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# HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1970

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UNITED STATES  
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MISCELLANEOUS  
PUBLICATION  
NUMBER 1380

PREPARED BY  
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## ABSTRACT

Burford, James B., Jane L. DeLashmutt, and Ralph T. Roberts, 1980. Hydrologic data for experimental agricultural watersheds in the United States, 1970. U.S. Department of Agriculture, Miscellaneous Publication No. 1380, 515 pp.

Hydrologic data from 153 agricultural watersheds for calendar year 1970 are summarized in this publication. Daily and monthly total precipitation and streamflow together with annual maximum peak discharge and maximum runoff for selected time intervals are included. Watershed descriptive information is presented. Maximum and minimum daily temperatures are given for many of the watersheds. This is the 14th publication in this series.

KEYWORDS: Air temperature, hydrology data, hydrology research, precipitation, streamflow, water data, watersheds.

Science and Education Administration  
U.S. DEPARTMENT OF AGRICULTURE  
In Cooperation With  
State Agricultural Experiment Stations

# HYDROLOGIC DATA FOR EXPERIMENTAL AGRICULTURAL WATERSHEDS IN THE UNITED STATES, 1970

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UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

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## PREFACE

This publication presents basic data on monthly precipitation and runoff; annual maximum discharge and maximum volumes of runoff; daily precipitation and mean daily discharge, with daily air temperature for some areas; and selected runoff events, with associated data on rainfall, land use, and antecedent conditions for agricultural watersheds where research was in progress during 1970. It is a continuation of processing and releasing hydrologic data of general interest collected cooperatively with other agencies.

Throughout the watershed studies the State agricultural experiment stations have collaborated in selecting, planning, and conducting these studies. In several studies the U.S. Geological Survey and State and local agencies, such as State water boards and highway departments of local drainage and conservation districts, have assisted in the work. The classification and correlation of soils and evaluation of other watershed characteristics in the descriptions have been based mostly on field surveys by the U.S. Department of Agriculture's Soil Conservation Service.

These data were collected originally for specific research objectives, which are still in progress or have been attained. In addition, they can serve many other purposes. This publication provides information for other government agencies, university staff members, graduate students, private engineers, and those who need detailed, factual information concerning agricultural watersheds. High-quality hydrologic data such as these have historic value in addition to providing a basis for research and design and evaluation of projects and programs for conservation and development of the Nation's water resources.

Although the data on which this publication is based were collected in 1970, the findings are still valid and are used for further research on agricultural watersheds.

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The decimal system of paging is used to index the watershed data. Pages are numbered at the bottom according to location and watershed number, and the data for each watershed are given on one or more pages. For example, page 10,001-1 is location 10 (Watkinsville, Ga.), Watershed 1 (W-1 at Watkinsville), and page 1 of the data for that watershed. For convenience in finding items listed in table 3, pages are also numbered consecutively at the top.

Table 3 is a list of continuing or new watersheds by State, locality, assigned location number, and land resource area, with number of watershed units and selected runoff events reported for 1970 in this publication. Table 4 includes similar data on discontinued watersheds.



# Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1970

This is the 14th publication in the series on hydrological data by the Science and Education Administration - Agricultural Research (SEA-AR) (formerly Agricultural Research Service (ARS)). The first three are described in the following section and the others are summarized in table 1. Since the decimal paging system used (see explanation on preceding page) is consistent with that at the bottom of pages in the other 13 publications, previously published records and general descriptions can be readily found and consulted.

This publication contains selected hydrologic data from 153 watersheds for 1970. It includes data on monthly precipitation and runoff for all the watersheds; annual maximum discharge and maximum volumes of runoff for intervals of 1, 2, 6, and 12 hours and 1, 2, and 8 days for 139 watersheds; daily precipitation for 150 watersheds; mean daily discharge for 130 watersheds; daily maximum and minimum air temperatures for 16 watersheds; and detailed information on 1 or more selected typical storm events for 113 watersheds.

Information on selected storm events includes (1) tabular data for antecedent rainfall and runoff; (2) data on rainfall intensity and runoff for the event and on accumulated depth of rainfall and runoff; (3) description of watershed conditions at the time of the selected events; and (4) plottings of runoff hydrographs and rainfall histograms.

For newly established watersheds, descriptions of watershed physical characteristics, instrumentation, land management, and recommended area of application of the results are given as well as graphs and maps.

The first 11 publications in this series resulted from the cooperative efforts of several former ARS watershed research projects and the editing staff in Beltsville, Md. Hydrologic data were summarized, arranged according to standardized formats, recorded on preprinted data sheets, and submitted to the editing office for final review, assemblage, and publication.

A computer-oriented system has been designed and developed by the Water Data Laboratory to produce camera copy sheets for these publications. This is the third publication that has been compiled using the computerized system. Hydrologic data submitted from research projects, in digital form and recorded by computer, are accepted by the system. The required data analyses and summaries are performed and the tables and plottings are provided within and by the system. Narrative information is incorporated into the system as upper and lower case alphabetic data using computer-compatible word-processing equipment. The format of hand-compiled references (4-11) has been retained where practicable in the computer-compiled versions of the publications.

## PUBLICATIONS OF EARLIER DATA

Historical hydrologic data on the experimental agricultural watersheds, both terminated and active, have been previously summarized in three looseleaf publications (reprints in bound volumes) by the former Agricultural Research Service. They are described in the following three reference summaries. Beginning with the hydrologic data for 1956 through 1970, the types of data previously published separately in these three references are combined in U.S. Department of Agriculture Miscellaneous Publications 945, 994, 1070, 1164, 1194, 1216, 1226, 1262, 1330, 1370, and 1380. These 11 publications are listed in table 1 as references 4-14. These reference numbers have been assigned to simplify citations to them in this and future publications. The first three looseleaf and the first eight miscellaneous publications have been recorded on 16-mm microfilm. Copies can be made available for the cost of the film processing.

Reference 1,--"Monthly Precipitation and Runoff for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Branch, 691 pages, 1957. Includes physical descriptions and land use of 334 experimental agricultural watersheds at 60 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1955.

Reference 2,--"Annual Maximum Flows From Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 330 pages, 1958. Includes records from 322 watersheds at 59 locations in 27 States from 1923 through 1957. Many of these watersheds were discontinued before 1957.

Reference 3,--"Selected Runoff Events for Small Agricultural Watersheds in the United States," Soil and Water Conservation Research Division, 374 pages, 1960. Includes a sam-

pling of 1 to 6 typical runoff events from 68 watersheds at 40 locations in 25 States from 1933 through 1959. The publication has maps of each watershed, information on watershed conditions for each event, including the 30-day antecedent rainfall and runoff, and tabular as well as graphic data on each storm.

Copies of all these publications have been furnished to the Soil Conservation Service and other Federal, State, and local government agencies. They have also been distributed to State agricultural experiment stations, university libraries and engineering departments, private engineers and individuals when requested, and similar foreign institutions and individuals when requested.

Table 2 lists in which of the 14 references data are included for each watershed.

Table 3 summarizes where data for each watershed can be found in this 14th publication.

Table 4 lists the watershed units where studies were discontinued in 1969.

## FORM OF DATA PRESENTATION

The data in this publication are presented for each watershed in the following order: (1) Watershed description, if not previously published; (2) monthly precipitation and runoff; (3) average monthly precipitation and runoff for period of record; (4) annual maximum flows; (5) daily temperature extremes, daily precipitation, and discharge for some watersheds; (6) selected runoff events; (7) graphs of selected runoff events; and (8) watershed maps, if not previously published or if revised.

### Continuing Watersheds

For current watersheds for which the descriptive information has been

Table 1,---Description of references 4-14 of "Hydrologic Data for Experimental Agricultural Watersheds in the United States"

Reference	For calendar year (19--)	Miscellaneous Publication No.	Year published (19--)	Total pages	Monthly precipitation and runoff	Annual maximum discharge and runoff for selected time intervals	Selected runoff events	New water-sheds	Daily precipitation, discharge, and/or temperature (max,--min,)
4.....	56-59	945	63	672	157	142	134	45	...
5.....	60-61	994	65	496	160	145	133	24	...
6.....	62	1070	68	447	164	155	136	13	50
7.....	63	1164	70	465	168	156	142	9	57
8.....	64	1194	71	460	163	163	143	8	57
9.....	65	1216	72	568	189	178	122	22	60
10.....	66	1226	72	399	198	185	106	11	60
11.....	67	1262	73	634	216	204	174	26	62
12.....	68	1330	76	542	174	174	116	1	174
13.....	69	1370	79	602	167	150	139	5	167
14.....	70	1380	79	515	153	139	113	2	150



Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference 2/--													
	Town	State			R	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
15001	Staunton	VA	W-I	390.	48	55		01	02	03											
15002	Staunton	VA	W-II	2,430.	48	55		01	02												
15003	Staunton	VA	W-III	6,144.	48	55		01	02		04										
16006	Klingerstown	PA	WE-38	1,773.	68												12	13	14		
17001	Edwardsville	IL	W-1	27.22	38	55		01	02	03											
17002	Edwardsville	IL	W-2	49.95	38	55		01	02												
17003	Edwardsville	IL	W-3	12.55	38	42		01	02												
17004	Edwardsville	IL	W-4	289.8	38	55		01	02	03											
18001	Elmwood	IL	WB-1	1.28	45	46		01													
18002	Elmwood	IL	WB-2	2.28	45	46		01													
18003	Elmwood	IL	WB-3	2.61	45	46		01													
18004	Elmwood	IL	WB-4	2.77	45	46		01													
18005	Elmwood	IL	WB-5	1.93	45	46		01													
18006	Elmwood	IL	WB-6	2.41	45	46		01													
18007	Elmwood	IL	WT-1	2.02	45	46		01													
18008	Elmwood	IL	WT-2	1.88	45	46		01													
18009	Elmwood	IL	WT-3	2.40	45	46		01													
18010	Elmwood	IL	WT-4	2.06	45	46		01													
18011	Elmwood	IL	WT-5	2.76	45	46		01													
18012	Elmwood	IL	WT-6	5.35	45	46		01													
19001	Lafayette	IN	W-1	2.55	40	53		01	02												
19002	Lafayette	IN	W-2	2.23	40	53		01	02												
19003	Lafayette	IN	W-4	2.01	40	53		01	02												
19004	Lafayette	IN	W-5	2.87	40	53		01	02	03											
19005	Lafayette	IN	W-6	2.79	40	53		01	02	03											
19006	Lafayette	IN	W-7	1.96	40	53		01	02												
19007	Lafayette	IN	W-8	1.96	40	53		01	02												
19008	Lafayette	IN	W-10	2.06	40	53		01	02												
19009	Lafayette	IN	W-11	2.05	40	53		01	02												
19010	Lafayette	IN	W-12	3.37	40	53		01	02												
19011	Lafayette	IN	W-13	3.02	40	53		01	02												
19012	Lafayette	IN	W-14	2.85	40	53		01	02												
19013	Lafayette	IN	W-15	3.59	40	53		01	02												
19014	Lafayette	IN	W-18	3.24	40	53		01	02												
19015	Lafayette	IN	W-20	2.64	40	52		01	02												
19016	Lafayette	IN	W-25	3.52	40	52		01	02												
19017	Lafayette	IN	W-31	1.64	40	51		01	02												
19018	Lafayette	IN	W-32	1.83	40	51		01	02												
19019	Lafayette	IN	W-33	3.44	40	51		01	02												
19020	Lafayette	IN	W-34	3.17	40	51		01	02												
20001	Clarinda	IA	W-V	3.25	32	42		01	02												
20002	Clarinda	IA	W-W	1.97	34	42		01	02												
20003	Clarinda	IA	W-X	1.97	34	42		01	02												
20004	Clarinda	IA	W-Y	3.25	32	42		01	02												
20005	Clarinda	IA	W-Z	3.12	32	42		01	02												
21001	Iowa City	IA		1,926.	24		07	01	02	03	04	05	06	07	08	09	10	11	12		
22001	Shenandoah	IA	No. 1	128,000.	34	40		01	02												
22002	Shenandoah	IA	No. 2	67,200.	34	40		01	02												
23001	East Lansing	MI	A	1.98	41	59		01	02		04										
23002	East Lansing	MI	B	1.35	41	59		01	02		04										
23003	East Lansing	MI	W	1.65	41	59		01	02		04										
24001	Bethany	MO	Pa-A	2.03	34	42		01	02												
24002	Bethany	MO	Pa-B	5.56	32	42		01	02												
24003	Bethany	MO	Pa-C	1.97	37	42		01	02												
24004	Bethany	MO	D-1	7.51	34	42		01	02												
24005	Bethany	MO	D-2	8.03	34	42		01	02												
24006	Bethany	MO	D-3	4.48	32	42		01	02	03											
24007	Bethany	MO	1-58	2.12	33	42		01	02												
24008	Bethany	MO	IJ-1	2.13	33	42		01	02												

See footnotes at end of table.

Table 2.-- Index to information on experimental agricultural watersheds included in references 1-14/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--)		Rev. No. 4/	Index to information in reference 5/--																	
	Town	State			B	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14				
25001	McCredie	MO	S.R.W.	153.	41		07	01	02				04	05	06	07	08	09	10	11	12	13	14		
25002	McCredie	MO	No.2	44.3	51	63	07	01	02				04	05	06	07									
26001	Coshocton	OH	102	1.26	37	46	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26002	Coshocton	OH	104	1.33	37	46		01	02				04												
26003	Coshocton	OH	129	2.71	38	72	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26004	Coshocton	OH	135	2.69	38	70	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26005	Coshocton	OH	130	1.63	38	72	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26006	Coshocton	OH	107	2.59	38	46		01	02				04												
26007	Coshocton	OH	131	2.21	38	70	06	01	02				04	05	06	07	08	09	10	11	12	13			
26008	Coshocton	OH	132	0.59	48	70	06	01	02				04	05	06	07	08	09	10	11	12	13			
26009	Coshocton	OH	134	0.92	38	47		01	02				04												
26010	Coshocton	OH	123	1.37	39		06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26011	Coshocton	OH	115	1.61	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26012	Coshocton	OH	127	1.65	49	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26013	Coshocton	OH	109	1.69	38		06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26014	Coshocton	OH	103	0.65	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26015	Coshocton	OH	110	1.27	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26016	Coshocton	OH	113	1.45	39	73	06	01	02				04	05	06	07	08	09	10	11	12	13			
26017	Coshocton	OH	118	1.96	40	73	06	01	02				04	05	06	07	08	09	10	11	12	13			
26018	Coshocton	OH	111	1.18	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26019	Coshocton	OH	121	1.42	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26020	Coshocton	OH	106	1.56	39	72	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26021	Coshocton	OH	188	2.05	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26022	Coshocton	OH	124	2.07	39	47		01	02				04												
26023	Coshocton	OH	185	7.40	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26024	Coshocton	OH	187	7.20	41	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26025	Coshocton	OH	192	7.59	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26026	Coshocton	OH	172	43.6	39	72	06	01	02				04	05	06	07	08	09	10	11					
26027	Coshocton	OH	169	29.0	40	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26028	Coshocton	OH	177	75.6	40	71	06	01	02				04	05	06	07	08	09	10	11	12	13			
26029	Coshocton	OH	183	74.2	38	63	06	01	02	03			04	05	06	07									
26030	Coshocton	OH	196	303.	37		06	01	02	03			04	05	06	07	08	09	10	11	12	13	14		
26031	Coshocton	OH	10	122.	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26032	Coshocton	OH	5	349.	40	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26033	Coshocton	OH	92	920.	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26034	Coshocton	OH	94	1,520.	39	71	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26035	Coshocton	OH	95	2,570.	39	72	06	01	02				04	05	06	07	08	09	10	11	12	13	14		
26036	Coshocton	OH	97	4,580.	37	71	06	01	02	03			04	05	06	07	08	09	10	11	12	13	14		
26037	Coshocton	OH	994	17,500.	36	71	06	01	02				04	05	06	07	08	09	10	11					
26038	Coshocton	OH	174	52.8	60		06						05	06	07	08	09	10	11	12	13	14			
26039	Coshocton	OH	194	187.	60		06						05	06	07	08	09	10	11	12	13	14			
26040	Coshocton	OH	182	69.6	64	71															10	11	12	13	14
26041	Coshocton	OH	166	79.2	67																	13	14		
27001	Hamilton	OH	W-1	187.	38	44		01	02	03															
27002	Hamilton	OH	W-II	16.2	38	44		01	02																
27003	Hamilton	OH	W-III	28.8	38	44		01	02																
27004	Hamilton	OH	W-IV	20.3	38	44		01	02																
28001	Zanesville	OH	C.W.	2.55	34	45		01	02																
28002	Zanesville	OH	P.W.	3.57	34	45		01	02																
28003	Zanesville	OH	W.W.	2.23	34	45		01	02																
29001	Colby	WI	W-1	345.	49	66		01	02	03	04	05	06	07	08	09	10								
30001	Coon Valley	WI	No. 1	49,400.	34	40		01	02																
30002	Coon Valley	WI	No. 2	49,344.	34	40		01	02																
31001	Fennimore	WI	W-1	330.	38	67	07	01	02	03	04	05	06	07	08	09	10	11							
31002	Fennimore	WI	W-2	22.8	38	67	07	01	02	03	04	05	06	07	08	09	10	11							
31003	Fennimore	WI	W-3	52.5	38	67	07	01	02				04	05	06	07	08	09	10	11					
31004	Fennimore	WI	W-4	171.	38	67	07	01	02	03	04	05	06	07	08	09	10	11							

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--) B E No.			Index to information in reference 5/--													
	Town	State			3/	4/	01	02	03	04	05	06	07	08	09	10	11	12	13	14	
32001	La Crosse	WI	U.P.W.	2.41	33	55		01	02												
32002	La Crosse	WI	U.C.W.	2.24	33	46		01	02												
32003	La Crosse	WI	C.W.	2.71	37	63	07	01	02		04	05	06	07							
32004	La Crosse	WI	C.W.A.	3.06	52	63	07	01	02		04	05	06	07							
32005	La Crosse	WI	E-3	1.01	33	42		01	02												
32006	La Crosse	WI	A-4	2.21	33	54		01	02												
33001	Bentonville	AR	W-1	10.03	38	43		01	02												
33002	Bentonville	AR	W-2	9.34	38	47		01	02												
33003	Bentonville	AR	W-3	14.25	38	47		01	02												
33004	Bentonville	AR	W-4	24.	39	47		01	02												
33005	Bentonville	AR	W-5	19.4	38	47		01	02	03											
33006	Bentonville	AR	W-6	10.75	39	47		01	02												
34001	Cherokee	OK	W-1	2.23	42	60		01	02		04										
34002	Cherokee	OK	W-2	4.82	42	60		01	02		04										
34003	Cherokee	OK	W-3	8.30	42	60		01	02		04										
34004	Cherokee	OK	W-4	4.35	42	60		01	02		04										
34005	Cherokee	OK	W-5	7.85	42	60		01	02		04										
34006	Cherokee	OK	W-6	1.75	42	60		01	02		04										
34007	Cherokee	OK	W-7	1.99	42	60		01	02		04										
34008	Cherokee	OK	W-8	4.72	41	60		01	02		04										
34009	Cherokee	OK	W-9	8.50	42	60		01	02	03	04										
34010	Cherokee	OK	W-10	1.68	60	67						05	06	07	08	09	10	11			
34011	Cherokee	OK	W-11	2.12	60	67						05	06	07	08	09	10	11			
34012	Cherokee	OK	W-12	1.68	60	67						05	06	07	08	09	10	11			
34013	Cherokee	OK	W-13	1.99	60	67						05	06	07	08	09	10	11			
34014	Cherokee	OK	W-14	2.16	60	67						05	06	07	08	09	10	11			
34015	Cherokee	OK	W-15	2.15	60	67						05	06	07	08	09	10	11			
35001	Guthrie	OK	W-1	33.40	32	53		01	02												
35002	Guthrie	OK	W-2	3.21	31	51		01	02												
35003	Guthrie	OK	W-3	3.13	30	51		01	02												
35004	Guthrie	OK	W-4	5.62	31	53		01	02												
35005	Guthrie	OK	W-5	5.28	31	47		01	02												
35006	Guthrie	OK	W-I	2.50	37	53		01	02												
35007	Guthrie	OK	W-II	5.09	42	55		01	02												
35008	Guthrie	OK	W-III	9.09	42	53		01	02												
35009	Guthrie	OK	W-IV	13.4	42	53		01	02												
35010	Guthrie	OK	W-V	15.7	42	53		01	02												
35011	Guthrie	OK	W-VI	94.8	42	55		01	02	03											
36001	Muskogee	OK	W-I	14.5	39	47		01	02												
36002	Muskogee	OK	W-II	65.4	39	45		01	02												
36003	Muskogee	OK	W-IV	24.9	38	47		01	02												
37001	Stillwater	OK	W-1	16.7	51	72	05	01	02		04	05	06	07	08	09	10	11	12	13	14
37002	Stillwater	OK	W-3	92.	51	72		01	02	03	04	05	06	07	08	09	10	11	12	13	14
37003	Stillwater	OK	W-4	206.	51	72		01	02		04	05	06	07	08	09	10	11	12	13	14
38001	Garland	TX	W-I	25.	38	47		01	02												
38002	Garland	TX	W-III	10.4	38	47		01	02												
38003	Garland	TX	W-IV	16.2	39	47		01	02												
39001	Spur	TX	W-1	11.53	27	45		01	02												
39002	Spur	TX	W-2	9.39	27	45		01	02												
39003	Spur	TX	W-3	11.71	27	44		01	02												
39004	Spur	TX	W-5	5.81	27	45		01	02												
39005	Spur	TX	W-6	6.04	27	45		01	02												
39006	Spur	TX	W-11	8.70	30	45		01	02												
39007	Spur	TX	W-12	8.41	30	45		01	02												
39008	Spur	TX	W-14	8.53	30	45		01	02												
39009	Spur	TX	W-15	8.50	30	45		01	02												
40001	Tyler	TX	W-2	9.15	43	44		01	02	03											
40002	Tyler	TX	W-3	7.94	32	42		01	02												
40003	Tyler	TX	W-4	5.75	31	42		01	02												
40004	Tyler	TX	W-5	1.73	32	42		01	02												

See footnotes at end of table.





Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres 2/	Record (19--)		Rev. ref. No. 4/	Index to information in reference 5/--													
	Town	State			B	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
44016	Hastings	NE	12-H	3.66	39	54		01	02												
44017	Hastings	NE	13-H	3.41	39	54		01	02												
44018	Hastings	NE	14-H	3.35	39	54		01	02												
44019	Hastings	NE	15-H	3.62	39	54		01	02												
44020	Hastings	NE	16-H	3.57	39	54		01	02												
44021	Hastings	NE	17-H	3.96	39	54		01	02												
44022	Hastings	NE	18-H	3.74	39	67	06	01	02	04	05	06	07	08	09	10	11				
44023	Hastings	NE	19-H	4.10	41	54		01	02												
44024	Hastings	NE	20-H	4.05	41	54		01	02												
44025	Hastings	NE	21-H	3.94	41	54		01	02												
44026	Hastings	NE	22-H	3.99	41	67	06	01	02			06	07	08	09	10	11				
44027	Hastings	NE	23-H	4.06	41	67		01	02			06	07	08	09	10	11				
44028	Hastings	NE	24-H	4.21	41	54		01	02												
44029	Hastings	NE	25-H	2.24	63	67							07	08	09	10	11				
45001	Safford	AZ	W-I	519.	39	76	07	01	02	04	05	06	07	08	09	10	11				
45002	Safford	AZ	W-II	682.	39	76	08	01	02	03	04	05	06		08	09	10	11			
45003	Safford	AZ	W-IV	764.	39	76		01	02		04	05	06		08	09	10	11			
45004	Safford	AZ	W-V	723.	39	76	07	01	02		04	05	06	07	08	09	10	11			
46001	Colorado Spr.	CO	W-1	10.6	38	46		01	02												
46002	Colorado Spr.	CO	W-2	39.7	38	46		01	02												
46003	Colorado Spr.	CO	W-3	35.4	38	46		01	02												
46004	Colorado Spr.	CO	W-4	35.6	38	46		01	02	03											
47001	Albuquerque	NM	W-I	246.	39	76	08	01	02	03	04	05	06		08	09	10	11	12		
47002	Albuquerque	NM	W-II	40.5	39	76	07	01	02		04	05	06	07	08	09	10	11	12		
47003	Albuquerque	NM	W-III	176.	39	76	07	01	02		04	05	06	07	08	09	10	11	12		
48001	Mexican Spr.	NM	W-1	187.	38	42		01	02												
48002	Mexican Spr.	NM	W-2	610.	37	42		01	02	03											
48003	Mexican Spr.	NM	W-3	1,325.	38	42		01	02												
48004	Mexican Spr.	NM	W-6	5,550.	37	42		01	02	03											
48005	Mexican Spr.	NM	W-7	8,495.	38	42		01	02												
48006	Mexican Spr.	NM	W-8	20,910.	37	42		01	02	03											
48007	Mexican Spr.	NM	W-10	17,220.	37	42		01	02												
48008	Mexican Spr.	NM	W-11	46,080.	37	39		01	02	03											
48009	Mexican Spr.	NM	W-12	2,550.	37	39		01	02												
48010	Mexican Spr.	NM	W-13	3,360.	37	39		01	02												
48011	Mexican Spr.	NM	W-14	3,560.	37	38		01	02												
48012	Mexican Spr.	NM	W-15	4,740.	37	39		01	02												
49001	Santa Fe	NM	W-I	141.	39	48		01	02	03											
49002	Santa Fe	NM	W-II	790.	39	48		01	02												
49003	Santa Fe	NM	W-III	51.6	39	48		01	02												
50001	Placerville	CA	W-1	41.	35	44		01	02	03											
51001	Santa Paula	CA	W-1	413.	38	42		01	02												
51002	Santa Paula	CA	W-3	106.	38	42		01	02												
51003	Santa Paula	CA	W-4	44.4	38	42		01	02												
51004	Santa Paula	CA	W-5	55.1	38	42		01	02												
51005	Santa Paula	CA	W-6	163.	38	42		01	02												
51006	Santa Paula	CA	H.B.R.	735.	36	42		01	02												
51007	Santa Paula	CA	L.A.	1,607.	34	40		01	02												
51008	Santa Paula	CA	H.P.R.	1,832.	34	43		01	02												
51009	Santa Paula	CA	H.A.B.	5,939.	34	37		01	02												
52001	Sebastopol	CA	W-1	83.	36	43		01	02	03											
52002	Sebastopol	CA	W-2	56.	36	40		01	02												
53001	Vacaville	CA	W-I	40.	37	42		01	02												
54001	Watsonville	CA	W-1	16.8				01	02												
54002	Watsonville	CA	W-2	18.5				01	02												
54003	Watsonville	CA	W-3	27.4	38	42		01	02	03											
54004	Watsonville	CA	W-4	10.1	38	42		01	02												

See footnotes at end of table.



Table 2.--Index to information on experimental agricultural watersheds included in references 1-141/--  
Continued

Water-shed ident. code	Study location		Water-shed name-No.	Area in acres 2/	Record (19--)		Rev. ref. No. 4/	Index to information in reference 5/--													
	Town	State			R	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
65007	Newell	SD	W-7	160.	58	73	05		04	05	06	07	08	09	10	11	12	13	14		
65008	Newell	SD	W-8	160.	58	61			04	05											
65009	Newell	SD	W-9	815.	58	61			04	05											
65010	Newell	SD	W-10	280.	58	61			04	05											
65011	Newell	SD	W-11	160.	58	61			04	05											
65012	Newell	SD	W-12	90.	58	73	05		04	05	06	07	08	09	10	11	12	13	14		
65013	Newell	SD	W-13	160.	58	73			04	05	06	07	08	09	10	11	12	13	14		
65014	Newell	SD	W-14	35.	58	73	05		04	05	06	07	08	09	10	11	12	13	14		
65015	Newell	SD	W-15	115.	58	73	05		04	05	06	07	08	09	10	11	12	13	14		
65016	Newell	SD	W-16	13,000.	58	61	05		04	05											
66001	Moorefield	WV	W-1	8.57	58	67	06		04	05	06	07	08	09	10	11					
66002	Moorefield	WV	W-2	10.06	58	67	06		04	05	06	07	08	09	10	11					
66004	Moorefield	WV	W-4	6.32	58	67	06		04	05	06	07	08	09	10	11					
66005	Moorefield	WV	W-5	9.55	58	67	06		04	05	06	07	08	09	10	11					
67001	N. Danville	VT	W-1	10,610.	58				04	05	06	07	08			11	12	13	14		
67002	N. Danville	VT	W-2	146.	58				04	05	06	07	08			11	12	13	14		
67003	N. Danville	VT	W-3	2,067.	60					05	06	07	08			11	12	13	14		
67004	N. Danville	VT	W-4	10,752.	60											11	12	13	14		
67005	N. Danville	VT	W-5	27,469.	60					05	06	07	08			11	12	13	14		
68001	Reynolds	ID	W-1	57,700.	63						07	08	09	10	11	12	13	14			
68002	Reynolds	ID	W-2	8,990.	65								09	10	11	12	13	14			
68003	Reynolds	ID	W-3	7,846.	66									10	11	12	13	14			
68004	Reynolds	ID	W-4	13,453.	67											11	12	13	14		
68011	Reynolds	ID	W-11	306.	67											11	12	13	14		
68012	Reynolds	ID	W-12	205.	67											11	12	13	14		
68013	Reynolds	ID	W-13	100.	66										10	11	12	13	14		
68014	Reynolds	ID	W-14	33.	67											11	12	13	14		
69001	Chickasha	OK	100	2,339,800.	61	78					06	07	08	09	10	11	12	13	14		
69002	Chickasha	OK	200	(a)2,612,500. (b) 273,000.	61	75					06	07	08	09	10	11	12	13	14		
69004	Chickasha	OK	400	112,910.	61	68					06	07	08	09	10						
69005	Chickasha	OK	500	(a)2,768,000. (b) 43,840.	64	78						08	09	10	11	12	13	14			
69006	Chickasha	OK	600	(a)3,011,800. (b) 243,050.	63	71						07	08	09	10	11	12	13	14		
69007	Chickasha	OK	700	(a)3,061,120. (b) 50,830.	61	78					06	07	08	09	10	11	12	13	14		
69008	Chickasha	OK	611	4,845.	61	74					06	07	08	09				13	14		
69009	Chickasha	OK	612	563.	61	74					06	07	08	09	10	11	12	13	14		
69010	Chickasha	OK	111	16,640.	61	78					06	07	08	09	10	11	12	13	14		
69011	Chickasha	OK	131	25,660.	61	78					06	07	08	09	10	11	12	13	14		
69012	Chickasha	OK	411	34,180.	61	74					06	07	08	09	10	11	12	13	14		
69013	Chickasha	OK	511	38,020.	61	78					06	07	08	09	10	11	12	13	14		
69014	Chickasha	OK	110	25,020.	63	78						07	08	09	10	11	12	13	14		
69015	Chickasha	OK	522	132,990.	63	73						07	08	09	10	11	12	13	14		
69016	Chickasha	OK	512	22,530.	63	78						07	08	09	10	11	12	13	14		
69017	Chickasha	OK	621	21,310.	63	73						07	08	09	10	11	12	13	14		
69018	Chickasha	OK	121	131,780.	63	74						07	08	09	10	11	12	13	14		
69019	Chickasha	OK	513	12,314.	65	78						09	10	11	12	13	14				
69020	Chickasha	OK	514	7,225.	67	78															
69021	Chickasha	OK	5141	4,064.	67	78															
69022	Chickasha	OK	5142	360.	67	74															
69023	Chickasha	OK	5143	485.	67	74															
69024	Chickasha	OK	5144	1,456.	67	78															
69025	Chickasha	OK	5145	253.	67	78															
69026	Chickasha	OK	5146	762.	67	78															
69027	Chickasha	OK	311	15,206.	67	78												11	12	13	14
69030	Chickasha	OK	C-1	17.8	65	76								09	10	11	12	13	14		
69031	Chickasha	OK	C-2	32.5	62									09	10	11	12	13	14		
69032	Chickasha	OK	C-3	44.3	65	76								09	10	11	12	13	14		
69033	Chickasha	OK	C-4	29.9	65	76								09	10	11	12	13	14		
69034	Chickasha	OK	C-5	12.8	65	76								09	10	11	12	13	14		
69035	Chickasha	OK	C-6	13.0	65	76								09	10	11	12	13	14		
69036	Chickasha	OK	C-7	26.5	65	76								09	10	11	12	13	14		

See footnotes at end of table.

Table 2.--Index to information on experimental agricultural watersheds included in references 1-14<sup>1/--</sup>  
Continued

Water- shed ident. code	Study location		Water- shed name-No.	Area in acres	Record (19--)		Rev. ref. No.	Index to information in reference <sup>5/--</sup>													
	Town	State			R	E		01	02	03	04	05	06	07	08	09	10	11	12	13	14
69037	Chickasha	OK	C-8	27.3	65	76								09	10	11	12	13	14		
69038	Chickasha	OK	R-1	17.8	62	74								09	10	11	12	13	14		
69039	Chickasha	OK	R-2	24.1	62	74								09	10	11	12	13	14		
69040	Chickasha	OK	R-3	25.8	62	74								09	10	11	12	13	14		
69041	Chickasha	OK	R-4	18.1	62	74								09	10	11	12	13	14		
69042	Chickasha	OK	R-5	23.7	66	77										10	11	12	13	14	
69043	Chickasha	OK	R-6	27.2	66	77										10	11	12	13	14	
69044	Chickasha	OK	R-7	19.2	66	78										10	11	12	13	14	
69045	Chickasha	OK	R-8	27.6	66	78										10	11	12	13	14	
70001	Sonora	TX	W-14	30,720.	61	73											11	12	13	14	
70002	Sonora	TX	S-9	1,774.	61	73											11	12	13	14	
70003	Sonora	TX	S-10	5,392.	61	73											11	12	13	14	
70004	Sonora	TX	S-11	10,787.	61	73											11	12	13	14	
70005	Sonora	TX	S-12	2,801.	61	73											11	12	13	14	
70006	Sonora	TX	S-13	686.	61	73											11	12	13	14	
70007	Sonora	TX	W-1	10.2	63												11	12	13	14	
70008	Sonora	TX	W-2	8.6	65												11	12	13	14	
70009	Sonora	TX	W-3	6.7	65												11	12	13	14	
70010	Sonora	TX	W-4	4.5	66												11	12	13	14	
70011	Sonora	TX	W-5	7.2	66												11	12	13	14	
70012	Sonora	TX	W-6	6.9	66												11	12	13	14	
70013	Sonora	TX	W-7	12.2	65	73											11	12	13	14	
71001	Treynor	IA	W-1	74.5	64								08	09	10	11	12	13	14		
71002	Treynor	IA	W-2	82.8	64								08	09	10	11	12	13	14		
71003	Treynor	IA	W-3	107.	64								08	09	10	11	12	13	14		
71004	Treynor	IA	W-4	150.	64								08	09	10	11	12	13	14		
71005	Treynor	IA	W-5	389.	63	74							08	09	10	11	12	13	14		
72001	Cottonwood	SD	H-2	2.13	63	73								09	10	11	12	13	14		
72002	Cottonwood	SD	L-2	2.38	63	73								09	10	11	12	13	14		
72005	Cottonwood	SD	M-1	2.35	63	73								09	10	11	12	13	14		
73002	Fort Staunton	NM	7302	32.2	66												10				
75001	Ahoskie	NC	W-A1	36,480.	64	74								09	10	11	12	13	14		
75002	Ahoskie	NC	W-A2	15,360.	64	74								09	10	11	12	13	14		
75003	Ahoskie	NC	W-A3	2,368.	64	74								09	10	11	12	13	14		
75004	Ahoskie	NC	W-A4	1,664.	64	74								09	10	11	12	13	14		

<sup>1/</sup> For description of references 1-14<sup>1</sup>, see page 2 and table 1.<sup>2/</sup> (a) = total drainage area; (b) = study area.<sup>3/</sup> B = year (19--) record began; E = year (19--) record ended.<sup>4/</sup> Reference in which additional or revised watershed information has been included.<sup>5/</sup> For explanation of reference numbers, see page 2 and table 1.

published in references 1 and 4-14, the tabular data begin at the top of the first page. On each page at the top center is a sequential page number and the decimal paging system is shown at the bottom.

The geographic location associated with each study, usually a city and State, and the local name and number of the watershed are recorded at the top of the first page for each watershed. This identification is followed by detailed information on the geographic location and the size of the watershed.

In the space to the right of the first table title, MONTHLY PRECIPITATION AND RUNOFF (inches), the location and watershed number (or designation) are given.

In the table for the current calendar year, the precipitation (P) in inches is given in the monthly columns and the yearly total in the last column, headed annual. In the line below, the corresponding runoff (Q) in inches is similarly given for each month and the total for the year. For some watersheds, data are included for years previous to the current year. Underneath, in two lines, are given the (P) and (Q) station average amounts (STA AV) by months, with average annual total for the period of record.

In the second table, entitled ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS, data are also given for the calendar year listed in the first column. Under the maximum discharge heading, the date column shows the month and day that the instantaneous peak in inches per hour occurred. In computing this rate, corrections were made, where needed, for any significant pondage above the runoff-measuring device. Under the maximum volume heading, the date refers to the month and day on which the interval began; for example, if the interval began August 30 at 2359, the entry in the date column would be 8-30. The depths for

1 hour to 8 days are the annual maximum values recorded, without regard to entire clock hours or days; thus, if the 6-hour interval began at 1332, the interval would end exactly 6 hours later at 1932. The volume given is in inches of average depth over the watershed for each of the seven selected time intervals (1, 2, 6, and 12 hours and 1, 2, and 8 days). In the last section of the table, the maximum discharges and depths for the various periods are given under MAXIMUMS FOR PERIOD OF RECORD.

Notes and footnotes below the first two tables include (1) a general statement as to watershed conditions and other physical changes for the period covered; (2) location (publication) where the most recent map may be found; (3) length of precipitation and runoff records; and (4) location of the nearest long-time National Weather Service precipitation station together with the record length.

For some watersheds, tables of daily air temperature (maximum and minimum in degrees Fahrenheit), daily precipitation (inches), and mean daily discharge (cfs) are next, with explanation of the data in footnotes at the end of each table. The multiplier to convert mean daily discharge in cubic feet per second to inches per day is given as the first note to the mean daily discharge table. Cooperating agencies are identified at the bottom of the first page for each watershed just above the index page number.

If no daily tables are given, the tabular data for selected runoff events begin in the remaining space on the first page and are carried forward on continuation sheets (or pages) until completed. In general, the selected runoff events were those in which runoff was produced by a relatively uniform rainfall excess of short duration. The information for each event includes tabulation of (1) antecedent rainfall and runoff that

occurred on the day of the event prior to the beginning of the event; (2) rainfall intensities and accumulated amounts for the event; (3) runoff rates and accumulated amounts for the event; and (4) specific watershed conditions at the time of the event.

Simple graphs of rainfall and runoff rates for all events follow the tabular data. Runoff rates expressed in both cubic feet per second (CFS) and inches per hour (IN/HR) are shown on the graphs. Some very low runoff rates expressed in IN/HR are given in the "E" format, such as 7.25 E-4, which is equal to 0.000725 IN/HR.

Maps follow the graphs unless previously published in references 3-13 or unless shown here on the map of another watershed.

In the Notes at the bottom of the first page for runoff events, the multiplier to convert runoff rates in cubic feet per second to inches per hour is given. The notes on continuation pages contain the statement on the multiplier and similar explanations of the data on each page.

### New Watersheds

For the two watersheds installed in recent years and not reported previously (see table 3), the presentation begins with the watershed description in the upper part of the first page. The explanations and definitions on which the description is based are given in the next section.

The first line, centered at the top of the sheet, indicates the project location, which is the nearest city or town, and the number or name of the watershed used locally. The descriptive material is then given under the 12 major topics listed generally down the left side of the sheet: Location, Area, Slopes, Soils, Erosion, Land Capability, Geology, Surface Drainage, Character

of Flow, Instrumentation, Watershed Conditions, and Generally Represents.

After this description, the tabular data are summarized in the first two tables and notes are included as previously described for Continuing Watersheds. The tabular data for daily air temperature, precipitation, and discharge, if presented, precede the tabular data for SELECTED RUNOFF EVENTS. The rest of the material of this series for the particular watershed follows in the same order as previously indicated.

### WATERSHED DESCRIPTIONS

The following definitions and explanations were used in describing watershed location, watershed characteristics, instrumentation, land management, and recommended area of application of the hydrologic data.

LOCATION gives county and State, distance and direction of the runoff gaging station from the nearest city or town, and the major river basin in which it lies. When two or more basins are involved, the tributary or subbasin is mentioned first, followed by the major basin.

AREA of watershed is given in acres if less than 640 acres and in both acres and square miles if more than 1 square mile. If areas are revised, additional values are included with notes on date of change.

SLOPES are given in terms of the ranges commonly used in survey work in the locality. The percentages of the watershed lying in each slope class are listed. As an example, 8% is in 0-2% class means that 8 percent of the watershed area has slopes ranging from 0 to 2 percent.

SOILS are described briefly, according to definitions from the U.S. Department of Agriculture "Soil Survey Manual," Agriculture Handbook 18, published in 1951. Soil descriptions are given for the new watersheds. Soil-type name consists of the soil series plus the textural

class, determined primarily by the texture of the upper part of the soil profile.

Soil texture refers to the relative proportions of the various size groups (or separates) of individual soil grains in a mass of soil. Specifically it refers to the proportions of clay, silt, and sand less than 2 mm in diameter. The various classes of texture in order of increasing percentages of the smaller size groups are (1) sand, (2) loamy sand, (3) sandy loam, (4) loam, (5) silt loam, (6) silt, (7) sandy clay loam, (8) clay loam, (9) silty clay loam, (10) sandy clay, (11) silty clay, and (12) clay. In some of the descriptions the broader classification of coarse, moderately coarse, medium, moderately fine, and fine has been used--the coarse soils are the sands and the fine soils the clays.

Soil structure refers to the aggregation of primary soil particles into compound particles, or clusters of primary particles, that are separated from adjoining aggregates by surfaces of weakness. Structure grade, or the durability of the aggregates when subjected to disturbance, is described as structureless, weak, moderate, or strong. For some soils the structureless grade is described as massive, if coherent, or single grain, if non-coherent. The size of the aggregates is reported as very fine, fine, medium, coarse, or very coarse. Structure shape is given as being platy, prismatic, columnar, angular blocky, subangular blocky, granular, or crumb.

Permeability is the quality of a soil that enables it to transmit water or air. This quality is indicated by the terms very slow, slow, moderately slow, moderate, moderately rapid, rapid, or very rapid.

Internal soil drainage is the quality of a soil that permits the downward flow of excess water through it. Internal drainage is reflected in the frequency and duration of pe-

riods of saturation with water. It is determined by the texture, structure, and other characteristics of the soil profile and of underlying layers and by the height of the water table, either permanent or perched, in relation to the water added to the soil. Internal drainage is described as none, very slow, slow, medium, rapid, or very rapid.

Soils may be grouped into soil drainage classes, based on observations and inferences used to obtain classes of runoff, soil permeability, and internal soil drainage. These classes are given in some soils descriptions to identify internal drainage. They are very poorly drained, poorly drained, imperfectly or somewhat poorly drained, moderately well drained, well drained, somewhat excessively drained, or excessively drained.

EROSION conditions on the watershed are described according to the following classification for water and wind erosion, also briefed from Agriculture Handbook 18. The percentage of the watershed in the following erosion classes is given.

Class 1.--The soil has a few rills or places with thin A horizons that give evidence of accelerated erosion, but not to an extent to alter greatly the thickness and character of the A horizon. Except for soils having very thin A horizons (less than 8 inches), the surface soil consists entirely of A horizon throughout nearly all the delineated areas. Up to about 25 percent of the original A horizon, or original plowed layer in soils with thin A horizons, has been removed from most of the area. This class also includes the areas with no erosion.

Class 2.--The soil has been eroded to the extent that ordinary tillage implements reach through the remaining A horizon or well below the depth of the original plowed layer in soils with thin A horizons. Generally the plowed layer consists of a mixture of the original A horizon and

the underlying horizons. Mapped areas of eroded soil usually have patches in which the plowed layer consists entirely of the original A horizon and others in which it consists entirely of underlying horizons. Shallow gullies may be present. Approximately 25 to 75 percent of the original A horizon or surface soil may have been lost from most of the area.

Class 3.--The soil has been eroded to the extent that all or practically all the original surface soil, or A horizon, has been removed. The plowed layer consists essentially of materials from the B or other underlying horizons. Patches in which the plowed layer is a mixture of the original A horizon and the B horizon, or other underlying horizons, may be included within mapped areas. Shallow gullies, or a few deep ones, are common in some soil types. More than about 75 percent of the original surface soil, or A horizon, and commonly part or all the B horizon, or other underlying horizons, have been lost from most of the area.

Class 4.--The land has been eroded until it has an intricate pattern of moderately deep or deep gullies. Soil profiles have been destroyed except in small areas between the gullies. Such land is not useful for crops in its present condition. Reclamation for crop production or for improved pasture is difficult, but may be practicable if other characteristics of the soil are favorable and erosion can be controlled.

Class +.--Recent alluvial and colluvial deposition.

LAND CAPABILITY is given as classified by Klingebiel and Montgomery in U.S. Department of Agriculture "Land-Capability Classification," Agriculture Handbook 210, published in 1961. The classification expresses the suitability of land for use without deterioration. The eight land-capability classes are

distinguished according to the risk of land damage or difficulty of land use. Classes I-IV are suitable for cultivation and other uses, whereas classes V-VIII are not suitable for cultivation.

Class I.--Very good land for cultivation; nearly level and productive; not subject to erosion; needs only ordinary good farming methods.

Class II.--Good land for cultivation; mostly gently sloping; not more than moderately subject to erosion; some land may be rather wet; can be farmed safely with easily applied practices.

Class III.--Moderately good land for cultivation; mostly moderately sloping; some areas too wet or too dry; can be farmed safely with practical conservation measures, carefully applied; usually a combination of two or more measures is needed.

Class IV.--Fairly good land, suitable for occasional cultivation; generally strongly sloping; often shallow or very sandy; often found in dry climate.

Class V.--Land very well suited for grazing or forestry; requires good range or woodland management.

Class VI.--Land well suited for grazing or forestry; steeply sloping land, or stony or shallow soil; eroded, droughty, or wet land; requires careful management.

Class VII.--Land fairly well suited for grazing or forestry; severely limited in use by such factors as very steep slope, shallow or droughty soil, wetness, severe erosion, or excessive salinity; requires very careful management.

Class VIII.--Land not suitable for cultivation, grazing, or forestry; may be useful for wildlife, recreation, or protection of water supplies.

WATERSHED GEOLOGY information, when available, for new watersheds is reported here. The parts of each watershed occupied by various geological formations or series are briefly



described, together with strike and dip of the strata, thickness, and relative position, when known. Faults, perched water tables, outcrops, if present, and other details relating to the movement of water within the drainage area or affecting the hydrology of the watershed are described.

SURFACE DRAINAGE refers to the ease with which excess water flows from the watershed area. The length of the principal waterway is the distance from the gaging station to the most remote point on the watershed boundary, measured along the flood plain of the watercourse.

CHARACTER OF FLOW describes the flow of the principal watercourse with respect to permanence and space. The following definitions are from Meinzer's "Outline of Ground-Water Hydrology," U.S. Geological Survey Water-Supply Paper 494, published in 1923.

As to permanence, streams may be divided into perennial, intermittent, and ephemeral streams.

A perennial stream, or stretch of a stream, flows continuously. Perennial streams are generally fed in part by springs, and their upper surfaces usually stand lower than the water table in the localities through which they flow.

Intermittent streams may be divided, with respect to their water source, into spring-fed intermittent streams and surface-fed intermittent streams. They also flow in direct response to precipitation.

A spring-fed intermittent stream, or stretch of a stream, flows only at certain times when it receives water from springs. The intermittent character of streams of this type is generally caused by fluctuations of the water table, whereby the stream channels stand part of the time below and part of the time above the water table. This is the ordinary type of intermittent stream.

A surface-fed intermittent

stream, or stretch of a stream, flows during protracted periods when it receives water from some surface source, generally the gradual and long-continued melting of snow in a mountainous or other cold tributary area. The term may be arbitrarily restricted to streams or stretches of streams that flow continuously during at least 1 month.

An ephemeral stream, or stretch of a stream, flows only in direct response to precipitation. It receives no water from springs and no long-continued supply from melting snow or other surface source. Its stream channel is at all times above the water table. The term may be arbitrarily restricted to streams or stretches of streams that do not flow continuously for as long as 1 month.

With respect to continuity in space, streams may be divided into continuous and interrupted streams. An interrupted stream contains (1) perennial stretches with intervening, intermittent, or ephemeral stretches or (2) intermittent stretches with intervening ephemeral stretches. These two classes of interrupted streams are designated, respectively, perennial interrupted streams and intermittent interrupted streams. A continuous stream does not have interruptions in space. It may be perennial, intermittent, or ephemeral, but it does not habitually have wet and dry stretches.

INSTRUMENTATION describes the type of runoff control or measuring device, number and type of precipitation gages, type of charts used, and snow courses, if employed.

WATERSHED CONDITIONS describe the general use and farm, forest, or range practices before the period of record and the conservation measures, crops, yields, and general cultural operations and practices during the period of record. Rotation crops are listed in the order grown. Operations are described with commonly used agricultural terms, and only those that appear to have a sig-

nificant relationship to the hydrology of the watershed are mentioned.

GENERALLY REPRESENTS gives the broad area of application for which the data of the specific watershed are recommended. The land resource areas named are those delineated on the map titled "Location of Experimental Agricultural Watersheds of the Science and Education Administration-Agricultural Research," on pages 26 and 27. Solid circles show the approximate locations of the continuing or new watersheds; open circles show approximate locations of the discontinued studies. For a few studies the circles indicate the locations of the project headquarters instead of the watershed locations. A larger index map with more detail is included in reference 4.

For some studies there is an apparent contradiction between the watershed location on the maps and the descriptive information under Generally Represents. This is caused by the small scale of maps; it is difficult to show many small local variations in boundaries of the land resources areas. The descriptive statements, instead of the map location, should be the guide to the application of the data.

### STANDARD SYMBOLS FOR TABULAR DATA

The following capital letters have been used as standard symbols throughout this publication to designate specific items or meanings:

<u>Symbol</u>	<u>Meaning</u>
E	value is estimated or partially estimated.
H	precipitation in form of hail.
L	precipitation in form of sleet or freezing rain.
M	mixed precipitation in form of rain, snow, and sleet.

N	precipitation in form of rain and snow.
P	monthly or annual precipitation in inches.
Q	monthly or annual runoff in inches.
RG	rain gage, generally followed by gage number.
S	precipitation in form of snow.
STA AV (or AVG)	station average for period of record.
T	trace, indicates that the value is not large enough to round to the lowest significant digit. In some arrays a trace value is indicated by all zeros, with more than one zero located to the right of the decimal.

Time-of-day symbols or designations a, p, m, and n used in previous publications through 1961 have been discontinued, and military time (0001 through 2400) has been substituted in publications since then. Unless stated otherwise, time used in tables is eastern, central, mountain, or Pacific standard, whichever applies to the given location.

### PERSONNEL RESPONSIBLE FOR DATA PREPARATION

At each research location many individuals have contributed to the planning and establishment of the watershed and the collection, compilation, and analysis of the data. Some of those who were directly responsible for preparing the data and information for this report are--

<u>Name</u>	<u>Location</u>
R. B. Slack.....	08
A. P. Barnett.....	10
J. C. Carr, V. O. Shanholtz.....	13
R. M. Weaver.....	16
L. A. Kramer, M. Mazzocco.....	25, 71
C. A. Salrin.....	26
W. O. Ree, W. R. Gwinn, F. L. Wimberly.....	37
C. W. Richardson, D. A. Wright..	42, 70

G. C. Bolton, W. A. Champion, A. J. Bowie, C. K. Mutchler.....	62
V. A. Ferreira.....	63, 64
C. L. Hanson, A. R. Kuhlman, D. A. Woolhiser.....	65, 72
R. DeAngelis, D. Grant.....	67
R. L. Engleman.....	68
D. G. DeCoursey, M. A. Hartman, A. D. Nicks, E. D. Rhodes, R. R. Schoof, O. D. Workman.....	69
R. B. Slack, P. Yates, T. K. Woody.....	75

Res. 6 (5): 1430-1432,  
illus.

Rawitz, E., Engman, E. T., and  
Cline, G. D.

1970. Use of the mass balance  
method for examining  
the role of soils in  
controlling watershed  
performance. Water Re-  
sources Res. 6 (4):  
1115-1123, illus.

## ADDITIONAL PUBLICATIONS

### BY LOCATION

In references 1 and 4-13 (see pp. 2 and 3), citations to other publications, which present watershed data and interpretations of results in various journals, bulletins, and periodicals, are given at the end of the introduction for many of the locations. Following is a listing, by location number, of additional publications that have resulted from related work through 1970. Several publications pertaining to the overall program of hydrology that could not be tied to a specific location are listed at the end under General References.

16. Klingerstown, Pennsylvania  
Gburek, W. J., and Heald, W. R.  
1970. Effects of direct runoff from agricultural land on the water quality of small streams. In Relationship of Agriculture to Soil and Water Pollution. Cornell Agr. Waste Mangt. Conf. Proc. 1970, pp. 61-68, illus.

Parmele, L. H.  
1970. Comments on 'Seasonal Variation in Rain Gage Catch' by McGuinness, J. L., and Vaughan, G. W., In Water Resources

### 21. Iowa City, Iowa

England, C. B.

1970. Land capability: A hydrologic response unit in agricultural watersheds. U.S. Dept. Agr. ARS 41-172, 12 pp., illus.

### 25. McCredie, Missouri

Saxton, K. E., and Whitaker, F. D.

1970. Hydrology of a claypan watershed. Mo. Agr. Expt. Sta. Res. Bul. 974, 47 pp., illus.

### 26. Coshocton, Ohio

Caro, J. H., Edwards, W. M., Glass, B. L., and Frere, M. H.

1970. Dieldrin in runoff from treated watersheds. Symp. on Internatl. Aspects of Watershed Mangt., Bozeman, Mont., Proc. 1970, pp. 141-160.

Edwards, W. M., and Harrold, L. L.

1970. Agricultural pollution of water bodies. Ohio Jour. Sci. 70 (1): 50-56.

Harrold, L. L., and Edwards, W. M.

1970. Watershed studies of agricultural pollution. Ohio Rpt. 55 (4): 85-86, illus.

- \_\_\_\_\_ Triplett, G. B., Jr.,  
and Edwards, W. M.  
1970. No-tillage corn - characteristics of the system. Agr. Engin. 51 (3): 128-131, illus.
- Ricca, V. T., Taiganides, E. P.,  
McGuinness, J. L., and Simmons,  
P. W.  
1970. Influence of land use on runoff from agricultural watersheds. Amer. Soc. Agr. Engin. Trans. 13 (2): 187-190, illus.
- Toebes, C., Ouryvaev, V., and  
Harrold, L. L.  
1970. Representative and experimental basins, an international guide for research and practice. UNESCO Studies and Rpts. in Hydrol. No. 4, 348 pp.
42. Riesel, Texas  
Baird, R. W., Richardson, C. W.,  
and Knisel, W. G., Jr.  
1970. Effects of conservation practices on storm runoff in the Texas Blackland Prairie. U.S. Dept. Agr. Tech. Bul. 1406, 31 pp., illus.
- Knisel, W. G., Jr., and Baird,  
R. W.  
1970. Depth-integrating and dip samplers. Amer. Soc. Civ. Engin. Proc., Hydraul. Div. Jour. 96 (HY 2): 497-507, illus.
62. Oxford, Mississippi  
Bolton, G. C., Wilson, R. B.,  
and Bowie, A. J.  
1970. Computer programs for processing runoff and sediment data. U.S. Dept. Agr. ARS 41-159, 36 pp., illus.
- Bowie, A. J.  
1970. Sediment yield investigations in a complex watershed. U.S. Dept. Agr. ARS-SCS Workshop on Watershed Modeling, Tucson, Ariz., Proc. 1969 (Mar. 16-19), 20 pp.
- Murphree, C. E., Jr., Bolton, G. C., McHenry, J. R., and Parson, D. A.  
1970. Closure: "Field test of an X-ray sediment concentration gage." Amer. Soc. Civ. Engin. Proc., Hydraul. Div. Jour. 96 (HY 1): 225-226, illus.
63. Tombstone, Arizona  
England, C. B., and Stephenson, G. R.  
1970. Response units for evaluating the hydrologic performance of rangeland. Jour. Hydrol. 11: 89-97, illus.
- Gwinn, W. R.  
1970. Calibration of Walnut Gulch supercritical flumes. Amer. Soc. Civ. Engin. Proc., Hydraul. Div. Jour. 96 (HY 8): 1681-1689, illus.
- Libby, F., Wallace, D. E., and Spangler, D. P.  
1970. Seismic refraction studies of the subsurface geology of Walnut Gulch Experimental Watershed, Arizona. U.S. Dept. Agr. ARS 41-164, 14 pp., illus.
- Osborn, H. B., and Renard, K. G.  
1970. Thunderstorm runoff on the Walnut Gulch Experimental Watershed, Arizona, U.S.A. Inter-

- natl. Assoc. Sci. Hydrol. Symp. on Results of Res. on Represent. and Expt. Basins, Wellington, New Zealand, Proc. 1970, pp. 455-464, illus.
- Proc. 1970, pp. 49-60, illus.
69. Chickasha, Oklahoma  
Blanchard, B. J., and DeCoursey, D. G.  
1970. A design for low flow controls. Water Resources Bul., Amer. Water Resources Assoc. Jour. 6 (2): 222-228, illus.
- Renard, K. G.  
1970. The hydrology of semi-arid rangeland watersheds. U.S. Dept. Agr. ARS 41-162, 26 pp., illus.
64. Santa Rosa, New Mexico  
Renard K. G., Drissel, J. C., and Osborn, H. B.  
1970. Flood peaks from a small southwest range watershed. Amer. Soc. Civ. Engin. Proc., Hydraul. Div. Jour. 96 (HY-3): 773-785, illus.
- DeCoursey, D. G., and Blanchard, B. J.  
1970. Flow analysis of large triangular weir. Amer. Soc. Civ. Engin. Proc., Hydraul. Div. Jour. 96 (HY 7): 1435-1454, illus.
67. North Danville, Vermont  
Henderick, R. L., and Comer, G. H.  
1970. Space variations of precipitation and implications for rain gage network design. Jour. Hydrol. X (2): 151-163, illus.
- Pionke, H. B.  
1970. Effects of climate, impoundments, and land use on stream salinity. Jour. Soil and Water Conserv. 25 (2): 62-64, illus.
- Johnson, M. L.  
1970. Research on Sleepers River at Danville, Vermont. Amer. Soc. Civ. Engin. Proc., Irrig. and Drain. Div. Jour. 96 (IR 1): 67-88, illus.
- and Nicks, A. D.  
1970. The effect of selected hydrologic variables on stream salinity. Internatl. Assoc. Sci. Hydrol. Bul. 15 (4): 13-21, illus.
70. Sonora, Texas  
Knisel, W. G., Jr.  
1970. Factor analysis of reservoir losses. Water Resources Res. 6 (2): 491-498, illus.
- Kunkle, S. H.  
1970. Concentration and cycles of bacterial indicators in farm surface runoff. In Relationship of Agriculture to Soil and Water Pollution. Cornell Agr. Waste Mangt. Conf.
72. Cottonwood, South Dakota  
Hanson, C. L., Kuhlman, A. R., Erickson, C. J., and Lewis, J. K.  
1970. Grazing effects on runoff and vegetation on western South Dakota rangeland. Jour. Range

Mangt, 23 (6): 418-420, illus.

Woolhiser, D. A., Hanson, C. L., and Kuhlman, A. R.

1970. Overland flow on rangeland watersheds. New Zeal. Jour. Hydrol. (Spec. Issue) 9 (2): 336-356, illus.

74. Athens, Georgia

Yates, P.

1970. V-notch weir for submerged flow measurement. Agr. Engin. 51 (3): 132-133, illus.

75. Ahoskie, North Carolina

Snyder, W. M., Mills, W. C., and Stephens, J. C.

1970. A method of derivation of nonconstant water and response functions. Water Resources Res. 6 (1): 261-274, illus.

General References

Amerman, C. R., Hillel, D. I., and Peterson, A. E.

1970. A variable-intensity sprinkling infiltrometer. Soil Sci. Soc. Amer. Proc. (Note) 34: 830-832, illus.

Benoit, G. R., and Bornstein, J.

1970. Freezing and thawing effects on drainage. Soil Sci. Soc. Amer. Proc. 34 (4): 551-557, illus.

Brakensiek, D. L.

1970. Infiltration of water into nonuniform soil. Amer. Soc. Civ. Engin. Proc., Irrig. and Drain. Div. Jour. 96 (IR3): 358-363.

Diskin, M. H.

1970. On the computer eval-

uation of Thiessen weights. Jour. Hydrol. 11: 69-78, illus.

Duke, H. R., Kruse, E. G., and Hutchinson, G. L.

1970. An automatic vacuum lysimeter for monitoring percolation rates. U.S. Dept. Agr. ARS 41-165, 12 pp., illus.

Ellis, J. W., and Asmussen, L. E.

1970. Recorder float connector for unidirectional chart movement. Amer. Met. Soc. Bul. 51 (9): 867, illus.

Hershfield, D. M.

1970. A comparison of conditional and unconditional probabilities for wet- and dry-day sequences. Jour. Appl. Met. 9 (5): 825-827, illus.

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1970. Dry periods in the Eastern United States. Jour. Soil and Water Conserv. 25 (6): 242-243, illus.

---

1970. Generalizing dry-day frequency data. Amer. Water Works Assoc. Jour. 62 (1): 51-54, illus.

Holtan, H. N.

1970. An infiltration model adapted to agricultural watersheds. "Hydrologic Models in Water Resources Management" Conf. Proc., Water Resources Res. Inst., Clemson Univ., Clemson, S.C., Rpt. No. 17, pp. 72-80, illus.

1970. Representative and experimental basins as dispersed systems. IASH-Unesco - Symp. on Results of Res. on Represent. and Expt. Basins, Wellington, New Zealand, Proc. 1970, pp. 112-126, illus.
- Kruse, E. G., and Dragoun, F. J.  
1970. H-flumes for measurement of flows of water containing high concentrations of suspended sediment. U.S. Dept. Agr. ARS 41-163, 13 pp., illus.
- Laflen, J. M., and Saveson, I. L.  
1970. Surface runoff from graded lands of low slopes. Amer. Soc. Agr. Engin. Trans, 13 (3): 340-341, illus.
- Onstad, C. A., and Jamieson, D. G.  
1970. Modeling the effect of land use modifications on runoff. Water Resources Res. 6 (5): 1287-1295, illus.
- and Olson, T. C.  
1970. Water budget accounting on two corn-cropped watersheds. Jour. Soil and Water Conserv. 25 (4): 150-152, illus.
- Overton, D. E., and Brakensiek, D. L.  
1970. A kinematic model of surface runoff response. IASH-Unesco Symp. on Results of Res. on Represent. and Expt. Basins, Wellington, (N.Z.), Proc. 1970, pp. 100-112, illus.
- Snyder, W. M., Mills, W. C., and Stephens, J. C.  
1970. A method of derivation of nonconstant watershed response functions. Water Resources Res. 6 (1): 261-274, illus.
- Whisler, F. D., and Bower, H.  
1970. Comparison of methods for calculating vertical drainage and infiltration for soils. Jour. Hydrol. X (1): 1-19, illus.





UNITED STATES INDEX MAP AND RELATED DATA

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[Pages 26 through 28]

LOCATION OF EXPERIMENTAL AGRICULTURAL WATERSHEDS OF THE SCIENCE & EDUCATION ADMINISTRATION, AGRICULTURAL RESEARCH (1970)

BY  
LAND RESOURCE REGIONS  
AND  
MAJOR LAND RESOURCE AREAS  
OF THE  
UNITED STATES  
(48 CONTIGUOUS STATES)

KEY TO RESEARCH LOCATIONS  
● 37 Current (continuing studies)  
○ 33 Discontinued locations



SCALE IN MILES  
0 50 100 200 300

LEGEND  
T Land resource region  
— Boundaries  
--- Major land resource area  
--- Boundaries  
— State lines

## LEGEND FOR LAND RESOURCE REGIONS AND MAJOR LAND RESOURCE AREAS

(of the 48 conterminous States)

- A** NORTHWESTERN FOREST, FORAGE, AND SPECIALTY CROP REGION
- Northern Pacific Coast Range and Valleys
  - Willamette and Puget Sound Valleys
  - Olympic and Western Slope Cascade Mountains
  - California Coastal Redwood Belt
  - Stikvliovs-Trinity Area
- B** NORTHWESTERN WHEAT AND RANGE REGION
- Eastern Slope Cascade Mountains
  - Columbia Basin
  - Columbia Plateau
  - Palouse and Nez-Perce Prairies
  - Upper Snake River Lava Plains and Hills
  - Snake River Plains
  - Lost River Valleys and Mountains
  - Eastern Idaho Plateaus
- C** CALIFORNIA SUBTROPICAL FRUIT, TRUCK, AND SPECIALTY CROP REGION
- Central California Valleys
  - Central California Coast Range
  - California Delta
  - Serrano and San Joaquin Valleys
  - Sierra Nevada Foothills
  - Southern California Coastal Plain
  - Southern California Mountains
- D** WESTERN RANGE AND IRRIGATED REGION
- Klamath and Shasta Valleys and Basins
  - Sierra Nevada Range
  - Mahneur High Plateau
  - Humboldt High Plateau
  - Waynes High Plateau
  - Cayuse High Plateau and Mountains
  - Fallons-Lovelock Area
  - Great Salt Lake Area
  - Southern Nevada Basin and Range
  - Sonoran Basin and Range
  - Imperial Valley
  - Northern Intermountain Deserts
  - Semiarid Rocky Mountains
  - Central Deseretic Basins, Mountains and Plateaus
  - (See E below)
  - Cultirado and Green Rivers Plateaus
  - New Mexican Plateau, Plateaus and Mesas
  - Black River Valley, Mesas and Plateaus
  - Black Hills, Hualpala, and Cerbat Mountains
  - Arizona and New Mexico Mountains
  - Central Arizona Basin and Range
  - Southeastern Arizona Basin and Range
  - Southern Deseretic Basins, Plains and Mountains
- E** ROCKY MOUNTAIN RANGE AND FOREST REGION
- Northern Rocky Mountains
  - Northern Rocky Mountain Valleys
  - Alpine Meadows and Rockland
  - Northern Rocky Mountain Foothills
  - Kasatch and Oquirrh Mountains
  - Southern Rocky Mountain Foothills
  - San Luis Valleys
  - High Intermountain Valleys
- F** NORTHERN GREAT PLAINS SPRING WHEAT REGION
- Brown Glaciated Plain
  - Dark Brown Glaciated Plain
  - Rolling Soft Shale Plain
  - Black Glaciated Plains
  - Red River Valley of the North
  - Western Minnesota Forest-Prairie Transition
- G** WESTERN GREAT PLAINS RANGE AND IRRIGATED REGION
- Northern Rolling High Plains
  - Northern Smooth High Plains
  - Pierre Shale Plains and Badlands
  - Black Hills
  - Rolling Pierre Shale Plains
  - Mixed Sandy and Silty Tableland
  - Nebraska Sand Hills
  - Dakota-Nebraska Eroded Tableland
  - Central High Plains
  - Irrigated Upper Platte River Valley
  - Upper Arkansas Valley Rolling Plains
  - Pecos-Canadian Plains and Valleys
- H** CENTRAL GREAT PLAINS WINTER WHEAT AND RANGE REGION
- Central Nebraska Loess Hills
  - Central High Tableland
  - Rolling Plains and Breaks
  - Central Kansas Sandstone Hills
  - Central Loess Plains
  - Bluestem Hills
  - Southern High Plains
  - Central Rolling Red Plains
  - Great Bend Sand Plains
  - Central Rolling Red Prairies
- I** SOUTHWESTERN PLATEAUS AND PLAINS, RANGE AND COTTON REGION
- Edwards Plateau
  - Texas Central Basin
  - Rio Grande Plain
- J** SOUTHWESTERN PRAIRIES, COTTON AND FORAGE REGION
- Cross Timbers
  - Grand Prairie
  - Texas Blackland Prairie
  - Texas Claypan Area
- K** NORTHERN LAKE STATES FOREST AND FORAGE REGION
- Northern Minnesota Swamps and Lakes
  - Minnesota Rockland Hills
  - Wisconsin and Minnesota Thin Loess and Till
  - Wisconsin and Minnesota Sandy Outwash
  - Superior Lake Plain
  - Northwestern Michigan and Wisconsin Stony, Sandy, and Rocky Plains and Hills
  - Northern Michigan Sandy Drift
- L** LAKE STATES FRUIT, TRUCK, AND DAIRY REGION
- Southeastern Wisconsin Drift Plain
  - Western Michigan Fruit Belt
  - Southeastern Michigan Fruit and Truck Belt
  - Southern Michigan Drift Plain
  - Erie-Huron Lake Plain
  - Erie Fruit and Truck Area
  - Ontario-Mohawk Plain
- M** CENTRAL FEED GRAINS AND LIVESTOCK REGION
- Loess, Till, and Sandy Prairies
  - Central Iowa and Minnesota Till Prairies
  - Eastern Iowa and Minnesota Till Prairies
- N** EAST AND CENTRAL GENERAL FARMING AND FOREST REGION
- (See M Above)
  - Orisk Highland
  - Adirondack Mountains
  - Adirondack Plateau and Ridges
  - Appalachian Mountains
  - Ouachita Mountains
  - Kentucky and Indiana Sandstone and Shale Hills and Valleys
  - Kentucky Bluegrass
  - Highland Rim and Pennroyal
  - Nashville Basin
  - Western Allegheny Plateau
  - Cumberland Plateau and Mountains
  - Central Allegheny Plateau and Mountains
  - Eastern Allegheny Plateau and Mountains
  - Southern Appalachian Ridges and Valleys
  - Sand Mountain
  - Blue Ridge
- O** MISSISSIPPI DELTA COTTON AND FEED GRAINS REGION
- Southern Mississippi Valley Alluvium
  - Eastern Arkansas Prairies
  - (See P below)
- P** SOUTH ATLANTIC AND GULF SLOPE CASH CROP, FOREST, AND LIVESTOCK REGION
- (See J Above)
  - Southern Coastal Plain
  - Southern Mississippi Valley Silty Uplands
  - Alabama and Mississippi Blackland Prairies
  - Southern Piedmont
  - Carolina and Georgia Sandhills
  - North Central Florida Ridge
- R** NORTHEASTERN FORAGE AND FOREST REGION
- Eastern Ohio Till Plain
  - Glaciated Allegheny Plateau and Catskill Mountains
  - Tughill Plateau
  - St. Lawrence-Champlain Plain
  - Northeastern Mountains
  - New England and Eastern New York Upland
  - Connecticut Valley
  - Aroostook Area
- S** NORTHERN ATLANTIC SLOPE TRUCK, FRUIT, AND POULTRY REGION
- Northern Appalachian Ridges and Valleys
  - Northern Piedmont
  - Northern Coastal Plain
- T** ATLANTIC AND GULF COAST LOWLANDS, FOREST AND TRUCK CROP REGION
- Gulf Coast Prairies
  - Gulf Coast Marshes
  - Gulf Coast Platewoods
  - Atlantic Coast Flatwoods
- U** FLORIDA SUBTROPICAL FRUIT, TRUCK CROP, AND RANGE REGION
- South Central Florida Ridge
  - Southern Florida Flatwoods
  - Florida Everglades and Associated Areas

Compiled by Morris E. Austin  
Information from SCS, State, and other Offices

Table 3.--Experimental agricultural watersheds, listed by State, locality, and location number, under study during 1970 and included in this publication

State	Locality	Assigned location number	Major land resource area <sup>1/</sup>	Watershed units	Events reported	Pages
Arizona.....	Tombstone.....	63	D-41	8	14	279-313
Florida.....	Vero Beach.....	08	U-55	2	0	30-33
Georgia.....	Watkinsville.....	10	P-136	1	1	34-36
Idaho.....	Reynolds.....	68	D-23, D-25	8	6	345-374
Iowa.....	Treynor.....	71	M-107	5	5	482-496
Mississippi....	Oxford.....	62	P-133, P-134	<u>2/</u> 11	11	239-278
Missouri.....	McCredie.....	25	M-113	1	1	60-63
New Mexico.....	Santa Rosa.....	64	G-70	1	0	314-315
North Carolina	Ahoskie.....	75	P-133	4	4	503-515
Ohio.....	Coshocton.....	26	N-124	<u>3/</u> 19	38	64-150
Oklahoma.....	Chickasha.....	69	H-78, H-80, J-84	34	27	375-463
	Stillwater.....	37	H-80	3	3	151-161
Pennsylvania...	Klingerstown.....	16	S-147	1	1	56-59
South Dakota...	Mewell.....	65	G-58, G-59, G-60	7	0	316-329
	Cottonwood.....	72	G-60	3	0	497-502
Texas.....	Riesel (Waco).....	42	J-86	<u>4/</u> 22	22	162-238
	Sonora.....	70	I-81	13	0	464-481
Vermont.....	North Danville.....	67	R-144	5	5	330-344
Virginia.....	Blacksburg.....	13	N-128, N-130, P-136, S-148	5	5	37-55

<sup>1/</sup> See location map (p. 26) and legend (p. 27).

<sup>2/</sup> 1 watershed (Oxford, Miss.) discontinued, 1970.

<sup>3/</sup> 15 watersheds (Coshocton, Ohio) discontinued, 1970.

<sup>4/</sup> Includes data for new watersheds SW-19 and SW-20 (Riesel, Tex.).

Table 4.--Watersheds, listed by State and locality, for which data were previously included but are not in this publication<sup>1/</sup>

State	Locality	Major land resource area <sup>2/</sup>	Discontinued watershed units		
			Number	Record period (19--)	Assigned location and watershed number
Mississippi.....	Oxford.....	P-133, P-134	1	57-69	62.011
Ohio.....	Coshocton.....	N-124	2	38-69	26.004,-007
			7	39-71	26.011,-014,-015,-018, 26.019,-021,-025
			1	39-73	26.016
			2	40-71	26.027,-028
			1	40-73	26.017
			1	48-70	26.008
			1	49-71	26.012

<sup>1/</sup> For discontinued watershed studies prior to 1969, see tables in previous publications.

<sup>2/</sup> See location map (p. 26) and legend (p. 27).

**WATERSHED DATA BY LOCATION NUMBER  
AND  
DECIMAL PAGING**

[8.002 - 1 TO 75.004 - 3, A TOTAL OF 486 DATA SHEETS]  
For location by States and Land Resource Areas  
and Regions, see U. S. Index Map, page 26.

VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-2

LOCATION: Okeechobee County, Florida. Runoff gaging site is about 3 mi. N. of City of Okeechobee on Cemetery Road. Taylor Creek empties into Lake Okeechobee.

AREA: 63170.00 acres 98.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													VERO BEACH, FLORIDA (TAYLOR CREEK)		WATERSHED W-2		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
1970 P	4.81	2.62	6.89	0.15	5.94	6.67	6.86	5.52	5.08	4.28	0.06	0.41	49.29				
Q	3.005	1.164	3.659	0.350	0.363	1.000	2.442	1.140	0.370	1.503	0.245	0.157	15.396				
STA AV P	2.04	2.43	3.47	2.01	4.40	8.54	6.44	6.69	6.38	4.36	1.28	1.50	49.53				
Q	0.556	0.496	1.207	0.203	0.395	2.238	2.076	2.130	2.682	2.221	2.216	0.220	16.641				

NOTES: Watershed conditions: 1970: Range & forest, 43%; improved pasture, 43%; cropland, 4%; miscellaneous, 10%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 8.2-4. Precipitation and runoff records began July 1955. Precipitation Thiessen Weighted using 7 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1970 DAILY AIR TEMPERATURE (degrees F)													VERO BEACH, FLORIDA (TAYLOR CREEK)		WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min
1	84 63	65 49	72 53	88 72	89 67	86 71	88 69	93 74	92 68	85 65	85 58	82 53				
2	78 56	69 65	74 48	87 73	83 61	83 63	93 70	94 75	93 70	92 69	86 63	83 60				
3	67 55	81 71	77 57	87 65	84 59	84 67	95 73	95 74	93 70	90 70	84 57	79 52				
4	58 46	72 30	77 58	74 65	87 61	86 70	94 71	96 70	94 71	89 68	70 39	81 50				
5	54 47	57 43	79 67	88 63	66 62	87 73	92 72	98 74	94 69	88 69	65 40	83 46				
6	70 67	61 54	71 57	87 64	83 57	85 67	90 72	94 73	95 70	86 71	73 41	77 42				
7	71 49	67 54	81 57	80 55	66 58	89 65	90 72	95 75	95 69	85 67	78 47	77 47				
8	54 29	73 49	78 63	80 57	87 58	85 66	94 72	93 76	93 70	87 68	81 51	76 50				
9	47 31	75 46	80 56	76 62	85 56	85 65	92 70	91 76	91 70	88 68	82 63	80 49				
10	48 26	75 43	73 50	62 59	84 56	87 67	89 70	88 74	94 69	87 68	85 61	80 53				
11	50 30	61 41	80 61	83 64	85 59	90 72	92 72	89 75	95 71	87 66	81 54	81 50				
12	67 52	69 50	77 67	85 70	86 62	87 68	92 73	93 76	93 73	88 65	80 59	82 57				
13	75 49	71 48	73 62	84 69	86 63	92 69	91 73	90 75	88 74	88 64	87 66	81 49				
14	67 55	76 48	71 46	88 67	87 60	92 66	92 75	91 73	85 70	88 68	88 65	77 47				
15	74 61	77 57	60 44	88 62	89 59	89 72	92 73	94 74	90 71	86 65	72 43	81 53				
16	70 56	83 67	67 46	87 59	90 59	88 70	94 72	93 73	90 72	89 67	61 35	83 65				
17	75 58	83 66	71 55	85 61	88 59	90 71	93 71	86 74	90 73	82 62	69 40	74 37				
18	75 56	73 55	72 59	82 61	89 61	90 73	93 73	92 74	89 71	82 62	75 44	80 50				
19	76 56	71 50	87 61	86 66	89 69	90 70	94 74	93 73	92 72	83 71	80 56	82 56				
20	69 48	73 51	84 63	85 69	86 70	95 73	94 76	93 71	90 70	84 69	85 54	80 49				
21	71 45	72 44	83 66	90 71	87 63	95 74	88 73	96 71	90 69	86 66	85 58	82 58				
22	61 43	67 48	88 68	93 70	87 64	93 73	87 74	91 71	90 68	83 63	85 55	83 51				
23	65 40	71 48	77 52	88 63	89 63	91 76	88 72	90 72	90 69	85 63	82 36	84 55				
24	70 48	76 51	67 49	87 68	85 70	88 71	88 73	90 74	89 72	84 65	50 29	85 60				
25	62 41	76 59	76 54	88 67	73 72	91 72	90 74	94 74	87 73	88 61	66 50	83 39				
26	75 50	79 46	74 62	86 64	87 67	90 72	90 74	90 73	87 72	84 60	76 53	64 31				
27	78 50	65 38	69 61	88 63	90 69	92 74	89 73	94 72	89 73	85 64	81 55	62 32				
28	78 56	70 51	77 71	90 64	91 70	93 76	94 73	94 73	91 71	86 62	80 54	69 39				
29	81 56		87 71	89 69	84 71	92 74	95 73	95 74	89 72	84 68	80 58	76 47				
30	82 64		89 67	91 65	86 72	90 72	92 74	91 72	84 69	87 67	82 54	75 62				
31	79 40		88 73		85 70		92 74	91 70		86 66		80 43				
AV.	69 49	65 46	77 59	83 63	86 64	86 68	92 73	92 73	88 68	86 66	75 50	79 50				
MEAN	59.0	55.4	67.8	72.9	74.9	77.4	82.1	83.0	78.2	76.2	62.5	64.2				
STA AV	74 51	73 52	77 55	83 62	87 67	89 72	90 74	91 74	88 72	86 66	78 58	73 51				

NOTES: Temperature data from R-3, readings taken daily. STA AV period from July 1, 1956 through 1970.

1970		DAILY PRECIPITATION (inches)					VERO BEACH, FLORIDA (TAYLOR CREEK)					WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	0.00	0.0	0.0	
2	3.34	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.01	0.87	0.0	0.0	
3	1.19	1.74	0.0	0.06	0.0	0.0	0.13	0.0	0.0	3.40	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	1.02	0.72	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.35	0.0	0.0	3.61	0.18	0.0	0.49	0.00	0.0	0.0	
6	1.56	0.00	0.0	0.06	0.0	0.0	0.19	0.68	0.17	0.46	0.0	0.0	
7	0.0	0.00	0.70	0.0	0.0	0.10	0.88	0.30	0.23	0.80	0.0	0.0	
8	0.0	0.0	0.33	0.0	0.0	0.0	3.13	0.74	0.04	0.00	0.0	0.0	
9	0.0	0.01	0.0	0.0	0.0	0.0	0.09	0.63	0.02	0.02	0.0	0.0	
10	0.0	0.00	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.09	0.04	0.0	
11	0.0	0.0	0.85	0.02	0.0	0.75	0.0	0.08	0.0	3.01	0.0	0.0	
12	0.0	0.0	0.47	0.0	0.0	0.0	0.32	0.27	0.0	0.01	0.0	0.0	
13	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.00	0.06	0.02	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	1.25	0.0	0.0	0.0	
15	1.67	0.0	0.0	0.00	0.0	0.0	0.24	0.0	0.03	0.13	0.02	0.0	
16	0.02	0.28	0.0	0.0	0.0	0.11	0.0	0.00	0.18	0.28	0.0	0.0	
17	3.02	0.00	0.0	0.0	0.0	0.10	0.04	0.0	0.01	0.16	0.0	0.11	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.44	1.03	0.03	0.01	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.15	1.92	0.21	0.08	0.18	0.0	0.0	
22	0.0	0.0	0.39	0.0	0.0	0.03	0.07	0.15	0.02	0.0	0.0	0.0	
23	0.01	0.0	0.0	0.0	0.01	0.46	0.61	0.38	0.03	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	1.69	0.57	0.00	0.61	0.40	0.0	0.0	0.0	
25	0.0	0.58	2.37	0.0	0.07	1.12	0.0	0.01	0.19	0.0	0.0	0.11	
26	0.0	0.0	1.68	0.0	0.24	0.06	0.29	0.03	0.08	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.91	0.0	0.00	0.05	0.00	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	3.55	0.12	0.56	0.21	0.03	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	2.33	0.21	0.01	0.01	1.34	0.21	0.0	0.0	
30	0.01	0.0	0.0	0.0	0.13	0.49	0.0	0.05	0.37	0.60	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.18	
TOTAL	4.81	2.62	6.89	0.15	5.94	6.67	6.86	5.52	5.08	4.28	0.06	0.41	
STA AV	2.04	2.43	3.47	2.01	4.40	6.54	6.44	6.69	6.38	4.36	1.28	1.50	

NOTES: Thiessen weighted rainfall, using 7 rain gages. STA AV based on period July 1, 1955 through 1970.

1970		MEAN DAILY DISCHARGE (cfs)					VERO BEACH, FLORIDA (TAYLOR CREEK)					WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	23.0	36.0	31.0	141.0	11.0	94.0	146.0	35.0	22.0	186.0	62.0	16.0	
2	23.0	30.0	30.0	108.0	10.0	124.0	107.0	36.0	20.0	111.0	43.0	16.0	
3	147.0	302.0	26.0	77.0	10.0	80.0	70.0	27.0	18.0	451.0	35.0	16.0	
4	431.0	426.0	24.0	64.0	9.4	51.0	62.0	24.0	17.0	387.0	30.0	15.0	
5	243.0	778.0	23.0	52.0	9.4	257.0	158.0	50.0	16.0	247.0	26.0	15.0	
6	458.0	293.0	26.0	45.0	8.7	329.0	228.0	10.0	22.0	171.0	24.0	15.0	
7	1170.0	165.0	21.0	42.0	20.0	163.0	250.0	48.0	24.0	371.0	24.0	14.0	
8	664.0	110.0	95.0	56.0	11.0	96.0	680.0	132.0	34.0	418.0	23.0	14.0	
9	342.0	81.0	103.0	6.7	9.9	70.0	501.0	400.0	46.0	259.0	22.0	13.0	
10	207.0	74.0	71.0	23.0	10.0	46.0	273.0	364.0	35.0	165.0	19.0	13.0	
11	149.0	61.0	47.0	24.0	9.1	66.0	162.0	213.0	29.0	129.0	19.0	13.0	
12	114.0	58.0	247.0	24.0	8.6	134.0	107.0	156.0	24.0	106.0	19.0	13.0	
13	100.0	56.0	437.0	23.0	8.6	77.0	96.0	254.0	23.0	79.0	19.0	15.0	
14	78.0	49.0	263.0	22.0	7.9	26.0	75.0	152.0	46.0	65.0	19.0	15.0	
15	563.0	45.0	143.0	16.0	7.3	15.0	66.0	120.0	86.0	56.0	19.0	15.0	
16	1020.0	40.0	94.0	17.0	6.9	21.0	83.0	79.0	48.0	59.0	19.0	15.0	
17	594.0	55.0	65.0	15.0	6.9	20.0	59.0	55.0	36.0	90.0	19.0	15.0	
18	402.0	55.0	54.0	15.0	6.7	60.0	48.0	40.0	27.0	84.0	17.0	16.0	
19	273.0	47.0	48.0	15.0	6.7	6.5	33.0	32.0	26.0	61.0	17.0	15.0	
20	197.0	50.0	39.0	14.0	6.4	6.1	33.0	26.0	20.0	48.0	17.0	15.0	
21	146.0	16.0	34.0	14.0	6.0	6.5	189.0	117.0	20.0	39.0	17.0	10.0	
22	111.0	28.0	35.0	13.0	6.0	9.0	770.0	94.0	19.0	39.0	17.0	10.0	
23	95.0	27.0	48.0	13.0	5.6	14.0	529.0	77.0	18.0	24.0	18.0	10.0	
24	83.0	28.0	40.0	13.0	13.0	80.0	563.0	85.0	21.0	31.0	17.0	11.0	
25	70.0	30.0	104.0	13.0	27.0	147.0	311.0	110.0	28.0	27.0	15.0	11.0	
26	62.0	65.0	1600.0	13.0	17.0	241.0	169.0	88.0	30.0	25.0	15.0	13.0	
27	55.0	47.0	2280.0	13.0	23.0	146.0	139.0	55.0	27.0	23.0	15.0	12.0	
28	51.0	36.0	2060.0	12.0	85.0	82.0	115.0	44.0	23.0	21.0	15.0	11.0	
29	47.0	1030.0	12.0	64.0	63.0	202.0	202.0	44.0	24.0	20.0	15.0	11.0	
30	43.0	397.0	12.0	373.0	125.0	151.0	31.0	153.0	62.0	15.0	11.0	11.0	
31	44.0	199.0	158.0	106.0	106.0	106.0	27.0	27.0	134.0	134.0	12.0	12.0	
MEAN	257.26	110.29	313.26	30.92	31.04	88.50	209.06	97.58	32.73	128.65	21.70	13.42	
INCHES	3.005	1.164	3.659	0.350	0.363	1.000	2.442	1.140	0.370	1.503	0.245	0.157	
STA AV	0.556	0.496	1.207	0.203	0.395	2.238	2.076	2.130	2.682	2.221	2.216	0.220	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by .0003768. Discharge is combined flow from Williamson Ditch and S-1 structure. Runoff data furnished by the U.S. Geological Survey. Discharge measurements generally made once a week.

## VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3

LOCATION: Okeechobee County, Florida. Runoff gaging site is approximately 11 mi. (airline) N-NW of City of Okeechobee on State Road #68. Northern reach of Taylor Creek Watershed.

ARBA: 10050.00 acres 15.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)				VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3												
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	4.50	2.67	6.33	0.01	6.72	6.40	4.77	4.35	6.45	2.57	0.02	0.38	0.074	45.19	
	Q	2.720	1.109	3.586	0.424	0.279	0.824	0.813	0.492	0.712	1.236	0.178	0.074	12.446		
STA AV	P	1.92	2.31	3.44	2.34	4.39	7.67	6.74	6.52	5.95	4.18	1.17	1.46	48.10		
	Q	0.498	0.348	1.130	0.187	0.290	1.617	1.890	2.008	2.533	1.903	1.228	0.146	13.778		

NOTES: Watershed conditions: 1970: Improved pasture, 51%; range & forest, 38%; cropland, 1%; miscellaneous, 10%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 8.2-4. Precipitation and runoff records began July 1955. Precipitation Thiessen weighted using 2 gages. Runoff data furnished by U.S. Geological Survey. For long-time precipitation records, see National Weather Service records at Okeechobee Hurricane Gate 6, Florida.

1970	DAILY PRECIPITATION (inches)												VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0												
3	1.12	1.82	0.0	0.09	0.0	0.0	0.02	0.0	0.0	0.15	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	1.27	0.24	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.05	0.0	0.0	0.70	0.0	0.0	0.96	0.0	0.0	0.0												
6	1.46	0.0	0.0	0.01	0.0	0.0	0.28	0.38	0.0	0.20	0.0	0.0												
7	0.0	0.0	0.67	0.0	0.0	0.05	0.49	0.03	1.04	0.77	0.0	0.0												
8	0.0	0.0	0.35	0.0	0.0	0.0	0.18	0.0	0.0	0.01	0.0	0.0												
9	0.0	0.01	0.0	0.0	0.0	0.0	0.23	0.56	0.0	0.00	0.0	0.0												
10	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.02	0.0												
11	0.0	0.0	0.96	0.0	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.31	0.0	0.0	0.0	0.32	0.07	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.09	0.01	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0												
15	1.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
16	0.04	0.10	0.0	0.0	0.0	0.48	0.0	0.0	0.26	0.05	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.92	0.01	0.01	0.0	0.0												
21	0.0	0.0	0.0	0.0	0.0	0.0	1.78	0.65	0.10	0.23	0.0	0.0												
22	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0												
23	0.01	0.0	0.0	0.0	0.0	0.03	0.34	0.52	0.11	0.0	0.0	0.0												
24	0.0	0.0	0.0	0.0	2.17	0.43	0.0	0.62	0.26	0.0	0.0	0.0												
25	0.0	0.74	2.09	0.0	0.05	1.56	0.0	0.06	0.29	0.0	0.0	0.12												
26	0.0	0.0	1.43	0.0	0.0	0.09	0.13	0.03	0.35	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.99	0.0	0.0	0.20	0.01	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.66	0.19	0.52	0.09	0.07	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	2.77	0.0	0.03	0.02	1.73	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.09	0.80	0.0	0.01	0.35	0.22	0.0	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.23	0.0												
TOTAL	4.50	2.67	6.33	0.01	6.72	6.40	4.77	4.35	6.45	2.57	0.02	0.38												
STA AV	1.92	2.31	3.44	2.34	4.39	7.67	6.74	6.52	5.95	4.18	1.17	1.46												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-2, p.08.002-1. Thiessen weighted average of 2 rain gages. STA AV based on period July 1, 1955 through 1970.



1970 MEAN DAILY DISCHARGE (cfs) VERO BEACH, FLORIDA (TAYLOR CREEK) WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.10	5.90	6.60	26.00	0.70	12.00	6.50	5.90	3.80	53.00	2.60	1.80
2	4.10	3.00	8.80	19.00	0.70	18.00	8.60	4.90	3.60	35.00	3.60	1.60
3	24.00	70.00	4.70	16.00	0.70	9.30	7.00	4.50	3.20	72.00	3.40	1.60
4	36.00	89.00	4.50	13.00	0.60	5.90	5.90	4.30	2.90	38.00	3.40	1.80
5	19.00	44.00	8.30	12.00	0.60	70.00	6.20	4.00	2.90	23.00	3.00	2.00
6	104.00	33.00	2.90	11.00	0.60	82.00	6.50	4.30	6.50	17.00	3.00	1.80
7	150.00	26.00	3.70	9.50	0.50	30.00	7.00	5.40	5.90	44.00	3.00	1.40
8	71.00	21.00	17.00	8.30	0.40	18.00	8.90	4.50	20.00	51.00	2.80	1.40
9	44.00	17.00	14.00	7.50	0.40	12.00	8.90	5.40	26.00	33.00	2.80	1.60
10	31.00	14.00	8.90	7.00	0.30	8.90	8.60	8.10	19.00	23.00	2.80	1.20
11	24.00	12.00	5.00	6.20	0.30	6.70	7.80	5.70	14.00	18.00	2.60	1.20
12	19.00	10.00	46.00	5.70	0.30	5.70	6.70	4.10	12.00	14.00	2.60	1.20
13	16.00	9.70	60.00	5.20	0.30	4.50	7.00	3.80	9.70	12.00	2.40	1.00
14	11.00	8.90	33.00	3.90	0.20	3.60	6.50	3.40	11.00	10.00	2.40	1.00
15	148.00	6.20	20.00	0.20	0.20	3.00	5.40	3.00	16.00	8.30	2.40	1.00
16	121.00	6.60	12.00	3.20	0.20	2.90	4.70	2.70	12.00	7.50	2.40	0.80
17	72.00	8.90	14.00	3.00	0.20	3.40	4.30	2.70	10.00	6.50	2.20	0.80
18	51.00	8.20	12.00	2.80	0.10	3.60	3.80	2.50	8.90	6.20	2.20	0.80
19	38.00	7.50	10.00	2.60	0.10	2.60	3.60	2.40	7.50	5.40	2.20	0.70
20	29.00	7.00	8.50	2.40	0.10	2.10	3.60	2.20	6.20	4.90	2.20	0.60
21	22.00	5.90	7.50	2.20	0.10	1.70	27.00	7.00	5.40	4.90	2.00	0.60
22	18.00	5.60	7.50	2.00	0.10	1.50	63.00	11.00	5.40	5.70	2.00	0.50
23	15.00	5.40	11.90	1.80	0.10	1.40	26.00	12.00	5.70	5.70	2.20	0.50
24	13.00	5.10	8.20	1.60	1.80	1.40	31.00	17.00	5.20	4.70	2.20	0.50
25	12.00	5.60	20.00	1.40	4.80	4.20	16.00	21.00	6.50	4.30	2.20	0.40
26	11.00	15.00	541.00	1.40	2.80	16.00	11.00	18.00	7.50	3.80	2.20	0.40
27	9.70	10.00	370.00	1.20	3.60	7.50	9.50	10.00	8.30	3.60	2.20	0.60
28	9.20	7.90	113.00	1.00	7.90	4.00	7.50	10.00	6.50	3.20	2.20	0.70
29	8.30		65.00	0.90	12.00	3.00	8.60	7.80	5.90	1.20	2.00	0.70
30	7.50		43.00	0.90	57.00	2.90	9.20	5.70	43.00	0.20	1.80	0.60
31	6.70		32.00		20.00		7.00	4.50		2.80		0.60
MEAN	37.052	16.729	48.842	5.963	3.797	11.593	11.074	6.703	10.017	16.835	2.500	1.013
INCHES	2.720	1.109	3.586	0.424	0.279	0.824	0.813	0.492	0.712	1.236	0.178	0.074
STA AV	0.498	0.348	1.130	0.187	0.290	1.617	1.890	2.008	2.533	1.903	1.228	0.146

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by .002368. Runoff data furnished by U.S. Geological Survey.

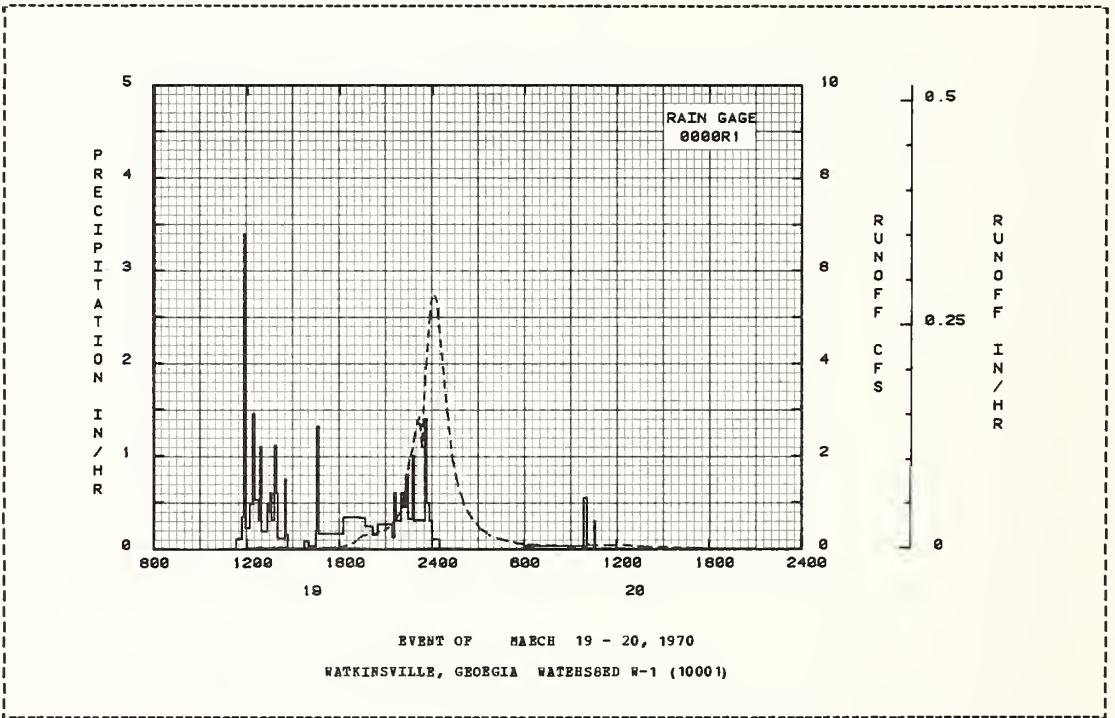


1970 SELECTED RUNOFF EVENT			WATKINSVILLE, GEORGIA WATERSHED W-1 (10001)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 19 - 20, 1970										
3-19	RG 0000R1 0.3	0.0	3-19	RG 0000R1			3-19			
				1118	0.0	0.0		1228	0.0	0.0
				1140	0.1091	0.04		1230	0.004	0.0
				1147	0.3429	0.08		1242	0.027	0.0002
				1153	3.4900	0.42		1255	0.033	0.0005
				1212	0.2211	0.49		1300	0.013	0.0006
WATERSHED CONDITIONS:				1222	0.4800	0.57		1309	0.005	0.0007
Dormant Coastal Bermudagrass				1229	1.4571	0.74		1322	0.009	0.0007
pasture - just beginning				1245	0.5250	0.88		1333	0.003	0.0008
spring growth; excellent				1251	0.3000	0.91		1342	0.015	0.0009
cover.				1257	1.1000	1.02		1347	0.037	0.0010
30 Day Antecedent Conditions:				1320	0.1826	1.09		1400	0.015	0.0013
	Rainfall (inches)	Runoff (inches)		1325	0.4800	1.13		1406	0.032	0.0014
02-17	0.00	0.0000		1331	0.4000	1.17		1411	0.026	0.0015
02-25	0.55	0.0000		1336	0.6000	1.22		1443	0.005	0.0019
03-09	0.07	0.0000		1346	0.3000	1.27		1503	0.004	0.0020
03-17	0.01	0.0000								
03-18	0.05	0.0000		1353	1.1143	1.40		1522	0.0	0.0021
				1400	0.6000	1.47		1630	0.0	0.0021
				1428	0.1071	1.52		1640	0.0	0.0021
				1432	0.7500	1.57		1654	0.008	0.0021
				1440	0.1500	1.59		1700	0.016	0.0022
				1545	0.0	1.59		1712	0.019	0.0024
				1600	0.0800	1.61		1724	0.022	0.0026
				1629	0.0207	1.62		1746	0.031	0.0031
				1635	0.2000	1.64		1759	0.030	0.0034
				1640	1.3201	1.75		1814	0.053	0.0039
				1815	0.1579	2.00		1822	0.056	0.0043
				1920	0.3415	2.37		1828	0.066	0.0046
				1940	0.3300	2.48		1852	0.124	0.0066
				2010	0.2400	2.60		1903	0.163	0.0080
				2030	0.1500	2.65		1916	0.222	0.0101
				2125	0.2618	2.89		1927	0.275	0.0125
				2135	0.1200	2.91		1935	0.292	0.0144
				2140	0.6000	2.96		1946	0.297	0.0172
				2200	0.3000	3.06		2010	0.321	0.0236
				2210	0.6000	3.16		2035	0.361	0.0309
				2218	0.4500	3.22		2056	0.397	0.0378
				2227	0.8000	3.34		2113	0.459	0.0440
				2244	0.3177	3.43		2127	0.550	0.0501
				2250	0.9999	3.53		2134	0.601	0.0536
				2300	0.3000	3.58		2138	0.626	0.0557
				2333	0.3091	3.75		2147	0.703	0.0608
				2339	1.3999	3.89		2153	0.740	0.0646
				2350	0.4909	3.98		2159	0.806	0.0686
				2400	0.3000	4.03		2203	0.886	0.0715
			3-20	30	0.1000	4.08		2218	1.297	0.0856
				600	0.0	4.08		2224	1.566	0.0930
				951	0.0260	4.18		2232	1.908	0.1049
				1003	0.5500	4.29		2237	2.027	0.1134
				1032	0.0	4.29		2245	2.159	0.1278
				1036	0.3000	4.31		2250	2.391	0.1376
								2301	2.689	0.1617
								2310	2.838	0.1831
								2321	3.193	0.2116
								2332	3.589	0.2437
								2337	3.974	0.2600
								2349	4.981	0.3063
								2355	5.298	0.3328
								2359	5.406	0.3512
								2400	5.406	0.3559
							3-20	10	5.460	0.4027
								18	5.320	0.4398
								24	4.963	0.4663
								100	2.925	0.5886
								121	1.910	0.6323
								142	1.352	0.6618
								206	0.946	0.6855
								221	0.775	0.6966
								309	0.429	0.7215
								348	0.283	0.7335
								428	0.205	0.7419
								537	0.115	0.7514
								552	0.102	0.7528
								700	0.073	0.7579
								807	0.058	0.7617
								854	0.048	0.7638

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.051653.

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 19 - 20, 1970 (CONTINUED)										
							3-20	950	0.038	0.7659
								956	0.044	0.7661
								1007	0.090	0.7667
								1012	0.080	0.7671
								1025	0.073	0.7679
								1045	0.075	0.7692
								1200	0.080	0.7742
								1240	0.070	0.7768
								1258	0.058	0.7778
								1350	0.043	0.7801
								1450	0.033	0.7820
								1650	0.010	0.7842
								1740	0.004	0.7845
								1940	0.0	0.7848

NOTES: To convert runoff in CFS to IN/8E, multiply by 0.051653.



BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)

LOCATION: Montgomery County, Va., 2 mi. W. of Christiansburg, Va., New River.

AREA: 786.00 acres 1.23 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 1.28	1.30	1.47	2.95	1.74	3.24	5.32	4.79	1.19	2.66	1.97	2.14	30.66	
	Q 0.398	0.222	0.138	0.189	0.137	0.091	0.109	0.177	0.088	0.076	0.081	0.080	1.786	
STA AV	P 2.15	2.51	3.03	2.65	2.83	2.54	3.73	3.57	2.96	2.68	2.22	2.84	33.71	
	Q 0.648	0.686	1.020	0.758	0.507	0.268	0.243	0.282	0.202	0.220	0.226	0.406	5.466	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval								
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days				
8-20	0.009	8-20	0.006	8-10	0.009	8-10	0.019	8-10	0.027	8-10	0.036	8-9	0.047	1-16	0.135

MAXIMUMS FOR PERIOD OF RECORD															
8-21	0.230	3-13	0.150	3-13	0.230	3-13	0.360	4-3	0.420	4-3	0.520	4-3	0.730	3-27	1.760
1966		1967		1967		1967		1960		1960		1960		1960	

NOTES: Watershed conditions: Cultivated, alfalfa and other hay crops, 28%; row crop, 10%; permanent pasture, usually good cover of native bluegrass combined with other grasses and clovers, 43%; farm woods predominately hard wood, 13%; idle, 5%; roads, 1%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.7-5. Precipitation Thiessen weighted from rain gages R-1, R-2, R-3, and R-4. Station average precipitation determined from record period from August 1957 through 1970. For long-time precipitation records, see National Weather Service records for Blacksburg, Virginia.

1970 DAILY PRECIPITATION (inches)													BLACKSBURG, VIRGINIA CRAB CREEK WATERSHED (13007)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.49	0.0	0.30	0.0	0.00E	0.0	0.0	0.08E	0.0		
2	0.0	0.39	0.04E	0.46	0.02	0.06	0.36	0.0	0.0	0.0	0.54	0.0		
3	0.02S	0.09S	0.0	0.0	0.63	0.04	0.0	0.83	0.14E	0.0	0.05	0.01		
4	0.0	0.0	0.10	0.0	0.33	0.00	0.01	0.0	0.03E	0.0	0.11N	0.0		
5	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.04E	0.0	0.0	0.0		
6	0.19S	0.0	0.0	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.00	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.00	0.0	0.0	0.0	0.01E	0.09	0.00	0.0	0.0	0.0	0.0		
9	0.0	0.25E	0.0	0.02	0.0	0.01	0.57	1.28	0.22	0.0	0.0	0.0		
10	0.0	0.02E	0.0	0.0	0.08E	0.0	0.04	1.33	0.38	0.01	0.33	0.0		
11	0.06S	0.0	0.0	0.0	0.26E	0.74	0.0	0.0	0.0	0.05	0.07	0.01		
12	0.01S	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.16		
13	0.0	0.0	0.0	0.45	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.14S	0.0	0.00	0.0	0.0	0.0	0.02	0.0	0.04	0.03	0.0		
15	0.0	0.04E	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.02	0.0	0.0		
16	0.0	0.17	0.0	0.0	0.29	0.12	0.0	0.0	0.0	0.0	0.0	0.34E		
17	0.54S	0.20	0.0	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.01		
18	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02		
19	0.01S	0.0	0.01E	0.03	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
20	0.07S	0.0	0.01E	0.17	0.0	0.18	0.56	0.86	0.0	0.18	0.22	0.0		
21	0.0	0.0	0.01E	0.0	0.0	0.00	0.42	0.0	0.0	0.32	0.0	0.93E		
22	0.0	0.0	0.23	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.09E		
23	0.07S	0.0	0.01	0.0	0.0	0.0	0.25	0.16	0.0	0.0	0.0	0.04		
24	0.0	0.0	0.0	0.01	0.0	0.0	1.40	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.01	0.0	0.26	0.21E	0.0	0.0	0.0	0.0	0.01S		
26	0.0	0.0	0.05E	0.33	0.08	0.43	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.12	0.0	0.31E	0.29	0.0	0.39	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.72	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0		
29	0.31	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	1.03	0.0	0.0		
30	0.0	0.0	0.06	0.0	0.0	0.0	0.83	0.30	0.0	0.83	0.0	0.0		
31	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.0	0.17E	0.0	0.51S		
TOTAL	1.28	1.30	1.47	2.95	1.74	3.24	5.32	4.79	1.19	2.66	1.97	2.14		
STA AV	2.15	2.51	3.03	2.65	2.83	2.54	3.73	3.57	2.96	2.68	2.22	2.84		

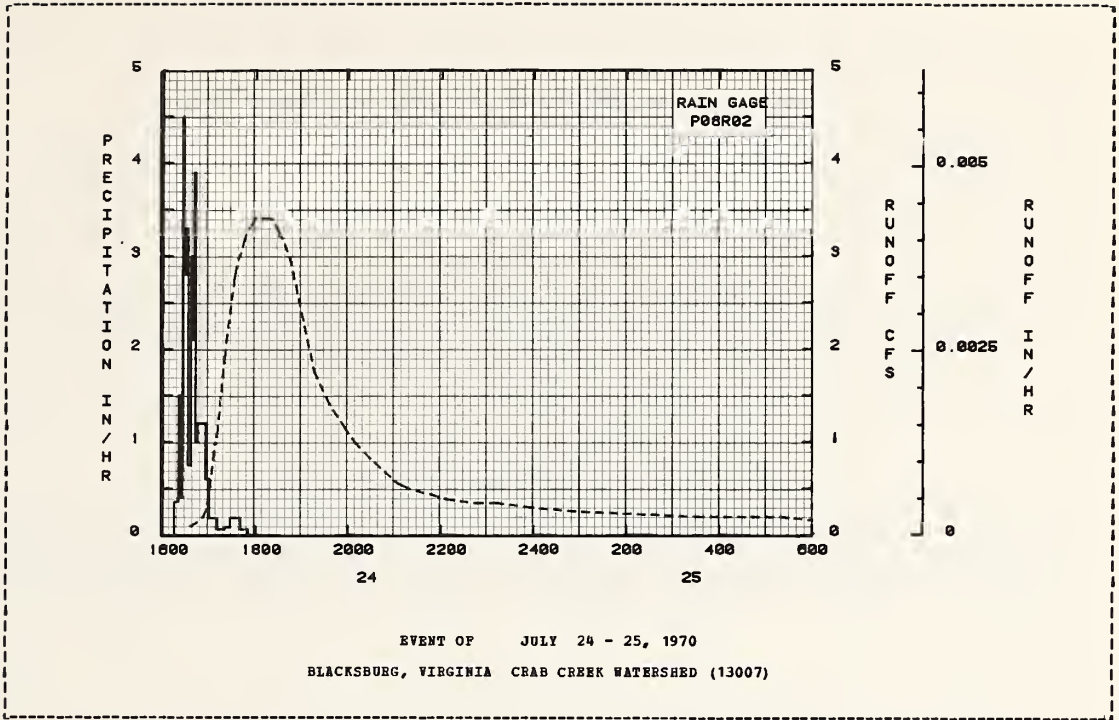
NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, R-3, and R-4. STA AV based on record period August 1957 through 1970.

1970		MEAN DAILY DISCHARGE (cfs)					BLACKSBURG, VIRGINIA CRAE CREEK WATERSHED (13007)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.796	0.222	0.190	0.183	0.146	0.122	0.087	0.111	0.102	0.087R	0.111	0.071	
2	0.424	0.382	0.173	0.568	0.144	0.134	0.089	0.104	0.102	0.087R	0.124	0.071	
3	0.343	0.383	0.172	0.513	0.162	0.111	0.094	0.318	0.108	0.087E	0.152	0.071	
4	0.260	0.506	0.172	0.426	0.324	0.111	0.090	0.169	0.102	0.080E	0.111	0.071	
5	0.225	0.239	0.160	0.364	0.197	0.111	0.083	0.116	0.102	0.071	0.099	0.071	
6	0.222	0.222	0.145	0.300	0.172	0.098	0.081	0.101	0.102	0.071	0.092	0.071	
7	0.221	0.222	0.145	0.229	0.146	0.103	0.071	0.096	0.102	0.071	0.077	0.071	
8	0.160	0.222	0.145	0.206	0.144	0.100	0.071	0.087	0.098	0.071	0.071	0.071	
9	0.159	0.311	0.128	0.190	0.144	0.098	0.113	0.182	0.107	0.071	0.071	0.070	
10	0.159	0.251	0.127	0.174	0.144	0.098	0.101	1.174	0.118	0.071	0.085	0.051	
11	0.340	0.222	0.127	0.159	0.157	0.113	0.087	0.377	0.116	0.071	0.099	0.055	
12	0.557	0.207	0.155	0.159	0.147	0.110	0.081	0.214	0.111	0.071	0.154	0.070	
13	0.563	0.203	0.147	0.166	0.146	0.099	0.080	0.175	0.111	0.071	0.127	0.070	
14	0.563	0.203	0.127	0.216	0.140	0.099	0.078	0.186	0.099	0.071	0.098	0.051	
15	0.563	0.211	0.127	0.160	0.135	0.097	0.063	0.144	0.087	0.071	0.087	0.055	
16	0.563	0.259	0.127	0.159	0.145	0.087	0.062	0.122	0.087	0.071	0.075	0.080	
17	0.563	0.398	0.127	0.159	0.149	0.087	0.071	0.120	0.087	0.071	0.071	0.083	
18	0.563	0.381	0.192	0.159	0.138	0.087	0.071	0.120	0.087	0.071	0.071	0.071	
19	0.511	0.325	0.161	0.159	0.127	0.087	0.071	0.120	0.087	0.071	0.071	0.062	
20	0.446	0.257	0.159	0.164	0.127	0.087	0.083	0.489	0.087	0.075	0.086	0.062	
21	0.580	0.227	0.159	0.140	0.127	0.097	0.097	0.188	0.087	0.100	0.072	0.206	
22	0.620	0.222	0.176	0.127	0.127	0.087	0.117	0.185	0.087	0.077	0.071	0.137	
23	0.618	0.222	0.161	0.127	0.123	0.087	0.108	0.133	0.087	0.071	0.071	0.116	
24	0.585	0.222	0.159	0.127	0.122	0.087	0.450	0.120	0.087	0.071	0.068	0.111	
25	0.515	0.222	0.150	0.127R	0.127	0.094	0.175	0.111	0.087	0.071	0.078	0.111	
26	0.486	0.208	0.127	0.135E	0.137	0.122	0.126	0.111	0.087	0.071	0.071	0.106	
27	0.314	0.191	0.127	0.159E	0.127	0.128	0.113	0.111	0.107	0.071	0.071	0.091	
28	0.249	0.190	0.127	0.159	0.127	0.090	0.111	0.111	0.099E	0.071	0.071	0.087	
29	0.349	0.127	0.127	0.159	0.127	0.087	0.102	0.111	0.087E	0.111	0.071	0.087	
30	0.385	0.127	0.127	0.159	0.127	0.087	0.421	0.113	0.087E	0.209	0.071	0.087	
31	0.242	0.127	0.127	0.127	0.127	0.127	0.151	0.102	0.116	0.116	0.116	0.141	
MEAN	0.4240	0.2618	0.1475	0.2077	0.1462	0.0999	0.1161	0.1885	0.0969	0.0813	0.0889	0.0848	
INCREAS	0.398	0.222	0.138	0.189	0.137	0.091	0.109	0.177	0.088	0.076	0.081	0.080	
STA AV	0.648	0.686	1.020	0.758	0.507	0.268	0.243	0.282	0.202	0.220	0.226	0.406	

NOTES: To convert CFS to IN/DAY, multiply by 0.030281. STA AV based on record period August 1957 through 1970.

1970		SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA CRAE CREEK WATERSHED (13007)						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 24 - 25, 1970											
7-24	RG P08R02 0.0	0.002	7-24	RG P08R02	0.0	0.0	7-24	1636	0.103	0.0	
					1620	0.3600	0.03	1644	0.143	0.0	
					1622	1.5003	0.08	1652	0.198	0.0	
					1625	0.4000	0.10	1656	0.269	0.0	
					1627	4.4990	0.25	1700	0.444	0.0	
WATERSHED CONDITIONS:											
	Permanent pasture, blue grass			1630	2.7998	0.39		1706	0.696	0.0001	
	combined with other native			1632	3.3008	0.50		1707	0.991	0.0001	
	grasses and clover, good			1636	0.7500	0.55		1709	0.983	0.0001	
	cover, 43%; row crop, 10%;			1638	2.9994	0.65		1711	1.181	0.0001	
	alfalfa and other hay, good			1640	2.1005	0.72		1712	1.252	0.0001	
	cover, 28%; idle with weeds,										
	grasses, and vines, good			1642	3.8992	0.85		1720	1.918	0.0004	
	cover, 85%; farm woods			1645	0.9999	0.90		1723	2.156	0.0005	
	predominately hard wood, 13%;			1650	1.2001	1.00		1732	2.750	0.0010	
	paved roads, 1%.			1655	1.2001	1.10		1735	2.893	0.0012	
				1700	0.5999	1.15		1747	3.226	0.0020	
				1710				1800	3.408	0.0029	
				1720	0.0600	1.19		1822	3.392	0.0045	
				1727	0.0858	1.20		1834	3.186	0.0053	
				1740	0.1846	1.24		1844	2.972	0.0059	
				1750	0.0601	1.25		1916	1.752	0.0075	
				1800	0.0	1.25		1936	1.395	0.0082	
								2000	1.086	0.0088	
								2009	0.991	0.0090	
								2028	0.824	0.0094	
								2104	0.547	0.0099	
								2120	0.491	0.0101	
								2148	0.428	0.0104	
								2208	0.380	0.0106	
								2246	0.341	0.0109	
								2312	0.341	0.0111	
								2400	0.293	0.0114	
								54	0.254	0.0117	
								340	0.190	0.0125	
								520	0.190	0.0129	

NOTES: To convert CFS to IN/HR, multiply by 0.0312617.



## BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)

LOCATION: Floyd Connty, Va.; 1 mi. W. of Terrys Fork, Va. Little River, New River.

AREA: 893.00 acres 1.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 1.07	1.64	1.01	3.27	1.82	3.44	4.90	2.60	1.01	3.06	2.42	1.87	28.11			
	Q 1.169	1.198	1.026	1.309	0.965	0.668	0.644	0.623	0.342	0.511	0.880	0.731	10.069			
STA AV	P 2.21	2.78	3.10	2.89	3.15	2.43	3.80	3.72	3.35	2.96	2.45	2.88	35.71			
	Q 1.743	1.915	2.232	1.781	1.460	0.936	0.870	0.853	1.019	1.122	1.163	1.471	16.465			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge																
Date Rate																
Maximum Volume for Selected Time Interval																
Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol. Date Vol.																
1970	7-24	0.086	7-24	0.073	7-24	0.108	7-24	0.141	7-24	0.157	4- 2	0.176	4- 1	0.260	4- 1	0.517
MAXIMUMS FOR PERIOD OF RECORD																
	9-30	1.160	9-30	0.620	9-30	0.910	9-30	1.620	9-30	2.170	9-29	2.590	9-29	2.810	9-29	3.230
	1959		1959		1959		1959		1959		1959		1959		1959	

NOTES: Watershed conditions: Permanent pasture, usually a fair cover of native grasses, 33%; farm woods, a mixture of hardwoods and conifers, 34%; row crops, 4%; hay, 20%; idle land, 7%; roads, 2%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.8-5. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from August 1957 through 1970. For long-time precipitation records, see National Weather Service records at Blacksburg, Virginia.

1970	DAILY PRECIPITATION (inches)												BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.61	0.0	0.11	0.0	0.0	0.0	0.0	0.14	0.0			
2	0.0	0.70	0.04E	0.67	0.0	0.07	0.07E	0.0	0.0	0.0	0.24	0.0			
3	0.0	0.07	0.0	0.0	0.48	0.0	0.01E	0.46	0.05	0.0	0.05	0.0			
4	0.0	0.0	0.04E	0.0	0.68	0.12	0.0	0.0	0.40	0.0	0.21E	0.0			
5	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.23S	0.0	0.0	0.12	0.0	0.42E	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.0	0.21E	0.0	0.04	0.0	0.0	0.74	0.90	0.0	0.0	0.0	0.0			
10	0.0	0.01E	0.0	0.0	0.0	0.01	0.01	0.98	0.27	0.05	0.68	0.0			
11	0.05S	0.0	0.0	0.0	0.03	0.06	0.0	0.0	0.0	0.0	0.09	0.0			
12	0.06S	0.0	0.22	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.60	0.10			
13	0.0	0.0	0.0	0.24	0.0	0.58E	0.0	0.01	0.0	0.0	0.0	0.0			
14	0.0	0.11S	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.01	0.09	0.0			
15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.04	0.01	0.0			
16	0.0	0.26	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22E		
17	0.41	0.26	0.0	0.0	0.20	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.17		
18	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0			
19	0.01E	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0			
20	0.05E	0.0	0.0	0.01E	0.0	0.13E	0.07	0.0	0.0	0.26	0.31	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.12	1.17	0.0	0.0	0.53	0.0	0.0	0.71E		
22	0.0	0.0	0.14	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.05E		
23	0.05E	0.0	0.01E	0.0	0.0	0.0	0.84	0.11E	0.0	0.0	0.0	0.0	0.02E		
24	0.0	0.0	0.0	0.51	0.0	0.0	1.22	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.20E	0.16E	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.01E	0.30	0.05E	0.08E	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.05	0.0	0.04E	0.18	0.0	0.29	0.0	0.0	0.0			
28	0.0	0.0	0.0	0.68	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0			
29	0.21	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	1.22	0.0	0.0			
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.60S	0.0			
TOTAL	1.07	1.64	1.01	3.27	1.82	3.44	4.90	2.60	1.01	3.06	2.42	1.87			
STA AV	2.21	2.76	3.10	2.89	3.15	2.43	3.80	3.72	3.35	2.96	2.45	2.88			

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period August 1957 through 1970.



1970 MEAN DAILY DISCHARGE (cfs)												BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	2.787	1.265	1.207	2.387	1.198	0.765	0.486	0.554	0.453	0.373	1.422	0.774	
2	1.963	4.186	1.270	6.324	1.137	0.778	0.475	0.501	0.451	0.358	0.950	0.774	
3	1.662	2.345	1.238	2.859	1.498	0.649	0.452	0.773	0.431	0.335	1.311	0.774	
4	1.338	1.428	1.322	2.033	4.797	0.735	0.415	0.655	0.683	0.291	1.065	0.708	
5	1.247	1.395	1.303	1.672	2.242	3.337	0.393	0.527	0.593	0.313	1.376	0.695	
6	1.279	1.372	1.204	1.573	1.598	1.818	0.388	0.526	0.469	0.324	1.018	0.675	
7	1.225	1.370	1.171	1.448	1.340	1.157	0.383	0.512	0.447	0.327	0.819	0.634	
8	1.155	1.368	1.133	1.300	1.211	0.796	0.385	0.525	0.446	0.371	0.733	0.685	
9	0.629	1.797	1.135	1.283	1.132	0.711	0.923	1.471	0.432	0.386	0.702	0.779	
10	0.332	1.516	1.135	1.173	1.068	0.671	0.693	4.295	0.480	0.437	1.577	0.803	
11	0.511	1.323	1.135	1.114	1.083	0.686	0.504	1.391	0.579	0.429	1.828	0.774	
12	0.917	1.234	1.345	1.114	1.104	0.672	0.454	0.888	0.464	0.427	2.514	0.667	
13	1.033	1.222	1.294	1.235	1.066	0.866	0.414	0.730	0.448	0.411	1.680	0.746	
14	0.990	1.182	1.138	1.528	0.973	0.954	0.405	0.656	0.410	0.394	1.193	0.702	
15	0.990	1.476	1.075	1.164	0.913	0.851	0.378	0.641	0.388	0.449	1.150	0.693	
16	1.057	2.062	1.068	1.135	1.030	0.789	0.344	0.580	0.374	0.429	0.949	0.903	
17	2.316	2.787	1.081	1.104	1.952	0.744	0.306	0.546	0.374	0.422	0.918	1.278	
18	3.213	2.068	2.055	1.066	1.049	0.675	0.305	0.633	0.374	0.429	0.888	0.947	
19	1.776	1.777	1.363	1.063	0.904	0.562	0.310	0.647	0.360	0.450	0.865	0.847	
20	1.400	1.462	1.304	1.047	0.851	0.830	0.330	0.594	0.375	0.502	1.451	0.808	
21	1.342	1.334	1.212	1.005	0.838	0.709	0.872	0.572	0.385	1.127	1.042	2.297	
22	1.045	1.378	1.583	0.954	0.818	3.614	1.357	0.561	0.347	0.620	0.940	1.551	
23	0.950	1.364	1.342	0.947	0.807	0.556	1.514	0.647	0.332	0.547	0.876	1.252	
24	0.990	1.351	1.233	1.943	0.720	0.536	5.851	0.594	0.331	0.522	0.693	1.062	
25	1.296	1.276	1.207	1.244	0.675	0.714	1.537	0.527	0.330	0.522	0.702	0.960	
26	2.422	1.207	1.207	1.637	0.779	0.710	0.840	0.527	0.325	0.522	0.855	0.821	
27	1.721	1.207	1.120	1.474	0.736	0.589	0.804	0.498	0.479	0.522	0.929	0.768	
28	2.025	1.207	1.078	3.173	0.718	0.549	0.773	0.466	0.464	0.543	0.918	0.704	
29	1.549		1.218	1.767	0.688	0.530	0.605	0.445	0.422	0.902	0.849	0.673	
30	1.384		1.135	1.366	0.659	0.502	0.649	0.451	0.391	2.921	0.810	0.723	
31	1.330		1.181		0.670		0.633	0.454		2.586		0.749	
MEAN	1.4152	1.6056	1.2418	1.6376	1.1685	0.6352	0.7799	0.7545	0.4278	0.6190	1.1008	0.8847	
INCHES	1.169	1.198	1.026	1.309	0.965	0.668	0.644	0.623	0.342	0.511	0.880	0.731	
STA AV	1.743	1.815	2.232	1.781	1.460	0.936	0.870	0.853	1.019	1.122	1.163	1.471	

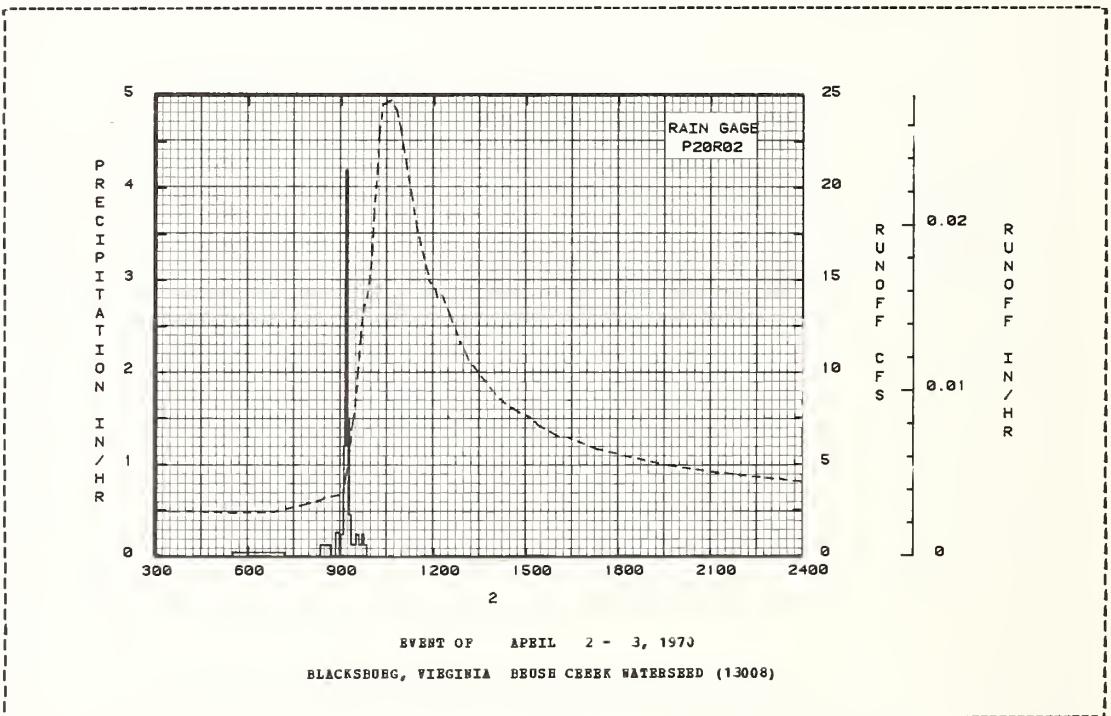
NOTES: To convert CFS to IN/DAY, multiply by 0.026652. STA AV based on record period August 1957 through 1970.

1970 SELECTED RUNOFF EVENT												BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)	
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF APRIL 2 - 3, 1970													
RG P20R02			RG P20R02										
4- 2	0.03	0.010	4- 2	530	0.0	0.0	4- 2	324	2.458	0.0			
				710	0.0420	0.07		346	2.458	0.0010			
				820	0.0	0.07		524	2.359	0.0054			
				830	0.1200	0.09		632	2.368	0.0084			
				835	0.1200	0.10		700	2.476	0.0097			
WATERSHED CONDITIONS:													
Permanent pasture of native grasses, good cover, 33%;													
woods, mixture of pine and hardwood with considerable undergrowth, good cover, 34%; hay, 20%; row crop, 4%;													
idle land, 7%; roads, 2%.													
				840	0.1200	0.11		740	2.755	0.0116			
				850	0.0	0.11		800	2.899	0.0126			
				857	0.2571	0.14		820	3.052	0.0137			
				900	0.0	0.14		828	3.188	0.0142			
				905	0.2400	0.16		856	3.332	0.0159			
				908	1.2000	0.22		904	3.458	0.0164			
				909	3.0001	0.27		905	3.575	0.0165			
				910	4.2001	0.34		909	4.187	0.0168			
				912	4.1999	0.48		912	4.772	0.0170			
				914	1.2000	0.52		917	5.763	0.0175			
				916	1.5000	0.57		922	7.177	0.0181			
				920	0.4500	0.60		926	7.753	0.0187			
				930	0.1200	0.62		928	8.257	0.0190			
				935	0.2400	0.64		929	8.518	0.0192			
				940	0.1200	0.65		931	9.284	0.0195			
				945	0.2400	0.67		932	9.887	0.0197			
				950	0.1200	0.68		935	10.778	0.0203			
								939	12.210	0.0212			
								944	13.579	0.0224			
								946	13.696	0.0229			
								950	14.047	0.0239			
								956	15.253	0.0255			
								1000	16.586	0.0267			
								1002	17.856	0.0273			
								1004	18.900	0.0280			
								1011	21.345	0.0306			
								1013	22.709	0.0314			
								1015	23.357	0.0323			
								1017	23.727	0.0332			
								1020	24.528	0.0345			

NOTES: To convert CFS to IN/HR, multiply by 0.0011105.

1970 SELECTED EHOFP EVENT			BLACKSBURG, VIRGINIA BRUSH CREEK WATERSHED (13008)								
ANTECEDENT CONDITIONS			RAINFALL			EHOFP					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF APRIL 2 - 3, 1970 (CONTINUED)											
							4- 2	1036	24.780	0.0418	
								1047	24.231	0.0468	
								1055	23.231	0.0503	
								1100	22.295	0.0524	
								1106	21.376	0.0548	
								1116	19.684	0.0586	
								1128	17.676	0.0627	
								1134	16.901	0.0646	
								1149	15.308	0.0691	
								1150	14.956	0.0694	
								1154	14.830	0.0705	
								1204	14.407	0.0732	
								1206	14.083	0.0737	
								1216	14.173	0.0763	
								1222	13.759	0.0778	
								1232	13.074	0.0803	
								1251	11.589	0.0846	
								1253	11.607	0.0850	
								1308	10.643	0.0881	
								1400	8.797	0.0975	
								1420	8.293	0.1007	
								1432	8.032	0.1025	
								1448	7.780	0.1048	
								1504	7.573	0.1071	
								1508	7.564	0.1077	
								1524	7.113	0.1099	
								1604	6.483	0.1189	
								1616	6.492	0.1163	
								1716	5.826	0.1231	
								1812	5.439	0.1289	
								1940	4.907	0.1373	
								2102	4.556	0.1445	
								2400	4.025	0.1586	
							4- 3	46	3.845	0.1620	

NOTES: To convert CFS to IN/EE, multiply by 0.0011105.



BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)

LOCATION: Halifax County, Va., 3.5 mi. SW of Tuberville, Va., Winns Creek, Dan River.

AREA: 1471.00 acres 2.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSBURG, VIRGINIA		LITTLE WINNS CREEK WATERSHED (13010)							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual									
1970	P	1.54	3.23	2.91	2.39	2.18	2.44	4.52	4.31	0.23	3.41	3.77	3.00	2.44	4.52	4.31	0.23	3.41	3.77	3.00	33.93	
	Q	0.377	0.943	0.614	0.694	0.405	0.199	0.300	0.396	0.107	0.161	0.492	0.434	0.199	0.300	0.396	0.107	0.161	0.492	0.434	5.121	
STA AV	P	3.01	3.26	3.36	2.83	3.52	3.09	3.99	4.14	2.69	2.95	2.51	3.19	3.01	3.26	3.36	2.83	3.52	3.09	3.99	4.14	38.55
	Q	0.916	1.181	1.257	0.938	0.799	0.562	0.443	0.519	0.340	0.564	0.492	0.539	0.916	1.181	1.257	0.938	0.799	0.562	0.443	0.519	8.550

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	4-2	0.034	4-2	0.029	4-2	0.049	11-14	0.100	2-17	0.155	2-16	0.241	2-16	0.340	2-16	0.520

MAXIMUMS FOR PERIOD OF RECORD															
10-10	1.120	10-10	0.710	10-10	1.030	10-10	1.410	10-10	1.510	10-10	1.580	10-10	1.620	10-10	1.910
1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959

NOTES: Watershed conditions: Farm woods, mixture of hardwoods and conifers, with pine predominating, 58%; cultivated, 18%; pasture, native grass mixture, usually fair cover, 8%; idle, 16%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.010-5. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.10-8. Precipitation: Thiessen weighted from R-1, R-2, and R-3. Station averages determined from continuous records from Jan. 1958 through 1970. For long-time precipitation records, see National Weather Service records at Halifax (1 mile N), Virginia.

1970	DAILY PRECIPITATION (inches)												BLACKSBURG, VIRGINIA	LITTLE WINNS CREEK WATERSHED (13010)
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.07E	0.0	0.0	0.41	0.0		
2	0.0	0.45	0.03	0.52	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.50	0.0	0.0	0.34	0.0	0.0	0.53	0.0	0.0	0.18	0.0		
4	0.0	0.0	0.15	0.0	0.89	0.0	0.81E	0.04	0.04E	0.0	0.37	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0		
6	0.33S	0.0	0.0	0.03	0.0	0.34	0.0	0.83	0.0	0.0	0.0	0.0		
7	0.06S	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
9	0.0	0.41	0.0	0.01	0.0	0.0	0.69	0.12	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	1.27	2.02	0.0	0.0	0.80	0.0		
11	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0		
12	0.08S	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0		
13	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0		
14	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0		
15	0.0	0.00	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.65	0.0	0.0		
16	0.0	1.05E	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.13	0.0	1.00		
17	0.13N	0.71E	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
18	0.01N	0.01E	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.05S	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0		
20	0.06S	0.0	0.14	0.09	0.0	0.0	0.44	0.01	0.0	0.05	0.08E	0.0		
21	0.0	0.0	0.12	0.0	0.0	0.13	0.18	0.0	0.0	0.88	0.0	0.94		
22	0.0	0.0	0.47	0.0	0.0	0.98	0.04	0.0	0.0	0.0	0.0	0.03		
23	0.03S	0.0	0.08	0.0	0.0	0.11	0.37	0.0	0.0	0.0	0.0	0.20		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.01		
25	0.0	0.08R	0.0	0.0	0.0	0.82	0.57	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.74	0.13	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0		
29	0.76	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0		
30	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.58	0.0	0.0		
31	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.82S	0.0		
TOTAL	1.54	3.23	2.91	2.39	2.18	2.44	4.52	4.31	0.23	3.41	3.77	3.00		
STA AV	3.01	3.26	3.36	2.83	3.52	3.09	3.99	4.14	2.69	2.95	2.51	3.19		

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period January 1958 through 1970.

1970	MEAN DAILY DISCHARGE (cfs)				BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.927	0.931	0.816	2.030	0.798	0.467	0.323	0.301	0.314	0.224	0.662	0.558
2	0.822	1.600	0.842	9.355	0.767	0.447	0.317	0.238	0.301	0.218	0.539	0.549
3	0.756	5.242	0.790	3.246	0.892	0.427	0.334	0.528	0.299	0.208	0.540	0.549
4	0.707	1.896	0.850	2.039	3.121	0.420	0.687	0.396	0.297	0.163	0.840	0.549
5	0.672	1.342	0.815	1.618	1.889	0.420	0.508	0.311	0.292	0.206	0.515	0.549
6	0.720	1.156	0.756	1.416	1.234	0.431	0.323	1.781	0.271	0.216	0.460	0.520
7	0.716	1.034	0.756	1.253	1.036	0.549	0.297	0.501	0.260	0.226	0.453	0.504
8	0.617	0.958	0.756	1.127	0.942	0.399	0.278	0.400	0.257	0.220	0.415	0.531
9	0.566	1.264	0.745	1.083	0.842	0.389	0.436	0.435	0.236	0.225	0.424	0.549
10	0.622	1.242	0.725	1.053	0.760	0.367	5.295	8.513	0.229	0.184	0.783	0.549
11	0.604	1.086	0.712	0.986	0.741	0.359	0.566	1.543	0.222	0.150	2.710	0.549
12	0.682	0.964	0.942	0.938	0.716	0.334	0.423	0.704	0.221	0.159	0.905	0.570
13	0.639	0.890	0.922	0.957	0.671	0.327	0.401	0.605	0.220	0.168	1.246	0.542
14	0.624	0.838	0.795	1.180	0.636	0.336	0.379	0.526	0.217	0.151	3.352E	0.504
15	0.620	0.816	0.767	0.969	0.624	0.345	0.372	0.495	0.199	0.417	6.727E	0.504
16	0.606	1.852	0.756	0.890	0.707	0.326	0.333	0.456	0.200	0.288	1.243	1.321
17	0.684	14.893	0.756	0.890	1.029	0.308	0.299	0.424	0.185	0.231	0.892	1.032
18	0.846	5.958	2.248	0.890	0.695	0.279	0.287	0.419	0.176	0.252	0.766	0.700
19	0.742	3.366	1.610	0.890	0.627	0.263	0.290	1.020	0.169	0.252	0.698	0.653
20	0.670	2.027	1.360	0.924	0.607	0.275	0.586	0.670	0.185	0.283	0.672	0.639
21	0.577	1.635	1.284	0.847	0.584	0.354	0.441	0.457	0.209	0.715	0.631	3.376
22	0.557	1.400	3.918	0.816	0.562	0.883	0.396	0.434	0.168	0.364	0.608	2.151
23	0.675	1.170	2.537	0.798	0.550	0.426	0.750	0.440	0.150	0.311	0.566	1.633
24	0.700	1.023	1.812	0.788	0.531	0.346	0.465	0.412	0.140	0.311	0.549	1.393
25	0.591	1.037	1.451	0.756	0.507	0.918	1.300	0.377	0.142	0.311	0.549	1.095
26	0.588	0.903	1.308	1.066	0.579	0.511	0.527	0.369	0.131	0.311	0.549	0.924
27	0.615	0.890	1.134	1.118	0.512	0.397	0.433	0.363	0.166	0.311	0.549	0.828
28	0.608	0.839	1.062	1.119	0.482	0.345	0.412	0.339	0.272	0.311	0.545	0.756
29	1.411		1.338	1.010	0.470	0.332	0.375	0.326	0.238	0.324	0.500	0.708
30	2.035		1.110	0.851	0.469	0.334	0.348	0.340	0.225	1.589	0.491	0.712
31	1.110		2.275		0.469		0.330	0.344		0.647		0.811E
MEAN	0.7519	2.0804	1.2241	1.4302	0.8080	0.4104	0.5971	0.7892	0.2197	0.3208	1.0142	0.8648
INCR5	0.377	0.943	0.614	0.694	0.405	0.199	0.300	0.396	0.107	0.161	0.492	0.434
STA AV	0.916	1.181	1.257	0.938	0.799	0.562	0.443	0.519	0.340	0.564	0.492	0.539

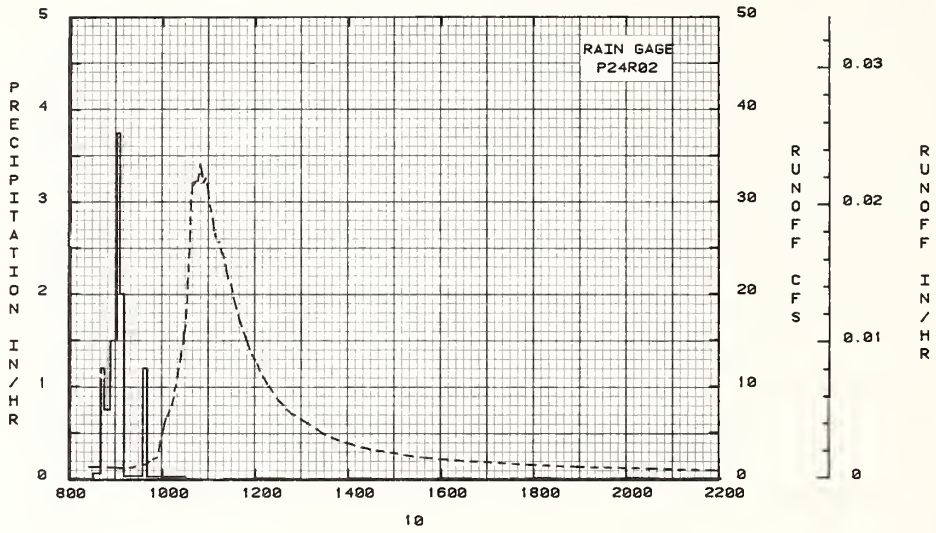
NOTES: To convert CFS to IN/DAY, multiply by 0.016178. STA AV based on record period January 1958 through 1970.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA			LITTLE WINNS CREEK WATERSHED (13010)				
	ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
	Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
	Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
	EVENT OF JULY 10, 1970										
	7-10	EG P24R02 0.43	0.037	7-10	EG P24R02 830	0.0	0.0	7-10	824	1.305	0.0
					840	0.0601	0.01		840	1.231	0.0002
					844	1.2000	0.09		854	1.231	0.0004
					852	0.7499	0.19		908	1.142	0.0006
					900	1.5000	0.39		920	1.231	0.0008
WATERSHED CONDITIONS:					904	3.7500	0.64		925	1.365	0.0009
Fern woods, mixture of					910	2.0001	0.84		940	1.632	0.0012
hardwoods and conifers					934	0.0250	0.85		942	1.884	0.0012
with pine predominating, 58%;					940	1.2000	0.97		947	2.136	0.0013
cultivated, 18%; pasture					1030	0.0240	0.99		953	2.299	0.0015
native grass mixture,											
usually fair cover, 8%;									955	3.011	0.0016
idle, 16%.									957	4.064	0.0017
									1001	5.444	0.0019
									1004	6.541	0.0021
									1006	6.764	0.0022
									1009	7.372	0.0024
									1012	7.965	0.0027
									1014	8.796	0.0029
									1015	9.537	0.0030
									1017	10.245	0.0032
									1019	11.347	0.0035
									1020	11.940	0.0036
									1023	13.275	0.0040
									1024	13.809	0.0041
									1026	14.684	0.0044
									1027	15.826	0.0046
									1028	15.975	0.0048
									1029	16.642	0.0050
									1030	17.606	0.0052
									1032	21.745	0.0056
									1034	24.963	0.0062
									1035	26.862	0.0065
									1036	30.199	0.0068
									1038	32.142	0.0075
									1039	31.846	0.0078

NOTES: To convert CFS to IN/HR, multiply by 0.0006741.

1970 SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA				LITTLE WINNS CREEK WATERSHED (13010)			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 10, 1970 (CONTINUED)										
							7-10	1042	32.246	0.0089
								1045	32.291	0.0100
								1048	34.115	0.0110
								1051	32.721	0.0121
								1052	32.127	0.0124
								1055	32.602	0.0135
								1058	31.312	0.0146
								1059	30.392	0.0149
								1105	27.574	0.0169
								1106	26.891	0.0172
								1107	26.491	0.0175
								1108	26.180	0.0178
								1111	25.631	0.0186
								1113	25.660	0.0192
								1116	24.444	0.0201
								1119	23.910	0.0209
								1122	22.531	0.0216
								1124	21.700	0.0221
								1128	21.018	0.0231
								1130	20.217	0.0236
								1131	15.609	0.0238
								1135	18.422	0.0247
								1139	17.191	0.0255
								1147	15.233	0.0270
								1152	14.061	0.0278
								1155	13.394	0.0283
								1159	12.845	0.0289
								1202	12.400	0.0293
								1205	11.688	0.0297
								1215	10.249	0.0309
								1218	9.953	0.0312
								1229	8.529	0.0323
								1236	7.965	0.0330
								1240	7.476	0.0333
								1244	7.238	0.0336
								1246	7.016	0.0338
								1251	6.853	0.0342
								1303	6.170	0.0351
								1319	5.310	0.0361
								1330	4.717	0.0367
								1339	4.405	0.0372
								1356	3.886	0.0380
								1408	3.589	0.0385
								1428	3.145	0.0393
								1524	2.373	0.0410
								1548	2.151	0.0416
								1600	2.047	0.0419
								1620	1.943	0.0423
								1754	1.454	0.0441
								1856	1.216	0.0450
								2040	1.009	0.0463

NOTES: To convert CFS to IN/HR, multiply by 0.0006741.



EVENT OF JULY 10, 1970  
 BLACKSBURG, VIRGINIA LITTLE WINNS CREEK WATERSHED (13010)

BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

LOCATION: Brunswick County, Va., on Route No. 58, 4 mi. W. of Lawrenceville, Va., Meherrin River.

AREA: 555.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	1.39	3.08	4.27	2.63	2.66	3.63	9.78	4.32	0.58	3.24	2.33	2.86	40.77
	Q	0.549	0.896	1.050	1.123	0.514	0.284	2.097	0.574	0.152	0.168	0.469	0.799	8.676
STA AV	P	2.83	3.42	3.28	2.41	3.39	4.20	4.58	4.09	2.72	2.69	2.50	3.06	39.17
	Q	0.868	1.187	1.324	0.909	0.818	0.608	0.562	0.400	0.271	0.342	0.470	0.726	8.484

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	7-23	0.661	7-23	0.491	7-23	0.877	7-23	1.405	7-23	1.521	7-23	1.595	7-23	1.670	7-21	1.757
MAXIMUMS FOR PERIOD OF RECORD																
	7-23	0.661	7-23	0.491	7-23	0.877	7-23	1.405	7-23	1.521	7-23	1.595	5-5	2.090	4-30	2.860
	1970		1970		1970		1970		1970		1970		1958		1958	

NOTES: Watershed conditions: Mixed cover, farm woods, mixture of hardwoods and conifers, 57%; permanent pasture, usually a good cover of native grass and clover mixture, 13%; alfalfa and other hay crops, 5%; cultivated, 9%; roads, 1%; idle, 15%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 13.11-6. Precipitation: Thiessen weighted from R-1 and R-2. Station averages determined from continuous records from April 1958 through 1970. For long-time precipitation records, see National Weather Service records at Emporia (1 mile NW), Virginia.

1970	DAILY PRECIPITATION (inches)												BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.02	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	
2	0.0	0.41	0.02	0.32	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.51	0.0	3.0	0.45	0.0	0.0	0.16E	0.0	0.0	0.07	0.0	0.0	
4	0.0	0.0	0.58	0.0	0.71	0.0	0.34	0.0	0.14	0.0	0.10	0.0	0.0	
5	0.0	0.0	0.02	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.38E	0.0	0.0	0.22	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.57	0.0	0.07	0.0	0.0	0.35	1.19E	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.01	0.0	0.0	0.0	0.0	1.70	1.10E	0.0	0.0	0.50	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.03	0.0	0.39	0.0	0.0	
12	0.4E	0.0	0.64	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.69	0.07	0.0	
13	0.0	0.0	0.09	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	
14	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.14	0.0	0.0	
16	0.0	0.76	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.18	0.0	1.14	0.0	
17	0.38E	0.59E	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	
18	0.02E	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	
19	0.02E	0.0	0.0	0.0	0.0	0.00	0.0	1.25	0.0	0.0	0.0	0.0	0.0	
20	0.05E	0.0	0.25	0.04	0.0	0.42	0.09	0.16	0.0	0.07	0.15	0.0	0.0	
21	0.0	0.0	0.04	0.0	0.0	0.25	0.52	0.0	0.0	0.72	0.0	0.75	0.0	
22	0.0	0.0	0.48	0.0	0.0	0.56	0.28	0.0	0.0	0.41	0.0	0.03	0.0	
23	0.0	0.0	0.06	0.07	0.0	0.03	4.70	0.45	0.0	0.15	0.0	0.21	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.22	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.01	0.0	0.01	0.0	
26	0.0	0.0	0.41	0.84	0.98	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.04	0.01	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	
29	0.36	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.15	0.0	0.0	0.0	0.0	0.12	0.0	0.0	1.52	0.0	0.0	0.0	
31	0.0	0.0	0.55	0.0	0.0	0.0	0.62	0.0	0.0	0.13	0.0	0.64S	0.0	
TOTAL	1.39	3.08	4.27	2.63	2.66	3.63	9.78	4.32	0.58	3.24	2.33	2.86		
STA AV	2.83	3.42	3.28	2.41	3.39	4.20	4.58	4.09	2.72	2.69	2.50	3.06		

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1 and R-2. STA AV based on record period April 1958 through 1970.

1970	MEAN DAILY DISCHARGE (cfs)					BLACKSBURG, VIRGINIA ROCKY RUN BRANCR WATERSRED (13011)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.498	0.375	0.475	1.849	0.441	0.225	0.149	0.361	0.172	0.095	0.197	0.256
2	0.470	0.556	0.461	3.357	0.414	0.221	0.329	0.272	0.165	0.093	0.190	0.246
3	0.456	1.238	0.459	1.695	0.490	0.212	0.301	0.243E	0.164	0.085	0.182	0.246
4	0.401	0.788	0.569	1.248	1.057	0.199	0.193	0.213E	0.164	0.063	0.172	0.246
5	0.375	0.623	0.836	1.079	0.851	0.252	0.190	0.213E	0.167	0.068	0.177	0.235
6	0.410	0.566	0.595	1.042	0.585	0.603	0.180	0.213E	0.151	0.069	0.168	0.239
7	0.550	0.523	0.548	0.953	0.502	0.253	0.166	0.213E	0.148	0.069	0.168	0.246
8	0.480	0.498	0.535	0.867	0.463	0.228	0.153	0.213E	0.140	0.069	0.168	0.246
9	0.411	0.548	0.498	0.808	0.420	0.223	0.184	0.431E	0.137	0.069	0.168	0.246
10	0.375	1.021	0.478	0.744	0.361	0.216	2.178	2.309	0.129	0.070	0.196	0.246
11	0.375	0.672	0.459	0.685	0.360	0.200	0.587	1.355	0.133	0.071	0.388	0.246
12	0.397	0.570	0.545	0.649	0.352	0.195	0.309	0.628	0.121	0.070	0.352	0.231
13	0.381	0.526	1.059	0.675	0.343	0.179	0.247	0.441	0.113	0.074	0.665	0.208
14	0.375	0.498	0.703	1.027	0.319	0.176	0.224	0.345	0.113	0.075	0.408	0.199
15	0.375	0.492	0.613	0.759	0.319	0.165	0.217	0.288	0.108	0.099	0.654	0.190
16	0.375	0.572	0.559	0.675	0.309	0.174	0.206	0.259	0.106	0.141	1.018	0.608
17	0.397	2.514	0.525	0.649	0.405	0.163	0.177	0.255	0.097	0.133	0.713	0.773
18	0.603	1.638	0.814	0.624	0.348	0.148	0.177	0.231	0.097	0.138	0.590	0.659
19	0.467	1.132	0.735	0.599	0.310	0.133	0.164	0.254	0.097	0.133	0.526	0.610
20	0.441	0.819	0.784	0.575	0.287	0.207	0.173	1.642	0.103	0.143	0.485	0.464
21	0.391	0.699	0.779	0.527	0.280	0.214	0.255	0.446	0.096	0.213	0.458	0.854
22	0.375	0.649	1.524	0.498	0.274	0.281E	0.279	0.338	0.094	0.165	0.420	1.510
23	0.375	0.619	1.089	0.487	0.260	0.177	34.104	0.369	0.090	0.209	0.390	1.881
24	0.375	0.565	0.856	0.483	0.248	0.163	4.492	0.339	0.086	0.146	0.328	1.963
25	0.375	0.569	0.727	0.459	0.245	0.400E	0.922	0.277	0.084	0.146	0.308	1.741
26	0.375	0.571	0.839	0.707	0.480	0.337E	0.545	0.242	0.081	0.146	0.308	0.964
27	0.355	0.548	0.908	0.840	0.296	0.168	0.421	0.227	0.096	0.137	0.308	0.677
28	0.336	0.512	0.730	0.616	0.252	0.165	0.349	0.216	0.112	0.123	0.293	0.619
29	0.386		1.243	0.543	0.242	0.175	0.313	0.193	0.096	0.123	0.274	0.563
30	0.459		0.933	0.473	0.232	0.161	0.306	0.184	0.095	0.375	0.274	0.519
31	0.382		2.614		0.233		0.404	0.181		0.303		0.712
MEAN	0.4128	0.7465	0.7900	0.8731	0.3863	0.2204	1.5772	0.4319	0.1185	0.1263	0.3649	0.6013
INCHES	0.549	0.896	1.050	1.123	0.514	0.284	2.097	0.574	0.152	0.168	0.469	0.799
STA AV	0.868	1.187	1.324	0.909	0.818	0.608	0.562	0.400	0.271	0.342	0.470	0.726

NOTES: To convert CFS to IN/DAY, multiply by 0.042886. STA AV based on record period April 1958 through 1970.

1970	SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA ROCKY RUN BRANCR WATERSRED (13011)						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 23 - 24, 1970										
7-23	RG P27R02 0.0	0.010	7-23	RG P27R02 1440	0.0	0.0	7-23	1615	0.582	0.0
				1500	0.6900	0.23		1616	0.632	0.0
				1628	0.0	0.23		1619	0.912	0.0001
				1637	2.2667	0.57		1621	1.757	0.0002
				1642	2.9996	0.82		1622	2.261	0.0003
				1648	2.5002	1.07		1623	2.686	0.0004
				1654	2.4998	1.32		1625	2.770	0.0006
				1700	2.4998	1.57		1627	3.307	0.0008
				1703	2.0006	1.67		1628	3.425	0.0009
				1707	4.5001	1.97		1631	3.514	0.0012
				1708	2.9982	2.02		1633	4.415	0.0014
				1713	3.6001	2.32		1635	5.742	0.0017
				1718	1.2001	2.42		1636	5.596	0.0019
				1728	1.8000	2.72		1637	6.514	0.0021
				1744	0.5625	2.87		1638	7.275	0.0023
				1750	2.9998	3.17		1639	7.538	0.0025
				1753	2.0000	3.27		1640	7.986	0.0027
				1809	0.4500	3.39		1641	8.624	0.0029
				1813	1.2000	3.47		1642	10.694	0.0032
				1830	0.1765	3.52		1643	15.222	0.0036
				1850	0.1500	3.57		1644	23.846	0.0041
				1925	0.1714	3.67		1645	34.825	0.0051
				1950	0.0720	3.70		1647	47.288	0.0074
				2000	0.1800	3.73		1648	49.264	0.0087
				2020	0.0900	3.76		1650	58.067	0.0121
				2040	0.0900	3.79		1651	66.260	0.0138
								1652	80.183	0.0158
								1653	93.474	0.0188
								1654	102.725	0.0215
								1655	105.377	0.0244
								1657	109.132	0.0311
								1658	125.059	0.0344
								1659	145.374	0.0382
								1700	155.363	0.0434
								1701	171.329	0.0460

NOTES: To convert CFS to IN/HR, multiply by 0.0017869.

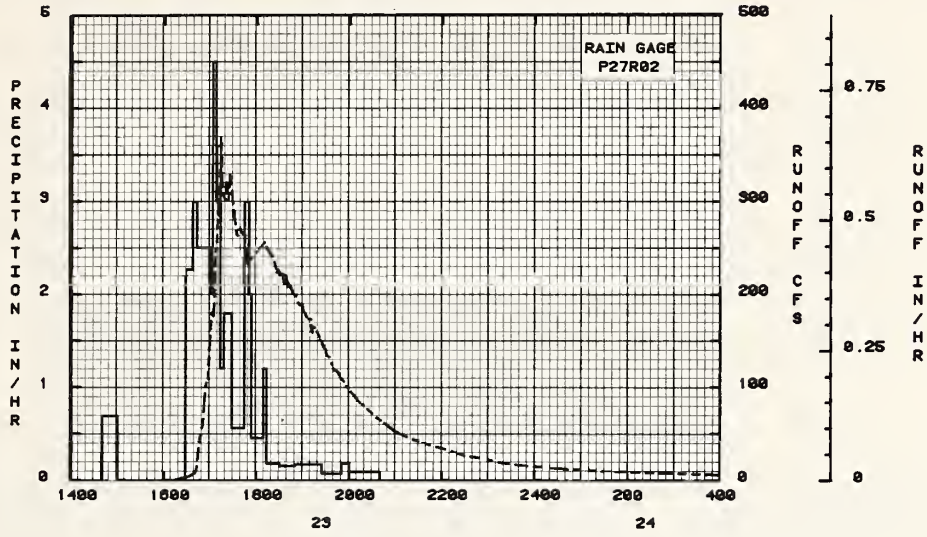


1970			SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA			ROCKY RUN BRANCH WATESEED (13011)		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Fainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JULY 23 - 24, 1970 (CONTINUED)											
							7-23	1702	160.725	0.0529	
								1703	179.746	0.0579	
								1704	176.651	0.0641	
								1705	190.440	0.0692	
								1706	223.542	0.0750	
								1707	246.073	0.0816	
								1708	249.089	0.0902	
								1709	272.844	0.0975	
								1710	302.746	0.1055	
								1711	284.183	0.1137	
								1712	311.771	0.1241	
								1713	369.850	0.1336	
								1714	345.097	0.1436	
								1715	322.981	0.1553	
								1716	306.652	0.1641	
								1717	306.438	0.1727	
								1718	303.277	0.1812	
								1719	301.257	0.1917	
								1720	320.508	0.2004	
								1721	320.233	0.2093	
								1722	309.019	0.2181	
								1723	300.971	0.2267	
								1724	307.833	0.2372	
								1725	328.270	0.2461	
								1726	325.797	0.2552	
								1728	306.881	0.2751	
								1729	297.592	0.2835	
								1731	282.979	0.3017	
								1734	264.081	0.3265	
								1735	262.910	0.3339	
								1738	270.881	0.3581	
								1742	264.361	0.3899	
								1744	263.481	0.4046	
								1747	236.581	0.4273	
								1748	232.765	0.4339	
								1810	255.704	0.5941	
								1812	250.863	0.6100	
								1816	245.161	0.6394	
								1818	243.431	0.6530	
								1821	240.090	0.6749	
								1823	234.651	0.6898	
								1825	227.269	0.7027	
								1826	223.100	0.7090	
								1828	226.441	0.7231	
								1830	223.285	0.7372	
								1831	220.386	0.7434	
								1834	221.757	0.7635	
								1835	213.212	0.7696	
								1836	211.645	0.7755	
								1837	220.414	0.7815	
								1838	219.496	0.7892	
								1839	213.206	0.7952	
								1840	208.225	0.8011	
								1841	212.294	0.8070	
								1842	209.585	0.8144	
								1844	206.339	0.8260	
								1845	207.173	0.8332	
								1846	201.678	0.8389	
								1849	199.199	0.8571	
								1851	197.945	0.8682	
								1854	189.545	0.8858	
								1856	188.051	0.8963	
								1858	188.935	0.9081	
								1901	180.848	0.9249	
								1903	178.095	0.9345	
								1905	175.510	0.9460	
								1908	173.002	0.9618	
								1910	172.600	0.9714	
								1911	166.086	0.9761	
								1912	158.777	0.9818	
								1913	164.060	0.9863	
								1915	164.491	0.9966	
								1918	159.538	1.0102	
								1921	154.311	1.0244	
								1922	150.629	1.0267	

NOTES: To convert CFS to IN/HR, multiply by 0.0017869.

1970			SELECTED RUNOFF EVENT			BLACKSBURG, VIRGINIA			ROCKY RUN BRANCH WATERHEEL (13011)		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JULY 23 - 24, 1970 (CONTINUED)											
							7-23	1924	149.151	1.0381	
								1925	147.842	1.0422	
								1926	144.540	1.0463	
								1927	142.178	1.0513	
								1929	140.718	1.0552	
								1930	137.186	1.0640	
								1931	134.064	1.0678	
								1933	132.833	1.0753	
								1934	132.413	1.0799	
								1937	125.569	1.0907	
								1938	123.739	1.0951	
								1940	119.836	1.1019	
								1941	117.935	1.1052	
								1944	117.029	1.1159	
								1947	113.430	1.1264	
								1949	109.871	1.1334	
								1953	106.374	1.1462	
								1956	100.755	1.1549	
								1959	98.080	1.1639	
								2002	94.454	1.1726	
								2006	91.376	1.1836	
								2008	88.768	1.1893	
								2014	83.199	1.2043	
								2017	80.916	1.2117	
								2019	80.138	1.2168	
								2024	76.120	1.2283	
								2030	71.565	1.2417	
								2036	67.211	1.2538	
								2041	64.385	1.2634	
								2046	60.926	1.2730	
								2049	58.912	1.2784	
								2051	57.675	1.2817	
								2058	52.974	1.2933	
								2102	51.458	1.2995	
								2106	49.499	1.3055	
								2110	48.201	1.3113	
								2115	46.398	1.3186	
								2124	43.460	1.3305	
								2130	41.949	1.3383	
								2136	39.739	1.3454	
								2156	35.217	1.3676	
								2219	28.989	1.3898	
								2229	26.633	1.3980	
								2243	24.439	1.4087	
								2250	23.722	1.4137	
								2301	21.641	1.4211	
								2305	20.958	1.4236	
								2318	18.507	1.4312	
								2351	15.227	1.4478	
								2400	14.656	1.4519	
							7-24	11	13.688	1.4565	
								28	12.759	1.4632	
								43	11.830	1.4687	
								101	10.907	1.4748	
								148	9.038	1.4887	
								216	8.585	1.4961	
								258	7.247	1.5060	
								348	6.206	1.5160	

NOTES: To convert CFS to IN/HR, multiply by 0.0017869.



EVENT OF JULY 23 - 24, 1970  
 BLACKSBURG, VIRGINIA ROCKY RUN BRANCH WATERSHED (13011)

## BLACKSEURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

LOCATION: Bedford County, Va., on Route No. 460, about 6 mi. west of Forest, Va., near Goode, Va., Elk Creek, Big Otter River.

AREA: 1058.00 acres 1.65 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													BLACKSEURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	1.30	3.05	2.07	3.27	2.27	0.77	4.75	4.87	0.66	5.96	3.59	2.46	35.01															
	Q	0.639	1.044	0.676	1.243	0.359	0.109	0.234	0.285	0.072	0.769	0.783	0.470	6.684															
STA AV	P	2.41	3.31	3.38	2.34	3.12	2.63	3.52	3.92	3.05	3.12	2.94	3.16	36.90															
	Q	0.887	1.211	1.311	0.754	0.459	0.358	0.236	0.494	0.227	0.439	0.541	0.691	7.609															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval								2 Days		8 Days											
		Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970		7-14	0.318	7-14	0.120	10-31	0.152	10-31	0.397	10-31	0.608	10-30	0.675	10-30	0.711	10-30	0.949												
MAXIMUMS FOR PERIOD OF RECORD																													
		8-23	0.390	8-23	0.330	8-24	0.550	8-24	1.030	8-23	1.630	8-23	2.260	8-22	2.420	8-20	2.800												
		1967		1967		1967		1967		1967		1967		1967		1967													

NOTES: Watershed conditions: Mixed cover, cultivated, 30%; permanent pasture, usually a good cover of native grass mixture, 26%; farm woods, a mixture of hardwoods and pine, 37%; roads, 1%; idle, 6%. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pub. 1330, p. 13.015-4. For drainage pattern map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 13.15-5. Precipitation: Thiessen weighted from #-1, #-2 and #-3. STA AV determined from continuous records from September 1960 through 1970. For long-time precipitation records, see National Weather Service records at Bedford, Virginia.

1970 DAILY PRECIPITATION (inches)													BLACKSEURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)														
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.48	0.0	0.03E	0.0	0.06E	0.0	0.0	0.17M	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0	0.89	0.0	0.88	0.01	0.03E	0.29	0.0	0.0	0.0	0.33M	0.0	2	0.0	0.02	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0			
3	0.0	0.21	0.0	0.0	0.59	0.0	0.0	0.61E	0.0	0.0	0.29M	0.0	3	0.0	0.83	0.0	0.0	0.0	0.0	0.92E	0.08	0.0	0.0	0.0			
4	0.0	0.0	0.06E	0.0	0.61E	0.03E	0.05E	0.0	0.06E	0.0	0.67M	0.0	4	0.0	0.01	0.0	0.0	0.0	0.0	0.19	0.92E	0.08	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.05E	0.0	0.0	0.0	0.0	5	0.0	0.01	0.0	0.0	0.0	0.03	2.02E	0.33	0.0	0.52	0.0			
6	0.20S	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.03S	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.06	0.61	0.0			
7	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.05S	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.44			
8	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.0	0.50E	0.0	0.0	0.0	0.0	0.0	0.01	0.0			
9	0.0	0.83	0.0	0.01	0.0	0.0	0.0	0.19	0.92E	0.08	0.0	0.0	9	0.0	0.28S	0.0	0.03E	0.0	0.0	1.85E	0.0	0.0	0.01	0.44	0.0		
10	0.0	0.01	0.0	0.0	0.0	0.01	0.0	0.03	2.02E	0.33	0.0	0.0	10	0.0	0.17S	0.0	0.0	0.0	0.39	0.0	0.0	0.18	0.07	0.0			
11	0.03S	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.06	0.61	0.0	11	0.0	0.23	0.0	0.0	0.08	0.08	0.0	0.0	0.0	0.0	0.71S			
12	0.05S	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	12	0.65	0.37	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.01S			
13	0.0	0.0	0.0	0.50E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.07S	0.05E	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.28S	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.06S	0.0	0.0	0.0	0.0	0.0	0.10	0.05E	0.0	0.0	0.0			
15	0.0	0.17S	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.18	0.07	0.0	15	0.05S	0.0	0.06	0.0	0.0	0.0	0.17	0.0	0.0	0.26	0.42	0.0		
16	0.0	0.23	0.0	0.0	0.08	0.0	0.08	0.0	0.0	0.0	0.0	0.71S	16	0.0	0.0	0.06E	0.0	0.0	0.0	0.11	0.07	0.0	1.59	0.0	0.75		
17	0.65	0.37	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.04	17	0.0	0.0	0.22E	0.0	0.0	0.25	3.23E	0.0	0.0	0.0	0.0	0.04		
18	0.07S	0.05E	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	18	0.03S	0.0	0.03E	0.0	0.0	0.11	0.09E	0.0	0.0	0.0	0.0	0.05		
19	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.05E	0.0	0.0	0.0	19	0.0	0.0	0.0	0.30	0.0	0.0	0.19	0.0	0.0	0.05	0.0	0.01		
20	0.05S	0.0	0.06	0.0	0.0	0.0	0.08E	0.01	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.06E	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.75	21	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.22E	0.0	0.0	0.0	0.33	0.0	0.18	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0		
23	0.03S	0.0	0.03E	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.05	0.0	0.01		
25	0.0	0.0	0.0	0.0	0.0	0.08E	0.01	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.08E	0.01	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.02E	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.18	0.0	0.0	27	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.18	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.38	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0		
30	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	2.76	0.0	30	0.0	0.0	0.25	0.0	0.0	0.0	0.29	0.0	0.0	2.76	0.0	0.0		
31	0.0	0.09	0.0	0.0	0.0	0.0	0.73	0.32	0.0	0.53M	0.45E	0.0	31	0.0	0.09	0.0	0.0	0.0	0.73	0.32	0.0	0.53M	0.45E	0.0	0.0		
TOTAL		1.30	3.05	2.07	3.27	2.27	0.77	4.75	4.87	0.66	5.96	3.59	2.46														
STA AV		2.41	3.31	3.38	2.34	3.12	2.63	3.52	3.92	3.05	3.12	2.94	3.16														

NOTES: Precipitation amounts are Thiessen weighted values from rain gages R-1, R-2, and R-3. STA AV based on record period September 1960 through 1970.

1970 MEAN DAILY DISCHARGE (cfs) BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSEED (13015)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3.228	0.555	0.896	1.147	0.533E	0.256	0.079	0.223	0.177	0.096	1.643	0.459
2	1.793	3.063	0.896	14.496	0.522E	0.240	0.082	0.143	0.152	0.102	0.968	0.459
3	1.346	2.811	0.896	6.326E	0.345E	0.221	0.113	0.350	0.142	0.096	2.777	0.459
4	1.033	1.589	0.959	3.057E	2.382E	0.212	0.081	0.208	0.135	0.096	3.703	0.425
5	0.923	1.187	0.880	2.809E	1.819E	0.225	0.066	0.128	0.129	0.096	1.725	0.422
6	0.868	1.046	0.808	3.174E	0.975E	0.227	0.062	0.127	0.126	0.096	0.987	0.434
7	0.813	0.962	0.846	2.240E	0.678E	0.198	0.061	0.125	0.111	0.096	0.774	0.435
8	0.779	0.896	0.880	2.004E	0.635E	0.184	0.074	0.186	0.108	0.096	0.634	0.459
9	0.779	3.490	0.686	1.525E	0.592E	0.184	0.097	0.389	0.122	0.096	0.560	0.459
10	0.722	2.480	0.661	0.782E	0.555E	0.176	0.109	5.332	0.165	0.096	0.751	0.459
11	0.568	1.631	0.704	0.837E	0.559E	0.163	0.077	0.995	0.156	0.096	3.457	0.459
12	0.584	1.288	1.093	1.191E	0.610E	0.156	0.061	0.468	0.112	0.096	1.821	0.659
13	0.524	1.072	1.069	1.518E	0.482E	0.139	0.053	0.347	0.114	0.096	1.246E	0.440
14	0.498	0.988	0.792	2.883E	0.331E	0.139	6.197	0.301	0.098	0.096	1.119	0.396
15	0.461	1.047	0.779	0.537E	0.303E	0.235	0.310	0.268	0.094	0.096	2.055	0.373
16	0.469	2.219	0.779	0.407E	0.390E	0.209	0.146	0.246	0.087	0.096	1.420E	1.079
17	1.314	4.439	0.779	0.603E	0.719E	0.182	0.115	0.229	0.087	0.096	0.970E	0.982
18	1.908	3.118	2.126	0.832E	0.385E	0.155	0.110	0.199	0.087	0.104	0.693E	0.696
19	1.310	2.253	1.877	0.938E	0.260E	0.129	0.110	0.205	0.084	0.107	0.549E	0.630
20	1.007	1.671	2.039E	0.907E	0.224E	0.122	0.133	0.199	0.092	0.107	1.019E	0.572
21	0.868	1.353	1.355E	0.803E	0.224E	0.103	0.163	0.197	0.097	0.160	0.849	1.848
22	0.867	1.308	1.212E	0.779E	0.224E	0.099	0.201	0.271	0.091	0.203	0.752	1.653
23	0.688	1.143	0.821	0.765E	0.241E	0.111	0.138	0.241	0.074	0.181	0.657	1.160
24	0.594	1.091	0.750	0.823E	0.231E	0.136	0.179	0.204	0.073	0.171	0.565	0.952
25	0.719	1.047	0.693	0.911E	0.237E	0.129	0.154	0.180	0.070	0.171	0.555	0.838
26	0.663	0.884	0.661	1.097E	0.268E	0.135	0.127	0.172	0.072	0.171	0.555	0.693
27	0.587	0.866	0.611	0.392E	0.251	0.114	0.165	0.161	0.075	0.171	0.523	0.661
28	0.608	0.896	0.608	0.437E	0.235	0.102	0.166	0.156	0.089	0.171	0.514	0.588
29	0.680	1.167	0.560E	0.235	0.094	0.122	0.138	0.096	0.096	0.175	0.472	0.579
30	0.652	0.876	0.491E	0.245	0.087	0.226	0.128	0.096	0.096	0.650	0.471	0.545
31	0.549	0.840		0.261		0.641	0.169			30.020		0.607
MEAN	0.9163	1.6568	0.9690	1.8423	0.5145	0.1620	0.3360	0.4092	0.1070	1.1032	1.1595	0.6736
INCEBS	0.639	1.044	0.676	1.243	0.359	0.109	0.234	0.285	0.072	0.769	0.783	0.470
STA AV	0.887	1.211	1.311	0.754	0.459	0.358	0.236	0.494	0.227	0.439	0.541	0.691

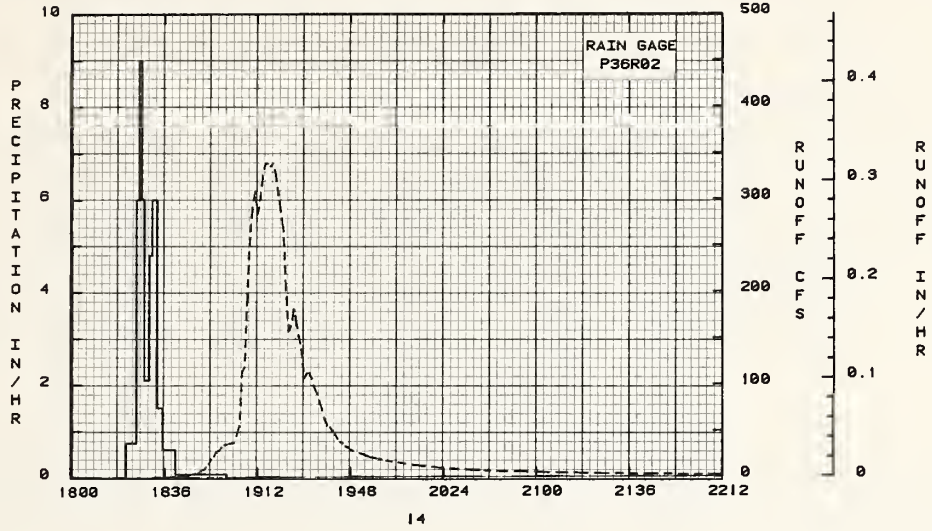
NOTES: To convert CFS to IN/DAY, multiply by 0.022496. STA AV based on record period September 1960 through 1970.

1970 SELECTED RUNOFF EVENT BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSEED (13015)												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JULY 14 - 15, 1970												
7-14	EG P36E02	0.0	0.001	7-14	EG P36E02		7-14	1832	0.096	0.0		
					1821	0.0		1834	0.149	0.0		
					1825	0.7500		1836	0.160	0.0		
					1826	6.0015		1838	0.320	0.0		
					1827	8.9939		1839	0.619	0.0		
					1828	6.0015						
					1830	2.0995		1840	0.704	0.0		
					1831	4.8012		1841	0.789	0.0		
					1832	6.0015		1842	1.173	0.0		
					1833	6.0015		1843	1.344	0.0		
					1835	1.4997		1844	1.355	0.0		
					1840	0.6000		1845	1.910	0.0		
					1850	0.0600		1846	2.976	0.0		
					1900	0.0600		1847	3.670	0.0		
								1848	4.075	0.0001		
								1849	5.217	0.0002		
								1850	6.966	0.0003		
								1851	8.268	0.0004		
								1852	11.362	0.0005		
								1853	14.669	0.0007		
								1854	19.587	0.0010		
								1855	22.905	0.0013		
								1856	27.428	0.0017		
								1857	28.836	0.0022		
								1858	32.741	0.0027		
								1859	35.152	0.0032		
								1900	35.813	0.0038		
								1901	36.645	0.0043		
								1903	37.403	0.0054		
								1905	55.860	0.0069		
								1906	114.021	0.0081		
								1907	118.801	0.0098		
								1908	198.620	0.0127		
								1909	258.680	0.0160		
								1910	291.741	0.0200		
								1511	309.121	0.0244		

NOTES: To convert CFS to IN/HR, multiply by 0.0009374.

1970 SELECTED RUNOFF EVENT			BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 14 - 15, 1970 (CONTINUED)										
							7-14	1912	284.295	0.0298
								1913	300.340	0.0341
								1914	326.316	0.0367
								1915	339.215	0.0448
								1916	338.948	0.0458
								1917	336.122	0.0547
								1918	339.258	0.0556
								1919	327.469	0.0657
								1920	305.044	0.0703
								1921	286.589	0.0746
								1922	265.231	0.0766
								1923	201.724	0.0829
								1924	157.419	0.0855
								1925	163.436	0.0878
								1926	181.519	0.0903
								1927	168.280	0.0935
								1928	151.744	0.0958
								1929	136.681	0.0979
								1930	106.703	0.1001
								1931	112.400	0.1017
								1932	112.325	0.1033
								1933	106.330	0.1049
								1934	96.888	0.1068
								1935	89.677	0.1082
								1936	81.387	0.1055
								1937	71.775	0.1106
								1938	62.291	0.1118
								1939	55.794	0.1127
								1940	53.565	0.1135
								1941	49.703	0.1143
								1942	45.766	0.1152
								1943	41.126	0.1158
								1944	37.691	0.1164
								1945	36.176	0.1171
								1946	33.402	0.1176
								1947	31.556	0.1181
								1948	29.284	0.1185
								1949	28.377	0.1190
								1953	24.323	0.1206
								1955	22.190	0.1213
								1956	21.315	0.1216
								1958	19.992	0.1223
								1959	19.523	0.1226
								2000	18.564	0.1229
								2002	17.549	0.1234
								2004	16.834	0.1240
								2013	12.588	0.1260
								2017	11.639	0.1268
								2024	9.452	0.1280
								2027	8.655	0.1284
								2030	8.246	0.1268
								2038	6.977	0.1297
								2040	6.666	0.1299
								2042	6.262	0.1301
								2046	5.953	0.1305
								2054	5.569	0.1312
								2100	5.131	0.1317
								2105	4.683	0.1321
								2109	4.374	0.1324
								2112	4.225	0.1326
								2120	3.723	0.1331
								2128	3.243	0.1335
								2131	3.094	0.1337
								2147	2.624	0.1344
								2156	2.379	0.1347
								2212	2.016	0.1353
								2236	1.643	0.1360
								2254	1.483	0.1364
								2302	1.387	0.1366
								2318	1.216	0.1369
								2338	1.045	0.1373
								2400	0.939	0.1376
							7-15	56	0.715	0.1363

NOTES: To convert CFS to IN/HR, multiply by 0.0009374.



EVENT OF JULY 14 - 15, 1970  
 BLACKSBURG VIRGINIA CHESTNUT BRANCH WATERSHED (13015)

KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38

LOCATION: Northumberland County, Pennsylvania 6 miles northeast of Klingerstown, Pennsylvania: Mahantango Creek Watershed, Susquehanna River Basin.

AREA: 1773.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	1.81	2.73	2.84	3.61	2.99	5.29	5.10	2.71	2.00	3.98	4.30	2.19	39.55
Q	0.693	4.798	2.785	4.645	1.276	0.671	0.848	0.201	0.109	0.295	2.076	1.536	19.934
STA AV P	1.46	1.36	2.69	3.42	3.86	4.61	3.66	3.32	3.57	2.63	4.20	2.32	37.10
Q	0.903	2.277	2.300	2.485	1.518	0.958	0.491	0.378	0.542	0.230	1.765	1.372	15.220

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	4-2	0.102	4-2	0.100	4-2	0.194	4-2	0.567	4-2	1.020	4-2	1.721	4-2	2.401	3-31	3.381

MAXIMUMS FOR PERIOD OF RECORD													
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
4-2	0.102	4-2	0.100	4-2	0.194	4-2	0.567	4-2	1.020	4-2	1.721	4-2	2.401
1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: Mixed cover area, 4-yr rotation of corn, small grain, small grain and native grasses, most of which is heavily contoured. Vegetative cover: corn, 20.4%; small grain, 20.0%; pasture, 4.0%; hay, 12.9%; vegetables, 0.7%; idle, 0.6%; orchard, 0.5%; homesteads and roads, 3.1%; forest, 37.8%. Precipitation and runoff records began Jan. 1, 1968. Precipitation data Thiessen weighted average for rain gages #B37 and #E37. Length of record 3 yr (1968-70). For long-time precipitation records, see National Weather Service records at Selingsgrove, CAA Airport, Pennsylvania.

1970 DAILY AIR TEMPERATURE (degrees F)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	24	13	47	28	39	18	43	28	79	55	80	57	84	60	87	70	70	49	60	40	62	49	45	28	
2	26	12	47	39	40	29	50	34	73	50	84	63	86	68	84	64	72	44	66	43	58	39	62	38	
3	29	14	42	11	35	30	48	34	60	47	80	56	82	67	80	59	74	60	68	48	52	46	58	37	
4	21	8	16	3	32	30	46	29	59	48	61	52	83	63	74	56	82	69	56	37	51	43	52	26	
5	32	8	26	16	39	32	46	27	72	43	69	58	72	59	76	53	80	58	63	35	48	40	35	22	
6	32	22	34	25	37	28	40	29	48	37	62	49	78	54	80	58	75	56	72	48	52	38	34	22	
7	22	11	39	17	40	24	50	35	56	30	70	46	80	52	80	61	76	49	77	48	62	40	30	18	
8	10	-2	32	28	38	22	62	28	78	38	81	50	80	60	80	62	74	56	75	46	60	40	34	14	
9	6	-2	34	31	32	15	69	44	82	55	87	61	70	66	81	64	71	62	68	48	50	46	40	30	
10	21	3	42	31	36	16	49	29	82	48	84	60	77	64	80	62	83	64	70	55	58	47	45	32	
11	22	11	32	25	40	24	48	27	78	61	86	59	77	60	84	58	70	50	66	59	63	56	34	30	
12	24	16	27	17	32	26	55	29	80	58	84	61	80	62	86	59	72	46	70	60	60	54	34	32	
13	26	18	23	10	36	27	57	34	78	60	74	50	76	56	86	60	78	54	72	59	53	46	35	31	
14	22	11	18	4	32	20	46	41	66	54	72	51	75	60	87	62	78	62	72	61	49	42	37	28	
15	6	24	26	18	31	14	64	40	61	53	60	55	79	65	88	65	86	64	68	52	50	39	34	28	
16	32	8	29	16	39	16	66	38	61	50	65	57	79	60	87	65	88	60	51	46	39	32	35	26	
17	43	25	37	12	36	16	64	46	60	50	74	64	80	56	85	64	78	52	47	34	40	29	38	33	
18	38	17	44	21	34	30	57	41	62	50	78	58	83	59	82	56	71	61	62	42	43	28	38	28	
19	17	5	38	20	40	30	46	38	80	46	78	56	82	62	76	64	70	49	61	38	52	32	52	31	
20	16	0	24	16	37	29	66	28	78	56	71	47	80	58	79	66	74	48	54	44	48	39	39	26	
21	12	4	28	13	42	33	62	41	76	45	63	45	72	52	77	56	82	62	60	51	48	33	32	26	
22	16	1	50	20	38	30	67	38	82	56	74	55	75	56	76	51	90	65	64	58	52	36	32	28	
23	24	3	38	23	38	31	55	45	78	60	78	50	73	62	79	60	89	66	62	55	47	17	33	30	
24	20	6	48	20	41	31	59	46	67	56	78	55	82	65	76	56	89	70	58	54	30	17	32	24	
25	33	20	38	6	46	31	69	35	59	55	76	62	84	66	79	56	90	66	62	52	29	17	31	24	
26	40	27	20	2	58	37	71	39	73	48	72	62	83	62	82	56	86	64	58	51	36	27	28	17	
27	30	26	30	17	44	30	71	54	58	41	63	49	88	62	85	60	88	46	50	42	43	37	29	13	
28	38	26	34	20	53	28	70	52	66	40	73	44	86	67	86	63	58	42	54	36	47	40	29	18	
29	44	36			40	19	74	54	70	46	72	48	85	66	85	67	52	40	52	40	45	40	28	18	
30	37	18			34	16	73	57	68	47	85	61	84	69	82	62	53	43	50	47	50	33	28	17	
31	35	14			42	28			74	53			83	72	74	58			52	48				32	14
AV.	26	13	34	18	39	25	58	38	70	50	74	55	80	62	81	60	76	56	62	48	49	37	37	25	
MEAN	19.4		26.0		32.2		48.1		59.7		64.6		70.8		71.0		66.0		54.9		43.4			31.2	
STA AV	29	16	33	19	44	28	60	40	67	49	76	57	81	62	80	59	74	54	61	45	48	35	34	23	

NOTES: Temperature data taken daily with maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 0930 for the date shown to 0930 the following day. Data recorded at #B37 meteorological station. STA AV based on 3 yr (1968-70) record period.



1970 DAILY PRECIPITATION (inches)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.34	0.0	0.18	0.0	0.0	0.78	0.11	0.0	0.0	0.01	0.0		
2	0.0	0.68	0.0	1.68	0.70	0.16	0.42	0.05	0.0	0.08	0.0	0.0		
3	0.0	0.12	0.0	0.0	0.25	0.33	0.05	0.0	0.15	0.22	0.55	0.26		
4	0.0	0.0	0.22	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.09		
5	0.0	0.10	0.03	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.10	0.0		
6	0.0	0.0	0.0	0.0	0.0	1.16	0.0	0.0	0.0	0.15	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.07N	0.0	0.0	0.05	0.45	0.21	0.05	0.0	0.0	0.0	0.0		
9	0.0	0.58N	0.0	0.05	0.0	0.0	1.55	0.0	0.07	0.0	0.0	0.0		
10	0.0	0.39N	0.0	0.0	0.0	0.0	0.08	0.0	0.19	0.0	0.17	0.0		
11	0.0	0.10N	0.0	0.0	0.19	0.0	0.0	0.0	0.04	0.0	0.27	0.35		
12	0.0	0.0	0.49M	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.90	0.39		
13	0.48B	0.09	0.01M	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.03	0.0		
14	1.03B	0.16S	0.0	0.29	0.15	0.0	0.0	0.0	0.0	1.13	0.16	0.0		
15	0.0	0.06S	0.0	0.17	0.0	0.35	0.22	0.0	0.0	0.41	0.67	0.0		
16	0.0	0.0	0.0	0.0	0.57	0.05	0.18	0.0	0.0	0.0	0.0	0.37M		
17	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.09M		
18	0.0	0.0	0.20N	0.0	0.0	1.34	0.0	0.0	0.25	0.0	0.0	0.0		
19	0.05	0.0	0.0	0.0	0.05	0.0	0.31	0.15	0.0	0.0	0.0	0.0		
20	0.05	0.0	0.20	0.55	0.0	0.0	0.65	0.05	0.0	0.0	1.05	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.15	0.0	0.84	0.0	0.14M		
22	0.0	0.0	0.40	0.0	0.05	0.0	0.0	0.09	0.0	0.60	0.0	0.16B		
23	0.0	0.0	0.0	0.33	0.0	0.0	0.0	1.41	0.0	0.0	0.0	0.14		
24	0.0	0.0	0.10	0.37	0.10	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.05	0.0	0.0	0.0	0.0	0.10	0.0	0.05	0.0	0.0	0.14S		
26	0.05	0.0	0.35	0.0	0.0	0.45	0.0	0.0	0.18	0.0	0.0	0.01S		
27	0.05	0.0	0.0	0.0	0.0	0.20	0.05	0.0	0.96	0.0	0.0	0.0		
28	0.05S	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.05S		
29	0.95	0.62	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.40	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.35	0.05	0.35	0.0	0.0		
31	0.0	0.0	0.14N	0.0	0.0	0.0	0.40	0.25	0.19	0.19	0.0	0.0		
TOTAL	1.81	2.73	2.84	3.61	2.99	5.29	5.10	2.71	2.00	3.58	4.30	2.19		
STA AV	1.46	1.36	2.69	3.42	3.86	4.61	3.66	3.32	3.57	2.63	4.20	2.32		

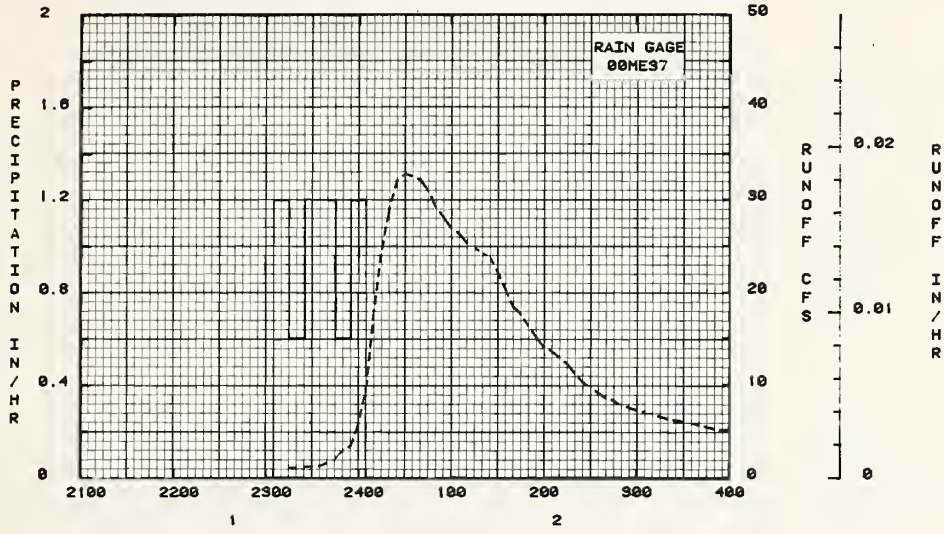
NOTES: Precipitation values are Thiessen weighted average of rain gages MB37 and ME37. STA AV based on 3 yr (1968-70) record period.

1970 MEAN DAILY DISCHARGE (cfs)													KLINGERSTOWN, PENNSYLVANIA WATERSHED WE-38	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	3.39	2.56	4.26	7.34	3.33	1.09	0.90	0.90	0.28	0.24	0.55	1.84		
2	2.97	46.37	4.18	120.16	3.96	1.06	5.50	0.69	0.28	0.23	0.89	1.70		
3	2.60	63.86	3.86	58.32	6.10	1.28	2.49	0.62	0.34	0.32	1.93	1.78		
4	2.09	31.24	4.16	24.33	4.97	1.11	1.80	0.55	0.34	0.20	2.96	2.67		
5	1.91	15.38	5.07	15.62	4.83	1.14	1.37	0.50	0.27	0.20	3.01	2.11		
6	1.94	10.49	5.46	11.91	4.27	4.25	1.11	0.47	0.24	0.25	2.10	2.25		
7	1.94	8.20	5.32	9.30	3.85	1.89	0.95	0.47	0.21	0.21	1.66	2.08		
8	1.78	6.96	5.18	7.81	3.58	1.83	1.02	0.48	0.22	0.20	1.33	2.01		
9	2.02	6.27	4.94	7.04	3.25	1.78	4.67	0.44	0.27	0.20	1.15	2.08		
10	1.62	24.79	4.52	5.97	3.01	1.32	9.12	0.41	0.30	0.20	1.16	1.89		
11	1.55	25.25	4.12	4.91	2.81	1.15	5.98	0.37	0.25	0.21	1.49	1.88		
12	1.52	14.66	4.05	4.23	2.33	1.39	3.88	0.38	0.20	0.19	5.78	4.05		
13	1.46	16.66	3.66	3.72	2.03	1.05	2.64	0.37	0.20	0.18	13.53	4.41		
14	1.34	7.58	3.23	3.63	1.97	0.93	1.90	0.33	0.21	0.78	8.70	5.03		
15	1.28	6.85	2.81	3.71	1.76	1.02	1.83	0.32	0.20	1.86	13.52	4.66		
16	1.26	5.68	2.18	3.07	1.98	1.05	1.81	0.31	0.21	0.64	14.49	4.28		
17	1.36	5.10	2.06	2.88	6.61	0.92	1.31	0.30	0.24	0.43	8.53	8.59		
18	1.39	5.10	2.07	2.34	4.48	4.83	1.12	0.27	0.38	0.38	5.58	10.57		
19	1.26	5.49	2.94	2.14	4.21	4.52	1.06	0.35	0.37	0.33	3.95	9.39		
20	1.28	4.56	5.20	3.82	3.59	3.04	2.24	0.38	0.31	0.30	9.82	6.84		
21	1.15	3.75	7.50	3.18	3.15	2.36	1.69	0.35	0.19	0.89	15.73	5.22		
22	1.14	5.35	8.17	2.98	2.99	1.74	1.20	0.27	0.17	1.67	10.11	4.61		
23	0.93	7.54	11.53	3.46	2.78	1.36	1.08	2.21	0.16	3.35	6.60	4.16		
24	1.05	8.14	12.79	5.12	2.32	1.16	1.01	0.55	0.15	1.83	4.42	3.96		
25	1.10	9.12	11.42	5.72	2.07	1.07	0.96	0.44	0.15	1.27	3.29	3.31		
26	1.21	6.82	16.68	5.72	2.00	1.24	0.84	0.39	0.15	1.01	2.82	3.05		
27	1.10	5.63	19.41	5.23	1.72	1.53	0.76	0.35	0.94	0.87	2.24	2.56		
28	1.09	4.72	13.66	4.69	1.49	0.97	0.73	0.32	0.34	0.76	1.97	2.13		
29	2.07	11.18	4.10	4.10	1.28	0.92	0.70	0.29	0.26	0.69	2.40	1.91		
30	2.75	8.28	3.59	3.59	1.19	0.98	0.69	0.33	0.27	0.86	2.54	1.74		
31	2.09	7.56	1.15	1.15	1.15	0.83	0.56	0.56	1.19	1.19	1.72	1.72		
MEAN	1.666	12.765	6.692	11.534	3.066	1.665	2.038	0.483	0.271	0.708	5.155	3.692		
INCHES	0.693	4.798	2.785	4.645	1.276	0.671	0.848	0.201	0.109	0.295	2.076	1.536		
STA AV	0.903	2.277	2.300	2.485	1.518	0.958	0.491	0.378	0.542	0.230	1.765	1.372		

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.013425. Records are good. Some periods of winter records are affected by ice on control, no adjustments were made for these records. STA AV based on 3 yr (1968-69) record period.

1970 SELECTED RUNOFF EVENT			KLINGERSTOWN, PENNSYLVANIA			WATERSHED WE-38				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 1 - 2, 1970										
7- 1	RG 00ME37 0.0	0.011	7- 1	BG 00ME37 2305	0.0	0.0	7- 1	2315	1.065	0.0
				2310	1.2001	0.10		2320	1.141	0.0001
				2315	1.1997	0.20		2325	1.180	0.0002
				2325	0.6001	0.30		2330	1.220	0.0003
				2340	1.2000	0.60		2335	1.302	0.0004
WATERSHED CONDITIONS:				2345	1.1997	0.70		2340	1.664	0.0005
Mixed cover area, 4-yr				2355	0.6001	0.80		2345	2.080	0.0006
rotation of corn, small grain,				2400	1.1997	0.90		2350	3.614	0.0007
small grain and native			7- 2	5	1.2001	1.00		2355	3.453	0.0008
grasses, most of which is				110	0.0	1.00		2400	5.876	0.0010
heavily contoured. Vegetative							7- 2	5	9.718	0.0014
cover: Corn, 20.4%; small							10	18.084	0.0020	
grain, 20.0%; pasture, 4.0%;							15	24.791	0.0030	
hay, 12.9%; vegetables, 0.7%;							20	29.199	0.0042	
idle, 0.6%; orchard, 0.5%;							25	32.198	0.0056	
homesteads and roads, 3.1%;										
forest, 37.8%.										
								30	32.834	0.0072
								40	32.198	0.0102
								45	30.998	0.0117
								50	29.199	0.0131
								55	28.071	0.0144
								100	26.943	0.0157
								105	26.379	0.0169
								110	25.320	0.0181
								125	23.732	0.0215
								130	22.246	0.0226
								135	20.331	0.0236
								140	18.514	0.0245
								145	17.654	0.0254
								150	16.395	0.0262
								155	15.199	0.0269
								200	14.045	0.0276
								205	13.680	0.0282
								210	12.962	0.0268
								215	12.267	0.0254
								220	11.265	0.0299
								225	10.321	0.0364
								230	9.718	0.0309
								235	9.137	0.0313
								240	8.576	0.0317
								245	8.304	0.0321
								250	7.777	0.0325
								255	7.524	0.0329
								300	7.271	0.0333
								305	7.028	0.0336
								310	6.785	0.0339
								320	6.321	0.0345
								325	6.098	0.0348
								335	5.876	0.0354
								340	5.663	0.0357
								345	5.451	0.0360
								350	5.248	0.0362

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000559.



EVENT OF JULY 1 - 2, 1970  
 KLINGERTOWN, PENNSYLVANIA WATERSHED WE-38

MCCREDIE, MISSOURI STATION RESERVOIR W-1

LOCATION: Callaway County, Mo.; 1 mi. S.E. of McCredie; Crows Fork Creek, Anxvasse Watershed, Missouri River Basin.

AREA: 153.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														MCCREDIE, MISSOURI STATION RESERVOIR W-1														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.13	0.39	1.42	7.19	8.17	7.81	1.70	5.18	10.07	3.22	1.17	1.36	47.79														
	Q	0.140	0.0	0.0	3.345	3.827	5.717	0.0	0.157	4.565	0.915	0.296	0.298	19.259														
STA AV	P	1.43	1.56	2.63	3.78	4.32	4.70	3.61	2.85	3.92	3.68	1.52	1.64	36.04														
	Q	0.518	0.653	1.096	1.166	0.938	1.081	0.544	0.134	0.566	1.147	0.395	0.355	8.593														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	9-23	1.426	6-13	0.949	6-12	1.543	6-12	2.427	6-12	2.596	6-12	2.640	9-22	3.545	6-12	4.218

MAXIMUMS FOR PERIOD OF RECORD																
Year	10-13	2.269	10-13	1.365	10-13	2.236	10-4	3.960	10-4	7.000	10-4	7.775	10-3	8.090	10-2	8.840
Year	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968

NOTES: Watershed conditions: 58% Pasture and meadow; 2% alfalfa; 20% corn; 1% soybeans; 11% grain sorghum; 2% small grains and 6% roads and farmsteads. Precipitation Thiessen average of 4 recording gages and 1 non-recording gage. Precipitation and runoff records began Jan. 1, 1941. Runoff amounts, or rates, which are reported as inches or inches per hour, respectively, were computed with a constant watershed area of 153 acres, including reservoir surface area. Previous published runoff amounts and rates were computed with a variable watershed area equal to the total area less the reservoir surface area, which was a function of reservoir stage. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, OSDA Misc. Pub. 1164, p. 25.1-13. For long-time precipitation records, see National Weather Service records at Columbia, Missouri.

1970 DAILY AIR TEMPERATURE (degrees F)														MCCREDIE, MISSOURI STATION RESERVOIR W-1													
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec				
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min			
1	24	20	50	33	51	42	41	36	63	48	69	66	92	70	100	75	89	69	79	52	48	31	64	58			
2	25	18	20	16	63	49	51	28	59	37	68	60	93	72	92	70	88	72	79	59	44	34	60	32			
3	27	10	18	5	68	56	52	32	71	40	62	52	92	73	90	72	84	72	79	50	41	32	70	51			
4	38	13	40	10	67	34	48	33	76	64	57	54	88	58	90	70	84	67	71	46	42	32	62	34			
5	17	13	53	26	53	29	57	30	79	50	70	53	78	56	80	70	80	62	80	59	53	32	50	40			
6	15	-4	51	31	57	32	61	42	76	49	76	51	79	54	78	62	89	72	81	63	65	32	44	23			
7	11	2	50	36	60	30	72	37	79	49	78	54	84	62	78	73	90	73	72	60	60	38	48	26			
8	6	-5	49	28	68	33	76	53	80	59	80	58	86	68	86	70	80	66	71	65	63	40	54	32			
9	17	4	33	29	48	29	72	39	81	64	80	57	86	59	85	73	87	62	70	46	50	46	53	36			
10	26	1	47	22	41	29	75	43	78	51	82	63	84	58	83	69	87	54	59	36	58	40	59	36			
11	31	24	44	29	36	27	80	46	81	60	82	64	87	61	81	70	70	47	65	39	57	39	59	29			
12	24	20	40	19	36	26	79	52	81	68	81	62	88	64	84	66	81	58	64	51	51	45	32	28			
13	36	16	38	20	36	23	46	42	82	66	86	64	90	66	85	63	81	54	64	55	50	45	44	27			
14	42	20	37	16	36	22	54	42	82	60	87	68	93	71	86	65	77	54	61	50	49	38	54	29			
15	47	26	29	20	39	20	66	41	67	52	88	66	93	69	91	69	84	69	58	41	38	32	52	34			
16	44	34	37	11	36	24	73	49	64	44	88	66	86	60	91	72	74	58	54	33	52	25	40	34			
17	34	14	61	27	35	28	71	54	76	48	88	72	91	61	83	71	76	64	54	32	55	36	45	35			
18	14	0	61	30	37	36	66	48	60	52	88	70	91	68	91	74	76	63	60	36	52	34	56	36			
19	12	4	33	11	39	34	66	48	80	56	78	62	88	73	91	75	76	56	61	44	50	34	56	30			
20	16	9	34	11	42	31	59	42	82	56	80	60	87	62	90	73	86	63	59	48	49	35	32	24			
21	15	-6	57	24	47	26	64	38	83	59	69	57	77	53	82	65	84	71	67	42	61	34	44	32			
22	28	4	57	40	53	31	81	50	84	60	77	55	78	56	85	71	84	64	66	50	60	30	48	34			
23	34	26	53	26	43	32	80	40	81	60	83	58	80	58	84	66	81	58	60	55	17	16	41	26			
24	54	20	53	31	56	30	68	42	80	62	88	69	87	66	83	64	72	57	64	53	26	11	38	16			
25	55	42	48	21	54	38	70	45	73	63	87	66	89	63	84	66	83	57	65	48	44	24	33	21			
26	44	34	50	14	45	33	79	53	78	54	82	68	91	67	86	65	79	54	66	52	61	40	40	18			
27	51	23	50	30	53	22	82	61	78	55	78	56	92	70	88	65	69	48	65	52	60	38	36	25			
28	66	45	52	30	53	27	86	65	80	63	82	57	92	79	92	68	71	50	54	42	41	35	36	19			
29	56	32	46	25	86	68	80	64	80	64	91	66	96	72	92	68	79	53	56	34	56	40	38	20			
30	46	24	50	31	82	62	76	63	76	63	90	72	96	77	94	73	79	56	57	41	64	36	40	26			
31	56	32	48	34	82	66	82	66	82	66	99	74	88	72	96	74	88	72	46	37	36	30	30	11			
AV.	33	17	44	23	48	31	68	45	77	56	80	62	88	65	87	69	81	61	65	47	51	34	47	30			
MEAN	24.7		33.8		39.7		56.8		66.7		70.7		76.6		78.1		70.8		56.0		42.4		38.7				
STA AV	39	20	43	23	52	30	67	43	75	52	83	61	88	65	88	63	81	65	70	45	54	33	41	24			

NOTES: Temperature data taken daily with the maximum and minimum thermometers, except on weekends and holidays, when data taken from hygrothermograph charts. The recording period is from 1700 of the previous day to 1700 of the day on which values are recorded. STA AV based on 30 yr (1941-1970) record period.

1969		DAILY PRECIPITATION (inches)				MCCREDIE, MISSOURI				STATION RESERVOIR W-1			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.03	0.29	0.82	0.0	1.04	0.0	0.0	0.0	0.02	0.0	0.0	
2	0.21	0.0	0.02	0.0	0.0	0.04	0.0	0.07	1.31	0.0	0.0	0.0	
3	0.0	0.0	0.13	0.01	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.07	0.0	0.03	0.0	0.0	0.02	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.21	0.03	0.0	1.29	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.62	0.0	0.22	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.40	0.0	0.0	0.0	
8	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.30	0.59	0.0	
9	0.0	0.0	0.0	0.0	1.07	0.0	0.0	0.62	0.46	0.0	0.05	0.0	
10	0.02	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.15	
11	0.0	0.0	0.08	0.0	0.05	0.0	0.0	0.02	0.0	0.0	0.02	0.05	
12	0.0	0.0	0.20	0.27	0.0	2.46	0.0	0.0	0.12	0.0	0.0	0.0	
13	0.0	0.16	0.0	0.03	0.0	1.38	0.0	0.0	0.85	0.30	0.0	0.0	
14	0.0	0.16	0.0	0.0	2.86	0.48	0.0	0.0	0.90	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.10	0.49	0.0	0.33	0.0	0.21	0.0	0.0	0.25	
16	0.0	0.0	0.02	0.0	0.0	0.71	0.0	0.24	0.0	0.0	0.0	0.37	
17	0.10	0.0	0.07	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.20	0.14	0.0	0.11	0.46	0.0	0.0	0.0	0.51	0.0	
20	0.0	0.0	0.0	0.0	0.0	1.31	0.0	0.18	0.0	0.0	0.0	0.05	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	
22	0.0	0.0	0.03	0.08	0.83	0.0	0.0	0.45	2.88	0.72	0.0	0.0	
23	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	2.10	0.35	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.13	0.0	0.74	0.0	0.0	0.0	0.73	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.83	0.0	0.0	
27	0.0	0.0	0.0	0.07	0.0	0.0	0.07	0.0	0.0	0.49	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.6	0.0	
29	0.0	0.0	0.0	0.44	0.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	2.66	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
31	0.0	0.25	0.0	0.0	0.70	0.0	0.74	0.0	0.0	0.0	0.0	0.04	
TOTAL	0.13	0.39	1.42	7.19	8.17	7.81	1.70	5.18	10.07	3.22	1.17	1.36	
STA AV	1.43	1.56	2.63	3.78	4.32	4.70	3.61	2.85	3.92	3.68	1.92	1.64	

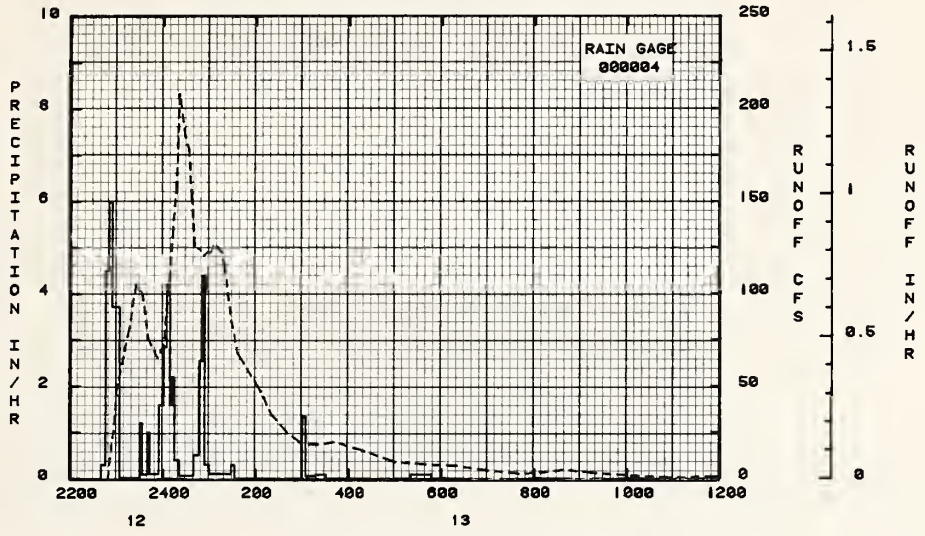
NOTES: Precipitation data are Thiessen weighted values for 4 recording rain gages and 1 non-recording rain gage. STA AV values are for 30 yr (1941-1970) record period.

1970		MEAN DAILY DISCHARGE (cfs)				MCCREDIE, MISSOURI				STATION RESERVOIR W-1			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	1.027	1.180	5.645	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.517	0.130	1.123	0.0	0.0	0.091	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.210	0.982	0.756	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.170	0.0	0.680	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.022	0.0	0.362	0.0	0.066	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.173	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.096	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.219	0.0	0.0	0.148	0.0	
9	0.0	0.0	0.0	0.0	0.602	0.0	0.0	0.631	0.0	0.0	0.679	0.0	
10	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0	0.0	0.0	0.160	0.0	
11	0.0	0.0	0.0	0.0	0.166	0.0	0.0	0.0	0.0	0.0	0.090	0.0	
12	0.0	0.0	0.0	0.064	0.096	3.571	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	13.504	0.0	0.0	0.073	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	9.756	1.147	0.0	0.0	2.640	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	5.727	0.457	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.389	3.378	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.142	0.205	0.0	0.0	0.0	0.0	0.0	0.316	
18	0.0	0.0	0.0	3.411	0.038	0.096	0.0	0.0	0.0	0.0	0.0	0.118	
19	0.0	0.0	0.0	3.308	0.0	0.102	0.0	0.0	0.0	0.0	0.552	0.0	
20	0.0	0.0	0.0	0.432	0.0	4.967	0.0	0.0	0.0	0.0	0.225	0.025	
21	0.0	0.0	0.0	0.168	0.0	0.266	0.0	0.0	0.0	0.0	0.049	0.831	
22	0.0	0.0	0.0	0.0	0.547	0.169	0.0	0.0	9.973	0.275	0.0	0.509	
23	0.0	0.0	0.0	0.189	0.138	0.099	0.0	0.0	12.585	0.456	0.0	0.088	
24	0.251	0.0	0.0	0.384	0.222	0.053	0.0	0.0	0.545	0.0	0.0	0.027	
25	0.473	0.0	0.0	0.136	1.772	0.0	0.0	0.0	2.705	0.0	0.0	0.0	
26	0.173	0.0	0.0	0.0	0.077	0.0	0.0	0.0	0.676	1.685	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.094	2.791	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.672	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	11.501	1.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	1.628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0289	0.0	0.0	0.7167	0.7936	1.2251	0.0	0.0326	0.9780	0.1896	0.0635	0.0617	
INCHES	0.140	0.0	0.0	3.345	3.827	5.717	0.0	0.157	4.565	0.915	0.296	0.298	
STA AV	0.518	0.653	1.096	1.166	0.938	1.081	0.544	0.134	0.566	1.147	0.395	0.355	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.155557. STA AV values are for 30 yr (1941-1970) record period.

1970 SELECTED RUNOFF EVENT			MCCREDIE, MISSOURI STATION RESERVOIR #-1							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JUNE 12 - 13, 1970										
RG 000004			RG 000004							
6-12	3.74	0.013	6-12	2239	0.0	0.0	6-12	2248	0.0	0.0
				2245	0.3000	0.03		2256	30.228	0.0131
				2249	4.5001	0.33		2300	51.166	0.0307
				2253	6.0000	0.73		2308	65.861	0.0813
				2303	3.7202	1.35		2316	82.519	0.1454
WATERSEED CONDITIONS:										
58% Pasture and meadow,										
8-12 in. tall; 2% alfalfa,										
12-14 in. tall; 20% corn,										
6-8 in. tall; 4% grain										
1% soybeans, 4-6 in. tall;										
11% grain sorghum, 6-8 in.										
tall; 2% small grain, 18-										
24 in. tall; and 6% roads										
and farmstead.										
			6-13	2400	1.5998	1.66	6-13	4	92.053	0.5780
				4	2.8500	1.85		8	104.333	0.6213
				8	4.2000	2.13		12	136.338	0.6742
				11	1.6000	2.21		16	156.921	0.7375
				14	2.2000	2.32		18	180.563	0.7738
				20	0.4001	2.36		20	208.255	0.8159
				39	0.0631	2.38		24	196.756	0.9034
				46	0.5143	2.44		28	184.522	0.9858
				50	2.5502	2.61		32	178.540	1.0642
				53	4.4000	2.83		36	152.678	1.1357
				59	0.3000	2.86		40	126.108	1.1959
				128	0.1034	2.91		44	124.541	1.2500
				132	0.3001	2.93		48	123.536	1.3036
				300	0.0	2.93		52	120.852	1.3564
				304	1.3499	3.02		56	122.641	1.4090
				317	0.0462	3.03		100	121.684	1.4620
				330	0.0923	3.05		104	126.147	1.5155
				520	0.0	3.05		108	125.444	1.5698
				547	0.0889	3.09		116	122.015	1.6767
								120	111.264	1.7271
								128	85.167	1.8120
								136	67.730	1.8781
								144	62.246	1.9343
								206	46.964	2.0641
								220	34.469	2.1257
								240	24.889	2.1898
								300	18.232	2.2364
								320	18.277	2.2758
								340	19.835	2.3170
								420	14.743	2.3917
								500	8.861	2.4427
								540	7.508	2.4781
								620	6.628	2.5086
								700	4.207	2.5320
								740	2.497	2.5465
								808	3.244	2.5552
								836	4.595	2.5671
								920	2.660	2.5843
								1006	1.526	2.5947
								1056	0.301	2.5996
								1146	1.068	2.6033
								1312	1.047	2.6131
								1456	0.135	2.6197
								1624	0.332	2.6219

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00648. Event precipitation totals for rain gages R-2, R-3, S-6, and R-8 are 2.93, 3.26, 3.17 and 2.94 respectively and the Thiessen average event precipitation is 3.08 inches.



EVENT OF JUNE 12 - 13, 1970  
MCCREDIE, MISSOURI STATION RESERVOIR #-1

## COSHOCTON, OHIO WATERSHED 102

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 102	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 2.42	1.72	3.38	5.48	3.72	3.28	3.77	0.52	3.97	3.52	2.91	2.53	37.22	
	Q 0.084	0.0	0.0	0.248	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.332	
STA AV	P 1.88	2.19	4.03	3.38	3.94	4.59	4.31	3.01	2.39	2.38	2.45	2.29	36.85	
	Q 0.048	0.059	0.118	0.063	0.009	0.156	0.181	0.034	0.017	0.009	0.001	0.0	0.695	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
			Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	4-24	0.254	4-24	0.166	4-24	0.194	4-24	0.202	4-24	0.202	4-23	0.202	4-22	0.202	4-16	0.202

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Rate	Date	Vol.	Date	Rate	Date	Vol.	Date	Rate	Date	Vol.	Date	Rate	Date	Vol.
	6-12	3.640	6-12	1.310	7- 5	1.427	7- 5	2.470	7- 5	2.470	7- 5	2.470	7- 5	2.470	6-29	2.597
	1957		1957		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of improved practice alfalfa meadow. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.1-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1970, pp. 26.1-1 and 26.30-3. Precipitation data from rain gage Y101. Precipitation and runoff records began April 1937. Watershed discontinued Jan. 1, 1947 to Apr. 30, 1957 and Sept. 1, 1957 to March 29, 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 102	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.67	3.10	1.15	0.44	0.0	0.0	0.0	0.0	0.21	1.00	0.0		
3	0.15S	0.14S	0.27	0.3	0.0	0.81	0.0	0.0	0.69	0.0	0.0	0.30		
4	0.19S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.22	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.05	0.35	0.0	0.0	0.0	0.0	0.0	0.9		
6	0.06S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.13	0.0	0.0	0.0	0.0	1.37	0.0	0.04	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.15	0.18	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.14	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.15	0.0	0.45		
12	0.0	0.04S	0.42S	0.0	0.67	0.13	0.0	0.0	0.0	0.18	0.13	0.60		
13	0.0	0.03S	0.24S	0.55	1.06	0.0	0.0	0.0	0.0	0.19	0.0	0.16		
14	0.0	0.0	0.11S	0.07	0.0	0.0	0.0	0.0	0.0	0.15	0.64	0.0		
15	0.0	0.39M	0.03S	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.17	0.0		
16	0.0	0.0	0.35S	0.0	0.31	0.06E	0.0	0.10	0.0	0.0	0.0	0.17		
17	0.07E	0.0	0.21S	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0	0.08		
18	0.07S	0.0	0.09S	0.0	0.0	0.01E	0.0	0.0	0.08	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.28	0.0	0.0	0.05	0.07	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.45	0.0	0.0	0.31	0.0	0.0	0.05	0.24	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.06	0.42	0.0	0.15S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.47		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S		
24	0.0	0.0	0.0	1.92	0.61	0.0	0.0	0.0	0.10	0.0	0.0	0.0		
25	0.06E	0.0	0.22	0.0	0.49	0.02E	0.0	0.0	1.64	0.0	0.05S	0.04S		
26	0.07M	0.0	0.08	0.0	0.0	0.34	0.0	0.0	0.83	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.04	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0		
29	1.05	0.18S	0.0	0.0	0.0	0.03	0.73	0.0	0.0	0.37	0.45	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.46	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.42	1.72	3.38	5.48	3.72	3.28	3.77	0.52	3.97	3.52	2.91	2.53		
STA AV	1.88	2.19	4.03	3.38	3.94	4.59	4.31	3.01	2.39	2.38	2.45	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y101. STA AV based on 22 yr period, part-years records included.

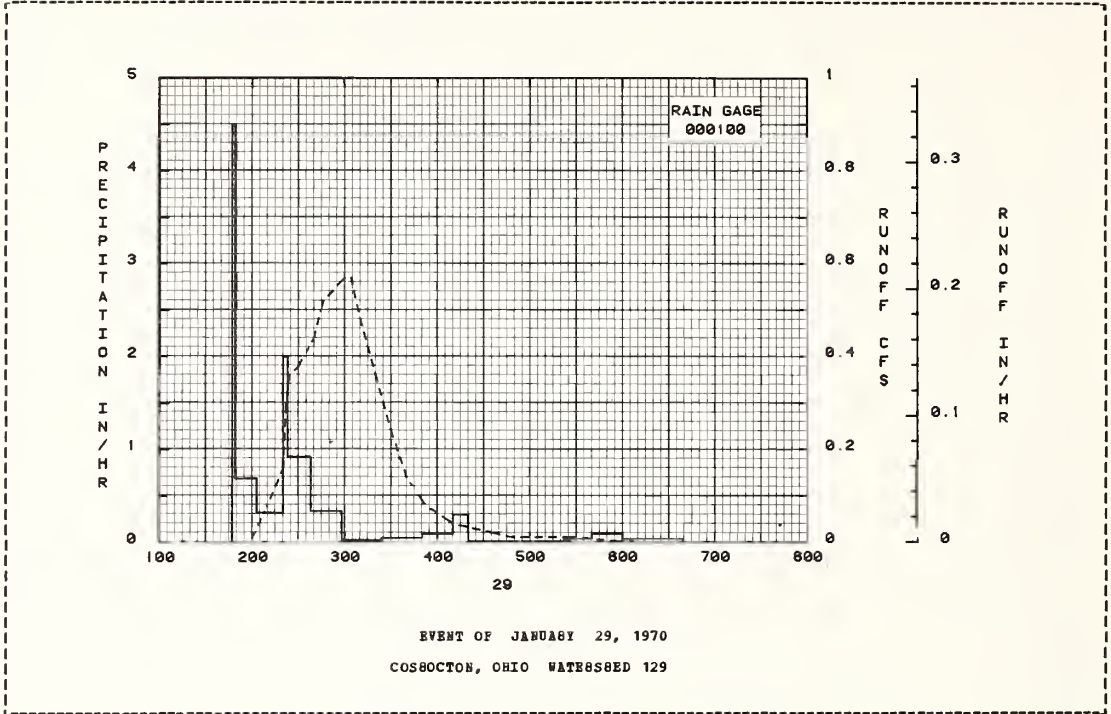


1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 102												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0	0.0	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.084	0.0	0.0	0.248	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.048	0.059	0.118	0.063	0.009	0.156	0.181	0.334	0.017	0.009	0.001	0.0

NOTES: To convert CFS to IN/DAY, multiply by 18.8902. STA AV based on 22 yr period, part-years records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 102											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 25, 1970											
3G 00Y101			RG 00Y101								
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	236	0.0	0.0	
				150	1.0800	0.09		237	0.025	0.0002	
				200	0.4198	0.16		240	0.057	0.0018	
				208	0.3751	0.21		246	0.110	0.0084	
				216	0.6752	0.30		256	0.139	0.0247	
WATERSHED CONDITIONS:											
Coverage legumes and grass.											
				221	0.6006	0.35		304	0.160	0.0404	
				222	3.0000	0.40		308	0.160	0.0488	
				230	0.5242	0.47		316	0.119	0.0634	
				238	0.3001	0.51		322	0.085	0.0714	
				240	1.2000	0.55		330	0.035	0.0779	
				252	0.8002	0.71		340	0.017	0.0816	
				305	0.3690	0.79		354	0.003	0.0834	
				315	0.1799	0.82		420	0.0	0.0639	
				320	0.2402	0.84					
				330	0.0600	0.85					
				400	0.0400	0.87					
				415	0.1200	0.90					
				425	0.0601	0.91					

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.78709517.



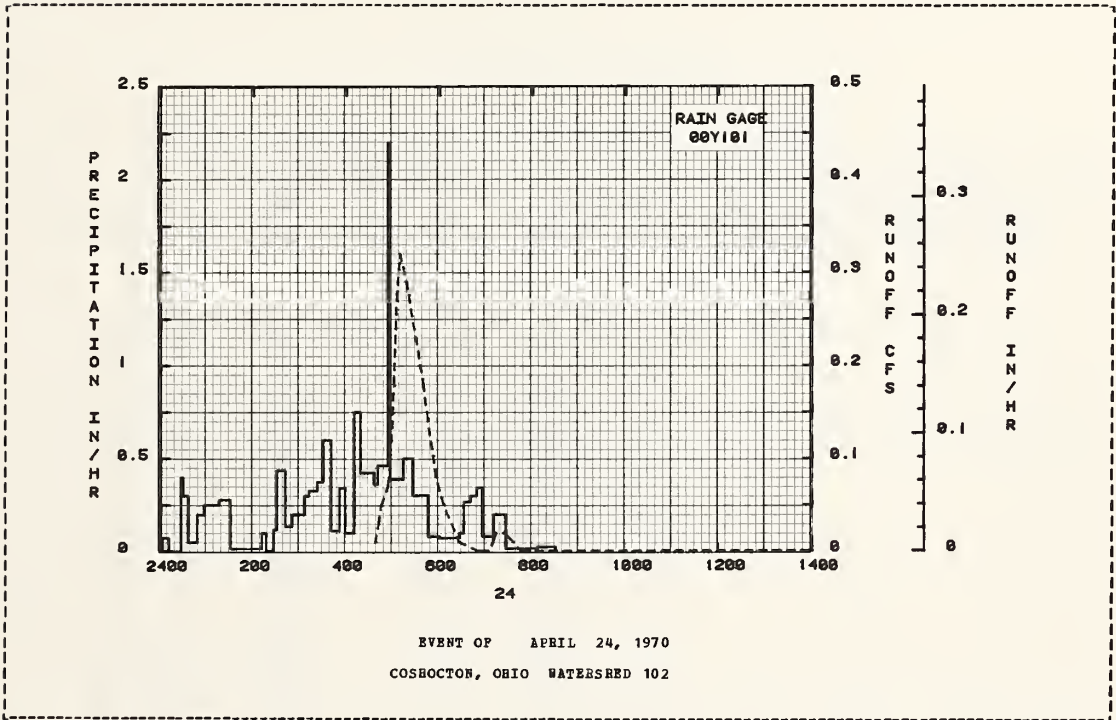
EVENT OF JANUARY 29, 1970  
COSHOCTON, OHIO WATERSHED 129

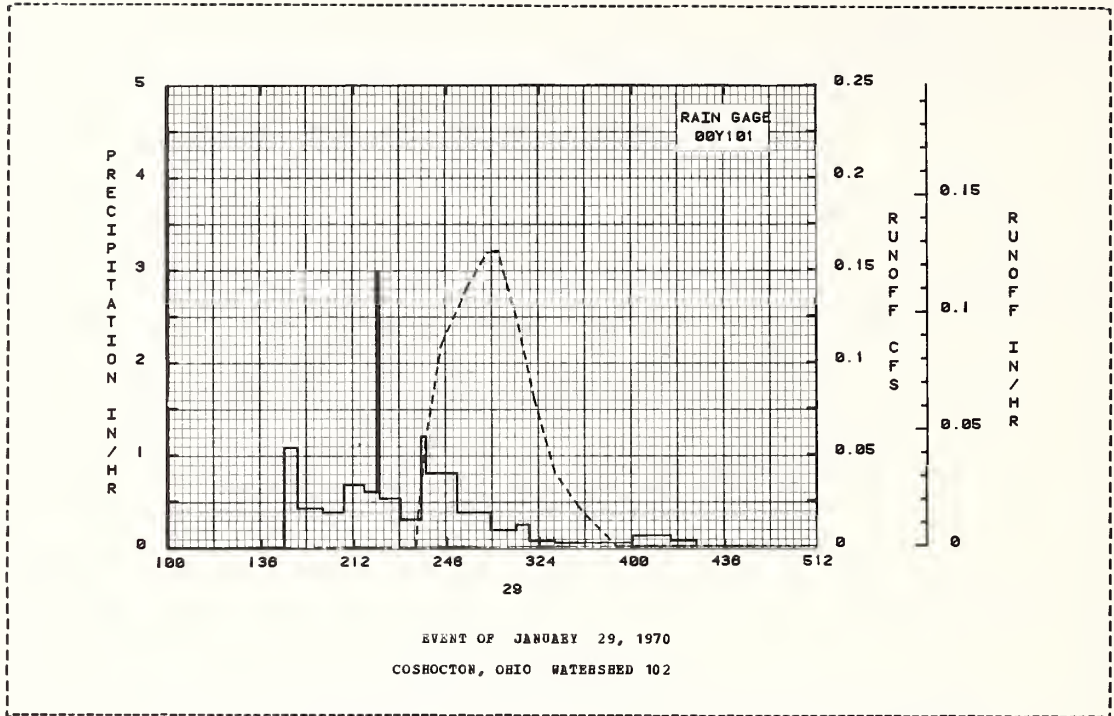
1970 PRECEDENT CONDITIONS			1970 SELECTED RUNOFF EVENT						COSHOCTON, OHIO WATERSHED 129		
Date	Rainfall	Runoff	Date	Time	Rainfall Intensity	Acc.	Date	Time	Runoff Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 24, 1970											
4-24	0.0	0.000	4-24	14	0.0	0.0	4-24	300	0.004	0.0	
				30	0.0375	0.01		310	0.006	0.0003	
				35	0.4800	0.05		330	0.012	0.0014	
				55	0.1200	0.09		340	0.025	0.0025	
				135	0.2100	0.23		346	0.053	0.0039	
WATERSHED CONDITIONS: Mixed grass.											
				230	0.0655	0.29		354	0.053	0.0065	
				255	0.3600	0.44		400	0.082	0.0090	
				310	0.2000	0.49		416	0.082	0.0170	
				331	0.3143	0.60		420	0.138	0.0197	
				343	0.5000	0.70		424	0.209	0.0239	
				355	0.1500	0.73		430	0.222	0.0318	
				405	0.3600	0.79		436	0.265	0.0407	
				413	0.0750	0.80		440	0.280	0.0473	
				418	1.0800	0.89		450	0.312	0.0654	
				453	0.3943	1.12		456	0.400	0.0784	
				456	1.8000	1.21		500	0.566	0.0902	
				528	0.4875	1.47		502	0.612	0.0974	
				546	0.2667	1.55		510	0.661	0.1284	
				606	0.1200	1.59		516	0.612	0.1517	
				630	0.0250	1.60		520	0.612	0.1666	
				659	0.3103	1.75		530	0.521	0.2012	
				736	0.0811	1.80		540	0.400	0.2293	
								550	0.296	0.2505	
								600	0.209	0.2659	
								610	0.138	0.2765	
								620	0.082	0.2832	
								632	0.053	0.2881	
								640	0.046	0.2905	
								650	0.046	0.2933	
								704	0.082	0.2988	
								716	0.082	0.3048	
								730	0.067	0.3112	
								752	0.030	0.3177	
								812	0.012	0.3203	
								830	0.006	0.3213	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 102							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
			EVENT OF APRIL 24, 1970 (CONTINUED)							
			4-24	640	0.2667	1.62				
				648	0.3000	1.66				
				655	0.3429	1.70				
				710	0.0800	1.72				
				725	0.2000	1.77				
				806	0.0146	1.78				
				830	0.0250	1.79				

NOTES: To convert runoff in CFS to IN/RR, multiply by 0.78709517.





1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 102							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	EG 00Y101 0.0	0.000	4-24	EG 00Y101 2	0.0	0.0	4-24	437	0.010	0.0
				10	0.0750	0.01		441	0.034	0.0012
				26	0.0	0.01		445	0.050	0.0034
				29	0.4000	0.03		453	0.070	0.0057
				35	0.3000	0.06		455	0.085	0.0117
WATERSHED CONDITIONS: Coverage legumes and grass.				47	0.0500	0.07		459	0.139	0.0176
				56	0.2000	0.10		501	0.183	0.0218
				115	0.2526	0.18		505	0.276	0.0338
				130	0.2800	0.25		509	0.323	0.0495
				210	0.0150	0.26		517	0.291	0.0817
				216	0.1000	0.27		529	0.234	0.1230
				225	0.0	0.27		539	0.183	0.1504
				230	0.1200	0.28		545	0.139	0.1631
				241	0.4364	0.36		555	0.085	0.1778
				250	0.1333	0.38		605	0.045	0.1863
				305	0.2000	0.43		625	0.010	0.1935
				311	0.3000	0.46		649	0.0	0.1951
				322	0.3273	0.52		703	0.0	0.1951
				330	0.3750	0.57		709	0.010	0.1955
				340	0.6000	0.67		713	0.020	0.1963
				351	0.1091	0.69		723	0.020	0.1989
				358	0.3429	0.73		735	0.007	0.2010
				410	0.1000	0.75		745	0.001	0.2015
				414	0.7500	0.80		755	0.0	0.2016
				418	0.7500	0.85				
				435	0.4235	0.97				
				440	0.3600	1.00				
				453	0.4615	1.10				
				456	2.2000	1.21				
				513	0.3882	1.32				
				525	0.5000	1.42				
				545	0.3000	1.52				
				600	0.0800	1.54				
				625	0.0720	1.57				
				631	0.1000	1.58				

NOTES: To convert runoff in CFS to I<sup>2</sup>/HH, multiply by 0.78709517.

## COSHOCTON, OHIO WATERSHED 129

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 2.71 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 129	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.38	1.71	3.42	5.62	3.70	3.18	3.50	0.39	3.54	3.61	3.00	2.66	36.71
	Q	0.234	0.303	0.0	0.519	0.008	0.026	0.0	0.0	0.014	0.036	0.0	0.007	0.817
STA AV	P	2.71	2.35	3.49	3.43	3.82	4.04	4.34	2.82	2.57	2.13	2.49	2.24	36.43
	Q	0.093	0.109	0.163	0.060	0.046	0.138	0.130	0.038	0.037	0.010	0.001	0.011	0.834

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	4-24	0.242	4-24	0.185	4-24	0.264	4-24	0.322	4-23	0.323	4-23	0.323	4-22	0.323	4-16	0.330

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
6-12 1957	2.360	6-12 1957	0.980	9-1 1950	1.010	3-4 1963	1.530	3-4 1963	2.420	3-4 1963	2.900	3-3 1963	3.510	3-3 1963	4.000

NOTES: Watershed conditions: Cover of improved practice pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.3-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.3-1 and 26.30-3. Precipitation data from rain gage 100. Precipitation and runoff records began April, 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 129	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.13S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.65	0.09	1.14	0.50	0.0	0.0	0.0	0.0	0.0	0.15	1.03	0.0	0.0
3	0.15S	0.14S	0.26	0.0	0.0	0.77E	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.30
4	0.19S	0.0	0.72	0.0	0.10	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0
5	0.05S	0.0	0.0	0.0	0.02E	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.14	0.0	0.0	0.0	0.0	1.25	0.0	0.04E	0.0	0.0	0.0	0.0	0.0
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.19	0.13	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.15	0.0	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0	0.50	0.0
12	0.0	0.04S	0.42S	0.0	0.66	0.13	0.0	0.0	0.0	0.19	0.10	0.0	0.65	0.0
13	0.0	0.03S	0.24S	0.49	1.03	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.10	0.0
14	0.0	0.0	0.11S	0.11	0.0	0.0	0.0	0.0	0.0	0.15	0.69	0.0	0.0	0.0
15	0.0	0.30H	0.03S	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.16	0.0	0.0	0.0
16	0.0	0.0	0.05S	0.0	0.34	0.07E	0.0	0.07	0.0	0.0	0.0	0.0	0.22	0.0
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.15	0.30	0.0	0.0	0.02	0.02E	0.0	0.0	0.0	0.0	0.0	0.0
20	0.03S	0.0	0.10	0.53	0.0	0.0	0.34	0.0	0.03E	0.05	0.27	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.45	0.0	0.0	0.20S	0.0
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.50	0.0
23	0.0	0.0	0.0	0.08	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.06S	0.0
24	0.0	0.0	0.0	1.92	0.60	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0
25	0.06E	0.0	0.25	0.0	0.45	0.0	0.0	0.0	1.49	0.0	0.0	0.0	0.04S	0.0
26	0.07H	0.0	0.10	0.0	0.0	0.40	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.08S	0.05S	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0
29	1.02	0.18S	0.0	0.0	0.0	0.03	0.71	0.0	0.0	0.38	0.42	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.52	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	2.38	1.71	3.42	5.62	3.70	3.18	3.50	0.39	3.54	3.61	3.00	2.66	36.71	0.817
STA AV	2.71	2.35	3.49	3.43	3.82	4.04	4.34	2.82	2.57	2.13	2.49	2.24	36.43	0.834

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 100. STA AV based on 33 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 129												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.019E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
13	0.0	0.0	0.0	0.0	0.001E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.003E	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.027E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0009	0.0	0.0	0.0020	0.0	0.0001	0.0	0.0	0.0001	0.0	0.0	0.0
INCHES	0.234	0.003	0.0	0.519	0.008	0.026	0.0	0.0	0.014	0.006	0.0	0.007
STA AV	0.093	0.109	0.163	0.060	0.046	0.138	0.130	0.038	0.037	0.010	0.001	0.011

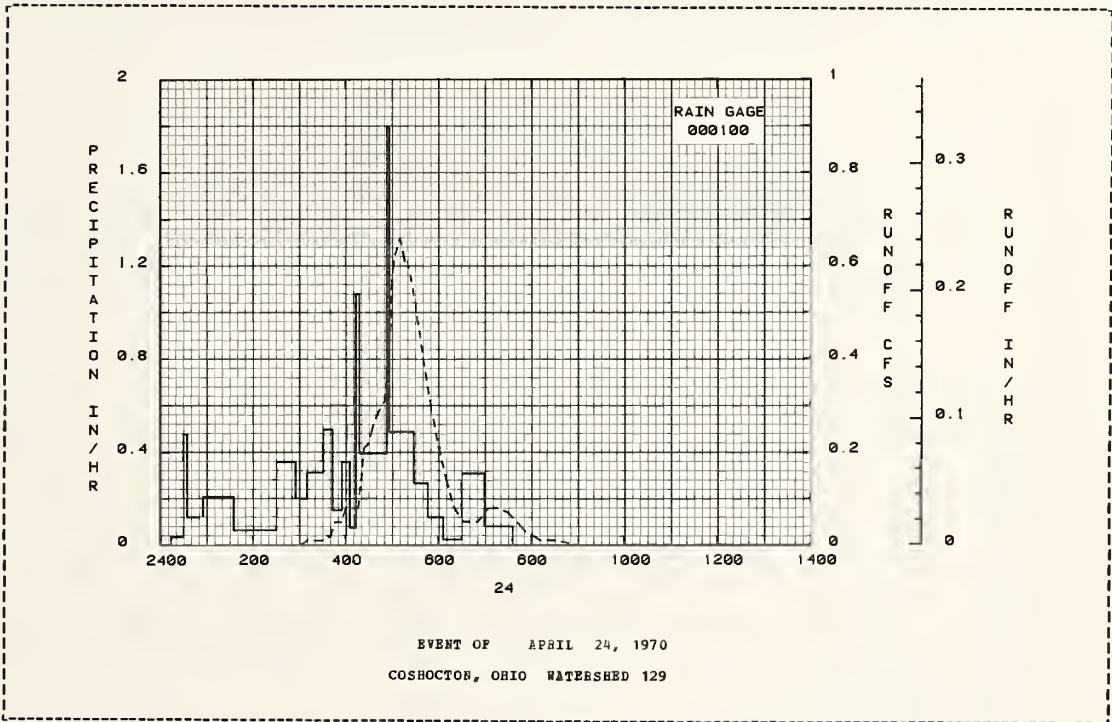
NOTES: To convert CPS to IN/DAY, multiply by 8.7829. STA AV based on 33 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 129											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
1-29	RG 000100	0.003	1-29	147	0.0	0.0	1-29	203	0.012	0.0	
				149	4.5001	0.15		210	0.082	0.0029	
				203	0.6862	0.31		220	0.160	0.0103	
				220	0.3175	0.40		222	0.296	0.0131	
				223	2.0000	0.50		224	0.363	0.0171	
WATERSHED CONDITIONS:				238	0.9200	0.73		230	0.381	0.0307	
Mixed grass.				258	0.3301	0.84		240	0.438	0.0557	
				324	0.0231	0.85		246	0.521	0.0733	
				350	0.0462	0.87		300	0.566	0.1197	
				410	0.0900	0.90		304	0.566	0.1335	
				420	0.2999	0.95		310	0.479	0.1526	
				522	0.0097	0.96		320	0.363	0.1783	
				540	0.0333	0.97		330	0.236	0.1966	
				600	0.0900	1.00		340	0.138	0.2080	
				640	0.0300	1.02		352	0.082	0.2160	
								410	0.335	0.2224	
								436	0.020	0.2268	
								450	0.012	0.2262	
								530	0.006	0.2304	
								600	0.002	0.2311	
								640	0.0	0.2313	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 129							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	900	0.002	0.3220
								1100	0.0	0.3227
								1200	0.0	0.3227

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.36595407.



## COSHOCTON, OHIO WATERSHED 130

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.63 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 130			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	2.34	1.65	3.47	5.41	3.61	3.25	3.39	0.45	3.51	3.60	2.82	2.59	36.09			
	Q	0.432	0.0	0.0	0.813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.245			
STA AV	P	2.66	2.24	3.34	3.32	3.77	3.98	4.38	2.72	2.58	2.13	2.45	2.19	35.75			
	Q	0.116	0.127	0.183	0.107	0.029	0.164	0.129	0.017	0.045	0.001	0.001	0.015	0.933			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days				
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	1-29	0.389	1-29	0.311	1-29	0.408	4-24	0.479	4-24	0.480	4-23	0.480	4-22	0.480	4-16	0.480
MAXIMUMS FOR PERIOD OF RECORD																
	6-12	4.060	6-12	1.420	6-12	1.440	3- 4	1.550	3- 4	2.160	3- 4	2.540	3- 4	3.140	3- 3	3.330
	1957		1957		1957		1963		1963		1963		1963		1963	

NOTES: Watershed conditions: Cover of improved practice meadow. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.5-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.5-1 and 26.30-3. Precipitation data from rain gage 103. Precipitation and runoff records began May, 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 130			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	0.14S	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.14S	0.64	0.09	1.11	0.45	0.0	0.0	0.0	0.0	0.0	0.19	1.03	0.0	0.0			
3	0.15S	0.14S	0.26	0.0	0.0	0.80	0.0	0.0	0.70	0.0	0.0	0.0	0.30	0.0			
4	0.19S	0.0	0.73	0.0	0.07	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0			
5	0.05S	0.0	0.0	0.0	0.02E	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	J.10S	J.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.11	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	J.0	0.24	0.01S	0.0	0.0	0.0	0.18	0.15	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.16	0.0	0.0	0.0			
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.50	0.0	0.0			
12	0.0	0.04S	0.42S	0.0	0.65	0.10	0.0	0.0	0.0	0.20	0.11	0.60	0.0	0.0			
13	0.0	0.03S	0.24S	0.50	1.05	0.0	0.0	0.0	0.0	0.15	0.0	0.10	0.0	0.0			
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.16	0.62	0.0	0.0	0.0			
15	J.0	0.30M	0.03S	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.13	0.0	0.0	0.0			
16	J.0	0.0	0.05S	0.0	0.31	0.10	0.0	0.06	0.0	0.0	0.0	0.0	0.22	0.0			
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0			
18	0.07S	0.0	0.09S	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.16	0.30	0.0	0.0	0.05	0.02E	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.03S	0.0	0.08S	0.49	0.0	0.0	0.36	0.0	0.0	0.05	0.22	0.0	0.0	0.0			
21	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.03	0.44	0.0	0.205	0.0	0.0			
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.40	0.0	0.0			
23	0.0	0.0	0.0	0.08	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.125	0.0	0.0			
24	0.0	0.0	0.0	1.87	0.69	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0			
25	0.06E	0.0	0.25	0.0	0.46	0.0	0.0	0.0	1.40	0.0	0.0	0.04S	0.0	0.0			
26	0.07M	0.0	0.15	0.0	0.0	0.38	0.0	0.0	0.82	0.0	0.0	0.0	0.0	0.0			
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.05S	0.05S	0.0	0.0			
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0			
29	0.97	0.18S	0.0	0.0	0.05	0.57	0.0	0.0	0.0	0.41	0.45	0.0	0.0	0.0			
30	J.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.48	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	2.34	1.65	3.47	5.41	3.61	3.25	3.39	0.45	3.51	3.60	2.82	2.59	36.09	0.0			
STA AV	2.66	2.24	3.34	3.32	3.77	3.98	4.38	2.72	2.58	2.13	2.45	2.19	35.75	0.933			

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 103. STA AV based on 33 yr period, part-year records included.

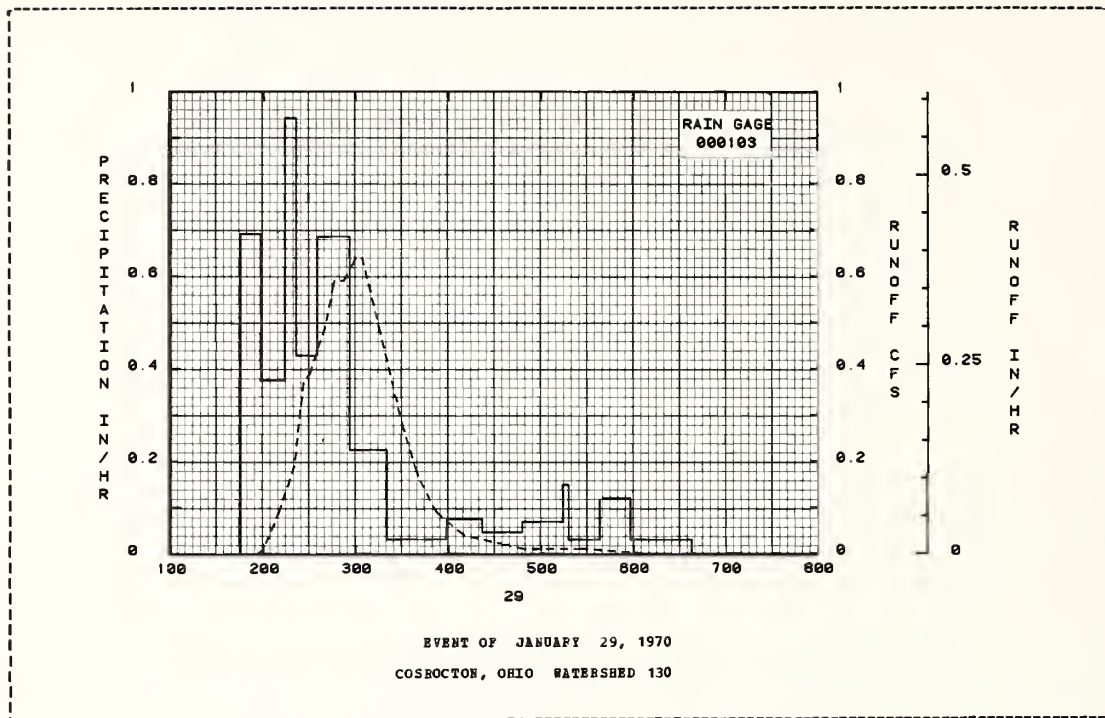


1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 130												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0010	0.0	0.0	0.0019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.432	0.0	0.0	0.813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.116	0.127	0.183	0.107	0.329	0.164	0.129	0.017	0.045	0.001	0.001	0.015

NOTES: To convert CFS to IN/DAY, multiply by 14.6022. STA AV based on 33 yr period, part-year records included.

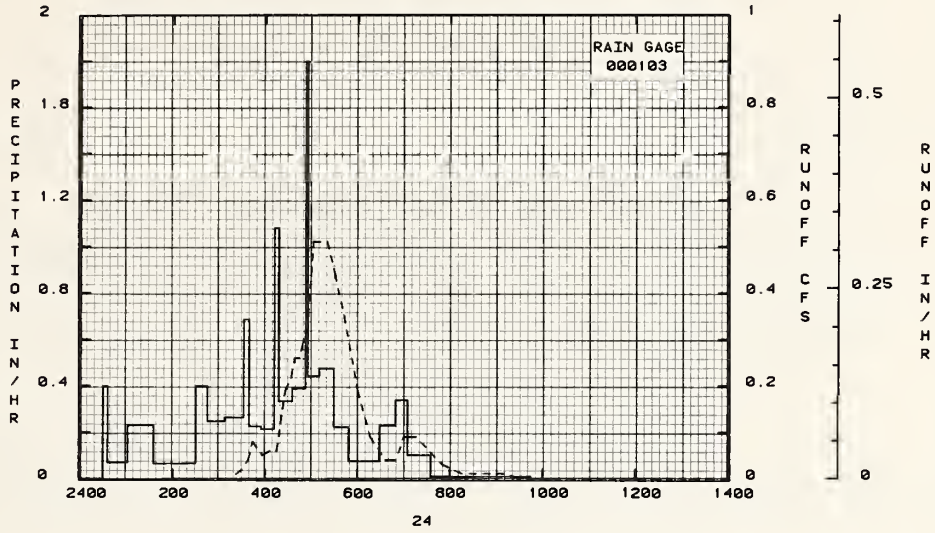
1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 130												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	156	0.0	0.0		
				158	0.6927	0.15		200	0.014	0.0003		
				214	0.3751	0.25		210	0.090	0.0056		
				221	0.9426	0.36		220	0.190	0.0198		
				235	0.4285	0.46		226	0.370	0.0368		
WATERSHED CONDITIONS:				256	0.6860	0.70		230	0.390	0.0523		
Mixed grass.				320	0.2249	0.79		240	0.490	0.0969		
				358	0.0316	0.81		246	0.590	0.1298		
				422	0.0750	0.84		252	0.590	0.1656		
				448	0.0462	0.86		300	0.640	0.2156		
				514	0.0692	0.89		304	0.640	0.2416		
				518	0.1500	0.90		315	0.490	0.3046		
				538	0.0300	0.91		330	0.280	0.3632		
				558	0.1290	0.95		340	0.170	0.3860		
				638	0.0300	0.97		352	0.090	0.4018		
								410	0.041	0.4138		
								436	0.024	0.4224		
								450	0.014	0.4251		
								530	0.038	0.4296		
								610	0.003	0.4318		
								640	0.0	0.4323		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.60842671.



1970 SELECTED RUNOFF EVENT			COSROCTON, OHIO WATERSHED 130							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000103 0.0	0.000	4-24	RG 000103 29	0.0	0.0	4-24	322	0.008	0.0
				35	0.4000	0.04		330	0.024	0.0013
				101	0.0692	0.07		338	0.041	0.0039
				135	0.2294	0.20		344	0.077	0.0075
				212	0.0649	0.24		356	0.053	0.0154
WATERSHED CONDITIONS: Mixed grass.				230	0.0667	0.26		406	0.064	0.0213
				245	0.4000	0.36		415	0.064	0.0271
				307	0.2455	0.45		420	0.120	0.0318
				332	0.2640	0.56		426	0.190	0.0412
				339	0.6857	0.64		434	0.220	0.0579
				355	0.2250	0.70		438	0.260	0.0676
				412	0.2118	0.76		444	0.260	0.0834
				417	1.0800	0.85		450	0.300	0.1005
				435	0.3333	0.95		456	0.350	0.1202
				452	0.3882	1.06		502	0.510	0.1464
				455	1.8000	1.15		520	0.510	0.2395
				510	0.4400	1.26		530	0.440	0.2877
				529	0.4737	1.41		542	0.350	0.3358
				548	0.2211	1.48		600	0.190	0.3851
				628	0.0750	1.53		616	0.090	0.4078
				649	0.2286	1.61		636	0.041	0.4211
				705	0.3375	1.70		650	0.041	0.4269
				735	0.1000	1.75		700	0.090	0.4335
				945	0.0092	1.77		716	0.090	0.4481
								750	0.031	0.4690
								816	0.008	0.4741
								910	0.008	0.4785
								930	0.0	0.4793

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.60842671.



EVENT OF APRIL 24, 1970  
COSHOCTON, OHIO WATERSHED 130

## COSHOCKTON, OHIO WATERSHED 123

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.37 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCKTON, OHIO WATERSHED 123		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 2.44	1.79	3.49	5.73	3.57	3.41	3.77	0.57	3.67	3.67	3.04	2.59	37.74		
	Q 0.658	0.294	0.132	1.339	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	2.432		
STA AV	P 2.76	2.38	3.45	3.54	3.83	4.22	4.49	2.82	2.60	2.26	2.58	2.36	37.29		
	Q 0.382	0.327	0.429	0.277	0.120	0.273	0.220	0.073	0.046	0.017	0.010	0.117	2.291		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days				
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	1-29	0.656	1-29	0.476	1-29	0.581	1-29	0.658	4- 2	0.707	4- 1	0.707	3-31	0.707	2- 1	0.938

MAXIMUMS FOR PERIOD OF RECORD													
Date	Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1957	5.970	1957	1.370	1957	1.480	1969	2.054	1969	2.131	1959	2.330	1959	2.330
												1964	2.660

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.10-6. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.10-1 and 26.30-3. Precipitation data from rain gage Y103. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCKTON, OHIO WATERSHED 123	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.16S	0.0	0.0	0.80E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.75	0.07	1.27E	0.47	0.0	0.0	0.0	0.0	0.18	1.04	0.0	0.0	
3	0.15S	0.14S	0.37	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.28	
4	0.19S	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.05	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.14	0.0	0.0	0.0	0.0	1.34E	0.0	0.03	0.0	0.0	0.0	0.0	
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.15	0.20	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.14	0.0	0.0	
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.22	0.0	0.45	0.0	
12	0.0	0.04S	0.42S	0.0	0.66	0.20	0.0	0.0	0.0	0.24	0.14	0.60	0.0	
13	0.0	0.03S	0.24S	0.50E	0.99	0.0	0.0	0.0	0.0	0.15	0.0	0.13	0.0	
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.65	0.0	0.0	
15	0.0	0.30E	0.03S	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.18	0.0	0.0	
16	0.0	0.0	0.05S	0.0	0.31	0.11	0.0	0.12	0.0	0.0	0.0	0.24	0.0	
17	0.07E	0.0	0.21S	0.0	0.0	1.10	0.0	0.0	0.0	0.0	0.0	0.07	0.0	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.13E	0.29	0.0	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.07	0.54	0.0	0.0	0.36	0.0	0.03E	0.04	0.20	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.43E	0.0	0.18S	0.0	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.47	0.0	
23	0.0	0.0	0.0	0.06	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S	0.0	
24	0.0	0.0	0.0	2.00	0.72	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
25	0.06E	0.0	0.25	0.0	0.29	0.02	0.0	0.0	1.53	0.0	0.09S	0.05S	0.0	
26	0.07E	0.0	0.10	0.0	0.0	0.38	0.0	0.0	0.78	0.0	0.0	0.0	0.0	
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.04	0.05S	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	
29	1.05	0.0	0.18S	0.0	0.0	0.03E	0.78	0.0	0.0	0.40	0.42	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.52	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.44	1.79	3.49	5.73	3.57	3.41	3.77	0.57	3.67	3.67	3.04	2.59	37.74	
STA AV	2.76	2.38	3.45	3.54	3.83	4.22	4.49	2.82	2.60	2.26	2.58	2.36	37.29	

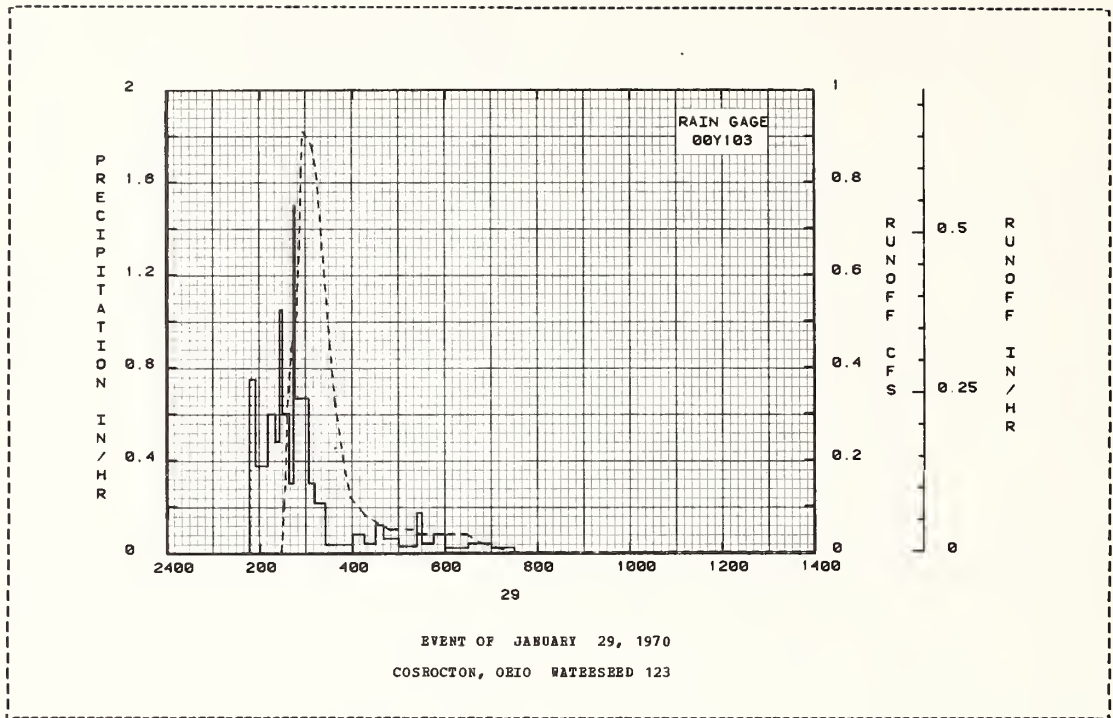
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage Y103. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 123												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.016	0.0	0.041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0012	0.0006	0.0002	0.0026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.658	0.294	0.132	1.339	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009
STA AV	0.382	0.327	0.429	0.277	0.120	0.273	0.220	0.073	0.046	0.017	0.010	0.117

NOTES: To convert CFS to IN/DAY, multiply by 17.3735. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 123											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 29, 1970											
1-29	RG 00Y103 0.0	0.0	1-29	RG 00Y103	0.0	0.0	1-29	227	0.0	0.0	
					146	0.7502	0.10	229	0.030	0.0004	
					210	0.3751	0.20	231	0.099	0.0020	
					220	0.5957	0.30	233	0.160	0.0051	
					225	0.4805	0.34	235	0.296	0.0106	
					229	1.0503	0.41	237	0.363	0.0185	
					237	0.6001	0.49	241	0.438	0.0378	
					243	0.2997	0.52	247	0.521	0.0725	
					245	1.5000	0.57	251	0.661	0.1010	
					303	0.6671	0.77	253	0.820	0.1189	
					311	0.3001	0.81	255	0.506	0.1396	
					325	0.2142	0.86	307	0.877	0.2686	
					400	0.0343	0.88	313	0.820	0.3301	
					415	0.0800	0.90	323	0.612	0.4165	
					430	0.0400	0.91	331	0.438	0.4672	
					440	0.1231	0.93	337	0.328	0.4949	
					500	0.0600	0.95	347	0.209	0.5273	
					523	0.0261	0.96	357	0.118	0.5470	
					530	0.1714	0.98	417	0.082	0.5711	
					545	0.0400	0.99	447	0.053	0.5955	
					600	0.0800	1.01	459	0.046	0.6027	
					630	0.0200	1.02	517	0.046	0.6127	
					700	0.0400	1.04	527	0.041	0.6180	
					730	0.0200	1.05	547	0.035	0.6272	
								557	0.035	0.6314	
								603	0.041	0.6341	
								627	0.041	0.6460	
								647	0.020	0.6534	
								707	0.006	0.6565	
								727	0.002	0.6575	
								817	0.0	0.6581	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.72389455.

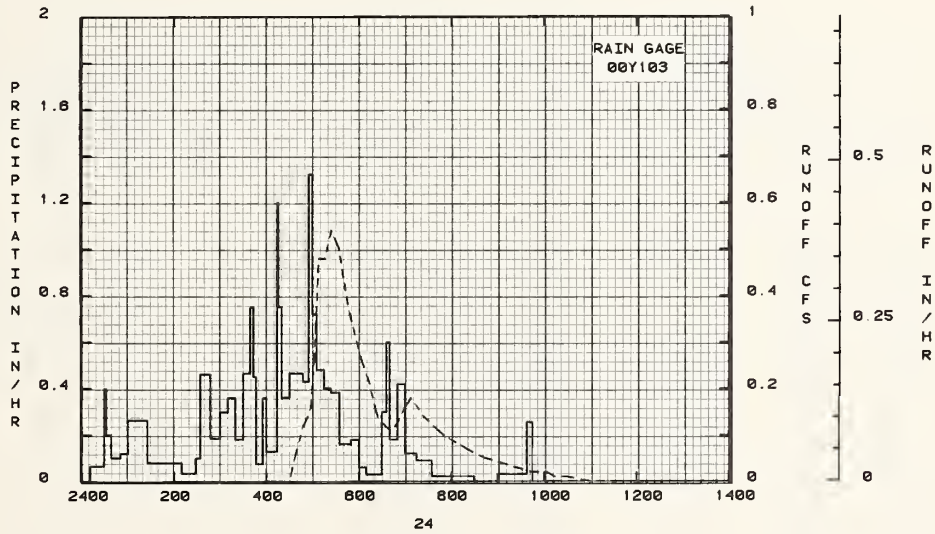


1970 SELECTED RUNOFF EVENT			COSROCTON, OHIO WATESEED 123							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
RG 00Y103			RG 00Y103							
4-24	0.0	0.000	4-24	11	0.0	0.0	4-24	432	0.006	0.0
				29	0.0667	0.02		434	0.030	0.0004
				32	0.4000	0.04		440	0.067	0.0039
				38	0.2000	0.06		448	0.118	0.0128
				50	0.1000	0.08		454	0.138	0.0221
WATESEED CONDITIONS: Coverage of wheat.				100	0.1200	0.10		458	0.160	0.0293
				125	0.2640	0.21		502	0.265	0.0396
				210	0.0800	0.27		504	0.328	0.0468
				228	0.0333	0.28		502	0.479	0.0663
				234	0.1000	0.29		516	0.479	0.1125
				247	0.4615	0.39		524	0.543	0.1618
				300	0.1846	0.43		534	0.500	0.2247
				310	0.3000	0.48		548	0.363	0.2975
				320	0.3600	0.54		604	0.265	0.3582
				330	0.1800	0.57		614	0.209	0.3868
				339	0.4667	0.64		624	0.132	0.4077
				343	0.7500	0.69		634	0.118	0.4232
				347	0.8500	0.72		640	0.102	0.4314
				355	0.0750	0.73		648	0.112	0.4423
				400	0.3600	0.76		700	0.160	0.4624
				414	0.1286	0.79		708	0.184	0.4790
				416	1.2000	0.83		724	0.138	0.5101
				420	0.7500	0.88		750	0.099	0.5473
				430	0.3600	0.94		820	0.067	0.5773
				448	0.4667	1.08		844	0.053	0.5947
				455	0.4226	1.13		904	0.041	0.6060
				500	1.3200	1.24		928	0.030	0.6146
				505	0.7200	1.30		944	0.020	0.6206
				515	0.4800	1.38		1004	0.020	0.6254
				524	0.4000	1.44		1014	0.012	0.6273
				535	0.3812	1.51		1030	0.006	0.6290
				550	0.1600	1.55		1100	0.002	0.6304
				600	0.1800	1.58		1130	0.0	0.6302
				610	0.0600	1.59				
				630	0.0300	1.60				

NOTES: To convert runoff in cfs to in/hr, multiply by 0.72389455.

1970 SELECTED RUNOFF EVENT			COSROCTON, OHIO WATERSHED 123							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
			4-24	636	0.3000	1.63				
				640	0.6000	1.67				
				650	0.1800	1.70				
				700	0.4200	1.77				
				715	0.1200	1.80				
				735	0.0900	1.83				
				830	0.0218	1.85				
				900	0.0	1.85				
				938	0.0316	1.87				
				945	0.2571	1.90				

NOTES: To convert runoff in CFS to IN/8R, multiply by 0.72389455.



EVENT OF APRIL 24, 1970  
COSROCTON, OHIO WATERSHED 123

## COSHOCTON, OHIO WATERSHED 109

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.69 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 109	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	2.46	1.76	3.42	5.79	3.67	3.52	3.42	0.49	3.72	3.56	2.86	2.46	37.13
	Q	0.187	0.0	0.0	0.013	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.213
STA AV	P	2.65	2.26	3.39	3.49	3.84	4.21	4.52	2.77	2.63	2.20	2.48	2.24	36.69
	Q	0.070	0.145	0.127	0.045	0.100	0.257	0.295	0.146	0.046	0.010	0.001	0.017	1.258

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge	Maximum Volume for Selected Time Interval														
		1 Hour Date	1 Hour Vol.	2 Hours Date	2 Hours Vol.	6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.	
1970	1-29	0.248	1-29	0.167	1-29	0.181	1-29	0.187	1-29	0.187	1-28	0.187	1-27	0.187	1-21	0.187
MAXIMUMS FOR PERIOD OF RECORD																
	5-17	4.340	6-29	0.820	6-28	1.090	7-5	1.416	3-4	1.920	3-4	2.170	3-3	2.550	3-1	2.660
	1941		1941		1940		1969		1963		1963		1963		1963	

NOTES: Watershed conditions: Cover of wheat to corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, DSDA Misc. Pub. 945, p. 26.13-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, DSDA Misc. Pub. 1070, pp. 26.13-1 and 26.30-3. Precipitation data from rain gage Y102. Precipitation and runoff records began Nov. 1938. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 109	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.13S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.70	0.05	1.22	0.47	0.0	0.0	0.0	0.0	0.20	1.05	0.0	0.0	0.0
3	0.15S	0.14S	0.31	0.0	0.0	0.82	0.0	0.0	0.60	0.0	0.0	0.0	0.26	0.0
4	0.19S	0.0	0.75	0.0	0.10	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0
5	0.05S	0.0	0.0	0.0	0.05	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.10S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.14	0.0	0.0	0.0	0.0	1.25	0.0	0.03	0.0	0.0	0.0	0.0	0.0
9	0.0	0.25	0.01S	0.0	0.0	0.0	0.19E	0.17	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.16	0.0	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.16	0.0	0.46	0.0	0.0
12	0.0	0.04S	0.42S	0.0	0.66	0.14	0.0	0.0	0.0	0.20	0.10	0.63	0.0	0.0
13	0.0	0.03S	0.24S	0.55	1.03	0.0	0.0	0.0	0.0	0.19	0.0	0.10	0.0	0.0
14	0.0	0.0	0.11S	0.09	0.0	0.0	0.0	0.0	0.0	0.16	0.38	0.0	0.0	0.0
15	0.0	0.30S	0.03S	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.39	0.0	0.0	0.0
16	0.0	0.0	0.05S	0.0	0.32	0.07	0.0	0.08	0.0	0.0	0.0	0.25	0.0	0.0
17	0.07E	0.0	0.21S	0.0	0.0	1.32	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05
18	0.07S	0.0	0.09S	0.0	0.0	0.03	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.13	0.29	0.0	0.0	0.06	0.06	0.0	0.0	0.0	0.0	0.0	0.0
20	0.03S	0.0	0.08	0.51	0.0	0.0	0.38	0.0	0.01	0.04	0.18	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.05	0.40	0.0	0.15S	0.0	0.0
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.43	0.0	0.0
23	0.0	0.0	0.0	0.07	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.07S	0.0	0.0
24	0.0	0.0	0.0	1.99	0.60	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0
25	0.06E	0.0	0.25	0.0	0.44	0.0	0.0	0.0	1.60	0.0	0.07S	0.03S	0.0	0.0
26	0.07M	0.0	0.10	0.0	0.0	0.38	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.05	0.03S	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0
29	1.10	0.0	0.18S	0.0	0.0	0.05	0.64	0.0	0.0	0.37	0.42	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.4E	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		2.46	1.76	3.42	5.79	3.67	3.52	3.42	0.49	3.72	3.56	2.86	2.46	37.13
STA AV		2.65	2.26	3.39	3.49	3.84	4.21	4.52	2.77	2.63	2.20	2.48	2.24	36.69

NOTES: For daily air temperatures in the vicinity, see table for Watershed #95, p. 26.035-1. Precipitation amounts are for rain gage Y102. STA AV based on 33 yr period, part-year records included.

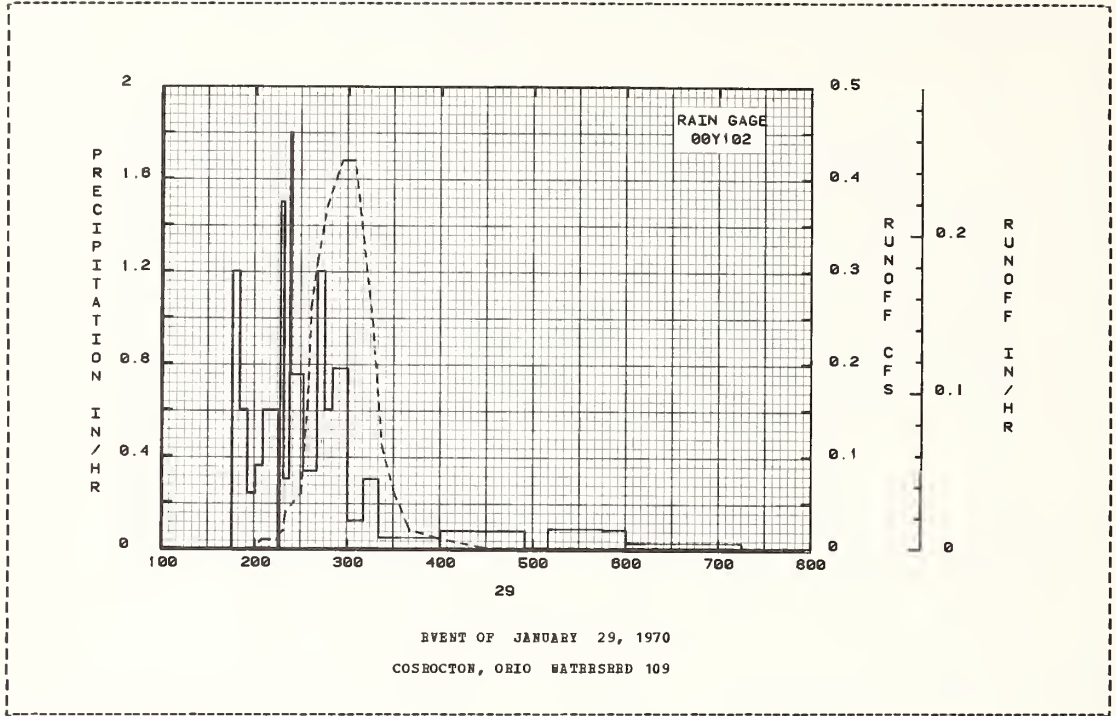


1973 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 109												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.013	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	3.187	0.0	0.0	0.013	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0
STA AV	0.070	0.145	0.127	0.045	0.100	0.257	0.295	0.146	0.046	0.010	0.001	0.017

NOTES: To convert CFS to IN/DAY, multiply by 14.0838. STA AV based on 33 yr period, part-year records included.

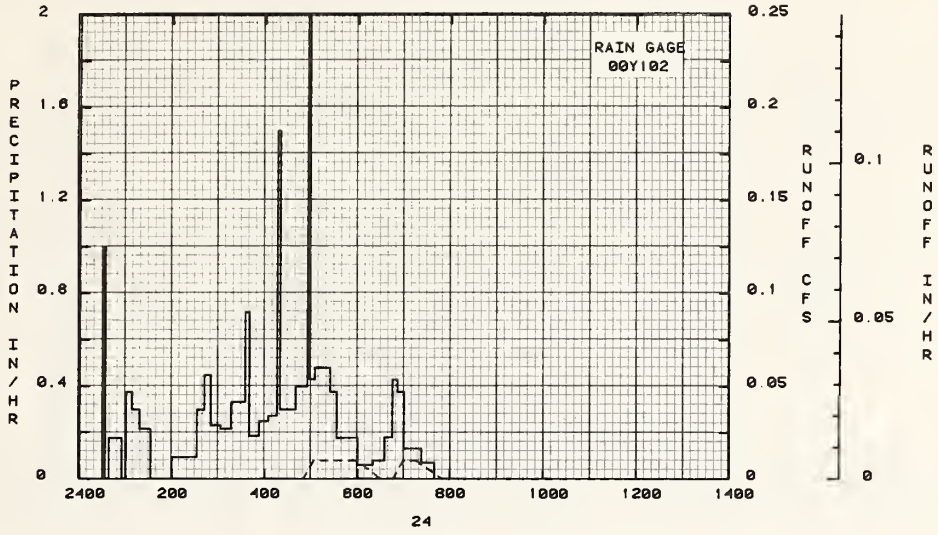
1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 109											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Hainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
1-29	0.0	0.0	1-29	145	0.0	0.0	1-29	154	0.001	0.0	
				150	1.2000	0.10		200	0.002	0.0001	
				155	0.6006	0.15		204	0.007	0.0003	
				200	0.2395	0.17		210	0.007	0.0007	
				205	0.3604	0.20		214	0.014	0.0011	
WATERSHED CONDITIONS:				215	0.5997	0.30		218	0.023	0.0018	
Coverage of seeded wheat.				216	0.0	0.30		220	0.035	0.0024	
				218	1.5000	0.35		230	0.061	0.0071	
				222	0.3001	0.37		234	0.156	0.0113	
				223	1.8000	0.40		236	0.264	0.0154	
				231	0.7502	0.50		240	0.313	0.0267	
				240	0.3336	0.55		246	0.365	0.0466	
				245	1.2000	0.65		252	0.403	0.0691	
				250	0.6006	0.70		256	0.422	0.0852	
				300	0.7796	0.83		304	0.422	0.1183	
				310	0.1201	0.85		310	0.330	0.1403	
				320	0.2999	0.90		316	0.235	0.1569	
				400	0.0450	0.93		322	0.113	0.1671	
				455	0.0764	1.00		330	0.061	0.1739	
				510	0.0	1.00		340	0.023	0.1780	
				545	0.0857	1.05		400	0.007	0.1809	
				630	0.0800	1.07		430	0.004	0.1825	
				715	0.0240	1.10		500	0.004	0.1837	
								630	0.002	0.1863	
								700	0.001	0.1867	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.58682576.



1970 SELECTED RUNOFF EVENT			COSROCTON, OHIO WATERSHED 109							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
			EVENT OF APRIL 24, 1970							
4-24	0.0	0.000	4-24	10	0.0	0.0	4-24	450	0.002	0.0
				30	0.0	0.0		504	0.007	0.0006
				33	1.0000	0.05		600	0.007	0.0044
				38	0.0	0.05		630	0.002	0.0057
				55	0.1765	0.10		646	0.002	0.0060
WATERSHED CONDITIONS: Coverage of seeded wheat.				100	0.0	0.10		700	0.007	0.0066
				108	0.3750	0.15		716	0.007	0.0077
				118	0.3000	0.20		750	0.002	0.0092
				132	0.2143	0.25		820	0.001	0.0096
				200	0.0	0.25		900	0.0	0.0098
				232	0.0938	0.30				
				242	0.3000	0.35				
				250	0.4500	0.41				
				303	0.2308	0.46				
				317	0.2143	0.51				
				335	0.3333	0.61				
				340	0.7200	0.67				
				353	0.1846	0.71				
				405	0.2500	0.76				
				416	0.2727	0.81				
				420	1.5000	0.91				
				440	0.3000	1.01				
				455	0.4000	1.11				
				458	2.0000	1.21				
				505	0.4286	1.26				
				525	0.4800	1.42				
				533	0.3750	1.47				
				600	0.1778	1.55				
				620	0.0600	1.57				
				635	0.0800	1.59				
				645	0.1800	1.62				
				652	0.4286	1.67				
				700	0.3750	1.72				
				723	0.1304	1.77				
				740	0.0706	1.79				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.58682576.



EVENT OF APRIL 24, 1970  
COSHOCTON, OHIO WATERSEED 109

## COSHOCTON, OHIO WATERSHED 106

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 1.56 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 106	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	2.43	1.64	3.28	5.27	3.51	3.64	2.77	0.41	3.86	3.65	2.53	2.36	35.35
	Q	0.145	0.0	0.0	0.445	0.012	0.027	0.0	0.0	0.0	0.0	0.027	0.037	0.693
STA AV	P	2.63	2.09	3.17	3.25	3.68	4.08	4.45	2.71	2.64	2.13	2.38	2.17	35.37
	Q	0.235	0.217	0.117	0.132	0.117	0.286	0.309	0.201	0.155	0.018	0.029	0.078	1.893

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days			
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	1-29	0.159		1-29	0.115	1-29	0.141	4- 2	0.168	4- 1	0.238	4- 1	0.247	3-31	0.247	3-25	0.247
MAXIMUMS FOR PERIOD OF RECORD																	
	8-23	7.630		9- 1	1.260	9- 1	1.380	9- 1	1.390	2-23	1.410	2-23	1.410	2-23	2.000	2-19	2.440
	1964			1950		1950		1950		1960		1962		1962		1962	

NOTES: Watershed conditions: Cover of meadow, prevailing practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.20-5. For Geology Description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.20-1 and 26.30-3. Precipitation data from rain gage 113. Precipitation and runoff records began Apr. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 106	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.63	0.10	1.11	0.47	0.0	0.0	0.0	0.0	0.20	1.04	0.0		
3	0.15S	0.14S	0.17	0.0	0.0	0.92	0.0	0.0	0.56	0.0	0.0	0.20		
4	0.19S	0.0	0.75	0.0	0.05	0.0	0.0	0.0	0.21	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02E	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.12	0.0	0.0	0.0	0.0	1.09	0.0	0.10	0.0	0.0	0.0		
9	0.0	0.23	0.01S	0.0	0.0	0.0	0.22E	0.10	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.23	0.0	0.47		
12	0.0	0.04S	0.42S	0.0	0.65	0.13	0.0	0.0	0.0	0.22	0.07	0.63		
13	0.0	0.03S	0.24S	0.50	1.04	0.0	0.0	0.0	0.0	0.14	0.0	0.07		
14	0.0	0.0	0.11S	0.05	0.0	0.0	0.0	0.0	0.0	0.16	0.51	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.14	0.0		
16	0.0	0.0	0.05S	0.0	0.33	0.07E	0.0	0.05	0.0	0.0	0.0	0.20		
17	0.07E	0.0	0.21S	0.0	0.0	1.35	0.0	0.0	0.0	0.0	0.0	0.05		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.25	0.0	0.0	0.07	0.01E	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.55	0.0	0.0	0.39	0.0	0.0	0.05	0.20	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.17	0.36	0.0	0.10S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.45		
23	0.0	0.0	0.0	0.09	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.09S		
24	0.0	0.0	0.0	1.70	0.55	0.0	0.0	0.0	0.09	0.0	0.0	0.0		
25	0.06E	0.0	0.18	0.0	0.40	0.02E	0.0	0.0	1.66	0.0	0.0	0.05S		
26	0.07M	0.0	0.10	0.0	0.0	0.33	0.0	0.0	0.75	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.06S	0.05S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0		
29	1.06	0.0	0.18S	0.0	0.0	0.04E	3.25	0.0	0.0	0.44	0.30	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.50	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.43	1.64	3.28	5.27	3.51	3.64	2.77	0.41	3.86	3.65	2.53	2.36		
STA AV	2.63	2.09	3.17	3.25	3.68	4.08	4.45	2.71	2.64	2.13	2.38	2.17		

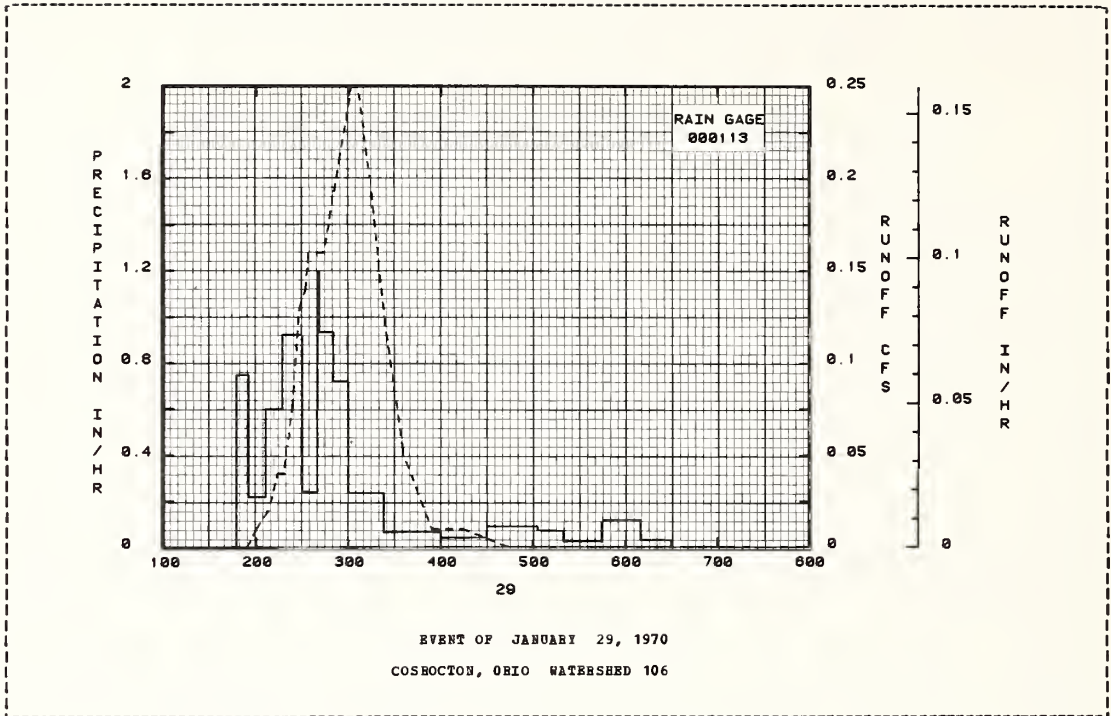
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 113. STA AV based on 32 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 106												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
13	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0003	0.0	0.0	0.0010	0.0	0.0001	0.0	0.0	0.0	0.0	0.0001	0.0001
INCHES	0.145	0.0	0.0	0.445	0.012	0.027	0.0	0.0	0.0	0.0	0.027	0.037
STA AV	0.235	0.217	0.117	0.132	0.117	0.286	0.309	0.201	0.155	0.018	0.029	0.078

NOTES: To convert CFS to IN/DAY, multiply by 15.2575. STA AV based on 32 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 106												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF JANUARY 29, 1970												
1-29	RG 000113 0.0	0.0	1-29	RG 000113 147	0.0	0.0	1-29	144	0.0	0.0		
				155	0.7502	0.10		154	0.002	0.0021		
				206	0.2182	0.14		200	0.012	0.0005		
				217	0.5999	0.25		208	0.016	0.0017		
				230	0.9225	0.45		214	0.035	0.0033		
				240	0.2402	0.49		218	0.041	0.0049		
				241	1.2000	0.51		224	0.082	0.0088		
				252	0.9324	0.65		228	0.128	0.0132		
				300	0.7196	0.77		232	0.138	0.0188		
				323	0.2348	0.86		234	0.160	0.0220		
				400	0.0649	0.90		244	0.160	0.0389		
				430	0.0400	0.92		254	0.209	0.0585		
				503	0.0909	0.97		302	0.250	0.0779		
				520	0.0706	0.99		306	0.250	0.0885		
				545	0.0240	1.00		314	0.196	0.1074		
				610	0.1200	1.05		324	0.118	0.1240		
				630	0.0300	1.06		336	0.053	0.1349		
								354	0.012	0.1411		
								414	0.006	0.1430		
								444	0.002	0.1443		
								514	0.002	0.1449		
								544	0.0	0.1452		
								624	0.0	0.1452		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.63572791.

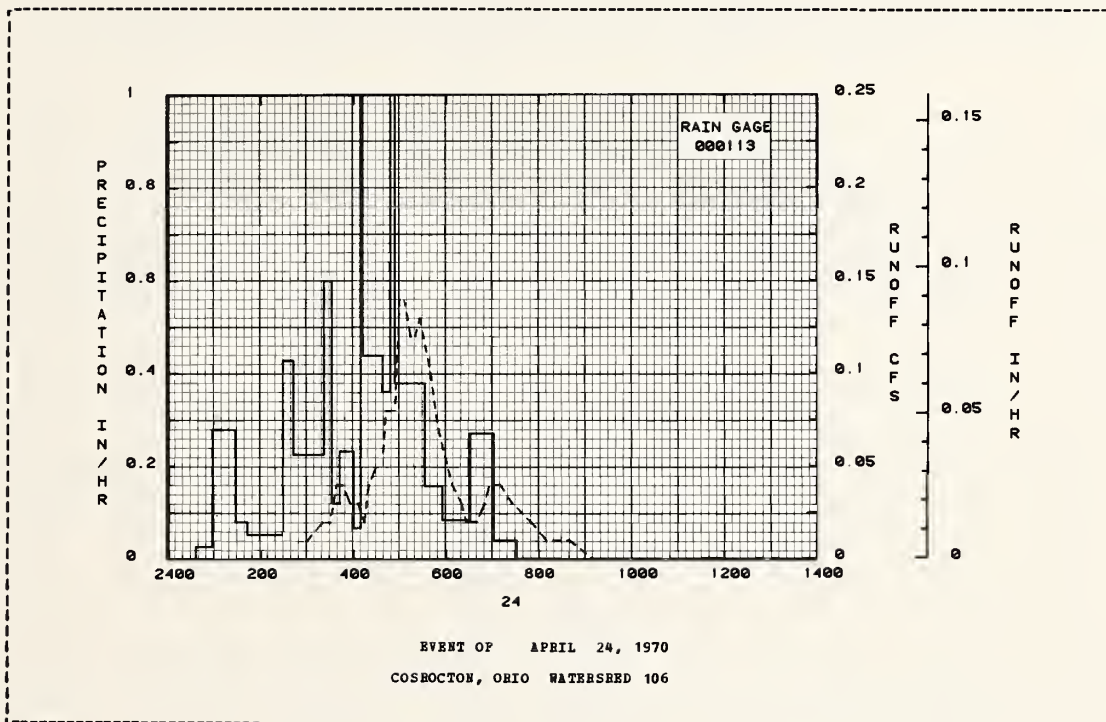


1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 106				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	EG 000113 0.05	0.000	4-24	EG 000113 35	0.0	0.0	4-24	246	0.009	0.0
				57	0.0273	0.01		250	0.009	0.0004
				127	0.2800	0.15		300	0.012	0.0015
				142	0.0800	0.17		320	0.016	0.0045
				228	0.0522	0.21		324	0.020	0.0053
				242	0.4286	0.31		330	0.020	0.0066
				322	0.2250	0.46		338	0.041	0.0092
				332	0.6000	0.56		346	0.041	0.0127
				342	0.1200	0.58		356	0.030	0.0165
				400	0.2333	0.65		406	0.030	0.0197
				409	0.0667	0.66		414	0.025	0.0220
				412	1.0000	0.71		420	0.041	0.0241
				438	0.4385	0.90		430	0.053	0.0291
				448	0.3600	0.96		438	0.053	0.0336
				454	1.0000	1.06		442	0.082	0.0365
				532	0.3789	1.30		454	0.082	0.0469
				555	0.1565	1.36		500	0.138	0.0539
				631	0.0833	1.41		506	0.138	0.0627
				702	0.2710	1.55		514	0.118	0.0735
				732	0.0400	1.57		520	0.118	0.0810
								526	0.128	0.0888
								540	0.099	0.1056
								550	0.074	0.1188
								608	0.041	0.1258
								620	0.030	0.1303
								626	0.025	0.1320
								640	0.025	0.1357
								650	0.030	0.1386
								656	0.041	0.1409
								710	0.041	0.1470
								726	0.030	0.1530
								750	0.020	0.1594
								810	0.012	0.1628
								840	0.006	0.1657
								910	0.004	0.1673

NOTES: To convert runoff in cfs to IN/HR, multiply by 0.65372791.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 106							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	950	0.004	0.1690
								1030	0.002	0.1703
								1130	0.0	0.1709

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.65372791.



## COSHOCTON, OHIO WATERSHED 185

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 7.40 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 185	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	2.54	1.70	3.39	5.56	3.42	3.68	2.99	0.42	0.0	0.0	0.0	0.0	23.70
	Q	0.424	0.104	0.062	0.551	0.062	0.091	0.006	0.0	0.004	0.0	0.022	0.059	1.386
STA AV	P	2.69	2.14	3.23	3.29	3.74	3.86	4.25	2.74	2.49	1.99	2.31	2.14	34.85
	Q	0.150	0.213	0.324	0.144	0.114	0.258	0.221	0.108	0.127	0.046	0.019	0.051	1.776

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
	1-29	0.300	1-29	0.187	1-29	0.257	1-29	0.316	1-28	0.353	1-28	0.383	1-27	0.388	1-25	0.489

MAXIMUMS FOR PERIOD OF RECORD															
1946	1950	1950	1950	1950	1950	1950	1963	1963	1963	1963	1963	1963	1963	1963	1963
6-16	3.350	9-1	1.910	9-1	2.310	9-1	2.320	3-4	2.420	3-4	2.880	3-3	3.550	3-1	4.110

NOTES: Watershed conditions: Cover of no-till corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.23-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.23-1 and 26.30-3. Precipitation data from rain gage 128. Precipitation and runoff records began Sept. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 185	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.67	0.10	1.18	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.15S	0.14S	0.23	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.19S	0.0	0.76	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02	0.33	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.13	0.0	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.38	0.14	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.04S	0.42S	0.0	0.64	0.10	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.33S	0.24S	0.51	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.11S	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.30H	0.03S	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.05S	0.0	0.30	0.0	0.0	0.06	0.0	0.0	0.0	0.0		
17	0.07E	0.0	0.21S	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.30	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.55	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	1.82	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.06E	0.0	0.25	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.07H	0.0	0.07	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	1.17	0.0	0.18S	0.0	0.0	0.07	0.25	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.54	1.70	3.39	5.56	3.42	3.68	2.99	0.42	0.0	0.0	0.0	0.0		
STA AV	2.69	2.14	3.23	3.29	3.74	3.86	4.25	2.74	2.49	1.99	2.31	2.14		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 128. STA AV based on 32 yr period, part-year records included.



1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 185												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.021	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0
3	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.010	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008
13	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.006	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.001	0.0	0.0	0.0
26	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.105E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0043	0.0012	0.0006	0.0057	0.0006	0.0009	0.0001	0.0	0.0	0.0	0.0002	0.0006
INCHES	0.424	0.104	0.062	0.551	0.062	0.091	0.006	0.0	0.004	0.0	0.022	0.059
STA AV	0.150	0.213	0.324	0.144	0.114	0.258	0.221	0.108	0.127	0.046	0.019	0.051

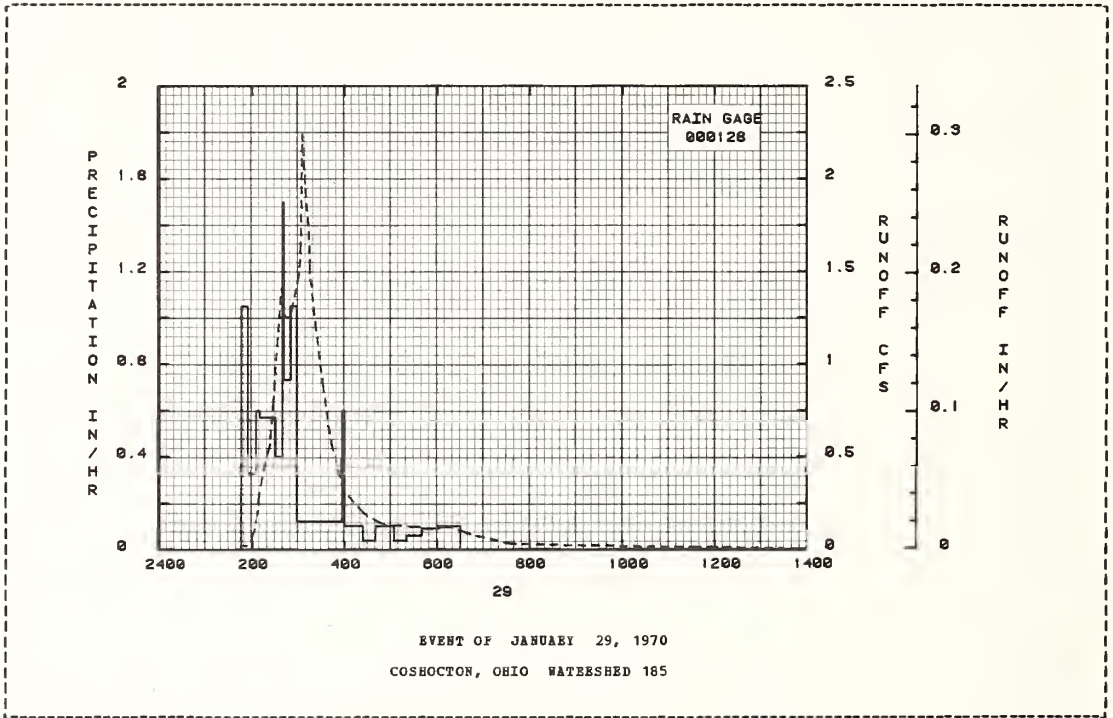
NOTES: To convert CFS to IN/DAY, multiply by 3.2164. STA AV based on 32 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 185										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970										
RG 900128			RG 090128							
1-29	0.0	0.005	1-29	146	0.0	0.0	1-29	149	0.015	0.0
				154	1.0503	0.14		153	0.021	0.0002
				205	0.3272	0.20		159	0.050	0.0007
				210	0.6006	0.25		203	0.107	0.0014
				239	0.5697	0.44		207	0.211	0.0028
WATERSHED CONDITIONS:				239	0.4003	0.50		209	0.311	0.0040
Idle corn field of chopped stalks.				241	1.5000	0.55		213	0.388	0.0071
				250	0.7326	0.66		223	0.570	0.0178
				258	1.0503	0.80		227	0.786	0.0239
				357	0.1220	0.92		229	0.908	0.0277
				400	0.5994	0.95		233	1.140	0.0368
				424	0.1000	0.99		238	1.410	0.0511
				440	0.0375	1.00		243	1.250	0.0659
				504	0.1000	1.04		249	1.250	0.0827
				520	0.0375	1.05		253	1.330	0.0942
				540	0.0600	1.07		301	1.490	0.1194
				600	0.0900	1.10		303	1.660	0.1264
				630	0.1000	1.15		305	2.240	0.1351
								309	1.940	0.1538
								313	1.750	0.1703
								315	1.490	0.1776
								323	1.180	0.2014
								333	0.846	0.2240
								343	0.570	0.2398
								359	0.311	0.2555
								429	0.182	0.2720
								453	0.130	0.2804
								513	0.130	0.2862
								525	0.118	0.2895
								537	0.118	0.2927
								547	0.107	0.2952
								553	0.107	0.2966
								605	0.118	0.2996
								619	0.118	0.3033
								643	0.076	0.3085

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.

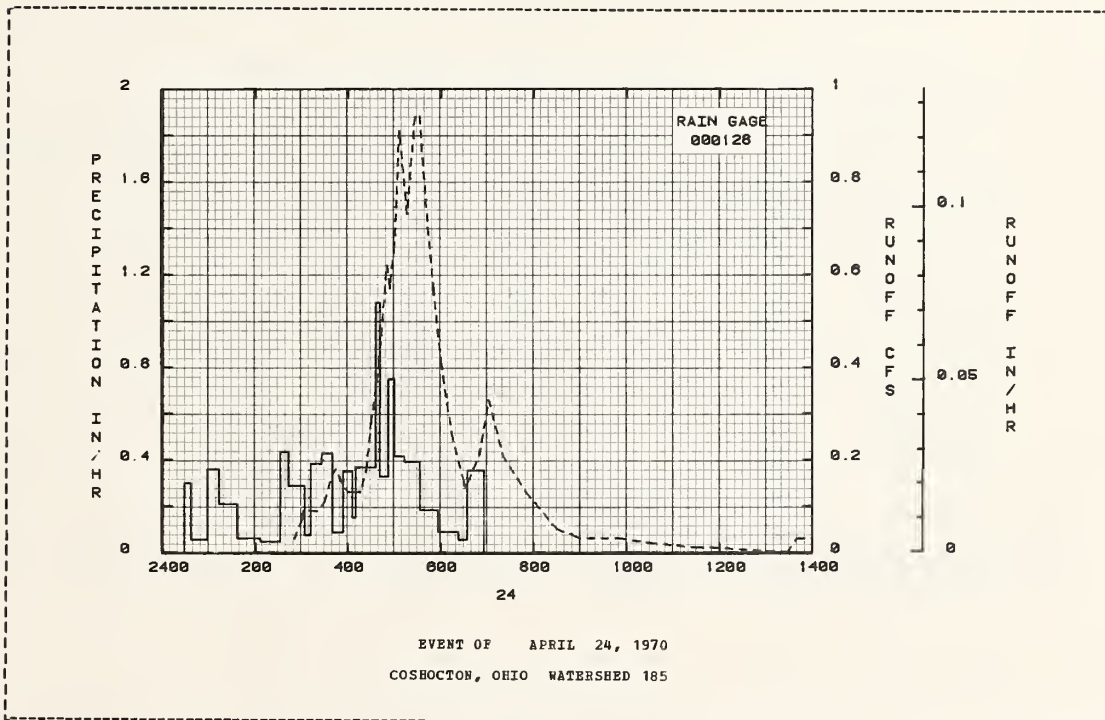
1970 SELECTED RUNOFF EVENT			COSHOCOTON, OHIO WATERSHED 185							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	733	0.034	0.3146
								903	0.021	0.3201
								1133	0.011	0.3255
								1203	0.011	0.3262
								1733	0.003	0.3314

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 185							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000128 0.0	0.091	4-24	RG 000128 28	0.0	0.0	4-24	250	0.034	0.0
				36	0.3000	0.04		300	0.067	0.0011
				58	0.0545	0.06		302	0.086	0.0014
				113	0.3600	0.15		320	0.086	0.0049
				136	0.2087	0.23		330	0.107	0.0071
WATERSHED CONDITIONS: Idle corn field of chopped stalks.				206	0.0600	0.26		340	0.168	0.0102
				232	0.0462	0.28		344	0.182	0.0118
				243	0.4364	0.36		352	0.155	0.0148
				304	0.2857	0.46		400	0.130	0.0174
				312	0.0750	0.47		416	0.130	0.0220
				326	0.3857	0.56		424	0.182	0.0248
				340	0.4286	0.66		430	0.276	0.0279
				354	0.0857	0.68		440	0.409	0.0355
				406	0.3500	0.75		450	0.621	0.0470
				410	0.1500	0.76		454	0.570	0.0523
				436	0.3692	0.92		500	0.674	0.0606
				441	1.0800	1.01		506	0.908	0.0712
				452	0.3273	1.07		516	0.729	0.0895
				500	0.7500	1.17		526	0.940	0.1081
				513	0.4154	1.26		532	0.940	0.1207
				533	0.3900	1.39		540	0.757	0.1359
				556	0.1826	1.46		550	0.570	0.1507
				623	0.0889	1.50		600	0.409	0.1616
				634	0.0545	1.51		616	0.242	0.1732
				656	0.3545	1.64		632	0.142	0.1801
								650	0.211	0.1872
								702	0.330	0.1944
								720	0.211	0.2053
								750	0.130	0.2167
								830	0.050	0.2247
								900	0.034	0.2275
								936	0.027	0.2300
								950	0.034	0.2310
								1030	0.021	0.2335
								1130	0.011	0.2356

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13401832.



COSHOCTON, OHIO WATERSHED 187

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 7.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 187	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	2.62	1.69	3.29	5.18	3.78	3.87	3.20	3.51	3.3	0.0	0.0	0.0	24.14	
Q	1.240	0.348	0.042	2.466	0.034	0.011	0.0	0.0	0.0	0.0	0.0	0.006	4.146	
STA AV P	2.70	2.18	3.32	3.30	3.85	4.06	4.47	2.72	2.67	2.06	2.36	2.16	35.85	
Q	0.84J	0.649	1.063	0.597	0.231	0.317	3.262	0.055	0.099	0.018	0.018	0.239	4.389	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge			Maximum Volume for Selected Time Interval												
	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days									
1970	1-29	0.428	4-24	0.347	4-24	0.476	4-24	0.668	4-24	0.742	1-29	0.924	1-28	1.118	1-26	1.528

MAXIMUMS FOR PERIOD OF RECORD												
Date	6-12	9-1	9-1	9-1	9-1	3-4	3-4	3-4	3-4	3-4	7-5	
1957	2.750	1.370	1.540	1.570	2.010	2.350	2.950	3.528				
1950												
1950												
1963												
1963												
1963												
1969												

NOTES: Watershed conditions: From strip cropping to no plow corn. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pnb. 945, p. 26.24-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.24-1 and 26.30-3. Precipitation data from rain gage 116. Precipitation and runoff records began Jan. 1941. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 187	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.65	0.10	1.09	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.15S	0.14S	0.20	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.19S	0.0	0.76	0.0	0.07	3.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.06	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	3.9	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	3.0	0.14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.24	0.01S	0.0	0.0	0.0	0.33	0.15	0.0	0.0	0.0	0.0		
10	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.04S	0.42S	0.0	0.65	0.10	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.03S	0.24S	0.44	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.11S	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.05S	0.0	0.34	0.05	0.0	0.11	0.0	0.0	0.0	0.0		
17	0.07E	0.0	0.21S	0.0	0.0	1.48	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.11	0.29	0.0	0.0	0.05	0.02	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.45	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.07	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0		
24	3.0	0.0	0.0	1.83	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.06E	0.0	0.22	0.0	0.42	0.02E	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.07M	0.0	0.07	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0		
27	3.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	1.25	0.0	0.18S	0.0	0.0	0.03E	0.45	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.62	1.69	3.29	5.18	3.78	3.87	3.20	3.51	0.0	0.0	0.0	0.0		
STA AV	2.70	2.18	3.32	3.30	3.85	4.06	4.47	2.72	2.67	2.06	2.36	2.16		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 116. STA AV based on 30 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHPD 187												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0097	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.043	0.0	0.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.012E	0.0	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.009	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.003E	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.246E	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.004	0.0	0.0	0.050	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.010	0.0	0.0	0.042	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.003	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.020	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.278	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.060	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0121	0.0038	0.0004	0.0249	0.0003	0.0001	0.0	0.0	0.0	0.0	0.0	0.0001
INCHES	1.240	0.348	0.042	2.466	0.034	0.011	0.0	0.0	0.0	0.0	0.0	0.006
STA AV	0.840	0.649	1.063	0.597	0.231	0.317	0.262	0.055	0.099	0.018	0.018	0.239

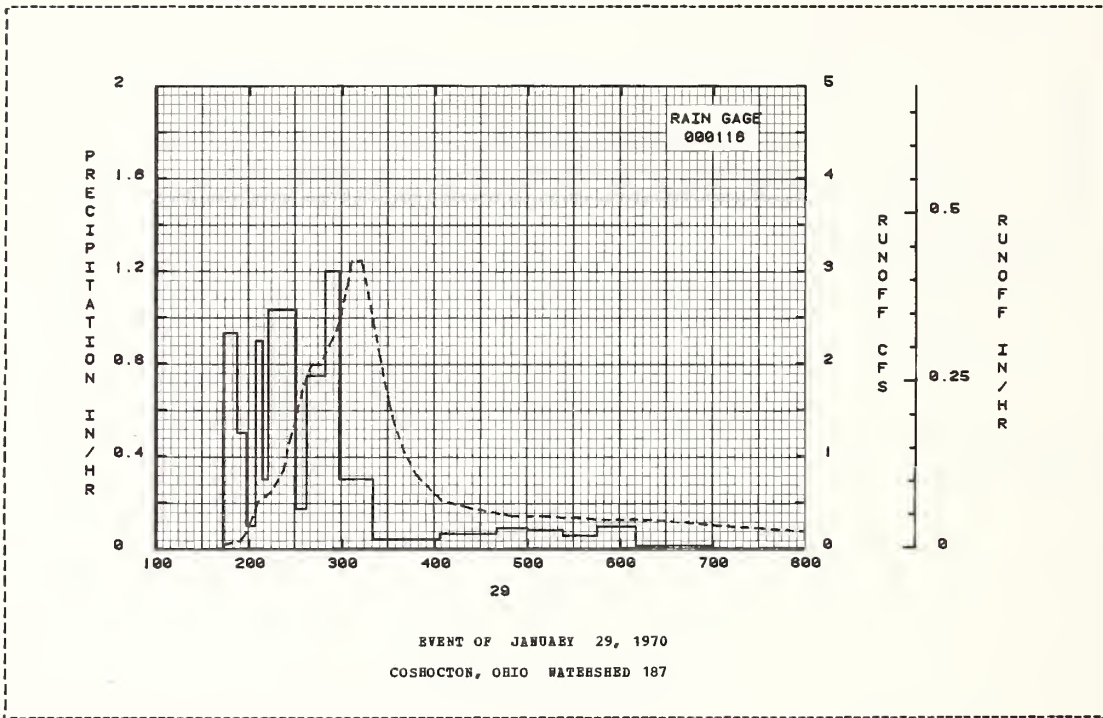
NOTES: To convert CFS to IN/DAY, multiply by 3.3058. STA AV based on 30 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHPD 187										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970										
1-29	0.0	0.013	1-29	143	0.0	0.0	1-29	144	0.050	0.0
				152	0.9339	0.14		154	0.086	0.0016
				158	0.4995	0.19		158	0.182	0.0028
				204	0.0999	0.20		202	0.349	0.0052
				208	0.9002	0.26		206	0.521	0.0092
				212	0.3001	0.28		214	0.621	0.0197
				239	1.0332	0.59		222	0.846	0.0332
				237	0.1717	0.61		226	1.180	0.0425
				249	0.7493	0.76		230	1.410	0.0544
				258	1.2008	0.94		234	1.710	0.0687
				320	0.3000	1.05		240	1.990	0.0941
				403	0.0419	1.08		246	1.990	0.1215
				440	0.0649	1.12		254	2.290	0.1608
				500	0.0900	1.15		258	2.450	0.1826
				523	0.0783	1.18		304	2.920	0.2196
				545	0.0545	1.20		306	3.110	0.2334
				610	0.0960	1.24		312	3.110	0.2763
				700	0.0120	1.25		314	2.990	0.2902
								320	2.450	0.3277
								324	2.090	0.3485
								330	1.580	0.3738
								334	1.330	0.3872
								340	1.040	0.4035
								348	0.786	0.4203
								404	0.521	0.4443
								424	0.430	0.4661
								450	0.349	0.4893
								510	0.349	0.5053
								524	0.330	0.5162
								534	0.330	0.5238
								544	0.311	0.5312
								620	0.311	0.5569
								714	0.226	0.5902
								734	0.211	0.6002
								924	0.182	0.6498

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.

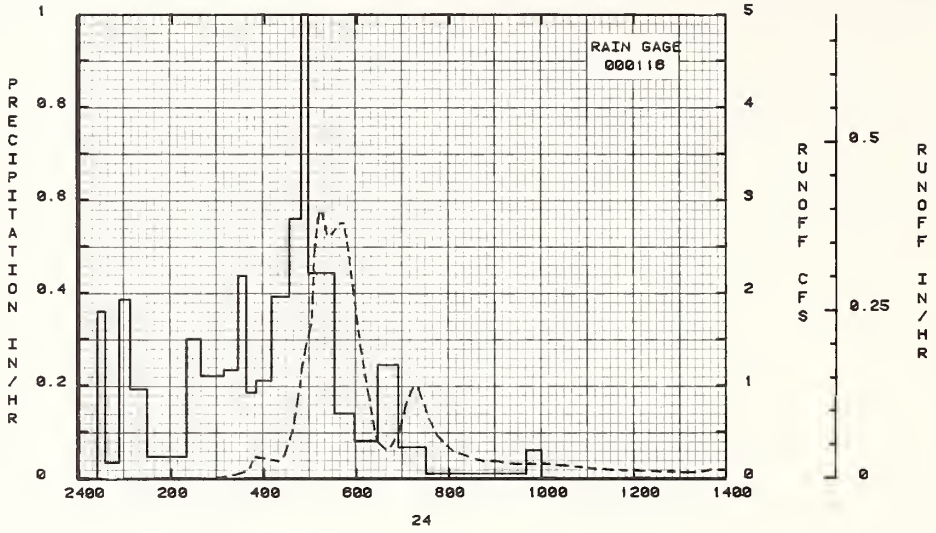
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 187							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTIEUED)										
							1-29	1214	0.142	0.7130
								2400	0.096	0.9059

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 187							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000116 0.0	0.000	4-24	RG 001116 24	0.0	0.0	4-24	259	0.011	0.0
				34	0.3600	0.06		311	0.021	0.0004
				52	0.0333	0.07		327	0.050	0.0617
				106	0.3857	0.16		335	0.067	0.0028
				128	0.1909	0.23		341	0.107	0.0040
WATERSHED CONDITIONS: Idle corn field of chopped stalks.				220	0.0462	0.27		345	0.182	0.0053
				238	0.3000	0.36		349	0.226	0.0072
				308	0.2200	0.47		401	0.211	0.0132
				326	0.2333	0.54		419	0.182	0.0213
				337	0.4364	0.62		425	0.226	0.0241
				350	0.1846	0.66		431	0.349	0.0281
				410	0.2100	0.73		437	0.521	0.0341
				433	0.3913	0.88		441	0.701	0.0357
				448	0.5600	1.02		445	0.908	0.0471
				457	1.0000	1.17		449	1.180	0.0567
				531	0.4412	1.42		455	1.450	0.0748
				557	0.1385	1.48		501	1.660	0.0962
				627	0.0800	1.52		503	1.940	0.1044
				654	0.2444	1.63		505	2.450	0.1145
				730	0.0667	1.67		511	2.860	0.1510
				940	0.0092	1.69		515	2.860	0.1774
				1000	0.0600	1.71		521	2.630	0.2152
								527	2.630	0.2515
								539	2.750	0.3256
								543	2.750	0.3508
								549	2.450	0.3866
								555	2.040	0.4175
								601	1.660	0.4430
								605	1.410	0.4571
								611	1.110	0.4744
								615	0.908	0.4837
								623	0.521	0.4968
								627	0.388	0.5010
								637	0.311	0.5090
								645	0.349	0.5151
								655	0.497	0.5248
								659	0.621	0.5299
								705	0.816	0.5398
								713	0.973	0.5562
								720	0.973	0.5718
								725	0.846	0.5822
								735	0.621	0.5950
								745	0.452	0.6113
								805	0.293	0.6284
								825	0.226	0.6403
								845	0.182	0.6497
								901	0.182	0.6564
								925	0.155	0.6657
								1011	0.155	0.6821
								1035	0.130	0.6900
								1125	0.086	0.7024
								1205	0.076	0.7098
								1235	0.067	0.7147
								1310	0.058	0.7197
								1320	0.058	0.7210
								1340	0.086	0.7243
								1406	0.086	0.7294
								1416	0.096	0.7315
								1430	0.086	0.7344
								1500	0.067	0.7397
								2400	0.050	0.8122

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.13774104.



EVENT OF APRIL 24, 1970  
COSHOCKTON, OHIO WATERSHED 187



COSHOCTON, OHIO WATERSHED 196

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Walbonding River, Muskingum River Basin.

AREA: 303.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 196																
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.49	1.76	3.38	5.48	3.41	3.61	3.16	0.48	3.67	3.62	2.83	2.56	36.47																
	Q	1.884	1.866	1.961	4.527	1.072	0.382	0.177	0.066	0.122	0.221	0.716	1.656	14.650																
STA AV	P	2.70	2.36	3.52	3.44	3.79	4.29	4.43	2.73	2.65	2.22	2.50	2.31	36.95																
	Q	1.750	1.890	2.840	2.368	1.484	1.038	0.726	0.283	0.228	0.205	0.403	0.967	14.182																

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge	1 8onr		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1-29	0.524	1-29	0.393	1-29	0.556	1-29	0.834	4- 1	1.083	4- 1	1.318	4- 1	1.548	1-28	2.172
MAXIMUMS FOR PERIOD OF RECORD															
6-12	3.720	6-12	1.310	6-12	1.440	7- 5	2.106	7- 5	2.453	1-21	2.920	1-20	3.210	3- 4	4.630
1957		1957		1957		1969		1969		1959		1959		1964	

NOTES: Watershed conditions: Woods, 27%; grassland, 50%; miscellaneous, 23%; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.30-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watershed in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.30-1 and 26.30-3. Precipitation data from rain gages 108 and 107. Precipitation and runoff records began May 1937. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 196													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.14S	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.14S	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	3.14S	0.70	0.10	1.18	3.42	0.0	0.0	0.0	0.0	0.20	1.05	0.0	0.0	2	3.14S	0.70	0.10	1.18	3.42	0.0	0.0	0.0	0.0	0.20	1.05	0.0	
3	3.15S	3.14S	0.23	0.0	0.0	0.92	0.0	0.0	0.57	0.0	0.0	0.29	0.0	3	3.15S	3.14S	0.23	0.0	0.0	0.92	0.0	0.0	0.57	0.0	0.0	0.29	
4	0.19S	0.0	0.76	0.0	0.07	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	4	0.19S	0.0	0.76	0.0	0.07	0.0	0.0	0.0	0.19	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.02E	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.05S	0.0	0.0	0.0	0.02E	0.32	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.14	0.0	0.0	0.0	0.0	1.11	0.0	0.03	0.0	0.0	0.0	0.0	8	0.0	0.14	0.0	0.0	0.0	1.11	0.0	0.03	0.0	0.0	0.0	0.0	
9	0.0	0.25	0.01S	0.0	0.0	0.0	0.22	0.15	0.0	0.0	0.0	0.0	0.0	9	0.0	0.25	0.01S	0.0	0.0	0.22	0.15	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.13	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.13	0.0	0.0	0.0	
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.44	0.0	11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.44	0.0	
12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.21	0.13	0.62	0.0	12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.21	0.13	0.62	0.0		
13	0.0	0.03S	0.24S	0.44	1.02	0.0	0.0	0.0	0.0	0.16	0.0	0.11	0.0	13	0.0	0.03S	0.24S	0.44	1.02	0.0	0.0	0.16	0.0	0.0	0.11	0.0	
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.15	0.63	0.0	0.0	14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.15	0.63	0.0	0.0	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.15	0.0	0.0	15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.28	0.0	0.0	0.15	0.0	0.0	
16	0.0	0.0	0.05S	0.0	0.34	0.10	0.0	0.11	0.0	0.0	0.0	0.25	0.0	16	0.0	0.0	0.05S	0.0	0.34	0.10	0.0	0.11	0.0	0.0	0.0	0.25	
17	0.07E	0.0	0.21S	0.0	0.0	1.36	0.0	0.0	0.0	0.0	0.0	0.06	0.0	17	0.07E	0.0	0.21S	0.0	0.0	1.36	0.0	0.0	0.0	0.0	0.0	0.06	
18	0.07S	0.0	0.09S	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18	0.07S	0.0	0.09S	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.13	0.22	0.0	0.0	0.07	0.01E	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.13	0.22	0.0	0.0	0.07	0.01E	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.08S	0.58	0.0	0.0	0.38	0.0	0.0	0.05	0.23	0.0	0.0	20	0.03S	0.0	0.08S	0.58	0.0	0.0	0.38	0.0	0.0	0.05	0.23	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.09	0.41	0.0	0.15S	0.0	21	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.09	0.41	0.0	0.15S	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.49	0.0	22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.49	
23	0.0	0.0	0.0	0.07	0.02E	0.0	0.08	0.0	0.0	0.0	0.0	0.07S	0.0	23	0.0	0.0	0.0	0.07	0.02E	0.0	0.08	0.0	0.0	0.0	0.0	0.07S	
24	0.0	0.0	0.0	1.86	0.46	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	24	0.0	0.0	0.0	1.86	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	3.96E	0.0	0.22	0.0	0.45	0.0	0.0	0.0	1.73	0.0	0.0	0.04S	0.0	25	3.96E	0.0	0.22	0.0	0.45	0.0	0.0	0.0	1.73	0.0	0.0	0.04S	
26	0.07M	0.0	0.09	0.0	0.0	0.33	0.0	0.0	0.70	0.0	0.0	0.0	0.0	26	0.07M	0.0	0.09	0.0	0.0	0.33	0.0	0.0	0.0	0.70	0.0	0.0	
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.04S	0.0	27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.04S	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	
29	1.12	0.18S	0.0	0.0	0.0	0.02	0.57	0.0	0.0	0.41	0.37	0.0	0.0	29	1.12	0.18S	0.0	0.0	0.0	0.02	0.57	0.0	0.0	0.41	0.37	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.51	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.51	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.49	1.76	3.38	5.48	3.41	3.61	3.16	0.48	3.67	3.62	2.83	2.56	36.47	TOTAL	2.49	1.76	3.38	5.48	3.41	3.61	3.16	0.48	3.67	3.62	2.83	2.56	36.47
STA AV	2.70	2.36	3.52	3.44	3.79	4.29	4.43	2.73	2.65	2.22	2.50	2.31	36.95	STA AV	2.70	2.36	3.52	3.44	3.79	4.29	4.43	2.73	2.65	2.22	2.50	2.31	36.95

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 107 and 108. STA AV based on 34 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 196												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.261	1.000	0.190	2.035	0.579	0.098	0.054	0.052	0.014	0.024	0.106	0.299
2	0.261	4.539	0.207	15.738	0.766	0.101	0.050	0.042	0.011	0.034	1.475	0.261
3	0.251	1.877	0.623	2.835	0.565	0.488	0.050E	0.042	0.019	0.033	0.642	0.360
4	0.226	1.355	3.450	1.725	0.472	0.175	0.050E	0.037	0.047	0.024	0.362	0.395
5	0.210	0.876	1.664	1.270	0.452	0.319	0.050E	0.030	0.034	0.024	0.272	0.318
6	0.203	0.780	1.055	1.140	0.394	0.141	0.050E	0.031	0.026	0.024	0.204	0.299
7	0.196	0.746	0.859	0.938	0.327	0.112	0.044	0.028	0.028	0.024	0.165	0.261
8	0.172	0.885	0.746	0.780	0.299	0.101	0.354	0.026	0.025	0.024	0.138	0.234
9	0.148	3.095	0.599	0.67E	0.261	0.086	0.236	0.035	0.020	0.024	0.123	0.218
10	0.143	1.470	0.517	0.565	0.226	0.083	0.100	0.039	0.018	0.047	0.145	0.196
11	0.133	1.055	0.477	0.489	0.210	0.079	0.066	0.028	0.017	0.733	0.119	0.392
12	0.123	0.842	0.452E	0.452	0.418	0.171	0.058	0.026	0.016	0.092	0.134	3.104
13	0.123	0.661	0.452	0.672	2.825	0.088	0.050	0.026	0.016	0.194	0.124	1.215
14	0.123	0.545	0.385	0.745	0.775	0.079	0.045	0.026	0.015	0.094	0.393	0.896
15	0.114	0.517	0.280	0.596	0.523	0.073	0.066	0.017	0.014	0.086	0.789	0.745
16	0.110	0.477	0.261	0.517	0.636	0.079	0.054	0.020	0.014	0.056	0.394	0.866
17	0.201	0.452	0.308	0.466	0.505	1.117	0.039	0.029	0.013	0.046	0.339	0.855
18	0.323	0.429	0.471	0.417	0.417	0.282	0.036	0.024	0.012	0.042	0.299	0.661
19	0.203	0.383	0.917	0.543	0.360	0.107	0.047	0.024	0.012	0.040	0.261	0.565
20	0.180	0.301	1.024	2.273	0.308	0.087	0.092	0.026	0.012	0.042	0.352	0.477
21	0.123	0.261	0.780	0.890	0.261	0.246	0.048	0.024	0.012	0.110	0.262	0.452
22	0.085	0.308	0.989	0.733	0.226	0.115	0.037	0.028	0.013	0.075	0.218	2.158
23	0.085	0.281	1.017	0.633	0.203	0.084	0.034	0.031	0.014	0.056	0.184	1.347
24	0.088	0.253	0.900	12.837	0.247	0.074	0.033	0.026	0.016	0.048	0.158	0.993
25	0.142	0.231	0.958	2.446	0.429	0.072	0.029	0.023	0.012	0.046	0.164	0.746
26	0.531	0.196	1.374	1.542	0.285	0.116	0.029	0.016	0.132	0.044	0.190	0.644
27	0.319	0.128	0.976	1.163	0.170	0.089	0.030	0.019	0.219	0.042	0.196	0.548
28	1.057	0.108	0.834	1.001	0.148	0.067	0.030	0.018	0.039	0.040	0.170	0.466
29	14.530E		0.822	0.817	0.128	0.067	0.143	0.013	0.028	0.067	0.364	0.410
30	2.098		0.729	0.695	0.118	0.060	0.180	0.013	0.025	0.421	0.374	0.371
31	1.310		0.644		0.110		0.064E	0.016		0.160		0.327
MEAN	0.7736	0.8483	0.8052	1.9211	0.4403	0.1620	0.0725	0.0271	0.0517	0.0909	0.3039	0.6800
INCHES	1.884	1.866	1.961	4.527	1.072	0.382	0.177	0.066	0.122	0.221	0.716	1.656
STA AV	1.750	1.890	2.840	2.368	1.484	1.038	0.726	0.283	0.22E	0.205	0.400	0.967

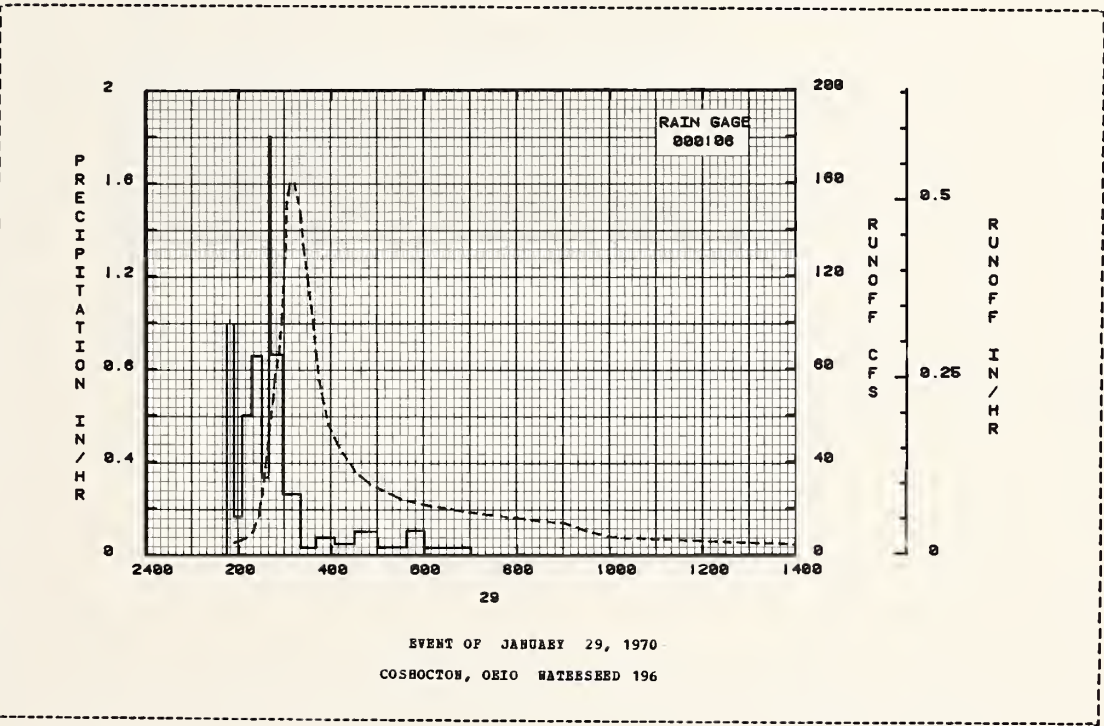
NOTES: To convert CFS to IN/DAY, multiply by 0.0786. STA AV based on 34 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 196												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	RG 000108		1-29	RG 000108			1-29					
	0.0	0.029		144	0.0	0.0		154	5.400	0.0		
				153	1.0000	0.15		210	7.500	0.0056		
				204	0.1636	0.18		218	10.200	0.0095		
				216	0.6001	0.30		222	13.600	0.0121		
				230	0.8569	0.50		226	17.800	0.0155		
WATERSHED CONDITIONS:												
Woods, 27%; grassland, 50%;												
miscellaneous, 23%; watershed												
in improved practice.												
				239	0.3336	0.55		228	22.400	0.0177		
				241	1.8000	0.61		230	25.700	0.0203		
				257	0.8619	0.84		232	31.900	0.0234		
				320	0.2609	0.94		236	42.500	0.0315		
				340	0.9300	0.95		240	56.000	0.0422		
				404	0.0750	0.98		244	66.400	0.0556		
				430	0.0462	1.00		246	75.000	0.0633		
				500	0.1000	1.05		252	87.200	0.0898		
				537	0.0324	1.07		256	104.000	0.1107		
				600	0.1043	1.11		300	128.000	0.1361		
				700	0.0300	1.14		302	152.000	0.1513		
								306	160.000	0.1853		
								312	160.000	0.2377		
								320	146.000	0.3045		
								324	132.000	0.3348		
								330	116.000	0.3754		
								336	100.000	0.4107		
								340	87.200	0.4311		
								344	75.000	0.4488		
								350	65.100	0.4718		
								356	56.000	0.4916		
								410	46.200	0.5306		
								430	36.100	0.5755		
								450	30.200	0.6117		
								530	23.900	0.6707		
								600	21.400	0.7078		
								650	18.700	0.7625		
								730	16.900	0.8013		
								810	15.200	0.8363		
								830	14.400	0.8525		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.

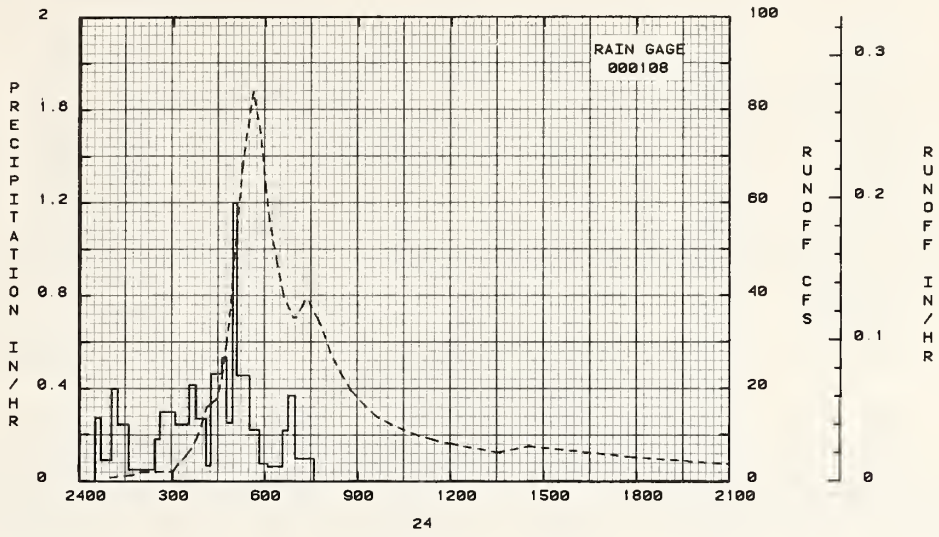
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 196								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
				1-29				900	13.600	0.8754	
								930	10.200	0.8949	
								1000	7.500	0.9094	
								1200	5.780	0.9529	
								1600	4.300	1.0189	
								1930	3.620	1.0643	
								2400	2.860	1.1120	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00327305.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 196							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000108 0.0	0.002	4-24	RG 000108 30	0.0	0.0	4-24	100	0.831	0.0
				41	0.2727	0.05		145	1.400	0.0027
				101	0.0900	0.08		200	2.050	0.0041
				113	0.4000	0.16		300	2.050	0.0108
				135	0.2455	0.25		310	3.620	0.0123
WATERSHED CONDITIONS: Woods, 27%; grassland, 50%; miscellaneous, 23%; watershed in improved practice.				225	0.0480	0.29		326	5.400	0.0162
				235	0.1800	0.32		336	7.000	0.0196
				245	0.3000	0.37		346	9.050	0.0240
				305	0.3000	0.47		356	12.100	0.0298
				332	0.2444	0.58		406	16.000	0.0375
				345	0.4154	0.67		426	17.800	0.0559
				405	0.2700	0.76		436	22.400	0.0669
				414	0.0667	0.77		446	31.000	0.0815
				436	0.4636	0.94		452	37.000	0.0926
				445	0.5333	1.02		458	46.200	0.1062
				457	0.2500	1.07		506	56.000	0.1285
				505	1.2000	1.23		516	69.000	0.1626
				530	0.4560	1.42		526	76.500	0.2022
				549	0.2211	1.49		536	84.000	0.2460
				605	0.0750	1.51		550	75.000	0.3067
				634	0.0621	1.54		600	63.800	0.3446
				645	0.2182	1.58		608	56.000	0.3707
				658	0.3692	1.66		624	46.200	0.4153
				735	0.0973	1.72		636	39.700	0.4434
								654	35.300	0.4802
								700	35.300	0.4918
								716	38.800	0.5241
								724	38.800	0.5410
								748	33.600	0.5884
								806	27.700	0.6185
								826	23.400	0.6464
								846	19.600	0.6699
								916	16.000	0.6990
								940	13.600	0.7184
								1006	12.100	0.7366
								1046	10.200	0.7609
								1136	8.520	0.7864
								1200	8.000	0.7972
								1330	6.160	0.8320
								1430	7.500	0.8544
								1800	5.020	0.9261
								2200	3.620	0.9827
								2400	3.460	1.0059

NOTES: To convert runoff in CFS to IN/HH, multiply by 0.00327305.



EVENT OF APRIL 24, 1970  
 COSHOCTON, OHIO WATERSHED 196

## COSROCTON, OHIO WATERSHED 10

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Manskingus River Basin.

AREA: 122.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSROCTON, OHIO WATERSHED 10			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 2.33	1.99	3.52	5.96	4.42	3.99	3.66	0.68	3.63	4.03	2.32	2.71	38.96			
	Q 1.238	1.248	1.288	3.101	1.087	0.171	0.081	0.011	0.028	0.089	0.370	0.855	9.567			
STA AV	P 2.80	2.42	3.46	3.48	3.70	4.07	4.45	2.77	2.55	2.26	2.57	2.40	36.94			
	Q 1.161	1.326	1.842	1.557	0.916	0.662	0.500	0.177	0.118	0.142	0.239	0.625	9.266			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	1-29	0.266	1-29	0.237	1-29	0.374	1-29	0.552	4-24	0.660	4- 1	0.809	4- 1	0.957	1-28	1.493
MAXIMUMS FOR PERIOD OF RECORD																
	6-28	1.760	6-28	0.980	6-28	1.390	7- 5	1.817	7- 5	2.104	7- 5	2.370	7- 5	2.588	7- 5	3.461
	1957		1957		1957		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of 21% idle cropland; 48% grassland; 25% woodland; 6% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pnb. 945, p. 26.31-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pnb. 1070, pp. 26.31-1 and 26.37-2. Precipitation data from rain gage 27 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSROCTON, OHIO WATERSHED 10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.88	0.13	1.19	0.45	0.0	0.0	0.0	0.0	0.0	0.15	1.03	0.0	0.0
3	0.17S	0.14S	0.27	0.0	0.0	0.38	0.0	0.0	0.84	0.0	0.0	0.0	0.32	0.0
4	0.12S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0
5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.17	0.0	0.0	0.0	0.0	1.52	0.0	0.02E	0.0	0.0	0.0	0.0	0.0
9	0.0	0.27	0.01S	0.0	0.0	0.0	0.12	0.18	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.30	0.14	0.0	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	1.22	0.0	0.45	0.0	0.0
12	0.0	0.04S	0.42S	0.0	0.69	0.52	0.0	0.0	0.0	0.26	0.09	0.63	0.0	0.0
13	0.0	0.03S	0.24S	0.75	1.50	0.0	0.0	0.0	0.0	0.29	0.0	0.10	0.0	0.0
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.32	0.66	0.0	0.0	0.0
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.17	0.0	0.0	0.0
16	0.0	0.0	0.05S	0.0	0.36	0.13	0.0	0.02	0.0	0.0	0.0	0.0	0.28	0.0
17	0.07E	0.0	0.21S	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0
18	0.07S	0.0	0.39S	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.15	0.33	0.0	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0
20	0.03S	0.0	0.09	0.51	0.0	0.0	0.28	0.0	0.02E	0.08	0.21	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.48	0.0	0.17S	0.0	0.0
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.52	0.0	0.0
23	0.0	0.0	0.0	0.11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S	0.0	0.0
24	0.0	0.0	0.0	1.94	0.64	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0
25	0.06E	0.0	0.24	0.0	0.40	0.01E	0.0	0.0	1.35	0.0	0.02S	0.04S	0.0	0.0
26	0.07M	0.0	0.15	0.0	0.0	0.28	0.0	0.0	0.78	0.0	0.0	0.0	0.0	0.0
27	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.10S	0.05S	0.0	0.0
28	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0
29	1.01	0.0	0.18S	0.0	0.0	0.08	0.27	0.0	0.0	0.42	0.38	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71	38.96	0.0
STA AV	2.80	2.42	3.46	3.48	3.70	4.07	4.45	2.77	2.55	2.26	2.57	2.40	36.94	0.0

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 27 and 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.078	0.224	0.052	0.292E	0.132	0.032	0.010	0.006	0.0	0.001	0.022	0.078
2	0.078	1.491	0.060	4.088E	0.212	0.032	0.010	0.004	0.0	0.001	0.187	0.364
3	0.074	0.621	0.202	0.717	0.163	0.041	0.009	0.004	0.005	0.001	0.183	0.077
4	0.367	0.318E	0.895	0.394	0.132	0.036	0.008	0.004	0.003	0.001	0.076	0.083
5	0.061	0.216	0.533	0.315	0.114	0.081	0.008	0.004	0.001	0.004	0.050	0.064
6	0.055	0.186	0.313	0.281	0.094	0.039	0.007	0.003	0.001	0.003	0.039	0.058
7	0.052	0.181	0.237	0.253	0.071	0.034	0.006	0.002	0.0 T	0.001	0.034	0.055
8	0.049	0.244	0.198	0.182	0.061	0.030	0.069	0.002	0.0	0.001	0.030	0.052
9	0.047	0.663	0.163	0.158	0.055	0.028	0.038	0.004	0.0 T	0.001	0.028	0.049
10	0.044	0.382	0.137	0.132	0.049	0.026	0.028	0.003	0.001	0.006	0.028	0.047
11	0.042	0.275	0.120	0.118	0.059	0.022	0.018	0.002	0.001	0.007	0.028	0.068
12	0.039	0.204	0.105	0.118	0.156	0.029	0.011	0.002	0.001	0.020	0.032	0.567
13	0.036	0.154	0.093	0.327	1.881E	0.022	0.010	0.002	0.001	0.045	0.030	0.317
14	0.036	0.123	0.082	0.335	0.481	0.020	0.009	0.002	0.001	0.034	0.069	0.200
15	0.036	0.109	0.078	0.211	0.281	0.020	0.016	0.001	0.001	0.027	0.185	0.150
16	0.036	0.097	0.071	0.186	0.289	0.022	0.012	0.001	0.001	0.013	0.093	0.184
17	0.036	0.109	0.078	0.158	0.212	0.080	0.006	0.001	0.001	0.009	0.066	0.172
18	0.039	0.141	0.139	0.137	0.153	0.340	0.006	0.001	0.001	0.007	0.058	0.142
19	0.042	0.111	0.205	0.183	0.127	0.026	0.006	0.001	0.001	0.007	0.058	0.119
20	0.042	0.075	0.272	0.613	0.102	0.024	0.014	0.001	0.001	0.007	0.070	0.097
21	0.042	0.064	0.274	0.254	0.078	0.030	0.009	0.001	0.001	0.024	0.058	0.093
22	0.042	0.064	0.273	0.186	0.064	0.026	0.006	0.001	0.001	0.016	0.052	0.462
23	0.042	0.061	0.210	0.170	0.055	0.022	0.007	0.001	0.001	0.011	0.044	0.286
24	0.042	0.058	0.185	4.040	0.086	0.017	0.006	0.001	0.001	0.009	0.042	0.193
25	0.066	0.062	0.227	0.752	0.156	0.014	0.006	0.001	0.006	0.007	0.039	0.147
26	0.104	0.058	0.360	0.431	0.097	0.020	0.005	0.001	0.026	0.005	0.036	0.127
27	0.064	0.055	0.299	0.300	0.052	0.020	0.004	0.001	0.032	0.004	0.036	0.109
28	0.191	0.052	0.257	0.229	0.044	0.016	0.004	0.001	0.007	0.004	0.036	0.093
29	3.920R		0.187	0.180	0.039	0.014	0.007	0.0 T	0.003	0.013	0.085	0.082
30	0.534		0.152	0.152	0.036	0.011	0.048	0.0	0.001	0.053	0.099	0.074
31	0.309		0.142		0.034		0.011	0.0		0.032		0.067
MEAN	0.2047	0.2285	0.2130	0.5299	0.1797	0.0292	0.0134	0.0019	0.0047	0.0147	0.0632	0.1413
INCHES	1.238	1.248	1.288	3.101	1.087	0.171	0.081	0.011	0.028	0.089	0.370	0.855
STA AV	1.161	1.326	1.842	1.557	0.916	0.662	0.500	0.177	0.118	0.142	0.239	0.625

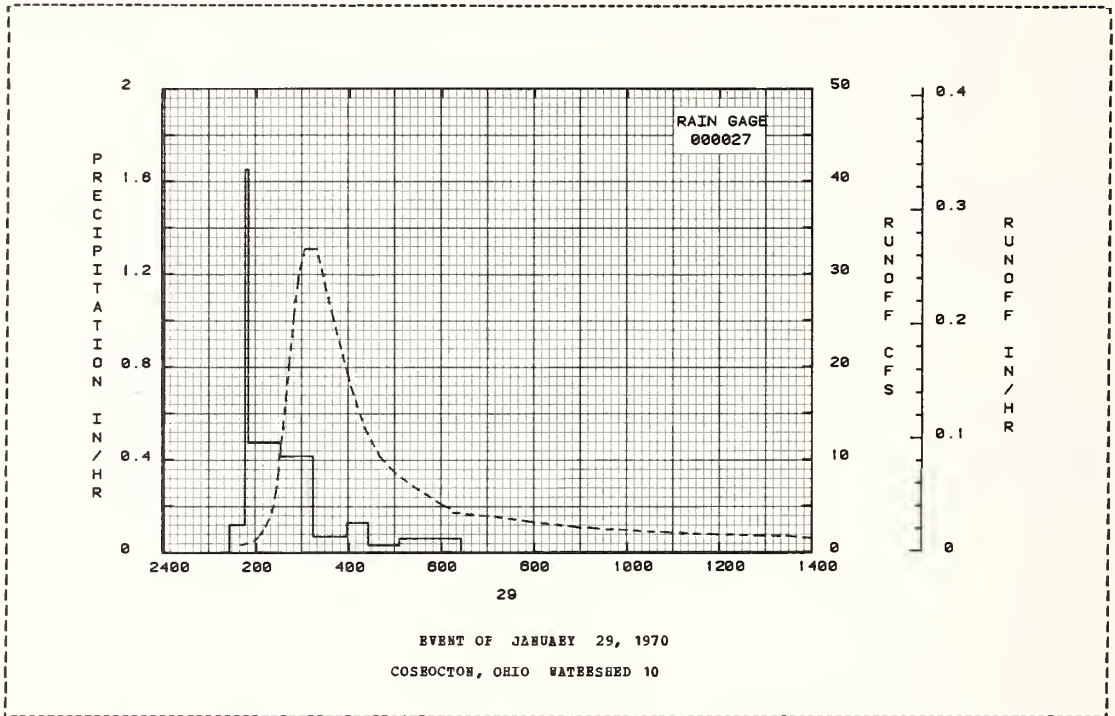
NOTES: To convert CFS to IN/DAY, multiply 0.19510. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVRNT COSHOCTON, OHIO WATERSHED 10												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVRNT OF JANUARY 29, 1970												
1-29	0.0	0.011	1-29	125	0.0	0.0	1-29	140	0.859	0.0		
				145	0.1199	0.04		148	1.010	0.0010		
				149	1.6504	0.15		156	1.270	0.0022		
				231	0.4715	0.48		202	1.660	0.0034		
				313	0.4143	0.77		204	1.920	0.0039		
WATERSHED CONDITIONS:				357	0.0682	0.82		208	2.420	0.0051		
Cover of 21%, idle cropland;				425	0.1286	0.88		212	2.860	0.0065		
48%, grassland; 25%;				505	0.0390	0.90		216	3.620	0.0083		
woodland and 6%, miscel-				625	0.0600	0.98		220	4.410	0.0105		
laneous; watershed in								222	5.120	0.0118		
improved practice.								226	7.150	0.0151		
								228	8.470	0.0172		
								230	10.300	0.0198		
								234	13.400	0.0262		
								238	16.700	0.0344		
								242	20.300	0.0444		
								248	25.500	0.0630		
								254	29.800	0.0855		
								302	32.700	0.1194		
								318	32.700	0.1903		
								330	28.200	0.2399		
								340	24.900	0.2758		
								400	18.500	0.3346		
								420	13.400	0.3778		
								440	10.300	0.4099		
								500	8.470	0.4353		
								530	6.700	0.4661		
								600	5.120	0.4901		
								610	4.750	0.4968		
								614	4.260	0.4992		
								700	3.900	0.5246		
								800	3.230	0.5536		
								900	2.630	0.5774		
								924	2.520	0.5858		
								1100	2.060	0.6156		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 10				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	1200	1.880	0.6316
								1300	1.740	0.6463
								1340	1.660	0.6555
								1500	1.460	0.6724
								1700	1.270	0.6946
								1940	1.070	0.7200
								2200	0.986	0.7391
								2400	0.831	0.7535

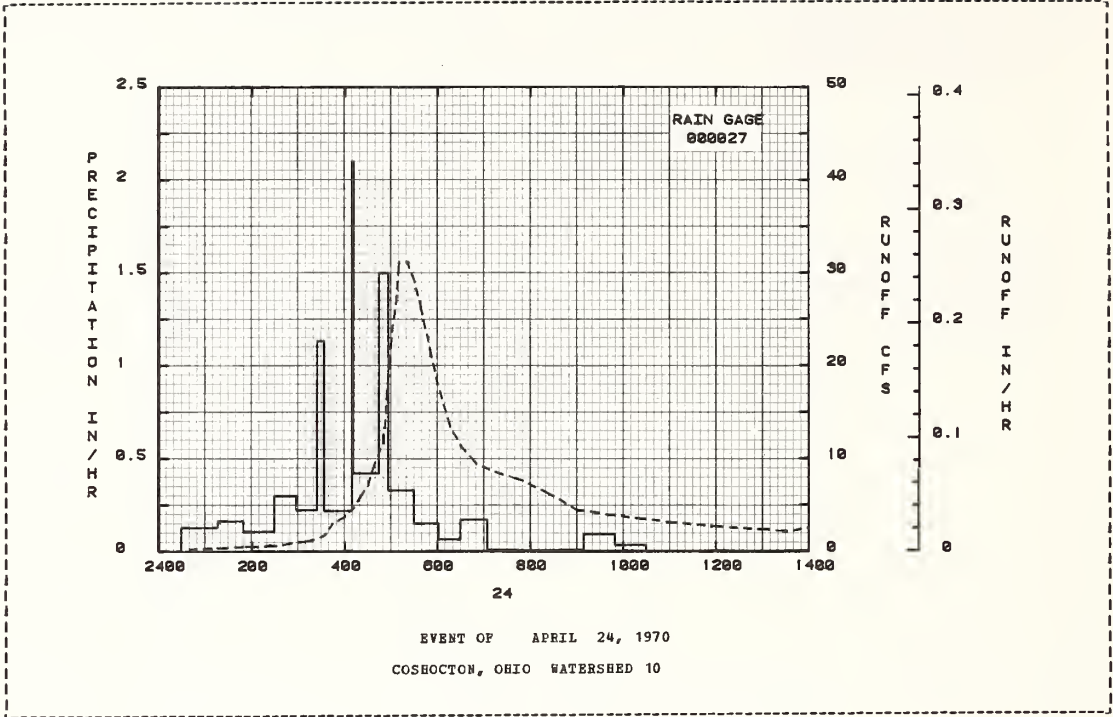
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.





1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 10							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	HG 000027 0.0	0.001	4-24	RG 000027 29	0.0	0.0	4-24	40	0.256	0.0
				116	0.1277	0.10		120	0.381	0.0017
				148	0.1636	0.19		148	0.495	0.0034
				229	0.1050	0.26		152	0.537	0.0037
				257	0.3000	0.40		208	0.537	0.0049
WATERSHED CONDITIONS: Cover of 21%, idle cropland; 48%, grassland; 25%, woodland and 6%, miscel- laneous; watershed in improved practice.										
				324	0.2222	0.50		220	0.603	0.0058
				333	1.1333	0.67		232	0.603	0.0068
				439	0.2167	0.80		240	0.725	0.0075
				411	2.1000	0.87		252	0.916	0.0088
				444	0.4182	1.10		308	1.070	0.0110
				456	1.5000	1.40		320	1.270	0.0129
				529	0.3273	1.58		332	1.660	0.0153
				601	0.1500	1.66		336	1.920	0.0163
				629	0.0643	1.69		340	2.420	0.0175
				704	0.1714	1.79		344	2.980	0.0190
				909	0.0048	1.80		400	3.760	0.0263
				949	0.0900	1.86		408	4.410	0.0307
				1029	0.0300	1.88		412	4.750	0.0332
								420	5.900	0.0390
								430	7.150	0.0478
								436	6.900	0.0543
								450	11.800	0.0739
								452	13.400	0.0773
								454	16.700	0.0814
								458	20.300	0.0914
								500	22.900	0.0973
								506	26.800	0.1175
								510	31.200	0.1332
								520	31.200	0.1755
								530	29.000	0.2163
								540	25.500	0.2532
								550	21.600	0.2851
								600	17.900	0.3119
								616	13.600	0.3458
								630	11.300	0.3692
								650	9.400	0.3972
								716	8.470	0.4287
								750	7.580	0.4657
								830	5.900	0.5022
								900	4.400	0.5231
								920	4.190	0.5347
								940	3.900	0.5457
								1020	3.490	0.5657
								1100	3.100	0.5836
								1200	2.630	0.6069
								1300	2.310	0.6270
								1332	2.110	0.6366
								1400	2.520	0.6454
								1500	2.520	0.6659
								1540	2.310	0.6790
								1612	2.110	0.6886
								1700	1.920	0.7017
								1820	1.740	0.7215
								1900	1.660	0.7307
								2020	1.500	0.7478
								2100	1.420	0.7557
								2240	1.270	0.7739
								2400	1.140	0.7870

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.008129.



## COSHOCTON, OHIO WATERSHED 5

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 349.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 5
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	39.32
	Q 1.408	1.485	1.557	3.339	1.298	0.459	0.324	0.026	0.248	0.328	0.721	1.445	12.637
STA AV	P 2.79	2.37	3.45	3.46	3.78	3.99	4.50	2.82	2.63	2.22	2.66	2.44	37.10
	Q 1.379	1.445	2.169	1.793	1.148	0.761	0.585	0.196	0.120	0.180	0.332	0.742	10.851

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	4-24	0.173	4-24	0.151	4-24	0.238	4-24	0.440	4-24	0.559	1-28	0.727	1-28	0.960	1-28	1.719
MAXIMUMS FOR PERIOD OF RECORD																
	6-28	1.090	6-28	0.770	6-28	1.040	7- 5	1.700	7- 5	2.088	7- 5	2.495	7- 5	2.809	7- 5	4.146
	1957		1957		1957		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of 20% cropland, 54% grassland, 23% woodland, 3% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 26.32-5 (Revised). For Geology description and map, see foregoing reference, pp. 26.32-1 and 26.37-2. Precipitation data from rain gage 91. Precipitation and runoff records began Jan. 1940. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 5
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.14S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.91	0.14	1.12	0.46	0.0	0.0	0.0	0.0	0.17	1.05	0.0	
3	0.19S	0.14S	0.26	0.0	0.0	0.29	0.0	0.0	1.13	0.0	0.0	0.34	
4	0.05S	0.0	0.74	0.0	0.12	0.0	0.0	0.0	0.10	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.20	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.11	0.18	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.30	0.15	0.0	
11	0.13S	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	1.20	0.0	0.45	
12	0.0	0.04S	0.42S	0.0	0.74	0.56	0.0	0.0	0.0	0.26	0.07	0.65	
13	0.0	0.03S	0.24S	0.75	1.47	0.0	0.0	0.0	0.0	0.34	0.0	0.10	
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.39	0.70	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.18	0.0	
16	0.0	0.0	0.05S	0.0	0.36	0.21	0.0	0.0	0.0	0.0	0.0	0.30	
17	0.07E	0.0	0.21S	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.06	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	
19	0.0	0.0	0.15	0.34	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.10	0.51	0.0	0.0	0.30	0.0	0.03E	0.09	0.22	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.47	0.0	0.15S	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.54	
23	0.0	0.0	0.0	0.10	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S	
24	0.0	0.0	0.0	1.91	0.64	0.0	0.0	0.0	0.12	0.0	0.0	0.0	
25	0.06E	0.0	0.22	0.0	0.43	0.02E	0.0	0.0	1.23	0.0	0.05S	0.04S	
26	0.07S	0.0	0.14	0.0	0.0	0.25	0.0	0.0	0.74	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05	0.05S	
28	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	
29	1.05	0.0	0.18S	0.0	0.0	0.08	0.24	0.0	0.0	0.44	0.35	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.51	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	
STA AV	2.79	2.37	3.45	3.46	3.78	3.99	4.50	2.82	2.63	2.22	2.66	2.44	

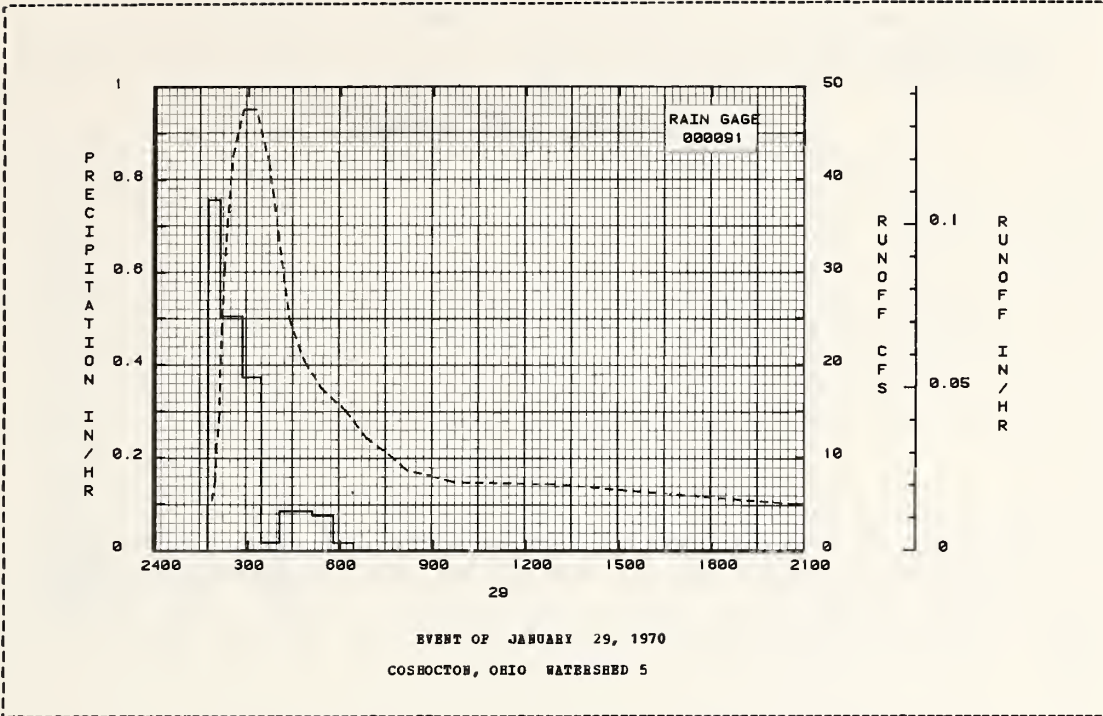
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 91. STA AV based on 31 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.198	0.525	0.146	1.160E	0.481	0.102	0.042	0.032	0.004	0.009	0.098	0.293
2	0.198	4.840	0.177	10.238E	0.715	0.087	0.036	0.024	0.004	0.047	2.544	0.260
3	0.191	1.801	0.603	2.449E	0.452	0.161	0.030	0.023	1.443	0.018	0.880E	0.575
4	0.167	1.179	2.625	2.000	0.413	0.115	0.140	0.033	0.066	0.011	0.364	0.431E
5	0.155	0.884	1.492	1.505	0.344	0.983E	0.036	0.024	0.015	0.007	0.278	0.311
6	0.155	0.715	1.058	1.271	0.285	0.126	0.030	0.012	0.017	0.007	0.200	0.268
7	0.122	0.637	0.935	1.127	0.252	0.074	0.023	0.010	0.012	0.007	0.151	0.221
8	0.094	0.764	0.828	0.758	0.228	0.058	1.818	0.007	0.006	0.007	0.119	0.198
9	0.075	2.041	0.699	0.667	0.192	0.044	3.562	0.011E	0.006	0.007	0.162	0.191
10	0.084	1.059	0.576	0.541	0.167	0.040	0.319	0.019	0.005	0.027E	0.132	0.167
11	0.098	0.870	0.463	0.427	0.176	0.046	0.259	0.006	0.005	1.764	0.102	0.427
12	0.102	0.747	0.369	0.404	0.805	1.166	0.142E	0.035	0.004	0.153E	0.102	2.992
13	0.098	0.637E	0.379	1.111	5.398	0.158	0.073E	0.004	0.004	0.679E	0.094	1.264
14	0.090	0.592	0.325	0.576	1.450	0.087	0.049E	0.004	0.903	0.377E	0.622	0.923
15	0.083	0.534	0.229	0.779	0.997	0.081	0.185E	0.004	0.003	0.137	0.945	0.794
16	0.085	0.479E	0.198	0.682	0.993E	0.642	0.038	0.004	0.003	0.056	0.389	1.026
17	0.285	0.440	0.229	0.622	0.652E	1.061	0.023	0.005	0.003	0.038	0.299	1.107
18	0.320	0.415	0.384	0.550E	0.563E	0.340	0.022	0.005	0.003	0.030	0.262	3.881
19	0.149	0.415	0.850	0.635E	0.454E	0.119	0.022	0.005	0.003	0.027	0.213	0.747
20	0.115	0.381E	1.041	1.951E	0.355E	0.086	0.272	0.006	0.003	0.024	0.437	0.652
21	0.102	0.329	0.751	0.699E	0.331	0.364	0.946	0.006	0.003	0.219	0.274	0.667
22	0.098	0.302E	0.872	0.622E	0.260	0.144	0.025	0.008	0.003	0.084	0.200	2.483
23	0.098	0.276	0.932	0.578	0.213	0.088	0.026	0.009E	0.002	0.053	0.141	1.052
24	0.102	0.260	0.863	0.796	0.664	0.067	0.019	0.008E	0.002	0.944	0.102	0.700
25	0.169E	0.233	0.843	2.294	0.858	0.062	0.015	0.006E	1.014	0.036	0.102	0.577
26	0.426E	0.139	1.276	1.580	0.497E	0.203	0.015	0.004	0.610	0.031	0.130	0.507
27	0.231	0.150	0.892	1.180	0.245	0.084	0.017	0.004	0.326	0.028	0.150	0.417
28	1.229E	0.134	0.795	0.940	0.179	0.053	0.013	0.004	0.016	0.025	0.139	0.340
29	10.665E		0.714	0.774	0.150	0.057	0.081	0.004	0.011	0.075	0.576	0.269
30	3.255		0.667	0.637	0.134	0.044	0.318	0.004	0.010	0.586	0.415	0.228
31	1.420		0.607E		0.119		0.053	0.079		0.185		0.213
MEAN	0.6662	0.7779	0.7363	1.6319	0.6138	0.2242	0.1532	0.0124	0.1213	0.1549	0.3522	0.6834
INCHES	1.408	1.485	1.557	3.339	1.298	0.459	0.324	0.026	0.248	0.328	0.721	1.445
STA AV	1.379	1.445	2.169	1.793	1.148	0.761	0.585	0.196	0.120	0.180	0.332	0.742

NOTES: To convert CFS to IN/DAY, multiply by 0.06820. STA AV based on 31 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 5												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 25, 1970												
1-29	HG 000091 0.0	0.024	1-29	RG 000091 142	0.0	0.0	1-29	150	5.390	0.0		
				205	0.7566	0.29		156	7.530	0.0018		
				249	0.5045	0.66		158	10.800	0.0027		
				326	0.3731	0.89		204	14.200	0.0063		
				402	0.0167	0.90		206	20.300	0.0079		
WATERSHED CONDITIONS:												
Cover of 20%, idle cropland;												
54%, grassland; 23%, wood-												
land; 3%, miscellaneous;												
watershed in improved												
practice.												
				506	0.0844	0.99		208	23.700	0.0100		
				546	0.0750	1.04		214	30.400	0.0177		
				626	0.0150	1.05		220	35.800	0.0271		
								230	42.700	0.0457		
								250	47.600	0.0865		
								315	47.600	0.1449		
								340	41.800	0.1978		
								400	33.400	0.2334		
								420	25.000	0.2611		
								450	20.300	0.2933		
								522	17.500	0.3219		
								610	15.000	0.3588		
								650	12.100	0.3845		
								736	10.200	0.4088		
								810	8.530	0.4239		
								856	8.000	0.4419		
								942	7.290	0.4586		
								1300	7.060	0.5259		
								1600	6.180	0.5823		
								2290	4.850	0.6763		
								2400	4.690	0.7034		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00284165.

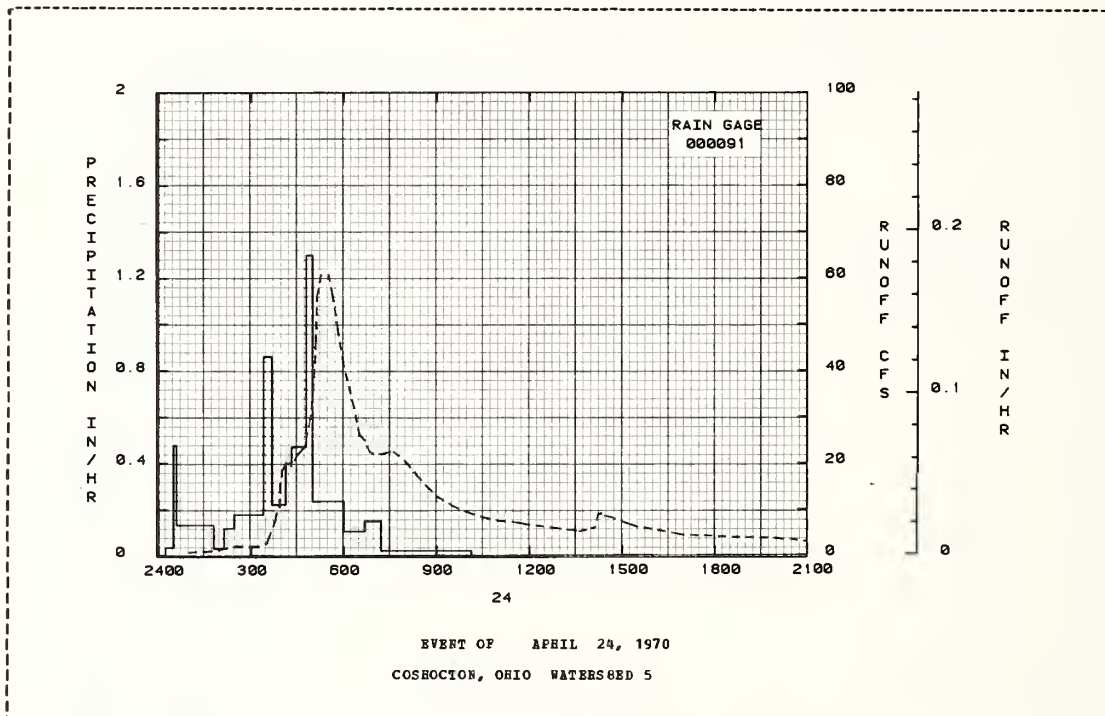


1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 5							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000091 0.0	0.002	4-24	14	0.0	0.0	4-24	100	0.827	0.0
				30	0.0375	0.01		130	0.975	0.0013
				35	0.4800	0.05		200	1.400	0.0030
				147	0.1333	0.21		230	2.140	0.0055
				207	0.0300	0.22		315	2.140	0.0101
				227	0.1200	0.26		330	2.750	0.0118
				324	0.1789	0.43		338	5.030	0.0133
				340	0.8625	0.66		346	7.530	0.0157
				407	0.2222	0.76		350	9.320	0.0173
				419	0.4000	0.84		354	10.800	0.0192
				447	0.4714	1.06		356	14.200	0.0204
				459	1.3000	1.32		400	18.400	0.0235
				600	0.2361	1.56		408	20.300	0.0308
				640	0.1050	1.63		416	20.300	0.0385
				712	0.1500	1.71		418	19.400	0.0404
				1007	0.0206	1.77		430	22.000	0.0522
								444	23.700	0.0673
								456	30.400	0.0827
								500	35.800	0.0890
								504	41.800	0.0963
								506	47.600	0.1005
								508	56.200	0.1054
								516	60.800	0.1276
								530	60.800	0.1679
								540	55.000	0.1953
								550	47.600	0.2196
								600	40.900	0.2406
								620	31.900	0.2751
								630	26.300	0.2889
								640	25.000	0.3010
								650	22.500	0.3123
								656	22.000	0.3186
								708	22.000	0.3311
								730	22.500	0.3543
								736	22.500	0.3607

NOTES: To convert runoff in cfs to IN/HR, multiply by 0.00284165.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 5							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	800	20.300	0.3850
								820	17.500	0.4029
								840	15.000	0.4183
								900	12.800	0.4315
								930	10.800	0.4483
								1000	9.320	0.4626
								1030	8.260	0.4751
								1100	7.530	0.4863
								1140	7.060	0.5001
								1200	6.610	0.5066
								1300	5.750	0.5242
								1330	5.390	0.5321
								1336	5.210	0.5336
								1350	5.570	0.5372
								1400	5.960	0.5399
								1408	6.180	0.5422
								1414	9.060	0.5444
								1420	9.060	0.5470
								1426	8.530	0.5495
								1446	8.000	0.5573
								1506	7.060	0.5644
								1530	6.180	0.5719
								1610	5.390	0.5829
								1700	4.370	0.5945
								2000	3.630	0.6286
								2400	2.990	0.6662

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00284165.



COSHOCTON, OHIO WATERSHED 92

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Mnskingum River Basin.

AREA: 920.00 acres 1.44 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														COSHOCTON, OHIO WATERSHED 92															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	39.32															
	Q	1.453	1.841	1.757	3.987	1.570	0.356	0.183	0.007	0.143	0.270	0.717	1.359	13.643															
STA AV	P	2.78	2.42	3.46	3.47	3.70	4.04	4.53	2.79	2.57	2.28	2.59	2.41	37.03															
	Q	1.493	1.666	2.381	1.981	1.211	0.816	0.610	0.183	0.117	0.186	0.380	0.843	11.865															

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
Date	Maximum Discharge	1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days					
	Date	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	1 Day	2 Days	2 Days	8 Days					
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970	4-24	0.263		4-24	0.216	4-24	0.336	4-24	0.585	4-24	0.732	4- 1	0.915	4- 1	1.106	1-28	1.873

MAXIMUMS FOR PERIOD OF RECORD															
Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
7- 5 1969	0.780	7- 5 1969	0.625	7- 5 1969	1.101	7- 5 1969	2.417	7- 5 1969	2.908	7- 5 1969	3.377	7- 5 1969	3.730	7- 5 1969	5.164

NOTES: Watershed conditions: Cover of 16% idle cropland; 59% grassland; 21% woodland; 4% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, OSDA Misc. Pub. 1070, p. 26.32-5 (Revised). For Geology description and map, see foregoing reference, pp. 26.33-1 and 26.37-2. Precipitation data from rain gage 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)														COSHOCTON, OHIO WATERSHED 92													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.14S	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.14S	0.91	0.14	1.12	0.46	0.0	0.0	0.0	0.0	0.17	1.05	0.0	2	0.14S	0.91	0.14	1.12	0.46	0.0	0.0	0.17	1.05	0.0				
3	0.19S	0.14S	0.26	0.0	0.0	0.29	0.0	0.0	1.13	0.0	0.0	0.34	3	0.19S	0.14S	0.26	0.0	0.0	0.29	0.0	0.0	1.13	0.34				
4	0.05S	0.0	0.74	0.0	0.12	0.0	0.0	0.0	0.10	0.0	0.0	0.0	4	0.05S	0.0	0.74	0.0	0.12	0.0	0.0	0.10	0.0	0.0				
5	0.05S	0.0	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0				
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.20	0.0	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0	0.0	8	0.0	0.20	0.0	0.0	0.0	1.55	0.0	0.0	0.0	0.0				
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.11	0.18	0.0	0.0	0.0	0.0	9	0.0	0.26	0.01S	0.0	0.0	0.11	0.18	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.30	0.15	0.0	10	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.30	0.15	0.0				
11	0.13S	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	1.20	0.0	0.45	11	0.13S	0.0	0.0	0.0	0.38	0.0	0.0	1.20	0.0	0.45				
12	0.0	0.04S	0.92S	0.0	0.74	0.56	0.0	0.0	0.0	0.26	0.07	0.65	12	0.0	0.04S	0.92S	0.0	0.74	0.56	0.0	0.26	0.07	0.65				
13	0.0	0.03S	0.24S	0.75	1.47	0.0	0.0	0.0	0.0	0.34	0.0	0.10	13	0.0	0.03S	0.24S	0.75	1.47	0.0	0.0	0.34	0.0	0.10				
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.39	0.70	0.0	14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.39	0.70	0.0				
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.18	0.0	15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.45	0.0	0.18	0.0				
16	0.0	0.0	0.05S	0.0	0.36	0.21	0.0	0.0	0.0	0.0	0.0	0.30	16	0.0	0.0	0.05S	0.0	0.36	0.21	0.0	0.0	0.0	0.30				
17	0.07E	0.0	0.21S	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.06	17	0.07E	0.0	0.21S	0.0	0.0	0.80	0.0	0.0	0.0	0.06				
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.05E	0.0	0.0				
19	0.0	0.0	0.15	0.34	0.0	0.0	0.05	0.12	0.0	0.0	0.0	0.0	19	0.0	0.0	0.15	0.34	0.0	0.0	0.05	0.12	0.0	0.0				
20	0.03S	0.0	0.10	0.51	0.0	0.0	0.30	0.0	0.03R	0.09	0.22	0.0	20	0.03S	0.0	0.10	0.51	0.0	0.0	0.30	0.0	0.03R	0.09	0.22			
21	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.47	0.0	0.15S	21	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.47	0.0	0.15S			
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.54	22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.0	0.0	0.54				
23	0.0	0.0	0.0	0.10	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06S	23	0.0	0.0	0.0	0.10	0.0	0.0	0.09	0.0	0.0	0.06S				
24	0.0	0.0	0.0	1.91	0.64	0.0	0.0	0.0	0.12	0.0	0.0	0.0	24	0.0	0.0	0.0	1.91	0.64	0.0	0.0	0.12	0.0	0.0				
25	0.06E	0.0	0.22	0.0	0.43	0.02E	0.0	0.0	1.23	0.0	0.05S	0.04S	25	0.06E	0.0	0.22	0.0	0.43	0.02E	0.0	1.23	0.0	0.05S	0.04S			
26	0.07S	0.0	0.14	0.0	0.0	0.25	0.0	0.0	0.74	0.0	0.0	0.0	26	0.07S	0.0	0.14	0.0	0.0	0.25	0.0	0.74	0.0	0.0				
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05	0.05S	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05	0.05S			
28	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	28	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0			
29	1.05	0.0	0.18S	0.0	0.0	0.08	0.24	0.0	0.0	0.44	0.35	0.0	29	1.05	0.0	0.18S	0.0	0.0	0.08	0.24	0.0	0.44	0.35	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.51	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.51	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0			
TOTAL	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74	TOTAL	2.32	2.03	3.50	5.87	4.64	2.94	3.77	0.72	3.70	4.17	2.92	2.74		
STA AV	2.78	2.42	3.46	3.47	3.70	4.04	4.53	2.79	2.57	2.28	2.59	2.41	STA AV	2.78	2.42	3.46	3.47	3.70	4.04	4.53	2.79	2.57	2.28	2.59	2.41		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 92												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.739	3.079	0.531	2.683	1.705	0.394	0.093	0.054	0.001E	0.026	0.358	0.907
2	0.739	15.403	0.598	34.927	1.983	0.352	0.086	0.035E	0.0 E	0.053	3.607	0.836
3	0.720	6.387	1.561	7.265	1.542	0.523	0.083	0.034E	1.664E	0.052	3.094E	1.393
4	0.666	3.858	7.902	4.965	1.367	0.419	0.218	0.034E	0.359E	0.018	1.149	1.344
5	0.615	2.827	4.718	3.845	1.345	1.505	0.082	0.024E	0.042	0.017E	0.906	1.100
6	0.572	2.430	3.170	3.500	1.077	0.412	0.069	0.013E	0.021	0.017	0.739	1.003
7	0.502	2.280	2.635	3.009	0.907	0.311	0.052	0.011E	0.018	0.018	0.590	0.841
8	0.450	2.523	2.330	2.425	0.818	0.261	2.634	0.009E	0.014	0.020	0.488	0.776
9	0.427	6.507	2.190	1.972	0.721	0.224	0.745	0.010E	0.016	0.020	0.407	0.739
10	0.394	3.927	1.785	1.705	0.648	0.206	0.417	0.011E	0.008	0.125	0.444E	0.651
11	0.362	2.885	1.405	1.560	0.651	0.189	0.238	0.009E	0.004	3.565	0.352	1.046
12	0.342	2.385	1.250E	1.460	1.997	1.658	0.140	0.006E	0.002	0.645E	0.355	6.343
13	0.322	1.945	1.225E	3.032	16.864	0.403	0.101	0.003E	0.0 T	0.759E	0.332	3.500
14	0.312	1.595	1.200E	2.975	5.301	0.26J	0.075	0.001E	0.0	0.679	1.156	2.440
15	0.292	1.455	1.175E	2.219	3.351	0.249	0.143	0.001E	0.0	0.406	2.214	1.910
16	0.283	1.335E	1.125E	1.970	3.146	0.994	0.195	0.0 T	0.0	0.166	1.140	2.192
17	0.536	1.200E	1.075E	1.850	2.435E	1.656	0.052	0.0 E	0.0	0.124	0.553	2.070
18	0.754	1.100E	1.183	1.735E	1.820E	0.792	0.045	0.0	0.0	0.101	0.882	1.700
19	0.483	1.050	2.164	1.987	1.465E	0.320	0.042	0.0	0.0	0.086	0.757	1.495
20	0.363	1.050E	2.802	5.075	1.250	0.239	0.334	0.0	0.0	0.082E	1.034	1.255
21	0.322	1.002E	2.180	2.592	1.100	0.639	0.158	0.0	0.0	0.474	0.828	1.150
22	0.312E	0.930	2.469	2.167	0.906	0.287	0.051	0.0	0.0	0.267	0.666	4.455
23	0.312	0.860	2.660	1.930	0.776	0.190	0.062	0.0	0.0	0.183	0.534	2.841
24	0.302	0.776	2.485	33.510	1.249	0.153	0.036	0.0	0.0	0.153	0.405	2.160
25	0.526	0.696	2.408	7.353	2.006	0.178	0.025	0.0	1.585	0.128	0.405	1.775
26	1.424	0.572	3.342	4.865E	1.226	0.328	0.026	0.0	0.930	0.108	0.476	1.560
27	0.626	0.586	2.585	3.845E	0.803	0.231	0.034	0.0	0.713	0.093	0.543	1.310
28	2.245	0.517	2.235	3.170E	0.684	0.138	0.028	0.0	0.073	0.086	0.502	1.125
29	30.408		2.015	2.495E	0.586	0.152	0.095	0.0	0.037	0.184	1.218	1.002
30	5.832		1.850	2.020E	0.502	0.112	0.660	0.0	0.031	1.241	1.179	0.883
31	3.995		1.766		0.439		0.123	0.030E		0.554		0.794
MEAN	1.8123	2.5415	2.1913	5.1365	1.9572	0.4593	0.2276	0.0093	0.1840	0.3371	0.9235	1.6939
INCHES	1.453	1.841	1.757	3.987	1.570	0.356	0.183	0.007	0.143	0.270	0.717	1.359
STA AV	1.493	1.666	2.381	1.981	1.211	0.816	0.610	0.183	0.117	0.186	0.380	0.843

NOTES: To convert CFS to IN/DAY, multiply 0.025871. STA AV based on 32 yr period.

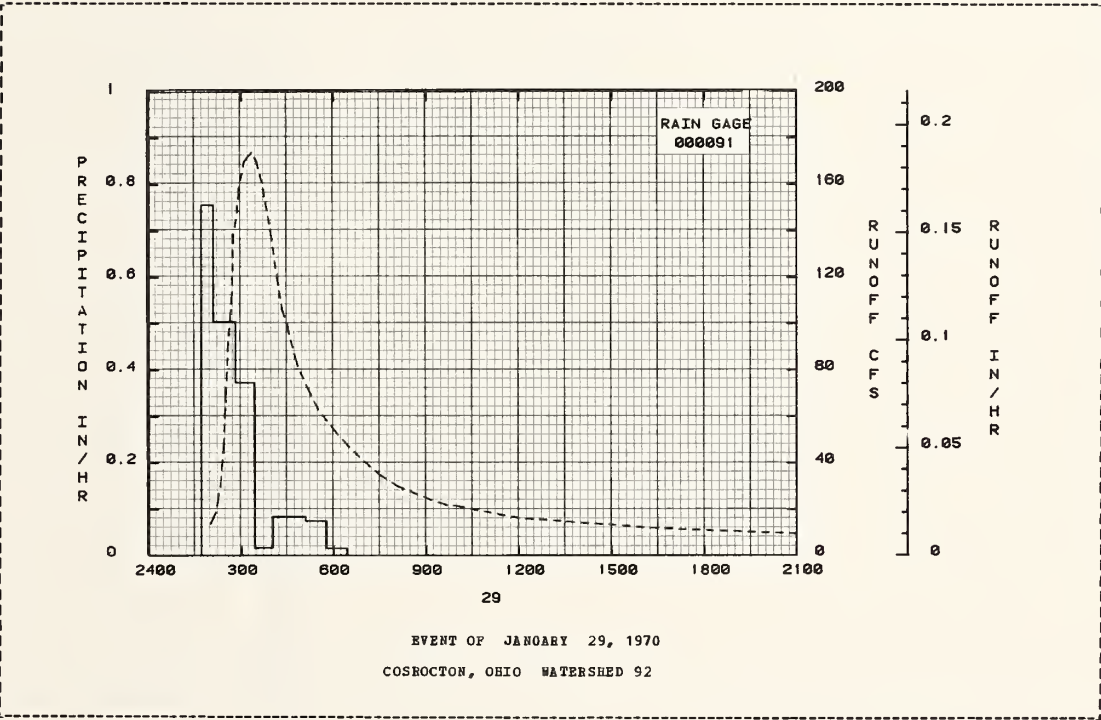
1970 SELECTED FURNOFF EVENT COSHOCTON, OHIO WATERSHED 92												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	RG 000091	0.020	1-29	RG 000091	0.0	0.0	1-29	200	13.900	0.0		
	0.0			142	0.7566	0.29		210	18.800	0.0029		
				205	0.5045	0.66		214	23.900	0.0044		
				326	0.3731	0.89		220	31.200	0.0074		
				402	0.0167	0.90		222	38.400	0.0086		
WATERSHED CONDITIONS:					506	0.0844	0.99	225	46.800	0.0109		
Cover of 16%, idle cropland;					546	0.0750	1.04	226	50.600	0.0118		
59%, grassland; 21% wood-					626	0.0150	1.05	228	60.800	0.0138		
land; 4%, miscellaneous;								230	65.700	0.0162		
watershed in improved								232	79.300	0.0189		
practice.								234	92.100	0.0220		
								240	106.000	0.0327		
								242	114.000	0.0367		
								244	136.000	0.0412		
								250	145.000	0.0564		
								256	159.000	0.0728		
								306	170.000	0.1024		
								320	174.000	0.1457		
								330	170.000	0.1766		
								340	161.000	0.2063		
								350	149.000	0.2342		
								400	136.000	0.2598		
								410	129.000	0.2828		
								420	106.000	0.3031		
								430	98.600	0.3215		
								450	81.800	0.3539		
								510	72.000	0.3815		
								530	63.000	0.4058		
								600	54.500	0.4375		
								630	46.800	0.4648		
								650	42.600	0.4809		
								710	38.400	0.4954		
								730	34.800	0.5086		
								804	30.000	0.5284		
								830	27.500	0.5418		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00107757.



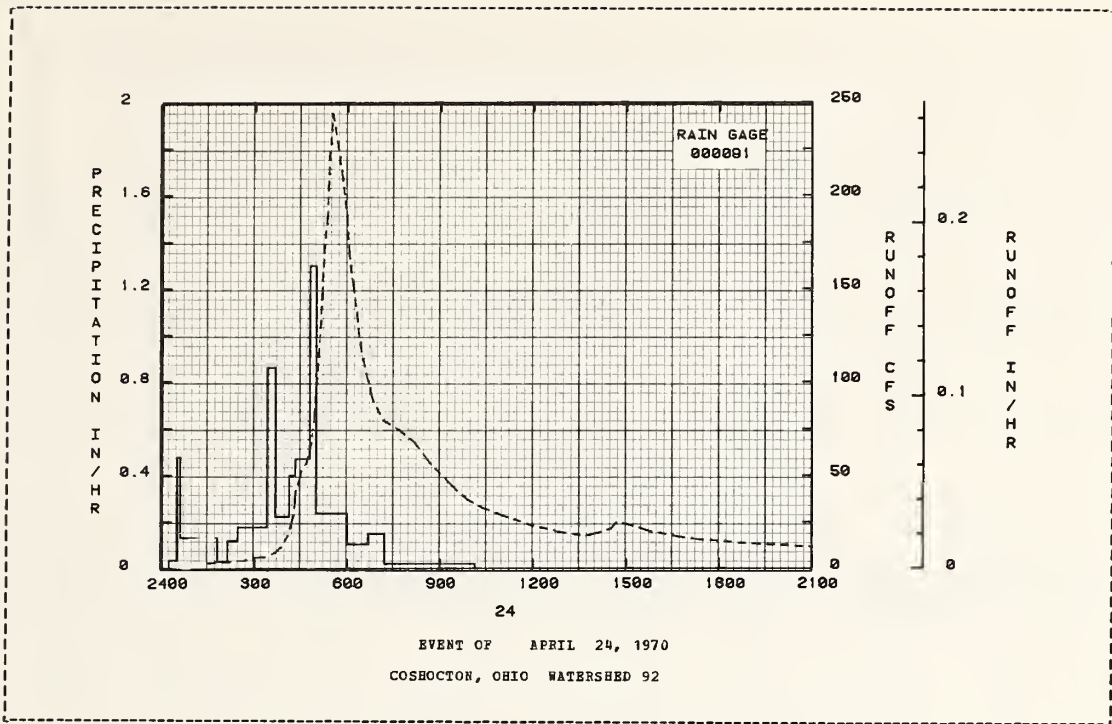
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 92				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	9 10	23.900	0.5603
								9 40	21.800	0.5726
								10 00	21.300	0.5803
								12 00	16.200	0.6207
								16 30	11.700	0.6884
								21 00	9.380	0.7395
								24 00	7.810	0.7673

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00107797.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 92							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000091 0.0	0.004	4-24	EG 000091 14	0.0	0.0	4-24	130	3.020	0.0
				30	0.0375	0.01		200	3.540	0.0018
				35	0.4800	0.05		244	4.840	0.0051
				147	0.1333	0.21		300	5.990	0.0067
				207	0.0300	0.22		320	6.410	0.0089
WATERSHED CONDITIONS:				227	0.1200	0.26		340	8.820	0.0116
Cover of 16%, idle cropland;				324	0.1789	0.43		352	11.700	0.0138
59%, grassland; 21%, wood-				340	0.8625	0.66		358	14.600	0.0152
land; 4%, miscellaneous;				407	0.2222	0.76		404	17.900	0.0170
watershed in improved				419	0.4000	0.84		410	22.900	0.0192
practice.				447	0.4714	1.06		416	28.700	0.0220
				459	1.3000	1.32		418	35.500	0.0231
				600	0.2361	1.56		420	41.800	0.0245
				640	0.1050	1.63		426	46.800	0.0293
				712	0.1500	1.71		430	52.600	0.0329
				1007	0.0206	1.77		440	56.400	0.0327
								450	67.400	0.0538
								456	81.800	0.0618
								500	98.600	0.0683
								504	114.000	0.0759
								508	133.000	0.0848
								510	147.000	0.0898
								514	170.000	0.1012
								520	188.000	0.1205
								522	204.000	0.1275
								524	220.000	0.1351
								530	244.000	0.1601
								540	228.000	0.2025
								550	208.000	0.2417
								558	188.000	0.2702
								602	170.000	0.2831
								610	152.000	0.3062
								618	136.000	0.3269
								624	120.000	0.3407
								630	112.000	0.3532
								640	100.000	0.3722
								650	89.500	0.3892
								710	79.300	0.4195
								740	74.400	0.4609
								810	67.400	0.4991
								840	56.400	0.5325
								914	46.800	0.5640
								932	41.800	0.5783
								952	37.000	0.5925
								1022	32.600	0.6113
								1110	27.500	0.6372
								1150	23.900	0.6557
								1200	22.900	0.6599
								1250	19.700	0.6790
								1330	17.900	0.6925
								1346	17.900	0.6976
								1410	19.700	0.7057
								1430	21.300	0.7131
								1440	24.500	0.7172
								1500	23.900	0.7259
								1526	21.800	0.7366
								1550	19.700	0.7456
								1640	17.100	0.7621
								1730	15.300	0.7767
								1920	13.100	0.8048
								2110	11.700	0.8293
								2330	10.500	0.8572
								2400	10.500	0.8629

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03107797.



COSHOCTON, OHIO WATERSHED 94

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walbonding River, Muskingum River Basin.

AREA: 1520.00 acres 2.37 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 94		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71	38.96		
	Q 1.612	1.884	1.808	4.323	1.734	0.402	0.213	0.031	0.119	0.258	0.733	1.330	14.447		
STA AV	P 2.78	2.43	3.46	3.47	3.69	4.04	4.50	2.79	2.56	2.27	2.58	2.40	36.57		
	Q 1.504	1.651	2.400	1.985	1.236	0.863	0.653	0.215	0.136	0.197	0.361	0.813	12.014		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	4-24	0.342	4-24	0.296	4-24	0.464	4-24	0.748	4-24	0.899	4-24	1.061	4-24	1.262	1-28	1.867
MAXIMUMS FOR PERIOD OF RECORD																
	6-28	0.920	6-28	0.770	6-28	1.220	7- 5	2.503	7- 5	2.921	7- 5	3.409	7- 5	3.750	7- 5	5.217
	1957		1957		1957		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of 15%, cropland; 57%, grassland; 24%, woodland, 4%, miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.34-1 and 26.37-2. Precipitation data from rain gages 27 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 94		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.14S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.88	0.13	1.19	0.45	0.0	0.0	0.0	0.0	0.15	1.03	0.0	0.0	0.0	
3	0.17S	0.14S	0.27	0.0	0.0	0.38	0.0	0.0	0.84	0.0	0.0	0.0	0.32	0.0	
4	0.12S	0.0	0.75	0.0	0.09	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.04	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.17	0.0	0.0	0.0	0.0	1.52	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.27	0.01S	0.0	0.0	0.0	0.12	0.18	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.30	0.14	0.0	0.0	0.0	
11	0.13S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	1.22	0.0	0.45	0.0	0.0	
12	0.0	0.04S	0.42S	0.0	0.69	0.52	0.0	0.0	0.0	0.26	0.09	0.63	0.0	0.0	
13	0.0	0.03S	0.24S	0.75	1.50	0.0	0.0	0.0	0.0	0.29	0.0	0.10	0.0	0.0	
14	0.0	0.0	0.11S	0.06	0.0	0.0	0.0	0.0	0.0	0.32	0.66	0.0	0.0	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.17	0.0	0.0	0.0	
16	0.0	0.0	0.05S	0.0	0.36	0.13	0.0	0.02	0.0	0.0	0.0	0.28	0.0	0.0	
17	0.07E	0.0	0.21S	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.15	0.33	0.0	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.09	0.51	0.0	0.0	0.28	0.0	0.02E	0.08	0.21	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.48	0.0	0.17S	0.0	0.0	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.52	0.0	0.0	
23	0.0	0.0	0.0	0.11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.07S	0.0	0.0	
24	0.0	0.0	0.0	1.94	0.64	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	
25	0.06E	0.0	0.24	0.0	0.40	0.31E	0.0	0.0	1.35	0.0	0.02S	0.04S	0.0	0.0	
26	0.07M	0.0	0.15	0.0	0.0	0.28	0.0	0.0	0.78	0.0	0.0	0.0	0.0	0.0	
27	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.10S	0.05S	0.0	0.0	
28	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	
29	1.01	0.0	0.18S	0.0	0.0	0.98	0.27	0.0	0.0	0.42	0.38	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.33	1.99	3.52	5.96	4.42	3.09	3.66	0.68	3.63	4.03	2.92	2.71	38.96		
STA AV	2.78	2.43	3.46	3.47	3.69	4.04	4.50	2.79	2.56	2.27	2.58	2.40	36.57		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 27 and 91. STA AV based on 32 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 94												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.390	4.371	1.022	4.062	3.015	0.821	0.256	0.189	0.032	0.083	0.667E	1.605
2	1.360	23.419	1.085	62.756	3.904	0.742	0.241	0.135	0.026	0.127	5.594E	1.460
3	1.240	9.985	2.751	12.235	2.842	1.199	0.231	0.126	1.399	0.142	3.920	1.968
4	1.150	5.232	12.596	8.012	2.633	0.961	0.358	0.121	0.701	0.077	1.871	2.102
5	1.125	4.460	8.352	5.911	2.458	2.273	0.203	0.104	0.099	0.065	1.505	1.605
6	1.050	3.810	5.302	5.311	2.020	0.852	0.199	0.087	0.053	0.062	1.215	1.460
7	0.933	3.354	4.498	4.680	1.760	0.677	0.164	0.071	0.038	0.062	1.005	1.300
8	0.844	4.021	3.820	3.735	1.640	0.591	3.437	0.062	0.032	0.062	0.866	1.240
9	0.800	11.316	3.135	3.220	1.565	0.527	1.367	0.085	0.031	0.059	0.764	1.217
10	0.760	6.856	2.720	2.848	1.495	0.486	0.748	0.112	0.026	0.192	0.742	1.130
11	0.742	5.063E	2.405	2.505	1.453	0.448	0.506	0.071	0.020	3.478	0.742	1.662
12	0.724	4.620E	2.100	2.300	3.086	2.229	0.368	0.057	0.020	0.507E	0.739	9.842
13	0.706	4.120E	2.000	4.879	24.443E	0.801	0.297	0.049	0.022	1.263	0.675	5.229
14	0.706	3.660E	1.960E	5.349	9.670E	0.576	0.265	0.044	0.018	1.247	1.891	3.625
15	0.670	3.245E	1.920E	3.845	7.760E	0.542	0.399	0.039	0.014	0.960	4.047	2.885
16	0.627	2.885E	1.880E	3.380	7.725E	1.502	0.356	0.042	0.014	0.471	2.112	3.329
17	1.070	2.610E	1.760	3.060	5.665E	2.745	0.210	0.040	0.015	0.341	1.675	3.445
18	1.400	2.300E	2.052	2.775	3.922E	1.459	0.181	0.034	0.018	0.269	1.528	2.885
19	1.092	2.950	3.811	3.288	2.725E	0.696	0.157	0.045	0.022	0.226	1.390	2.460
20	0.932	1.960E	5.075	8.898	2.307	0.543	0.520	0.049	0.022	0.226	1.705	2.100
21	0.866	1.840E	3.845	4.687	2.035	0.983	0.257	0.038	0.019	0.886	1.435	2.050
22	0.822	1.680E	4.542	3.800	1.724	0.614	0.157	0.051	0.016	0.640	1.160	7.487
23	0.822	1.530E	4.793	3.515	1.479	0.440	0.196	0.061	0.013	0.415	0.958	4.988
24	0.822	1.425E	4.211	66.292	2.149	0.408	0.162	0.038	0.013	0.351	0.822	3.625
25	1.135	1.220E	3.980	14.265	3.282	0.408	0.135	0.032	2.202	0.303	0.822	2.940
26	2.758	1.100	5.987	9.864E	2.202	0.614	0.135E	0.029	1.163	0.267	0.933	2.565
27	1.400	1.125	4.567	7.160E	1.535	0.530	0.130E	0.026	1.143	0.242	1.025	2.150
28	4.482	1.027	3.885	5.470E	1.310	0.342	0.126E	0.026	0.195	0.192	0.958	1.880
29	56.284		3.610	4.380	1.090	0.375	0.230	0.025	0.135	0.272E	2.017	1.720
30	8.691		3.070	3.595	0.963	0.301	1.230	0.019	0.106	2.085E	2.052	1.570
31	5.632		2.775		0.903		0.360	0.054		0.912E		1.395
MEAN	3.3208	4.2959	3.7254	9.2023	3.5719	0.8562	0.4382	0.0635	0.2544	0.5318	1.5612	2.7393
INCHES	1.612	1.884	1.808	4.323	1.734	0.402	0.213	0.031	0.119	0.258	0.733	1.330
STA AV	1.504	1.651	2.400	1.985	1.236	0.863	0.653	0.215	0.136	0.197	0.361	0.813

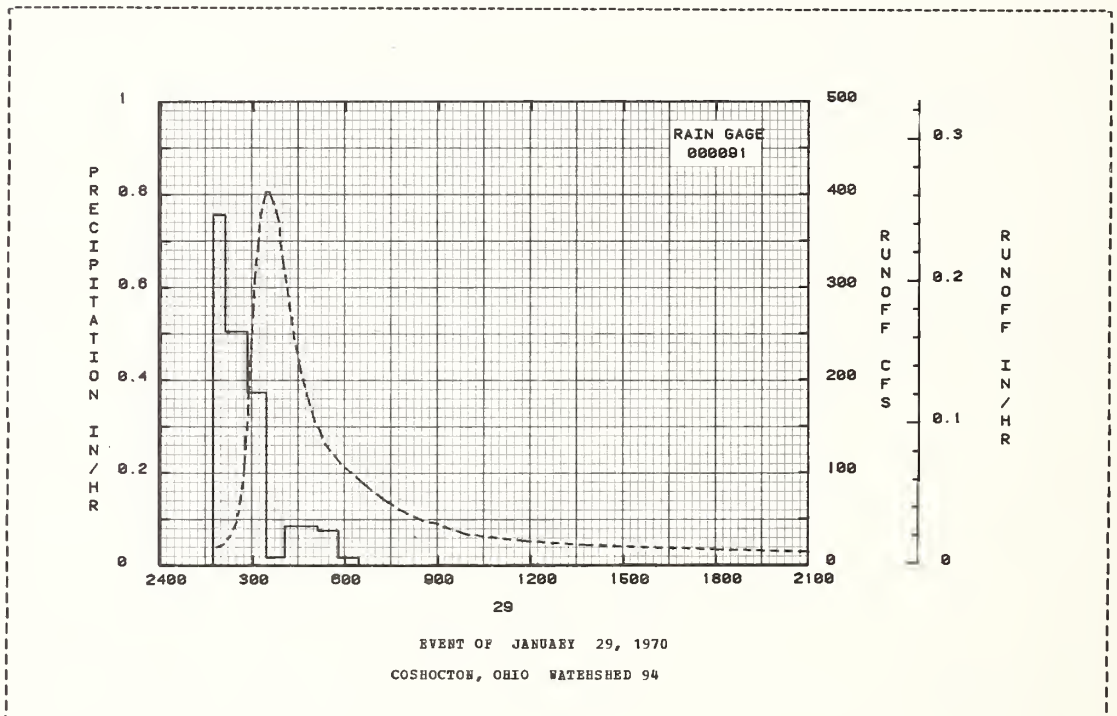
NOTES: To convert CFS to IN/DAY, multiply by 0.015690. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 94											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
1-29	0.0	0.022	1-29	142	0.0	0.0	1-29	150	19.800	0.0	
				205	0.7566	0.29		204	23.200	0.0033	
				249	0.5045	0.66		210	28.100	0.0050	
				326	0.3731	0.89		216	32.400	0.0070	
				402	0.0167	0.90		222	39.900	0.0094	
WATERSHED CONDITIONS:											
				506	0.0844	0.99		228	47.100	0.0122	
				546	0.0750	1.04		230	53.600	0.0133	
				626	0.0150	1.05		232	58.700	0.0145	
								234	68.100	0.0159	
								236	76.400	0.0175	
								238	83.000	0.0192	
								240	90.100	0.0211	
								242	105.000	0.0232	
								244	118.000	0.0256	
								246	139.000	0.0284	
								249	155.000	0.0332	
								250	173.000	0.0350	
								252	193.000	0.0390	
								254	219.000	0.0435	
								256	237.000	0.0484	
								258	260.000	0.0538	
								300	282.000	0.0597	
								304	317.000	0.0727	
								310	353.000	0.0945	
								314	377.000	0.1104	
								324	403.000	0.1528	
								330	463.000	0.1791	
								340	390.000	0.2222	
								350	371.000	0.2636	
								354	341.000	0.2791	
								400	320.000	0.3007	
								410	282.000	0.3334	
								420	244.000	0.3620	
								430	215.000	0.3870	
								440	193.000	0.4092	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0065246.

1970 SELECTED RUNOFF EVENT			COSHOCOTON, OHIO			WATERSHED 94				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	450	173.000	0.4291
								500	155.000	0.4469
								510	145.000	0.4632
								520	131.000	0.4782
								530	124.000	0.4921
								550	110.000	0.5175
								610	99.800	0.5403
								630	90.100	0.5610
								650	80.800	0.5796
								710	72.100	0.5962
								732	64.200	0.6125
								800	55.200	0.6307
								830	47.900	0.6475
								900	44.100	0.6625
								910	41.300	0.6671
								1000	32.400	0.6871
								1200	25.100	0.7246
								1400	21.000	0.7547
								1800	16.300	0.8034
								2200	13.600	0.8424
								2400	12.300	0.8593

NOTES: To convert runoff in CFS to IN/HH, multiply by 0.00065246.

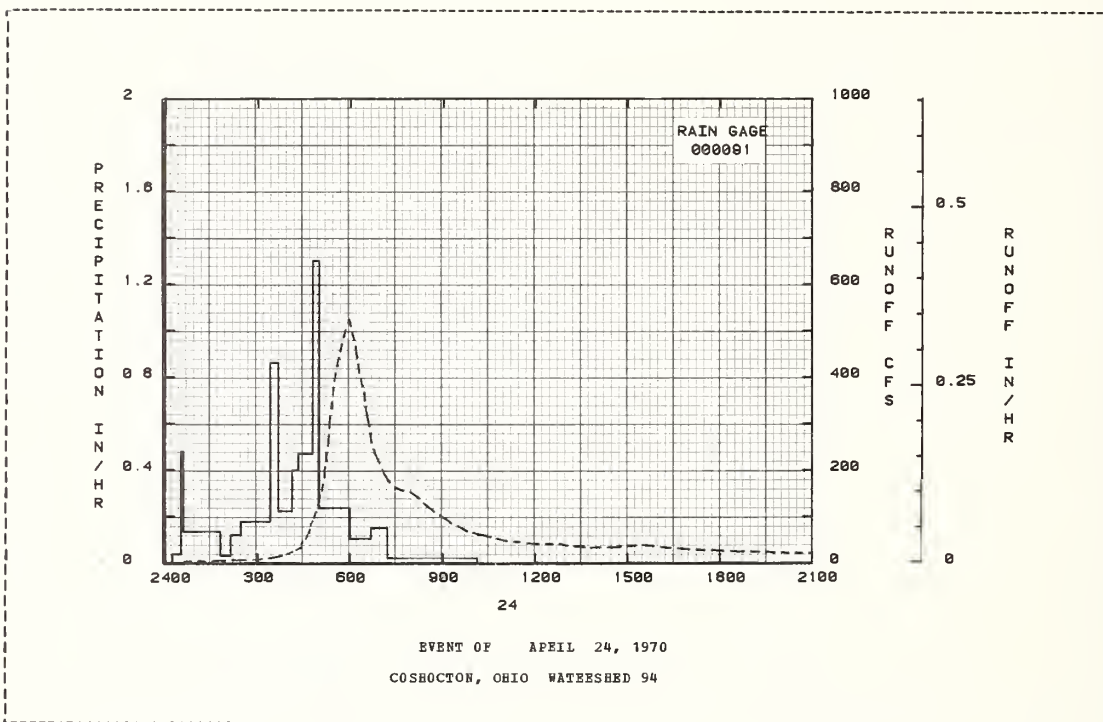


1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 94				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	0.0	0.001	4-24	14	0.0	0.0	4-24	37	3.580	0.0
				30	0.0375	0.01		137	4.700	0.0027
				35	0.4800	0.05		157	5.240	0.0038
				147	0.1333	0.21		237	6.500	0.0064
				207	0.0300	0.22		307	8.820	0.0089
WATERSHED CONDITIONS: Cover of 15% cropland; 57% grassland; 24% woodland; 4% miscellaneous; watershed in improved practice.										
				227	0.1200	0.26		331	12.000	0.0116
				324	0.1789	0.43		347	15.900	0.0140
				340	0.8625	0.66		355	19.000	0.0155
				407	0.2222	0.76		407	24.100	0.0183
				419	0.4000	0.84		415	28.100	0.0206
				447	0.4714	1.06		423	33.600	0.0233
				459	1.3000	1.32		425	39.900	0.0241
				600	0.2361	1.56		427	45.500	0.0250
				640	0.1050	1.63		433	52.000	0.0282
				712	0.1500	1.71		437	59.600	0.0306
				1007	0.0206	1.77		439	64.200	0.0320
								441	72.100	0.0335
								443	80.800	0.0352
								447	90.100	0.0389
								449	97.400	0.0409
								453	110.000	0.0454
								457	124.000	0.0505
								501	145.000	0.0563
								505	155.000	0.0628
								507	169.000	0.0663
								509	185.000	0.0702
								511	206.000	0.0744
								515	237.000	0.0841
								517	260.000	0.0895
								519	294.000	0.0955
								521	317.000	0.1021
								525	347.000	0.1165
								527	377.000	0.1244
								531	409.000	0.1415
								537	442.000	0.1692
								547	488.000	0.2198
								557	524.000	0.2749
								607	480.000	0.3294
								613	442.000	0.3555
								617	409.000	0.3780
								627	365.000	0.4201
								631	323.000	0.4351
								637	294.000	0.4552
								641	260.000	0.4672
								647	237.000	0.4834
								657	215.000	0.5080
								707	189.000	0.5259
								717	173.000	0.5496
								727	162.000	0.5678
								743	155.000	0.5954
								757	152.000	0.6188
								813	139.000	0.6441
								827	124.000	0.6641
								843	110.000	0.6845
								901	97.400	0.7048
								917	85.400	0.7207
								937	74.300	0.7381
								947	68.100	0.7458
								1007	62.300	0.7600
								1033	55.200	0.7766
								1105	47.100	0.7944
								1207	39.900	0.8237
								1289	39.900	0.8419
								1303	37.300	0.8478
								1319	34.800	0.8541
								1337	33.600	0.8608
								1347	33.000	0.8644
								1407	33.000	0.8716
								1427	33.600	0.8788
								1447	34.800	0.8862
								1507	37.300	0.8940
								1517	37.900	0.8981
								1533	37.900	0.9047
								1551	36.000	0.9119
								1611	33.600	0.9195

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00065246.

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
				4-24				1647	30.100	0.9320
								1717	28.100	0.9415
								1807	25.600	0.9561
								1847	24.100	0.9669
								1917	23.200	0.9746
								1947	22.200	0.9820
								2107	20.600	1.0006
								2237	19.000	1.0200
								2327	18.200	1.0301
								2400	17.400	1.0365

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00065246.





COSHOCTON, OHIO WATERSHED 95

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 2570.00 acres 4.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 95													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual												
1970	P	2.36	1.92	3.52	5.94	4.23	3.04	3.58	0.60	3.65	3.92	2.91	2.65	38.32												
	Q	1.580	1.771	1.785	4.166	1.515	0.323	0.174	0.017	0.082	0.212	0.709	1.310	13.664												
STA AV	P	2.80	2.41	3.46	3.48	3.71	4.08	4.44	2.77	2.55	2.25	2.58	2.40	36.92												
	Q	1.480	1.635	2.409	1.993	1.204	0.807	0.596	0.195	0.126	0.186	0.360	0.812	11.804												

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	4-24	0.287	4-24	0.271	4-24	0.456	4-24	0.738	4-24	0.891	4-24	1.955	4-1	1.234	1-28	1.828

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	6-28	0.610	6-28	0.560	6-28	0.950	7-5	1.873	3-4	2.320	3-4	2.780	3-4	3.490	7-5	4.292
	1957		1957		1957		1969		1963		1963		1963		1969	

NOTES: Watershed conditions: Cover of 15% cropland; 55% grassland; 26% woodland; 4% miscellaneous; watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 985, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.35-1 and 26.37-2. Precipitation data from rain gages 27, 39 and 91. Precipitation and runoff records began Jan. 1939. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY AIR TEMPERATURE (degrees F)													COSHOCTON, OHIO WATERSHED 95												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	29	25	46	36	58	25	56	33	85	68	81	65	92	73	88	73	75	48	66	44	60	45	64	39	
2	28	23	46	24	50	46	54	30	68	45	79	65	90	71	82	61	80	51	73	44	54	41	60	45	
3	28	10	24	0	65	47	50	28	58	35	69	55	85	70	79	65	82	62	61	41	40	34	61	40	
4	19	13	21	-6	57	46	43	28	70	44	72	54	77	57	74	56	85	64	61	34	45	36	57	29	
5	32	15	33	21	46	28	49	24	70	37	78	59	69	52	76	57	82	62	70	39	43	38	36	24	
6	27	14	33	25	45	24	42	28	46	31	68	53	80	64	77	58	80	57	77	50	53	40	24	18	
7	14	-4	40	20	47	32	49	33	64	28	81	48	81	58	80	58	85	64	74	52	58	41	30	17	
8	-3	-8	40	33	37	25	68	34	79	49	86	62	78	60	83	62	86	63	77	58	62	40	47	20	
9	3	-7	40	33	33	21	61	44	81	59	87	62	72	61	72	64	82	65	76	59	64	46	52	38	
10	13	2	33	26	30	21	49	34	75	62	90	62	72	60	79	63	80	59	68	47	56	47	41	31	
11	20	2	31	25	40	20	48	27	78	55	86	64	78	62	82	60	72	49	64	48	53	45	52	35	
12	25	17	26	15	31	26	61	36	72	60	90	62	85	65	86	66	78	52	72	59	50	47	43	32	
13	24	7	20	13	30	22	64	41	76	56	79	62	86	66	88	64	85	56	72	62	48	44	34	30	
14	23	12	22	10	28	18	50	42	73	50	79	63	88	69	88	63	81	60	66	61	44	38	40	26	
15	30	10	30	21	24	12	63	39	83	64	80	62	87	71	88	67	89	71	61	40	39	27	34	18	
16	43	24	27	15	26	15	66	43	70	47	83	68	78	63	88	68	82	60	43	33	32	23	36	25	
17	39	35	39	16	34	18	74	48	56	45	87	66	82	60	85	66	87	56	54	32	23	23	38	30	
18	35	10	54	28	40	32	57	38	70	38	86	67	85	63	87	62	74	59	60	32	44	29	38	30	
19	20	9	51	24	42	36	52	42	80	49	70	55	82	64	89	68	78	52	63	34	47	33	53	34	
20	13	7	24	15	50	38	66	51	82	64	71	48	68	53	86	79	84	55	57	45	52	36	34	25	
21	8	-4	38	14	41	36	58	45	86	62	67	52	72	49	78	61	87	69	56	50	44	30	29	24	
22	11	-6	54	31	38	33	68	40	85	64	75	50	74	56	84	56	90	70	60	48	48	26	39	29	
23	20	10	43	29	36	33	74	60	84	64	80	54	80	60	77	60	90	69	54	37	26	11	47	24	
24	25	1	50	27	39	34	64	47	81	62	81	58	86	67	78	59	88	70	64	45	22	11	26	16	
25	41	24	43	10	46	27	70	45	82	62	74	56	87	68	82	58	76	66	63	46	28	12	28	15	
26	32	27	26	3	52	34	75	53	70	47	79	58	88	68	85	60	83	55	66	38	49	28	23	8	
27	32	29	35	26	43	30	78	55	66	43	68	57	80	69	88	65	61	49	66	45	54	48	25	20	
28	56	26	37	24	48	31	77	57	72	46	74	51	90	71	87	66	55	42	60	42	55	41	24	10	
29	56	30			32	24	80	64	82	56	80	58	89	70	88	66	58	38	54	47	56	41	27	18	
30	30	19			47	21	84	66	75	58	92	68	81	70	91	67	66	45	56	52	49	39	28	12	
31	40	21			48	31			80	61			88	73	76	56			64	52			25	19	
AV.	26	13	36	20	41	29	62	42	74	52	79	59	82	64	83	63	79	58	64	46	47	35	39	25	
MEAN	19.5		28.0		35.0		51.8		63.1		69.0		72.8		73.0		68.7		54.8		40.9		31.9		
STA AV	33	19	36	20	46	28	58	42	68	49	79	58	81	62	82	61	75	54	66	44	50	33	37	22	

NOTES: Temperature data based on records at North Appalachian Experimental Watershed. STA AV is for 32 yr (1939-70) record period.

1970		DAILY PRECIPITATION (inches)					COSHOCTON, OHIO WATERSHED 95						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.14S	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.84	0.12	1.20	0.45	0.02	0.0	0.0	0.0	0.14	1.07	0.0	
3	0.16S	0.14S	0.28	0.0	0.0	0.40	0.0	0.0	0.76	0.0	0.0	0.30	
4	0.14S	0.0	0.74	0.0	0.08	0.0	0.0	0.0	0.11	0.0	0.0	0.0	
5	0.65S	0.0	0.0	0.0	0.04	0.44	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.16	0.0	0.0	0.0	0.0	1.51	0.0	0.03E	0.0	0.0	0.0	
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.16	0.17	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.30	0.13	0.0	
11	0.13S	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	1.24	0.0	0.44	
12	0.0	0.04S	0.42S	0.0	0.66	0.41	0.0	0.0	0.0	0.27	0.10E	0.64	
13	0.0	0.03S	0.24S	0.75	1.44	0.0	0.0	0.0	0.0	0.28	0.0	0.09	
14	0.0	0.0	0.11S	0.07	0.0	0.0	0.0	0.0	0.0	0.25	0.66	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.16	0.0	
16	0.0	0.0	0.05S	0.0	0.35	0.09E	0.0	0.02	0.0	0.0	0.0	0.27	
17	0.07E	0.0	0.21S	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.06	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.08E	0.6	0.0	0.0	
19	0.0	0.0	0.14	0.31	0.0	0.0	0.05E	0.10	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.09	0.50	0.0	0.0	0.28	0.0	0.01E	0.07	0.21	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.01	0.48	0.0	0.18S	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.50	
23	0.0	0.0	0.0	0.11	0.0	0.0	0.10	0.0	0.0	0.0	0.01S	0.06S	
24	0.0	0.0	0.0	1.95	0.65	0.0	0.0	0.0	0.17	0.0	0.0	0.0	
25	0.06E	0.0	0.24	0.0	0.37	0.01E	0.0	0.0	1.40	0.0	0.03S	0.04S	
26	0.07M	0.0	0.15	0.0	0.01	0.29	0.0	0.0	0.79	0.0	0.0	0.0	
27	0.07S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.09S	0.05S	
28	0.04S	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.08	0.0	
29	1.02	0.0	0.18S	0.0	0.0	0.09	0.28	0.0	0.0	0.41	0.36	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.47	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	
TOTAL	2.36	1.92	3.52	5.94	4.23	3.04	3.58	0.60	3.65	3.92	2.91	2.65	
STA AV	2.80	2.41	3.46	3.48	3.71	4.08	4.44	2.77	2.55	2.25	2.58	2.40	

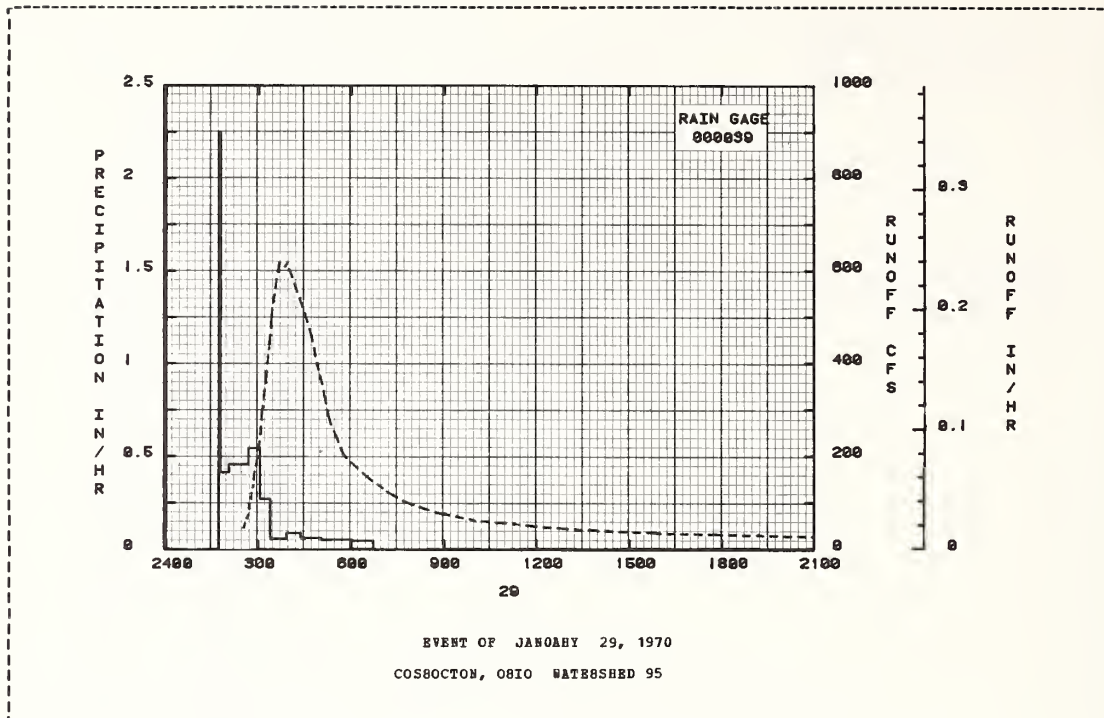
NOTES: Precipitation amounts are for rain gages 27, 39 and 91. STA AV based on 33 yr period.

1970		MEAN DAILY DISCHARGE (cfs)					COSHOCTON, OHIO WATERSHED 95						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	2.40	7.13	1.60	6.17	4.37	1.20	0.38	0.27	0.0	0.09	1.01	2.72	
2	2.35	36.46	1.73	112.36	5.91	1.10	0.35	0.17	0.0	0.11	9.21	2.35	
3	2.15	16.83	4.85	20.35	4.27	1.67	0.35	0.16	0.94	0.23	7.18	3.10	
4	1.97E	8.82	22.10	12.48	3.86	1.27	0.44	0.14	0.99	0.09	3.21	3.50	
5	1.89	6.87	15.17	9.47	3.52	3.10	0.29	0.10	0.11	0.07	2.47	2.84	
6	1.77	5.57	9.09	8.39	2.90	1.24	0.28	0.10	0.05	0.06	1.93	2.41	
7	1.41E	5.27	7.19	7.27	2.51	0.57	0.21	0.08	0.02	0.07	1.58	2.06	
8	1.15E	6.08	5.99	5.90	2.30	0.87	4.23	0.07	0.01	0.06	1.33	1.97	
9	1.15E	18.27	4.85	4.92	2.06	0.80	2.19	0.09	0.01	0.06E	1.15	1.93	
10	1.13E	11.07	4.09	4.17	1.89	0.77	1.06	0.17	0.02	0.23E	1.28	1.73	
11	1.10E	8.81E	3.59	3.86	1.85	0.72	0.72	0.07	0.01	4.75	1.07	2.52	
12	1.10E	7.79E	3.31	3.59	4.22	2.39	0.50	0.06	0.00	0.80	1.13	16.82	
13	1.10E	6.85E	3.31	7.58	44.69	1.08	0.39	0.04	0.00	2.05	1.07	9.67	
14	1.10	5.98E	3.19E	8.82	14.07	0.80	0.33	0.03	0.00	1.39	2.81	6.48	
15	1.07	5.19E	3.00E	6.53	8.73	0.78	0.59	0.03	0.0 T	1.29	7.26	5.02	
16	1.02	4.49E	2.89E	5.47	8.48	1.45	0.54	0.02	0.0	0.59	3.68	5.62	
17	1.70	3.87E	2.72E	4.83	6.64	3.49	0.30	0.02	0.0	0.43	2.84	5.92	
18	2.40	3.32E	3.14	4.17	5.06	2.27	0.26	0.02	0.0	0.34	2.39	4.74	
19	1.63	2.94E	6.35	5.04E	4.21	0.95	0.23	0.02	0.0	0.30	2.10	4.10	
20	1.33E	2.72E	8.38	15.40	3.61	0.78	0.69	0.02	0.0	0.31	2.68	3.45	
21	1.20E	2.56E	6.38	8.22	3.12	1.38	0.36	0.02	0.0	1.11	2.31	3.12	
22	1.15E	2.45E	7.60	6.13	2.73	0.87	0.24	0.02	0.0	0.91	1.85	12.18	
23	1.15E	2.35E	8.10	5.45	2.43	0.67	0.27	0.03	0.0	0.64	1.51	8.85	
24	1.15	2.25E	7.04	111.37	3.19	0.58	0.22	0.02	0.0	0.52	1.24	6.24	
25	1.66	2.15E	6.66	21.21	5.04	0.57	0.14	0.02	2.77	0.44	1.20	4.83	
26	4.63	1.85	10.32	13.20	3.45	0.84	0.17	0.01	1.42	0.40	1.40	4.03	
27	2.43	1.68	7.85	9.80	2.27	0.78	0.20	0.01	1.82	0.37	1.53	3.38	
28	6.81	1.60	6.52	7.97	1.88	0.50	0.18	0.00	0.42	0.29	1.47	2.90	
29	95.10	5.76	6.48	1.61	0.53	0.32	0.00	0.16	0.46	3.10	2.51	0.0	
30	15.01	5.28	5.39	1.43	0.44	0.44	1.87	0.00	0.11	2.87	3.65	2.30	
31	9.38	4.74	1.32	1.32	1.32	0.53	0.0 T	0.0	1.55	0.0	2.10	0.0	
MEAN	5.503	6.828	6.219	15.065	5.278	1.162	0.607	0.059	0.296	0.738	2.554	4.561	
INCHES	1.580	1.771	1.785	4.186	1.515	0.323	0.174	0.017	0.082	0.212	0.709	1.310	
STA AV	1.480	1.635	2.409	1.993	1.204	0.807	0.596	0.195	0.126	0.186	0.360	0.812	

NOTES: To convert CFS to IN/DAY, multiply by 0.0092613. STA AV based on 33 yr period.

1970			SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 95		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970											
1-29	RG 000039 0.0	0.029	1-29	RG 000039			1-29				
				142	0.0	0.0		230	46.800	0.0	
				146	2.2506	0.15		234	55.600	0.0013	
				202	0.4126	0.26		236	67.000	0.0021	
				240	0.4579	0.55		240	74.200	0.0039	
				302	0.5454	0.75		241	88.000	0.0044	
WATERSHED CONDITIONS: Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice.				322	0.2701	0.84		242	96.800	0.0050	
				354	0.0562	0.87		244	109.000	0.0063	
				422	0.0857	0.91		246	121.000	0.0078	
				502	0.0600	0.95		248	132.000	0.0094	
				602	0.0500	1.00		249	138.000	0.0103	
				642	0.0450	1.03		250	150.000	0.0112	
								252	167.000	0.0132	
								254	180.000	0.0154	
								258	200.000	0.0203	
								300	217.000	0.0230	
								303	249.000	0.0275	
								306	293.000	0.0327	
								319	329.000	0.0407	
								314	370.000	0.0497	
								318	416.000	0.0598	
				320		443.000		443.000	0.0653		
				322		462.000		462.000	0.0711		
				324		490.000		490.000	0.0772		
				326		517.000		517.000	0.0837		
				330		549.000		549.000	0.0975		
				334		582.000		582.000	0.1120		
				338		600.000		600.000	0.1272		
				340		618.000		618.000	0.1350		
				350		609.000		609.000	0.1745		
				356		618.000		618.000	0.1981		
				400		600.000		600.000	0.2138		
				410		568.000		568.000	0.2513		
				420		536.000		536.000	0.2868		
				430		503.000		503.000	0.3202		
				442		462.000		462.000	0.3574		
				450		416.000		416.000	0.3800		
				500		370.000		370.000	0.4053		
				508		329.000		329.000	0.4233		
				514		293.000		293.000	0.4353		
				520		268.000		268.000	0.4461		
				530		244.000		244.000	0.4626		
				540		213.000		213.000	0.4773		
				550		196.000		196.000	0.4905		
				600		186.000		186.000	0.5028		
				612		174.000		174.000	0.5167		
				630		156.000		156.000	0.5358		
				640		147.000		147.000	0.5455		
				652		138.000		138.000	0.5565		
				700		131.000		131.000	0.5634		
				710		123.000		123.000	0.5716		
				728		111.000		111.000	0.5851		
				740		104.000		104.000	0.5934		
				800		94.600		94.600	0.6062		
				818		88.000		88.000	0.6168		
				830		84.000		84.000	0.6234		
				846		78.000		78.000	0.6317		
				910		72.400		72.400	0.6433		
				950		63.600		63.600	0.6608		
				1000		60.300		60.300	0.6648		
				1100		55.600		55.600	0.6872		
				1200		48.200		48.200	0.7072		
				1300		42.700		42.700	0.7247		
				1400		38.900		38.900	0.7404		
				1600		33.000		33.000	0.7681		
				1800		29.800		29.800	0.7923		
				2100		25.300		25.300	0.8242		
				2400		22.100		22.100	0.8516		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00038589.



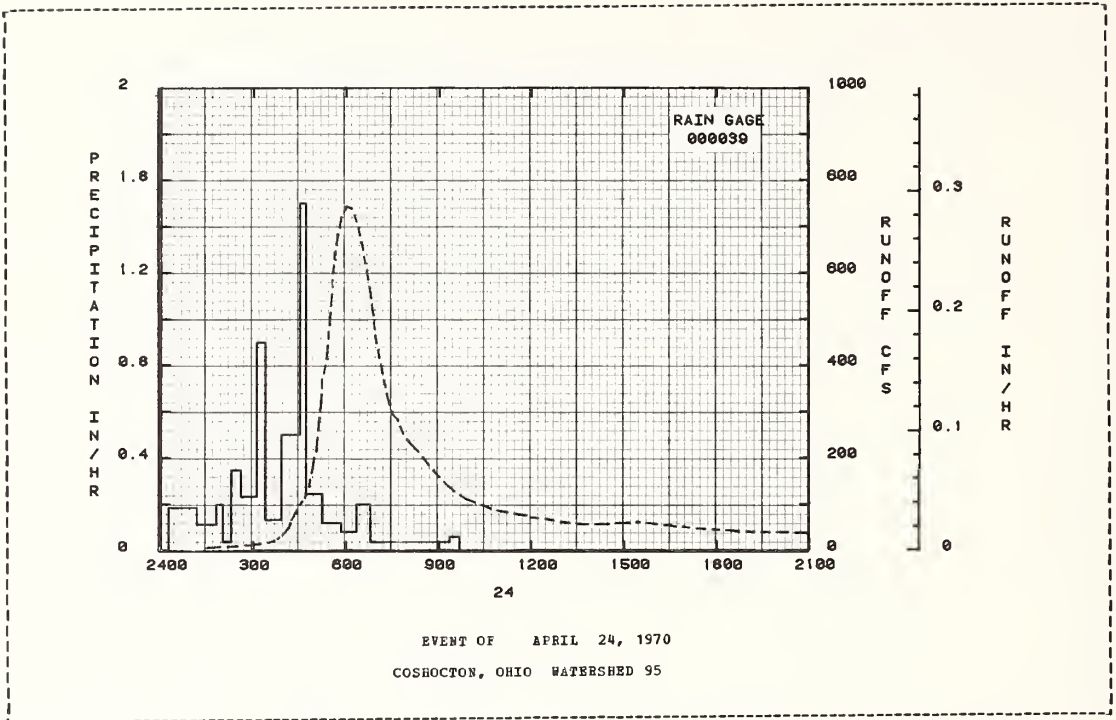
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 95							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	0.0	0.004	4-24	15	0.0	0.0	4-24	130	6.840	0.0
				110	0.1855	0.17		156	8.280	0.0013
				148	0.1105	0.24		230	9.870	0.0033
				200	0.2000	0.28		250	11.600	0.0047
				216	0.0375	0.29		314	14.900	0.0067
				235	0.3474	0.40		330	17.500	0.0084
				306	0.2323	0.52		340	21.300	0.0096
				322	0.9000	0.76		346	25.800	0.0105
				354	0.1312	0.83		350	28.700	0.0112
				430	0.5000	1.13		356	33.000	0.0124
				442	1.5000	1.43		400	38.900	0.0133
				514	0.2438	1.56		404	44.000	0.0144
				550	0.1167	1.63		408	49.600	0.0156
				620	0.0800	1.67		410	54.000	0.0163
				647	0.2000	1.76		412	58.700	0.0170
				920	0.0353	1.85		414	65.300	0.0178
				940	0.0600	1.87		418	74.200	0.0196
								420	80.000	0.0206
								424	88.000	0.0228
								430	99.000	0.0264
								434	106.000	0.0290
								440	114.000	0.0332
								442	124.000	0.0347
								448	138.000	0.0397
								450	153.000	0.0416
								454	174.000	0.0458
								458	200.000	0.0506
								502	217.000	0.0560
								504	244.000	0.0590
								506	261.000	0.0622
								508	287.000	0.0657
								510	308.000	0.0695
								512	336.000	0.0737
								514	370.000	0.0782
								522	416.000	0.0984

WATERSHED CONDITIONS:  
Cover of 15%, cropland; 55%, grassland; 26%, woodland; 4%, miscellaneous; watershed in improved practice.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00038589.

1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WEIBERSHEE 95				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
				4-24				524	443.000	0.1039
								528	499.000	0.1160
								532	554.000	0.1295
								534	600.000	0.1369
								538	646.000	0.1529
								544	683.000	0.1785
								550	720.000	0.2056
								600	743.000	0.2527
								610	738.000	0.3003
								620	710.000	0.3469
								630	664.000	0.3911
								640	600.000	0.4317
								648	545.000	0.4611
								652	508.000	0.4746
								656	462.000	0.4871
								704	416.000	0.5097
								710	382.000	0.5251
								720	329.000	0.5480
								730	293.000	0.5680
								740	281.000	0.5664
								750	252.000	0.6035
								802	233.000	0.6222
								820	213.000	0.6480
								830	198.000	0.6612
								840	184.000	0.6735
								850	170.000	0.6849
								900	158.000	0.6955
								918	138.000	0.7126
								930	127.000	0.7228
								952	111.000	0.7396
								1010	103.000	0.7520
								1030	94.600	0.7647
								1040	90.200	0.7706
								1100	84.000	0.7818
								1130	78.000	0.7974
								1150	74.200	0.8072
								1200	70.500	0.8119
								1230	67.000	0.8252
								1300	60.300	0.8375
								1330	57.100	0.8488
								1350	55.600	0.8560
								1404	55.600	0.8610
								1430	57.100	0.8704
								1450	58.700	0.8778
								1510	58.700	0.8853
								1524	60.300	0.8907
								1530	60.300	0.8930
								1604	55.600	0.9057
								1640	51.000	0.9180
								1738	45.400	0.9360
								1830	41.400	0.9505
								1900	40.100	0.9584
								1930	38.900	0.9660
								2006	38.900	0.9750
								2040	37.700	0.9834
								2110	36.500	0.9906
								2220	34.200	1.0065
								2254	33.300	1.0138
								2320	31.900	1.0192
								2400	31.400	1.0273

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00038589.



## COSHOCTON, OHIO WATERSHED 97

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Little Mill Creek, Walhonding River, Muskingum River Basin.

AREA: 4580.00 acres 7.16 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 97	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 2.39	1.86	3.45	5.91	4.06	3.26	3.29	0.57	3.57	3.82	2.90	2.71	37.79	
	Q 1.524	1.675	1.629	4.174	1.261	0.280	0.136	0.013	0.058	0.175	0.638	1.262	12.825	
STA AV	P 2.95	2.36	3.46	3.49	3.74	4.16	4.43	2.72	2.50	2.24	2.52	2.38	36.96	
	Q 1.713	1.601	2.377	2.031	1.206	0.681	0.624	0.209	0.124	0.164	1.345	0.833	12.109	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days					
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970	4-24	0.287	4-24	0.271	4-24	0.470	4-24	0.794	4-24	0.966	4-24	1.135	4- 1	1.329	1-28	1.786
	6-28	0.720	6-28	0.660	6-28	1.150	7- 5	2.235	7- 5	2.646	1-21	3.240	1-20	3.540	1-18	6.770
	1957		1957		1957		1969		1969		1959		1959		1937	

NOTES: Watershed conditions: Cover of 18% cropland, 50% grassland, 28% woodland, 4% miscellaneous, improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, OSDA Misc. Pub. 945, p. 26.34-5. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, OSDA Misc. Pub. 1070, pp. 26.36-1 and 26.37-2. Precipitation data from rain gages 27, 54, 56 and 91. Precipitation and runoff records began Jan. 1937. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 97	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.78	0.11	1.20	0.45	0.02E	0.0	0.0	0.0	0.15	1.37	0.0		
3	0.16S	0.14S	0.25	0.0	0.0	0.47	0.0	0.0	0.68	0.0	0.0	0.31		
4	0.15S	0.0	0.74	0.0	0.11	0.0	0.0	0.0	0.15	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.05	0.41	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.16	0.0	0.0	0.0	0.0	1.46	0.0	0.03E	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.16	0.18	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.30	0.15	0.0		
11	0.13S	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	1.23	0.0	0.46		
12	0.0	0.04S	0.42S	0.0	0.68	0.31E	0.0	0.0	0.0	0.24	0.08	0.65		
13	0.0	0.03S	0.24S	0.68	1.30	0.0	0.0	0.0	0.0	0.23	0.0	0.11		
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.24	0.65	0.0		
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.15	0.0		
16	0.0	0.0	0.05S	0.0	0.34	0.08E	0.0	0.01	0.0	0.0	0.0	0.27		
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.07		
18	0.07S	0.0	0.09S	0.0	0.0	0.01	0.0	0.0	0.05E	0.0	0.0	0.0		
19	0.0	0.0	0.14	0.32	0.0	0.0	0.04E	0.09	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.09	0.50	0.0	0.0	0.27	0.0	0.01E	0.07	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.03	0.48	0.0	0.17S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.50		
23	0.0	0.0	0.0	0.12	0.02E	0.0	0.09	0.0	0.0	0.0	0.0	0.07S		
24	0.0	0.0	0.0	1.95	0.58	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
25	0.06E	0.0	0.23	0.0	0.39	0.01E	0.0	0.0	1.43	0.0	0.04S	0.04S		
26	0.07M	0.0	0.14	0.0	0.0	0.34	0.0	0.0	0.73	0.0	0.0	0.0		
27	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.08S	0.05S		
28	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0		
29	1.04	0.18S	0.0	0.0	0.0	0.07	0.22	0.0	0.0	0.41	0.38	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.46	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.39	1.86	3.45	5.91	4.06	3.26	3.29	0.57	3.57	3.82	2.90	2.71		
STA AV	2.95	2.36	3.46	3.49	3.74	4.16	4.43	2.72	2.50	2.24	2.52	2.38		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 27, 54, 56 and 91. STA AV based on 34 yr period.

1970		MEAN DAILY DISCHARGE (cfs)					COSHOCTON, OHIO WATERSHED 97					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	4.50	11.27	2.60	8.85	6.82	1.77	0.55	0.43	0.00	1.11	1.79	4.96
2	4.14	60.11	2.80	218.11	8.73	1.69	0.47	0.27	0.00	1.11	13.19	4.14
3	3.64E	29.47E	7.53	37.79	6.70	2.52	0.44	0.21	0.26	0.24	13.15	4.82
4	3.38E	16.13E	36.67	21.33	5.85	2.22	0.52	0.26	1.45	0.12	5.46	5.79
5	3.14	13.20E	27.32	15.00	5.38	4.71	0.38	0.17	0.18	1.08	4.38	4.67
6	2.91	11.45	14.54	12.87	4.65	2.12	0.34	0.12	0.06	0.07	3.08	3.94
7	2.50	9.74	11.05	11.02	4.20	1.60	0.28	0.09	0.04	0.07	2.44	3.51
8	2.15E	9.56	8.93	8.86	3.91	1.36	4.75	0.07	0.03	0.07	2.92	3.25
9	2.06E	31.72	7.65	7.79	3.51	1.19	4.31	0.09	0.02	0.07	1.77	3.13
10	2.02	19.72	6.73	6.79	3.19	1.08	1.94	0.20	0.02	0.19	1.97	2.81
11	1.98	13.14	5.99	6.13	3.08	1.01	1.16	0.11	0.01	6.49	1.73	3.81
12	1.90	11.00E	5.55E	5.73	6.03	2.44	3.74	0.07	0.01	1.46	1.76	31.59
13	1.77	9.88E	5.38	11.63	62.26	1.64	0.59	0.05	0.01	2.93	1.68	16.96
14	1.69	8.88E	5.14	13.93	22.15	1.12	0.50	0.04	0.01	1.71	3.28	10.47
15	1.69	7.96E	4.97	9.90	12.60	1.07	0.65	0.04	0.01	1.96	11.26	7.77
16	1.69	7.13E	4.89	8.31	12.37	1.72	1.04	0.03	0.00	1.88	6.14	8.72
17	2.55	6.36E	4.73	7.53	9.80	5.66	0.40	0.03	0.00	0.69	4.82	9.48
18	3.71	5.65E	5.72	6.62	7.77	4.90	0.33	0.02	0.00	1.57	3.92	7.63
19	2.52E	5.22E	9.82	8.00	6.45	1.63	0.31	0.02	0.01	0.51	3.51	6.89
20	2.02E	5.06E	13.51	26.46	5.35	1.21	0.79	0.02	0.00	0.52	4.25	5.73
21	1.71E	4.81E	13.31	12.86	4.61	2.12	0.57	0.02	0.01	1.58	3.61	5.33
22	1.17E	4.57E	12.26	9.44	3.94	1.48	0.32	0.02	0.01	1.44	3.02	21.82
23	0.95E	4.43E	12.81	8.45	3.55	1.06	0.31	0.03	0.00	0.57	2.41	15.79
24	0.95E	4.20E	10.94	213.09	4.16	0.89	0.30	0.03	0.00	0.81	1.94	10.34
25	1.73E	10.22	39.10	7.32	0.81	0.21	0.02	0.02	3.56	0.69	1.98	8.42
26	8.14	2.92	16.74	22.43	5.14	1.08	0.20	0.02	1.46	0.59	2.35	7.15
27	4.12	2.64	12.13	15.34	3.45	1.31	0.23	0.01	3.10	0.50	2.64	5.99
28	10.53E	2.55	9.98	12.33	2.99	1.75	0.22	0.01	0.50	0.44	2.55	5.31
29	169.31E	9.18	9.56	2.59	0.75	0.29	0.01	0.24	0.63	4.48	4.66	4.66
30	27.29	8.19	8.20	2.11	0.63	2.30	0.00	0.15	4.31	6.49	4.13	4.13
31	15.33	7.23	1.94	1.94	1.94	0.83	0.00	0.00	2.85	2.85	3.77	3.77
MEAN	9.458	11.513	10.113	26.772	7.826	1.797	0.847	0.079	0.373	1.087	4.394	7.832
INCHES	1.524	1.675	1.629	4.174	1.261	0.280	0.136	0.013	0.058	0.175	0.638	1.262
STA AV	1.713	1.601	2.377	2.031	1.236	0.881	0.624	0.209	0.124	0.164	0.345	0.833

NOTES: To convert CFS to IN/DAY, multiply by 0.0051969. STA AV based on 34 yr period.

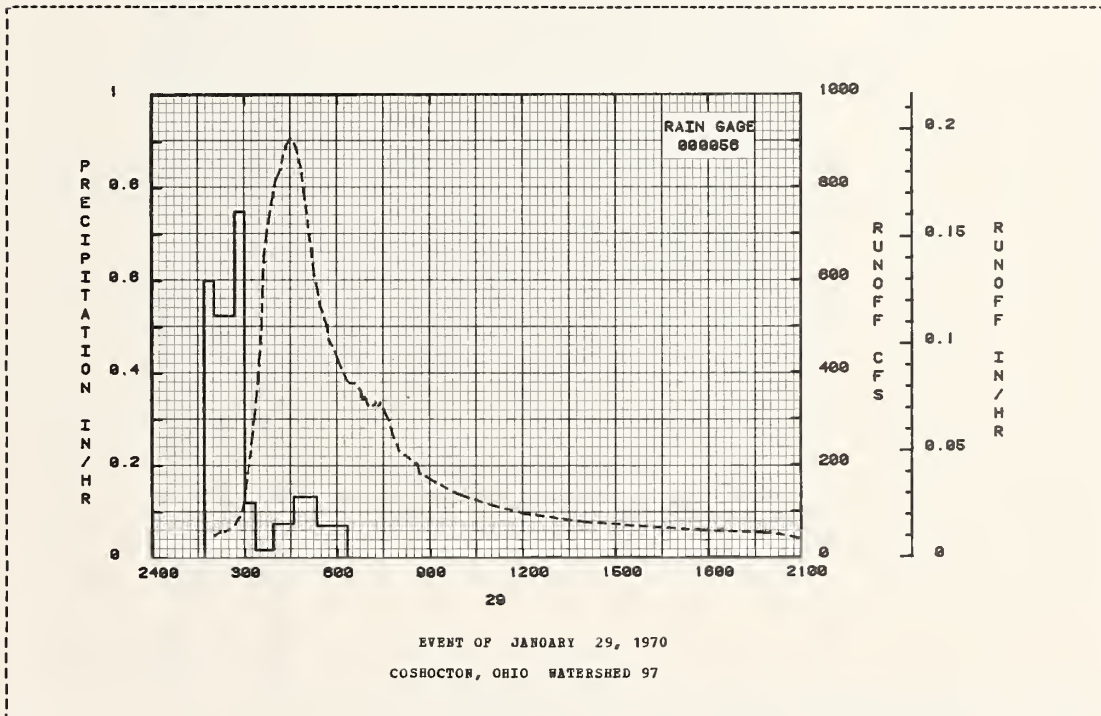
1970		SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 97					
ANTECEDENT CONDITIONS		RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970										
1-29	RG 000056	0.019	1-29	RG 000056	140	0.0	1-29	200	49.900	0.0
					200	0.5997		212	57.500	0.0023
					240	0.5251		220	57.500	0.0040
					300	0.7496		230	63.700	0.0062
					320	0.1200		240	72.900	0.0087
WATERSHED CONDITIONS:					355	0.0171		250	89.600	0.0116
Cover of 18%, cropland; 50%,					435	0.0750		256	110.000	0.0138
grassland; 28%, woodland;					520	0.1333		300	135.000	0.0156
4%, miscellaneous; watershed					620	0.0700		304	170.000	0.0178
in improved practice.								308	202.000	0.0205
								314	260.000	0.0255
								318	298.000	0.0295
								320	322.000	0.0317
								324	362.000	0.0366
								326	388.000	0.0393
								328	426.000	0.0422
								330	449.000	0.0454
								332	481.000	0.0487
								333	504.000	0.0505
								334	550.000	0.0524
								335	574.000	0.0544
								336	610.000	0.0565
								338	654.000	0.0611
								344	710.000	0.0758
								350	750.000	0.0916
								356	790.000	0.1082
								400	814.999	0.1198
								410	840.000	0.1496
								420	890.000	0.1808
								430	908.000	0.2133
								440	890.000	0.2457
								450	845.000	0.2770
								456	790.000	0.2947
								500	760.000	0.3059
								506	700.000	0.3217

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0021654.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 97				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	510	666.000	0.3316
								516	610.000	0.3454
								524	569.000	0.3624
								526	550.000	0.3664
								532	532.000	0.3781
								540	504.000	0.3931
								544	472.000	0.4001
								550	460.000	0.4102
								600	435.000	0.4264
								608	412.000	0.4386
								620	383.000	0.4558
								624	378.000	0.4613
								634	378.000	0.4749
								646	362.000	0.4909
								650	343.000	0.4960
								654	349.000	0.5010
								700	329.999	0.5084
								710	329.999	0.5203
								715	336.000	0.5263
								720	329.999	0.5323
								724	336.000	0.5371
								730	322.000	0.5442
								740	298.000	0.5554
								750	260.000	0.5655
								800	232.000	0.5744
								836	202.000	0.6026
								840	183.000	0.6054
								910	164.000	0.6242
								950	140.000	0.6461
								1015	130.000	0.6583
								1100	114.000	0.6781
								1200	96.000	0.7008
								1400	76.600	0.7382
								1800	57.500	0.7963
								2000	52.500	0.8201
								2400	40.700	0.8605

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.

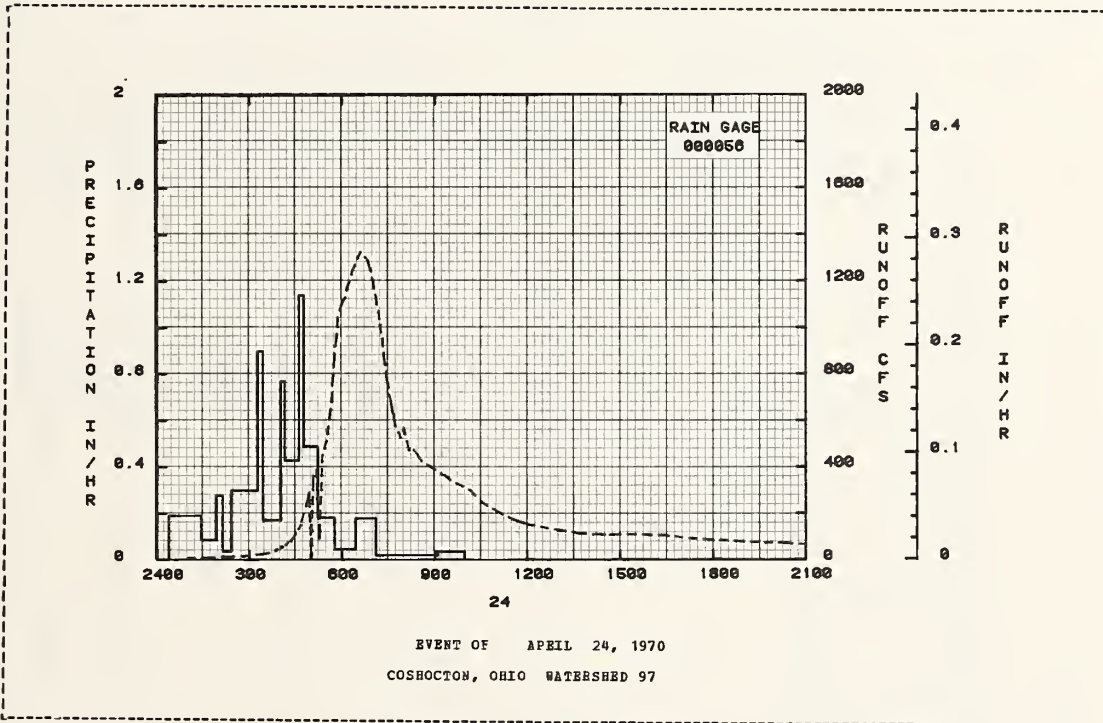


1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 97							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000056 0.0	0.002	4-24	RG 000056 23	0.0	0.0	4-24	100	8.880	0.0
				126	0.1905	0.20		130	9.860	0.0010
				154	0.0857	0.24		152	10.900	0.0018
				207	0.2769	0.30		230	14.100	0.0035
				224	0.0353	0.31		300	19.100	0.0053
WATERSHED CONDITIONS: Cover of 18%, cropland; 50%, grassland; 28%, woodland; 4%, miscellaneous; watershed in improved practice.				316	0.3000	0.57		320	24.200	0.0069
				326	0.9000	0.72		338	31.200	0.0087
				401	0.1714	0.82		350	39.700	0.0102
				408	0.7714	0.91		354	44.900	0.0108
				436	0.4286	1.11		400	52.500	0.0119
				446	1.1400	1.30		404	57.500	0.0127
				513	0.4889	1.52		410	65.200	0.0140
				546	0.1818	1.62		414	72.900	0.0150
				626	0.0450	1.65		420	84.100	0.0167
				706	0.1800	1.77		430	114.000	0.0203
				906	0.0200	1.81		436	135.000	0.0230
				958	0.0346	1.84		440	152.000	0.0251
								442	170.000	0.0263
								446	202.000	0.0290
								452	250.000	0.0339
								456	290.000	0.0378
								500	2.200	0.0399
								504	362.000	0.0425
								510	388.000	0.0506
								516	91.500	0.0558
								522	453.000	0.0617
								526	481.000	0.0684
								530	512.999	0.0756
								532	550.000	0.0794
								534	574.000	0.0835
								536	610.000	0.0878
								538	650.000	0.0924
								540	690.000	0.0972
								542	770.000	0.1025
								544	840.000	0.1083
								546	890.000	0.1146
								550	974.000	0.1281
								552	1046.000	0.1354
								558	1094.000	0.1586
								606	1130.000	0.1907
								610	1172.000	0.2073
								620	1242.000	0.2509
								630	1298.000	0.2968
								636	1326.000	0.3252
								650	1290.999	0.3913
								656	1242.000	0.4187
								700	1199.999	0.4364
								706	1130.000	0.4616
								710	1070.000	0.4775
								714	1010.000	0.4925
								718	950.000	0.5066
								720	890.000	0.5133
								724	840.000	0.5258
								726	790.000	0.5317
								730	740.000	0.5428
								734	690.000	0.5531
								738	634.000	0.5627
								740	625.999	0.5672
								744	574.000	0.5759
								750	550.000	0.5881
								754	527.000	0.5959
								800	569.000	0.6078
								810	472.000	0.6266
								820	472.000	0.6436
								834	426.000	0.6663
								850	402.000	0.6902
								900	388.000	0.7045
								920	362.000	0.7316
								930	343.000	0.7443
								1010	298.000	0.7906
								1030	250.000	0.8104
								1100	210.000	0.8353
								1130	176.000	0.8562
								1154	158.000	0.8707
								1200	152.000	0.8741

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Date	Time	Rate	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	Mo-Day	of Day	(cfs)	
					Acc.			Acc.	
					(inches)			(inches)	
EVENT OF APRIL 24, 1970 (CONTINUED)									
				4-24			1300	127.000	0.9043
							1340	114.000	0.9217
							1430	107.000	0.9416
							1440	107.000	0.9455
							1500	110.000	0.9533
							1530	110.000	0.9652
							1600	105.000	0.9768
							1620	105.000	0.9844
							1714	91.500	1.0035
							1800	84.100	1.0181
							1900	76.600	1.0355
							2020	69.800	1.0566
							2140	63.700	1.0759
							2240	60.600	1.0894
							2330	57.500	1.1001
							2400	57.500	1.1063

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00021654.



## COSHOCTON, OHIO WATERSHED 174

LOCATION: Coshocton Co., Ohio; 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 52.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 174	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41	35.55
	Q	1.481	1.181	1.310	3.261	0.397	0.162	0.976	0.000	0.055	0.114	0.443	1.038	9.577
STA AV	P	2.34	2.06	3.63	3.47	3.22	3.03	4.15	2.41	1.90	2.59	2.31	33.57	
	Q	0.841	1.081	2.263	1.572	0.653	0.287	0.535	0.085	0.050	0.074	0.180	0.452	8.072

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	1-29	0.464	1-29	0.348	1-29	0.503	4- 2	0.741	4- 1	1.060	4- 1	1.222	4- 1	1.339	1-28	1.754
MAXIMUMS FOR PERIOD OF RECORD																
	7- 5	1.0R5	4-25	0.820	4-25	1.110	7- 5	1.802	7- 5	2.154	7- 5	2.365	3- 9	2.540	3- 4	3.710
	1969		1961		1961		1969		1969		1969		1964		1964	

NOTES: Watershed conditions: Cover of 15% hardwoods, 2% reforested, 67% grassland, 16% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26.30-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.38-1 and 26.30-3. Precipitation data from rain gage 107. Precipitation and runoff records began June 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 174	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.14S	0.70	0.08	1.18	J.44	0.0	0.0	0.0	0.0	0.21	1.04	0.0	0.0	0.0
3	0.15S	0.14S	0.22	0.0	0.0	0.86	J.0	J.0	J.60	0.0	0.0	0.29	0.0	0.0
4	0.19S	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0
5	J.05S	0.0	0.0	0.0	0.02E	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.06S	0.0	0.0	J.10E	J.0	J.0	0.0	0.0	0.0	J.0	J.0	0.0	0.0	0.0
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.14	0.0	J.0	J.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.19	0.15	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.10	0.0	0.0	0.0
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	0.0	0.40	0.0	0.0
12	J.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.20	0.14	0.60	0.0	0.0
13	0.0	0.03S	0.24S	0.40	1.00	0.0	0.0	0.0	0.0	0.15	0.0	0.10	0.0	0.0
14	0.0	J.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.60	0.0	0.0	0.0
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.15	0.0	0.0	0.0
16	0.0	0.0	0.05S	0.0	0.33	0.10	0.0	0.05	0.0	0.0	0.0	0.25	0.0	0.0
17	J.07E	0.0	0.21S	0.0	0.0	1.30	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0
18	0.07S	0.0	0.39S	0.0	0.0	0.01E	0.0	J.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.12	0.20	0.0	0.0	0.10	0.02E	0.0	0.0	0.0	0.0	0.0	0.0
20	0.33S	0.0	0.08S	0.60	0.0	0.0	0.33	0.0	0.0	0.35	0.22	0.0	0.0	0.0
21	0.0	0.0	0.0	J.0	0.0	0.40	0.0	0.0	0.09	0.42	0.0	0.10S	0.0	0.0
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.49	0.0	0.0
23	0.0	0.0	0.0	0.08	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.05S	0.0	0.0
24	0.0	0.0	0.0	1.86	0.47	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0
25	J.06E	J.0	0.20	0.0	0.45	0.0	0.0	0.0	1.69	0.0	0.0	0.03S	0.0	0.0
26	J.07M	0.0	0.07	0.0	0.0	0.37	0.0	J.0	0.72	0.0	0.0	0.0	0.0	0.0
27	0.11S	0.0	0.0	0.0	0.0	J.0	J.0	0.0	J.30	0.0	0.05S	J.04S	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0
29	1.10	0.1RS	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.41	0.39	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.48	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	2.47	1.76	3.27	5.37	3.43	3.48	3.03	J.39	3.61	3.59	2.74	2.41		
STA AV	2.34	2.06	3.63	3.47	3.22	3.03	4.15	2.41	2.46	1.90	2.59	2.31		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 11 yr period, part-year records included.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 174												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	0.099	0.010	0.367	0.022	0.001	0.003	0.001	0.0	0.0	0.004	0.024
2	0.024	0.747	0.013	2.429	0.058	0.001	0.003	0.0	0.0	0.0	0.263	0.017
3	0.021	0.192	0.095	0.252	0.030	0.047	0.002	0.0	0.0	0.0	0.070	0.034
4	0.319	0.094	0.602	0.139	0.021	0.305	0.001	0.0	0.0	0.0	0.017	0.044
5	0.017	0.069	0.214	0.099	0.019	0.036	0.001	0.0	0.0	0.0	0.013	0.019
6	0.013	0.050	0.126	0.083	0.017	0.005	0.001	0.0	0.0	0.0	0.011	0.015
7	0.010	0.350	0.089	0.069	0.015	0.002	0.0	0.0	0.0	0.0	0.010	0.013
8	0.010	0.120	0.068	0.047	0.013	0.001	0.044	0.0	0.0	0.0	0.008	0.013
9	0.008	0.470	0.052	0.036	0.011	0.001	0.724	0.0	0.0	0.0	0.007	0.013
10	0.007	0.161	0.034	0.030	0.010	0.001	0.007	0.0	0.0	0.0	0.006	0.011
11	0.007	0.099	0.033	0.024	0.010	0.001	0.005	0.0	0.0	0.122	0.005	0.059
12	0.006	0.069	0.030	0.021	0.028	0.001	0.003	0.0	0.0	0.007	0.009	0.528
13	0.005	0.047	0.033	0.074	0.302	0.001	0.002	0.0	0.0	0.021	0.013	0.150
14	0.005	0.036	0.033	0.057	0.050	0.0 T	0.001	0.0	0.0	0.004	0.070	0.089
15	0.005	0.033	0.024	0.039	0.024	0.0	0.002	0.0	0.0	0.002	0.139	0.064
16	0.005	0.033	0.019	0.030	0.059	0.001	0.002	0.0	0.0	0.001	0.033	0.115
17	0.320	0.033	0.019	0.024	0.028	0.161	0.0	0.0	0.0	0.001	0.019	0.093
18	0.058	0.044	0.060	0.021	0.015	0.023	0.0	0.0	0.0	0.001	0.017	0.059
19	0.022	0.038	0.127	0.042	0.013	0.003	0.0 T	0.0	0.0	0.001	0.015	0.047
20	0.013	0.017	0.127	0.340	0.011	0.001	0.004	0.0	0.0	0.0 T	0.035	0.036
21	0.008	0.013	0.073	0.075	0.010	0.013	0.003	0.0	0.0	0.008	0.025	0.033
22	0.007	0.020	0.115	0.059	0.008	0.005	0.0 T	0.0	0.0	0.004	0.015	0.372
23	0.007	0.022	0.128	0.045	0.007	0.004	0.0 T	0.0	0.0	0.001	0.011	0.163
24	0.007	0.017	0.108	2.186	0.011	0.004	0.0	0.0	0.0	0.001	0.008	0.110
25	0.026	0.013	0.124	0.246	0.046	0.003	0.0	0.0	0.075	0.001	0.008	0.073
26	0.118	0.010	0.187	0.147	0.021	0.008	0.0	0.0	0.021	0.001	0.010	0.064
27	0.046	0.010	0.094	0.099	0.006	0.010	0.0	0.0	0.026	0.001	0.011	0.050
28	0.284	0.010	0.078	0.069	0.005	0.005	0.0	0.0	0.0	0.0	0.013	0.046
29	2.133		0.081	0.047	0.003	0.004	0.024	0.0	0.0	0.002	0.066	0.036
30	0.221		0.059	0.033	0.002	0.003	0.029	0.0	0.0	0.063	0.047	0.024
31	0.126		0.047		0.002		0.003	0.0		0.010		0.021
MEAN	0.1060	0.0936	0.0937	0.2411	0.0284	0.0120	0.0054	0.0	0.0041	0.0082	0.0327	0.0786
INCHES	1.481	1.181	1.310	3.261	0.357	0.162	0.076	0.000	0.055	0.114	0.443	1.098
STA AV	0.841	1.081	2.263	1.572	0.653	0.287	0.535	0.085	0.050	0.074	0.180	0.452

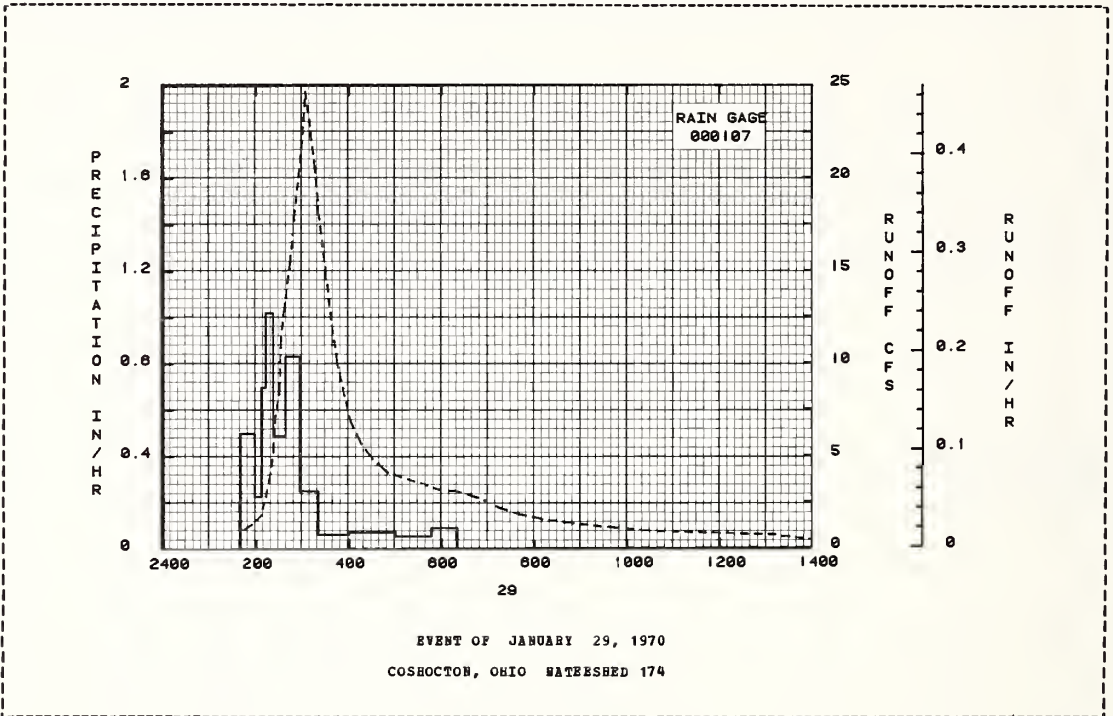
NOTES: To convert CFS to IN/DAY, multiply by 0.45079. STA AV based on 11 yr period, part-year records included.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 174												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	0.0	0.034	1-29	140	0.0	0.0	1-29	142	1.000	0.0		
				158	0.4999	0.15		154	1.320	0.0044		
				206	0.2251	0.18		200	1.560	0.0071		
				212	0.6993	0.25		206	1.840	0.0103		
				222	1.0200	0.42		208	2.160	0.0116		
WATERSHED CONDITIONS:			238	0.4872	0.55		210	2.480	0.0130			
Cover of 15%, hardwoods; 2%,			256	0.8139	0.80		214	3.220	0.0166			
reforested; 67%, grassland;			320	0.2499	0.50		218	4.100	0.0212			
16%, miscellaneous; watershed			400	0.0600	0.94		222	5.380	0.0271			
in improved practice.			500	0.0700	1.01		224	6.880	0.0310			
			546	0.0522	1.05		230	8.620	0.0456			
			620	0.0882	1.10		232	11.500	0.0519			
							236	12.900	0.0672			
							244	15.590	0.1028			
							250	18.300	0.1346			
							258	21.300	0.1842			
							304	24.700	0.2274			
							316	20.700	0.3127			
							322	17.800	0.3488			
							330	15.000	0.3899			
							338	12.000	0.4237			
							346	9.800	0.4510			
							354	8.270	0.4736			
							402	6.880	0.4926			
							416	5.650	0.5201			
							430	4.850	0.5431			
							450	4.100	0.5711			
							600	3.120	0.6502			
							616	3.120	0.6658			
							646	2.740	0.6933			
							716	2.160	0.7163			
							740	1.840	0.7313			
							810	1.560	0.7473			
							850	1.320	0.7653			
							940	1.100	0.7842			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01878287.

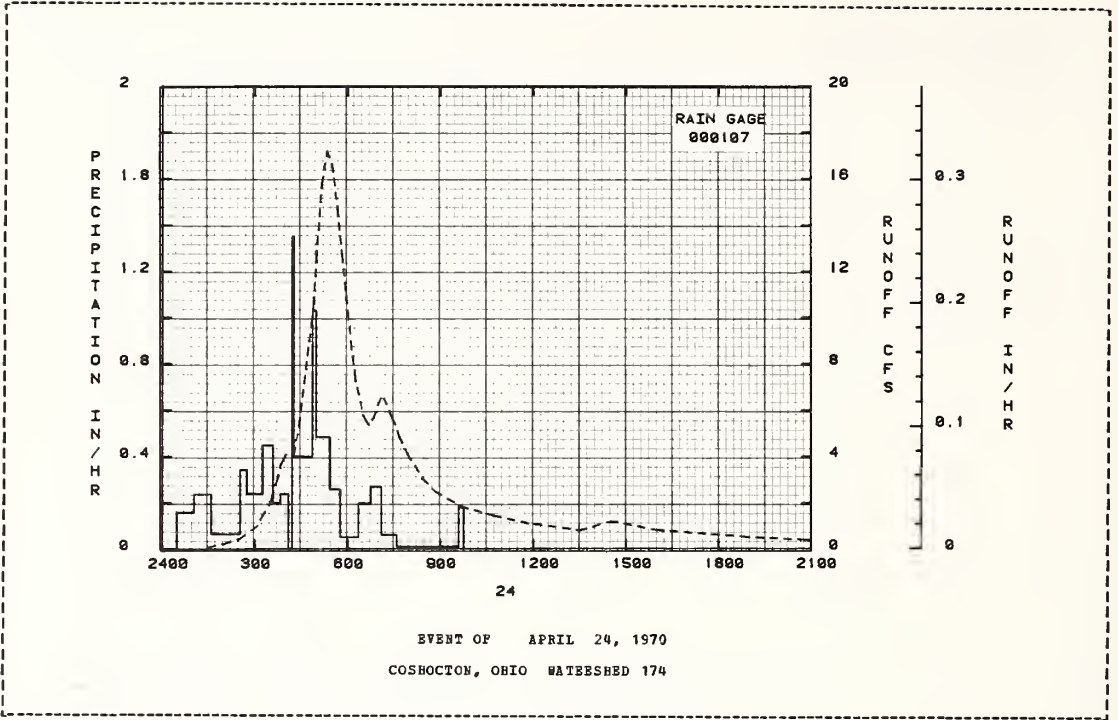
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	10 30	0.900	0.7999
								13 12	0.690	0.8403
								18 00	0.390	0.8893
								24 00	0.290	0.9282

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.01878287.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 174							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000107 0.0	0.002	4-24	EG 000107 28	0.0	0.0	4-24	130	0.090	0.0
				102	0.1588	0.09		200	0.250	0.0016
				135	0.2364	0.22		230	0.450	0.0049
				231	0.0643	0.28		304	1.000	0.0126
				245	0.3429	0.36		314	1.440	0.0164
WATERSHED CONDITIONS: Cover of 15%, hardwoods; 2%, reforested; 67%, grassland; 16%, miscellaneous; watershed in improved practice.				315	0.2400	0.48		320	1.630	0.0193
				335	0.4500	0.63		330	2.000	0.0250
				350	0.2000	0.68		336	2.480	0.0292
				405	0.2400	0.74		346	3.220	0.0381
				412	0.0	0.74		350	3.640	0.0424
				416	1.3500	0.83		400	4.100	0.0545
				452	0.4000	1.07		416	4.100	0.0750
				459	1.0286	1.19		426	5.380	0.0898
				525	0.4846	1.40		434	6.880	0.1052
				546	1.2571	1.49		440	8.100	0.1192
				621	0.0514	1.52		450	9.800	0.1472
				645	0.2000	1.60		454	10.600	0.1600
				705	0.2700	1.69		500	12.900	0.1821
				735	0.0600	1.72		510	15.800	0.2270
				935	0.0100	1.74		520	17.200	0.2787
				945	0.1800	1.77		530	16.600	0.3316
								540	14.700	0.3805
								550	12.400	0.4229
								600	10.200	0.4583
								608	8.620	0.4819
								616	7.250	0.5018
								630	5.780	0.5304
								640	5.380	0.5479
								650	5.650	0.5652
								704	6.530	0.5919
								710	6.530	0.6041
								722	5.900	0.6274
								732	5.380	0.6451
								740	4.850	0.6579
								756	4.100	0.6803
								826	3.020	0.7137
								850	2.480	0.7344
								940	1.840	0.7682
								1044	1.440	0.8011
								1150	1.100	0.8273
								1330	0.810	0.8573
								1430	1.200	0.8762
								1600	0.810	0.9046
								1900	0.510	0.9420
								2400	0.370	0.9834

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01878287.





COSHOCTON, OHIO WATERSHED 194

LOCATION: Coshocton Co., Ohio 10 mi. NE of Coshocton; Tuscarawas River, Muskingum River Basin.

AREA: 187.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 194	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41	35.55	
	Q 1.945	1.893	2.044	4.116	1.178	0.500	0.217	0.049	0.099	0.302	0.740	1.547	14.631	
STA AV	P 2.39	2.16	3.39	3.30	3.19	3.03	4.15	2.41	2.46	1.90	2.59	2.31	33.28	
	Q 1.310	1.620	3.114	2.301	1.350	0.587	0.716	0.155	0.109	0.173	0.348	0.764	12.548	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days				
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	1-29	0.298	1-29	0.245	1-29	0.372	4- 2	0.607	4- 1	0.893	4- 1	1.118	4- 1	1.316	1-28	1.963

MAXIMUMS FOR PERIOD OF RECORD																						
Date	Maximum Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.									
1969	7- 5	0.959	1961	4-25	0.680	1961	4-25	0.930	1969	7- 5	1.620	1969	7- 5	1.979	1969	2.269	1964	3- 9	2.600	1964	3- 4	3.890

NOTES: Watershed conditions: Cover of 21% hardwoods, 2% reforested, 58% grassland, 11% cultivated, 8% miscellaneous, watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 26.30-4. For Geology description and map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, pp. 26.39-1 and 26.30-3. Precipitation data from rain gage 107. Precipitation and runoff records began Jan. 1960. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO WATERSHED 194	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.14S	0.70	0.08	1.18	0.44	0.0	0.0	0.0	0.0	0.21	1.04	0.0		
3	0.15S	0.14S	0.22	0.0	0.0	0.86	0.0	0.0	0.60	0.0	0.0	0.29		
4	0.19S	0.0	0.75	0.0	0.08	0.0	0.0	0.0	0.15	0.0	0.0	0.0		
5	0.05S	0.0	0.0	0.0	0.02E	0.34	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.06S	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.14	0.0	0.0	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.26	0.01S	0.0	0.0	0.0	0.19	0.15	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.10	0.0		
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	0.0	0.40		
12	0.0	0.04S	0.42S	0.0	0.60	3.10	0.0	0.0	0.0	0.20	0.14	0.60		
13	0.0	0.03S	0.24S	0.40	1.00	0.0	0.0	0.0	0.0	0.15	0.0	0.10		
14	0.0	0.0	0.11S	0.08	0.0	0.0	0.0	0.0	0.0	0.17	0.60	0.0		
15	0.0	0.30H	0.03S	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.15	0.0		
16	0.0	0.0	0.05S	0.0	0.33	0.10	0.0	0.05	0.0	0.0	0.0	0.25		
17	0.07E	0.0	0.21S	0.0	0.0	1.30	0.0	0.0	0.0	0.0	0.0	0.06		
18	0.07S	0.0	0.09S	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.12	0.20	0.0	0.0	0.10	0.02E	0.0	0.0	0.0	0.0		
20	0.03S	0.0	0.08S	0.60	0.0	0.0	0.33	0.0	0.0	0.95	0.22	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.09	0.42	0.0	0.10S		
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.49		
23	0.0	0.0	0.0	0.08	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.05S		
24	0.0	0.0	0.0	1.86	0.47	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
25	0.06E	0.0	0.20	0.0	0.49	0.0	0.0	0.0	1.69	0.0	0.0	0.03S		
26	0.07H	0.0	0.97	0.0	0.0	0.37	0.0	0.0	0.72	0.0	0.0	0.0		
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.05S	0.04S		
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0		
29	1.10	0.0	0.18S	0.0	0.0	0.0	0.45	0.0	0.0	0.41	0.39	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.48	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	2.47	1.76	3.27	5.37	3.43	3.48	3.03	0.39	3.61	3.59	2.74	2.41		
STA AV	2.39	2.16	3.39	3.30	3.19	3.03	4.15	2.41	2.46	1.90	2.59	2.31		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 107. STA AV based on 11 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 194												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.215	0.670	0.131	1.266	0.378	3.086	0.042	0.024	0.004	0.010	0.062	0.152
2	0.215	2.870	0.156	8.102	0.534	0.094	0.037	0.018	0.003	0.016	1.372	J.131
3	0.201	1.110	0.442	1.487	0.378	0.422	0.037	0.015	0.002	0.012	0.457	0.212
4	0.188	0.670E	2.040	0.945	0.340	0.142	0.037	0.018	0.004	0.010	0.189	J.302
5	0.188	0.549	1.047	0.730	0.307	0.270	0.037	0.021	0.006	0.010	0.142	0.188
6	0.176	0.437	0.675	0.648	0.274	0.131	0.037	0.018	0.005	0.008	0.112	0.176
7	0.164	0.417	0.545	0.557	0.258	0.112	0.037	0.015	0.007	0.006	0.094	0.152
8	0.164	0.592	0.458	0.458	0.229	0.094	0.254	0.015	0.007	0.006	0.079	0.141
9	0.152	1.810	0.361	0.378	0.215	0.086	0.153	0.022	0.004	0.006	0.059	0.131
10	0.131	0.886	0.395	0.322	0.215	0.386	0.072	0.021	0.004	0.022	0.083	0.121
11	0.131	0.622	0.305	0.305	0.201	0.079	0.052	0.015	0.005	0.761	0.058	0.284
12	0.131	0.481	0.289	0.289	0.312	0.091	0.042	0.015	0.006	0.067	0.068	1.806
13	0.121	0.378	0.274	0.441	1.570	0.079	0.037	0.015	0.006	0.194	0.058	0.726
14	0.168	0.322	0.244	0.436	0.453	0.072	0.037	0.015	0.005	0.056	0.245	0.513
15	0.178	0.305	0.201	0.361	0.307	0.072	0.048	0.015	0.004	0.037	0.438	0.390
16	0.192	0.289	0.188	0.289	0.414	0.071	0.047	0.015	0.003	0.028	0.215	0.503
17	0.185	0.274	0.201	0.274	0.307	0.749	0.037	0.012	0.003	0.028	0.169	0.479
18	0.265	0.326	0.341	0.274	0.258	0.192	0.037	0.008	0.004	0.028	0.152	0.359
19	0.176	0.296	0.647	0.356	0.229	0.094	0.038	0.006	0.005	0.024	0.131	0.322
20	0.164	0.215	0.718	1.320	0.215	0.086	0.085	0.006	0.006	0.019	0.207	0.274
21	0.164	0.215	0.545	0.570	0.201	0.205	0.034	0.006	0.008	0.055	0.142	0.253
22	0.164	0.215	0.691	0.458	0.176	0.103	0.021	0.008	0.003	0.037	0.121	1.232
23	0.164	0.189	0.680	0.405	0.176	0.072	0.021	0.010	0.002	0.024	0.103	0.730
24	0.164	0.176	0.592	7.053	0.219	0.058	0.021	0.010	0.002	0.021	0.086	0.528
25	0.220	0.154	0.652	1.450	0.342	0.058	0.021	0.010	0.445	0.021	0.094	0.417
26	0.601	0.131	0.866	0.942	0.226	0.094	0.021	0.008	0.079	0.021	0.112	0.378
27	0.283	0.141	0.592	0.730	0.131	0.072	0.021	0.006	0.117	0.015	0.121	0.307
28	0.854	0.131	0.522	0.592	0.121	0.052	0.021	0.006	0.012	0.010	0.112	0.258
29	6.865		0.531	0.481	0.112	0.056	0.112	0.005	0.010	0.031	0.245	0.243
30	1.410		0.437	0.417	0.094	0.047	0.138	0.004	0.010	0.601E	0.240	0.229
31	0.885		0.378		0.086		0.032	0.004		0.182E		0.215
MEAN	0.4929	0.5312	0.5180	1.0780	0.2984	0.1310	0.0551	0.0125	0.0261	0.0765	0.1937	0.3921
INCHES	1.945	1.893	2.044	4.116	1.178	0.500	0.217	0.049	0.099	0.302	0.740	1.547
STA AV	1.310	1.620	3.114	2.301	1.350	0.587	0.716	0.155	0.109	0.173	3.348	0.764

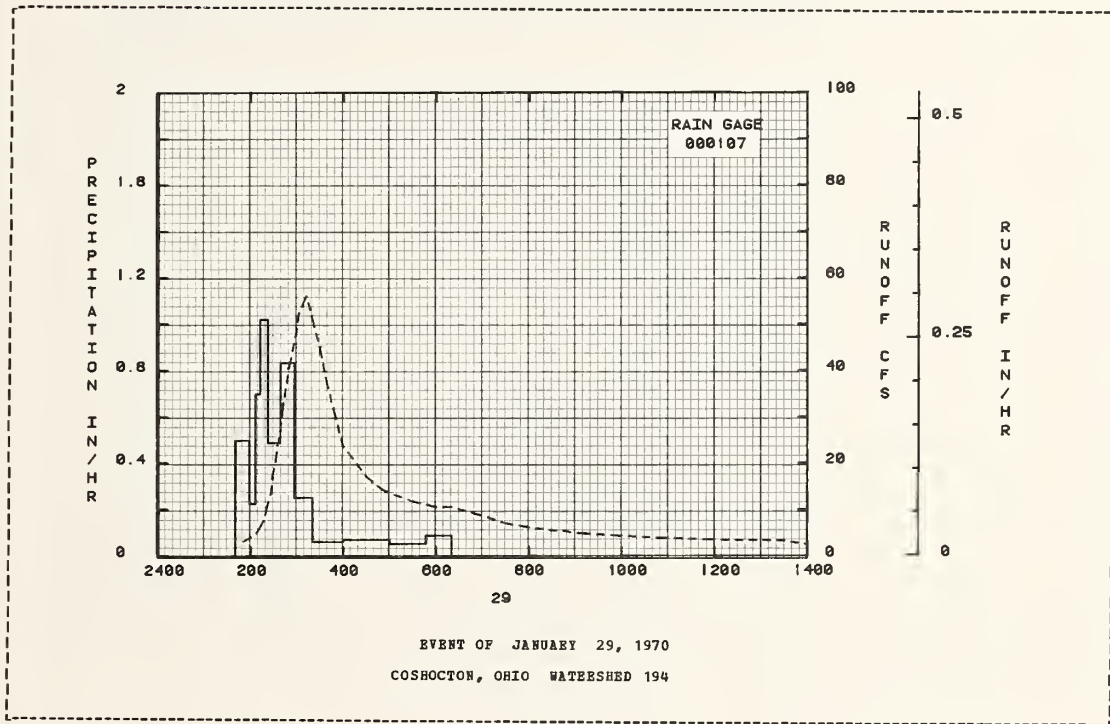
NOTES: To convert CPS to IN/DAY, multiply by 0.12728. STA AV based on 11 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 194												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Ennoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	0.0	0.031	1-29	140	0.0	0.0	1-29	150	3.150	0.0		
				158	0.4999	0.15		200	4.080	0.0032		
				206	0.2251	0.18		208	5.180	0.0065		
				212	0.6993	0.25		216	7.460	0.0110		
				222	1.9200	0.42		220	10.300	0.0141		
WATERSHED CONDITIONS:				238	0.4872	0.55		226	13.600	0.0204		
21%, hardwoods; 2%, re-				256	0.8339	0.80		228	17.400	0.0231		
forested; 58%, grassland;				320	0.2499	0.90		232	21.000	0.0299		
11%, cultivated; 8%, miscel-				400	0.0600	0.94		238	27.200	0.0427		
laneous; watershed in				500	0.0700	1.01		242	33.100	0.0534		
improved practice.				546	0.0522	1.05		250	41.400	0.0797		
				620	0.0882	1.10		258	47.600	0.1112		
								302	52.500	0.1289		
								312	56.100	0.1769		
								320	50.800	0.2147		
								330	44.300	0.2567		
								340	36.200	0.2922		
								350	29.600	0.3213		
								400	23.500	0.3448		
								412	21.000	0.3684		
								430	17.000	0.3986		
								450	14.300	0.4263		
								458	13.600	0.4362		
								530	11.700	0.4720		
								600	10.500	0.5014		
								620	10.500	0.5200		
								650	9.140	0.5460		
								730	7.000	0.5745		
								800	6.080	0.5918		
								910	4.790	0.6254		
								1000	4.250	0.6454		
								1100	3.750	0.6666		
								1200	3.450	0.6857		
								1330	3.150	0.7120		
								1800	2.360	0.7777		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.09530340.

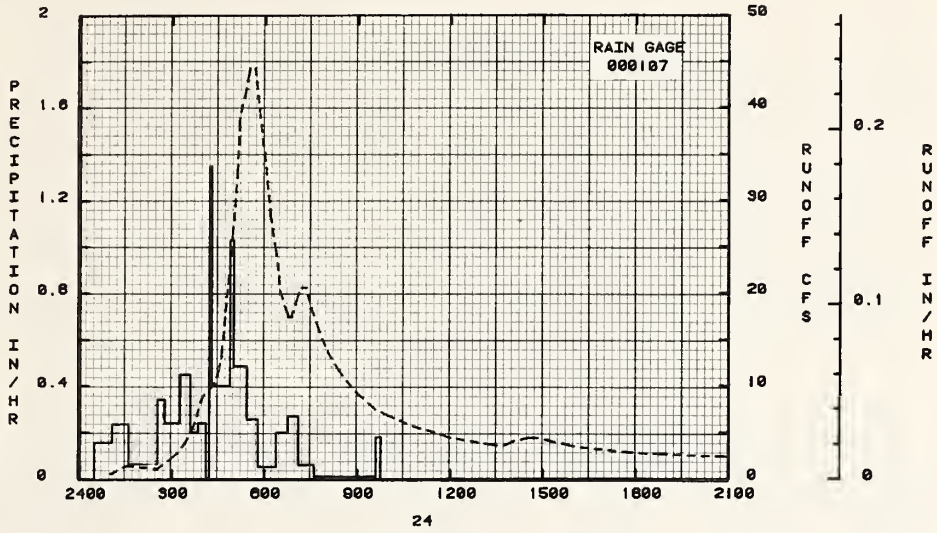
1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 194								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 29, 1970 (CONTINUED)											
									2400	1.750	0.8431

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00530340.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO WATERSHED 194							
ANTECEDENT CONDITIONS			REINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT CP APRIL 24, 1970										
4-24	RG 000107 0.0	0.003	4-24	RG 000107 28	0.0	0.0	4-24	100	0.590	0.0
				102	0.1588	0.09		130	1.390	0.0026
				135	0.2364	0.22		230	1.070	0.0091
				231	0.0643	0.28		300	2.360	0.0136
				245	0.3429	0.36		310	2.850	0.0159
WATERSHED CONDITIONS: 21% hardwoods; 2% reforested; 58% grassland; 11% cultivated; 8% miscellaneous; watershed in improved practice.										
				315	0.2400	0.48		322	3.750	0.0194
				335	0.4500	0.63		330	4.420	0.0223
				350	0.2000	0.68		344	6.080	0.0288
				405	0.2400	0.74		356	8.580	0.0366
				412	0.0	0.74		402	9.140	0.0413
				416	1.3500	0.83		422	10.300	0.0585
				452	0.4000	1.07		430	11.700	0.0663
				459	1.0286	1.19		436	13.600	0.0730
				525	0.4846	1.40		442	17.400	0.0812
				546	0.2571	1.49		450	22.000	0.0951
				621	0.0514	1.52		458	27.200	0.1125
				645	0.2000	1.60		506	33.100	0.1336
				705	0.2700	1.69		510	38.900	0.1465
				735	0.9600	1.72		520	41.400	0.1820
				935	0.0100	1.74		530	44.300	0.2199
				945	0.1800	1.77		540	44.300	0.2590
								550	38.900	0.2958
								600	34.300	0.3282
								610	28.400	0.3559
								622	24.000	0.3837
								630	20.100	0.3993
								640	18.300	0.4163
								646	17.400	0.4258
								650	17.400	0.4320
								706	20.100	0.4585
								710	20.600	0.4657
								720	20.600	0.4839
								730	18.300	0.5011
								746	15.800	0.5252
								802	13.600	0.5460
								830	11.100	0.5766
								900	9.140	0.6034
								934	7.460	0.6283
								1010	6.590	0.6506
								1050	5.620	0.6721
								1116	5.180	0.6845
								1200	4.420	0.7032
								1310	3.750	0.7285
								1330	3.600	0.7350
								1344	3.600	0.7395
								1404	4.080	0.7463
								1430	4.420	0.7561
								1450	4.420	0.7639
								1510	4.080	0.7714
								1600	3.450	0.7880
								1740	2.850	0.8158
								1900	2.590	0.8350
								2100	2.360	0.8613
								2200	2.150	0.8733
								2400	1.950	0.8950

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00530340.



## COSHOCTON, OHIO WATERSHED 182

LOCATION: Coshocton Co., Ohio; 10 mi NE of Coshocton, Tuscarawas River, Walhounding River, Muskingum River Basin.

AREA: 69.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO WATERSHED 182	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	2.62	2.05	3.45	5.63	3.73	3.83	3.29	0.66	3.94	3.97	2.85	2.87	36.89
	Q	1.651	1.732	1.869	3.765	0.994	0.279	0.070	0.005	0.025	0.135	0.689	1.584	12.798
STA AV	P	2.59	1.88	3.63	3.61	3.60	2.77	4.84	2.20	2.80	2.14	2.83	2.76	35.64
	Q	1.120	1.268	2.417	1.888	1.213	0.197	0.904	0.077	0.018	0.069	0.202	0.762	10.135

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1-29	0.332	1-29	0.272	1-29	0.404	1-29	0.632	4- 1	0.837	4- 1	1.026	4- 1	1.215	1-28	1.835
MAXIMUMS FOR PERIOD OF RECORD															
7- 5 1969	0.966	7- 5 1969	0.486	7- 5 1969	0.696	7- 5 1969	1.537	7- 5 1969	1.832	7- 5 1969	2.190	3- 9 1964	2.64C	3- 4 1964	3.960

NOTES: Watershed conditions: Cover of 3% hardwoods, 9% pastured woodland, 5% reforested, 49% grassland, 34% cultivated, prevailing practice except for 10% of area which was strip cropped. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 26.43-2. For Geology description, see foregoing reference, p. 26.40-1. Gage for Watershed 182 is 400 ft. upstream from that of Watershed 183, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164 and earlier publications of this series. Precipitation data from rain gage 119. Precipitation and runoff records began January, 1964. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

Day	DAILY PRECIPITATION (inches)												COSHOCTON, OHIO WATERSHED 182	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.14S	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.14S	0.75	0.09	1.10	0.40	0.0	0.0	0.0	0.0	0.20	1.05	0.0	0.0	
3	0.15S	0.14S	0.23	0.0	0.0	0.93	0.0	0.0	0.57	0.0	0.0	0.0	0.35	
4	0.19S	0.0	0.78	0.0	0.06	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	
5	0.05S	0.0	0.0	0.0	0.04	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.06S	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.24	0.0	0.0	0.0	0.0	1.23	0.0	0.02	0.0	0.0	0.0	0.0	
9	0.0	0.40	0.01S	0.0	0.0	0.0	0.24	0.19	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.19	0.0	0.0	
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.50	0.0	
12	0.0	0.04S	0.42S	0.0	0.60	0.10	0.0	0.0	0.0	0.22	0.09	0.65	0.0	
13	0.0	0.03S	0.24S	0.52	1.29	0.0	0.0	0.0	0.0	0.18	0.0	0.10	0.0	
14	0.0	0.0	0.11S	0.10	0.0	0.0	0.0	0.0	0.0	0.19	0.70	0.0	0.0	
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.15	0.0	0.0	
16	0.0	0.0	0.05S	0.0	0.37	0.10	0.0	0.15	0.0	0.0	0.0	0.0	0.32	
17	0.07E	0.0	0.21S	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.15	0.30	0.0	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.0	
20	0.03S	0.0	0.08S	0.56	0.0	0.0	0.44	0.0	0.03E	0.05	0.25	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.72	0.0	0.0	0.28	0.40	0.0	0.20S	0.0	
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.50	0.0	
23	0.0	0.0	0.0	0.07	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	
24	0.0	0.0	0.0	1.88	0.54	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	
25	0.06E	0.0	0.27	0.0	0.43	0.02E	0.0	0.0	1.61	0.0	0.0	0.05S	0.0	
26	0.07M	0.0	0.10	0.0	0.0	0.28	0.0	0.0	0.61	0.0	0.0	0.0	0.0	
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.07S	0.05S	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	
29	1.25	0.0	0.18S	0.0	0.0	0.05	0.48	0.0	0.0	0.43	0.30	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.57	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	2.62	2.05	3.45	5.63	3.73	3.83	3.29	0.66	3.94	3.97	2.85	2.87	36.89	
STA AV	2.59	1.88	3.63	3.61	3.60	2.77	4.84	2.20	2.80	2.14	2.83	2.76	10.135	

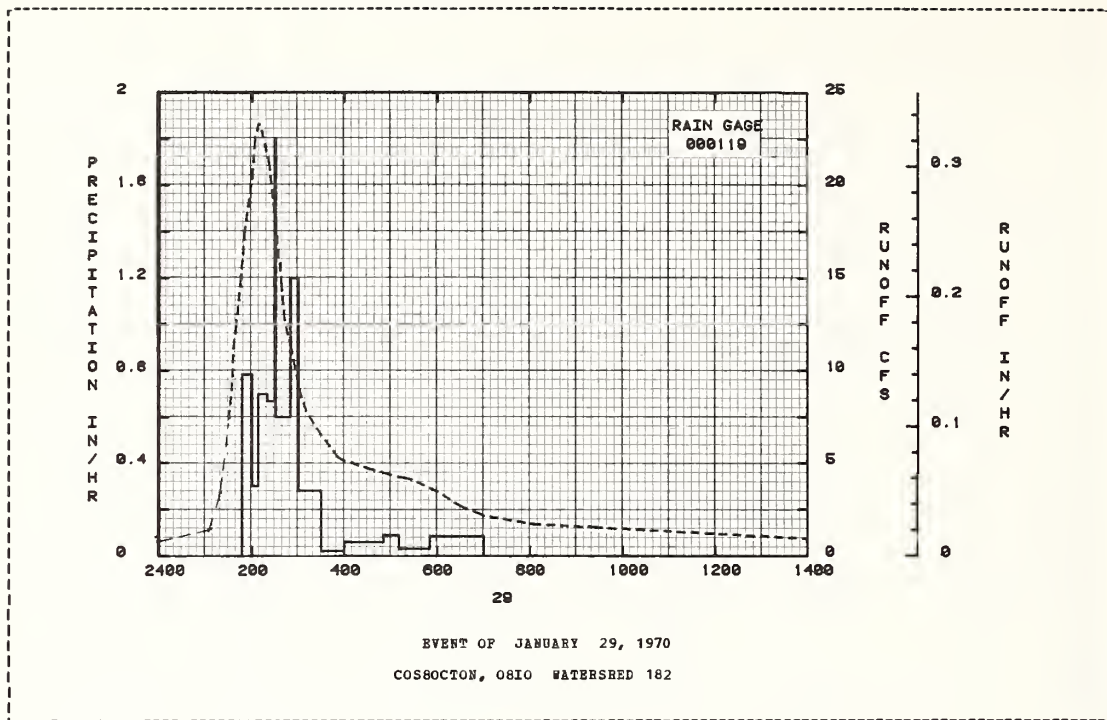
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gage 119. STA AV based on 7 yr period.

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 182												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.055	0.196	0.030	0.429	0.118	0.015	0.004	0.001	0.0	0.0	0.017	0.048E
2	0.055	1.050	0.037	2.776	0.166	0.013	0.002	0.001	0.0	0.0	0.303	0.050
3	0.055	0.363	0.160	0.532	0.118	0.084	0.002	0.001	0.0	0.0	0.118	0.099
4	0.050	0.215	0.733	0.320	0.099	0.030	0.002	0.002	0.0	0.0	0.359	0.103
5	0.046	0.171	0.294	0.243	0.088	0.054	0.002	0.001	0.0	0.0	0.055	0.068
6	0.039	0.155	0.214	0.214	0.078	0.025	0.002	0.0	0.0	0.0	0.050	0.059
7	0.030	0.158	0.179	0.196	0.064	0.015	0.003	0.0	0.0	0.0	0.039	0.055
8	0.024	0.228	0.147	0.155	0.055	0.011	0.059	0.0	0.0	0.0	0.030	0.055
9	0.024	0.680	0.123	0.118	0.050	0.010	0.023	0.002	0.0	0.0	0.024	0.055
10	0.021	0.291	0.105	0.099	0.042	0.008	0.009	0.003	0.0	0.0	0.030	0.047
11	0.021	0.223	0.099	0.088	0.039	0.007	0.004	0.001	0.0	0.144	0.024	0.132
12	0.021	0.171	0.094	0.078	0.087	0.009	0.002	0.0	0.0	0.008	0.027	0.055
13	0.021E	0.131	0.094	0.154	0.054	0.007	0.002	0.0	0.0	0.038	0.030	0.265
14	0.024E	0.110	0.083	0.179	0.159	0.005	0.002	0.0	0.0	0.013	0.124	0.201E
15	0.027E	0.105	0.064	0.139	0.126	0.035	0.005	0.0	0.0	0.011	0.200	0.156E
16	0.027E	0.099	0.055	0.110	0.158	0.206	0.004	0.0	0.0	0.004	0.089	0.230
17	0.027E	0.094	0.069	0.099	0.118	0.286	0.001	0.0	0.0	0.003	0.073	0.189
18	0.027E	0.120	0.138	0.088	0.094	0.051	0.001	0.0	0.0	0.003	0.073	0.155
19	0.027E	0.110	0.238	0.127	0.078	0.215	0.001	0.0	0.0	0.003	0.068	0.126
20	0.027E	0.059	0.222	0.461	0.064	0.008	0.012	0.0	0.0	0.002	0.107	0.099
21	0.027E	0.046	0.163	0.175	0.050	0.060	0.001	0.0	0.0	0.010	0.069	0.095
22	0.027E	0.050	0.220	0.147	0.042	0.020	0.0	0.0	0.0	0.004	0.055	0.485E
23	0.027E	0.050	0.238	0.135	0.039	0.311	0.002	0.0	0.0	0.003	0.047	0.287
24	0.027E	0.053	0.196	2.426	0.046	0.008	0.002	0.0	0.0	0.003	0.042	0.207
25	0.151	0.341	0.234	0.487	0.068	0.007	0.002	0.0	0.048	0.003	0.036	0.155
26	0.319	0.030	0.333	0.297	0.057	0.017	0.002	0.0	0.008	0.002	0.027	0.131
27	0.081	0.033	0.214	0.233	0.030	0.039	0.002	0.0	0.017	0.002	0.027	0.110
28	0.293	0.030	0.187	0.196	0.024	0.004	0.003	0.0	0.0	0.001	0.027	0.099
29	2.587		0.192	0.163	0.019	0.036	0.023	0.0	0.0	0.011	0.080E	0.083
30	0.388		0.171	0.139	0.017	0.005	0.020	0.0	0.0	0.007	0.061E	0.068
31	0.254		0.138		0.017		0.003	0.0		0.038		0.059
MEAN	0.1558	0.1809	0.1763	0.3670	0.0937	0.0272	0.0066	0.0004	0.0024	0.0127	0.0671	0.1494
INCHES	1.651	1.732	1.869	3.765	0.994	0.279	0.070	0.005	0.025	0.135	0.689	1.584
STA AV	1.120	1.268	2.417	1.888	1.213	0.197	0.904	0.077	0.018	0.069	0.202	0.762

NOTES: To convert CFS to IN/DAY, multiply by 0.34198. STA AV based on 7 yr period.

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 182												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
RG 000119			RG 000119									
1-29	0.0	0.039	1-29	147	0.0	0.0	1-29	130	7.460	0.0		
				200	0.7841	0.17		134	9.330	0.0080		
				208	0.3001	0.21		136	11.300	0.0129		
				220	0.7002	0.35		149	12.700	0.0243		
				229	0.6671	0.45		146	15.200	0.0442		
WATERSHED CONDITIONS:			231	1.8000	0.51		150	17.400	0.0597			
Cover of 3%, hardwoods; 9%,			250	0.6000	0.70		200	20.500	0.1047			
pastured woodland; 5%, re-			300	1.1994	0.90		204	22.600	0.1252			
forested; 49%, grassland;			330	0.2800	1.04		208	23.300	0.1470			
34%, miscellaneous, water-			400	0.0200	1.05		210	23.300	0.1580			
shed in improved practice.												
			450	0.0630	1.10		222	21.200	0.2214			
			510	0.0900	1.13		230	18.000	0.2587			
			550	0.0300	1.15		238	14.700	0.2898			
			700	0.0857	1.25		242	12.700	0.3028			
							250	11.300	0.3256			
							256	10.100	0.3408			
							304	8.570	0.3586			
							310	7.810	0.3703			
							330	6.510	0.4043			
							350	5.370	0.4325			
							400	5.110	0.4450			
							430	4.720	0.4800			
							500	4.350	0.5123			
							526	4.110	0.5384			
							600	3.450	0.5689			
							630	2.680	0.5907			
							700	2.160	0.6079			
							804	1.700	0.6372			
							933	1.500	0.6710			
							1400	0.903	0.7472			
							1800	0.731	0.7938			
							2400	0.482	0.8457			

NOTES: To convert runoff in CFS TO IN/HR, multiply by 0.01428907.



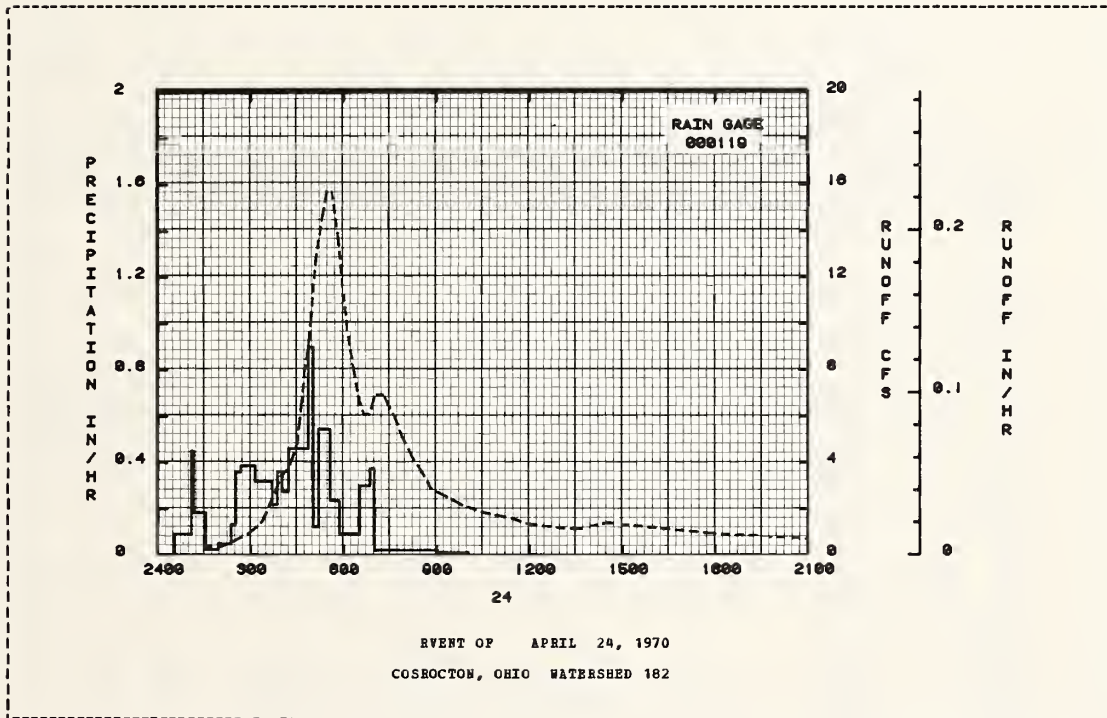
1970 SELECTED RUNOFF EVENT			COSROCTON, OHIO WATERSHED 182							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000119 0.07	0.006	4-24	RG 000119 32	0.0	0.0	4-24	130	0.395	0.0
				105	0.0909	0.05		200	0.342	0.0026
				109	0.4500	0.08		230	0.653	0.0061
				132	0.1826	0.15		300	0.998	0.0120
				157	0.0240	0.16		322	1.440	0.0184
				222	0.0480	0.18		330	1.840	0.0215
				231	0.1333	0.20		336	2.160	0.0243
				241	0.3600	0.26		350	2.850	0.0326
				309	0.3857	0.44		400	3.450	0.0401
				341	0.3188	0.61		410	3.670	0.0485
				352	0.2182	0.65		420	4.110	0.0577
				402	0.3600	0.71		430	4.850	0.0683
				413	0.2727	0.76		436	5.930	0.0760
				452	0.4615	1.06		440	6.810	0.0820
				502	0.9000	1.21		446	8.190	0.0927
				512	0.1200	1.23		454	9.330	0.1093
				534	0.5455	1.43		458	10.500	0.1187
				552	0.2333	1.50		506	12.700	0.1407
				632	0.0900	1.56		520	14.700	0.1863
				652	0.3000	1.66		528	15.700	0.2152
				700	0.3750	1.71		538	15.700	0.2525
				902	0.0197	1.75		550	13.700	0.2944
				1002	0.0100	1.76		600	11.300	0.3241
								608	9.710	0.3441
								620	8.000	0.3693
								630	6.810	0.3869
								640	6.070	0.4022
								650	6.070	0.4166
								700	6.810	0.4319
								706	6.950	0.4417
								716	6.950	0.4582
								720	6.810	0.4647
								730	6.360	0.4803
								740	5.930	0.4949
								754	5.110	0.5133

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01424907.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 182				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970 (CONTINUED)										
							4-24	816	4.110	0.5374
								830	3.670	0.5503
								850	2.850	0.5658
								920	2.520	0.5849
								950	2.160	0.6016
								1030	1.840	0.6206
								1100	1.700	0.6332
								1130	1.560	0.6448
								1200	1.320	0.6551
								1330	1.100	0.6610
								1430	1.380	0.6987
								1800	0.903	0.7556
								2400	0.691	0.8237

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.01424907.



COSHOCTON, OHIO WATERSHED 166

LOCATION: Coshocton County, Ohio; 10 miles NE of Coshocton; Walhonding River, Muskingum River Basin.

AREA: 79.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COSHOCTON, OHIO		WATERSHED 166	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970 P	2.36	1.68	3.44	5.51	3.65	3.21	3.44	0.42	3.52	3.60	2.51	2.62	36.40			
Q	1.541	1.579	1.660	3.746	3.794	0.215	0.083	0.012	0.029	3.130	0.498	1.353	11.550			
STA AV P	2.64	2.19	3.34	3.30	3.82	3.91	4.37	2.73	2.62	2.08	2.51	2.26	35.78			
Q	1.142	1.073	2.096	1.638	1.308	0.273	1.457	0.113	0.036	0.066	0.251	0.571	10.394			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days				
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	1-29	0.308	1-29	0.260	1-29	0.384	4-24	0.621	4- 1	0.794	4- 1	0.995	4- 1	1.220	1-28	1.753

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
	7-27	0.921	7- 5	0.539	7- 5	0.866	7- 5	1.593	7- 5	1.876	7- 5	2.054	7- 5	2.249	7- 4	3.215
	1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Cover of 4%, hardwoods; 6%, reforested; 67%, grassland; 17%, cultivated; 6%, miscellaneous. Watershed in improved practice. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 26.41-7. Precipitation records began 1940. Runoff records began January 1, 1967. Precipitation data from rain gages 100 and 103. For long-time precipitation records, see National Weather Service records at Coshocton, Ohio.

1970 DAILY PRECIPITATION (inches)													COSHOCTON, OHIO		WATERSHED 166	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.13S	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.14S	0.64	0.09	1.13	0.47	0.0	0.0	0.0	0.0	0.17	1.03	0.0				
3	3.15S	0.14S	0.26	0.0	0.0	0.78E	0.0	0.0	0.70	0.0	0.0	0.30				
4	0.19S	0.0	0.73	0.0	0.08	0.0	0.0	0.0	0.16	0.0	0.0	0.0				
5	0.05S	0.0	0.0	0.0	0.02E	0.27	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.06S	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.10S	0.15S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.13	0.0	0.0	0.0	0.0	1.25	0.0	0.02E	0.0	0.0	0.0				
9	0.0	0.25	0.01S	0.0	0.0	0.0	0.18	0.14	0.0	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.15	0.0				
11	0.13S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.50				
12	0.0	0.04S	0.42S	0.0	0.65	0.12	0.0	0.0	0.0	0.19	0.11	0.63				
13	0.0	0.03S	0.24S	0.50	1.04	0.0	0.0	0.0	0.0	0.16	0.0	0.10				
14	0.0	0.0	0.11S	0.98	0.0	0.0	0.0	0.0	0.0	0.15	0.65	0.0				
15	0.0	0.30M	0.03S	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.14	0.0				
16	0.0	0.0	0.05S	0.0	0.32	0.08E	0.0	0.06	0.0	0.0	0.0	0.22				
17	0.07E	0.0	0.21S	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.05				
18	0.07S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0				
19	0.0	0.0	0.15	0.30	0.0	0.0	0.63	0.02E	0.0	0.0	0.0	0.0				
20	0.03S	0.0	0.09S	0.51	0.0	0.0	0.35	0.0	0.02E	0.05	0.25	0.0				
21	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.02	0.44	0.0	0.20S				
22	0.0	0.0	0.41S	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.45				
23	0.0	0.0	0.0	0.08	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.09S				
24	0.0	0.0	0.0	1.89	0.60	0.0	0.0	0.0	0.06	0.0	0.0	0.0				
25	0.06E	0.0	0.25	0.0	0.45	0.0	0.0	0.0	1.44	0.0	0.0	0.04S				
26	0.07M	0.0	0.13	0.0	0.0	0.39	0.0	0.0	0.77	0.0	0.0	0.0				
27	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.06S	0.05S				
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0				
29	1.00	0.18S	0.0	0.0	0.0	0.04	0.64	0.0	0.0	0.39	0.43	0.0				
30	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.50	0.0	0.0				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	2.36	1.68	3.44	5.51	3.65	3.21	3.44	0.42	3.52	3.60	2.91	2.62				
STA AV	2.64	2.19	3.34	3.30	3.82	3.91	4.37	2.73	2.62	2.08	2.51	2.26				

NOTES: For daily air temperatures for the vicinity, see table for Watershed W-95, p. 26.035-1. Precipitation amounts are for rain gages 100 and 103. STA AV based on 31 yr period (1940-1970).

1970 MEAN DAILY DISCHARGE (cfs) COSHOCTON, OHIO WATERSHED 166												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.043	0.295	0.036	0.482	0.105	0.013	0.004	0.011	0.0	0.0	0.017	0.067
2	0.043	0.896	0.045	3.095	0.155	0.011	0.003	0.003	0.0	0.0 T	0.207	0.058
3	0.043	0.385	0.135	0.716	0.098	0.379	0.003	3.003	0.0	0.0	0.122	0.382
4	0.039	0.285	0.573	0.430	0.081	0.024	0.003	0.002	0.0	0.0	0.077	0.089
5	0.036	0.235	0.341	0.307	0.066	0.063	0.003	0.001	0.0	0.0	0.058	0.062
6	0.036	0.190	0.285	0.275	0.058	0.019	0.003	0.001	0.0	0.0	0.043	0.054
7	0.036	0.157	0.255	0.206	0.046	0.011	0.002	0.001	0.0	0.0	0.030	0.046
8	0.030	0.213	0.207	0.150	0.043	0.008	0.081	0.002	0.0	0.0	0.321	0.046
9	0.021	0.570	0.158	0.129	0.039	0.006	0.022E	0.002	0.0	0.0 T	0.017	0.046
10	0.019	0.322	0.123	0.110	0.033	0.005	0.009	0.002	0.0	0.001	0.025	0.039
11	0.021	0.295	0.098	0.092	0.030	0.005	0.005	0.001	0.0	0.145	0.017	0.094
12	0.021	0.220	0.087E	0.082	0.086	0.005	0.003	0.001	0.0	0.007	0.020	0.521
13	0.019	0.150	0.387	0.146	0.432	0.005	0.003	0.001	0.0	0.033	0.017	0.282
14	0.017	0.129	0.077	0.130	0.142	0.004	0.003	0.001	0.0	0.017	0.069	0.218
15	0.015	0.116	0.067E	0.098	0.107	0.005	0.010	0.001	0.0	0.011	0.132	0.176
16	0.019	0.098	0.067	0.082	0.141	0.007	0.004	0.001	0.0	0.008	0.067	0.213
17	0.062	0.087	0.067	0.072	0.092	0.233	0.002	0.001	0.0	0.006	0.062	0.183
18	0.073	0.105	0.117	0.062	0.077	0.055	0.002	0.001	0.0	0.004	0.058	0.143
19	0.050	0.095	0.199	0.095	0.058	0.019	0.002	0.001	0.0	0.003	0.050	0.129
20	0.058	0.058	0.217	0.350	0.044	0.013	0.006	0.001	0.0	0.004	0.081	0.110
21	0.051	0.050	0.180	0.172	0.037	0.033	0.003	0.0 T	0.0	0.020	0.050	0.098
22	0.036	0.054	0.214	0.150	0.030	0.015	0.003	0.0	0.0	0.019	0.039	0.387
23	0.033	0.054	0.220	0.123	0.031	0.009	0.003	0.0	0.0	0.008	0.030	0.265
24	0.030	0.045	0.190	2.915E	0.053	0.006	0.003	0.0	0.0	0.008	0.024	0.226
25	0.065	0.041	0.216	0.670	0.095	0.005	0.003	0.0	0.047	0.008	0.030	0.197
26	0.192	0.033	0.278	0.440	0.050	0.026	0.003	0.0	0.016	0.008	0.039	0.173
27	0.098	0.039	0.206	0.315	0.033	0.012	0.003	0.0	0.031	0.006	0.039	0.136
28	0.399	0.033	0.188	0.241	0.027	0.006	0.002	0.0	0.001	0.005	0.033	0.110
29	2.565		0.196	0.181	0.019	0.007	0.044	0.0	0.001	0.011	0.091	0.092
30	0.582		0.163	0.144	0.015	0.005	0.035	0.0	0.0 T	0.067	0.086	0.082
31	0.372		0.230		0.015		0.0	0.0		0.028		0.072
MEAN	0.1654	0.1877	0.1781	0.4155	0.0756	0.0239	0.0089	0.0013	0.0033	0.0139	0.0552	0.1452
INCHES	1.541	1.579	1.660	3.746	0.704	0.215	0.083	0.012	0.029	0.130	0.498	1.353
STA AV	1.142	1.073	2.096	1.608	1.308	0.273	1.457	0.113	0.036	0.066	0.251	0.971

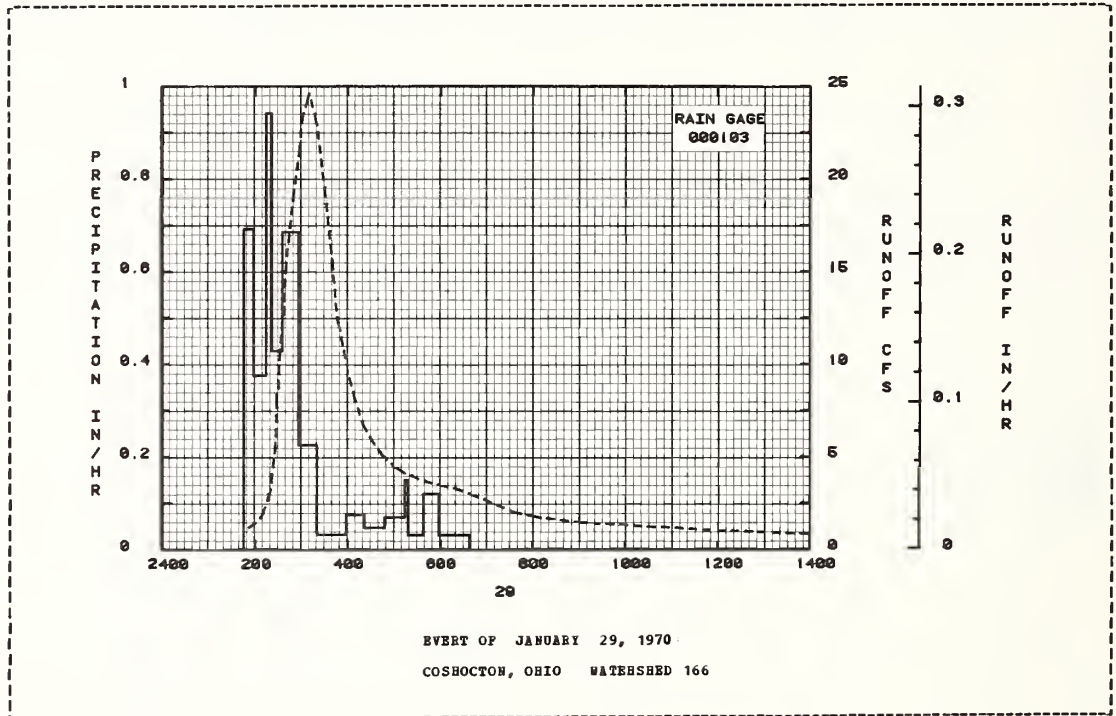
NOTES: To convert CFS to IN/DAY, multiply by 0.300526. STA AV based on 4 yr period (1967-1970).

1970 SELECTED RUNOFF EVENT COSHOCTON, OHIO WATERSHED 166												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JANUARY 29, 1970												
1-29	RG 000103 0.0	0.029	1-29	RG 000103 145	0.0	0.0	1-29	152	1.200	0.0		
				158	0.6927	0.15		200	1.440	0.0022		
				214	0.3751	0.25		210	1.920	0.3057		
				221	0.9426	0.36		216	2.700	0.0086		
				235	0.4285	0.46		220	3.260	0.0111		
WATERSHED CONDITIONS:				256	0.6860	0.70		222	4.100	0.0126		
Cover of 4%, hardwoods; 6%,				320	0.2249	0.79		226	5.390	0.0166		
reforested; 67%, grassland;				358	0.0316	0.81		228	8.370	0.0195		
17%, cultivated; 6%, miscel-				422	0.0750	0.84		230	8.750	0.0231		
laneous; watershed in im-				448	0.0462	0.86		232	10.800	0.0272		
proved practice.				514	0.0692	0.89		236	12.700	0.0370		
				518	0.1500	0.90		240	15.500	0.0488		
				538	0.0300	0.91		250	19.400	0.0852		
				558	0.1200	0.95		258	21.900	0.1197		
				638	0.0300	0.97		300	23.200	0.1291		
								310	24.600	0.1789		
								320	22.900	0.2285		
								330	19.400	0.2727		
								340	15.500	0.3091		
								346	12.500	0.3266		
								350	11.800	0.3367		
								400	9.580	0.3590		
								410	7.990	0.3773		
								420	6.740	0.3927		
								430	5.970	0.4060		
								444	5.110	0.4222		
								500	4.460	0.4382		
								514	4.100	0.4507		
								540	3.660	0.4718		
								600	3.460	0.4867		
								620	3.260	0.5007		
								640	2.970	0.5137		
								706	2.520	0.5286		
								736	2.000	0.5427		
								810	1.730	0.5558		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01252191.

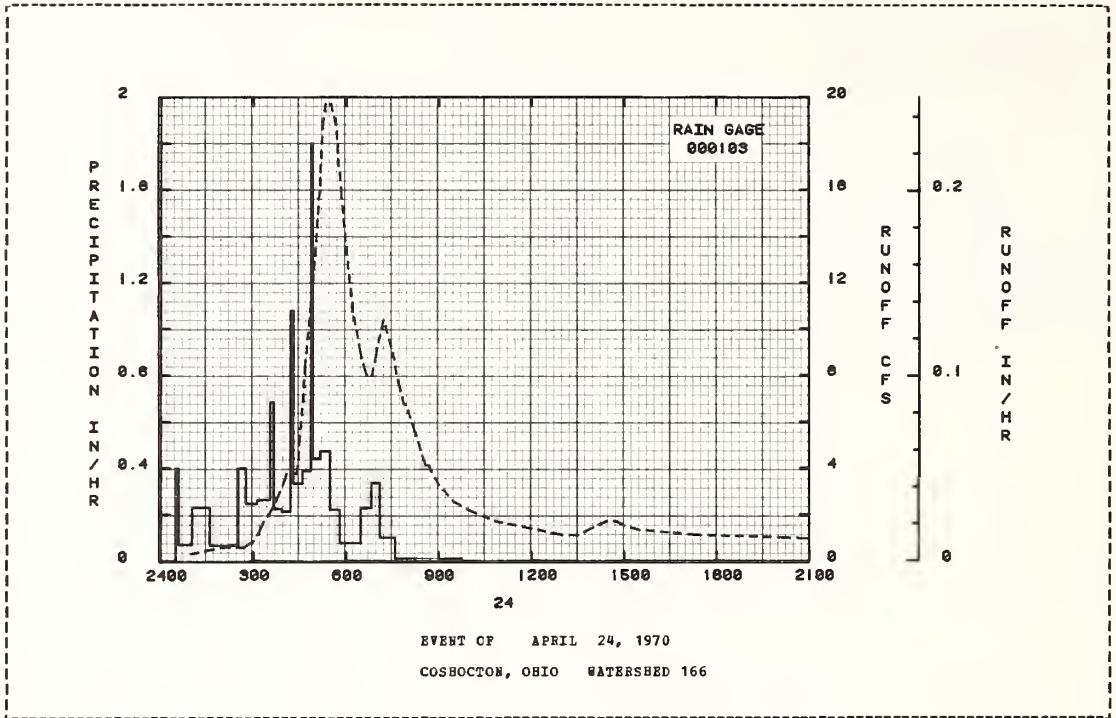
1970 SELECTED RUOFF EVENT			COSHOCTON, OHIO WATERSHED 166							
ANTECEDENT CONDITIONS			RAINFALL			RUOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JANUARY 29, 1970 (CONTINUED)										
							1-29	900	1.440	0.5722
								1200	0.998	0.6180
								1600	0.813	0.6634
								1900	0.813	0.6939
								2400	0.735	0.7424

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01252191.



1970 SELECTED RUNOFF EVENT			COSHOCTON, OHIO			WATERSHED 166				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 24, 1970										
4-24	RG 000103 0.0	0.003	4-24	RG 000103 29	0.0	0.0	4-24	100	0.315	0.0
				35	0.4000	0.04		130	0.460	0.0024
				101	0.0692	0.07		200	0.595	0.0057
				135	0.2294	0.20		240	0.560	0.0105
				212	0.0649	0.24		300	0.857	0.0135
WATERSHED CONDITIONS: Cover of 4%, hardwoods, 6%, reforested; 67%, grassland; 17%, cultivated; 6%, miscel- laneous; watershed in in- proved practice.				230	0.0667	0.26		310	1.200	0.0156
				245	0.4000	0.36		329	1.700	0.0186
				307	0.2455	0.45		330	2.000	0.0225
				332	0.2649	0.56		346	2.730	0.0303
				339	0.6857	0.64		400	3.460	0.0393
				355	0.2250	0.70		434	3.770	0.0423
				412	0.2118	0.76		424	3.770	0.0580
				417	1.0800	0.85		426	4.130	0.0596
				435	0.3333	0.95		430	5.390	0.0636
				452	0.3882	1.06		436	6.900	0.0713
				455	1.8000	1.15		440	8.370	0.0777
				510	0.4400	1.26		450	10.800	0.0977
				529	0.4737	1.41		509	13.200	0.1228
				548	0.2211	1.48		508	15.900	0.1471
				628	0.0759	1.53		514	18.800	0.1688
				649	0.2286	1.61		520	19.700	0.1929
				705	0.3375	1.70		530	19.700	0.2340
				735	0.1900	1.75		547	18.800	0.2741
				945	0.0092	1.77		550	15.900	0.3103
								609	13.500	0.3410
								612	10.800	0.3714
								630	8.750	0.4081
								640	7.990	0.4256
								650	7.990	0.4423
								700	9.160	0.4602
								712	10.400	0.4847
								730	8.950	0.5211
								742	7.610	0.5418
								752	6.740	0.5568
								756	6.740	0.5624
								816	5.390	0.5877
								834	4.100	0.6055
								840	4.100	0.6106
								900	3.260	0.6260
								930	2.520	0.6441
								1000	2.160	0.6588
								1050	1.700	0.6789
								1200	1.380	0.7014
								1300	1.100	0.7169
								1330	1.100	0.7238
								1400	1.440	0.7318
								1410	1.560	0.7349
								1426	1.700	0.7403
								1444	1.700	0.7467
								1500	1.500	0.7520
								1530	1.320	0.7608
								1730	1.100	0.7911
								2010	0.998	0.8261
								2400	0.950	0.8729

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01252191.



## STILLWATER, OKLAHOMA WATERSHED W-1

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 16.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													STILLWATER, OKLAHOMA WATERSHED W-1	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.13	0.25	2.61	4.98	1.12	2.79	1.10	0.19	6.09	1.91	0.30	0.85	22.32	
	Q 0.0	0.0	1.989	3.557	0.014	0.010	0.0	0.0	0.099	0.115	0.0	0.030	5.815	
STA AV	P 0.59	1.02	1.99	2.48	4.87	3.99	3.92	2.79	3.66	2.39	1.53	1.11	30.35	
	Q 0.124	0.269	0.829	0.865	1.698	0.899	0.599	0.065	0.381	0.578	0.360	0.199	6.866	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	4-30	1.429	4-30	0.622	4-30	0.846	4-30	1.287	4-30	1.369	4-30	1.394	4-29	1.405	3-28	2.294

MAXIMUMS FOR PERIOD OF RECORD															
1957	1951	1951	1951	1951	1951	1959	1959	1951	1959	1951	1959	1959			
4-18	6.990	7-15	3.314	7-15	3.737	7-15	3.963	10-2	4.519	7-4	5.185	10-1	5.679	9-29	7.627

NOTES: Watershed conditions: All native grass pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 37.1-7 (Revised). Precipitation data obtained from R-1 recording rain gage. Precipitation and runoff records began July 1951. Station average precipitation data from R-3 recording rain gage record through 1964 combined with data from R-1 for 1965 through 1970. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970	DAILY PRECIPITATION (inches)												STILLWATER, OKLAHOMA WATERSHED W-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.76	0.0	0.18	0.0	0.05	0.0	0.0	0.13	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.15	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.51	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.37	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0		
6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	1.36	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.02	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.16	0.0		
14	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.10	0.0	0.01	0.0		
15	0.0	0.0	0.0	0.22	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.71		
16	0.0	0.0	0.54	0.60	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.10	0.0	0.07	0.0	0.0		
18	0.06	0.0	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.04	0.0	0.32	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.03	0.0	0.0	0.0	0.0	0.39	0.22	0.0	0.0	0.0	0.0	0.14		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	2.98	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.43	0.16	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.01	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.06	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.23	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.47	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.13	0.25	2.61	4.98	1.12	2.79	1.10	0.19	6.09	1.91	0.30	0.85		
STA AV	0.59	1.02	1.99	2.48	4.87	3.99	3.92	2.79	3.66	2.39	1.53	1.11		

NOTES: Amounts recorded at rain gage R-1 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) STILLWATER, OKLAHOMA WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.575	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.353	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.027	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.066	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.046	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.027	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003
16	0.0	0.0	0.003	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017
17	0.0	0.0	0.043	0.183	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001
18	0.0	0.0	0.056	0.480	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.286	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.061	0.911	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0	0.0
23	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.037	0.0	0.0	0.0
24	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.314	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.222	0.976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.295	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0450	0.0832	0.0003	0.0002	0.0	0.0	0.0023	0.0026	0.0	0.0007
INCREAS	0.0	0.0	1.989	3.557	0.014	0.010	0.0	0.0	0.099	0.115	0.0	0.030
STA AV	0.124	0.269	0.829	0.865	1.698	0.899	0.599	0.065	0.381	0.578	0.360	0.199

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.425249.

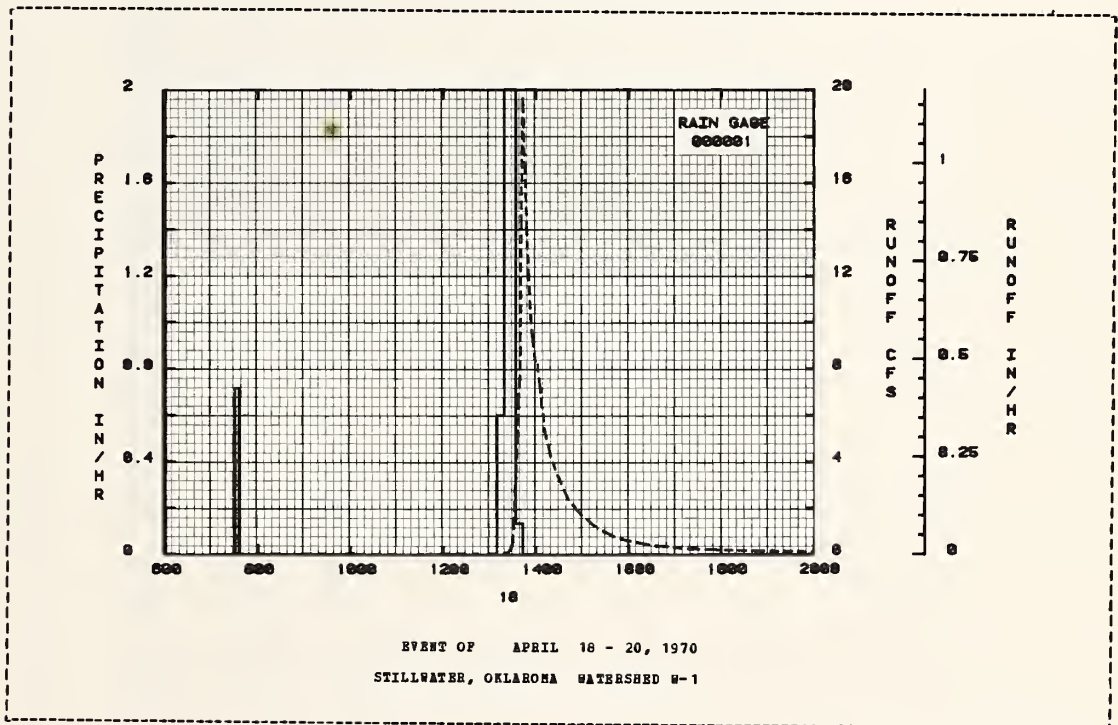
1970 SELECTED RUNOFF EVENT STILLWATER, OKLAHOMA WATERSHED W-1												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF APRIL 18 - 20, 1970												
4-18	RG 000001 0.0	0.012	4-18	EG 000001 730	0.0	0.0	4-18	730	0.027	0.0		
				735	0.7200	0.06		1310	0.044	0.0119		
				1309	0.0018	0.07		1320	0.061	0.0124		
				1319	0.6000	0.17		1323	0.079	0.0126		
				1334	2.0000	0.67		1324	0.101	0.0127		
WATERSHED CONDITIONS: 100% of area in native grass pasture; pasture in fair condition.				1343	0.1333	0.69		1325	0.136	0.0128		
								1326	0.177	0.0130		
								1327	0.221	0.0132		
								1328	0.281	0.0134		
								1329	0.431	0.0136		
								1330	0.522	0.0143		
								1331	1.303	0.0152		
								1332	1.970	0.0168		
								1333	2.711	0.0191		
								1334	3.553	0.0222		
								1335	4.243	0.0260		
								1336	5.035	0.0306		
								1337	5.725	0.0359		
								1338	6.618	0.0421		
								1339	7.409	0.0490		
								1340	8.638	0.0569		
								1341	14.593	0.0664		
								1342	17.303	0.0844		
								1343	19.619	0.1026		
								1344	18.689	0.1215		
								1346	16.411	0.1564		
								1348	14.081	0.1865		
								1351	11.913	0.2250		
								1353	10.268	0.2469		
								1355	9.504	0.2664		
								1357	8.967	0.2847		
								1359	8.320	0.3017		
								1402	8.184	0.3262		
								1405	7.291	0.3492		
								1408	6.332	0.3694		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.



1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED #-1								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF APRIL 18 - 20, 1970 (CONTINUED)											
						4-18			1412	5.304	0.3924
									1419	4.243	0.4255
									1429	3.334	0.4630
									1442	2.374	0.4997
									1459	1.701	0.5340
									1519	1.143	0.5622
									1541	0.761	0.5829
									1602	0.556	0.5966
									1626	0.406	0.6080
									1650	0.320	0.6166
									1722	0.241	0.6255
									1756	0.190	0.6328
									1846	0.150	0.6412
									2005	0.111	0.6514
									2150	0.089	0.6618
									2400	0.079	0.6726
						4-19			310	0.061	0.6858
									910	0.044	0.7045
									1630	0.027	0.7200
									2400	0.017	0.7298
						4-20			1200	0.017	0.7419
									1750	0.0	0.7448

NOTES: To convert runoff in cfs to IR/RR, multiply by 0.059385.

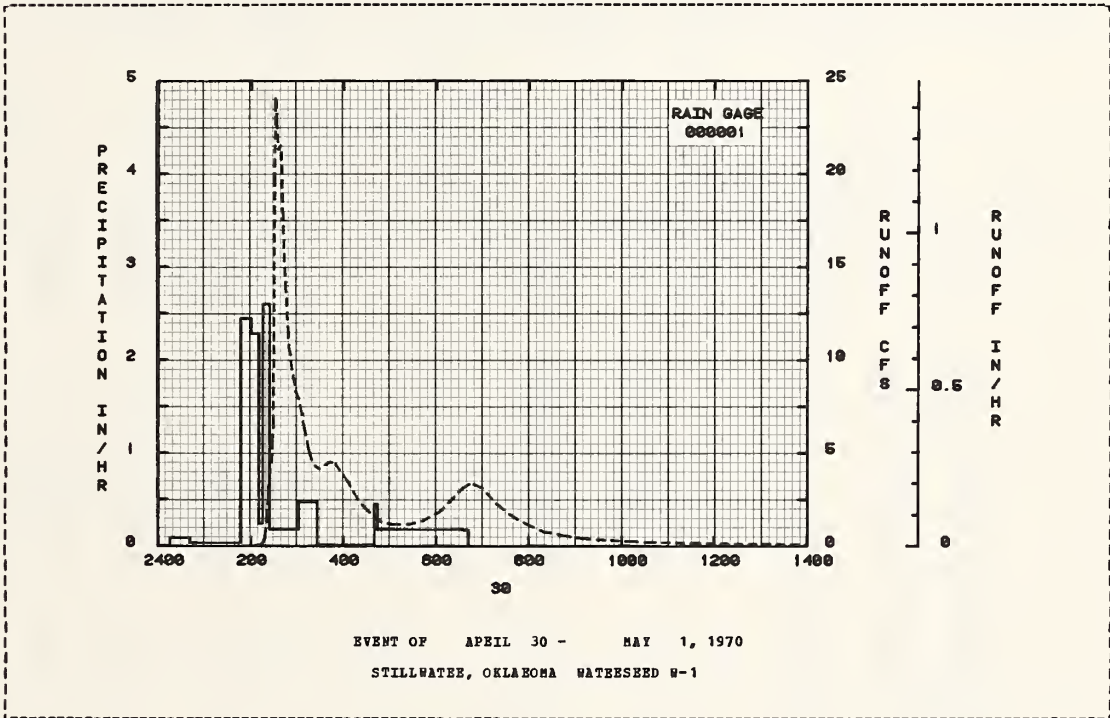


1970 SELECTED RDN OFF EVNT			STILLWATER, OKLAHOMA WATERSHED W-1								
ANTECEDENT CONDITIONS			RAINFALL			RDN OFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF			APRIL	30	-	MAY	1, 1970				
RG 000001			RG 000001								
4-30	0.0	0.0	4-30	15	0.0	0.0	4-30	207	0.0	0.0	
				41	0.0923	0.04		208	0.037	0.0	
				146	0.0277	0.07		211	0.054	0.0001	
				200	2.4429	0.64		213	0.071	0.0002	
				210	2.2800	1.02		214	0.111	0.0003	
WATERSHED CONDITIONS:				215	0.2400	1.04		215	0.177	0.0004	
100% of area in native grass				224	2.6000	1.43		216	0.261	0.0006	
pasture; pasture in fair				302	0.1737	1.54		217	0.360	0.0009	
condition.				326	0.4750	1.73		218	0.431	0.0013	
				440	0.0081	1.74		219	0.933	0.0020	
				444	0.4500	1.77		220	1.463	0.0032	
				635	0.1730	2.09		221	1.886	0.0049	
				642	0.1714	2.11		222	2.492	0.0071	
								223	3.216	0.0100	
								225	4.126	0.0172	
								227	4.883	0.0261	
								228	5.591	0.0313	
								229	6.618	0.0373	
								230	19.637	0.0504	
								231	24.055	0.0719	
								232	23.939	0.0956	
								233	22.462	0.1185	
								235	21.286	0.1619	
								238	21.511	0.2255	
								239	20.377	0.2461	
								241	17.561	0.2835	
								243	15.302	0.3161	
								245	13.656	0.3449	
								248	11.542	0.3822	
								249	10.713	0.3933	
								251	10.268	0.4140	
								253	9.505	0.4336	
								255	9.039	0.4519	
								258	8.292	0.4777	
								302	7.914	0.5098	
								306	7.039	0.5394	
								309	6.332	0.5553	
								314	5.304	0.5881	
								319	4.631	0.6127	
								324	4.245	0.6346	
								329	4.126	0.6553	
								341	4.496	0.7065	
								345	4.496	0.7244	
								350	4.378	0.7463	
								404	3.553	0.8013	
								419	2.492	0.8462	
								427	2.071	0.8643	
								434	1.802	0.8777	
								449	1.303	0.9007	
								504	1.143	0.9189	
								524	1.143	0.9415	
								543	1.384	0.9653	
								603	1.802	0.9968	
								617	2.374	1.0257	
								634	3.098	1.0718	
								643	3.334	1.1004	
								649	3.334	1.1202	
								700	3.098	1.1552	
								721	2.172	1.2099	
								738	1.623	1.2418	
								758	1.143	1.2692	
								820	0.761	1.2895	
								845	0.556	1.3062	
								910	0.406	1.3181	
								938	0.320	1.3282	
								1012	0.241	1.3376	
								1044	0.190	1.3444	
								1121	0.163	1.3505	
								1131	0.150	1.3524	
								1142	0.136	1.3540	
								1254	0.101	1.3624	
								1340	0.079	1.3665	
								1450	0.061	1.3714	
								1630	0.044	1.3766	
								2030	0.027	1.3850	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.059385.

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 30 - MAY 1, 1970 (CONTINUED)										
							4-30	2400	0.027	1.3906
							5- 1	630	0.017	1.3991
								1720	0-0	1.4046

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.059385.



STILLWATER, OKLAHOMA WATERSHED W-3

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 92.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													STILLWATER, OKLAHOMA WATERSHED W-3
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	0.21	0.20	2.94	4.50	1.12	2.71	1.00	0.17	5.49	1.83	0.28	0.50	21.35
Q	0.0	0.0	1.152	2.930	0.055	0.0	0.0	0.0	0.009	0.026	0.0	0.0	4.172
STA AV P	0.59	1.01	2.01	2.42	4.81	3.93	3.88	2.79	3.55	2.36	1.50	1.11	29.57
Q	0.042	0.157	0.619	0.705	1.466	0.762	0.508	0.079	0.317	0.518	0.188	0.084	5.443

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge	Maximum Volume for Selected Time Interval														
	Date	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days								
Date	Date	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.								
1970	4-30	0.510	4-30	0.402	4-30	0.616	4-30	1.007	4-30	1.111	4-30	1.137	4-30	1.157	3-29	1.671
MAXIMUMS FOR PERIOD OF RECORD																
	7-15	4.739	7-15	2.896	7-15	3.486	7-15	3.796	10-1	4.957	10-1	5.185	10-1	6.083	9-30	8.143
	1951		1951		1951		1951		1959		1959		1959		1959	

NOTES: Watershed conditions: All native grass cover. For map of watershed, see Selected Runoff Events for Small Agricultural Watersheds in the United States, USDA, AES, Jan. 1960, p. 37.2-6. Precipitation data obtained from R-3 recording rain gage. Precipitation and runoff records began July 1951. STA AV based on 20 yr (1951-70) record period. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970 DAILY PRECIPITATION (inches)													STILLWATER, OKLAHOMA WATERSHED W-3
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.70	0.0	0.19	0.0	0.03	0.0	0.0	0.12	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.14	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.48	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.32	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	
6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.02	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	1.23	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.05	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.16	0.0	
14	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.09	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.22	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.74	
16	0.0	0.0	0.77	0.46	0.0	0.0	0.0	0.0	1.82	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.10	0.0	0.06	0.0	0.0	
18	0.11	0.0	0.0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.05	0.0	0.36	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.05	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0	0.0	0.0	0.14	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
22	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	2.52	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.38	0.17	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.05	0.0	0.0	0.0	0.70	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	1.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.24	1.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.40	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.21	0.20	2.94	4.50	1.12	2.71	1.00	0.17	5.49	1.83	0.28	0.90	
STA AV	0.59	1.01	2.01	2.42	4.81	3.93	3.88	2.79	3.55	2.36	1.50	1.11	

NOTES: Amounts recorded at rain gage R-3 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) STILLWATER, OKLAHOMA WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	2.522	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.207	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.125	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.201	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.059	0.0	0.0
9	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.042	0.0	0.0
10	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.683	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.045	2.249	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.552	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.190	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.109	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.076	0.037	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0
23	0.0	0.0	0.065	0.023	0.0	0.0	0.0	0.0	0.026	0.0	0.0	0.0
24	0.0	0.0	0.058	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	1.059	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	1.002	4.392	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	1.172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.1437	0.3776	0.0068	0.0	0.0	0.0	0.0011	0.0033	0.0	0.0
INCHRS	0.0	0.0	1.152	2.930	0.055	0.0	0.0	0.0	0.009	0.026	0.0	0.0
STA AV	0.042	0.157	0.619	0.705	1.466	0.762	0.508	0.079	0.317	0.518	0.188	0.084

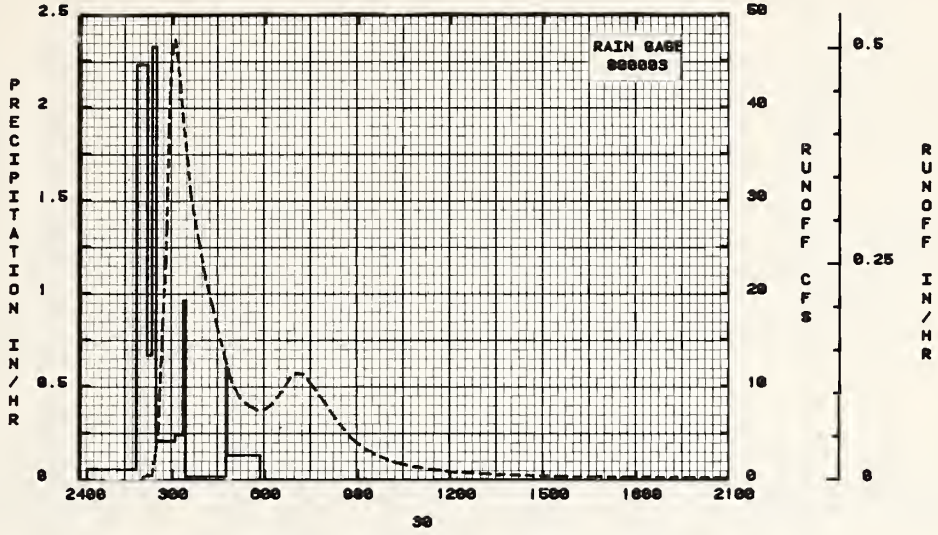
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.258714.

1970 SELECTED RUNOFF EVENT STILLWATER, OKLAHOMA WATERSHED W-3										
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 30 - MAY 4, 1970										
RG 00003										
4-30	0.0	0.0	4-30	14	0.0	0.0	4-30	202	0.0	0.0
				149	0.0568	0.09		203	0.210	0.0
				210	2.2286	0.87		204	0.282	0.0
				219	0.6667	0.97		206	0.283	0.0001
				227	2.3250	1.28		210	0.373	0.0003
WATERSHED CONDITIONS:										
100% of area in native grass; 32% in hay meadow in good condition, 46% in pasture in fair condition, and 22% in pasture in poor condition.										
				305	0.2053	1.41		211	0.475	0.0004
				320	0.2400	1.47		213	0.407	0.0006
				325	0.9600	1.55		215	0.356	0.0007
				444	0.0152	1.57		220	0.440	0.0011
				446	0.6000	1.59		222	1.099	0.0014
				551	0.1292	1.73		223	1.703	0.0017
								224	1.895	0.0020
								225	2.228	0.0024
								226	2.618	0.0028
								227	3.087	0.0033
								228	3.539	0.0039
								229	3.937	0.0046
								230	4.232	0.0053
								232	4.851	0.0069
								233	6.094	0.0079
								234	7.781	0.0092
								235	9.654	0.0108
								236	11.461	0.0127
								237	12.537	0.0148
								238	13.159	0.0171
								239	14.585	0.0196
								240	16.488	0.0224
								242	18.887	0.0288
								244	21.136	0.0360
								246	23.258	0.0440
								248	27.679	0.0531
								249	30.608	0.0584
								251	35.235	0.0702
								252	38.162	0.0768
								254	40.878	0.0910

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01078.

1970 SELECTED RUNOFF EVENT			STILLWATER, OKLAHOMA WATERSHED #3								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF			APRIL	30 -	MAY	4, 1970	(CONTINUED)				
							4-30	256	44.236	0.1062	
								258	45.826	0.1224	
								301	46.780	0.1474	
								304	47.277	0.1728	
								308	45.673	0.2062	
								314	42.341	0.2536	
								320	36.382	0.2972	
								328	34.475	0.3495	
								334	30.875	0.3848	
								341	26.440	0.4220	
								353	24.835	0.4795	
								404	21.523	0.5253	
								417	18.674	0.5722	
								429	15.807	0.6094	
								442	13.140	0.6432	
								455	10.487	0.6708	
								511	8.707	0.6984	
								528	7.696	0.7238	
								545	7.436	0.7472	
								600	7.526	0.7674	
								614	8.141	0.7871	
								633	9.436	0.8171	
								649	10.897	0.8463	
								700	11.362	0.8683	
								714	11.268	0.8967	
								724	10.642	0.9164	
								738	9.579	0.9418	
								759	7.989	0.9749	
								817	6.510	0.9983	
								834	5.341	1.0164	
								848	4.407	1.0287	
								904	3.715	1.0404	
								917	3.161	1.0484	
								933	2.701	1.0568	
								958	2.131	1.0677	
								1023	1.685	1.0763	
								1052	1.325	1.0841	
								1126	1.045	1.0913	
								1159	0.850	1.0969	
								1231	0.727	1.1014	
								1318	0.584	1.1069	
								1401	0.479	1.1110	
								1456	0.381	1.1152	
								1547	0.321	1.1184	
								1654	0.260	1.1219	
								1800	0.225	1.1248	
								1940	0.191	1.1265	
								2210	0.155	1.1332	
								2400	0.137	1.1361	
							5- 1	530	0.101	1.1432	
								840	0.092	1.1465	
								1310	0.073	1.1505	
								2400	0.065	1.1586	
							5- 2	1200	0.065	1.1670	
								2400	0.056	1.1748	
							5- 3	1200	0.037	1.1608	
								2400	0.037	1.1856	
							5- 4	1330	0.019	1.1857	
								2400	0.0	1.1908	

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.01078.



EVENT OF APRIL 30 - MAY 4, 1970  
 STILLWATER, OKLAHOMA WATERSHED #-3

STILLWATER, OKLAHOMA WATERSHED W-4

LOCATION: Noble Co., Okla.; 15 mi. N. of Stillwater; Black Bear Creek, Arkansas River.

AREA: 206.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													STILLWATER, OKLAHOMA WATERSHED W-4														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.09	0.20	2.48	4.20	0.80	2.82	1.13	0.19	5.35	1.91	0.22	0.51	20.30													
	Q	0.0	0.0	0.334	1.190	0.014	0.0	0.0	0.0	0.034	0.023	0.0	0.0	1.595													
STA AV	P	0.52	0.97	1.91	2.31	4.65	3.81	3.76	2.65	3.58	2.41	1.41	1.05	29.03													
	Q	0.058	0.083	0.346	0.405	1.144	0.684	0.476	0.064	0.325	0.464	0.111	0.066	4.226													

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		4-30	0.292	4-30	0.213	4-30	0.305	4-30	0.459	4-30	0.499	4-30	0.512	4-30	0.517	3-28	0.642
MAXIMUMS FOR PERIOD OF RECORD																	
		4-18	2.390	4-18	1.473	4-18	1.936	10-2	2.628	10-2	4.493	10-2	4.711	10-1	5.238	9-30	6.877
		1957		1957		1957		1959		1959		1959		1959		1955	

NOTES: Watershed conditions: All native grass cover. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 37.3-6 (Revised). Precipitation and runoff records began July 1951. STA AV based on 20 yr (1951-70) record period. Station average precipitation data from W-4 recording rain gage record through 1964 combined with 8-2 for 1965 through 1970. For long-time precipitation records, see National Weather Service records at Stillwater, Oklahoma.

1970	DAILY PRECIPITATION (inches)												STILLWATER, OKLAHOMA WATERSHED W-4											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.67	0.0	0.16	0.0	3.06	0.0	0.0	0.10	0.0	0.10	0.0	0.0	0.0								
2	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
3	0.0	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
4	0.0	0.0	0.0	0.27	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0								
6	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0								
7	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	1.26	0.0	0.0	0.0	0.0	0.0	0.0								
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0								
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
11	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.10	0.0	0.0	0.0	0.0	0.0								
14	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.16	0.0	0.02	0.0	0.0	0.0	0.0	0.0								
15	0.0	0.0	0.0	0.24	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75								
16	0.0	0.0	0.54	0.54	0.0	0.0	0.0	0.0	1.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
17	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.09	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0								
18	0.06	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
19	0.02	0.0	0.29	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
20	0.01	0.0	0.0	0.0	0.0	0.47	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16								
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
22	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	2.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.19	0.0	0.0	0.0	0.0	0.0	0.0								
24	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0								
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
27	0.0	0.0	0.06	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
28	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
29	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
30	0.0	0.0	0.20	1.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
31	0.0	0.0	0.40	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
TOTAL	0.09	0.20	2.48	4.20	0.80	2.82	1.13	0.19	5.35	1.91	0.22	0.51	20.30											
STA AV	0.52	0.97	1.91	2.31	4.65	3.81	3.76	2.65	3.58	2.41	1.41	1.05	29.03											

NOTES: Amounts recorded at rain gage 8-2 used for current monthly totals and for runoff events. STA AV based on 20 yr (1951-70) record period.



1970		MEAN DAILY DISCHARGE (cfs)						STILLWATER, OKLAHOMA WATERSHED W-4					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	2.926	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.110	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.037	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.154	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.192	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.008	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.018	0.0	0.0	0.0	0.0	0.029	0.0	0.0	0.0	
17	0.0	0.0	0.008	0.672	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	
18	0.0	0.0	0.017	1.660	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.488	0.120	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.059	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.038	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.003	0.004	0.0	0.0	0.0	0.0	0.172	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.080	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.754	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.530	4.419	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0933	0.3432	0.0040	0.0	0.0	0.0	0.0098	0.0064	0.0	0.0	
INCHES	0.0	0.0	0.334	1.190	0.014	0.0	0.0	0.0	0.034	0.023	0.0	0.0	
STA AV	0.058	0.083	0.346	0.405	1.144	0.684	0.476	0.064	0.325	0.464	0.111	0.066	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.115542.

RIESEL (WACO), TEXAS WATERSHED C

LOCATION: McLennan Co., Texas; 14 mi. ESE of Waco; Brazos River Basin.

AREA: 579.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED C															
		Jan	Feb	Mar	Apr	May	Jnn	Jul	Aug	Sep	Oct	Nov	Dec	Annual			Jan	Feb	Mar	Apr	May	Jnn	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.97	4.66	4.39	2.53	2.86	0.07	0.26	0.90	6.30	2.92	0.27	0.82	26.95	P	0.97	4.66	4.39	2.53	2.86	0.07	0.26	0.90	6.30	2.92	0.27	0.82	26.95	
	Q	0.112	1.403	2.350	0.335	0.111	0.002	0.0	0.0	0.0	0.025	0.0	0.0	4.338	Q	0.112	1.403	2.350	0.335	0.111	0.002	0.0	0.0	0.0	0.025	0.0	0.0	4.338	
STA AV	P	1.92	2.84	2.25	3.87	4.01	3.47	1.47	2.54	3.21	2.88	3.04	2.29	33.79	P	1.92	2.84	2.25	3.87	4.01	3.47	1.47	2.54	3.21	2.88	3.04	2.29	33.79	
	Q	0.441	0.658	0.649	1.019	0.931	0.633	0.171	0.185	0.360	0.302	0.484	0.519	6.353	Q	0.441	0.658	0.649	1.019	0.931	0.633	0.171	0.185	0.360	0.302	0.484	0.519	6.353	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
1970	Date	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
		3-6	0.297	3-6	0.189	3-6	0.336	2-24	0.604	2-24	0.730	3-6	1.377	3-6	1.476	2-28	2.256

MAXIMUMS FOR PERIOD OF RECORD

3-29	1.580	3-29	1.500	3-29	2.520	3-29	3.550	3-29	3.800	3-29	4.480	9-7	4.780	4-19	8.760		
1965		1965		1965		1965		1965		1965		1942		1957			

NOTES: Watershed conditions: 85% pasture; 7% row grain sorghum; 2% corn; 2% gravel and paved roads; 4% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.4-6. Precipitation and runoff records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 5, 14, and 20. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY AIR TEMPERATURE (degrees F)														RIESEL (WACO), TEXAS WATERSHED C													
Day	Jan		Feb		Mar		Apr		May		Jnn		Jul		Aug		Sep		Oct		Nov		Dec				
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min			
1	47	26	52	37	70	58	74	57	75	52	81	64	95	75	98	75	94	69	81	61	74	51	79	63			
2	54	32	58	44	66	60	73	35	66	50	79	56	95	74	99	75	78	70	82	62	64	38	76	63			
3	43	28	47	23	69	56	62	40	69	49	78	53	96	75	99	77	90	72	88	67	58	36	78	64			
4	48	20	43	30	85	50	69	46	74	53	78	55	99	73	98	76	85	76	87	68	56	34	76	51			
5	48	30	62	45	65	45	72	40	78	58	77	57	102	71	98	76	95	73	86	67	55	34	75	54			
6	47	22	63	46	69	49	65	42	81	54	81	58	94	67	96	76	94	75	80	66	65	38	77	49			
7	31	18	60	52	60	49	78	50	80	52	86	60	95	73	100	78	95	73	83	70	71	45	62	40			
8	43	20	58	40	52	43	78	53	80	60	92	66	97	74	100	78	94	73	88	72	78	53	65	44			
9	41	18	62	37	65	45	77	63	83	61	88	65	98	78	100	77	94	71	78	43	78	50	73	54			
10	36	20	55	32	70	45	71	56	83	68	87	63	98	76	99	75	94	77	64	43	69	41	78	59			
11	48	36	62	34	53	40	70	55	86	71	87	65	98	75	102	76	93	70	73	46	70	45	76	37			
12	64	36	72	33	44	34	74	60	86	72	89	75	98	76	97	73	89	71	68	57	74	37	46	28			
13	43	32	56	35	41	33	83	53	85	68	92	78	84	71	97	74	92	73	69	51	62	43	53	30			
14	42	34	71	44	54	36	71	54	87	67	93	78	93	72	99	75	87	71	76	53	51	43	57	37			
15	51	34	70	37	62	41	75	59	85	63	92	73	94	73	95	72	92	70	74	50	48	34	56	42			
16	55	36	41	31	70	44	75	65	70	49	92	70	92	71	95	73	92	72	95	47	48	29	71	44			
17	59	37	56	34	65	38	77	69	78	55	93	73	91	73	99	76	78	73	59	49	65	35	60	34			
18	64	28	69	48	52	39	79	70	73	57	93	70	94	73	100	76	87	71	60	48	75	41	71	39			
19	28	23	80	34	61	43	75	56	84	63	92	72	98	74	99	77	89	73	63	48	72	50	78	60			
20	41	25	53	39	53	40	73	54	87	65	93	71	98	73	98	77	91	72	69	50	78	41	66	40			
21	36	28	50	41	46	35	83	55	86	62	93	73	98	66	96	77	90	73	73	53	68	44	58	41			
22	39	32	60	47	45	34	81	61	87	63	95	69	98	60	96	77	87	73	75	58	77	48	71	58			
23	44	34	55	48	62	40	83	70	84	63	94	72	84	62	98	77	87	61	78	63	72	33	73	52			
24	47	37	55	48	72	49	80	71	82	67	89	73	99	68	92	74	73	59	73	55	46	22	55	25			
25	68	44	55	48	76	55	77	68	78	65	92	70	89	68	92	67	85	62	89	55	46	29	57	26			
26	77	42	54	33	70	39	81	63	85	67	94	73	93	69	92	66	85	59	79	60	69	38	53	27			
27	70	43	57	37	57	38	83	72	86	65	94	74	93	73	93	64	62	55	84	71	77	62	56	30			
28	73	59	60	47	66	47	83	73	84	62	97	75	94	74	92	67	65	55	76	42	77	56	59	40			
29	78	45			59	41	82	72	82	66	93	73	94	71	94	67	73	55	61	43	73	58	76	54			
30	56	27			59	42	82	71	83	69	94	72	96	74	92	69	78	58	68	43	74	60	61	45			
31	56	31			69	50			89	66			97	74	91	71			72	43			66	37			
AV.	51	32	58	39	62	44	76	56	81	61	89	68	94	72	97	74	86	68	76	55	66	42	66	44			
MEAN	41.2		49.0		52.7		67.3		71.3		78.8		83.1		85.2		77.4		65.4		54.3		55.3				
STA AV	57	37	62	40	69	47	77	56	83	63	89	70	94	72	94	72	88	66	81	57	68	46	61	39			

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 0800 of the day shown. STA AV based on 32 yr (1939-1970) period.

1970	DAILY PRECIPITATION (inches)					RIESEL (WACO), TEXAS				WATERSHED C		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	1.18	0.33	0.35E	0.0	0.37E	0.17E	0.0	0.83	0.0	0.01E	0.0
2	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0
3	0.06E	0.0	0.20	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.40	1.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0
9	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.03E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0
11	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.01E	0.0	0.53	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.24	0.05	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.26	0.0
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.42	0.0	0.0	0.19E	0.0	0.0	0.0	0.05E	0.0	0.0	0.08E
16	0.0	0.0	0.36	0.03E	0.0	0.0	0.0	0.0	2.69	0.0	0.0	0.0
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0
18	0.08S	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0
19	0.0	0.0	0.05E	0.10	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.06E
20	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.13E
21	0.0	0.0	0.18	0.0	0.0	0.0	0.09E	0.0	0.06E	0.0	0.0	0.02E
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.30	0.0	0.0	0.09E	0.0	0.0	0.07E	0.28	1.54	0.0	0.0
24	0.0	1.61	0.0	0.0	0.03E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.35	0.0	0.0	0.0
27	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.26	0.03E	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.53	1.29	0.0	0.0	0.02	0.0	0.0	0.0	0.54
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.97	4.66	4.39	2.53	2.86	0.07	0.26	2.90	6.30	2.92	0.27	0.82
STA AV	1.92	2.84	2.25	3.87	4.01	3.47	1.47	2.54	3.21	2.88	3.04	2.29

NOTES: Precipitation values are Thiessen weighted average of rain gages 5, 14, and 20. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period. Estimate codes may indicate that non-significant event totals are included.

1970	MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS				WATERSHED C		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.018	4.741	3.613	0.001	0.001	0.049	0.0	0.0	0.0	0.0	0.0	0.0
2	0.009	0.422	5.139	0.0 T	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0
3	0.006	0.052	4.219	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.003	0.018	0.743	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1.976	0.009	0.169	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.533	0.179	6.242	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.071	0.194	28.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.025	0.066	1.796	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.009	0.022	0.303	1.735	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.008	0.008	0.097	5.981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.007	0.005	0.263	0.293	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.004	0.002	0.204	0.085	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.003	0.032	0.373	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.003	0.002	0.035	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.003	0.006	0.020	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.003	0.019	0.019	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.003	0.008	1.852	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.002	0.004	0.273	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.003	0.001	0.144	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.002	0.031	0.078	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.002	0.001	3.068	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.002	0.001	0.470	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.002	0.003	0.139	0.001	0.0	0.0	0.0	0.0	0.0	0.556	0.0	0.0
24	0.002	18.500	0.061	0.001	0.0	0.0	0.0	0.0	0.0	0.059	0.0	0.0
25	0.003	2.767	0.027	0.001	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0
26	0.002	0.244	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.004	0.120	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.004	6.736	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.004	0.002	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.002	0.002	0.002	0.002	1.414	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.001	0.001	0.001	0.001	1.285	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0878	1.2190	1.8440	0.2714	0.0871	0.0018	0.0	0.0	0.0	0.0199	0.0	0.0
INCHES	0.112	1.403	2.350	0.335	0.111	0.002	0.0	0.0	0.0	0.025	0.0	0.0
STA AV	0.441	0.658	0.649	1.019	0.931	0.633	0.171	0.185	0.360	0.302	0.484	0.519

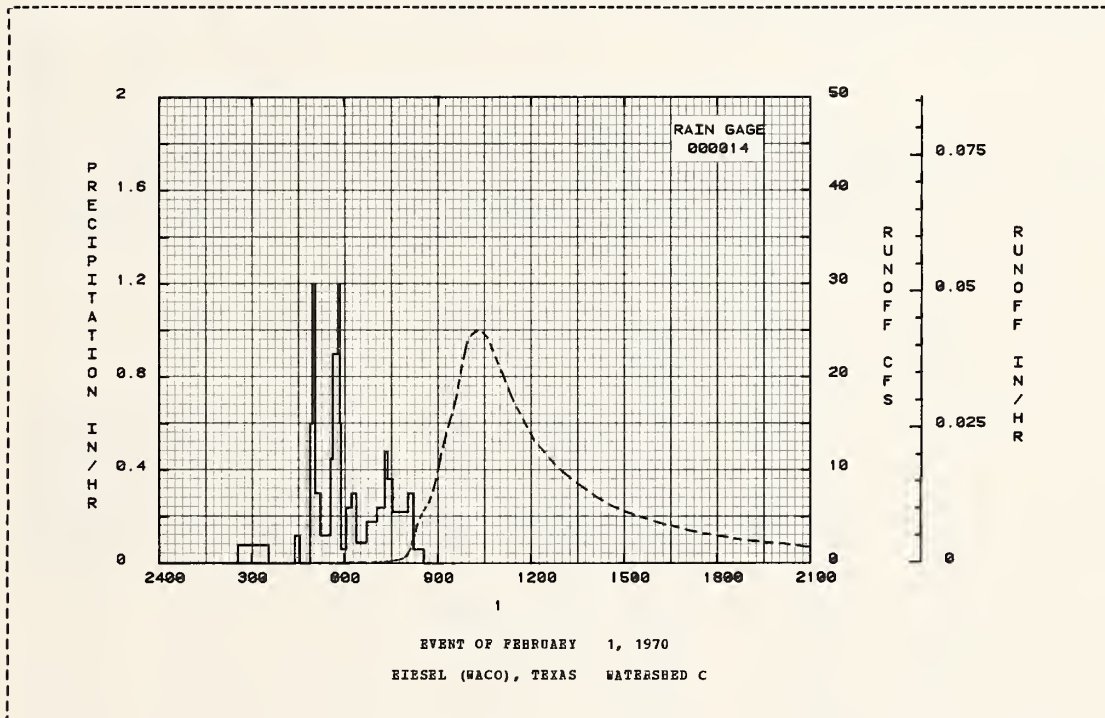
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.041108. Records began Feb. 1938; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period.

1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED C		
ANTECEDENT CONDITIONS			RAINFALL			RDNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF FEBRUARY 1, 1970											
2- 1	EG 000014	0.0	0.0	2- 1	EG 000014		2- 1	503	0.010	0.0	
					233	0.0		505	0.010	0.0	
					303	0.0800		507	0.010	0.0	
					333	0.0800		509	0.020	0.0	
					423	0.0		511	0.030	0.0	
					433	0.1200	0.10				
					453	0.0	0.10	513	0.040	0.0	
					458	0.6000	0.15	517	0.050	0.0	
					503	1.2000	0.25	537	0.050	0.0	
					513	0.3000	0.30	547	0.060	0.0	
					523	0.1200	0.32	552	0.060	0.0	
					528	0.1200	0.33	557	0.080	0.0	
					533	0.1200	0.34	602	0.090	0.0	
					537	0.4500	0.37	607	0.100	0.0	
					541	0.9000	0.43	617	0.110	0.0	
					547	0.9000	0.52	627	0.110	0.0	
					551	1.2000	0.60	657	0.110	0.0001	
					553	0.6000	0.62	702	0.120	0.0001	
					603	0.6000	0.63	707	0.140	0.0001	
					613	0.2400	0.67	712	0.170	0.0001	
					623	0.3000	0.72	717	0.190	0.0001	
					643	0.0900	0.75	722	0.210	0.0001	
					703	0.1800	0.81	727	0.240	0.0001	
					718	0.2400	0.87	732	0.280	0.0001	
					723	0.4800	0.91	737	0.320	0.0001	
					733	0.3600	0.97	742	0.360	0.0001	
					803	0.2200	1.08	747	0.410	0.0002	
					813	0.3000	1.13	752	0.520	0.0003	
					833	0.3600	1.15	757	0.680	0.0004	
					933	0.0	1.15	759	0.840	0.0004	
								801	0.960	0.0005	
								803	1.150	0.0006	
								805	1.320	0.0007	
								807	1.570	0.0008	
								809	2.010	0.0009	
								811	2.360	0.0010	
								813	2.670	0.0011	
								815	3.050	0.0013	
								817	3.480	0.0015	
								821	4.250	0.0019	
								825	4.820	0.0024	
								829	5.290	0.0030	
								833	5.700	0.0036	
								837	6.010	0.0043	
								842	6.540	0.0052	
								847	7.130	0.0062	
								852	8.050	0.0073	
								857	9.090	0.0085	
								902	10.370	0.0099	
								907	11.770	0.0115	
								912	12.900	0.0133	
								917	13.910	0.0152	
								922	14.980	0.0173	
								927	15.900	0.0195	
								932	16.910	0.0218	
								937	18.100	0.0243	
								942	19.640	0.0270	
								947	21.220	0.0299	
								952	22.360	0.0330	
								957	23.770	0.0363	
								1007	24.610	0.0432	
								1017	25.010	0.0503	
								1027	24.730	0.0574	
								1037	24.220	0.0644	
								1047	22.790	0.0711	
								1107	20.170	0.0834	
								1127	17.390	0.0941	
								1147	15.290	0.1034	
								1207	13.210	0.1115	
								1227	11.870	0.1187	
								1247	10.550	0.1251	
								1307	9.580	0.1308	
								1337	8.250	0.1384	
								1407	7.060	0.1450	
								1437	6.150	0.1507	
								1507	5.410	0.1557	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001713.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED C							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 1, 1970 (CONTINUED)										
							2- 1	1607	4.330	0.1640
								1707	3.470	0.1707
								1807	2.860	0.1761
								1907	2.400	0.1806
								2007	2.060	0.1844
								2107	1.700	0.1876
								2207	1.490	0.1903
								2307	1.310	0.1927
								2400	1.160	0.1946

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001713.



RIESEL (WACO), TEXAS WATERSHED D

LOCATION: McLennan Co., Texas; 14 mi. ESE of Waco; Brazos River Basin.

AREA: 1110.00 acres 1.73 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED D	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	0.95	4.60	4.42	2.49	2.71	0.95	0.19	0.92	6.52	3.12	2.29	0.84	27.09	
Q	0.064	1.200	2.317	0.276	0.048	0.001	0.0	0.0	0.002	0.078	0.0	0.0	3.986	
STA AV P	2.00	2.82	2.32	3.85	3.92	3.52	1.49	2.42	3.14	2.75	2.95	2.29	33.47	
Q	0.474	0.641	0.678	1.063	1.029	0.639	0.181	0.203	0.344	0.308	0.460	0.497	6.515	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	3-6	0.223	3-6	0.215	3-6	0.383	3-6	0.640	3-7	0.783	3-6	1.495	3-6	1.589	2-28	2.208
MAXIMUMS FOR PERIOD OF RECORD																
	3-29	2.110	3-25	1.930	3-29	3.150	3-29	4.590	3-29	4.880	3-29	5.630	3-29	5.690	4-19	9.660
	1965		1965		1965		1965		1965		1965		1965		1957	

NOTES: Watershed conditions: 69% pasture; 8% cotton; 1% corn; 4% fall planted small grain, mostly oats; 5% row sorghum; 2% gravel and paved roads; 11% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.4-6. Precipitation and runoff records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 5, 14, 20 and 26A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED D	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	1.21	0.32	0.04E	0.0	0.05E	0.09E	0.0	0.81	0.0	0.01E	0.0		
2	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0		
3	0.05E	0.0	0.21	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.37	1.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0		
9	0.0	0.0	0.0	1.62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0		
11	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.02E	0.0	0.57	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.28	0.0		
14	0.33E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.40	0.0	0.0	0.10E	0.0	0.0	0.0	0.04E	0.0	0.0	0.08E		
16	0.0	0.0	0.41	0.03E	0.0	0.0	0.0	0.0	2.58	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0		
18	0.07S	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0		
19	0.0	0.0	0.05E	0.11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.05E		
20	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.09E	0.0	0.36E	0.0	0.0	0.02E		
22	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.30	0.0	0.0	0.01E	0.0	0.0	0.06E	0.29	1.64	0.0	0.0		
24	0.0	1.62	0.0	0.0	0.35E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.38	0.0	0.0	0.0		
27	0.0	2.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.23	0.03E	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.46	0.0	1.15	0.0	0.0	0.02	0.0	0.0	0.0	0.55		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.95	4.60	4.42	2.49	2.71	0.05	0.19	0.92	6.52	3.12	0.29	0.84		
STA AV	2.00	2.82	2.32	3.85	3.92	3.52	1.49	2.42	3.14	2.75	2.95	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 5, 14, 20, and 26A. Records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS WATERSHED D					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.012	6.710	5.655	0.0	0.0	0.057	0.0	0.0	0.0	0.0	0.0	0.0
2	0.004	0.662	7.322	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0
3	0.001	0.064	7.286	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.018	1.256	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	2.168	0.003	0.266	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.662	0.096	12.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.078	0.212	59.202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.032	0.074	3.109	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0
9	0.009	0.024	0.493	2.739	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.006	0.007	0.136	9.651	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.009	0.002	0.302	0.375	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
12	0.003	0.0	0.243	0.092	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0 T	0.0	0.092	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.040	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.001	0.023	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.008	0.200	0.0	0.0	0.0	0.0	0.0	0.043	0.0	0.0	0.0
17	0.0	0.009	3.795	0.0 T	0.0	0.0	0.0	0.0	0.025	0.0	0.0	0.0
18	0.0	0.003	0.389	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0 T	0.194	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.124	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	4.774	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.697	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.183	0.0	0.0	0.0	0.0	0.0	0.0	3.530	0.0	0.0
24	0.0	32.883	0.072	0.0	0.0	0.0	0.0	0.0	0.0	0.112	0.0	0.0
25	0.0	4.912	0.033	0.0	0.0	0.0	0.0	0.0	0.038	0.002	0.0	0.0
26	0.0	0.378	0.004	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0
27	0.0	0.153	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	9.732	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.663	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	1.572	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0962	1.9982	3.4850	0.4296	0.0721	0.0020	0.0	0.0	0.0036	0.1177	0.0	0.0
INCHES	0.064	1.200	2.317	0.276	0.048	0.001	0.0	0.0	0.002	0.078	0.0	0.0
STA AV	0.474	0.641	0.678	1.063	1.029	0.639	0.181	0.203	0.344	0.308	0.460	0.497

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.021443. Records began Dec. 1937; station not in operation July 1943 to Mar. 1, 1949; part-year amounts not included in averages. STA AV based on 26 yr period.

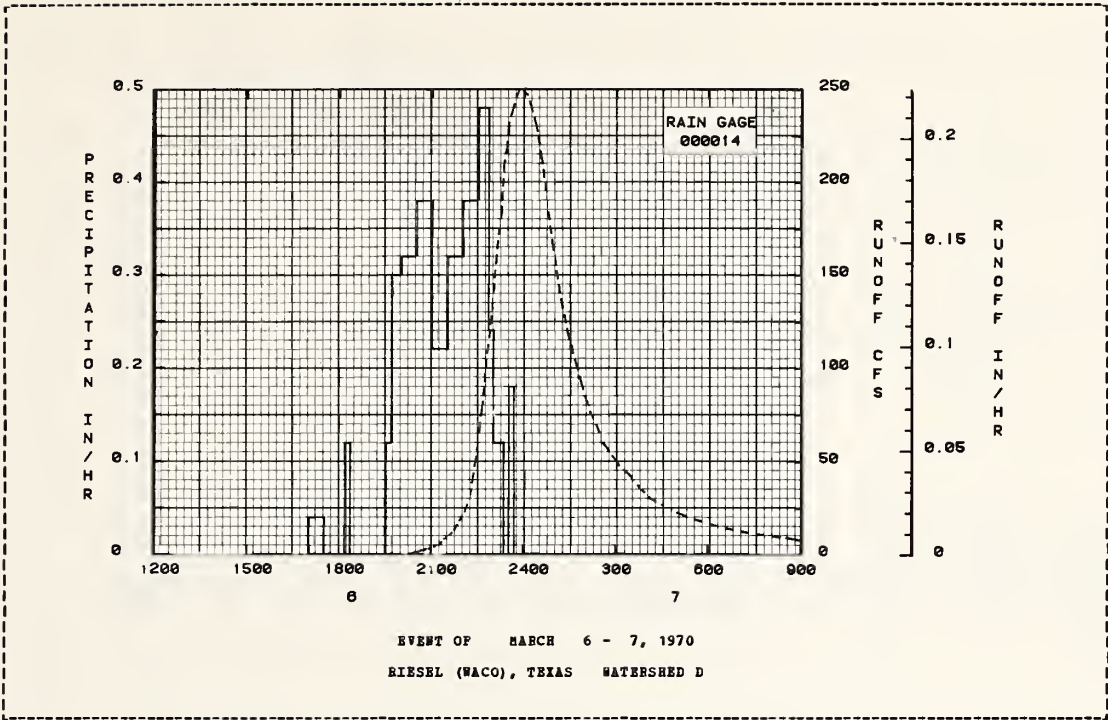
1970			SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED D		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 6 - 7, 1970											
3- 6	0.0	0.002	3- 6	1702	0.0	0.0	3- 6	1936	0.107	0.0	
				1732	0.0400	0.02		1946	0.109	0.0	
				1812	0.0	0.02		1956	0.122	0.0	
				1822	0.1200	0.04		2006	0.133	0.0	
				1932	0.0	0.04		2016	0.168	0.0	
WATERSHED CONDITIONS:											
69% pasture, dormant, all classes; 14% tilled, but not planted; 4% fall planted small grain, mostly oats; 6 to 8 inches high; 2% gravel and paved roads; 1% other.			1942	0.1200	0.06	0.06	2018	0.294	0.0		
Approx. 90% of other is Johnsongrass and weeds in conservation reserve, neither tilled nor grazed.			1952	0.3000	0.11	0.11	2020	0.337	0.0		
			2002	0.3000	0.16	0.16	2022	0.515	0.0		
			2032	0.3200	0.32	0.32	2024	0.705	0.0		
			2102	0.3800	0.51	0.51	2026	0.962	0.0		
			2132	0.2200	0.62	0.62	2028	1.242	0.0		
			2202	0.3200	0.78	0.78	2032	1.526	0.0001		
			2232	0.3800	0.97	0.97	2036	1.757	0.0002		
			2252	0.4800	1.13	1.13	2041	2.113	0.0003		
			2302	0.2400	1.17	1.17	2046	2.448	0.0005		
			2322	0.1200	1.21	1.21	2051	2.832	0.0007		
			2332	0.0	1.21	1.21	2056	3.220	0.0009		
			2342	0.1800	1.24	1.24	2101	3.704	0.0012		
							2106	4.272	0.0015		
							2111	5.078	0.0018		
							2116	5.598	0.0022		
							2121	6.735	0.0027		
							2126	8.472	0.0033		
							2131	9.316	0.0040		
							2136	10.556	0.0047		
							2141	11.714	0.0055		
							2146	13.476	0.0064		
							2151	15.886	0.0075		
							2156	18.089	0.0088		
							2200	20.463	0.0100		
							2206	22.841	0.0119		
							2211	26.815	0.0137		
							2216	31.292	0.0159		
							2221	40.050	0.0186		
							2226	49.000	0.0219		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000893.

1970 SELECTED RUNOFF EVENT			FISSEL (WACO), TEXAS WATERSHED D							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2231	58.000	0.0259
								2236	71.000	0.0307
								2241	82.000	0.0364
								2246	97.000	0.0431
								2251	112.500	0.0509
								2256	124.000	0.0597
								2301	137.500	0.0695
								2306	157.000	0.0805
								2311	172.000	0.0927
								2316	183.000	0.1059
								2321	208.000	0.1204
								2326	218.000	0.1362
								2331	232.000	0.1530
								2336	237.500	0.1705
								2341	242.000	0.1883
								2346	247.000	0.2065
								2351	250.000	0.2250
								2400	248.000	0.2584
							3- 7	7	247.000	0.2842
								16	238.000	0.3167
								26	227.500	0.3513
								36	210.000	0.3839
								46	187.500	0.4135
								56	167.000	0.4399
								106	148.000	0.4634
								116	132.000	0.4843
								126	119.000	0.5030
								136	108.000	0.5199
								146	99.000	0.5353
								156	88.500	0.5492
								206	80.000	0.5618
								216	73.000	0.5732
								226	67.000	0.5836
								236	59.500	0.5930
								246	56.000	0.6016
								306	48.000	0.6171
								326	43.000	0.6306
								346	36.000	0.6424
								406	30.329	0.6523
								436	25.779	0.6648
								506	21.601	0.6754
								536	18.793	0.6844
								606	16.139	0.6922
								636	14.118	0.6990
								706	12.431	0.7049
								736	10.968	0.7131
								806	9.833	0.7147
								836	8.819	0.7189
								906	7.786	0.7226
								936	7.328	0.7260
								1034	7.050	0.7290
								1024	6.735	0.7311

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000893.





RIESEL (WACO), TEXAS WATERSHED G

LOCATION: McLennan and Falls Counties, Texas; 16 mi. S.E. of Waco; Brazos River Basin.

AREA: 4380.00 acres 6.84 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED G	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	0.90	4.68	4.48	2.57	2.32	0.09	0.45	0.78	6.63	3.43	0.33	0.86	27.51	
Q	0.051	1.258	2.564	0.529	0.000	0.0	0.0	0.0	0.0	0.135	0.0	0.0	4.538	
STA AV P	2.20	2.99	2.33	3.61	3.48	4.30	1.62	2.78	3.37	2.89	2.98	2.56	35.12	
Q	0.691	0.819	0.763	0.738	0.741	0.981	0.179	0.183	0.338	0.194	0.507	0.528	6.663	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days					
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970	3-7	0.116	3-7	0.113	3-7	0.219	3-7	0.568	3-7	0.840	3-6	1.423	3-6	1.605	2-28	2.298

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
	3-29	0.950	3-29	0.910	3-29	1.720	3-29	3.390	3-29	3.940	3-29	4.030	3-29	4.740	11-22	4.820
	1965		1965		1965		1965		1965		1965		1965		1940	

NOTES: Watershed conditions: 40% pasture; 2% tilled, but not planted; 9% cotton; 5% corn; 8% fall planted small grain, largely oats; 4% sorghum; 2% gravel and paved roads; 30% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.4-6. Precipitation and runoff records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 5, 14, 20, 26A, 30A, 43A, 48A, 56A, 65A, 70, 74A, 84A, and 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED G	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.32	0.29E	0.03E	0.01E	0.08E	0.02E	0.0	0.88	0.0	0.04E	0.0		
2	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0		
3	0.07E	0.0	0.36	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0	0.0	0.0		
5	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.31	1.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5H	0.0	0.0		
9	0.0	0.0	0.0	1.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0		
11	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.03E	0.0	0.72	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.22E	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.29	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.36	0.0	0.0	0.07E	0.0	0.0	0.0	0.02E	0.0	0.0	0.11E		
16	0.0	0.0	0.42	0.02E	0.0	0.0	0.0	0.0	2.14	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.28E	0.0	0.0	0.0		
18	0.03S	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
19	0.0	0.0	0.05E	0.12	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E		
20	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.13E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.03E		
22	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.30	0.0	0.0	0.02E	0.0	0.0	0.03E	0.44	1.85	0.0	0.0		
24	0.0	1.74	0.0	0.0	0.07E	0.01E	0.31E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.53	0.0	0.0	0.0		
27	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.20	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.25E	0.85	0.0	0.0	0.03	0.0	0.0	0.0	0.54		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.90	4.68	4.48	2.57	2.32	0.09	0.45	0.78	6.63	3.43	0.33	0.86		
STA AV	2.20	2.99	2.33	3.61	3.48	4.30	1.62	2.78	3.37	2.89	2.98	2.56		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 5, 14, 20, 26A, 30A, 43A, 48A, 56A, 65A, 70, 74A, 84A, and 89. Records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. STA AV based on 18 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESSEL (WACO), TEXAS WATERSHED G												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.07	30.77	23.32	0.09	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.05	4.56	19.76	0.05	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.04	0.63	54.83	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.02	0.21	8.95	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	3.98	0.10	2.11	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	4.07	0.30	18.23	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.42	0.50	254.01	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.14	0.38	25.41	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.05	0.20	3.65	19.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.06	0.09	1.41	72.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.09	0.05	2.18	3.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.04	0.02	2.02	0.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.03	0.02	0.92	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.03	0.03	0.49	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.03	0.23	0.34	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.03	0.10	0.28	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.03	0.05	19.61	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02	0.04	2.55	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.02	0.02	1.52	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.02	0.01	0.94	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.02	0.00	22.14	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.02	0.01	4.16	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.02	0.07	1.42	0.01	0.0	0.0	0.0	0.0	0.0	23.79	0.0	0.0
24	0.02	119.01	0.64	0.01	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0
25	0.02	35.53	0.35	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0
26	0.02	2.75	0.17	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.02	1.19	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.03	34.74	0.10	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.01		0.07	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.00		0.08	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.303	8.271	15.220	3.248	0.000	0.0	0.0	0.0	0.0	0.800	0.0	0.0
INCHES	0.051	1.258	2.564	0.529	0.030	0.0	0.0	0.0	0.0	0.135	0.0	0.0
STA AV	0.691	0.819	0.763	0.738	0.741	0.981	0.179	0.183	0.338	0.194	0.507	0.528

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.005434. Records began Jan. 1938; station not in operation July 1943 to July 1, 1957; part-year amounts not included in averages. STA AV based on 18 yr period.

1970 SELECTED RUNOFF EVENT RIESSEL (WACO), TEXAS WATERSHED G												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF FEBRUARY 1 - 2, 1970												
2- 1	EG 000014	0.04	0.0	2- 1	EG 000014		2- 1					
				303	0.0	0.0	445		0.001	0.0		
				333	0.0800	0.04	450		0.003	0.0		
				423	0.0	0.04	455		0.005	0.0		
				433	0.1200	0.06	500		0.009	0.0		
				453	0.0	0.06	515		0.014	0.0		
				458	0.6000	0.11	530		0.020	0.0		
				503	1.2000	0.21	545		0.025	0.0		
				513	0.3000	0.26	550		0.052	0.0		
				523	0.1200	0.28	555		0.092	0.0		
				528	0.1200	0.29	600		0.143	0.0		
				533	0.1200	0.30	605		0.190	0.0		
				537	0.4500	0.33	610		0.229	0.0		
				541	0.9000	0.39	615		0.332	0.0		
				547	0.9000	0.48	620		0.547	0.0		
				551	1.2000	0.56	625		0.799	0.0		
				553	0.6000	0.58	630		1.085	0.0		
				603	0.0600	0.59	635		1.326	0.0		
				613	0.2400	0.63	640		1.641	0.0		
				623	0.3000	0.68	645		1.906	0.0		
				643	0.0900	0.71	650		2.286	0.0		
				703	0.1800	0.77	655		2.697	0.0		
				718	0.2400	0.83	700		3.361	0.0001		
				723	0.4800	0.87	705		4.108	0.0002		
				733	0.3600	0.93	710		4.953	0.0003		
				803	0.2200	1.04	715		5.823	0.0004		
				813	0.3000	1.09	720		6.974	0.0005		
							725		8.561	0.0006		
							730		10.518	0.0008		
							735		13.271	0.0010		
							740		16.152	0.0013		
							745		18.350	0.0016		
							750		21.202	0.0020		
							755		24.554	0.0024		
							800		30.198	0.0029		
							805		33.306	0.0035		

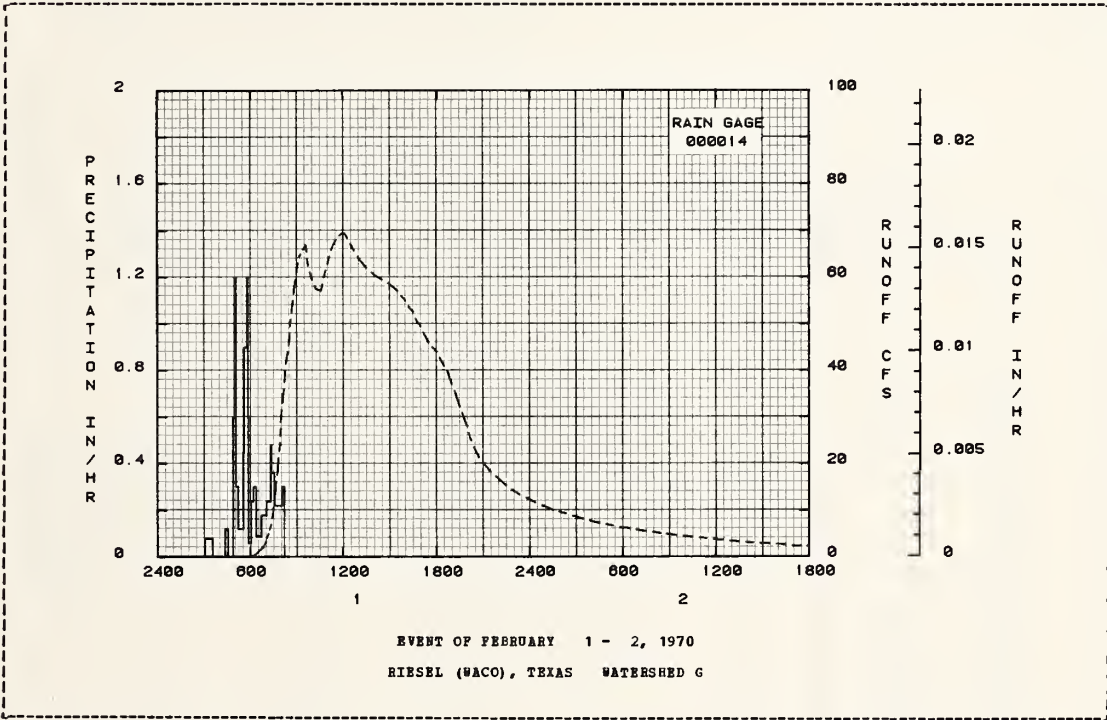
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.

1970 SELECTED RUNOFF EVENT			BISESEL (WACO), TEXAS WATERSHED 6							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF FEBRUARY 1 - 2, 1970 (CONTINUED)										
				2-	1			810	36.000	0.0042
								815	40.000	0.0049
								820	42.000	0.0057
								825	44.000	0.0065
								830	46.500	0.0074
								835	49.500	0.0083
								840	52.500	0.0093
								845	55.000	0.0103
								850	57.500	0.0114
								855	59.500	0.0125
								900	61.500	0.0136
								905	63.000	0.0148
								910	64.500	0.0160
								915	65.000	0.0172
								925	66.000	0.0197
								930	66.500	0.0210
								935	67.000	0.0223
								945	62.500	0.0247
								1000	59.500	0.0282
								1015	57.500	0.0315
								1025	57.200	0.0337
								1035	57.000	0.0359
								1045	60.000	0.0381
								1100	63.000	0.0416
								1115	66.000	0.0453
								1130	68.000	0.0491
								1145	69.000	0.0530
								1155	69.500	0.0556
								1205	69.500	0.0582
								1215	68.500	0.0608
								1230	67.000	0.0646
								1300	64.000	0.0720
								1330	62.000	0.0791
								1400	60.500	0.0860
								1430	59.500	0.0928
								1500	58.500	0.0995
								1530	57.000	0.1060
								1545	56.000	0.1092
								1600	55.000	0.1123
								1615	53.500	0.1154
								1630	52.500	0.1184
								1645	50.500	0.1213
								1700	49.500	0.1241
								1715	47.500	0.1268
								1730	46.000	0.1294
								1745	45.000	0.1320
								1800	44.000	0.1345
								1815	42.500	0.1369
								1830	41.000	0.1393
								1845	39.500	0.1416
								1900	37.000	0.1438
								1915	35.000	0.1458
								1930	32.308	0.1477
								1945	30.139	0.1495
								2000	27.972	0.1511
								2015	24.907	0.1526
								2030	23.026	0.1540
								2045	21.380	0.1553
								2100	20.119	0.1565
								2130	16.253	0.1587
								2200	16.806	0.1607
								2230	15.392	0.1625
								2300	14.099	0.1642
								2400	12.246	0.1672
				2-	2			130	10.080	0.1710
								300	6.587	0.1742
								430	7.218	0.1769
								600	6.237	0.1792
								730	5.484	0.1812
								900	4.768	0.1829
								1030	4.228	0.1844
								1200	3.707	0.1857
								1330	3.197	0.1869
								1500	2.853	0.1879
								1630	2.526	0.1888

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0002264.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED G							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF FEBRUARY 1 - 2, 1970 (CONTINUED)										
				2- 2	1700			1700	2.315	0.1891
					1800			1800	2.219	0.1896
					1930			1930	1.957	0.1903
					2100			2100	1.742	0.1909
					2230			2230	1.531	0.1915
					2400			2400	1.281	0.1920

NOTES: To convert runoff in CFS to IN/8R, multiply by 0.0002264.



RIESEL (WACO), TEXAS WATERSHED W-1

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 174.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED W-1	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.84	4.71	5.01	2.73	2.07	0.39	0.32	1.07	5.68	3.32	0.37	0.82	27.32	
	Q 0.191	1.355	3.448	0.620	0.045	0.006	0.0	0.0	0.0	0.012	0.0	0.0	5.677	
STA AV	P 2.25	2.79	2.63	4.00	4.26	3.30	1.50	2.08	2.58	2.64	2.93	2.53	33.49	
	Q 0.501	0.634	0.757	1.039	1.219	0.618	6.116	0.091	0.137	0.176	0.383	0.449	6.120	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	3-7	0.276	3-7	0.269	3-7	0.498	3-7	1.062	3-7	1.192	3-6	1.917	3-6	2.032	2-27	3.030
MAXIMUMS FOR PERIOD OF RECORD																
	5-1 1944	4.510	5-1 1944	2.990	5-1 1944	5.570	5-1 1944	6.910	5-1 1944	6.920	5-1 1944	7.050	4-30 1944	9.200	4-29 1944	11.060

NOTES: Watershed conditions: 11% cotton; 85% pasture; 3% roads; and 1% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve; but neither tilled nor grazed. Area reported as 174 acres beginning 1969. Previously reported as 176 acres prior publications. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.6-6 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen method using rain gages 75A, 89, W-2, W-2A, and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.37	0.28	0.02E	0.03E	0.39	0.0	0.0	0.85	0.0	0.05E	0.0		
2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0		
3	0.08E	0.0	0.92	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	3.31	1.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0		
9	0.0	0.0	0.0	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.05E	0.00E	0.0	0.06	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0		
11	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.06E	0.0	1.08	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.01E	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.32	0.0		
14	0.03E	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.40	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12E		
16	0.0	0.0	0.40	0.02E	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0		
17	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0		
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.05E		
20	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.11E		
21	0.0	0.0	0.17	0.0	0.0	0.0	0.08E	0.0	0.12	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.28	0.0	0.0	0.01E	0.0	0.0	0.0 E	0.50	1.73	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.10E	0.0	0.24E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.45	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.61	0.0	0.0	0.0		
27	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.13	0.04E	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.12E	0.57	0.0	0.0	0.01	0.0	0.0	0.0	0.50		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.84	4.71	5.01	2.73	2.07	0.39	0.32	1.07	5.68	3.32	0.37	0.82		
STA AV	2.25	2.79	2.63	4.00	4.26	3.30	1.50	2.08	2.58	2.64	2.93	2.53		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 75A, 89, W-2, W-2A, and W-5A. Records began July 1937; part-year amounts not included in averages. STA AV based on 33 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	1.437	1.369	0.330	0.020	0.026	0.0	0.0	0.0	0.0	0.0	0.0
2	0.033	0.094	0.541	0.021	0.012	0.006	0.0	0.0	0.0	0.0	0.0	0.0
3	0.031	0.038	4.634	0.021	0.010	0.003	0.0	0.0	0.0	0.0	0.0	0.0
4	0.023	0.035	0.435	0.019	0.009	0.003	0.0	0.0	0.0	0.0	0.0	0.0
5	0.483	0.034	0.208	0.015	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0
6	0.089	0.153	3.793	0.017	0.008	0.002	0.0	0.0	0.0	0.0	0.0	0.0
7	0.330	0.090	10.610	0.014	0.307	0.031	0.0	0.0	0.0	0.0	0.0	0.0
8	0.033	0.065	0.647	0.014	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0
9	0.031	0.042	0.232	2.625	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
10	0.043	0.030	0.116	1.114	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
11	0.061	0.029	0.176	0.069	0.009	0.001	0.0	0.0	0.0	0.0	0.0	0.0
12	0.033	0.026	0.142	0.044	0.010	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
13	0.030	0.030	0.083	0.025	0.010	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0
14	0.036	0.033	0.069	0.022	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.035	0.156	0.058	0.028	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.032	0.052	0.064	0.036	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.030	0.035	0.769	0.036	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.023	0.030	0.098	0.038	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.022	0.019	0.115	0.095	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.023	0.021	0.116	0.022	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.022	0.023	0.711	0.022	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.023	0.030	0.142	0.023	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.025	0.067	0.081	0.023	0.012	0.0	0.0	0.0	0.0	0.088	0.0	0.0
24	0.027	5.259	0.063	0.025	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.029	0.723	0.049	0.027	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.026	0.174	0.037	0.022	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.024	0.237	0.031	0.022	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.023	0.945	0.028	0.019	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.014	0.027	0.027	0.019	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.016	0.031	0.026	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.019	0.029	0.029	0.015	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0451	0.3539	0.8130	0.1511	0.0106	0.0015	0.0	0.0	0.0	0.0028	0.0	0.0
INCHES	0.191	1.355	3.448	0.620	0.045	0.036	0.0	0.0	0.0	0.012	0.0	0.0
STA AV	0.501	0.634	0.757	1.039	1.219	0.618	0.116	0.091	0.137	0.176	0.383	0.449

NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.136791. Records began July 1937; part-year amounts not included in averages. STA AV based on 33 yr period.

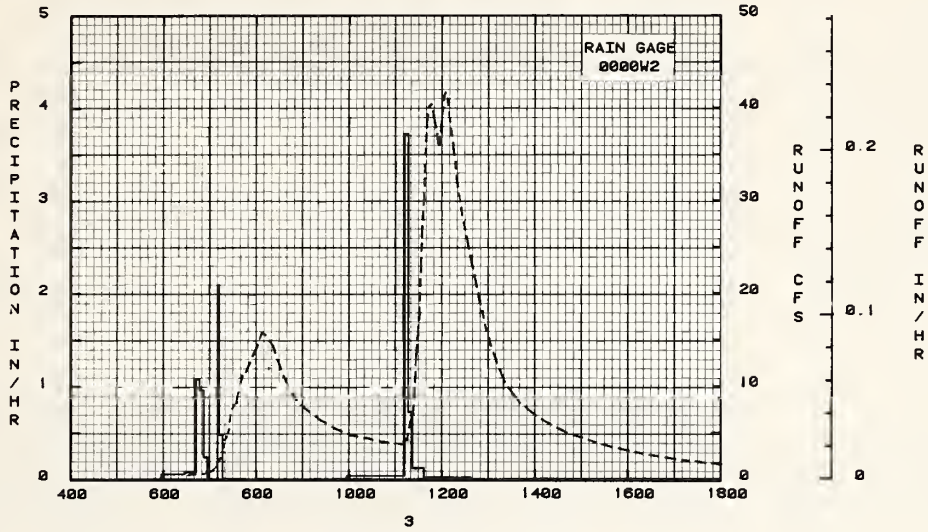
1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-1												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 3, 1970												
3- 3	0.0	0.017	3- 3	557	0.0	0.0	3- 3	632	0.501	0.0		
				627	0.0600	0.03		642	0.561	0.0005		
				642	0.0800	0.05		652	0.652	0.0011		
				647	1.0800	0.14		657	0.721	0.0014		
				652	0.9600	0.22		702	0.864	0.0018		
WATERSHED CONDITIONS:												
11% tilled, but not planted;												
85% pasture, Bermudagrass,												
good cover, moderately												
grazed; 3% gravel roads; 1%												
Johnsongrass and weeds, not												
tilled or grazed. Straight												
row cultivation, not												
terraced.												
				1112	0.0400	0.40		716	2.991	0.0039		
				1117	3.7200	0.71		718	3.743	0.0045		
				1122	0.7200	0.77		720	4.274	0.0053		
				1137	0.1200	0.80		722	4.647	0.0061		
				1237	0.0200	0.82		724	5.025	0.0070		
								725	5.505	0.0075		
								726	6.388	0.0081		
								727	6.938	0.0067		
								729	7.624	0.0101		
								732	8.038	0.0123		
								734	8.251	0.0139		
								737	9.442	0.0164		
								742	11.192	0.0213		
								747	11.604	0.0267		
								752	12.610	0.0324		
								757	13.641	0.0386		
								802	14.486	0.0453		
								807	15.804	0.0525		
								812	15.542	0.0600		
								822	14.322	0.0742		
								832	11.850	0.0866		
								842	9.836	0.0969		
								852	8.552	0.1056		
								902	7.700	0.1133		
								922	6.410	0.1267		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	942	5.446	0.1380
								1002	4.753	0.1477
								1022	4.424	0.1564
								1042	4.018	0.1644
								1102	3.833	0.1719
								1108	3.726	0.1741
								1112	3.971	0.1756
								1113	4.225	0.1760
								1115	4.313	0.1768
								1117	4.950	0.1777
								1118	5.576	0.1782
								1120	6.275	0.1793
								1123	7.267	0.1812
								1125	8.972	0.1827
								1126	10.858	0.1836
								1127	13.094	0.1847
								1128	14.441	0.1860
								1130	16.431	0.1889
								1131	17.707	0.1905
								1132	20.105	0.1923
								1133	23.088	0.1943
								1134	25.371	0.1966
								1135	27.298	0.1991
								1137	30.173	0.2045
								1139	34.960	0.2107
								1141	38.595	0.2177
								1143	40.170	0.2252
								1146	40.420	0.2367
								1150	39.172	0.2518
								1152	37.939	0.2591
								1155	36.157	0.2697
								1157	35.996	0.2766
								1200	38.595	0.2872
								1203	41.345	0.2985
								1205	41.683	0.3064
								1207	41.008	0.3142
								1210	39.255	0.3256
								1215	35.676	0.3434
								1220	32.149	0.3595
								1225	29.129	0.3740
								1230	26.866	0.3873
								1235	24.810	0.3956
								1240	22.681	0.4109
								1245	20.754	0.4212
								1248	19.847	0.4270
								1250	18.809	0.4307
								1256	16.609	0.4408
								1301	15.028	0.4483
								1311	12.499	0.4614
								1321	10.465	0.4723
								1331	9.235	0.4817
								1341	8.198	0.4900
								1401	6.821	0.5043
								1421	5.830	0.5163
								1441	4.988	0.5266
								1501	4.424	0.5355
								1531	3.611	0.5469
								1601	3.029	0.5564
								1631	2.542	0.5643
								1701	2.117	0.5709
								1731	1.833	0.5765
								1801	1.563	0.5813
								1901	1.304	0.5895
								2001	1.108	0.5964
								2100	0.919	0.6021
								2200	0.827	0.6071
								2300	0.776	0.6117
								2400	0.745	0.6160

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.005700.





EVENT OF MARCH 3, 1970  
 RIESEL (WACO), TEXAS WATERSHED W-1

## RIESEL (WACO), TEXAS WATERSHED W-2

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 130.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS		WATERSHED W-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 0.84	4.53	4.79	2.73	2.25	0.42	0.26	1.23	5.35	3.50	0.38	0.76	27.02			
	Q 0.494	1.683	3.921	1.038	0.205	0.044	0.0	0.0	0.154	0.061	0.029	0.7630				
STA AV	P 2.21	2.77	2.55	4.01	4.22	3.24	1.46	2.15	2.59	2.63	2.90	2.50	33.22			
	Q 0.593	0.763	0.872	1.091	1.244	0.581	0.117	0.058	0.112	0.164	0.393	0.557	6.544			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
Date	Maximum Discharge Rate	Maximum Volume for Selected Time Interval										
		1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.				
1970	2-24 0.315	2-24 0.276	3- 7 0.491	3- 7 1.081	3- 7 1.230	3- 6 2.027	3- 6 2.160	3- 1 3.186				

MAXIMUMS FOR PERIOD OF RECORD												
Date	Maximum Discharge Rate	1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.				
1944	4.830	5- 1 1944 2.860	5- 1 1944 5.400	5- 1 1944 6.910	5- 1 1944 6.970	5- 1 1944 7.120	4-30 1944 9.260	4-29 1944 10.960				

NOTES: Watershed conditions: 56% pasture; 20% row grain sorghum; 18% fall planted small grain, largely oats; 5% gravel and paved roads; 1% other. Approximately 90% of other is Johnsongrass and weeds in conservation reserve, but neither tilled nor grazed. Cropland farmed on contour, not terraced. Modified conservation applied 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began July 1937; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages W-2, W-4, W-5A, and W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS		WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	1.35	0.25	0.02E	0.00E	0.42	0.0	0.0	0.80	0.0	0.06E	0.0				
2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0				
3	0.06E	0.0	1.05	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0				
5	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.30	1.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	1.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0				
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.06E	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.12E	0.0	1.29	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.00E	0.05	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.32	0.0				
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
15	0.0	0.35	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.12E				
16	0.0	0.0	0.44	0.02E	0.0	0.0	0.0 E	0.0	1.20	0.0	0.0	0.0				
17	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0				
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0				
19	0.0	0.0	0.02E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03E				
20	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.10E				
21	0.0	0.0	0.14	0.0	0.0	0.0	0.08E	0.0	0.14	0.0	0.0	0.07E				
22	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.25	0.0	0.0	0.02E	0.0	0.0	0.0	0.54	1.68	0.0	0.0				
24	0.0	1.78	0.0	0.0	0.14	0.0	0.17E	0.0	0.0	0.0	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.29	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.62	0.0	0.0	0.0				
27	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.14	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.0	0.14E	0.59	0.0	0.0	0.06	0.0	0.0	0.0	0.45				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	0.84	4.53	4.79	2.73	2.25	0.42	0.26	1.23	5.35	3.50	0.38	0.76				
STA AV	2.21	2.77	2.55	4.01	4.22	3.24	1.46	2.15	2.59	2.63	2.90	2.50				

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages W-2, W-4, W-5A, and W-6. Records began July 1937. STA AV based on 33 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.069	1.697	0.517	0.102	0.059	0.062	0.0	0.0	0.0	0.0	0.020	0.007
2	0.079	0.091	0.310	0.085	0.047	0.023	0.0	0.0	0.0	0.0	0.019	0.008
3	0.071	0.058	0.160	0.074	0.042	0.015	0.0	0.0	0.0	0.0	0.017	0.007
4	0.070	0.062	0.352	0.072	0.041	0.015	0.0	0.0	0.0	0.0	0.016	0.007
5	0.046	0.068	0.171	0.065	0.037	0.014	0.0	0.0	0.0	0.0	0.018	0.009
6	0.108	0.117	2.999	0.066	0.032	0.014	0.0	0.0	0.0	0.0	0.012	0.006
7	0.086	0.088	8.420	0.060	0.032	0.012	0.0	0.0	0.0	0.0	0.007	0.004
8	0.085	0.079	0.555	0.062	0.032	0.012	0.0	0.0	0.0	0.0	0.008	0.005
9	0.086	0.068	0.200	2.321	0.035	0.011	0.0	0.0	0.0	0.0	0.005	0.008
10	0.094	0.065	0.142	1.022	0.037	0.011	0.0	0.0	0.0	0.0	0.005	0.006
11	0.093	0.068	0.171	0.111	0.035	0.012	0.0	0.0	0.0	0.0	0.005	0.005
12	0.084	0.064	0.153	0.103	0.036	0.010	0.0	0.0	0.0	0.0	0.005	0.003
13	0.085	0.069	0.123	0.088	0.031	0.010	0.0	0.0	0.0	0.0	0.005	0.001
14	0.091	0.070	0.115	0.089	0.028	0.006	0.0	0.0	0.0	0.0	0.016	0.001
15	0.087	0.133	0.113	0.097	0.034	0.004	0.0	0.0	0.0	0.0	0.010	0.009
16	0.087	0.072	0.121	0.109	0.029	0.003	0.0	0.0	0.0	0.0	0.010	0.008
17	0.085	0.066	0.770	0.106	0.019	0.001	0.0	0.0	0.0	0.0	0.006	0.005
18	0.077	0.063	0.143	0.107	0.019	0.001	0.0	0.0	0.0	0.0	0.008	0.002
19	0.078	0.050	0.154	0.144	0.020	0.001	0.0	0.0	0.0	0.005	0.009	0.002
20	0.080	0.051	0.148	0.079	0.021	0.001	0.0	0.0	0.0	0.005	0.009	0.008
21	0.080	0.059	0.501	0.073	0.019	0.0	0.0	0.0	0.0	0.004	0.011	0.010
22	0.078	0.067	0.173	0.070	0.034	0.0	0.0	0.0	0.0	0.007	0.015	0.007
23	0.073	0.099	0.136	0.070	0.040	0.0	0.0	0.0	0.0	0.688	0.008	0.004
24	0.061	4.722	0.105	0.078	0.043	0.003	0.0	0.0	0.0	0.030	0.005	0.002
25	0.059	0.434	0.092	0.074	0.035	0.0	0.0	0.0	0.0	0.014	0.007	0.002
26	0.055	0.102	0.087	0.069	0.038	0.0	0.0	0.0	0.0	0.013	0.009	0.0
27	0.059	0.144	0.089	0.069	0.033	0.0	0.0	0.0	0.0	0.017	0.010	0.0
28	0.056	0.470	0.097	0.066	0.089	0.0	0.0	0.0	0.0	0.011	0.011	0.0
29	0.043		0.095	0.065	0.029	0.0	0.0	0.0	0.0	0.014	0.013	0.0
30	0.039		0.102	0.074	0.048	0.0	0.0	0.0	0.0	0.016	0.012	0.017
31	0.040		0.102		0.047		0.0	0.0		0.017		0.003
MEAN	0.0870	0.3283	0.6909	0.1890	0.0361	0.0080	0.0	0.0	0.0	0.0272	0.0111	0.0051
INCHES	0.494	1.683	3.921	1.038	0.205	0.044	0.0	0.0	0.0	0.154	0.061	0.029
STA AV	0.593	0.763	0.872	1.091	1.244	0.581	0.117	0.058	0.112	0.164	0.393	0.557

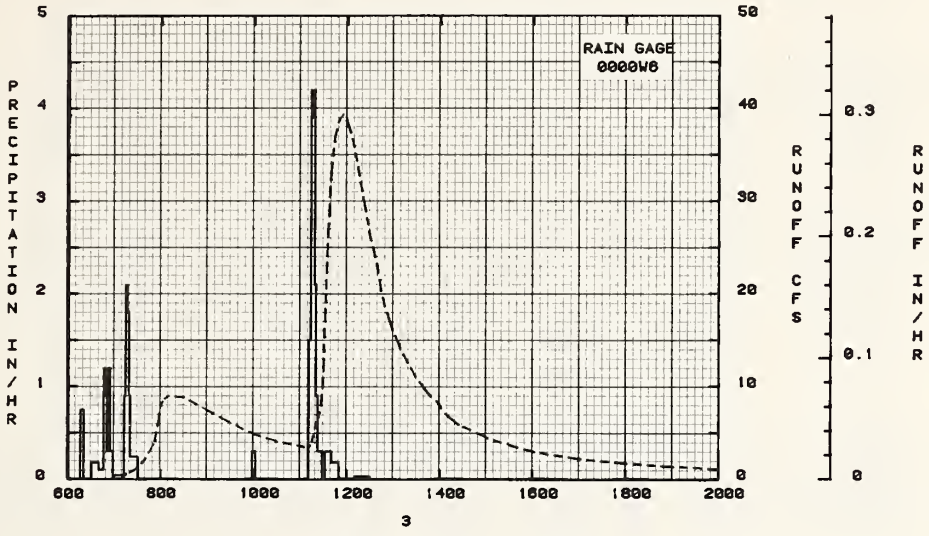
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.183090. Records began July 1937. STA AV based on 33 yr period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-2												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 3, 1970												
3-3	RG 0000W6 0.0	0.014	3-3	RG 0000W6	0.0	0.0	3-3	700	0.365	0.0		
					0.7500	0.05		710	0.432	0.0005		
					0.0	0.05		713	0.485	0.0007		
					0.1800	0.08		715	0.570	0.0008		
					0.1000	0.09		720	0.721	0.0012		
WATERSHED CONDITIONS:												
18% fall planted oats, 8 to 10 inches high; 20% tilled but not planted; 56% pasture, 8% bermudagrass, good cover, moderately grazed; 5% gravel roads; 1% Johnsongrass, not tilled or grazed. Cropland farmed on contour, not terraced.												
					0.2000	0.13		725	0.940	0.0017		
					0.9000	0.16		727	1.096	0.0020		
					0.3000	0.17		730	1.338	0.0025		
					1.2000	0.21		735	1.714	0.0035		
					0.3000	0.23		740	2.246	0.0048		
					0.0	0.23		745	2.966	0.0065		
					0.9000	0.26		750	3.743	0.0086		
					2.1000	0.33		752	4.161	0.0096		
					1.8000	0.39		754	5.044	0.0108		
					0.9000	0.42		756	6.104	0.0122		
					0.2400	0.46		758	7.105	0.0139		
					0.0	0.46		800	7.959	0.0158		
					0.3000	0.48		802	8.387	0.0179		
					0.0	0.48		805	8.719	0.0212		
					1.5000	0.53		810	9.003	0.0268		
					4.2001	0.60		830	8.803	0.0495		
					3.9000	0.73		900	7.398	0.0804		
					4.2000	0.87		930	6.061	0.1061		
					2.1000	0.94		1000	4.861	0.1269		
					0.9000	0.97		1030	4.065	0.1439		
					0.3000	1.00		1100	3.540	0.1584		
					0.0	1.00		1105	3.413	0.1606		
					0.3000	1.04		1110	3.413	0.1628		
					0.1800	1.07		1113	3.626	0.1641		
					0.0	1.07		1115	4.049	0.1651		
					0.0300	1.08		1117	4.682	0.1662		
								1119	5.525	0.1675		
								1121	6.147	0.1690		
								1123	6.590	0.1706		
								1125	7.177	0.1723		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07629.

1970 SELECTED RUNOFF EVENT			EIESEL (#ACO), TEXAS			WATERSHED W-2				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	1127	8.332	0.1743
								1129	10.178	0.1766
								1130	12.243	0.1780
								1131	15.542	0.1798
								1132	18.389	0.1819
								1133	21.478	0.1844
								1134	23.360	0.1873
								1135	25.371	0.1904
								1136	27.588	0.1938
								1137	29.724	0.1974
								1138	31.536	0.2013
								1139	32.843	0.2054
								1140	34.170	0.2096
								1142	35.676	0.2185
								1144	37.044	0.2277
								1149	38.760	0.2518
								1154	39.338	0.2766
								1159	38.677	0.3014
								1204	37.368	0.3256
								1209	35.836	0.3488
								1214	33.465	0.3708
								1219	31.079	0.3914
								1224	28.907	0.4104
								1229	26.435	0.4280
								1234	24.671	0.4443
								1239	22.952	0.4594
								1244	20.299	0.4731
								1249	18.640	0.4855
								1254	17.339	0.4969
								1259	16.132	0.5075
								1309	14.100	0.5267
								1319	12.548	0.5436
								1329	11.064	0.5586
								1339	9.898	0.5719
								1349	8.876	0.5838
								1359	8.172	0.5946
								1402	7.624	0.5976
								1412	6.700	0.6067
								1425	5.861	0.6171
								1432	5.585	0.6222
								1502	4.407	0.6413
								1532	3.597	0.6566
								1602	2.880	0.6690
								1702	2.117	0.6881
								1802	1.625	0.7024
								1902	1.297	0.7135
								2002	1.084	0.7224
								2102	0.894	0.7298
								2202	0.831	0.7364
								2302	0.752	0.7424
								2400	0.661	0.7476

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007629.



3  
 EVENT OF MARCH 3, 1970  
 RIESEL (WACO), TEXAS WATERSHED W-2

## RIESEL (WACO), TEXAS WATERSHED W-6

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 42.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED W-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	0.82	4.53	4.78	2.62	2.24	0.43	0.19	1.20	5.36	3.30	0.36	0.73	26.57	
Q	0.039	0.758	3.108	0.345	0.000	0.000	3.0	0.0	0.0	0.006	0.0	3.0	4.257	
STA AV P	2.05	2.71	2.45	4.05	3.94	3.37	1.39	2.21	2.72	2.79	2.92	2.33	32.91	
Q	0.326	0.414	0.558	0.745	0.807	0.476	0.070	0.027	0.089	0.110	0.288	0.322	4.234	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	3-3	0.315	3-3	0.256	3-7	0.436	3-7	0.971	3-7	1.135	3-6	1.813	3-6	1.955	3-1	2.826
MAXIMUMS FOR PERIOD OF RECORD																
	6-10	3.990	4-19	2.330	4-19	2.780	5-11	3.130	5-11	3.210	3-29	4.060	11-22	5.090	4-15	9.060
	1941		1957		1957		1957		1957		1965		1940		1957	

NOTES: Watershed conditions: 31% row grain sorghum; 43% fall planted small grain, largely oats; 15% pasture; 7% gravel and paved road; 4% other. All of other land use is non-tilled, non-pastured land, generally in various crop acreage reduction programs. Cropland farmed on contour, not terraces. Modified conservation program since 1956. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1160, p. 42.7-5 (Revised). Precipitation and runoff records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages W-2, W-4, and W-5A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED W-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.34	0.27	0.02E	0.00E	0.43	0.0	0.0	0.79	0.0	0.05E	0.0		
2	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		
3	0.05E	0.0	1.03	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.31	1.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0		
9	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06E	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.10E	0.0	1.12	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.00E	0.05	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.31	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.35	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.11E
16	0.0	0.0	0.43	0.02E	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.0		
17	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0		
19	0.0	0.0	0.02E	0.13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.02E		
20	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.05E		
21	0.0	0.0	0.14	0.0	0.0	0.0	0.09E	0.0	0.13	0.0	0.0	0.07E		
22	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.25	0.0	0.0	0.03E	0.0	0.0	0.0	0.50	1.67	0.0	0.0		
24	0.0	1.78	0.0	0.0	3.15	0.0	0.10E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.64	0.0	0.0	0.0		
27	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.11E	0.64	0.0	0.0	0.13	0.0	0.0	0.0	0.0		0.44
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.82	4.53	4.78	2.62	2.24	0.43	0.19	1.20	5.36	3.30	0.36	0.73		
STA AV	2.05	2.71	2.45	4.05	3.94	3.37	1.39	2.21	2.72	2.79	2.92	2.33		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages W-2, W-4, and W-5A. Records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS					WATERSHED W-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.001	0.191	0.120	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.002	0.001	0.048	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.001	0.001	1.214	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.001	0.001	0.685	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.037	0.001	0.034	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.002	0.005	0.873	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.002	0.003	2.466	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.002	0.003	0.176	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.002	0.002	0.038	0.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.002	0.002	0.016	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.001	0.003	0.023	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.001	0.003	0.016	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.002	0.002	0.011	0.006	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	
14	0.002	0.003	0.010	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.002	0.006	0.010	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.001	0.002	0.019	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.001	0.003	0.117	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.001	0.002	0.015	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.001	0.001	0.014	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.001	0.002	0.018	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.001	0.003	0.066	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.001	0.004	0.017	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.001	0.006	0.013	0.003	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	
24	0.0	0.954	0.012	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.049	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.010	0.011	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.018	0.014	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.064	0.013	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.012	0.012	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.015	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0023	0.0481	0.1782	0.0204	0.0	0.0	0.0	0.0	0.0	0.0004	0.0	0.0	
INCHES	0.039	0.758	3.108	0.345	0.000	0.000	0.0	0.0	0.0	0.006	0.0	0.0	
STA AV	0.326	0.414	0.558	0.745	0.807	0.476	0.070	0.027	0.089	0.110	0.288	0.322	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.562687. Records began May 1939; station not in operation July 1943 to Jan. 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

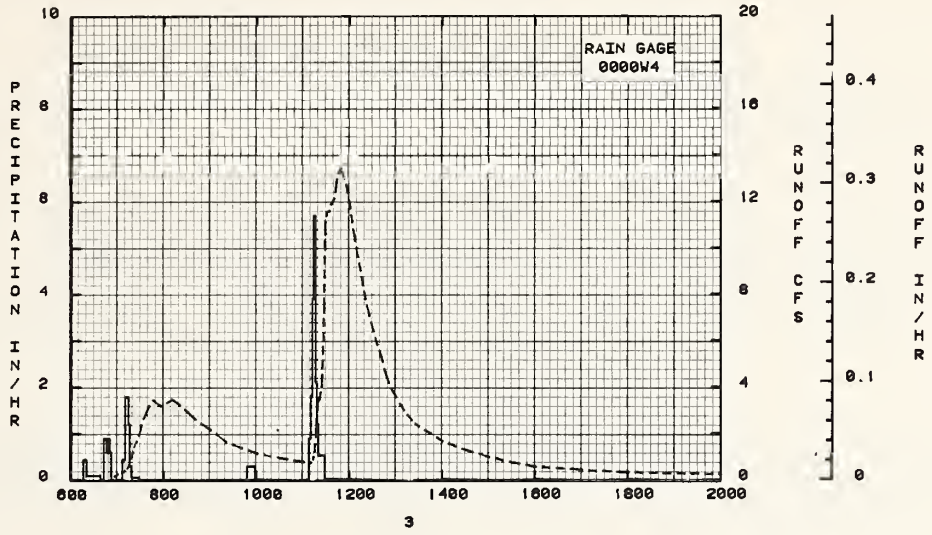
1970		SELECTED RUNOFF EVENT					RIESEL (WACO), TEXAS					WATERSHED W-6	
ANTECEDENT CONDITIONS		RAINFALL					RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF MARCH 3, 1970													
3- 3	0.0	0.007	3- 3	616	0.0	0.0	3- 3	656	0.184	0.0			
				620	0.4500	0.03		701	0.273	0.0004			
				638	0.1000	0.06		706	0.347	0.0010			
				642	0.0	0.06		711	0.433	0.0018			
				646	0.9000	0.12		713	0.515	0.0022			
WATERSHED CONDITIONS: 43% fall planted oats, 8 to 10 inches high; 31% tilled but not planted; 15% pasture, Bermudagrass, good cover, moderately grazed; 7% gravel roads; 4% Johnsongrass and weeds, not tilled or grazed. Cropland farmed on contour, not terraced.													
				648	0.6000	0.14		715	0.676	0.0027			
				650	0.9000	0.17		718	0.978	0.0037			
				652	0.6000	0.19		720	1.219	0.0046			
				706	0.0	0.19		722	1.463	0.0056			
				710	0.4500	0.22		725	1.666	0.0074			
				714	1.8000	0.34		728	1.938	0.0095			
				716	1.2000	0.38		731	2.384	0.0120			
				718	0.3000	0.39		735	2.841	0.0171			
				728	0.0600	0.40		741	3.224	0.0230			
				948	0.0	0.40		746	3.447	0.0295			
				958	0.3000	0.45		756	3.188	0.0425			
				1108	0.0	0.45		811	3.466	0.0620			
				1110	0.9000	0.48		821	3.242	0.0751			
				1112	1.8000	0.54		831	2.925	0.0872			
				1114	3.9001	0.67		841	2.614	0.0980			
				1116	5.6999	0.86		901	2.153	0.1166			
				1118	2.1000	0.93		921	1.643	0.1314			
				1120	1.2000	0.97		941	1.368	0.1432			
				1128	0.5250	1.04		1001	1.144	0.1530			
				1210	0.0143	1.05		1031	0.945	0.1652			
								1101	0.771	0.1753			
								1108	0.729	0.1774			
								1111	0.764	0.1783			
								1113	0.874	0.1789			
								1114	0.995	0.1793			
								1115	1.209	0.1797			
								1116	1.551	0.1802			
								1117	2.085	0.1809			
								1118	2.645	0.1818			
								1119	3.046	0.1829			

NOTES: To convert runoff in CFS to IN/RR, multiply by 0.023445.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED #6								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 3, 1970 (CONTINUED)											
							3- 3	1120	3.447	0.1842	
								1121	3.436	0.1855	
								1123	3.782	0.1883	
								1124	4.019	0.1898	
								1125	4.551	0.1915	
								1126	5.754	0.1935	
								1127	7.833	0.1962	
								1128	9.998	0.1997	
								1129	11.108	0.2038	
								1131	11.546	0.2127	
								1138	11.605	0.2263	
								1137	11.960	0.2401	
								1140	12.140	0.2542	
								1142	12.562	0.2639	
								1144	12.989	0.2738	
								1146	13.236	0.2841	
								1149	13.422	0.2997	
								1151	13.267	0.3101	
								1156	12.683	0.3354	
								1201	11.693	0.3593	
								1206	10.590	0.3810	
								1211	9.610	0.4007	
								1216	8.692	0.4186	
								1221	7.782	0.4347	
								1226	7.057	0.4492	
								1231	6.405	0.4624	
								1236	5.822	0.4743	
								1241	5.371	0.4852	
								1246	4.719	0.4951	
								1251	4.180	0.5038	
								1256	3.840	0.5116	
								1301	3.550	0.5188	
								1306	3.249	0.5254	
								1311	2.994	0.5315	
								1316	2.799	0.5372	
								1321	2.574	0.5424	
								1326	2.407	0.5473	
								1330	2.292	0.5510	
								1346	1.991	0.5644	
								1401	1.654	0.5751	
								1431	1.277	0.5923	
								1501	0.978	0.6055	
								1531	0.743	0.6156	
								1601	0.565	0.6233	
								1701	0.409	0.6347	
								1801	0.310	0.6431	
								2101	0.222	0.6618	
								2400	0.169	0.6755	

NOTES: To convert runoff in CFS to IN/8R, multiply by 0.023445.





EVENT OF MARCH 3, 1970  
BIRSEL (WACO), TEXAS WATERSHED W-6

RIESEL (WACO), TEXAS WATERSHED W-10

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 19.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-10															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78	27.59	P	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78	27.59	
	Q	0.089	1.669	2.685	0.835	0.000	0.0	0.0	0.0	0.0	0.414	0.0	0.0	5.692	Q	0.089	1.669	2.685	0.835	0.000	0.0	0.0	0.0	0.0	0.414	0.0	0.0	5.692	
STA AV	P	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31	32.66	P	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31	32.66	
	Q	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448	5.569	Q	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448	5.569	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Date	Maximum Discharge Rate	Maximum Volume for Selected Time Interval													
			1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.							
1970	2-24	0.395	2-24	0.348	2-24	0.580	3- 7	0.888	2-24	1.021	3- 6	1.728	3- 6	1.779	2-28	2.570

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge Rate	1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.							
6-10 1941	5.010	4-19 1957	2.310	4-19 1957	2.550	5-11 1957	3.000	11-22 1940	3.330	11-22 1940	3.530	4-24 1966	5.160	5-19 1957	8.290

NOTES: Watershed conditions: 100% Coastal Bermuda grass for pasture. Good cover, moderately grazed, terraced. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 42.7-5 (Revised). Precipitation and runoff records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. Precipitation data obtained from rain gage W-6. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-10												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	1.36	0.22	0.02E	0.0	0.41	0.0	0.0	0.79	0.0	0.07E	0.0	1	0.0	1.36	0.22	0.02E	0.0	0.41	0.0	0.79	0.0	0.07E		
2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	2	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.38	0.0	0.0		
3	0.05E	0.0	1.08	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	3	0.05E	0.0	1.08	0.0	0.0	0.0	0.0	0.14	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0		
5	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.0	0.29	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0		
9	0.0	0.0	0.0	0.0	2.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	2.16	0.0	0.0	0.0	0.0	0.0		
10	0.07E	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.07E	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.15	0.0	1.49	0.0	0.0	11	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.15	0.0	1.49		
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.06	0.0	0.0	12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.06		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.33	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.33		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.34	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.12	15	0.0	0.34	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.12	
16	0.0	0.0	0.45	0.03E	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	16	0.0	0.0	0.45	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	1.14	
17	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	17	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.21	
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.03E	19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.06	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	0.11E	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	
21	0.0	0.0	0.14	0.0	0.0	0.0	0.08E	0.0	0.16	0.0	0.0	0.07E	21	0.0	0.0	0.14	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.16	
22	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.37	
23	0.0	0.25	0.0	0.0	0.03E	0.0	0.0	0.0	0.58	1.69	0.0	0.0	23	0.0	0.25	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.58	
24	0.0	1.78	0.0	0.0	0.13	0.0	0.23	0.0	0.0	0.0	0.0	0.0	24	0.0	1.78	0.0	0.0	0.13	0.0	0.23	0.0	0.0	0.0	0.23	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	0.0	0.0	0.0	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	
26	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.58	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.58	
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.14	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28	0.0	0.14	0.04E	0.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.96	
30	0.0	0.0	0.0	0.17	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.45	30	0.0	0.0	0.0	0.17	0.58	0.0	0.0	0.0	0.0	0.0	0.45	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78	TOTAL	0.85	4.54	4.74	2.84	2.34	0.41	0.31	1.32	5.33	3.73	0.40	0.78
STA AV	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31	STA AV	2.08	2.73	2.34	4.02	3.84	3.33	1.34	2.30	2.65	2.83	2.88	2.31

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-6. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

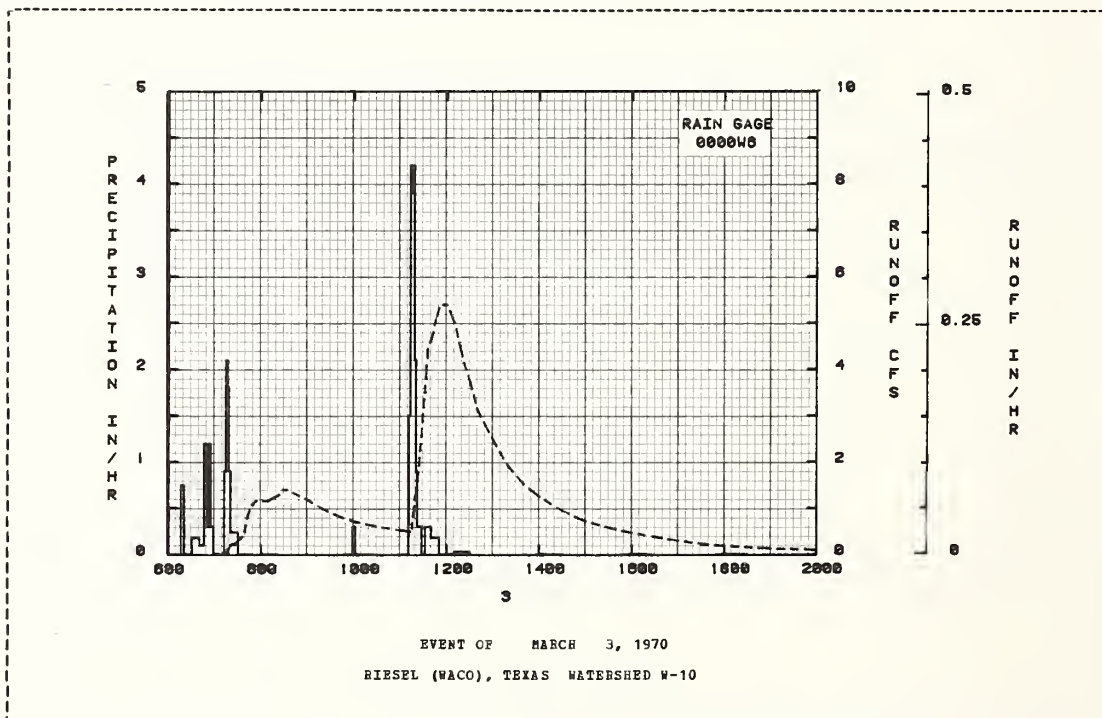
1970 MEAN DAILY DISCHARGE (cfs)												RIESEL (WACO), TEXAS WATERSHED W-10													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0.0	0.0	0.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.002	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2	0.0	0.002	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.603	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	0.0	0.0	0.603	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5	0.068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.003	0.0	0.376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	0.003	0.0	0.376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.033	0.0	1.078	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.033	0.0	1.078	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.565	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.565	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	0.0	0.0	0.0	0.126	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.879	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.879	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28	0.0	0.018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0024	0.0493	0.0717	0.0230	0.0	0.0	0.0	0.0	0.0	0.0111	0.0	0.0	MEAN	0.0024	0.0493	0.0717	0.0230	0.0	0.0	0.0	0.0	0.0111	0.0	0.0	
INCHES	0.089	1.669	2.685	0.835	0.000	0.0	0.0	0.0	0.0	0.414	0.0	0.0	INCHES	0.089	1.669	2.685	0.835	0.000	0.0	0.0	0.0	0.414	0.0	0.0	
STA AV	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448	STA AV	0.468	0.536	0.572	0.970	0.904	0.587	0.086	0.089	0.188	0.267	0.453	0.448

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.208206. Records began Aug. 1938; station not in operation July 1943 to May 3, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

1970 SELECTED RUNOFF EVENT												RIESEL (WACO), TEXAS WATERSHED W-10											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.	Date	Time	Rate	Acc.					
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	of Day	(cfs)	(inches)					
EVENT OF MARCH 3, 1970																							
3-3	EG 0000W6	0.0	0.001	3-3	EG 0000W6	616	0.0	0.0	3-3	700	0.006	0.0	0.0	0.0	3-3	700	0.006	0.0					
						620	0.7500	0.05		705	0.010	0.0	0.0										
						630	0.0	0.05		710	0.015	0.0001	0.0										
						640	0.1800	0.08		713	0.023	0.0001	0.0										
						646	0.1000	0.09		715	0.038	0.0002	0.0										
						648	1.2000	0.13		716	0.054	0.0002	0.0										
						650	0.9000	0.16		717	0.090	0.0003	0.0										
						652	0.3000	0.17		718	0.129	0.0004	0.0										
						654	1.2000	0.21		720	0.186	0.0007	0.0										
						658	0.3000	0.23		723	0.230	0.0012	0.0										
						712	0.0	0.23		726	0.230	0.0018	0.0										
						714	0.9000	0.26		729	0.284	0.0024	0.0										
						716	2.1000	0.33		732	0.326	0.0032	0.0										
						718	1.8000	0.39		735	0.381	0.0041	0.0										
						720	0.9000	0.42		738	0.504	0.0052	0.0										
						730	0.2400	0.46		740	0.625	0.0061	0.0										
						958	0.0	0.46		742	0.814	0.0073	0.0										
						1002	0.3000	0.48		745	0.953	0.0095	0.0										
						1111	0.0	0.48		748	1.081	0.0120	0.0										
						1113	1.5000	0.53		753	1.162	0.0167	0.0										
						1114	4.2001	0.60		808	1.162	0.0313	0.0										
						1116	3.9000	0.73		823	1.287	0.0467	0.0										
						1118	4.2000	0.87		828	1.399	0.0523	0.0										
						1120	2.1000	0.94		833	1.399	0.0562	0.0										
						1122	0.9000	0.97		858	1.200	0.0855	0.0										
						1128	0.3000	1.00		918	1.003	0.1040	0.0										
						1132	0.0	1.00		938	0.844	0.1195	0.0										
						1140	0.3000	1.04		958	0.722	0.1326	0.0										
						1150	0.1800	1.07		1028	0.613	0.1494	0.0										
						1210	0.0	1.07		1100	0.520	0.1646	0.0										
						1230	0.0300	1.08		1113	0.493	0.1701	0.0										

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-10							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 3, 1970 (CONTINUED)										
							3- 3	1119	1.219	0.1739
								1121	1.442	0.1761
								1123	1.774	0.1788
								1125	2.085	0.1820
								1127	2.566	0.1859
								1129	3.029	0.1906
								1131	3.353	0.1960
								1133	3.942	0.2021
								1135	4.437	0.2092
								1140	4.665	0.2283
								1145	5.044	0.2487
								1150	5.316	0.2704
								1155	5.392	0.2928
								1200	5.392	0.3155
								1210	4.996	0.3590
								1220	4.282	0.3979
								1230	3.719	0.4315
								1240	3.116	0.4601
								1250	2.791	0.4849
								1300	2.474	0.5070
								1320	1.900	0.5437
								1340	1.518	0.5724
								1400	1.248	0.5956
								1430	0.945	0.6232
								1500	0.709	0.6440
								1530	0.571	0.6601
								1600	0.462	0.6731
								1630	0.373	0.6836
								1700	0.288	0.6919
								1730	0.222	0.6983
								1800	0.176	0.7033
								1900	0.116	0.7106
								2000	0.089	0.7158
								2100	0.066	0.7197
								2200	0.053	0.7227
								2300	0.043	0.7251
								2400	0.034	0.7270

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.050342.



RIESEL (WACO), TEXAS WATERSHED Y

LOCATION: Falls Co., Texas; 17 mi. SE Waco; Brazos Basin.

AREA: 309.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED Y													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P 0.82	4.71	4.79	2.65	2.24	0.23	0.51	0.86	5.80	3.36	0.34	0.64	27.15														
	Q 0.107	1.320	3.744	0.610	0.006	0.011	0.0	0.0	0.003	0.011	0.0	0.0	5.103														
STA AV	P 2.17	2.70	2.38	3.92	3.87	3.46	1.45	2.03	2.58	2.66	2.75	2.32	32.31														
	Q 0.496	0.560	0.593	0.792	0.734	0.560	0.119	0.044	0.099	0.091	0.308	0.319	4.714														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days			
			Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	2-24	0.232	2-24	0.211	2-24	0.363	3- 7	0.785	3- 7	0.955	3- 6	1.602	3- 6	1.731	2-28	2.558

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	4-19	2.540	4-19	2.150	4-19	2.743	4-19	3.480	4-19	3.660	3-29	3.980	11-22	4.770	4-19	9.360
	1957		1957		1957		1957		1957		1965		1940		1957	

NOTES: Watershed conditions: 50% pasture; 11% cotton; 20% fall planted small grain, largely oats; 18% row grain sorghum; 1% gravel and paved roads. Cropland terraced, contour cultivation. No change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69, 69B, 70, 75A, 84A, 89, and W-2A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED Y												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	1.37	0.31	0.02E	0.03E	0.23E	0.0	0.0	0.82	0.0	0.05E	0.0													
2	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.00E	0.33	0.0	0.0	0.0													
3	0.07E	0.0	0.76	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0													
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0													
9	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.04E	0.01E	0.0	0.06	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0													
11	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.37E	0.0	0.91	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.03E	0.04	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.29	0.0													
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.37	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E													
16	0.0	0.0	0.37	0.03E	0.0	0.0	0.0	0.0	1.64	0.0	0.0	0.0													
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0													
19	0.0	0.0	0.04E	0.12	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.03E													
20	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.11E													
21	0.0	0.0	0.18	0.0	0.0	0.0	0.09E	0.0	0.11E	0.0	0.0	0.05E													
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.27	0.0	0.0	0.02E	0.0	0.0	0.00E	0.50	1.92	0.0	0.0													
24	0.0	1.84	0.0	0.0	0.09E	0.0	0.42E	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.39	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.59	0.0	0.0	0.0													
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.16	0.04E	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.07E	0.76	0.0	0.0	0.02	0.0	0.0	0.0	0.52													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.82	4.71	4.79	2.65	2.24	0.23	0.51	0.86	5.80	3.36	0.34	0.84													
STA AV	2.17	2.70	2.38	3.92	3.87	3.46	1.45	2.03	2.58	2.66	2.75	2.32													

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69, 69B, 70, 75A, 84A, 89, and W-2A. Records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS					WATERSHED Y	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.029	2.669	2.012	0.057	0.311	0.013	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.030	0.145	1.009	0.030	0.004	0.003	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.024	0.043	6.741	0.022	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.020	0.035	0.656	0.020	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.577	0.033	0.274	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.079	0.143	5.152	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.034	0.396	16.397	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.030	0.071	1.206	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.026	0.043	0.332	4.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.037	0.030	0.209	2.733	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.052	0.026	0.396	0.195	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.031	0.023	0.270	0.082	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.028	0.028	0.156	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.032	0.029	0.118	0.026	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.030	0.163	0.099	0.035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.028	0.056	0.109	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.027	0.033	1.481	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.022	0.028	0.223	0.047	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.021	0.016	0.238	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.023	0.013	0.217	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.021	0.017	1.396	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.022	0.026	0.286	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.023	0.064	0.139	0.013	0.0	0.0	0.0	0.0	0.0	0.142	0.0	0.0	
24	0.022	0.062	0.079	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.022	1.283	0.056	0.019	0.0	0.0	0.0	0.0	0.030	0.0	0.0	0.0	
26	0.018	0.197	0.038	0.013	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	
27	0.022	0.282	0.041	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.020	1.587	0.048	0.010	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.013	0.041	0.009	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.008	0.052	0.011	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.013	0.050		0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0446	0.6122	1.2749	0.2641	0.0027	0.0006	0.0	0.0	0.0011	0.0046	0.0	0.0	
INCHES	0.107	1.320	3.044	0.610	0.006	0.001	0.0	0.0	0.003	0.011	0.0	0.0	
STA AV	0.496	0.560	0.593	0.792	0.734	0.560	0.119	0.044	0.099	0.091	0.308	0.319	

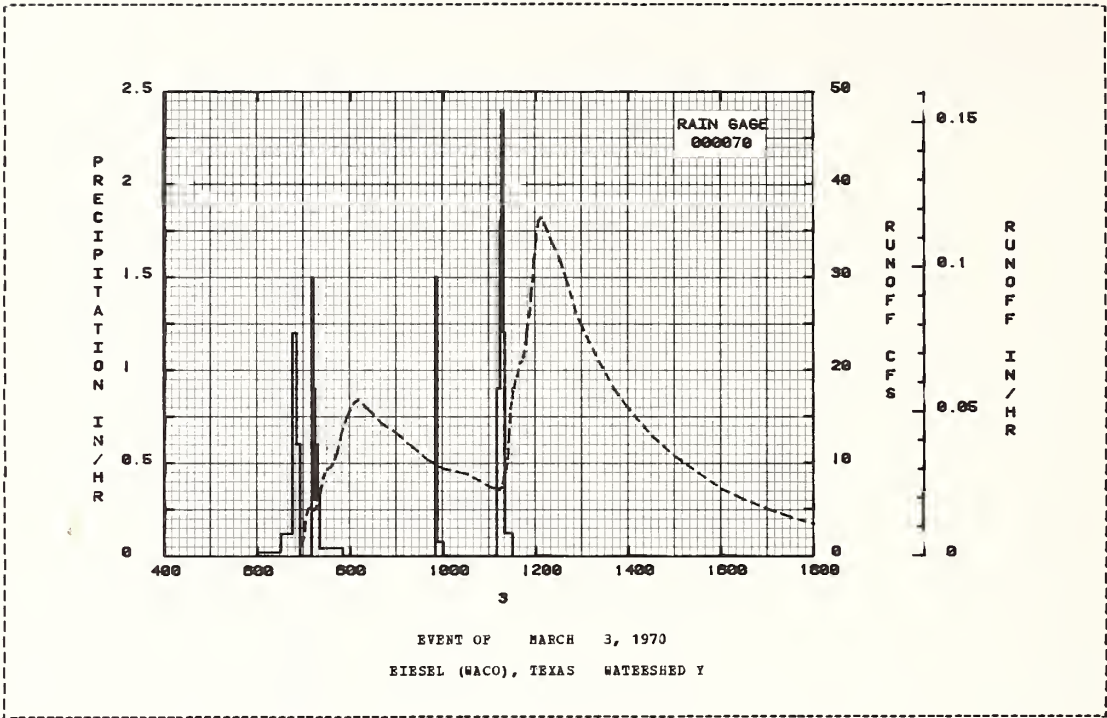
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.077028. Records began May 1937; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 29 yr period.

1970		SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 3, 1970										
3-3	0.0	0.020	3-3	600	0.0	0.0	3-3	655	1.210	0.0
				630	0.0200	0.01		658	1.490	0.0002
				645	0.1200	0.04		659	1.770	0.0003
				650	1.2000	0.14		700	2.080	0.0004
				655	0.6000	0.19		701	2.710	0.0005
WATERSHED CONDITIONS:										
50% pasture, Bermuda grass and native grass, good cover, moderately grazed;										
20% fall planted oats, 8 to 10 inches high; 29% tilled, bare; 1% gravel roads.										
Cropland terraced, cultivated on contour.										
				710	0.0	0.19		702	3.710	0.0007
				712	1.5000	0.24		704	4.640	0.0011
				714	0.9000	0.27		706	5.110	0.0016
				715	0.3000	0.28		709	5.240	0.0024
				718	0.6000	0.30		713	4.890	0.0035
				720	0.3000	0.31		715	5.110	0.0040
				750	0.0400	0.33		717	5.410	0.0046
				950	0.0	0.33		720	6.320	0.0055
				952	1.5000	0.38		723	7.620	0.0066
				1000	0.0750	0.39		725	8.470	0.0075
				1110	0.0	0.39		727	8.880	0.0084
				1114	0.9000	0.45		730	9.320	0.0099
				1116	1.8000	0.51		732	9.520	0.0109
				1110	2.4000	0.59		734	9.580	0.0119
				1120	1.2000	0.63		736	9.700	0.0129
				1130	0.1200	0.65		740	10.480	0.0151
								745	11.740	0.0181
								750	13.710	0.0215
								755	14.880	0.0253
								800	15.740	0.0294
								805	16.550	0.0337
								810	16.810	0.0382
								820	16.030	0.0470
								830	15.200	0.0554
								840	14.280	0.0633
								900	13.150	0.0780
								920	11.740	0.0913
								940	10.300	0.1031
								1000	9.380	0.1136
								1032	8.770	0.1291

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.003210.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED 1								
ANTECEDENT CONDITIONS			#INFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MARCH 3, 1970 (CONTINUED)											
							3- 3	1102	7.370	0.1420	
								1112	7.130	0.1459	
								1114	7.240	0.1467	
								1116	7.340	0.1475	
								1118	7.790	0.1483	
								1119	8.440	0.1487	
								1120	8.790	0.1492	
								1121	8.990	0.1497	
								1122	9.350	0.1502	
								1123	9.850	0.1507	
								1124	10.480	0.1512	
								1125	11.510	0.1518	
								1126	13.630	0.1525	
								1127	15.280	0.1533	
								1128	15.820	0.1541	
								1129	16.460	0.1550	
								1130	16.940	0.1559	
								1131	17.700	0.1568	
								1132	18.070	0.1578	
								1134	18.770	0.1598	
								1136	19.350	0.1618	
								1138	19.990	0.1639	
								1140	20.750	0.1661	
								1142	20.900	0.1683	
								1144	21.370	0.1706	
								1146	22.000	0.1729	
								1148	23.480	0.1753	
								1150	24.920	0.1779	
								1152	25.930	0.1806	
								1155	28.750	0.1850	
								1158	31.710	0.1899	
								1201	34.680	0.1952	
								1204	36.120	0.2009	
								1207	36.430	0.2067	
								1212	35.580	0.2163	
								1222	33.640	0.2348	
								1232	31.780	0.2523	
								1242	29.140	0.2686	
								1252	26.170	0.2834	
								1302	24.280	0.2969	
								1322	20.850	0.3210	
								1342	17.890	0.3417	
								1402	15.650	0.3596	
								1432	12.750	0.3824	
								1502	10.580	0.4011	
								1532	8.820	0.4167	
								1602	7.100	0.4295	
								1632	5.960	0.4400	
								1702	4.970	0.4488	
								1732	4.070	0.4561	
								1802	3.430	0.4621	
								1832	2.840	0.4671	
								1902	2.500	0.4714	
								2002	2.080	0.4787	
								2102	1.770	0.4849	
								2202	1.560	0.4902	
								2302	1.390	0.4949	
								2400	1.280	0.4991	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03210.





RIESEL (WACO), TEXAS WATERSHED Y-2

LOCATION: Falls Co., Texas; 18 mi. SE Waco; Brazos River Basin.

AREA: 132.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED Y-2			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 0.81	4.69	4.82	2.65	2.23	0.21	0.46	0.88	5.89	3.37	0.33	0.84	27.18			
	O 0.033	1.035	2.850	0.451	0.000	0.0	0.0	0.0	0.0	0.002	0.0	0.0	4.372			
STA AV	P 2.18	2.72	2.63	3.98	4.36	3.39	1.52	2.05	2.69	2.64	2.92	2.47	33.54			
	O 0.441	0.598	0.740	0.921	1.102	0.567	0.123	0.045	0.091	0.110	0.327	0.431	5.496			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	2-24	0.253	2-24	0.225	3- 7	0.390	3- 7	0.852	3- 7	1.004	3- 6	1.649	3- 6	1.766	2-28	2.574

MAXIMUMS FOR PERIOD OF RECORD																				
1944	5- 1	4.070	1944	5- 1	3.110	1944	5- 1	5.470	1944	5- 1	7.080	1944	5- 1	7.460	1944	4-30	9.640	1944	4-29	10.600

NOTES: Watershed conditions: 19% cotton; 28% fall planted small grain, largely oats; 19% row grain sorghum; 33% pasture; 1% gravel and paved roads. Cropland terraced, contour cultivation, conservation treatment since 1942. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (revised). Precipitation and runoff records began Jan. 1, 1939. Precipitation data from Thiessen weighted method using rain gages 69, 69B, 70, 75A, and 84A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	1.34	0.32	0.01E	0.01E	0.21E	0.0	0.0	0.82	0.0	0.05E	0.0				
2	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.00E	0.33	0.0	0.0	0.0				
3	0.07E	0.0	0.74	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0				
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0				
9	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.03E	0.02E	0.0	0.06	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0				
11	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.07E	0.0	0.88	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.04E	0.03	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0				
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
15	0.0	0.35	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E				
16	0.0	0.0	0.36	0.03E	0.0	0.0	0.0	0.0	1.70	0.0	0.0	0.0				
17	0.0	0.0	3.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0				
18	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0				
19	0.0	0.0	0.04E	0.12	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.04E				
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.10E				
21	0.0	0.0	0.18	0.0	0.0	0.0	0.12	0.0	0.11E	0.0	0.0	0.04E				
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.27	0.0	0.0	0.01E	0.0	0.0	0.00E	0.50	1.95	0.0	0.0				
24	0.0	1.85	0.0	0.0	0.08E	0.0	0.34	0.0	0.0	0.0	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.59	0.0	0.0	0.0				
27	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.17	0.04E	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.0	0.07E	0.77	0.0	0.0	0.02	0.0	0.0	0.0	0.52				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	0.81	4.69	4.82	2.65	2.23	0.21	0.46	0.88	5.89	3.37	0.33	0.84				
STA AV	0.18	2.72	2.63	3.98	4.36	3.39	1.52	2.05	2.69	2.64	2.92	2.47				

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69, 69B, 70, 75A, and 84A. Records began Jan. 1, 1939. STA AV based on 32 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)				RIESEL (WACO), TEXAS						WATERSHEEL Y-2			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.833	0.777	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.017	0.398	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0 T	2.837	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.174	0.0	0.073	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.011	0.023	2.302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.013	7.109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.005	0.460	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0 T	0.087	1.638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.041	0.786	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.001	0.0	0.121	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.064	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.032	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.023	0.016	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.002	0.019	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.486	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.041	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.052	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.476	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.004	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0	
24	0.0	3.679	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.433	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.042	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.108	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.557	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0060	0.2049	0.5399	0.0835	0.0	0.0	0.0	0.0	0.0	0.0703	0.0	0.0	
INCEES	0.033	1.035	2.850	0.451	0.000	0.0	0.0	0.0	0.0	0.002	0.0	0.0	
STA AV	0.441	0.598	0.740	0.921	1.102	0.567	0.123	0.045	0.091	0.110	0.327	0.431	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.180316. Records began Jan. 1, 1939. STA AV based on 32 yr period.

1970 SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS						WATERSHEEL Y-2			
ANTECEDENT CONDITIONS			RAINFALL			EDROFF							
Date	Rainfall	Ennoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF MARCH 6 - 7, 1970													
3- 6	FG 000069	0.0	0.006	3- 6	FG 000069		3- 6	1801	0.078	0.0			
					1710	0.0		1831	0.093	0.0003			
					1737	0.0667		1901	0.109	0.0007			
					1947	0.0		1936	0.123	0.0012			
					1957	0.4200		1946	0.135	0.0014			
					2007	0.3000							
					2037	0.3400		1956	0.168	0.0016			
					2107	0.2800		2001	0.198	0.0017			
					2137	0.2200		2006	0.238	0.0018			
					2207	0.2800		2011	0.281	0.0020			
					2237	0.3000		2016	0.307	0.0022			
					2257	0.5100	1.03	2021	0.371	0.0024			
					2307	0.1800	1.06	2026	0.439	0.0027			
					2317	0.1200	1.08	2031	0.527	0.0030			
								2036	0.679	0.0034			
								2041	0.829	0.0039			
								2046	1.061	0.0045			
								2051	1.447	0.0053			
								2054	1.749	0.0059			
								2057	2.240	0.0066			
								2059	2.693	0.0072			
								2101	3.253	0.0079			
								2103	3.617	0.0088			
								2105	4.006	0.0098			
								2106	4.096	0.0103			
								2111	4.988	0.0131			
								2116	5.498	0.0164			
								2121	6.486	0.0201			
								2126	7.624	0.0245			
								2131	8.404	0.0295			
								2141	9.799	0.0409			
								2151	11.639	0.0543			
								2201	13.426	0.0700			
								2211	15.249	0.0879			
								2221	17.400	0.1084			
								2231	19.783	0.1317			

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.

RIESEL (WACO), TEXAS WATERSHED Y-6

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 16.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED Y-6														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.89	4.64	4.89	2.71	2.19	0.26	0.38	0.98	5.94	3.37	0.85	27.34															
	Q	0.071	0.537	2.160	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.019															
STA AV	P	2.03	2.77	2.31	3.96	3.89	3.60	1.47	2.09	2.71	2.85	2.87	32.83															
	Q	0.289	0.363	0.409	0.654	0.767	0.564	0.111	0.044	0.058	0.205	0.327	4.112															

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	3-7	0.138	3-7	0.132	3-7	0.255	3-7	0.652	3-7	0.867	3-6	1.272	3-6	1.486	3-1	1.944

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
6-10 1941	3.790	3-29 1965	1.900	3-29 1965	2.340	3-29 1965	2.950	3-29 1965	3.130	3-29 1965	3.670	11-22 1940	4.870	4-19 1957	8.490

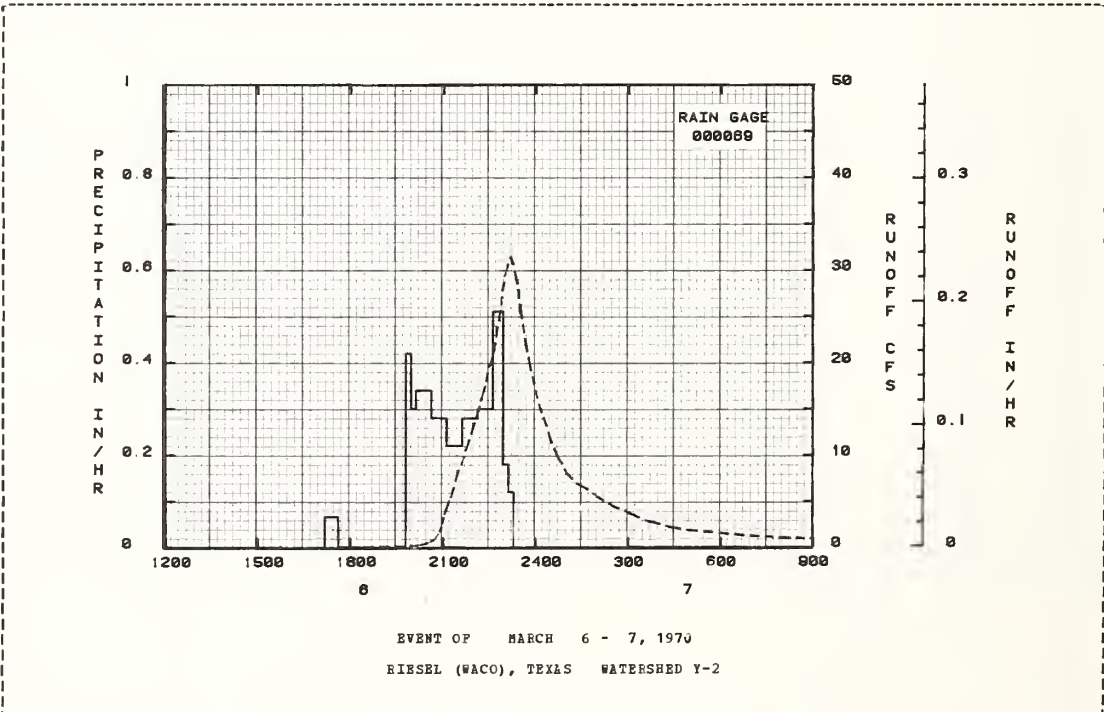
NOTES: Watershed conditions: 93% cotton; 5% pasture; 2% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69B and 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED Y-6													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL														
1	0.0	1.32	0.33	0.01E	0.0	0.26	0.0	0.0	0.85	0.0	0.05E	0.0															
2	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0															
3	0.07E	0.0	0.76	0.0	0.0	0.0	0.0	0.72E	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0															
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.0	0.30	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	1.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0															
9	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
10	0.03E	0.02E	0.0	0.06	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0															
11	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.08E	0.0	0.89	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.03E	0.03	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0															
14	0.03E	0.01E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
15	0.0	0.33	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
16	0.0	0.0	0.35	0.03E	0.0	0.0	0.0	0.0	1.72	0.0	0.0	0.0															
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0															
18	0.0 S	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0															
19	0.0	0.0	0.04E	0.11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E															
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.09E															
21	0.0	0.0	0.17	0.0	0.0	0.0	0.12	0.0	0.11E	0.0	0.0	0.04E															
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.50	1.94	0.0	0.0															
24	0.0	1.84	0.0	0.0	0.07E	0.0	0.25	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.58	0.0	0.0	0.0															
27	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.17	0.04E	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.08	0.75	0.0	0.0	0.02	0.0	0.0	0.0	0.52															
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.80	4.64	4.89	2.71	2.19	0.26	0.38	0.98	5.94	3.37	0.33	0.85															
STA AV	2.03	2.77	2.31	3.96	3.89	3.60	1.47	2.09	2.71	2.85	2.87	2.27															

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69B and 75A. Records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-2				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
						3- 6	2236		20.494	0.1443
							2241		22.076	0.1576
							2246		23.840	0.1720
							2251		25.583	0.1875
							2256		27.952	0.2042
							2301		29.575	0.2222
							2306		30.625	0.2410
							2311		31.383	0.2604
							2316		30.625	0.2798
							2321		29.277	0.2985
							2326		27.734	0.3163
							2331		25.512	0.3330
							2341		21.943	0.3627
							2351		19.145	0.3884
							2400		16.913	0.4087
						3- 7	11		14.670	0.4304
							21		13.150	0.4478
							31		11.324	0.4631
							41		9.998	0.4764
							51		9.068	0.4883
							101		7.988	0.4990
							121		6.872	0.5176
							141		6.275	0.5341
							201		5.418	0.5487
							211		5.065	0.5553
							231		4.423	0.5672
							241		4.184	0.5726
							301		3.739	0.5825
							321		3.211	0.5912
							341		2.782	0.5987
							401		2.508	0.6053
							421		2.185	0.6112
							441		2.001	0.6164
							501		1.818	0.6212
							531		1.673	0.6278
							601		1.508	0.6338
							631		1.363	0.6392
							701		1.202	0.6440
							801		0.998	0.6523

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.007513.

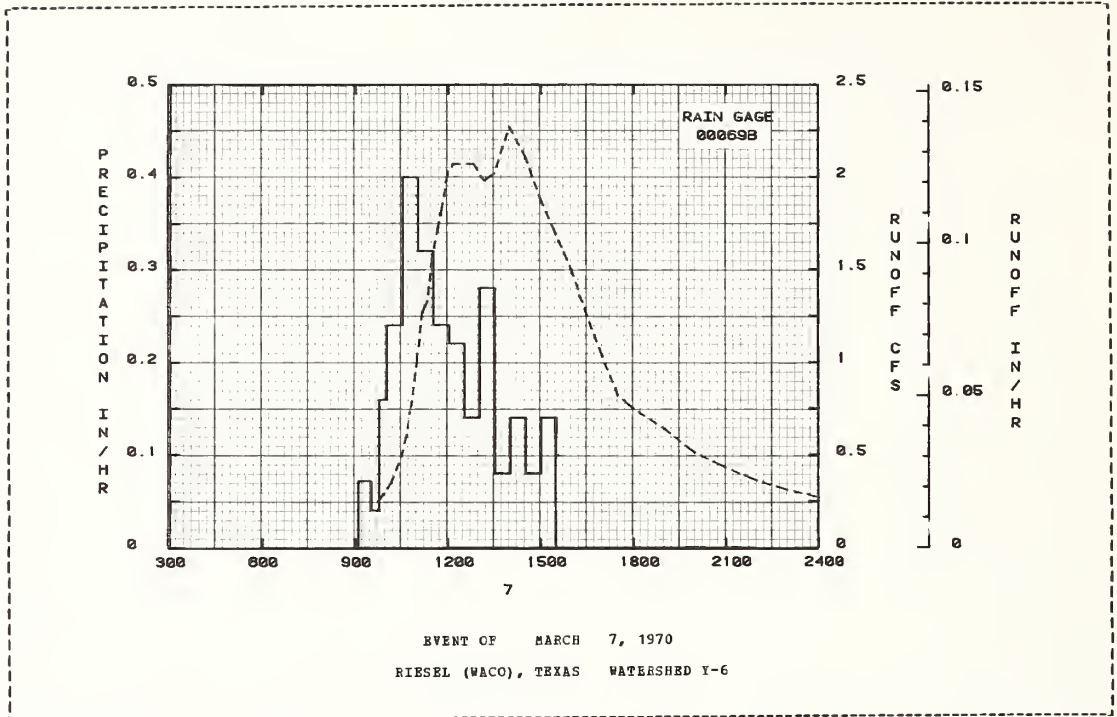


1970 MEAN DAILY DISCHARGE (cfs)				RIESEL (WACO), TEXAS				WATERSHED Y-6				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.002	0.025	0.052	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.003	0.006	0.036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.002	0.001	0.177	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.001	0.0 T	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.024	0.0 T	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.004	0.004	0.128	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.002	0.003	0.796	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.002	0.002	0.104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.004	0.001	0.012	0.069	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.002	0.0	0.004	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.001	0.0	0.015	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0 T	0.0	0.008	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0 T	0.003	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.026	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.007	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.008	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0 T	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.199	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.063	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.007	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.043	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0016	0.0131	0.0477	0.0057	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.071	0.537	2.160	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.289	0.363	0.409	0.654	0.767	0.564	0.111	0.044	0.098	0.205	0.327	0.279

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.460224. Records began Jan. 1939; station not in operation July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-6				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 7, 1970										
3- 7	0.0	0.252	3- 7	906	0.0	0.0	3- 7	944	0.249	0.0
				931	0.0720	0.03		954	0.287	0.0027
				946	0.0400	0.04		1009	0.350	0.0075
				1001	0.1600	0.08		1019	0.418	0.0114
				1031	0.2400	0.20		1029	0.494	0.0160
				1101	0.4000	0.40		1039	0.611	0.0216
				1131	0.3200	0.56		1049	0.787	0.0287
				1201	0.2400	0.68		1059	1.014	0.0378
				1231	0.2200	0.79		1109	1.272	0.0494
				1301	0.1400	0.86		1119	1.333	0.0626
				1331	0.2800	1.00		1129	1.576	0.0773
				1401	0.0800	1.04		1139	1.719	0.0940
				1431	0.1400	1.11		1149	1.858	0.1121
				1501	0.0800	1.15		1159	2.027	0.1318
				1531	0.1400	1.22		1209	2.074	0.1526
								1249	2.074	0.2367
								1309	1.981	0.2778
								1329	2.015	0.3183
								1359	2.269	0.3835
								1429	2.109	0.4501
								1459	1.880	0.5108
								1529	1.688	0.5651
								1559	1.499	0.6136
								1629	1.246	0.6554
								1659	1.029	0.6900
								1729	0.819	0.7181
								1759	0.755	0.7420
								1859	0.638	0.7844
								1959	0.509	0.8193
								2059	0.427	0.8478
								2159	0.361	0.8718
								2259	0.312	0.8923
								2400	0.275	0.9105

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.060843.



## RIESEL (WACO), TEXAS WATERSHED Y-7

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 40.30 acres

MONTELY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED Y-7	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	3.82	4.67	5.39	2.67	2.15	0.41	0.45	1.05	5.65	3.33	0.36	0.86	27.51	
Q	0.000	1.128	2.855	0.752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.735	
STA AV P	2.06	2.81	2.34	4.95	3.90	3.57	1.44	2.15	2.65	2.87	2.92	2.29	33.04	
Q	0.340	0.499	0.589	0.879	0.916	0.668	0.105	0.107	0.151	0.187	0.421	0.358	5.220	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970 2-24	0.289	2-24	0.259	2-24	0.435	3- 7	0.822	3- 7	0.964	3- 6	1.663	3- 6	1.745	2-28	2.640

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1941 6-10	3.590	1957 4-19	2.340	1965 3-29	2.960	1965 3-25	3.580	1965 3-29	3.840	1965 3-29	4.660	1940 11-22	5.370	1957 4-19	8.890

NOTES: Watershed conditions: 100% pasture, Bermudagrass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pnb. 1194, p. 42. 11-5 (Revised). Precipitation and runoff records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 89 and W-2A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.38	0.29	0.02E	0.09E	0.41	0.0	0.0	0.84	0.0	0.05E	0.0		
2	3.0	3.0	0.02E	0.0	3.0	3.0	3.0	3.0	0.36	3.0	3.0	0.0		
3	0.05E	0.0	0.85	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0		
4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0		
5	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	3.0	0.31	1.26	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.16	0.0	0.0		
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.07	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0		
11	0.0	3.0	0.32	3.0	0.0	0.0	3.0	0.07E	0.0	1.01	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.01E	0.0	3.0	0.0	0.0	0.34	3.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.31	0.0		
14	0.03E	0.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0		
15	0.0	0.41	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E		
16	0.0	0.0	0.37	0.02E	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0		
17	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	3.26	3.0	3.0	3.0	3.0	0.0	0.18	0.0	0.0		
19	0.0	0.0	0.03E	0.14	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.03E		
20	3.0	0.0	3.27	3.0	0.0	0.0	0.0	0.03E	3.0	0.0	0.13E	0.0		
21	3.0	0.0	0.19	0.0	0.0	0.0	0.30E	0.0	0.11	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.17	3.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.23	0.0	0.0	0.03E	0.0	0.0	0.0	0.49	1.83	0.0	0.0		
24	3.0	1.85	0.0	0.0	0.07E	3.0	0.45E	3.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	3.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0		
28	0.0	0.17	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.89	3.0	3.0	3.0	0.0		
30	0.0	0.0	0.0	0.06E	0.62	0.0	0.0	0.02	0.0	3.0	0.0	0.53		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.82	4.67	5.09	2.67	2.15	0.41	0.45	1.05	5.65	3.33	0.36	0.86		
STA AV	2.36	2.81	2.34	4.05	3.90	3.57	1.44	2.15	2.65	2.87	2.92	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 89 and W-2A. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS WATERSHED Y-7					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.190	0.180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.015	0.096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0 T	1.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.001	0.0	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.671	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	2.178	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.016	0.751	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.003	0.503	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.014	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.011	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	1.339	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0677	0.1548	0.0421	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCREAS	0.000	1.128	2.855	0.752	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.340	0.499	0.589	0.879	0.916	0.668	0.105	0.107	0.151	0.187	0.421	0.358

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.595041. Records began Jan. 1939; station not in operation from July 1943 to May 1, 1947; part-year amounts not included in averages. STA AV based on 27 yr period.

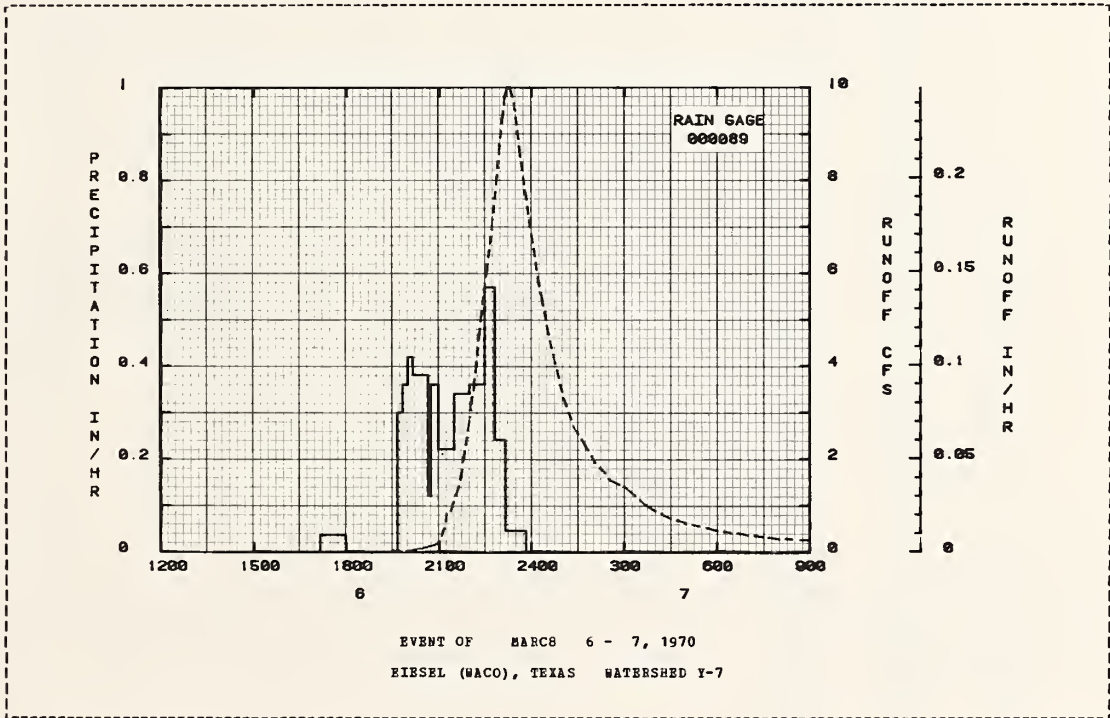
1970		SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-7		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970										
RG 000J89			RG 000089							
3- 6	0.0	0.002	3- 6	1709	0.0	0.0	3- 6	1930	0.009	0.0
				1759	0.0360	0.03		2000	0.020	0.0002
				1939	0.0	0.03		2005	0.027	0.0022
				1949	0.3000	0.08		2010	0.037	0.0003
				1959	0.3600	0.14		2015	0.053	0.0004
WATERSHED CONDITIONS: 100% pasture, Bermuda grass, fair cover, moderately grazed, dormant.										
				2009	0.4200	0.21		2020	0.066	0.0005
				2039	0.3800	0.40		2025	0.073	0.0006
				2044	0.1200	0.41		2030	0.089	0.0008
				2049	0.3600	0.44		2035	0.102	0.0010
				2059	0.3600	0.50		2040	0.120	0.0012
				2129	0.2200	0.61		2050	0.147	0.0018
				2159	0.3400	0.78		2055	0.172	0.0021
				2229	0.3600	0.96		2100	0.230	0.0025
				2249	0.5700	1.15		2105	0.351	0.0031
				2309	0.2400	1.23		2110	0.515	0.0040
				2349	0.0450	1.26		2113	0.656	0.0047
								2115	0.821	0.0053
								2123	0.880	0.0081
								2128	1.070	0.0101
								2133	1.235	0.0125
								2138	1.408	0.0152
								2143	1.618	0.0183
								2148	2.005	0.0220
								2153	2.308	0.0265
								2158	2.746	0.0317
								2203	3.175	0.0378
								2208	3.569	0.0448
								2213	4.099	0.0527
								2218	4.656	0.0617
								2223	5.194	0.0719
								2233	6.053	0.0951
								2243	7.008	0.1221
								2253	8.116	0.1534
								2258	8.771	0.1768
								2303	9.337	0.1895

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.



1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-7							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Fainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2308	9.776	0.2093
								2313	9.998	0.2297
								2318	9.998	0.2503
								2323	9.803	0.2708
								2328	9.500	0.2907
								2333	9.039	0.3098
								2338	8.507	0.3280
								2348	7.731	0.3615
								2400	6.813	0.3976
							3- 7	13	5.868	0.4316
								23	5.304	0.4547
								33	4.677	0.4753
								43	4.200	0.4936
								53	3.743	0.5100
								103	3.267	0.5245
								123	2.660	0.5490
								143	2.308	0.5695
								203	1.913	0.5869
								223	1.690	0.6018
								233	1.532	0.6085
								250	1.435	0.6189
								300	1.399	0.6248
								320	1.209	0.6356
								340	1.012	0.6448
								400	0.874	0.6526
								430	0.709	0.6624
								500	0.607	0.6706
								600	0.452	0.6837
								700	0.347	0.6936
								800	0.269	0.7012

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.024793.



RIESEL (WACO), TEXAS WATERSHED Y-8

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 20.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED Y-8	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.73	4.75	4.78	2.57	2.22	0.30	0.41	0.90	5.71	3.37	0.32	0.81	26.87	
	Q 0.001	0.807	2.811	0.263	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	3.882	
STA AV	P 1.95	2.79	2.41	4.05	3.80	3.73	1.50	2.12	2.81	2.97	2.94	2.29	33.36	
	Q 0.321	0.416	0.503	0.782	0.825	0.617	0.122	0.061	0.132	0.124	0.375	0.303	4.582	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		2 Days		8 Days				
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	2-24	0.204	3-6	0.193	3-6	0.367	3-7	0.872	3-7	1.021	3-6	1.783	3-6	1.855	2-28	2.655

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
	6-10	3.290	4-19	2.410	4-19	2.800	4-23	3.320	4-23	3.370	3-29	3.590	11-22	5.640	4-15	9.100
	1941		1957		1957		1957		1957		1965		1940		1957	

NOTES: Watershed conditions: 95% fall planted oats, 3% pasture; 2% gravel roads. Cropland terraced and contour tilled no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (revised). Precipitation and runoff records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. Precipitation data obtained from rain gage 75A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED Y-8	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.36	0.28	0.0	0.0	0.30	0.0	0.0	0.80	0.0	0.05E	0.0		
2	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		
3	0.08E	0.0	0.81	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0	0.0	0.0		
5	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0		
9	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.05E	0.0	0.05	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0		
11	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.06E	0.0	0.90	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.27	0.0		
14	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.13
16	0.0	0.0	0.49	0.03E	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0		0.0
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0		0.0
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0		0.0
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0		0.03E
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		0.11E
21	0.0	0.0	0.18	0.0	0.0	0.0	0.11	0.0	0.13	0.0	0.0	0.0		0.03E
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
23	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0E	0.48	1.93	0.0	0.0		0.0
24	0.0	1.82	0.0	0.0	0.09E	0.0	0.30	0.0	0.0	0.0	0.0	0.0		0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	0.0	0.0	0.0		0.0
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.57	0.0	0.0	0.0		0.0
27	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
28	0.0	0.20	0.04E	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0		0.0
30	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.01	0.0	0.0	0.0		0.51
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.73	4.75	4.78	2.57	2.22	0.30	0.41	0.90	5.71	3.37	0.32	0.81		
STA AV	1.95	2.79	2.41	4.05	3.80	3.73	1.50	2.12	2.81	2.97	2.94	2.29		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.032-1. Precipitation values are from rain gage 75A. Records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period. Estimate codes may indicate the non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS				WATERSHED Y-8	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.036	0.109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.504	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	T	0.031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.384	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	1.203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
24	0.0	0.561	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0252	0.0792	0.0076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.001	0.807	2.811	0.263	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
STA AV	0.321	0.416	0.503	0.782	0.825	0.617	0.122	0.061	0.132	0.124	0.375	0.303

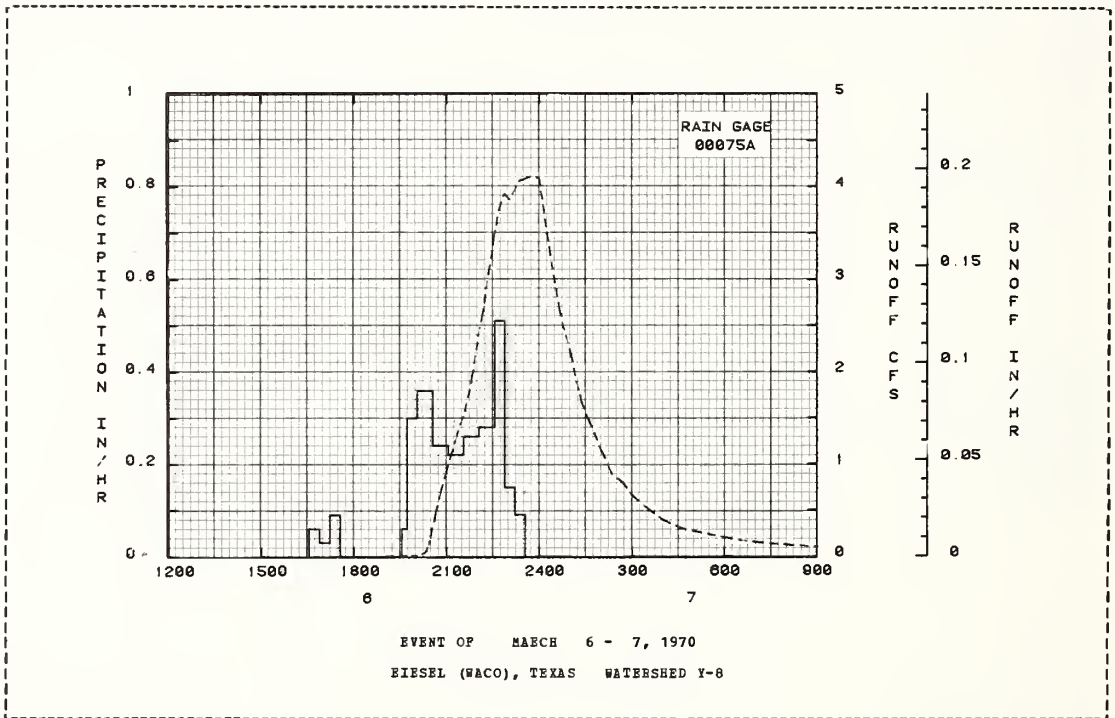
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.144310. Records began Mar. 1, 1939; station not in operation July 1943 to Jan. 1, 1949; part-year amounts not included in averages. STA AV based on 25 yr period.

1970			SELECTED RUNOFF EVENT				RIESEL (WACO), TEXAS				WATERSHED Y-8	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
3- 6	0.0	0.000	3- 6	1633	0.0	0.0	3- 6	1902	0.010	0.0		
				1653	0.0600	0.02		1932	0.010	0.0002		
				1713	0.0300	0.03		1942	0.010	0.0003		
				1733	0.0900	0.06		1952	0.010	0.0004		
				1933	0.0	0.06		2002	0.010	0.0005		
WATERSHED CONDITIONS:												
95% fall planted oats 8 to 10 inches high; 3% pasture, Bermuda grass, good cover moderately grazed, dormant; 2% gravel roads. Cropland terraced, cultivated on contour.												
				1943	0.0600	0.07		2012	0.030	0.0007		
				1953	0.3000	0.12		2017	0.040	0.0008		
				2003	0.3000	0.17		2020	0.060	0.0009		
				2033	0.3600	0.35		2023	0.100	0.0011		
				2043	0.2400	0.39		2025	0.130	0.0013		
				2053	0.2400	0.43		2027	0.170	0.0015		
				2103	0.2400	0.47		2029	0.220	0.0018		
				2133	0.2200	0.58		2032	0.310	0.0024		
				2203	0.2600	0.71		2037	0.430	0.0039		
				2233	0.2800	0.85		2042	0.550	0.0059		
				2253	0.5100	1.02		2047	0.660	0.0083		
				2313	0.1500	1.07		2052	0.780	0.0112		
				2333	0.0900	1.10		2102	0.980	0.0182		
								2112	1.160	0.0267		
								2122	1.360	0.0367		
								2132	1.510	0.0481		
								2142	1.730	0.0610		
								2152	2.020	0.0759		
								2202	2.400	0.0935		
								2212	2.680	0.1137		
								2222	3.080	0.1366		
								2232	3.450	0.1626		
								2242	3.760	0.1912		
								2252	3.920	0.2217		
								2302	3.860	0.2526		
								2322	4.070	0.3156		
								2342	4.110	0.3806		
								2400	4.090	0.4392		
								22	3.260	0.5034		
								42	2.600	0.5500		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.047680.

1970 SELECTED RUNOFF EVENT			EIESEL (WACO), TEXAS WATERSHED Y-8							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 7	102	2.180	0.5280
								122	1.670	0.6186
								142	1.400	0.6430
								202	1.130	0.6631
								222	0.890	0.6791
								242	0.800	0.6925
								302	0.650	0.7040
								332	0.510	0.7179
								402	0.390	0.7286
								432	0.310	0.7369
								502	0.270	0.7438
								602	0.200	0.7549
								702	0.150	0.7632
								802	0.120	0.7697

NOTES: To convert runoff in CFS to IN/EE, multiply by 0.047680.



## BIESEL (WACO), TEXAS WATERSHED Y-10

LOCATION: Falls Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 18.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														BIESEL (WACO), TEXAS WATERSHED Y-10		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 0.85	4.62	4.93	2.73	2.20	0.18	0.41	0.95	6.03	3.38	0.33	0.86	27.47			
	Q 0.012	0.959	2.656	0.592	0.0	0.0	0.0	0.0	0.0	0.296	0.0	0.0	4.516			
STA AV	P 2.10	2.68	2.35	3.94	3.91	3.50	1.44	2.08	2.71	2.75	2.82	2.31	32.59			
	Q 0.414	0.428	0.566	0.897	0.736	0.634	0.138	0.081	0.188	0.200	0.391	0.344	5.616			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	10-23	0.449	2-24	0.314	3- 7	0.516	3- 7	1.096	3- 7	1.099	3- 6	1.734	3- 6	1.788	2-27	2.671
MAXIMUMS FOR PERIOD OF RECORD																
	4-19	3.730	4-19	2.900	4-19	3.480	3-29	4.130	3-29	4.270	3-29	4.620	4-23	5.340	4-19	10.570
	1957		1957		1957		1965		1965		1965		1957		1957	

NOTES: Watershed conditions: 93% row grain sorghum; 4% pasture; 3% gravel roads. Cropland terraced and contour tilled; no change in conservation practices. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 42.11-5 (Revised). Precipitation and runoff records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. Precipitation data from Thiessen weighted method using rain gages 69 and 69E. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														BIESEL (WACO), TEXAS WATERSHED Y-10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.31	0.34	0.02E	0.00E	0.18E	0.0	0.0	0.85	0.0	0.05E	0.0			
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.01E	0.33	0.0	0.0	0.0			
3	0.06E	0.0	0.7C	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0			
5	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.0	0.29	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	1.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0			
9	0.0	0.0	0.0	2.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.05E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0			
11	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.09E	0.0	0.88	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.05E	0.03	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.28	0.0			
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.33	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E		
16	0.0	0.0	0.32	0.03E	0.0	0.0	0.0	0.0	1.78	0.0	0.0	0.0			
17	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0			
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0			
19	0.0	0.0	0.04E	0.11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.05E			
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.09E			
21	0.0	0.0	0.17	0.0	0.0	0.0	0.13	0.0	0.10E	0.0	0.0	0.04E			
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.28	0.0	0.0	0.02E	0.0	0.0	0.01E	0.51	1.95	0.0	0.0			
24	0.0	1.87	0.0	0.0	0.06E	0.0	0.28	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.41	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.59	0.0	0.0	0.0			
27	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.15	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.11E	0.75	0.0	0.0	0.03	0.0	0.0	0.0	0.52			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	0.85	4.62	4.93	2.73	2.20	0.18	0.41	0.95	6.03	3.38	0.33	0.86			
STA AV	2.10	2.68	2.35	3.94	3.51	3.50	1.44	2.08	2.71	2.75	2.82	2.31			

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 69 and 69E. Records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)					RIESEL (WACO), TEXAS			WATERSHED Y-10		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.040	0.146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.001	0.074	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.470	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.009	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.342	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.231	0.0	0.0
24	0.0	0.571	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.076	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0003	0.0268	0.0670	0.0154	0.0	0.0	0.0	0.0	0.0	0.0075	0.0	0.0
INCHES	0.012	0.959	2.656	0.592	0.0	0.0	0.0	0.0	0.0	0.296	0.0	0.0
STA AV	0.414	0.428	0.566	0.897	0.736	0.634	0.138	0.081	0.188	0.200	0.391	0.344

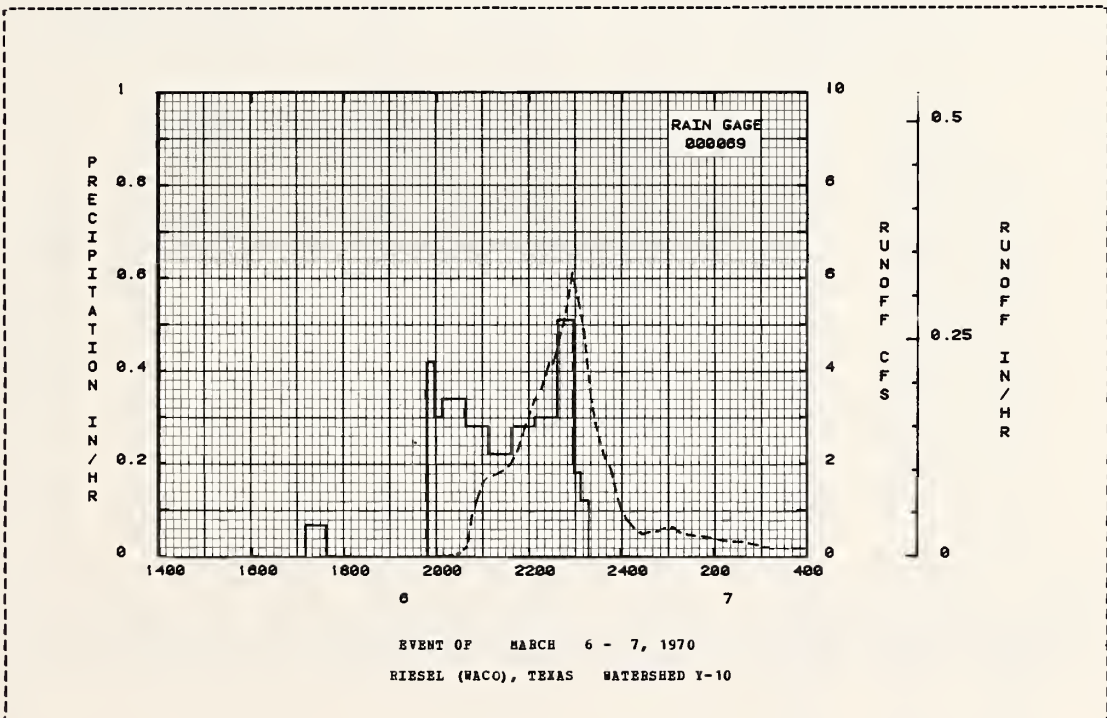
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.279659. Records began July 1, 1938; station not in operation July 1943 to May 1, 1946; part-year amounts not included in averages. STA AV based on 28 yr period.

1970		SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-10		
ANTECEDENT CONDITIONS		RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970										
3- 6	RG 000069 0.0	0.0	3- 6	RG 000069 1710	0.0	0.0	3- 6	1946	0.0	0.0
				1737	0.0667	0.03		1951	0.0	0.0
				1947	0.0	0.03		1956	0.001	0.0
				1957	0.4200	0.10		2001	0.003	0.0
				2007	0.3000	0.15		2006	0.007	0.0
WATERSHED CONDITIONS:										
	93% tilled, bare; 4% pasture,			2037	0.3400	0.32		2011	0.015	0.0
	Bermudagrass, good cover			2107	0.2800	0.46		2016	0.023	0.001
	moderately grazed, dormant;			2137	0.2200	0.57		2021	0.034	0.0002
	3% gravel roads. Cropland			2207	0.2800	0.71		2026	0.060	0.0004
	terraced, contour cultivation.			2237	0.3000	0.86		2031	0.083	0.0007
				2257	0.5100	1.03		2036	0.150	0.0012
				2307	0.1800	1.06		2039	0.211	0.0017
				2317	0.1200	1.08		2041	0.326	0.0022
								2043	0.542	0.0030
								2046	0.899	0.0049
								2051	1.153	0.0094
								2056	1.410	0.0151
								2101	1.620	0.0218
								2106	1.702	0.0292
								2116	1.762	0.0446
								2126	1.849	0.0606
								2136	1.991	0.0777
								2146	2.325	0.0969
								2156	2.841	0.1198
								2206	3.334	0.1473
								2216	3.620	0.1782
								2226	4.153	0.2127
								2231	4.174	0.2312
								2236	4.437	0.2503
								2241	4.805	0.2708
								2246	5.117	0.2929
								2251	5.598	0.3167
								2256	6.108	0.3427
								2301	5.703	0.3690
								2306	5.342	0.3935

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-10							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Bainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2311	4.852	0.4161
								2316	4.046	0.4359
								2321	3.334	0.4523
								2326	2.858	0.4660
								2336	2.209	0.4885
								2346	1.874	0.5067
								2351	1.529	0.5143
								2356	1.172	0.5203
								2400	1.003	0.5242
							3- 7	6	0.799	0.5290
								16	0.595	0.5352
								26	0.478	0.5400
								36	0.526	0.5445
								46	0.537	0.5492
								56	0.613	0.5543
								106	0.625	0.5598
								116	0.515	0.5649
								126	0.457	0.5692
								146	0.423	0.5770
								156	0.386	0.5806
								216	0.334	0.5870
								236	0.310	0.5927
								256	0.241	0.5976
								306	0.198	0.5996
								316	0.169	0.6012
								356	0.179	0.6074
								456	0.156	0.6163
								556	0.129	0.6239
								656	0.100	0.6300
								756	0.080	0.6348
								826	0.074	0.6369

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.053319.



## RIESEL (WACO), TEXAS SW-11

LOCATION: Falls County, Texas; 19 miles southeast of Waco; Brazos River Basin.

AREA: 2.66 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS SW-11	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.82	4.67	5.09	2.66	2.15	0.41	0.46	1.05	5.65	3.33	0.36	0.86	27.51
	Q	0.011	0.763	2.695	0.011	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	3.482
STA AV	P	1.95	3.50	3.04	3.86	3.43	4.04	1.15	1.85	3.04	3.71	3.52	2.65	35.72
	Q	0.235	0.542	0.782	0.083	0.275	1.012	0.113	0.0	0.375	0.445	1.213	0.590	5.667

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		2 Days		8 Days					
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970	2-24	0.573		2-24	0.436	3- 7	0.600	3- 7	1.176	3- 7	1.230	3- 6	1.931	3- 6	1.954	3- 1	2.628

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge Rate	1 Hour	2 Hours	6 Hours	12 Hours	2 Days	8 Days								
1940	6.670	11-22	2.060	11-22	2.260	11-22	2.580	11-22	2.820	11-22	3.590	11-22	5.900	11-21	6.220

NOTES: Watershed conditions: 100% winter growing Harding grass, moderately grazed. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pnb. 1370, p. 42.023-5. Precipitation and runoff records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in station averages. Precipitation data from rain gage 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS SW-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.38	0.29	0.02E	0.09E	0.41	0.0	0.0	0.84	0.0	0.05E	0.0		
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0		
3	0.05E	0.0	0.85	0.0	0.0	0.0	0.0	0.07E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0		
5	3.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.31	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0		
9	0.0	0.0	0.0	2.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.04E	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0		
11	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.07E	0.0	1.01	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.04	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.31	0.0		
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.41	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E		
16	0.0	0.0	0.37	0.02E	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0		
17	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0		
19	0.0	0.0	0.03E	0.14	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.03E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.13E		
21	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.04E		
22	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.23	0.0	0.0	0.03E	0.0	0.0	0.0	0.49	1.83	0.0	0.0		
24	0.0	1.85	0.0	0.0	0.07E	0.0	0.46E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
27	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.17	0.04E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.06E	0.62	0.0	0.0	0.02	0.0	0.0	0.0	0.53		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.82	4.67	5.09	2.66	2.15	0.41	0.46	1.05	5.65	3.33	0.36	0.86		
STA AV	1.95	3.50	3.04	3.86	3.43	4.04	1.15	1.85	3.04	3.71	3.52	2.65		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 89. Records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in averages. STA AV based on 6 yr period. Estimate codes may indicate that non-significant event totals are included.



1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS SW-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.004	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.001	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	T	0.070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.002	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0		
24	0.0	0.079	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0	0.0030	0.0097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
INCHES	0.011	0.763	2.695	0.011	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0		
STA AV	0.235	0.542	0.782	0.083	0.275	1.012	0.113	0.0	0.375	0.445	1.213	0.590		

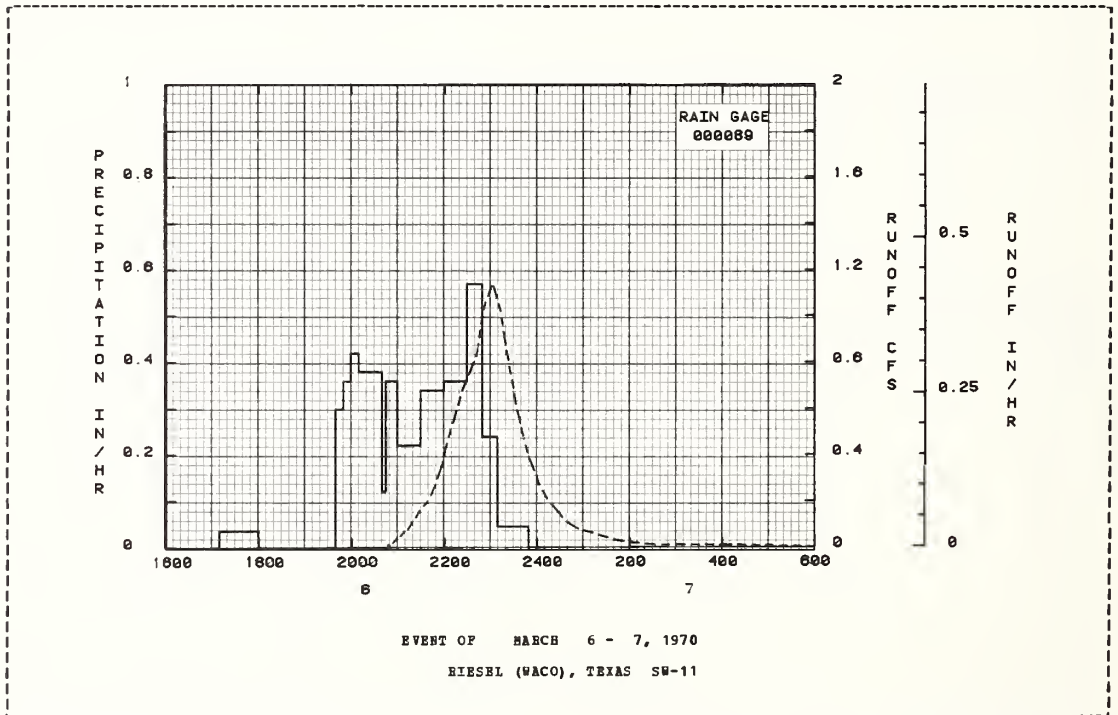
NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 8.947990. Records began March 1938; discontinued July 1943; reestablished July 1, 1969, part-year amounts not included in averages. STA AV based on 6 yr period.

1970 SELECTED RUNOFF EVENT													RIESEL (WACO), TEXAS SW-11	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.				
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)				
EVENT OF MARCH 6 - 7, 1970														
3- 6	RG 000089 0.0	0.012	3- 6	RG 000089			3- 6							
				1709	0.0	0.0		2043	0.002	0.0				
				1759	0.0360	0.03		2045	0.005	0.0				
				1939	0.0	0.03		2047	0.009	0.0001				
				1949	0.3000	0.08		2049	0.014	0.0002				
				1959	0.3600	0.14		2053	0.023	0.0007				
				2009	0.4200	0.21		2058	0.037	0.0016				
				2039	0.3800	0.40		2103	0.050	0.0030				
				2044	0.1200	0.41		2108	0.066	0.0048				
				2049	0.3600	0.44		2113	0.085	0.0071				
				2059	0.3600	0.50		2118	0.110	0.0101				
				2129	0.2200	0.61		2123	0.128	0.0138				
				2159	0.3400	0.78		2128	0.157	0.0182				
				2229	0.3600	0.96		2133	0.183	0.0235				
				2249	0.5700	1.15		2138	0.205	0.0295				
				2309	0.2400	1.23		2143	0.229	0.0362				
				2349	0.0450	1.26		2148	0.269	0.0439				
								2153	0.318	0.0530				
								2158	0.366	0.0636				
								2203	0.446	0.0762				
								2208	0.514	0.0911				
								2213	0.564	0.1078				
								2218	0.622	0.1262				
								2223	0.679	0.1465				
								2228	0.717	0.1682				
								2233	0.758	0.1911				
								2238	0.796	0.2153				
								2243	0.851	0.2409				
								2248	0.968	0.2691				
								2253	1.057	0.3006				
								2258	1.098	0.3340				
								2301	1.126	0.3547				
								2304	1.126	0.3757				
								2308	1.084	0.4032				
								2313	1.017	0.4358				
								2318	0.911	0.4657				

NOTES: To convert runoff in CPS to IN/HR, multiply by .372833.

1970 SELECTED RUNOFF EVENT			BIESSEL (#ACO), TRIAS SW-11							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2323	0.812	0.4925
								2328	0.722	0.5163
								2333	0.622	0.5372
								2338	0.543	0.5553
								2343	0.471	0.5710
								2348	0.414	0.5847
								2353	0.355	0.5967
								2400	0.301	0.6110
							3- 7	3	0.271	0.6163
								13	0.215	0.6314
								23	0.171	0.6434
								33	0.133	0.6528
								43	0.104	0.6602
								53	0.082	0.6660
								103	0.068	0.6707
								123	0.047	0.6778
								143	0.030	0.6826
								203	0.020	0.6857
								233	0.013	0.6888
								303	0.010	0.6909
								403	0.006	0.6939
								603	0.004	0.6976

NOTES: To convert runoff in CFS to IN/HR, multiply by .372833.



## RIESEL (WACO), TEXAS WATERSHED SW-12

LOCATION: McLennan Co., Texas; 18 mi. SE of Waco; Brazos River Basin.

AREA: 2.97 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED SW-12	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.85	4.79	4.59	2.60	2.29	0.10	0.69	0.66	5.98	3.36	3.34	0.86	27.11	
	Q 0.137	2.175	3.407	0.686	0.0	0.0	0.0	0.0	0.004	0.008	0.0	0.0	6.417	
STA AV	P 2.08	2.76	2.31	3.96	3.87	3.69	1.47	2.04	2.70	2.74	2.83	2.27	32.64	
	Q 0.419	0.643	0.611	0.675	0.590	0.388	0.073	0.017	0.036	0.010	0.148	0.278	3.887	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	2-24	1.150	2-24	0.654	2-24	0.851	2-24	1.107	2-24	1.231	3-6	2.033	3-6	2.068	2-27	3.188

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	3-29	4.000	3-29	3.070	3-29	3.830	3-29	4.620	3-29	4.800	3-29	5.340	3-29	5.390	4-15	8.530
	1965		1965		1965		1965		1965		1965		1965		1957	

NOTES: Watershed conditions: 100% native grass meadow mowed annually for hay. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, DSDA Misc. Pub. 945, p. 42.24-4. Precipitation and runoff records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. Precipitation data obtained from rain gage 70. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED SW-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.42	0.35	0.02E	0.0	0.10E	0.0	0.0	0.79	0.0	0.06E	0.0		
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0		
3	0.07E	0.0	0.68	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0E	0.0	0.0	0.0	0.0		
5	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0		
9	0.0	0.0	0.0	2.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.06E	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0		
11	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.05E	0.0	0.83	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.10E	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.28	0.0		
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.33	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.15		
16	0.0	0.0	0.34	0.03E	0.0	0.0	0.0	0.0	1.79	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0		
19	0.0	0.0	0.04E	0.13	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.14E		
21	0.0	0.0	0.18	0.0	0.0	0.0	0.12	0.0	0.13	0.0	0.0	0.06E		
22	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.29	0.0	0.0	0.05E	0.0	0.0	0.01E	0.48	1.98	0.0	0.0		
24	0.0	1.91	0.0	0.0	0.12	0.0	0.57	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.64	0.0	0.0	0.0		
27	0.0	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.05E	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.10E	0.75	0.0	0.0	0.02	0.0	0.0	0.0	0.51		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.85	4.79	4.59	2.60	2.29	0.10	0.69	0.66	5.98	3.36	0.34	0.86		
STA AV	2.08	2.76	2.31	3.96	3.87	3.60	1.47	2.04	2.70	2.74	2.83	2.27		

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 70. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)												HIESEL (WACO), TEXAS		WATERSHED SW-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.052	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
2	0.0 T	0.002	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
3	0.0	0.0 T	0.065	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.011	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
6	0.003	0.001	0.108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.001	0.001	0.142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
8	0.001	0.001	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
9	0.0 T	0.0 T	0.0 T	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
15	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
17	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
23	0.0	0.0 T	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0			
24	0.0	0.166	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0			
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
27	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
MEAN	0.0005	0.0095	0.0134	0.0028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
INCHES	0.137	2.175	3.407	0.686	0.0	0.0	0.0	0.0	0.004	0.008	0.0	0.0			
STA AV	0.419	0.643	0.611	0.575	0.590	0.388	0.073	0.017	0.036	0.019	0.148	0.278			

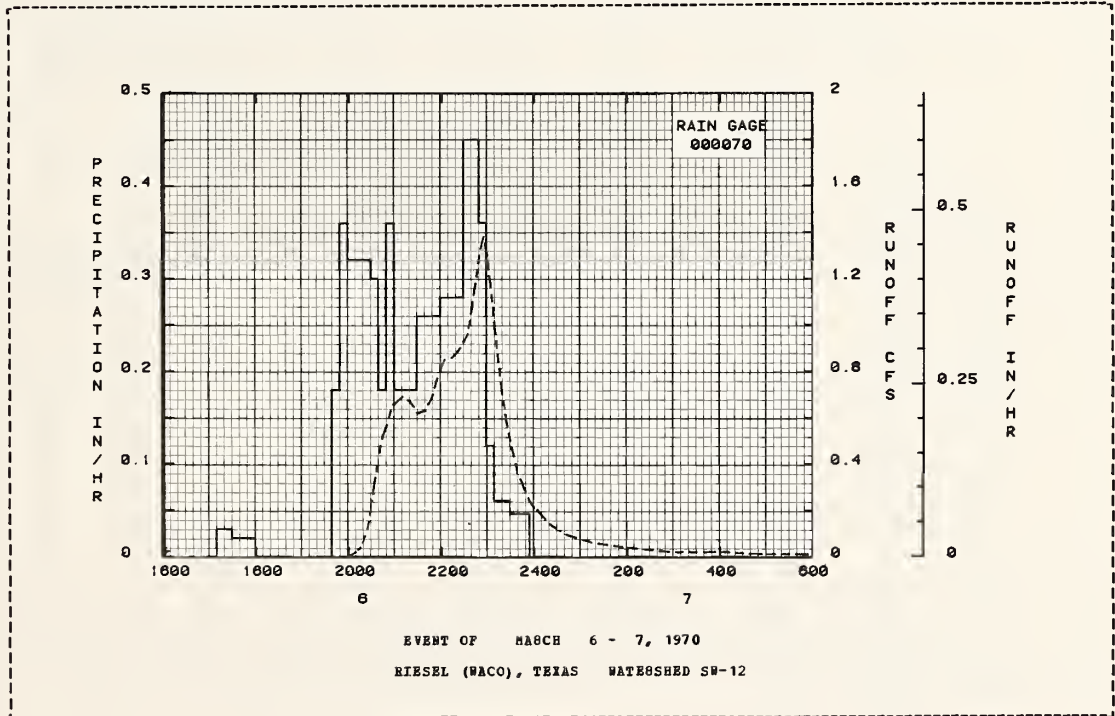
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 8.014025. Records began Jan. 1, 1938; station not in operation July 1943 to June 1, 1947; part-year amounts not included in averages. STA AV based on 28 yr period.

1970 SELECTED RUNOFF EVENT				HIESEL (WACO), TEXAS			WATERSHED SW-12			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970										
3- 6	RG 000070 0.0	0.005	3- 6	RG 000070 1708	0.0	0.0	3- 6	1939	0.002	0.0
				1728	0.0300	0.01		1949	0.004	0.0002
				1758	0.0200	0.02		2004	0.012	0.0009
				1938	0.0	0.02		2009	0.020	0.0014
				1948	0.1800	0.05		2012	0.032	0.0018
WATERSHED CONDITIONS: 100% native grass meadow, 12 to 14 inches, dormant.										
				1958	0.3600	0.11		2015	0.044	0.0025
				2028	0.3200	0.27		2018	0.061	0.0034
				2038	0.3000	0.32		2021	0.091	0.0047
				2048	0.1800	0.35		2024	0.120	0.0065
				2058	0.3600	0.41		2026	0.154	0.0081
				2128	0.1800	0.50		2028	0.199	0.0101
				2158	0.2600	0.63		2030	0.241	0.0126
				2228	0.2800	0.77		2032	0.291	0.0156
				2248	0.4500	0.92		2034	0.344	0.0192
				2258	0.3600	0.98		2036	0.381	0.0233
				2308	0.1200	1.00		2038	0.418	0.0279
				2328	0.0600	1.02		2041	0.478	0.0355
				2354	0.0462	1.04		2044	0.519	0.0440
								2049	0.573	0.0596
								2054	0.629	0.0767
								2059	0.664	0.0951
								2109	0.691	0.1337
								2119	0.669	0.1725
								2129	0.622	0.2093
								2139	0.629	0.2450
								2149	0.704	0.2830
								2154	0.774	0.3040
								2204	0.848	0.3502
								2214	0.856	0.3987
								2224	0.905	0.4489
								2234	0.965	0.5022
								2239	1.071	0.5312
								2244	1.179	0.5632
								2249	1.300	0.5986
								2254	1.380	0.6368

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.333916.

1970 SELECTED SUBOFF EVENT			HIESEL (WACO), TEXAS				WATERSHED SW-12			
ASTECDEST CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2259	1.296	0.6749
								2304	1.161	0.7100
								2309	0.987	0.7406
								2314	0.837	0.7666
								2319	0.699	0.7885
								2324	0.591	0.8069
								2329	0.501	0.8224
								2334	0.430	0.8357
								2339	0.363	0.8470
								2344	0.320	0.8567
								2349	0.277	0.8652
								2354	0.243	0.8726
								2400	0.211	0.8804
							3- 7	4	0.198	0.8851
								14	0.160	0.8953
								24	0.128	0.9035
								34	0.108	0.9102
								44	0.091	0.9159
								54	0.078	0.9207
								114	0.056	0.9283
								134	0.045	0.9341
								154	0.038	0.9388
								224	0.030	0.9446
								254	0.023	0.9491
								354	0.016	0.9558
								454	0.011	0.9604
								554	0.007	0.9635

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.333918.



RIESEL (WACC), TEXAS WATERSHED SW-17

LOCATION: Falls Co., Texas; 19 mi. SE of Waco; Brazos River Basin.

AREA: 2.99 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED SW-17			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.84	4.75	4.85	2.58	2.07	0.38	0.20	1.12	5.74	3.23	0.33	0.79	26.88		
	Q	0.022	1.821	3.677	0.970	0.0	0.0	0.0	0.011	0.169	0.0	0.0	6.671			
STA AV	P	1.97	2.82	2.35	4.12	3.80	3.50	1.52	2.20	2.98	2.94	2.34	33.32			
	Q	0.403	0.666	0.722	0.998	0.819	0.749	0.181	0.071	0.177	0.169	0.466	5.907			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	2-24	0.504	2-24	0.437	2-24	0.673	3-7	1.154	3-7	1.326	3-6	2.228	3-6	2.328	2-27	3.349

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
10-31 1940	7.060	4-19 1957	2.540	4-19 1957	2.960	4-23 1957	3.310	3-29 1965	3.520	3-29 1965	4.250	11-22 1940	5.370	4-19 1957	9.420

NOTES: Watershed conditions: 100% Bermudagrass pasture. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 42.28-5. Precipitation and runoff record began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. Precipitation data obtained from rain gage W-2. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970	DAILY PRECIPITATION (inches)												RIESEL (WACO), TEXAS WATERSHED SW-17			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	1.35	0.34	0.02E	0.05E	0.38	0.0	0.0	0.81	0.0	0.04E	0.0				
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0				
3	0.09E	0.0	0.82	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0				
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0				
5	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.0	0.32	1.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0				
9	0.0	0.0	0.0	0.0	2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
10	0.06E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.04E	0.0	1.03	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.05E	0.04	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.29	0.0				
14	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
15	0.0	0.40	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.45	0.0	0.0	0.0				
17	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0				
18	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0				
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.02E				
20	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.10E				
21	0.0	0.0	0.16	0.0	0.0	0.0	0.10E	0.0	0.11	0.0	0.0	0.06E				
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
23	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.48	1.72	0.0	0.0				
24	0.0	1.83	0.0	0.0	0.14	0.0	0.10E	0.0	0.0	0.0	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.62	0.0	0.0	0.0				
27	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.15	0.04E	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.0	0.08E	0.56	0.0	0.0	0.03	0.0	0.0	0.0	0.0				
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	0.84	4.75	4.85	2.58	2.07	0.38	0.20	1.12	5.74	3.23	0.33	0.79				
STA AV	1.97	2.82	2.35	4.12	3.80	3.50	1.52	2.20	2.98	2.94	2.34	3.32				

NOTES: For daily air temperatures in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage W-2. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 26 yr period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)													RIRSEL (WACO), TEXAS				WATERSHED SW-17	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
1	0.0	0.046	0.024	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
2	0.0	0.001	0.006	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
3	0.0	0.001	0.086	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
4	0.0	0.001	0.002	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
5	0.003	0.001	0.001	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
6	0.0 T	0.002	0.088	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
7	0.0	0.001	0.200	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
8	0.0	0.0 T	0.007	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
9	0.0	0.0	0.001	0.094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
10	0.0	0.0	0.0 T	0.016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
11	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
12	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
13	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
14	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
15	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
16	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
17	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
19	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
20	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
21	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
22	0.0	0.0	0.001	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
23	0.0	0.0	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.021	0.0	0.0						
24	0.0	0.148	0.001	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
25	0.0	0.006	0.001	0.0 T	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0						
26	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
27	0.0	0.004	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
28	0.0	0.015	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
29	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
30	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
31	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
MEAN	0.0001	0.0082	0.0149	0.0041	0.0	0.0	0.0	0.0	0.0	0.0007	0.0	0.0						
INCRRS	0.022	1.821	3.677	0.970	0.0	0.0	0.0	0.0	0.011	0.169	0.0	0.0						
STA AV	0.403	0.666	0.722	0.998	0.819	0.749	0.181	0.071	0.177	0.169	0.466	0.485						

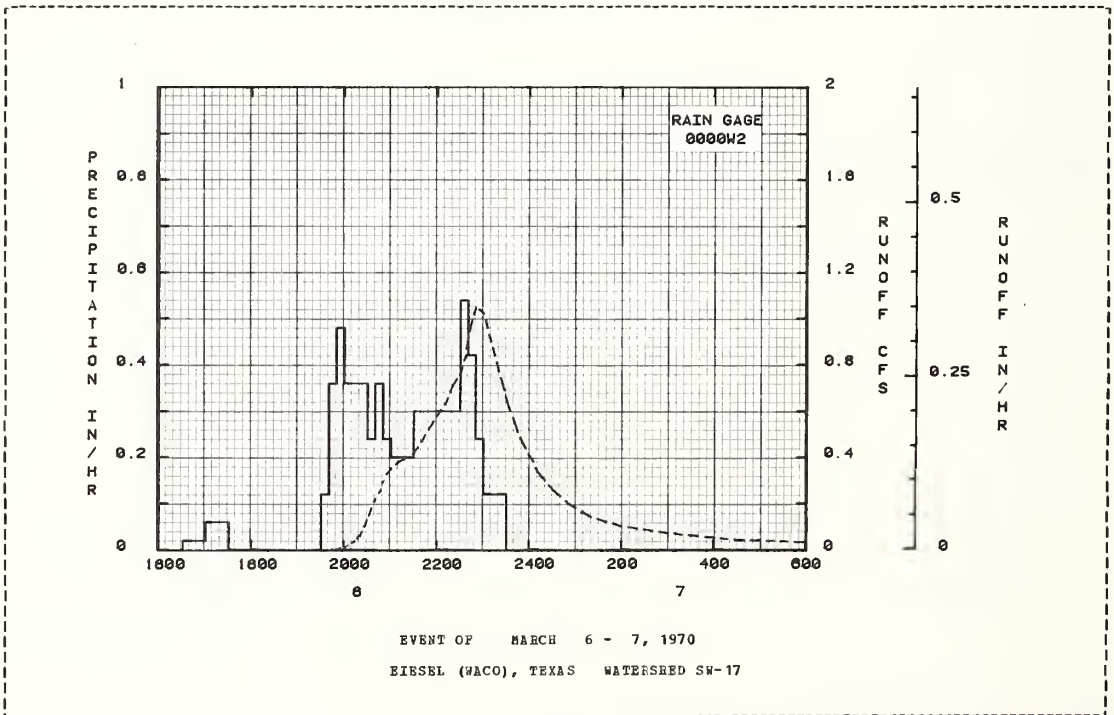
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.960419. Records began Feb. 1, 1939; station not in operation July 1943 to Jan. 1, 1948; part-year amounts not included in averages. STA AV based on 26 yr period.

1970 SELECTED RONOFF EVENT													RIRSEL (WACO), TEXAS				WATERSHED SW-17	
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.								
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)								
EVENT OF MARCH 6 - 7, 1970																		
3- 6	RG 0000W2 0.0	0.009	3- 6	1631	0.0	0.0	3- 6	1944	0.002	0.0								
				1701	0.0200	0.01		1946	0.003	0.0								
				1731	0.0600	0.04		1951	0.004	0.0001								
				1931	0.0	0.04		1956	0.006	0.0042								
				1941	0.1200	0.06		2001	0.005	0.0004								
				1951	0.3600	0.12		2006	0.015	0.0007								
				2001	0.4800	0.20		2011	0.027	0.0013								
				2031	0.3600	0.38		2014	0.036	0.0018								
				2041	0.2400	0.42		2017	0.049	0.0025								
				2051	0.3600	0.48		2019	0.058	0.0031								
				2101	0.2400	0.52		2021	0.065	0.0038								
				2131	0.2000	0.62		2024	0.081	0.0050								
				2201	0.3000	0.77		2027	0.103	0.0065								
				2231	0.3000	0.92		2030	0.127	0.0084								
				2241	0.5400	1.01		2033	0.154	0.0107								
				2251	0.4200	1.08		2036	0.182	0.0135								
				2301	0.2400	1.12		2040	0.206	0.0178								
				2331	0.1200	1.18		2041	0.222	0.0190								
								2046	0.245	0.0255								
								2048	0.256	0.0283								
								2050	0.287	0.0313								
								2052	0.303	0.0345								
								2056	0.329	0.0415								
								2101	0.351	0.0509								
								2111	0.383	0.0712								
								2121	0.400	0.0929								
								2131	0.423	0.1157								
								2141	0.470	0.1404								
								2151	0.529	0.1680								
								2201	0.581	0.1967								
								2211	0.635	0.2323								
								2221	0.710	0.2695								
								2226	0.744	0.2896								
								2231	0.757	0.3104								
								2236	0.816	0.3321								

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.331684.

1970 SELECTED RUNOFF EVENT			BIESEL (WACO), TEXAS WATERSHED SW-17							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2238	0.843	0.3413
								2241	0.917	0.3558
								2246	0.992	0.3822
								2251	1.045	0.4103
								2256	1.042	0.4391
								2301	1.022	0.4677
								2306	0.965	0.4951
								2311	0.901	0.5209
								2316	0.840	0.5450
								2321	0.773	0.5673
								2326	0.720	0.5879
								2331	0.652	0.6069
								2336	0.604	0.6242
								2341	0.558	0.6402
								2346	0.509	0.6550
								2351	0.468	0.6685
								2356	0.437	0.6810
								2400	0.410	0.6904
							3- 7	6	0.375	0.7034
								11	0.344	0.7133
								21	0.302	0.7312
								31	0.259	0.7467
								41	0.228	0.7601
								51	0.199	0.7719
								101	0.176	0.7823
								111	0.161	0.7916
								121	0.144	0.8000
								141	0.124	0.8148
								201	0.104	0.8274
								221	0.089	0.8381
								241	0.085	0.8477
								301	0.072	0.8564
								331	0.061	0.8674
								401	0.050	0.8766
								431	0.042	0.8842
								501	0.037	0.8908
								601	0.027	0.9014

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.331684.





## FIESEL (WACO), TEXAS WATERSHED SW-19

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 3.25 acres

SLOPES: Slope-Percent 0-3  
Percent of area 100.0

SOILS: Residual; moderately deep fine textured, granular, slowly permeable, alkaline throughout, slow internal drainage, Houston clay - 100%.

EROSION: Erosion Class + 1 2 3 4 5  
Percent of Area 0.0 0.0 100.0 0.0 0.0 0.0

LAND CAPABILITY: Class I II III IV V VI VII VIII  
Percent of Area 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0

GEOLOGY: The watershed is underlain by marls and chalks belonging to the Taylor group of the Gulf series of the Cretaceous system. The formations dip east-southeast at an angle a little steeper than the general slope of the land surface. For additional data see: Blank, H. R., et al., Geology of the Blacklands Experimental Watershed, near Waco, Texas, Bureau of Economic Geology, Univ. of Texas, Report No. 12, March, 1952.

SURFACE DRAINAGE: Good, no well defined drainageway by poorly defined natural depressions.

CHARACTER OF FLOW: Ephemeral, continuous.

INSTRUMENTATION: Runoff: Type H-3 flume near center of each dike 425 ft. long across slope to intercept and concentrate runoff. Precipitation: One weighing-recording rain gage.

WATERSHED CONDITIONS: 100% rangeland grasses of mixed species with moderate infestation of honey mesquite.

GENERALLY REPRESENTS: Rangeland areas in the Blackland Prairies and Coastal Plains of Texas infested with mesquite and other brush species.

MONTHLY PRECIPITATION AND RUNOFF (inches)														FIESEL (WACO), TEXAS WATERSHED SW-19															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																
1970	P	2.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	12.40																
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	0.023																
STA AV	P	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	12.40																
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	0.023																
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
Maximum Discharge																													
Maximum Volume for Selected Time Interval																													
Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970	10-23	0.048	10-23	0.022	10-23	0.022	10-23	0.022	10-23	0.022	10-22	0.022	10-21	0.022	10-15	0.022													
MAXIMUMS FOR PERIOD OF RECORD																													
	10-23	0.048	10-23	0.022	10-23	0.022	10-23	0.022	10-23	0.022	10-22	0.022	10-21	0.022	10-15	0.022													
	1970		1970		1970		1970		1970		1970		1970		1970														

NOTES: Watershed conditions: Same as described in previous section under WATERSHED CONDITIONS. Precipitation and runoff records began September 1, 1970. Precipitation data obtained from rain gage 568. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED SW-19
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.07E	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.04	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.26	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10Z	0.0	0.0	0.10E	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.06E	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.13E	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.03E	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.57	1.98	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.55	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	
STA AV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 56E. Records began September 1, 1970. STA AV based on 1 yr record period. Estimate codes may indicate that non-significant event totals are included.

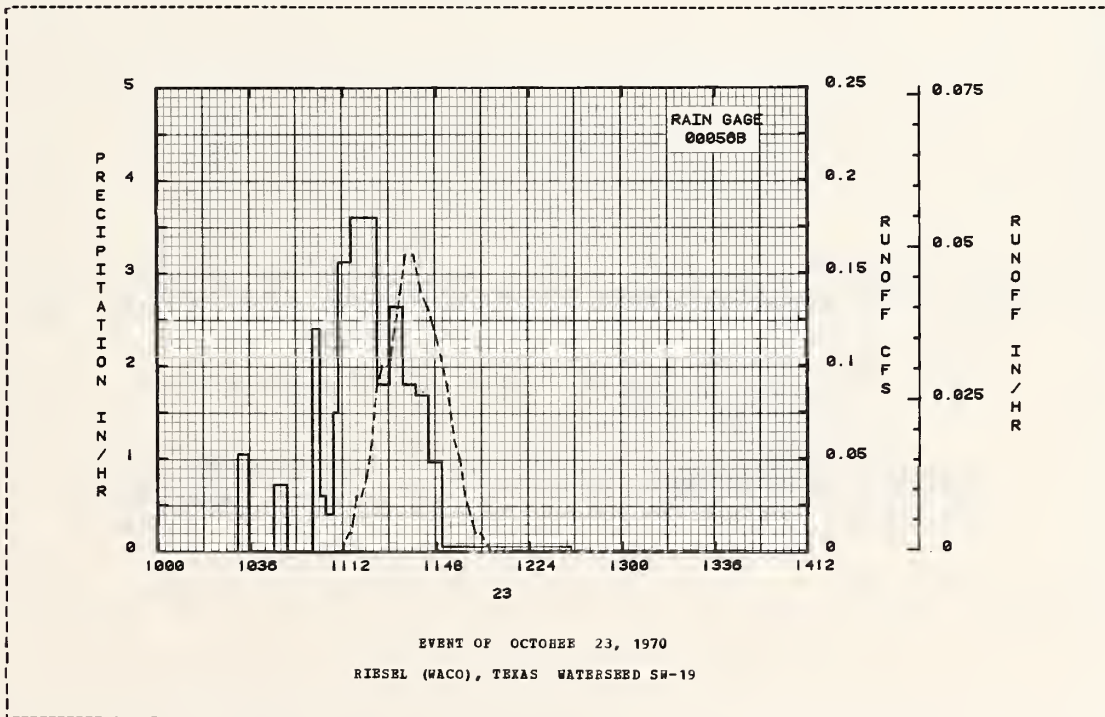
1970 MEAN DAILY DISCHARGE (cfs)													RIESEL (WACO), TEXAS WATERSHED SW-19
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.022	0.0	0.0	

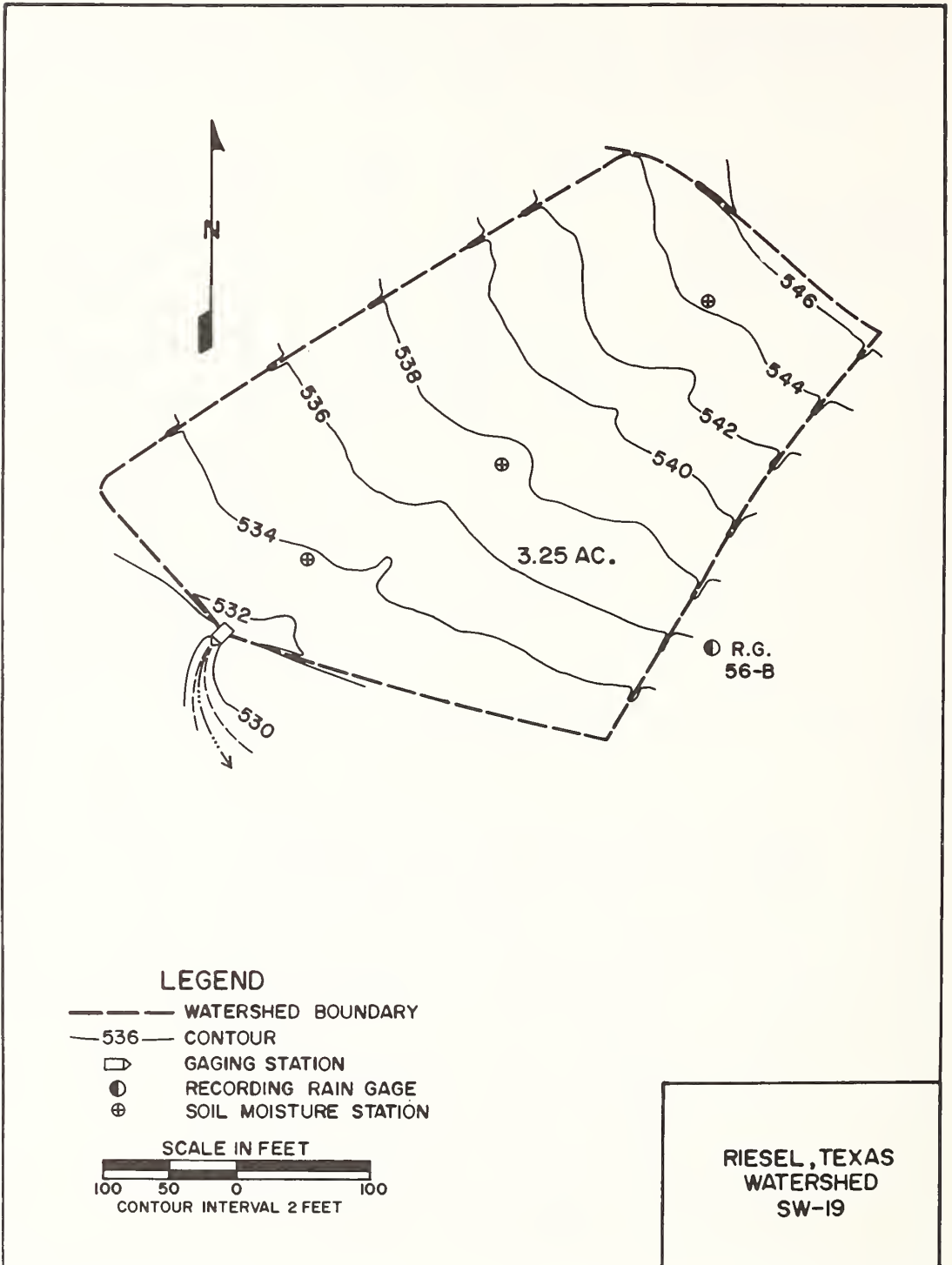
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.323585. Records began September 1, 1970. STA AV based on 1 yr record period.

1970 SELECTED EUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSEED SW-19				
ANTECEDENT CONDITIONS			RAINFALL			EUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF OCTOBER 23, 1970										
10-23	0.0	0.0	10-23	EG 00056B	0.0	0.0	10-23	1109	0.0	0.0
				1031	0.0	0.0		1110	0.001	0.0
				1035	1.0500	0.07		1111	0.004	0.0
				1045	0.0	0.07		1114	0.008	0.0001
				1050	0.7200	0.13		1115	0.012	0.0002
				1100	0.0	0.13		1116	0.018	0.0003
				1103	2.4000	0.25		1117	0.027	0.0004
				1105	0.6000	0.27		1119	0.032	0.0007
				1108	0.4000	0.29		1121	0.037	0.0010
				1110	1.5000	0.34		1123	0.061	0.0015
				1115	3.1200	0.60		1125	0.087	0.0022
				1120	3.6000	0.90		1127	0.095	0.0032
				1125	3.6000	1.20		1129	0.097	0.0041
				1130	1.8000	1.35		1130	0.095	0.0047
				1135	2.6400	1.57		1131	0.107	0.0052
				1140	1.8000	1.72		1132	0.121	0.0057
				1145	1.6800	1.86		1134	0.145	0.0071
				1150	0.9600	1.94		1136	0.156	0.0085
				1240	0.0480	1.98		1139	0.156	0.0109
								1142	0.139	0.0132
								1145	0.129	0.0153
								1147	0.121	0.0165
								1149	0.108	0.0177
								1152	0.087	0.0191
								1155	0.058	0.0202
								1157	0.046	0.0208
								1159	0.033	0.0212
								1201	0.023	0.0215
								1203	0.014	0.0217
								1205	0.010	0.0218
								1209	0.004	0.0219
								1211	0.002	0.0219
								1214	0.001	0.0219
								1219	0.0	0.0219
								1329	0.0	0.0219

WATERSEED CONDITIONS:  
100% rangeland grasses, 4 to 6 inches tall, with moderate infestation of honey mesquite.

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.305149.





## RIESEL (WACO), TEXAS WATERSHED SW-20

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 3.21 acres

SLOPES: Slope-Percent 0-3  
Percent of area 100.0

SOILS: Residual; moderately deep, fine textured, granular, slowly permeable, alkaline throughout, slow internal drainage, Houston clay - 100%.

EROSION:	Erosion Class	+	1	2	3	4	5
	Percent of Area	0.0	0.0	100.0	0.0	0.0	0.0

LAND CAPABILITY:	Class	I	II	III	IV	V	VI	VII	VIII
	Percent of Area	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0

GEOLOGY: The watershed is underlain by marls and chalks belonging to the Taylor group of the Gulf series of the Cretaceous system. The formations dip east-southeast at an angle a little steeper than the general slope of the land surface. For additional data see: Blank, H. R., et al., Geology of the Blacklands Experimental Watershed, near Waco, Texas, Bureau of Economic Geology, Univ. of Texas, Report No. 12, March, 1952.

SURFACE DRAINAGE: Good, no well defined drainageways, drainage by poorly defined natural depressions.

CHARACTER OF FLOW: Ephemeral, continuous.

INSTRUMENTATION: Runoff: Type H-3 flume near center of each dike 425 ft. long across slope to intercept and concentrate runoff. Precipitation: One weighing-recording rain gage.

WATERSHED CONDITIONS: 100% rangeland grasses of mixed species with moderate infestation of honey mesquite.

GENERALLY REPRESENTS: Rangeland areas in the Blackland Prairies and Coastal Plains of Texas infested with mesquite and other brush species.

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED SW-20	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87	12.40		
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0	0.087		
STA AV	P 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87	12.40		
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0	0.087		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge Rate	Maximum Volume for Selected Time Interval													
		1 Hour Date	1 Hour Vol.	2 Hours Date	2 Hours Vol.	6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.
1970 10-23	0.161	10-23	0.078	10-23	0.080	10-23	0.080	10-23	0.080	10-22	0.080	10-21	0.080	10-15	0.080
MAXIMUMS FOR PERIOD OF RECORD															
10-23 1970	0.161	10-23 1970	0.078	10-23 1970	0.080	10-23 1970	0.080	10-23 1970	0.080	10-22 1970	0.080	10-21 1970	0.080	10-15 1970	0.080

NOTES: Watershed conditions: Same as described in previous section under WATERSHED CONDITIONS. Precipitation and runoff records began September 1, 1970. Precipitation data obtained from rain gage 56R. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970		DAILY PRECIPITATION (inches)											RIESEL (WACO), TEXAS WATERSHED SW-20											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.07E	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.96	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.04	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.26	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.10E												
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.06E												
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.13E												
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.03E												
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	1.98	0.0	0.0												
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.79	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.55												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	6.31	4.02	0.33	0.87												
STA AV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	6.31	4.02	0.33	0.87												

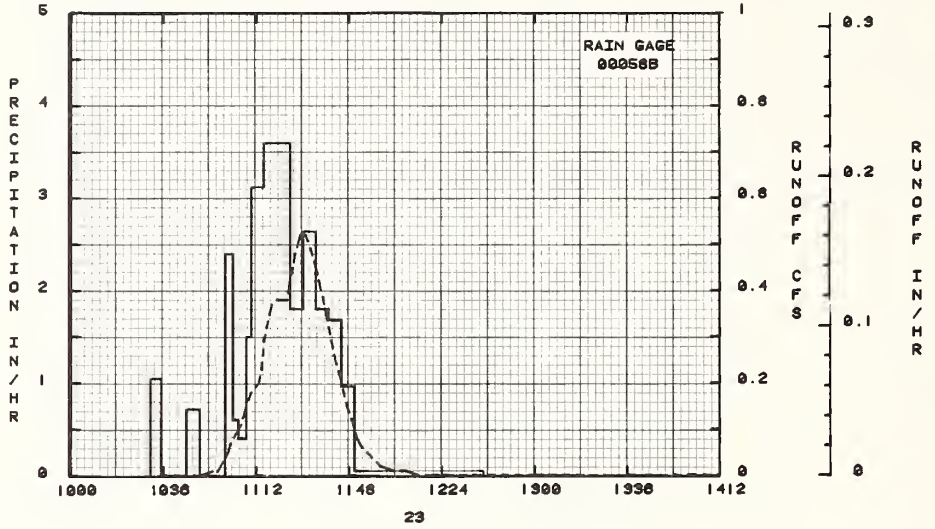
NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 56E. Records began September 1, 1970. STA AV based on 1 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)											RIESEL (WACO), TEXAS WATERSHED SW-20											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0												
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0004	0.0	0.0												
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0												
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.083	0.0	0.0												

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 7.414845. Records began September 1, 1970. STA AV based on 1 yr record period.

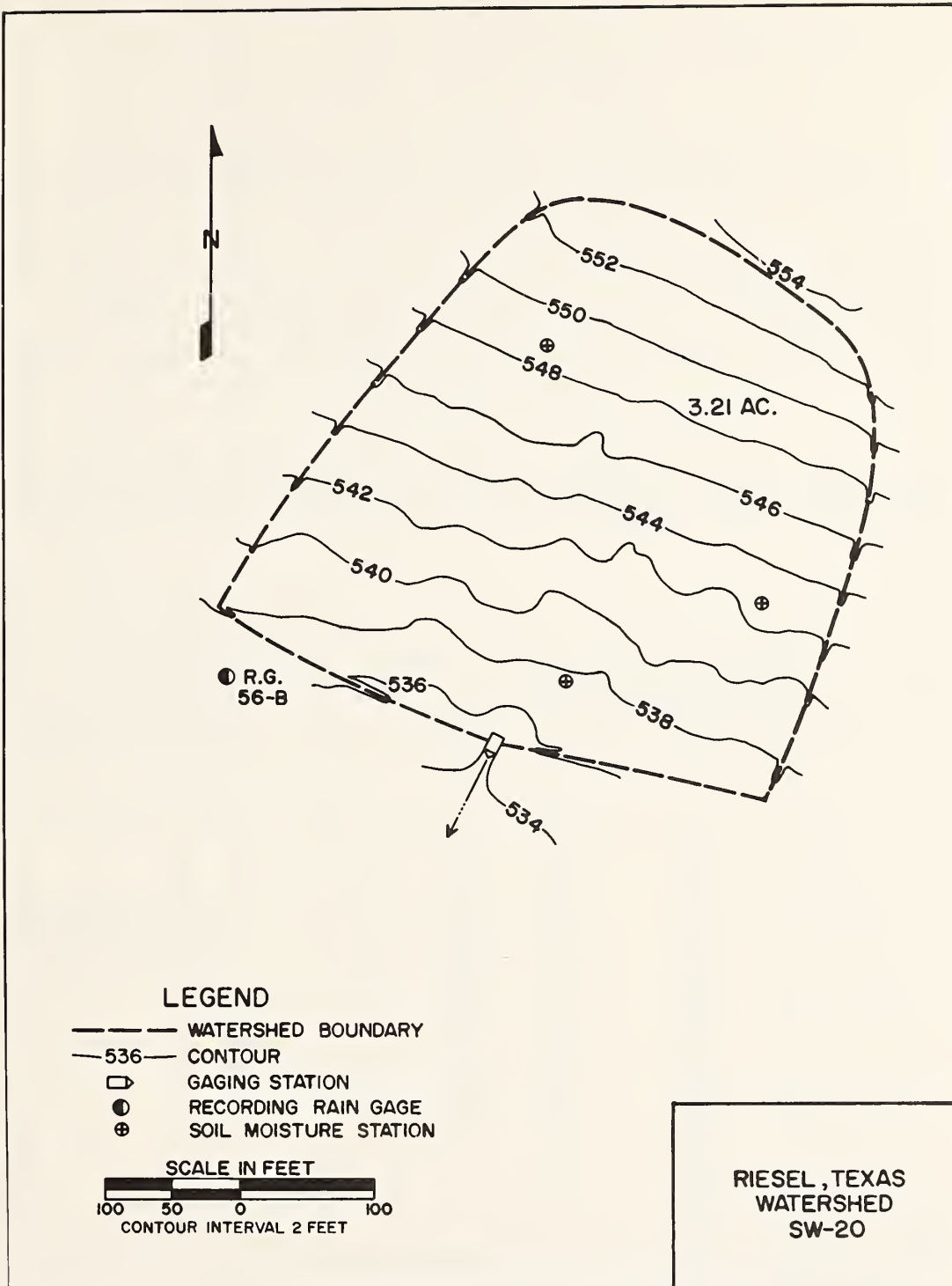
1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED S4-20								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF OCTOBER 23, 1970											
10-23	RG 00056B 0.0	0.0	10-23	FG 00056B							
				1031	0.0	0.0	10-23	1040	0.0	0.0	
				1035	1.0500	0.07		1045	0.0	0.0	
				1045	0.0	0.07		1050	0.0	0.0	
				1050	0.7200	0.13		1055	0.010	0.0001	
				1100	0.0	0.13		1057	0.010	0.0002	
WATERSHED CONDITIONS: 100% rangeland grasses, 4 to 6 inches tall, with moderate infestation of honey mesquite.				1103	2.4000	0.25		1059	0.030	0.0004	
				1105	0.6000	0.27		1101	0.050	0.0008	
				1108	0.4000	0.29		1102	0.070	0.0011	
				1110	1.5000	0.34		1104	0.090	0.0020	
				1115	3.1200	0.60		1106	0.110	0.0030	
				1120	3.6000	0.90		1108	0.150	0.0044	
				1125	3.6000	1.20		1110	0.180	0.0060	
				1130	1.8000	1.35		1113	0.200	0.0090	
				1135	2.6400	1.57		1114	0.230	0.0100	
				1140	1.8000	1.72		1115	0.290	0.0116	
				1145	1.6800	1.86		1117	0.350	0.0147	
				1150	0.9600	1.94		1118	0.370	0.0164	
				1240	0.0480	1.98		1120	0.380	0.0205	
								1124	0.380	0.0284	
								1125	0.420	0.0303	
								1127	0.480	0.0352	
								1129	0.520	0.0400	
								1131	0.520	0.0456	
								1133	0.490	0.0505	
								1135	0.450	0.0556	
								1137	0.400	0.0597	
								1139	0.350	0.0638	
								1141	0.290	0.0669	
								1143	0.240	0.0698	
								1145	0.200	0.0722	
								1147	0.150	0.0739	
								1149	0.120	0.0753	
								1151	0.080	0.0763	
								1153	0.060	0.0771	
								1155	0.050	0.0776	
								1200	0.020	0.0785	
								1205	0.010	0.0790	
								1210	0.010	0.0793	
								1215	0.0	0.0794	
								1220	0.0	0.0795	
								1300	0.0	0.0798	
								1400	0.0	0.0801	
								1500	0.0	0.0803	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.308952.



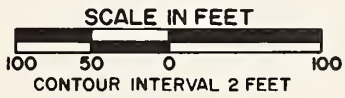
EVENT OF OCTOBER 23, 1970  
RIESEL (WACO), TEXAS WATERSHED SW-20





**LEGEND**

- WATERSHED BOUNDARY
- 536— CONTOUR
- ▭ GAGING STATION
- R.G. 56-B RECORDING RAIN GAGE
- ⊕ SOIL MOISTURE STATION



**RIESEL, TEXAS  
WATERSHED  
SW-20**

## RIESEL (WACO), TEXAS WATERSHED Y-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED Y-13														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.82	4.68	4.62	2.63	1.93	0.36	0.64	0.63	5.87	3.36	0.33	0.83	26.70														
	Q	0.004	0.922	2.615	0.547	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.0	4.154														
STA AV	P	0.82	3.61	4.40	3.43	1.69	0.35	0.36	1.22	3.81	4.80	1.15	2.35	27.95														
	Q	0.002	0.488	1.821	0.607	0.019	0.0	0.0	0.0	0.0	0.216	0.0	0.250	3.403														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge Date	1 Hour Date	2 Hours Date	Maximum Volume for Selected Time Interval																							
		Date	Vol.	Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.													
1970		3-3	0.643	2-24	0.419	2-24	0.574	3-7	0.972	3-7	1.025	3-6	1.701	3-6	1.725	2-27	2.645											
MAXIMUMS FOR PERIOD OF RECORD																												
		3-3	0.643	2-24	0.419	2-24	0.574	3-7	0.972	3-7	1.025	3-6	1.701	3-6	1.725	2-27	2.645											
		1970		1970		1970		1970		1970		1970		1970		1970												

NOTES: Watershed conditions: 96% grain sorghum; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.037-5. Precipitation and runoff records began January 1, 1969. Precipitation data obtained from rain gage 70-A. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED Y-13													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	1.36	0.29	0.01E	0.0	0.36	0.0	0.0	0.85	0.0	0.05E	0.0															
2	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0															
3	0.07E	0.0	0.65	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.0	0.29	1.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	1.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0															
9	0.0	0.0	0.0	2.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
10	0.04E	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0															
11	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.04E	0.0	0.81	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.12	0.04	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.28	0.0															
14	0.04E	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
15	0.0	0.36	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E															
16	0.0	0.0	0.36	0.01E	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0															
17	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0															
18	0.0 S	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0															
19	0.0	0.0	0.04E	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.09E															
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E															
21	0.0	0.0	0.18	0.0	0.0	0.0	0.12	0.0	0.09E	0.0	0.0	0.03E															
22	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
23	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0 E	0.55	2.01	0.0	0.0															
24	0.0	1.82	0.0	0.0	0.06E	0.0	0.52	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.46	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.56	0.0	0.0	0.0															
27	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.12	0.03E	0.0	0.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.16	0.54	0.0	0.0	0.03	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL		0.82	4.68	4.62	2.63	1.93	0.36	0.64	0.63	5.87	3.36	0.33	0.83														
STA AV		0.82	3.61	4.40	3.43	1.69	0.35	0.36	1.22	3.81	4.80	1.15	2.35														

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage 70-A. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) HIESEL (WACO), TEXAS WATERSHED Y-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.012	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.277	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.302	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.510	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.225	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0
24	0.0	0.366	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0156	0.0400	0.0087	0.0	0.0	0.0	0.0	0.0	0.0010	0.0	0.0
INCHES	0.004	0.022	2.615	0.547	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.0
STA AV	0.002	0.488	1.821	0.607	0.019	0.0	0.0	0.0	0.0	0.216	0.0	0.250

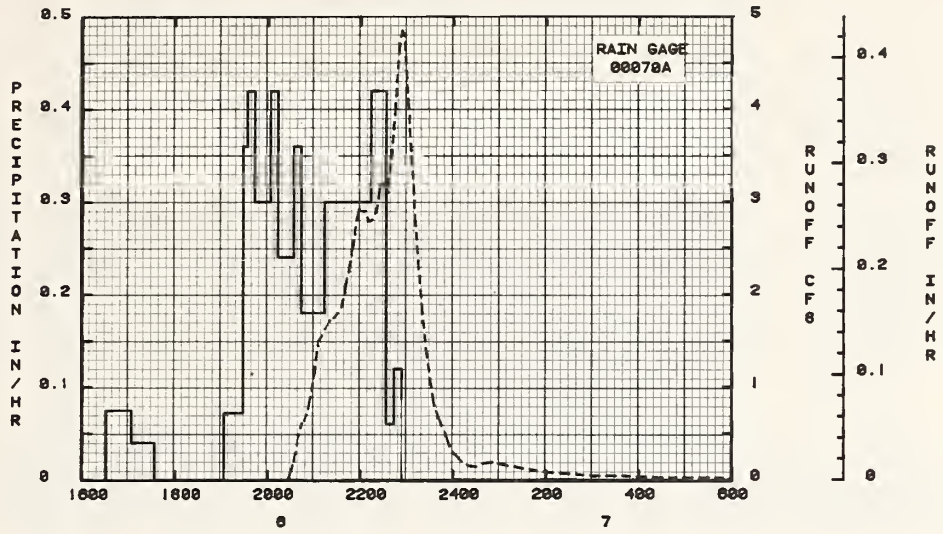
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.106341. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT HIESEL (WACO), TEXAS WATERSHED Y-13												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Fate (cfs)	Acc. (inches)		
EVENT OF MARCH 6 - 7, 1970												
3-6	RG 00070A 0.0	0.0	3-6	RG 00070A 1631	0.0	0.0	3-6	2024	0.0	0.0		
				1703	0.0750	0.04		2025	0.002	0.0		
				1733	0.0400	0.06		2026	0.012	0.0		
				1903	0.0	0.06		2027	0.028	0.0		
				1928	0.0720	0.09		2028	0.050	0.0001		
WATERSHED CONDITIONS: 96% tilled, seed bed prepared for grain sorghum not yet planted; 4% Bermudagrass waterway, good cover.				1933	0.3600	0.12		2029	0.080	0.0002		
				1943	0.4200	0.19		2030	0.102	0.0003		
				1953	0.3000	0.24		2032	0.162	0.0007		
				2003	0.3000	0.29		2034	0.208	0.0012		
				2013	0.4200	0.36		2036	0.296	0.0019		
				2023	0.2400	0.40		2038	0.387	0.0029		
				2033	0.2400	0.44		2040	0.488	0.0042		
				2043	0.3600	0.50		2042	0.559	0.0057		
				2113	0.1800	0.59		2044	0.609	0.0074		
				2143	0.3000	0.74		2047	0.636	0.0101		
				2213	0.3000	0.89		2050	0.701	0.0130		
				2233	0.4200	1.03		2055	0.895	0.0188		
				2243	0.0600	1.04		2100	1.148	0.0263		
				2253	0.1200	1.06		2105	1.502	0.0360		
								2110	1.556	0.0472		
								2115	1.648	0.0589		
								2120	1.715	0.0712		
								2125	1.754	0.0839		
								2130	1.803	0.0969		
								2135	1.873	0.1103		
								2140	2.061	0.1247		
								2142	2.170	0.1309		
								2145	2.283	0.1407		
								2148	2.459	0.1511		
								2151	2.580	0.1622		
								2155	2.833	0.1780		
								2158	2.925	0.1906		
								2201	2.899	0.2034		
								2205	2.899	0.2204		
								2210	2.794	0.2412		

NOTES: To convert runoff in CFS to IN/HR, multiply by .087764.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-13				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2215	2.807	0.2617
								2220	2.886	0.2825
								2225	3.184	0.3047
								2230	3.198	0.3281
								2235	3.101	0.3511
								2240	3.486	0.3752
								2245	4.070	0.4029
								2250	4.714	0.4350
								2253	4.846	0.4560
								2256	4.789	0.4771
								2259	4.331	0.4971
								2302	4.002	0.5154
								2305	3.545	0.5320
								2308	3.156	0.5467
								2311	2.743	0.5596
								2315	2.272	0.5743
								2320	1.793	0.5892
								2325	1.389	0.6008
								2330	1.067	0.6098
								2335	0.801	0.6166
								2340	0.684	0.6220
								2345	0.575	0.6266
								2350	0.486	0.6305
								2355	0.364	0.6336
								2400	0.286	0.6360
							3- 7	10	0.202	0.6396
								20	0.148	0.6422
								30	0.139	0.6443
								40	0.179	0.6466
								50	0.191	0.6493
								100	0.171	0.6519
								110	0.148	0.6542
								130	0.118	0.6581
								200	0.085	0.6626
								230	0.063	0.6658
								300	0.044	0.6681
								330	0.035	0.6698
								400	0.026	0.6711
								430	0.022	0.6722
								500	0.018	0.6731
								530	0.015	0.6738
								600	0.012	0.6744
								700	0.013	0.6755
								800	0.011	0.6766

NOTES: To convert runoff in CFS to IN/HR, multiply by .087764.



EVENT OF MARCH 6 - 7, 1970  
RIESEL (WACO), TEXAS WATERSHED Y-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 5.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED Y-14	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	3.74	4.74	4.81	2.58	2.21	0.31	0.41	0.91	5.70	3.37	0.32	0.81	26.93
	Q	0.001	0.416	2.075	0.026	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0	2.556
STA AV	P	0.88	3.62	4.46	3.46	1.87	0.32	0.23	1.70	3.62	4.87	1.12	2.18	28.33
	Q	0.001	0.208	1.358	0.247	0.015	0.0	0.0	0.0	0.0	0.127	0.0	0.246	2.203

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge	Maximum Volume for Selected Time Interval														
		1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days								
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.					
1970	3-6	0.335	3-6	0.267	3-7	0.452	3-7	0.902	3-7	0.970	3-6	1.615	3-6	1.627	2-28	2.074

MAXIMUMS FOR PERIOD OF RECORD											
Date	Maximum Discharge	Date	Maximum Volume								
3-23	0.623	3-6	0.267								
1969		1970									

NOTES: Watershed conditions: 96% fall planted oats; 4% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.038-5. Precipitation and runoff records began January 1, 1969. Precipitation data from Thiessen weighted method using rain gages 75A and 89. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED Y-14	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.36	0.28	0.00E	0.01E	0.31	0.0	0.0	0.80	0.0	0.05E	0.0		
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		
3	0.08E	0.0	0.81	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.29	1.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0		
9	0.0	0.0	0.0	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.00E	0.04E	0.0	0.05	0.0	0.0	0.0	0.0	0.01E	0.0	0.0	0.0		
11	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.06E	0.0	0.91	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.03	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.27	0.0		
14	0.00E	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.37	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0	0.13E		
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.58	0.0	0.0	0.0		
17	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0		
19	0.0	0.0	0.03E	0.13	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03E		
20	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.11E		
21	0.0	0.0	0.18	0.0	0.0	0.0	0.10	0.0	0.13	0.0	0.0	0.03E		
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.26	0.0	0.0	0.00E	0.0	0.0	0.0	0.48	1.52	0.0	0.0		
24	0.0	1.82	0.0	0.0	0.09E	0.0	0.32E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.42	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.57	0.0	0.0	0.0		
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.20	0.04E	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.82	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.01E	0.76	0.0	0.0	0.01	0.0	0.0	0.0	0.51		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.74	4.74	4.81	2.58	2.21	0.31	0.41	0.91	5.70	3.37	0.32	0.81		
STA AV	0.88	3.62	4.46	3.46	1.87	0.32	0.23	1.70	3.62	4.87	1.12	2.18		

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are Thiessen weighted average of rain gages 75A and 89. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs)				RIESEL (WACO), TEXAS				WATERSHED Y-14				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.002	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.252	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0	0.0
24	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0035	0.0158	0.0002	0.0	0.0	0.0	0.0	0.0	0.0003	0.0	0.0
INCHES	0.001	0.416	2.075	0.026	0.0	0.0	0.0	0.0	0.0	0.038	0.0	0.0
STA AV	0.001	0.208	1.358	0.247	0.315	0.0	0.0	0.0	0.0	0.127	0.0	0.246

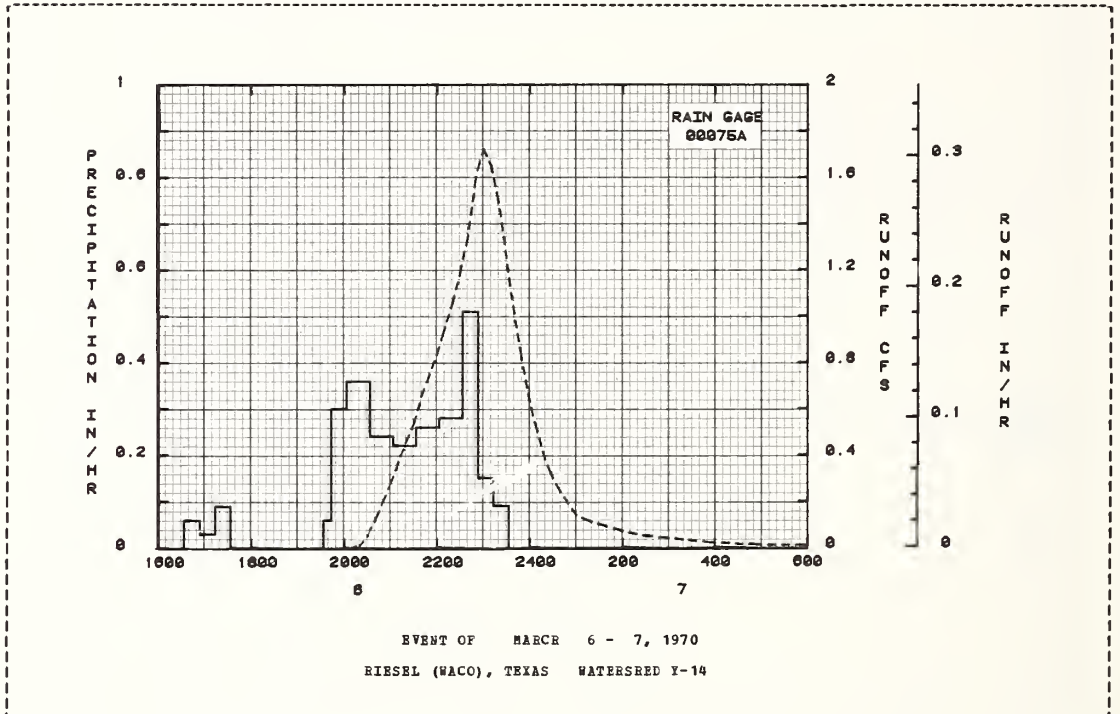
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 4.250295. Records began January 1, 1969. STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS			WATERSHED Y-14							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF MARCH 6 - 7, 1970													
BG 00075A			BG 00075A										
3- 6	0.0	0.0	3- 6	1633	0.0	0.0	3- 6	2000	0.0	0.0			
				1653	0.0600	0.02		2005	0.0	0.0			
				1713	0.0300	0.03		2010	0.032	0.0			
				1733	0.0900	0.06		2015	0.006	0.0001			
				1933	0.0	0.06		2020	0.014	0.0002			
WATERSHED CONDITIONS:													
96% fall planted oats, 4 to 6			1943			0.0600	0.07	2025			0.028	0.0005	
inches high; 4% Bernudagrass			1953			0.3000	0.12	2030			0.052	0.0011	
waterway, good cover.			2003			0.3000	0.17	2035			0.088	0.0021	
			2033			0.3600	0.35	2040			0.122	0.0036	
			2043			0.2400	0.39	2045			0.161	0.0057	
			2053			0.2400	0.43	2050			0.196	0.0083	
			2103			0.2400	0.47	2100			0.281	0.0153	
			2133			0.2200	0.58	2110			0.366	0.0248	
			2203			0.2600	0.71	2120			0.457	0.0370	
			2233			0.2800	0.85	2130			0.535	0.0516	
			2253			0.5100	1.02	2140			0.659	0.0692	
			2313			0.1500	1.07	2150			0.751	0.0900	
			2333			0.0900	1.10	2200			0.843	0.1135	
								2210			0.949	0.1399	
								2220			1.062	0.1696	
								2230			1.192	0.2029	
								2240			1.355	0.2405	
								2250			1.597	0.2841	
								2255			1.674	0.3082	
								2300			1.722	0.3333	
								2310			1.654	0.3831	
								2320			1.487	0.4295	
								2330			1.247	0.4699	
								2340			1.005	0.5031	
								2350			0.805	0.5298	
								2400			0.627	0.5509	
								3- 7			10	0.497	0.5675
											20	0.378	0.5804
											30	0.301	0.5904
											40	0.237	0.5983

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED Y-14							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 7	100	0.145	0.6096
								120	0.114	0.6172
								140	0.087	0.6231
								200	0.069	0.6277
								230	0.047	0.6328
								300	0.035	0.6364
								400	0.022	0.6414
								500	0.014	0.6446
								600	0.008	0.6465
								700	0.005	0.6477
								800	0.003	0.6484

NOTES: To convert runoff in CFS to IN/HR, multiply by .177096.





RIESEL (WACO), TEXAS WATERSHED W-12

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 9.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														RIESEL (WACO), TEXAS WATERSHED W-12													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83	27.26													
	Q	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.159	0.0	0.0	2.164													
STA AV	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23	31.02													
	Q	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.191	0.002	0.228	2.427													

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge				Maximum Volume for Selected Time Interval											
		Date	Rate	Date	Vol.	1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970		3- 7	0.250	3- 7	0.235	3- 7	0.433	3- 7	0.914	3- 7	0.970	3- 6	1.384	3- 6	1.403	2-27	1.729

MAXIMUMS FOR PERIOD OF RECORD																	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
		3- 7	0.250	3- 7	0.235	3- 7	0.433	3- 7	0.914	3- 7	0.970	3- 6	1.384	3- 6	1.403	2-27	1.729
		1970		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: 97% cotton; 3% grassed waterway, Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42-039-3. Precipitation and runoff records began October 1, 1969. Part-year amounts are included in station averages. Precipitation data obtained from rain gage W1B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)														RIESEL (WACO), TEXAS WATERSHED W-12													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	1.33	0.32	0.02E	0.04E	0.41	0.0	0.0	0.81	0.0	0.05E	0.0															
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0															
3	0.06E	0.0	0.77	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0															
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.0	0.31	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0															
9	0.0	0.0	0.0	1.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
10	0.05E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.10E	0.0	0.92	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.03	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.31	0.0															
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
15	0.0	0.38	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E															
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0															
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0															
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0															
19	0.0	0.0	0.03E	0.11	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.06E															
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E															
21	0.0	0.0	0.17	0.0	0.0	0.0	0.11E	0.0	0.10E	0.0	0.0	0.05E															
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.49	1.86	0.0	0.0															
24	0.0	1.82	0.0	0.0	0.10E	0.0	0.14	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.51	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.59	0.0	0.0	0.0															
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.16	0.05E	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.09E	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.52															
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83															
STA AV	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23															

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42-002-1. Precipitation values are from rain gage W1B. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.006	0.013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.095	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.003	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.429	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0 T	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.003	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.066	0.0	0.0
24	0.0	0.028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.011	0.0	0.0	0.0
26	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0
27	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0001	0.0020	0.0235	0.0010	0.0	0.0	0.0	0.0	0.0006	0.0021	0.0	0.0
INCHES	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.159	0.0	0.0
STA AV	0.008	0.134	1.750	0.069	0.0	0.0	0.0	0.0	0.045	0.191	0.002	0.228

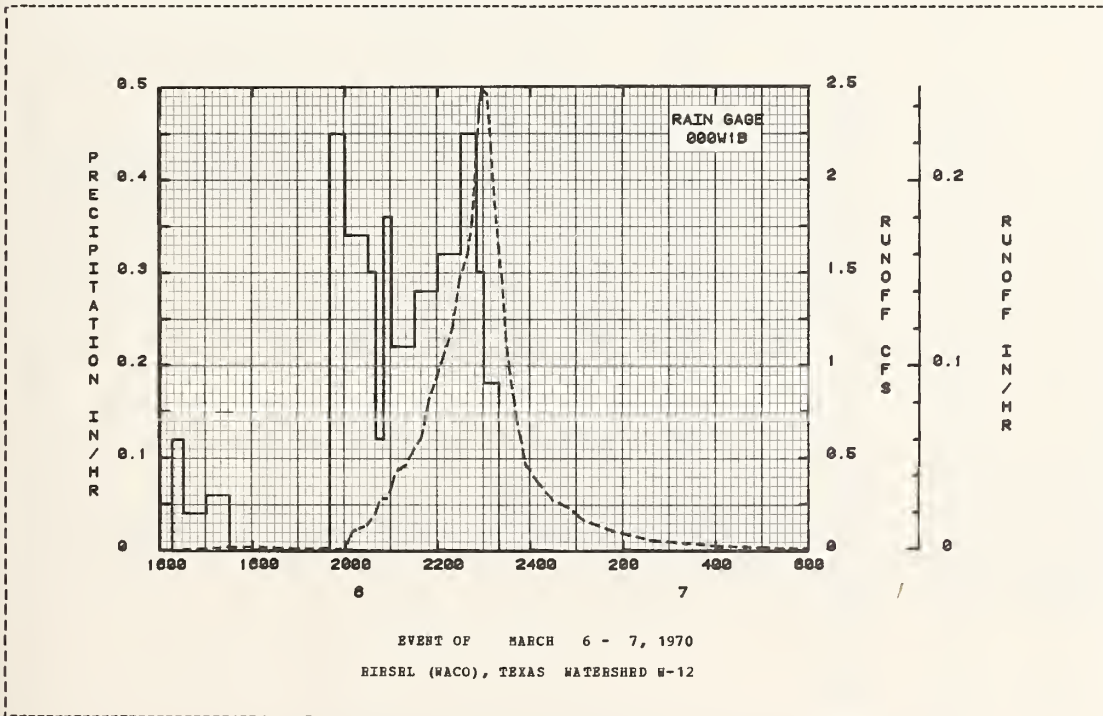
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.404207. STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-12												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
3- 6	RG 000W1B 0.0	0.004	3- 6	RG 000W1B 1615	0.0	0.0	3- 6	1630	0.004	0.0		
				1630	0.1200	0.03		1700	0.012	0.0004		
				1700	0.0400	0.05		1730	0.015	0.0011		
				1730	0.0600	0.08		1800	0.018	0.0019		
				1940	0.0	0.08		1830	0.008	0.0026		
				2000	0.4500	0.23		1900	0.007	0.0030		
				2030	0.3400	0.40		1930	0.006	0.0033		
				2040	0.3000	0.45		1949	0.004	0.0035		
				2050	0.1200	0.47		1954	0.007	0.0035		
				2100	0.3600	0.53		1959	0.011	0.0026		
				2130	0.2200	0.64		2001	0.020	0.0037		
				2200	0.2800	0.78		2003	0.037	0.0038		
				2230	0.3200	0.94		2005	0.063	0.0040		
				2250	0.4500	1.09		2007	0.084	0.0042		
				2300	0.3000	1.14		2009	0.097	0.0045		
				2310	0.1800	1.17		2012	0.111	0.0050		
				2320	0.1800	1.20		2014	0.114	0.0054		
								2019	0.124	0.0064		
								2024	0.132	0.0075		
								2025	0.136	0.0086		
								2034	0.167	0.0099		
								2039	0.204	0.0114		
								2044	0.258	0.0133		
								2049	0.279	0.0155		
								2054	0.283	0.0178		
								2059	0.330	0.0204		
								2104	0.397	0.0234		
								2109	0.437	0.0269		
								2112	0.442	0.0291		
								2114	0.450	0.0306		
								2119	0.459	0.0344		
								2129	0.545	0.0428		
								2139	0.609	0.0524		
								2149	0.816	0.0643		
								2159	0.943	0.0790		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.100175.

1970 SELECTED RUNOFF EVENT			EISEL (WACO), TEXAS WATERSHED W-12							
ANTCEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2209	1.067	0.0958
								2219	1.201	0.1147
								2229	1.480	0.1371
								2239	1.605	0.1629
								2244	1.775	0.1770
								2249	2.082	0.1931
								2251	2.205	0.2002
								2253	2.336	0.2078
								2254	2.409	0.2117
								2255	2.434	0.2157
								2257	2.497	0.2240
								2259	2.484	0.2323
								2304	2.459	0.2530
								2309	2.182	0.2724
								2314	1.884	0.2894
								2319	1.642	0.3041
								2324	1.445	0.3170
								2329	1.125	0.3277
								2334	0.949	0.3364
								2339	0.816	0.3438
								2344	0.683	0.3501
								2349	0.579	0.3554
								2354	0.463	0.3597
								2400	0.425	0.3642
							3- 7	9	0.366	0.3701
								29	0.270	0.3807
								49	0.228	0.3890
								109	0.164	0.3955
								129	0.132	0.4004
								149	0.098	0.4042
								209	0.081	0.4072
								239	0.051	0.4105
								309	0.036	0.4127
								409	0.019	0.4155
								509	0.013	0.4171
								609	0.009	0.4182
								709	0.008	0.4191

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.100175.



## RIESEL (WACO), TEXAS WATERSHED W-13

LOCATION: Falls County, Texas; 18 miles southeast of Waco; Brazos River Basin.

AREA: 11.30 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													RIESEL (WACO), TEXAS WATERSHED W-13				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83	27.26			
	Q	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.065	0.0	0.0	1.797			
STA AV	P	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.25	31.02			
	Q	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.114	0.002	0.076	1.925			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
		Date	Rate	Date	Vol.	Date	Vol.	6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		3-7	0.194	3-7	0.178	3-7	0.337	3-7	0.777	3-7	0.862	3-6	1.150	3-6	1.186	3-1	1.340
MAXIMUMS FOR PERIOD OF RECORD																	
		3-7	0.194	3-7	0.178	3-7	0.337	3-7	0.777	3-7	0.862	3-6	1.150	3-6	1.186	3-1	1.340
		1970		1970		1970		1970		1970		1970		1970		1970	

NOTES: Watershed conditions: 97% cotton; 3% grassed waterway. Cropland planted on graded furrows. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, USDA Misc. Pub. 1370, p. 42.040-3. Precipitation and runoff records began October 1, 1969. Part-year amounts are included in station averages. Precipitation data obtained from rain gage #1B. For long-time precipitation records, see National Weather Service records at Waco, Texas.

1970 DAILY PRECIPITATION (inches)													RIESEL (WACO), TEXAS WATERSHED W-13				
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
1	0.0	1.33	0.32	0.02E	0.04E	0.41	0.0	0.0	0.81	0.0	0.05E	0.0					
2	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0					
3	0.06E	0.0	0.77	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0					
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0					
5	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
6	0.0	0.31	1.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
7	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0					
9	0.0	0.0	0.0	1.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
10	0.05E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
11	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.10E	0.0	0.52	0.0	0.0					
12	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.03	0.0	0.0					
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.31	0.0					
14	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
15	0.0	0.38	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.14E					
16	0.0	0.0	0.40	0.03E	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0					
17	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0					
18	0.0 S	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0					
19	0.0	0.0	0.03E	0.11	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.06E					
20	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.06E					
21	0.0	0.0	0.17	0.0	0.0	0.0	0.11E	0.0	0.10E	0.0	0.0	0.05E					
22	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
23	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0 E	0.49	1.86	0.0	0.0					
24	0.0	1.82	0.0	0.0	0.10E	0.0	0.14	0.0	0.0	0.0	0.0	0.0					
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.51	0.0	0.0	0.0					
26	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.59	0.0	0.0	0.0					
27	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
28	0.0	0.16	0.05E	0.0	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0					
30	0.0	0.0	0.0	0.09E	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.52					
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TOTAL	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	3.26	0.36	0.83					
STA AV	0.82	4.64	4.94	2.57	2.08	0.41	0.25	1.22	5.88	4.84	1.15	2.23					

NOTES: For daily air temperature in the vicinity, see table for Watershed C, p. 42.002-1. Precipitation values are from rain gage #1B. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period. Estimate codes may indicate that non-significant event totals are included.

1970 MEAN DAILY DISCHARGE (cfs) RIESEL (WACO), TEXAS WATERSHED W-13												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.013	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.054	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.006	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.452	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.001	0.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.001	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.031	0.0	0.0
24	0.0	0.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0
25	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0
27	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0
28	0.0	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0002	0.0019	0.0211	0.0025	0.0	0.0	0.0	0.0	0.0012	0.0010	0.0	0.0
INCHES	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.065	0.0	0.0
STA AV	0.012	0.114	1.375	0.157	0.0	0.0	0.0	0.0	0.073	0.114	0.002	0.076

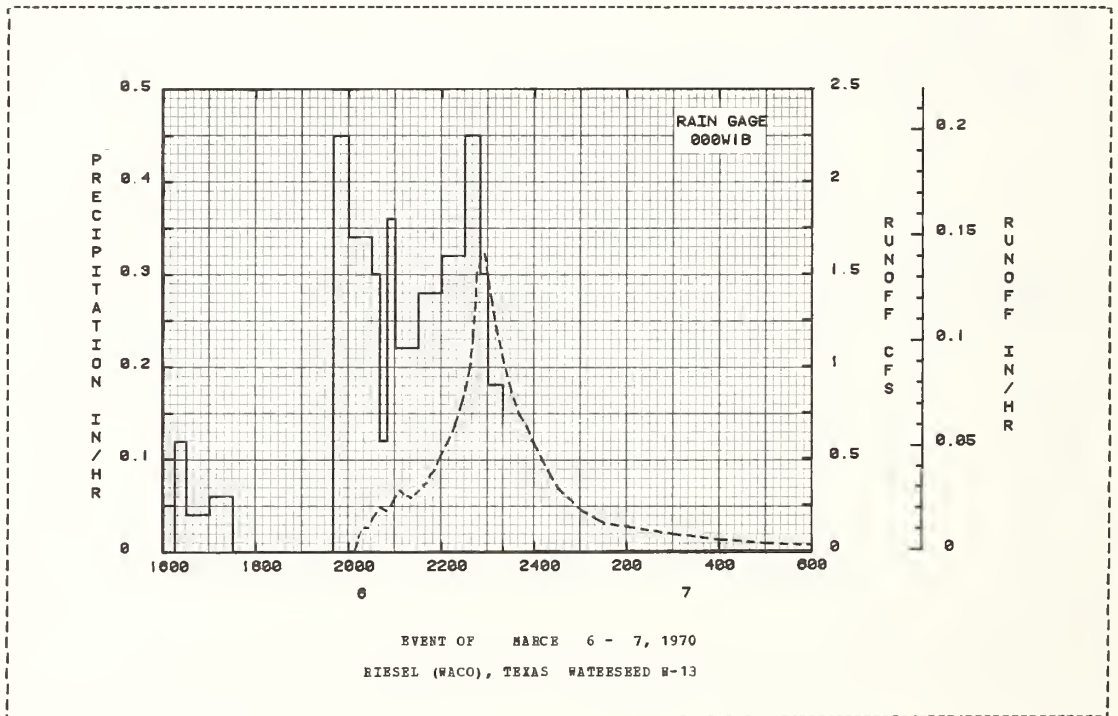
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 2.106341. Records began October 1, 1969. STA AV based on 2 yr (1969-70) record period.

1970 SELECTED RUNOFF EVENT RIESEL (WACO), TEXAS WATERSHED W-13												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MARCH 6 - 7, 1970												
3- 6	RG 000W18 0.0	0.0	3- 6	RG 000W1B 1615	0.0	0.0	3- 6	2006	0.0	0.0		
				1630	0.1200	0.03		2007	0.001	0.0		
				1700	0.0400	0.05		2008	0.005	0.0		
				1730	0.0600	0.08		2009	0.016	0.0		
				1940	0.0	0.08		2010	0.029	0.0		
				2000	0.4500	0.23		2011	0.050	0.0001		
				2030	0.3400	0.40		2013	0.081	0.0003		
				2040	0.3000	0.45		2016	0.106	0.0007		
				2050	0.1200	0.47		2021	0.127	0.0016		
				2100	0.3600	0.53		2026	0.135	0.0026		
				2130	0.2200	0.64		2031	0.176	0.0037		
				2200	0.2800	0.78		2036	0.215	0.0051		
				2230	0.3200	0.94		2041	0.241	0.0068		
				2250	0.4500	1.09		2049	0.221	0.0095		
				2300	0.3000	1.14		2056	0.262	0.0120		
				2310	0.1800	1.17		2101	0.298	0.0141		
				2320	0.1800	1.20		2106	0.333	0.0164		
								2111	0.308	0.0187		
								2116	0.298	0.0209		
								2121	0.291	0.0231		
								2126	0.308	0.0253		
								2131	0.333	0.0276		
								2136	0.358	0.0301		
								2141	0.370	0.0328		
								2146	0.418	0.0357		
								2151	0.443	0.0388		
								2156	0.487	0.0422		
								2201	0.543	0.0460		
								2206	0.577	0.0501		
								2211	0.618	0.0545		
								2216	0.672	0.0592		
								2221	0.728	0.0643		
								2226	0.800	0.0699		
								2231	0.875	0.0760		
								2236	0.975	0.0828		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.087764.

1970 SELECTED RUNOFF EVENT			RIESEL (WACO), TEXAS WATERSHED W-13							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 6 - 7, 1970 (CONTINUED)										
							3- 6	2241	1.156	0.0906
								2246	1.513	0.1004
								2249	1.540	0.1071
								2251	1.586	0.1117
								2256	1.614	0.1234
								2301	1.460	0.1347
								2306	1.332	0.1449
								2311	1.210	0.1542
								2321	1.024	0.1705
								2331	0.862	0.1843
								2341	0.740	0.1960
								2351	0.672	0.2063
								2400	0.582	0.2146
							3- 7	10	0.501	0.2225
								20	0.418	0.2292
								31	0.340	0.2353
								101	0.221	0.2476
								131	0.146	0.2557
								201	0.131	0.2618
								301	0.089	0.2715
								401	0.060	0.2780
								501	0.041	0.2824
								601	0.033	0.2856
								842	0.025	0.2924

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.087764.



## OXFORD, MISSISSIPPI WATERSHED W-4C

LOCATION: Marshall Co., Miss.; 4.8 mi. SE of Holly Springs, on State Highway No. 4; Chews Creek, Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 1580.00 acres 2.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-4C	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 1.11	3.97	6.18	7.48	4.68	4.56	2.08	4.52	2.82	5.97	2.54	3.33	49.24	
	Q 0.064	0.320	1.376	1.489	0.427	0.458	0.002	0.084	0.005	0.212	0.043	0.148	4.629	
STA AV	P 3.60	4.68	4.82	5.04	4.04	3.11	3.77	3.78	4.74	2.66	4.28	5.22	49.77	
	Q 0.606	0.928	0.894	0.751	0.291	0.118	0.201	0.230	0.343	0.121	0.479	0.726	5.688	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
Date	Maximum Discharge	Maximum Volume for Selected Time Interval										
		1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.				
1970	6-15 0.162	6-15 0.132	3- 3 0.229	3- 3 0.576	3- 3 0.697	3- 3 0.728	3- 2 0.752	4-16 1.007				

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge	1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.							
2-23 1962	0.840	2-23 1962	0.720	2-23 1962	1.130	3- 4 1964	1.560	3- 4 1964	1.620	1-31 1957	2.380	1-30 1957	3.340	1-27 1957	3.900

NOTES: Watershed conditions: About 13% in cultivation (cotton), fair cover November to March, poor cover April and May improving to good by mid-July; 40% in pasture and idle land, good cover April to October with fair cover remainder of year; 46% in woods, good cover; 1% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. Reported as Watershed W-4 prior to 1965 and from 1965-68 as Watershed W-4A; redesignated as W-4C (1969). Gaging station relocated upstream, Jan. 1965, reducing drainage area from 2,000 to 1,580 acres. About 30% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62-1-4. Monthly precipitation Thiessen weighted from rain gages 7, 8 and 18. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY AIR TEMPERATURE (degrees F)													OXFORD, MISSISSIPPI WATERSHED W-4C											
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
1	32	24	56	28	59	47	70	37	85	69	73	69	88	63	95	72	92	66	81	45	72	37	73	51
2	43	24	49	40	67	47	79	40	72	50	80	66	93	63	96	71	92	66	84	46	73	43	67	49
3	46	18	46	12	66	55	52	31	64	43	76	62	97	66	95	72	92	67	86	51	54	41	75	50
4	36	18	31	10	58	54	67	32	65	39	76	53	98	69	93	74	89	66	70	44	55	34	75	44
5	50	28	45	13	64	43	68	40	75	39	76	54	84	57	95	70	87	73	75	41	48	36	61	28
6	49	27	48	36	55	31	59	35	83	49	73	57	78	52	94	70	92	70	83	42	61	31	56	30
7	27	1	51	40	60	31	72	38	80	54	73	55	82	52	91	70	93	70	77	63	68	31	43	22
8	20	5	61	40	58	31	71	45	83	57	81	55	88	58	89	72	94	69	67	64	73	43	53	21
9	14	6	53	28	68	35	79	52	83	61	84	55	82	68	86	73	94	70	78	50	72	48	59	33
10	26	15	38	26	71	37	72	47	79	65	85	59	89	61	80	73	94	70	62	35	65	45	59	52
11	33	7	50	25	62	45	77	40	75	64	85	63	88	61	85	65	81	56	65	36	53	33	72	54
12	37	32	55	28	53	39	73	41	81	65	85	64	90	65	80	68	80	55	72	52	60	35	68	33
13	35	23	47	35	40	32	74	46	83	66	88	70	90	67	85	65	90	59	78	64	60	35	40	25
14	50	23	57	26	46	28	75	42	83	62	86	67	93	67	86	64	91	69	74	59	60	39	48	20
15	55	28	64	35	48	26	63	43	83	64	90	67	90	71	88	64	90	64	68	56	49	36	54	20
16	58	28	35	28	48	26	75	45	84	57	85	67	88	69	92	68	92	68	65	44	38	20	52	38
17	57	38	42	26	51	30	69	60	64	46	90	72	87	64	91	70	89	65	81	33	48	20	53	40
18	55	29	57	26	51	36	74	62	75	49	90	74	84	62	94	70	91	65	66	37	55	28	52	35
19	30	20	68	32	44	37	80	62	82	49	93	68	90	65	91	71	91	70	65	49	56	39	63	35
20	24	19	41	21	56	38	69	49	84	50	91	68	91	69	92	71	90	70	64	54	65	43	65	39
21	27	10	42	20	50	38	82	45	85	58	92	68	80	62	91	69	93	71	58	44	57	27	61	39
22	31	9	61	22	40	36	76	48	86	59	85	66	69	60	88	70	93	68	66	40	60	30	67	59
23	35	19	60	43	54	37	83	65	88	59	82	60	70	60	89	71	93	68	74	40	57	30	68	59
24	45	29	52	43	56	36	82	60	89	64	85	61	84	65	84	59	88	71	57	50	33	11	72	25
25	61	31	56	44	71	46	76	50	90	64	85	62	87	65	81	56	82	69	71	45	33	11	44	24
26	71	33	47	17	70	43	66	60	89	63	87	65	88	68	82	56	84	69	75	46	50	22	44	16
27	64	32	45	17	50	29	80	62	80	52	91	65	90	70	86	60	79	51	79	53	62	16	39	15
28	71	35	66	35	58	27	82	69	83	53	77	55	90	68	89	63	67	43	74	61	73	57	47	26
29	72	56	66	40	82	71	86	66	81	59	92	68	89	64	73	43	63	44	75	49	48	37	48	37
30	56	26	49	37	85	69	82	66	87	59	93	70	93	70	90	70	79	44	63	33	74	50	52	28
31	46	25	56	35	56	35	82	68	82	68	93	72	91	68	91	68	91	68	71	32	71	32	44	33
AV.	44	23	51	28	56	37	74	50	81	57	84	63	87	64	89	68	88	64	71	47	59	34	57	35
MEAN	33.5		39.7		46.8		61.7		69.0		73.3		75.9		78.4		76.0		58.8		46.4		46.1	
STA AV	47	28	52	31	60	37	72	50	80	58	86	64	89	68	89	67	82	60	73	48	62	38	51	30

NOTES: Temperature data from U.S. Weather Bureau Station at Holly Springs 4N Mississippi. STA AV is for 14 yr (1957-70) record period.

1970 DAILY PRECIPITATION (inches)												
OXFORD, MISSISSIPPI WATERSHED W-4C												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	1.27	0.19	1.50	0.14	0.90	0.0	0.82	0.0	0.0	0.0	0.0
2	0.0	0.0	0.29	0.0	0.07	0.62	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	2.24	0.0	0.0	0.0	0.0	0.07	0.45	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.01	0.22	0.0	0.0	0.0
5	0.0	0.09	0.0	0.0	0.0	0.03	0.0	0.14	0.0	0.0	0.0	0.00
6	0.02	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.94	0.0	0.0
8	0.0	0.29	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.21	0.0	0.81	1.14	0.0
10	0.0	0.0	0.0	0.0	2.52	0.0	0.0	0.0	0.98	0.0	0.0	0.0
11	0.69	0.0	0.16	0.0	0.18	0.0	0.0	0.0	0.0	0.14	0.0	0.51
12	0.0	0.0	0.31	0.64	0.0	0.0	0.0	0.0	0.0	0.72	0.10	0.0
13	0.0	0.0	0.0	0.09	0.0	0.31	0.0	0.0	0.0	2.07	0.32	0.0
14	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.48	0.0
15	0.0	1.29	0.0	0.0	0.0	2.52	0.0	0.0	0.0	0.0	0.0	0.65
16	0.0	0.0	0.0	0.06	0.75	0.0	0.0	0.98	0.0	0.0	0.0	0.29
17	0.0	0.0	0.80	2.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0
19	0.02	0.0	1.21	1.28	0.0	0.0	0.0	0.00	0.0	0.22	0.25	0.14
20	0.0	0.0	0.05	0.0	0.0	0.0	0.45	0.93	0.0	0.02	0.0	1.22
21	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.00
22	0.0	0.03	0.0	0.0	0.0	0.0	0.44	0.86	0.0	0.0	0.0	0.07
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.77	0.0	0.0	0.04
24	0.0	0.09	0.02	0.56	0.07	0.07	0.0	0.0	0.0	0.69	0.0	0.0
25	0.0	0.39	0.38	0.54	0.02	0.0	0.06	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.05	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0
29	0.38	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.03
30	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.00	0.0	0.0	0.0	0.31
31	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07
TOTAL	1.11	3.97	6.18	7.48	4.68	4.56	2.08	4.52	2.82	5.97	2.54	3.33
STA AV	3.64	4.68	4.82	5.04	4.04	3.11	3.77	3.78	4.74	2.66	4.28	5.22

NOTES: Daily precipitation values Thiessen weighted from rain gages 7, 8 and 18. STA AV based on 14 yr (1957-70) record period.

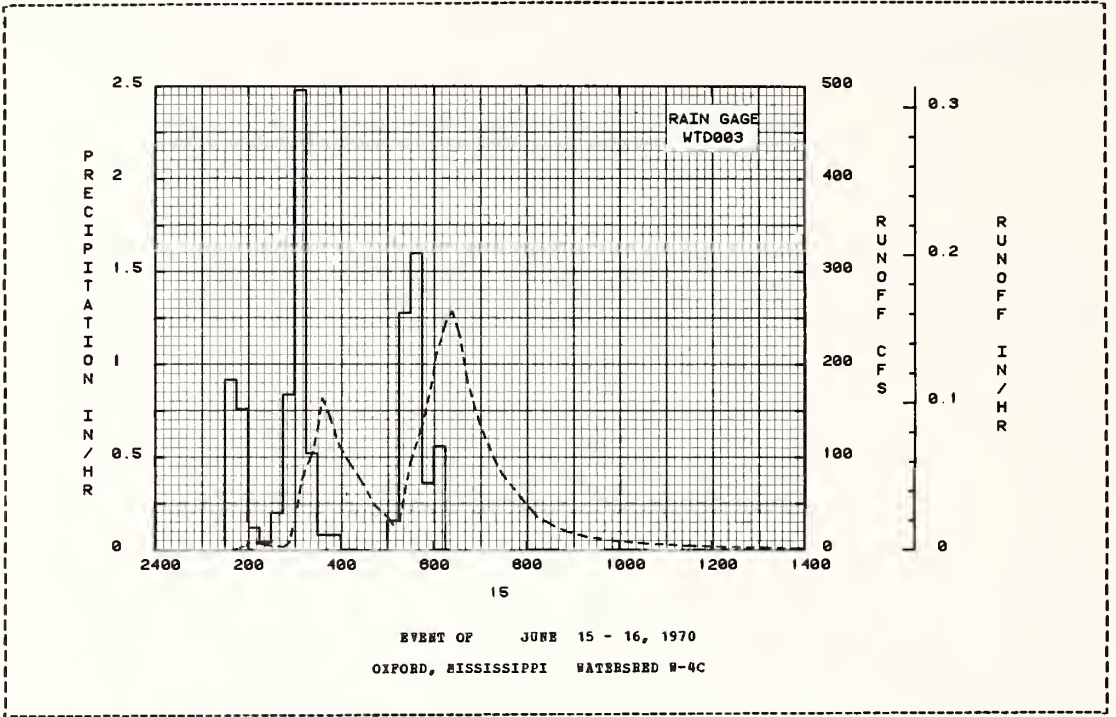
1970 MEAN DAILY DISCHARGE (cfs)												
OXFORD, MISSISSIPPI WATERSHED W-4C												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.906	5.155	0.471	10.185	0.471	0.380	0.0	0.0	0.0	0.0	0.0	0.0
2	0.906	1.171	0.861	2.796	0.471	2.950	0.0	0.0	0.0	0.0	0.0	0.0
3	1.054	0.031	47.670	0.471	0.471	0.266	0.0	0.0	0.0	0.0	0.0	0.0
4	0.677	0.0	2.231	0.471	0.380	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.338	0.371	0.677	0.471	0.250	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.290	0.574	0.471	0.290	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.290	0.471	0.380	0.290	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.290	0.380	0.380	0.290	0.0	0.156	0.0	0.0	0.0	0.0	0.0
9	0.0	0.290	0.290	0.471	0.145	0.0	0.0	0.0	0.0	0.414	2.250	0.0
10	0.0	0.115	0.290	0.471	19.223	0.0	0.0	0.0	0.262	0.0	0.0	0.0
11	0.0	0.086	0.290	0.471	4.051	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.290	0.494	0.471	0.0	0.0	0.0	0.0	0.299	0.0	0.0
13	0.0	0.0	0.290	1.783	0.471	0.0	0.0	0.0	0.0	13.286	0.0	0.0
14	0.0	0.380	0.290	0.290	0.235	0.0	0.0	0.0	0.0	0.0	0.555	0.0
15	0.0	8.380	0.290	0.290	0.0	26.774	0.0	0.0	0.0	0.0	0.0	0.100
16	0.0	1.978	0.380	0.598	0.760	0.032	0.0	0.079	0.0	0.0	0.0	0.856
17	0.0	0.301	3.007	37.399	0.047	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.132	1.205	1.607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.132	18.296	21.901	0.0	0.0	0.0	0.0	0.0	0.0	0.009	0.0
20	0.0	0.132	2.032	2.343	0.0	0.0	0.0	1.754	0.0	0.0	0.016	5.192
21	0.0	0.132	2.852	0.677	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.658
22	0.0	0.132	1.205	0.677	0.0	0.0	0.0	2.994	0.0	0.0	0.0	0.0
23	0.0	0.132	0.574	0.677	0.0	0.0	0.0	0.723	0.017	0.0	0.0	0.0
24	0.0	0.132	0.688	1.977	0.0	0.0	0.0	0.0	0.0	0.127	0.0	0.0
25	0.0	0.132	1.582	1.597	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.222	0.985	6.553	0.0	0.0	0.0	0.0	0.039	0.0	0.0	0.0
27	0.0	0.380	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.471	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.366	0.0	0.677	0.791	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.677	0.574	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.483	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.1370	0.7592	2.9472	3.2951	0.9148	1.0134	0.0050	0.1790	0.0106	0.4544	0.0957	0.3163
INCHES	0.064	0.329	1.376	1.489	0.427	0.458	0.002	0.084	0.005	0.212	0.043	0.148
STA AV	0.606	0.928	0.894	0.751	0.291	0.118	0.201	0.230	0.343	0.121	0.479	0.726

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.01506. STA AV based on 14 yr (1957-70) record period. Quality of records: Good, estimated to be within 10% of actual.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED N-4C				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JUNE 15 - 16, 1970										
RG WTD003			RG WTD003							
6-15	0.01	0.0	6-15	130	0.0	0.0	6-15	140	0.132	0.0
				145	0.9200	0.23		146	1.435	0.0
				200	0.7600	0.42		150	3.158	0.0001
				215	0.1200	0.45		154	4.009	0.0002
				230	0.0400	0.46		158	4.951	0.0004
WATERSHED CONDITIONS: About 13% of area in cultivation, primarily cotton, poor to fair cover; 40% in pasture and idle land with fair to good cover; 46% in woods, good cover; 1% bare gullies.				245	0.2000	0.51		202	8.290	0.0007
				300	0.8400	0.72		218	7.100	0.0017
				315	2.4800	1.34		230	4.469	0.0027
				330	0.5200	1.47		246	3.158	0.0033
				345	0.0800	1.49		254	8.911	0.0038
				400	0.0800	1.51		302	39.228	0.0058
				415	0.0	1.51		310	77.000	0.0107
				500	0.0	1.51		314	85.938	0.0141
				515	0.1600	1.55		324	106.208	0.0242
				530	1.2800	1.87		332	139.320	0.0345
				545	1.6005	2.27		336	163.795	0.0408
				600	0.3600	2.36		346	143.680	0.0569
				615	0.5600	2.50		358	112.014	0.0729
								416	87.728	0.0917
					430	69.800	0.1032			
					444	48.128	0.1118			
					502	33.792	0.1195			
					508	26.936	0.1214			
					516	32.000	0.1239			
					530	95.000	0.1332			
					546	137.155	0.1526			
					600	189.480	0.1765			
					602	206.455	0.1806			
					616	247.095	0.2138			
					624	257.655	0.2349			
					634	229.000	0.2604			
					644	180.000	0.2818			
					700	135.000	0.3082			
					718	98.704	0.3302			
					728	82.368	0.3397			
					752	57.195	0.3572			
					814	35.606	0.3679			
					836	25.412	0.3749			
					858	18.369	0.3799			
					918	14.000	0.3833			
					958	9.553	0.3882			
					1038	6.531	0.3916			
					1130	4.469	0.3946			
					1218	3.158	0.3965			
					1316	2.056	0.3981			
					1516	1.159	0.4001			
					1944	0.471	0.4024			
					2400	0.132	0.4032			
					532	0.132	0.4037			
					600	0.0	0.4037			
					6-16					

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.000628. Thiessen weighted storm rainfall, rain gages 7, 8 and 18. For 30-day antecedent P and Q, see tables on p. 62.001-2.



## OXFORD, MISSISSIPPI WATERSHED W-5

LOCATION: Marshall Co., Miss.; 6.1 mi. SW of Holly Springs, on State Highway No. 4; Willie Wilkins Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1000.00 acres 1.56 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-5			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 1.09	3.85	6.34	7.11	5.11	4.95	2.35	2.87	2.63	5.77	2.72	3.33	48.10			
	Q 0.135	1.15R	3.657	2.919	1.317	1.551	0.006	0.001	0.0	0.171	0.027	0.401	11.344			
STA AV	P 3.70	4.66	4.98	5.09	4.21	3.17	3.74	3.99	4.64	2.58	4.35	5.30	50.40			
	Q 1.315	1.794	1.930	1.536	0.745	0.356	0.307	0.420	0.539	0.226	0.832	1.705	11.704			
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	6-15	0.543	6-15	0.432	6-15	0.602	3- 3	1.30R	3- 3	1.56R	3- 3	1.675	3- 3	1.761	4-12	1.920
MAXIMUMS FOR PERIOD OF RECORD																
	3- 4	1.190	3- 4	0.990	3- 4	1.630	3- 4	2.120	2- 9	2.800	2- 9	3.100	1-30	3.720	1-27	5.250
	1964		1964		1964		1964		1966		1966		1957		1957	

NOTES: Watershed conditions: About 23% in cultivation (cotton, ryegrass and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 51% in pasture and idle land, good cover April to October with fair cover remainder of year; 25% in woods, good cover; 1% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 29% of drainage area above small deslitting and retention dams. For map of watershed, see Selected Ecnoff Events for Small Agricultural Watersheds in the United States, ARS, SMC, January 1960, p. 62.2-3. Monthly precipitation Thiessen weighted from rain gages R and 33. Precipitation and runoff records began Jan. 1957. Gaging station moved Oct. 1, 1969, acreage changed from 1130 acres to 1000 acres. For long-time precipitation records, see National Weather Service records at Holly Springs, MS, Mississippi.

1970	DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.23	0.21	1.28	0.15	0.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.24	0.0	0.08	0.70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	2.34	0.0	0.0	0.0	0.0	0.03	0.35	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.15	0.0	0.0	0.0	0.0	
5	3.0	0.09	0.0	0.0	0.0	0.10	0.0	0.41	0.0	0.0	0.0	0.0	0.0	
6	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.84	0.0	0.0	0.0	
8	0.0	0.27	0.0	0.0	0.0	0.0	1.34	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.23	0.0	0.94	1.14	0.0	0.0	
10	0.0	0.0	0.0	0.0	2.83	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	
11	0.64	0.0	0.16	0.0	0.28	0.0	0.0	0.0	0.0	0.09	0.0	0.50	0.0	
12	0.0	0.0	0.31	0.67	0.0	0.0	0.0	0.0	0.0	0.68	0.11	0.0	0.0	
13	0.0	0.0	0.0	0.05	0.0	0.16	0.0	0.0	0.0	1.75	0.34	0.0	0.0	
14	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	
15	0.0	1.36	0.0	0.0	0.0	2.87	0.0	0.0	0.0	0.0	0.0	0.68	0.0	
16	0.0	0.0	0.0	0.09	0.76	0.0	0.0	3.58	0.0	0.0	0.0	0.27	0.0	
17	0.0	0.0	0.85	2.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	
19	0.06	0.0	1.20	1.25	0.0	0.0	0.0	0.05	0.0	0.24	0.36	0.17	0.0	
20	0.0	0.0	0.03	0.0	0.0	0.0	0.50	0.25	0.0	0.03	0.0	1.19	0.0	
21	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.04	0.0	0.0	0.0	0.0	0.43	0.84	0.0	0.0	0.0	0.08	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.65	0.0	0.0	0.02	0.0	
24	0.0	0.07	0.04	0.53	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.0	
25	0.0	0.43	0.44	0.53	0.03	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.04	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	
29	0.33	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.31	0.0	
31	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	
TOTAL	1.09	3.85	6.34	7.11	5.11	4.95	2.35	2.87	2.63	5.77	2.72	3.33	48.10	
STA AV	3.70	4.66	4.98	5.09	4.21	3.17	3.74	3.99	4.64	2.58	4.35	5.30	50.40	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages R and 33. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs)													OXFORD, MISSISSIPPI WATERSHED #5			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.383	14.725	0.0	17.836	0.0	0.196	0.0	0.0	0.0	0.0	0.0	0.0				
2	0.383	4.822	0.0	5.223	0.0	3.880	0.0	0.0	0.0	0.0	0.0	0.0				
3	0.431	0.191	67.947	0.825	0.0	0.967	0.0	0.0	0.0	0.0	0.0	0.0				
4	0.480	0.0	5.841	0.240	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.431	0.0	2.711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
6	0.191	0.0	1.233	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	0.713	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
8	0.0	0.0	0.548	0.0	0.0	0.0	0.254	0.0	0.0	0.0	0.077	0.0				
9	0.0	0.0	0.191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.637	0.0				
10	0.0	0.0	0.356	0.0	37.867	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
11	1.890	0.0	0.939	0.0	14.824	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
12	1.490	0.0	0.240	0.016	0.089	0.0	0.0	0.0	0.0	0.191	0.0	0.0				
13	0.0	0.0	0.191	3.097	0.0	0.0	0.0	0.0	0.0	6.991	0.0	0.0				
14	0.0	0.0	0.431	0.535	0.0	0.0	0.0	0.0	0.0	0.0	0.290	0.0				
15	0.0	22.956	0.480	0.535	0.0	58.958	0.0	0.0	0.0	0.0	0.148	0.306				
16	0.0	3.046	0.480	0.480	0.725	0.535	0.0	0.0	0.0	0.0	0.0	0.507				
17	0.0	1.069	6.081	44.896	0.535	0.431	0.0	0.0	0.0	0.0	0.0	0.0				
18	0.0	0.295	2.496	1.506	0.535	0.191	0.0	0.0	0.0	0.0	0.0	0.0				
19	0.0	0.0	29.128	28.122	0.535	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
20	0.0	0.0	4.086	2.393	0.240	0.0	0.0	0.0	0.0	0.0	0.0	9.654				
21	0.0	0.0	8.752	1.262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.231				
22	0.0	0.0	5.286	1.010	0.0	0.0	0.0	0.062	0.0	0.0	0.0	0.165				
23	0.0	0.0	2.647	0.850	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
24	0.0	0.0	1.262	0.720	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
25	0.0	1.529	3.068	2.033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
26	0.0	0.0	3.754	10.204	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
27	0.0	0.0	1.275	0.876	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.0	1.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.926	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.781	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
31	0.0	0.0	0.781	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
MEAN	0.1833	1.7369	4.9558	4.0886	1.7855	2.1720	0.0082	0.0020	0.0	0.2317	0.0384	0.5440				
INCRS	0.135	1.158	3.657	2.919	1.317	1.551	0.006	0.001	0.0	0.171	0.027	0.401				
STA AV	1.315	1.794	1.930	1.536	0.745	0.356	0.307	0.420	0.539	0.226	0.832	1.705				

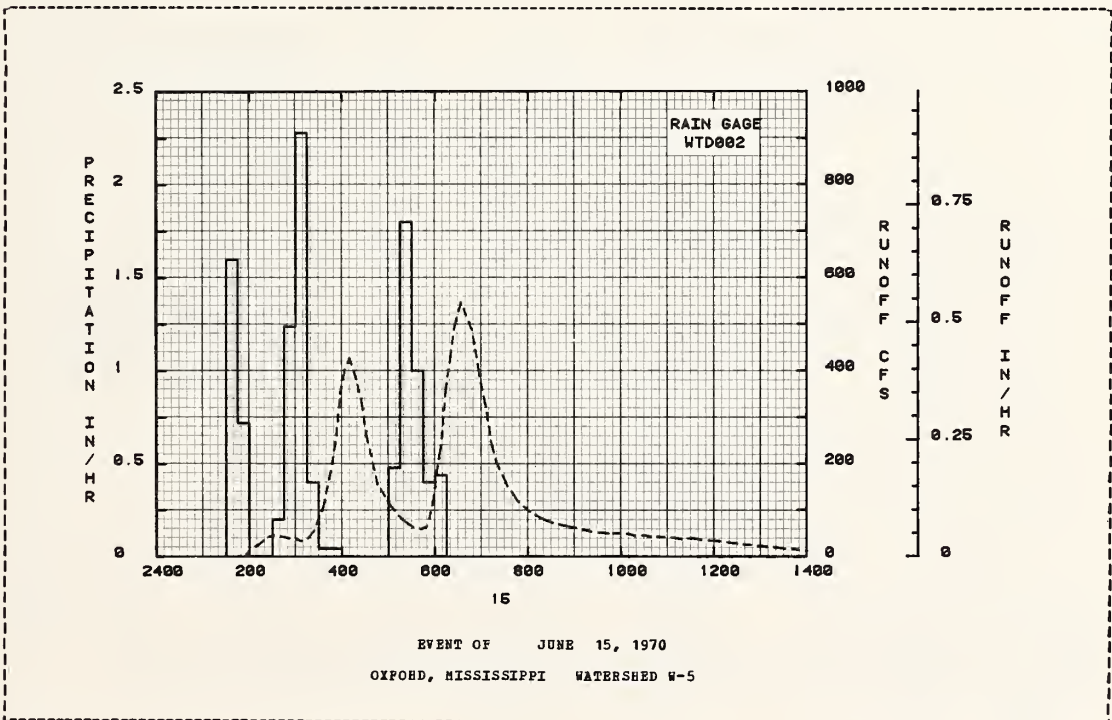
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.02380. Quality of records: Good, estimated to be within 10% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI WATERSHED #5						
ANTECEDENT CONDITIONS		RUNOFF		RAINFALL		RUNOFF				
Date	Rainfall	Date	Rate	Date	Intensity	Date	Rate			
Mo-Day	(inches)	Mo-Day	(inches)	Mo-Day	(in/hr)	Mo-Day	(cfs)			
EVENT OF JUNE 15, 1970										
6-15	RG WTD002 0.22	0.000		6-15	RG WTD002 130 145 200 215 230 245 300 315 330 345 400 500 515 530 545 600 615	0.0 1.6009 0.7200 0.0 0.0 0.2000 1.2400 2.2800 0.4000 0.0400 0.0400 0.0 0.4800 1.8000 1.0000 0.4000 0.4400	0.0 0.40 0.58 0.58 0.63 0.94 1.51 1.61 1.62 1.63 1.63 1.75 2.20 2.45 2.55 2.66	6-15 144 148 156 200 210 218 224 232 240 252 302 308 316 324 336 344 352 358 404 410 416 426 432 446 502 518 532 542 550 558 602 608 614 620 626	0.713 0.850 6.631 13.784 24.500 34.328 42.200 46.400 43.400 39.800 36.168 33.136 39.800 56.600 107.900 170.268 246.938 352.468 403.375 428.195 398.319 330.135 260.125 156.000 110.700 79.200 63.184 59.600 66.736 117.695 181.100 239.855 358.426 428.195 499.226	0.0 0.0001 0.0006 0.0013 0.0045 0.0084 0.0122 0.0181 0.0240 0.0322 0.0385 0.0415 0.0467 0.0531 0.0694 0.0878 0.1154 0.1452 0.1827 0.2239 0.2649 0.3250 0.3543 0.4025 0.4378 0.4629 0.4794 0.4896 0.4980 0.5102 0.5201 0.5410 0.5706 0.6096 0.6555
WATERSHED CONDITIONS: About 23% of area in cultivation, primarily cotton, ryegrass and corn, poor to fair cover; 51% in pasture and idle land with fair to good cover; 25% in woods, good cover; 1% in bare gullies.										

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.

1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI WATERSHED W-5							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JUNE 15, 1970 (CONTINUED)										
						6-15	634	547.059	0.7248	
							648	487.894	0.8445	
							658	388.528	0.9170	
							706	323.167	0.9640	
							714	238.720	1.0011	
							720	201.936	1.0230	
							734	152.000	1.0640	
							748	117.000	1.0951	
							802	97.400	1.1199	
							816	83.400	1.1408	
							832	72.868	1.1615	
							846	66.736	1.1777	
							902	61.400	1.1946	
							922	53.000	1.2135	
							944	49.400	1.2321	
							950	50.000	1.2370	
							1010	48.200	1.2532	
							1018	44.600	1.2593	
							1030	45.200	1.2682	
							1038	42.200	1.2740	
							1056	41.600	1.2865	
							1118	37.395	1.3009	
							1132	39.800	1.3098	
							1144	35.552	1.3173	
							1208	32.559	1.3308	
							1230	27.000	1.3416	
							1300	22.000	1.3537	
							1332	16.559	1.3639	

NOTES: To convert rnnoff in CFS to IN/HH, multiply by 0.000992. Thiessen weighted storm rainfall, rain gages 8 and 33. For 30-day antecedent P and Q, see tables on pp. 62.002-1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-10

LOCATION: Marshall Co., Miss.; 3.3 mi. NW of Chulahoma, on Connty road; Dry Fork Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 5530.00 acres 8.64 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-10																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	1.26	4.21	6.98	7.39	6.22	4.89	3.21	2.22	2.05	6.87	2.81	3.50	51.62																	
	Q	0.094	0.968	3.053	2.399	1.536	0.713	0.056	0.011	0.011	0.275	0.009	0.119	9.242																	
STA AV	P	3.84	4.91	5.05	5.17	4.68	3.17	4.01	3.80	4.56	2.65	4.54	5.53	51.91																	
	Q	1.096	1.324	1.595	1.253	0.791	0.217	0.389	0.348	0.473	0.158	0.634	1.345	9.624																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970		3- 3	0.377	3- 3	0.362	3- 3	0.655	3- 3	1.478	3- 3	1.797	3- 3	1.891	3- 3	1.976	2-26	2.139														
		MAXIMUMS FOR PERIOD OF RECORD																													
		7- 9	1.180	7- 9	1.060	7- 9	1.650	2-23	2.130	2-23	2.390	12- 3	2.660	1-30	2.980	3-24	4.170														
		1967		1967		1967		1962		1962		1964		1957		1965															

NOTES: Watershed conditions: About 17% in cultivation (cotton, corn and soybeans), fair cover November to March, poor cover April and May improving to good by mid-July; 36% in pasture and idle land, good cover April to October with fair cover remainder of year; 45% in woods, good cover; 2% bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 22% of drainage area above small desilting and retention dams. Monthly precipitation Thiessen weighted from rain gages 13, 14, 20, 24 and 26. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.3-3. Precipitation and runoff records began Jan. 1957. Runoff estimated for 1970. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970 DAILY PRECIPITATION (inches)														OXFORD, MISSISSIPPI WATERSHED W-10													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	1.26	0.24	1.51	0.50	1.62	0.0	0.0	0.0	0.0	0.0	0.0															
2	0.0	0.0	0.27	0.0	0.16	1.13	0.0	0.39	0.0	0.0	0.0	0.0															
3	0.0	0.0	2.70	0.0	0.0	0.0	0.17	0.02	0.30	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.09	0.0	0.17	0.0	0.0															
5	0.0	0.13	0.0	0.0	0.0	0.13	0.0	0.24	0.0	0.0	0.0	0.0															
6	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0															
8	0.0	0.30	0.0	0.0	0.0	0.0	1.85	0.07	0.0	0.0	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.36	0.0	0.96	1.24	0.0															
10	0.0	0.0	0.0	0.0	3.44	0.0	0.0	0.0	0.97	0.0	0.0	0.0															
11	0.64	0.0	0.15	0.0	0.07	0.0	0.0	0.0	0.0	0.08	0.0	0.40															
12	0.0	0.0	0.37	0.69	0.0	0.0	0.0	0.0	0.0	0.68	0.10	0.0															
13	0.0	0.0	0.0	0.01	0.0	0.19	0.0	0.0	0.03	2.38	0.34	0.0															
14	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0															
15	0.0	1.47	0.0	0.0	0.0	1.71	0.0	0.0	0.0	0.0	0.0	0.79															
16	0.0	0.0	0.0	0.07	0.74	0.0	0.0	0.00	0.0	0.0	0.0	0.18															
17	0.0	0.0	0.88	2.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0															
19	0.03	0.0	1.16	1.31	0.0	0.0	0.0	0.0	0.0	0.26	0.32	0.22															
20	0.0	0.0	0.05	0.0	0.0	0.0	0.52	0.08	0.0	0.01	0.0	1.30															
21	0.0	0.0	0.53	0.0	0.0	0.01	0.0	0.24	0.0	0.0	0.0	0.0															
22	0.0	0.05	0.0	0.0	0.0	0.0	0.64	0.68	0.0	0.0	0.0	0.05															
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.19	0.0	0.0	0.07															
24	0.0	0.13	0.04	0.57	0.0	0.03	0.0	0.0	0.0	0.94	0.0	0.0															
25	0.0	0.43	0.53	0.58	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.41	0.0	0.00	0.0	0.0	0.39	0.0	0.0	0.0															
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.07	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0															
29	0.55	0.0	0.0	0.0	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.01															
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.40															
31	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08															
TOTAL	1.26	4.21	6.98	7.39	6.22	4.89	3.21	2.22	2.05	6.87	2.81	3.50															
STA AV	3.84	4.91	5.05	5.17	4.68	3.17	4.01	3.80	4.56	2.65	4.54	5.53															

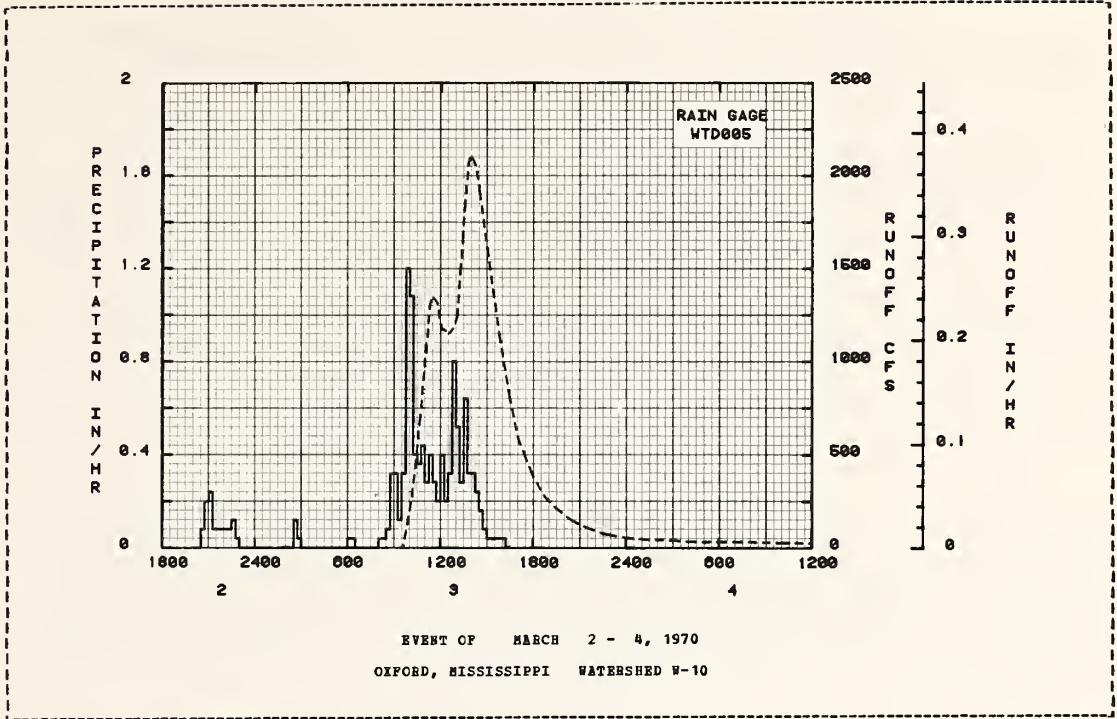
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 13, 14, 20, 24 and 26. STA AV based on 14 yr (1957-70) record period.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-10				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MARCH 2 - 4, 1970 (CONTINUED)										
3- 3			600		0.0	0.31	3- 3	1802	378.000	1.6662
			615		0.0400	0.32		1846	271.757	1.7069
			630		0.0400	0.33		1930	212.000	1.7407
			645		0.0	0.33		2030	146.000	1.7728
			700		0.0	0.33		2130	107.000	1.7955
			715		0.0	0.33		2230	76.856	1.8120
			730		0.0004	0.33		2322	62.060	1.8228
			745		0.0004	0.33		2400	53.032	1.8293
			800		0.0004	0.33	3- 4	130	44.381	1.8424
			815		0.0400	0.34		302	39.264	1.8539
			830		0.0400	0.35		432	33.088	1.8636
			845		0.0800	0.37		602	33.088	1.8725
			900		0.3200	0.45		730	31.387	1.8810
			915		0.3200	0.53		1032	27.016	1.8969
			930		0.1200	0.56		1630	23.239	1.9238
			945		0.3200	0.64		2400	19.616	1.9526
			1000		1.2000	0.94				
			1015		1.0800	1.21				
			1030		0.4000	1.31				
			1045		0.3600	1.40				
			1100		0.4400	1.51				
			1115		0.2800	1.58				
			1130		0.4000	1.68				
			1145		0.2810	1.75				
			1200		0.2000	1.80				
			1215		0.4000	1.90				
			1230		0.2000	1.95				
			1245		0.3200	2.03				
			1300		0.8000	2.23				
			1315		0.5200	2.36				
			1330		0.2800	2.43				
			1345		0.6400	2.59				
			1400		0.3200	2.67				
			1415		0.3200	2.75				
			1430		0.2400	2.81				
			1445		0.1600	2.85				
			1500		0.0800	2.87				
			1515		0.0400	2.88				
			1530		0.0400	2.89				
			1545		0.0400	2.90				
			1600		0.0400	2.91				
			1615		0.0400	2.92				
			1630		0.0010	2.92				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001793. Thiessen weighted storm rainfall, rain gages 13, 14, 20, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62.003-1 and 2.





## OXFORD, MISSISSIPPI WATERSHED W-12

LOCATION: Marshall Co., Miss.; 5.6 mi. SW of Holly Springs, on county road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 22800.00 acres 35.60 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-12	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 1.20	4.19	6.21	7.38	4.98	5.20	2.85	3.03	2.49	6.05	2.70	3.78	50.08	
	Q 0.137	0.798	1.649	2.029	0.324	0.828	0.082	0.031	0.015	0.171	0.034	0.175	7.074	
STA AV	P 3.67	4.68	4.85	5.00	4.27	3.19	3.92	3.85	4.46	2.54	4.33	5.24	50.01	
	Q 0.718	1.056	1.177	0.887	0.531	0.212	0.233	0.254	0.294	0.112	0.438	0.877	6.789	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days					
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
1970	3-3	0.170	3-3	0.167	3-3	0.318	3-3	0.813	3-3	1.033	3-3	1.082	3-3	1.113	4-17	1.289
MAXIMUMS FOR PERIOD OF RECORD																
	2-23	0.350	2-23	0.350	2-23	0.680	2-23	1.380	2-23	1.620	11-27	1.930	1-30	2.280	3-24	4.360
	1962		1962		1962		1962		1962		1968		1957		1965	

NOTES: Watershed conditions: About 16% in cultivation (cotton, corn, soybeans, ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 29% in pasture and idle land, good cover April to October with fair cover remainder of year; 47% in woods, good cover; 1% in bare gullies; 7% urban. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 18% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.4-6. Monthly precipitation Thiessen weighted from 16 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4W, Mississippi.

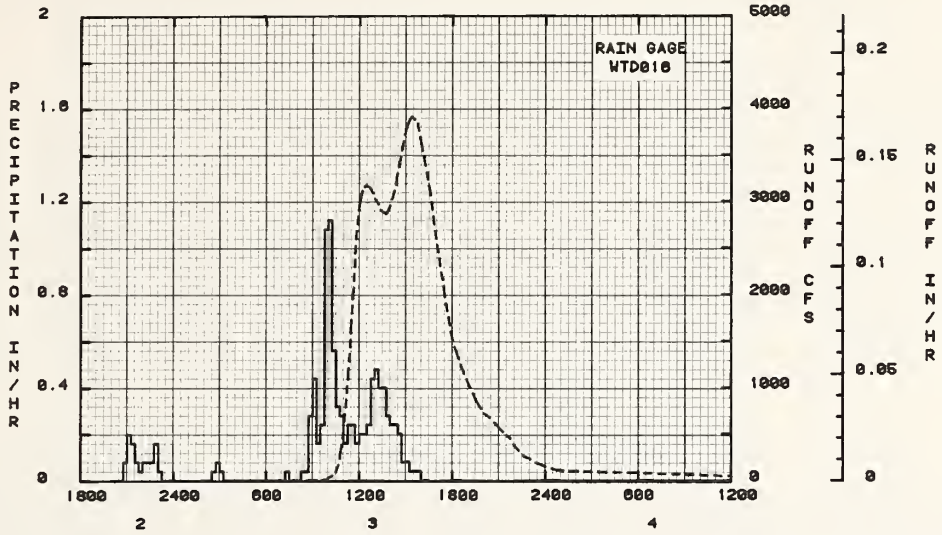
1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.22	0.16	1.51	0.26	0.93	0.0	0.09	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.24	0.0	0.11	0.82	0.0	0.03	0.0	0.0	0.0	0.0		
3	0.0	0.0	2.34	0.0	0.0	0.0	0.00	0.24	0.34	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.14	0.00	0.11	0.12	0.0	0.0	0.0		
5	0.0	0.08	0.0	0.0	0.0	0.05	0.0	0.28	0.0	0.0	0.0	0.02		
6	0.05	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.95	0.0	0.0		
8	0.0	0.24	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.24	0.0	0.86	1.16	0.0		
10	0.01	0.0	0.0	0.0	2.56	0.0	0.0	0.0	1.10	0.0	0.0	0.0		
11	0.64	0.0	0.17	0.0	0.24	0.0	0.0	0.0	0.0	0.12	0.0	0.45		
12	0.0	0.0	0.33	0.61	0.0	0.0	0.0	0.0	0.0	0.64	0.07	0.0		
13	0.0	0.0	0.0	0.04	0.0	0.65	0.0	0.0	0.01	2.02	0.31	0.0		
14	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.48	0.0		
15	0.0	1.37	0.0	0.0	0.0	2.34	0.0	0.0	0.0	0.0	0.0	0.65		
16	0.0	0.0	0.0	0.07	0.73	0.0	0.0	0.34	0.0	0.0	0.0	0.24		
17	0.0	0.0	0.82	2.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0		
19	0.02	0.0	1.02	1.14	0.0	0.0	0.0	0.01	0.0	0.21	0.37	0.20		
20	0.0	0.0	0.05	0.0	0.0	0.01	0.74	0.60	0.0	0.03	0.0	1.45		
21	0.0	0.0	0.49	0.0	0.0	0.01	0.0	0.25	0.0	0.0	0.0	0.00		
22	0.0	0.04	0.0	0.0	0.0	0.3	0.43	0.60	0.0	0.0	0.0	0.16		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.56	0.0	0.0	0.17		
24	0.0	0.09	0.03	0.63	0.01	0.24	0.0	0.0	0.0	0.77	0.0	0.0		
25	0.0	0.39	0.48	0.58	0.04	0.0	0.09	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.40	0.0	0.01	0.0	0.0	0.35	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.06	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0		
29	0.48	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
30	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.04	0.0	0.0	0.0	0.34		
31	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.07		
TOTAL	1.20	4.19	6.21	7.38	4.98	5.20	2.85	3.03	2.49	6.05	2.70	3.78		
STA AV	3.67	4.68	4.85	5.00	4.27	3.19	3.92	3.85	4.46	2.54	4.33	5.24		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 4 thru 9, 13, 15, 18 thru 20, 25, 29 thru 31 and 33. STA AV based on 14 yr (1957-70) record period.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI WATERSHED W-12									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF MARCH 2 - 5, 1970 (CONTINUED)												
3- 3			630		0.0	0.29	3- 3	1516	3891.994	0.5382		
			645		0.0	0.29		1522	3916.000	0.5551		
			700		0.0	0.29		1534	3882.994	0.5890		
			715		0.0	0.29		1546	3837.997	0.6226		
			730		0.0400	0.30		1600	3621.996	0.6605		
			745		0.0	0.30		1616	3387.356	0.7011		
			800		0.0	0.30		1632	3137.997	0.7389		
			815		0.0	0.30		1650	2753.999	0.7773		
			830		0.0400	0.31		1732	1974.373	0.8493		
			845		0.0400	0.32		1746	1743.999	0.8682		
			900		0.2800	0.39		1802	1505.837	0.8870		
			915		0.4400	0.50		1824	1311.999	0.9095		
			930		0.1600	0.54		1846	1150.000	0.9291		
			945		0.2400	0.60		1910	1000.000	0.9478		
			1000		1.0803	0.87		1930	874.000	0.9614		
			1015		1.1200	1.15		1952	771.685	0.9745		
			1030		0.5600	1.29		2004	719.360	0.9810		
			1045		0.3200	1.37		2024	680.000	0.9911		
			1100		0.2800	1.44		2046	610.000	1.0014		
			1115		0.1600	1.48		2116	515.918	1.0137		
			1130		0.2400	1.54		2132	480.000	1.0195		
			1145		0.2400	1.60		2146	452.759	1.0242		
			1200		0.1600	1.64		2200	369.687	1.0284		
			1215		0.2004	1.69		2218	321.632	1.0329		
			1230		0.2000	1.74		2238	259.195	1.0371		
			1245		0.2400	1.80		2304	228.536	1.0417		
			1300		0.4400	1.91		2324	190.656	1.0447		
			1315		0.4800	2.03		2400	150.224	1.0491		
			1330		0.4000	2.13	3- 4	44	109.986	1.0532		
			1345		0.4000	2.23		138	99.784	1.0573		
			1400		0.2800	2.30		332	90.174	1.0651		
			1415		0.2400	2.36		558	79.932	1.0741		
			1430		0.2400	2.42		1338	45.000	1.0949		
			1445		0.2000	2.47		1904	36.088	1.1045		
			1500		0.0800	2.49		2400	24.914	1.1110		
			1515		0.0800	2.51	3- 5	2400	10.510	1.1295		
			1530		0.0400	2.52						
			1545		0.0400	2.53						
			1600		0.0400	2.54						
			1615		0.0	2.54						
			1630		0.0	2.54						

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000435. Thiessen weighted storm rainfall, rain gages 4 thru 9, 13, 15, 16 thru 20, 25, 29 thru 31 and 33. For 30-day antecedent F and Q, see tables on pp. 62.004-1 and 2. page.



EVENT OF MARCH 2 - 5, 1970  
 OXFORD, MISSISSIPPI WATERSHED W-12

OXFORD, MISSISSIPPI WATERSHED W-17

LOCATION: Marshall Co., Miss.; 7.8 mi. SW of Holy Springs on County road; Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 32100.00 acres 50.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-17	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	1.22	4.41	6.36	7.59	5.13	5.37	3.01	2.75	2.29	6.04	2.67	3.94	50.79	
Q	0.496	1.200	2.266	2.569	1.092	1.299	0.279	0.221	0.192	0.333	0.232	0.468	10.644	
STA AV P	3.72	4.74	4.87	5.08	4.29	3.21	4.00	3.99	4.32	2.52	4.31	5.31	50.37	
Q	1.045	1.394	1.543	1.237	0.833	0.404	0.459	0.523	0.483	0.296	0.692	1.186	10.093	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Rate	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	3-3	0.162	3-3	0.161	3-3	0.317	3-3	0.834	3-3	1.100	3-3	1.194	3-3	1.247	4-17	1.521
MAXIMUMS FOR PERIOD OF RECORD																
	2-23	0.210	2-23	0.210	2-23	0.410	2-23	1.120	2-23	1.500	12-3	2.010	3-24	2.390	3-24	4.680
	1962		1962		1962		1962		1962		1964		1965		1965	

NOTES: Watershed conditions: About 18% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 48% in woods, good cover; 1% in bare gullies; 5% urban. Percentages of total area in various land use categories are based on the latest surveys completed 1965-73. About 18% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.5-5. Monthly precipitation Thiessen weighted from 21 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holy Springs 4N, Mississippi.

Day	DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-17	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.24	0.15	1.60	0.35	1.20	0.0	0.06	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.24	0.0	0.14	0.89	0.0	0.06	0.0	0.0	0.00	0.0		
3	0.0	0.0	2.45	0.0	0.0	0.0	0.01	0.24	0.31	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.12	0.00	0.10	0.11	0.0	0.0	0.0		
5	0.0	0.09	0.0	0.0	0.0	0.05	0.0	0.34	0.0	0.0	0.0	0.00		
6	0.05	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.91	0.0	0.0		
8	0.0	0.23	0.0	0.0	0.0	0.0	1.74	0.00	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.25	0.0	0.88	1.15	0.0		
10	0.01	0.0	0.0	0.0	2.66	0.0	0.0	0.0	1.08	0.0	0.0	0.0		
11	0.63	0.0	0.17	0.0	0.18	0.0	0.0	0.0	0.0	0.13	0.0	0.44		
12	0.0	0.0	0.35	0.63	0.0	0.0	0.0	0.0	0.0	0.62	0.07	0.0		
13	0.0	0.0	0.0	0.03	0.0	0.58	0.0	0.0	0.01	2.01	0.30	0.0		
14	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.49	0.0		
15	0.0	1.47	0.0	0.0	0.0	2.33	0.0	0.0	0.0	0.0	0.0	0.65		
16	0.0	0.0	0.0	0.06	0.71	0.0	0.0	0.26	0.0	0.0	0.0	0.22		
17	0.0	0.0	0.82	2.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0		
19	0.02	0.0	0.99	1.15	0.0	0.0	0.0	0.01	0.00	0.20	0.35	0.21		
20	0.0	0.0	0.05	0.0	0.0	0.01	0.69	0.45	0.0	0.03	0.0	1.53		
21	0.0	0.0	0.51	0.0	0.0	0.01	0.0	0.26	0.0	0.0	0.0	0.00		
22	0.0	0.04	0.0	0.0	0.0	0.0	0.45	0.49	0.0	0.0	0.0	0.18		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.47	0.0	0.0	0.23		
24	0.0	0.09	0.03	0.67	0.00	0.18	0.0	0.0	0.0	0.81	0.0	0.0		
25	0.0	0.40	0.51	0.61	0.04	0.0	0.13	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.38	0.0	0.01	0.0	0.0	0.31	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
29	0.51	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
30	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.35		
31	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07		
TOTAL	1.22	4.41	6.36	7.59	5.13	5.37	3.01	2.75	2.29	6.04	2.67	3.94		
STA AV	3.72	4.74	4.87	5.08	4.29	3.21	4.00	3.99	4.32	2.52	4.31	5.31		

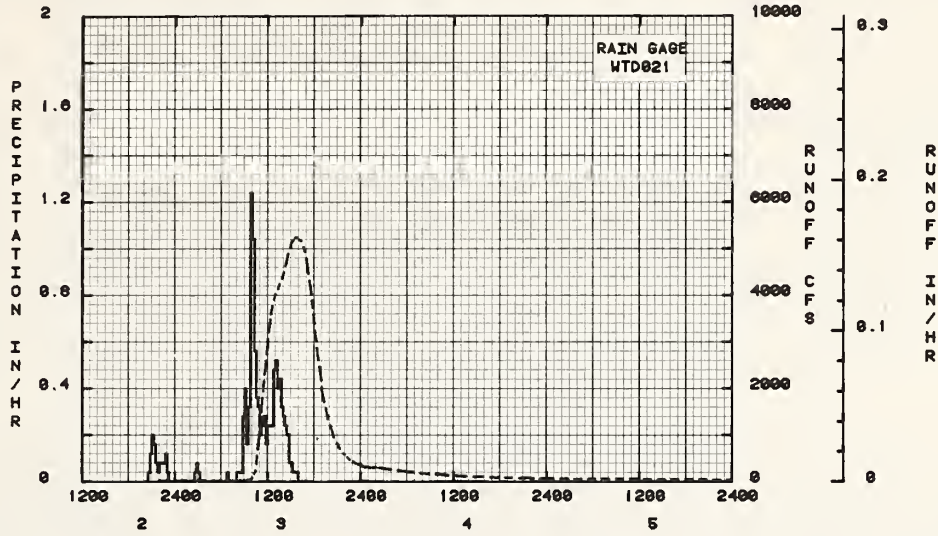
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31. STA AV based on 14 yr (1957-70) record period.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI WATERSHED #17							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
			EVENT OF MARCH 2 - 7, 1970 (CONTINUED)							
			3- 3	630	0.0	0.30	3- 3	1436	4890.613	0.4158
				645	0.0	0.30		1502	5125.609	0.4829
				700	0.0400	0.31		1516	5184.238	0.5201
				715	0.0	0.31		1530	5229.359	0.5576
				730	0.0	0.31		1542	5241.656	0.5899
				745	0.0	0.31		1558	5194.570	0.6329
				800	0.0	0.31		1618	5159.812	0.6862
				815	0.0400	0.32		1634	5033.930	0.7282
				830	0.0400	0.33		1646	4925.016	0.7590
				845	0.0407	0.34		1658	4729.496	0.7888
				900	0.2800	0.41		1714	4455.711	0.8266
				915	0.4000	0.51		1730	4178.289	0.8622
				930	0.1600	0.55		1746	3726.040	0.8948
				945	0.3200	0.63		1800	3389.997	0.9205
				1000	1.2400	0.94		1814	3011.999	0.9436
				1015	1.0400	1.20		1832	2609.996	0.9697
				1030	0.5600	1.34		1848	2315.995	0.9900
				1045	0.3600	1.43		1900	1961.995	1.0032
				1100	0.3200	1.51		1918	1710.000	1.0202
				1115	0.2000	1.56		1946	1343.999	1.0422
				1130	0.2400	1.62		2032	954.000	1.0694
				1145	0.2800	1.69		2100	800.000	1.0820
				1200	0.1600	1.73		2120	695.297	1.0897
				1215	0.2400	1.79		2148	600.000	1.0990
				1230	0.2400	1.85		2156	575.000	1.1014
				1245	0.2400	1.91		2216	519.520	1.1070
				1300	0.4800	2.03		2234	474.259	1.1116
				1315	0.5200	2.16		2302	426.152	1.1161
				1330	0.4000	2.26		2322	391.437	1.1223
				1345	0.4400	2.37		2340	372.895	1.1258
				1400	0.3200	2.45		2400	341.955	1.1295
				1415	0.2800	2.52	3- 4	12	335.895	1.1316
				1430	0.2400	2.58		28	312.050	1.1343
				1445	0.2000	2.63		42	315.000	1.1366
				1500	0.0800	2.65		112	303.230	1.1414
				1515	0.0800	2.67		136	303.230	1.1451
				1530	0.0400	2.68		200	306.163	1.1489
				1545	0.0400	2.69		228	286.000	1.1532
				1600	0.0400	2.70		246	288.812	1.1559
				1615	0.0	2.70		258	280.456	1.1577
				1630	0.0	2.70		356	259.000	1.1658
				1645	0.0008	2.70		536	222.504	1.1782
				1700	0.0007	2.70		648	157.208	1.1860
				1715	0.0007	2.70		758	175.963	1.1927
								950	149.375	1.2021
								1122	128.250	1.2087
								1228	119.938	1.2129
								1342	109.250	1.2173
								1456	101.000	1.2213
								1748	84.000	1.2295
								2050	69.000	1.2367
								2222	64.953	1.2399
								2400	58.568	1.2430
							3- 5	2400	32.050	1.2766
							3- 6	2400	27.408	1.2986
							3- 7	2400	23.210	1.3174

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000309. Thiessen weighted storm rainfall, rain gages 2, 4 thru 9, 13 thru 15, 17 thru 20, 22, 25, 28 thru 31 and 33. For 30-day antecedent P and Q, see tables on pp. 62.005 -1 and 2.





EVENT OF MARCH 2 - 7, 1970  
OXFORD, MISSISSIPPI WATERSHED W-17

## OXFORD, MISSISSIPPI WATERSHED W-24

LOCATION: Marshall Co., Miss.; 2.2 mi. SW of Holly Springs on County road; Little Sand Ditch, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 512.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-24											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual											
1970	P	1.32	4.70	6.22	7.99	5.29	6.31	3.31	2.32	2.32	6.39	2.73	4.68	53.58											
	Q	0.094	0.568	1.975	3.382	1.324	0.690	0.039	0.0	0.0	0.167	0.015	0.564	8.817											
STA AV	P	3.74	4.83	4.94	5.06	4.36	3.13	3.98	3.76	4.16	2.52	4.30	5.28	50.05											
	Q	1.085	1.465	1.407	1.435	0.634	0.144	0.194	0.314	0.241	0.134	0.535	1.091	8.679											
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																									
Maximum Discharge																									
		Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days											
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		4-17	0.597	4-17	0.474	4-17	0.709	4-17	1.052	4-17	1.191	4-17	1.280	4-17	1.383										
		2-23	1.040	2-23	0.900	2-23	1.360	2-23	1.640	2-23	1.860	3-28	2.390	1-30	3.160										
		1962		1962		1962		1962		1965		1965		1965											
MAXIMUMS FOR PERIOD OF RECORD																									

NOTES: Watershed conditions: About 4% in cultivation (corn), fair cover November to March, poor cover April and May improving to good by mid-July; 13% in pasture and idle land, good cover April to October with fair cover remainder of year; 81% in woods, good cover; 1% in bare gullies; 1% clay pit. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 7% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 627-4. Monthly precipitation Thiessen weighted from rain gages 4 and 30. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

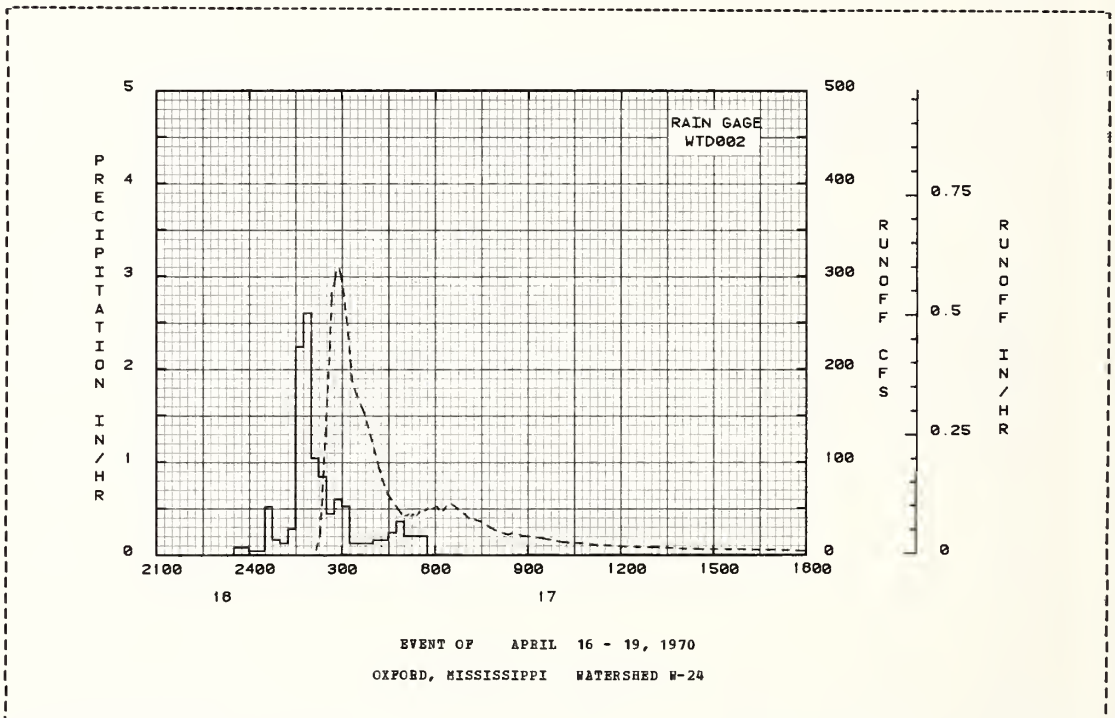
1970		DAILY PRECIPITATION (inches)											OXFORD, MISSISSIPPI WATERSHED W-24											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	1.23	0.11	1.93	0.26	0.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.21	0.0	0.15	0.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
3	0.0	0.0	2.32	0.0	0.0	0.0	0.0	0.13	0.26	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.30	0.04	0.0	0.0	0.0	0.0											
5	0.0	0.06	0.0	0.0	0.0	0.0	0.03	0.0	0.44	0.0	0.0	0.0	0.04											
6	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	0.0	0.0											
8	0.0	0.19	0.0	0.0	0.0	0.0	0.0	1.65	0.0	0.0	0.0	0.0	0.0											
9	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.22	0.0	0.99	1.16	0.0											
10	0.04	0.0	0.0	0.0	0.0	2.87	0.0	0.0	0.0	1.04	0.0	0.0	0.0											
11	0.62	0.0	0.17	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.40											
12	0.0	0.0	0.40	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.05	0.0											
13	0.0	0.0	0.0	0.01	0.0	0.96	0.0	0.0	0.0	0.0	2.33	0.31	0.0											
14	0.0	1.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52	0.0											
15	0.0	1.51	0.0	0.0	0.0	2.27	0.0	0.0	0.0	0.0	0.0	0.0	0.67											
16	0.0	0.0	0.0	0.04	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18											
17	0.0	0.0	0.85	2.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0											
19	0.02	0.0	0.87	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.37	0.20											
20	0.0	0.0	0.05	0.0	0.0	0.03	1.30	0.10	0.0	0.04	0.0	0.0	2.09											
21	0.0	0.0	0.55	0.0	0.0	0.04	0.0	0.66	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.03	0.0	0.0	0.0	0.0	0.28	0.19	0.0	0.0	0.0	0.0	0.33											
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.58	0.0	0.0	0.0	0.28											
24	0.0	0.09	0.04	0.67	0.0	1.15	0.0	0.0	0.0	0.75	0.0	0.0	0.0											
25	0.0	0.38	0.56	0.65	0.05	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0											
26	0.0	0.0	0.0	0.33	0.0	0.05	0.0	0.0	0.39	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.07	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0											
29	0.53	0.0	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36											
31	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08											
TOTAL		1.32	4.70	6.22	7.99	5.29	6.31	3.31	2.32	2.32	6.39	2.73	4.68											
STA AV		3.74	4.83	4.94	5.06	4.36	3.13	3.98	3.76	4.16	2.52	4.30	5.28											

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 4 and 30. STA AV based on 14 yr (1957-70) record period.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED #24				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 16 - 19, 1970 (CONTINUED)										
							4-17	706	38.938	0.9839
								718	37.184	0.9986
								730	35.400	1.0127
								748	28.784	1.0313
								758	25.726	1.0401
								822	21.438	1.0584
								830	23.459	1.0642
								850	19.984	1.0782
								930	17.481	1.1024
								1006	13.533	1.1204
								1114	10.438	1.1467
								1212	8.374	1.1643
								1314	7.193	1.1799
								1428	5.700	1.1953
								1646	4.979	1.2191
								2004	3.590	1.2465
								2400	2.961	1.2715
							4-18	2400	1.683	1.3794
							4-19	858	1.472	1.4068

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001937. Thiessen weighted storm rainfall, rain gages 4 and 30. For 30-day antecedent P and Q, see tables on pp. 62.007-1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-28

LOCATION: Marshall Co., Miss.; 2.3 mi. SW of Solly Springs on State Highway No. 7; Walkers Bottom Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1080.00 acres 1.69 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-28		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual			
1970	P 1.32	4.02	6.13	7.40	4.83	5.36	3.03	5.00	2.71	6.45	2.77	3.94	52.96			
	Q 0.141	0.380	1.565	0.781	0.086	0.261	0.013	0.297	0.012	0.185	0.0	0.079	3.799			
STA AV	P 3.67	4.70	4.80	4.89	4.14	3.29	3.88	3.76	4.44	2.66	4.30	5.28	49.81			
	Q 0.345	0.521	0.521	0.373	0.168	0.060	0.116	0.229	0.202	0.097	0.201	0.405	3.238			

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	8-20	0.302	8-20	0.202	8-20	0.244	3-3	0.442	3-3	0.570	3-3	0.640	3-3	0.733	3-3	0.923
	8-2	0.630	8-2	0.570	8-2	0.900	8-2	1.220	8-2	1.390	1-31	1.450	1-30	2.020	1-27	2.680
	1967		1967		1967		1967		1967		1957		1957		1957	

MAXIMUMS FOR PERIOD OF RECORD																
1970	8-2	0.630	8-2	0.570	8-2	0.900	8-2	1.220	8-2	1.390	1-31	1.450	1-30	2.020	1-27	2.680
	1967		1967		1967		1967		1967		1957		1957		1957	

NOTES: Watershed conditions: About 9% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 28% in pasture and idle land, good cover April to October with fair cover remainder of year; 61% in woods, good cover; 2% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 58% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.8-5. Monthly precipitation Thiessen weighted from rain gages 5, 6 and 7. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970	DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-28		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	1.24	0.18	1.31	0.16	0.78	0.0	0.17	0.0	0.0	0.0	0.0			
2	0.0	0.0	0.26	0.0	0.09	0.80	0.0	0.01	0.0	0.0	0.0	0.0			
3	0.0	0.0	2.18	0.0	0.0	0.0	0.0	0.73	0.48	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.15	0.12	0.0	0.0	0.0			
5	0.0	0.07	0.0	0.0	0.0	0.04	0.0	0.22	0.0	0.0	0.0	0.03			
6	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0			
8	0.0	0.23	0.0	0.0	0.0	0.0	1.52	0.0	0.0	0.0	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.20	0.0	0.79	1.21	0.0			
10	0.0	0.0	0.0	0.0	2.23	0.0	0.0	0.0	1.14	0.0	0.0	0.0			
11	0.71	0.0	0.23	0.0	0.11	0.0	0.0	0.0	0.0	0.15	0.0	0.58			
12	0.0	0.0	0.29	0.63	0.0	0.0	0.0	0.0	0.0	0.66	0.07	0.0			
13	0.0	0.0	0.0	0.04	0.0	1.26	0.0	0.0	0.0	2.52	0.31	0.0			
14	0.0	0.57	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.49	0.0			
15	0.0	1.29	0.0	0.0	0.0	2.14	0.0	0.0	0.0	0.0	0.0	0.66			
16	0.0	0.0	0.0	0.06	0.75	0.0	0.0	0.26	0.0	0.0	0.0	0.28			
17	0.0	0.0	0.87	2.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0			
19	0.01	0.0	1.06	1.20	0.0	0.0	0.0	0.0	0.0	0.22	0.40	0.20			
20	0.0	0.0	0.05	0.0	0.0	0.0	1.00	2.21	0.0	0.01	0.0	1.40			
21	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0			
22	0.0	0.03	0.0	0.0	0.0	0.0	0.39	0.88	0.0	0.0	0.0	0.14			
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.73	0.0	0.0	0.21			
24	0.0	0.09	0.02	0.75	0.02	0.13	0.0	0.0	0.0	0.68	0.0	0.0			
25	0.0	0.39	0.43	0.57	0.05	0.0	0.12	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0			
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.06	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0			
29	0.55	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.04			
30	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.33			
31	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07			
TOTAL	1.32	4.02	6.13	7.40	4.83	5.36	3.03	5.00	2.71	6.45	2.77	3.94			
STA AV	3.67	4.70	4.80	4.89	4.14	3.29	3.88	3.76	4.44	2.66	4.30	5.28			

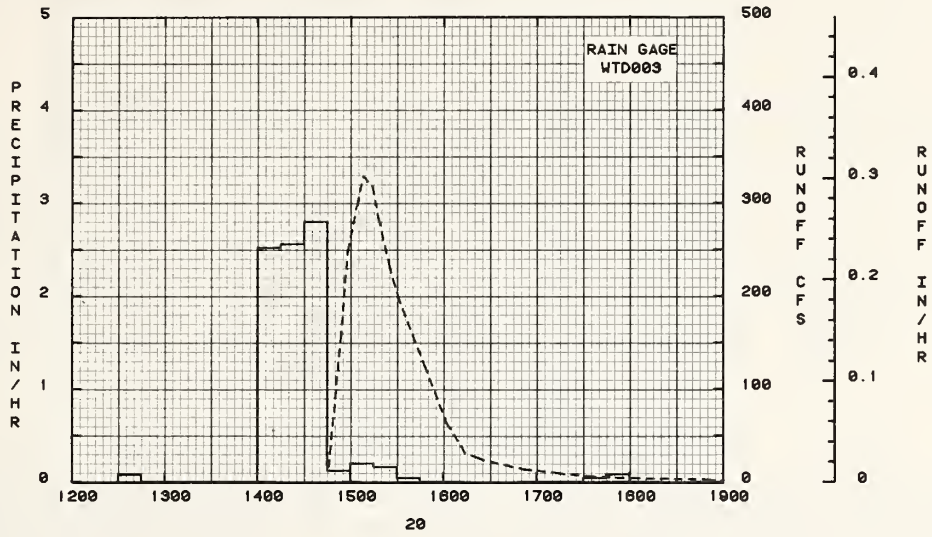
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 5, 6 and 7. STA AV based on 14 yr (1957-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) OXFORD, MISSISSIPPI WATERSHED W-28												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.838	3.352	0.240	2.589	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.0
2	0.737	1.325	0.120	4.031	0.0	0.371	0.0	0.0	0.0	0.0	0.0	0.0
3	0.597	0.006	26.761	2.204	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.0
4	0.460	0.0	5.650	0.665	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.394	0.0	2.222	0.363	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.394	0.0	1.840	0.239	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.363	0.0	1.511	0.177	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.363	0.039	1.300	0.194	0.0	0.0	0.268	0.0	0.0	0.0	0.0	0.0
9	0.363	0.0	1.210	0.149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.363	0.0	1.120	0.132	3.121	0.0	0.0	0.0	0.567	0.0	0.0	0.0
11	0.363	0.0	0.979	0.057	0.579	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.363	0.0	0.902	0.095	0.057	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.363	0.0	0.802	1.878	0.0	0.319	0.0	0.0	0.0	8.393	0.0	0.0
14	0.256	0.848	0.637	0.075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.074	4.835	0.637	0.0	0.0	11.108	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	2.312	0.637	0.0	0.153	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.394	2.897	15.996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.426	1.604	0.351	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.489	6.361	4.902	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.426	3.112	0.016	0.0	0.0	0.300	11.709	0.0	0.0	0.0	2.143
21	0.0	0.394	2.783	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.429
22	0.0	0.425	1.875	0.0	0.0	0.0	0.0	1.645	0.0	0.0	0.0	0.0
23	0.0	0.425	0.967	0.0	0.0	0.0	0.0	0.118	0.0	0.0	0.0	0.0
24	0.0	0.394	0.967	0.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.331	1.235	0.211	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.300	0.964	0.696	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.270	0.857	0.087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.240	0.457	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.086		0.307	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0		0.245	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0		0.224	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.2058	0.6158	2.2911	1.1806	0.1261	0.3952	0.0183	0.4346	0.0189	0.2708	0.0	0.1152
INCHES	0.141	0.380	1.565	0.781	0.086	0.261	0.013	0.297	0.012	0.185	0.0	0.079
STA AV	0.345	0.521	0.521	0.373	0.168	0.060	0.116	0.229	0.202	0.097	0.201	0.405

NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0220387. Quality of records: Poor, estimated to be within 20% of actual. STA AV based on 14 yr (1957-70) record period.

1970 SELECTED RUNOFF EVENT OXFORD, MISSISSIPPI WATERSHED W-28												
ANTECEDENT CONDITIONS			RAINFALL									RUNOFF
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 20, 1970												
8-20	RG WTD003 0.06	0.001	8-20	RG WTD003 1230	0.0	0.0	8-20	1446	16.000	0.0		
				1245	0.0800	0.02		1454	162.000	0.0109		
				1300	0.0	0.02		1458	248.700	0.0234		
				1315	0.0	0.02		1504	298.000	0.0489		
				1330	0.0	0.02		1508	328.905	0.0680		
				1345	0.0	0.02		1514	316.876	0.0970		
				1400	0.0	0.02		1518	282.698	0.1153		
				1415	2.5200	0.65		1526	224.900	0.1463		
				1430	2.5600	1.29		1532	192.603	0.1658		
				1445	2.8000	1.99		1548	124.600	0.2045		
				1500	0.1200	2.02		1602	63.144	0.2247		
				1515	0.2000	2.07		1614	30.808	0.2333		
				1530	0.1600	2.11		1626	23.098	0.2382		
				1545	0.0400	2.12		1640	17.630	0.2426		
				1730	0.0	2.12		1652	13.120	0.2454		
				1745	0.0400	2.13		1718	8.234	0.2497		
				1800	0.0800	2.15		1738	5.070	0.2518		
								1802	3.442	0.2534		
								1850	2.213	0.2555		
								1948	1.120	0.2570		
								2048	0.425	0.2577		
								2132	0.115	0.2579		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0009183. Thiessen weighted storm rainfall, rain gages 5, 6 and 7. For 30-day antecedent P and Q, see table above and on previous page.



EVENT OF AUGUST 20, 1970  
OXFORD, MISSISSIPPI WATERSHED W-28

## OXFORD, MISSISSIPPI WATERSHED W-32

LOCATION: Marshall Co., Miss.; 4.6 mi. E of Walhill on County road; Cuffawa Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 20000.00 acres 31.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-32			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
1970	P 1.21	4.17	6.78	7.08	6.56	4.69	3.34	3.12	2.07	6.78	2.66	6.31	51.77				
	Q 0.012	C.935	2.808	2.541	2.085	1.001	0.093	0.127	0.601	0.330	0.023	0.186	10.142				
STA AV	P 3.77	4.82	4.99	5.11	4.68	3.11	3.95	3.68	4.59	2.56	4.42	5.40	51.08				
	Q 1.141	1.683	1.853	1.444	1.045	0.201	0.337	0.354	0.472	0.142	0.692	1.477	10.843				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	3-3	0.337	3-3	0.332	3-3	0.640	3-3	1.611	3-3	1.980	3-3	2.040	3-3	2.078	2-27	2.097	
MAXIMUMS FOR PERIOD OF RECORD																	
	2-23	0.570	2-23	0.560	7-9	0.960	12-3	1.940	12-3	2.450	12-3	3.480	12-3	3.720	3-24	6.130	
	1962		1962		1967		1964		1964		1964		1964		1965		

NOTES: Watershed conditions: About 28% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 32% in pasture and idle land, good cover April to October with fair cover remainder of year; 39% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on surveys made from 1967 to 1972. About 21% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.10-5. Monthly precipitation Thiessen weighted from 10 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970		DAILY PRECIPITATION (inches)											OXFORD, MISSISSIPPI WATERSHED W-32			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	1.25	0.23	1.42	0.47	1.63	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.26	0.0	0.15	1.10	0.0	0.45	0.0	0.0	0.00	0.0	0.0	0.0		
3	0.0	0.0	2.68	0.0	0.0	0.0	0.16	0.01	0.29	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.10	0.00	0.0	0.20	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.15	0.0	0.0	0.0	0.19	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.00		
6	0.05	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.99	0.0	0.0	0.0		
8	0.0	0.30	0.0	0.0	0.0	0.0	1.95	0.41	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.35	0.0	0.98	1.17	0.0	0.0	0.0		
10	0.00	0.0	0.0	0.0	3.70	0.0	0.0	0.01	1.01	0.0	0.0	0.0	0.0	0.0		
11	0.64	0.0	0.15	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.40		
12	0.0	0.0	0.36	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.11	0.0	0.0		
13	0.0	0.0	0.0	0.01	0.0	0.17	0.0	0.0	0.06	2.46	0.33	0.0	0.0	0.0		
14	0.0	0.22	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0		
15	0.0	1.45	0.0	0.0	0.0	1.33	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.75		
16	0.0	0.0	0.0	0.09	0.70	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.18		
17	0.0	0.0	0.83	2.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.33	0.0	0.0	0.0		
19	0.02	0.0	1.10	1.31	0.0	0.0	0.0	0.01	0.00	0.28	0.30	0.18	0.0	0.18		
20	0.0	0.0	0.05	0.0	0.0	0.0	0.62	0.08	0.0	0.01	0.0	1.20	0.0	0.0		
21	0.0	0.0	0.51	0.0	0.0	0.05	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.05	0.0	0.0	0.0	0.0	0.55	0.58	0.0	0.0	0.0	0.0	0.0	0.04		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.18	0.0	0.0	0.0	0.0	0.10		
24	0.0	0.14	0.03	0.59	0.0	0.10	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.0		
25	0.0	0.42	0.51	0.58	0.06	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.38	0.0	0.00	0.0	0.0	C.34	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.08	0.07	0.0	0.0	0.0	0.0	0.0	C.0	0.46	0.0	0.0	0.0	0.0		
29	0.50	0.0	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	C.0	0.0	0.0	0.0	0.0	0.36		
31	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08		
TOTAL	1.21	4.17	6.78	7.08	6.56	4.69	3.34	3.12	2.07	6.78	2.66	6.31	51.77			
STA AV	3.77	4.82	4.99	5.11	4.68	3.11	3.95	3.68	4.59	2.56	4.42	5.40	51.08			

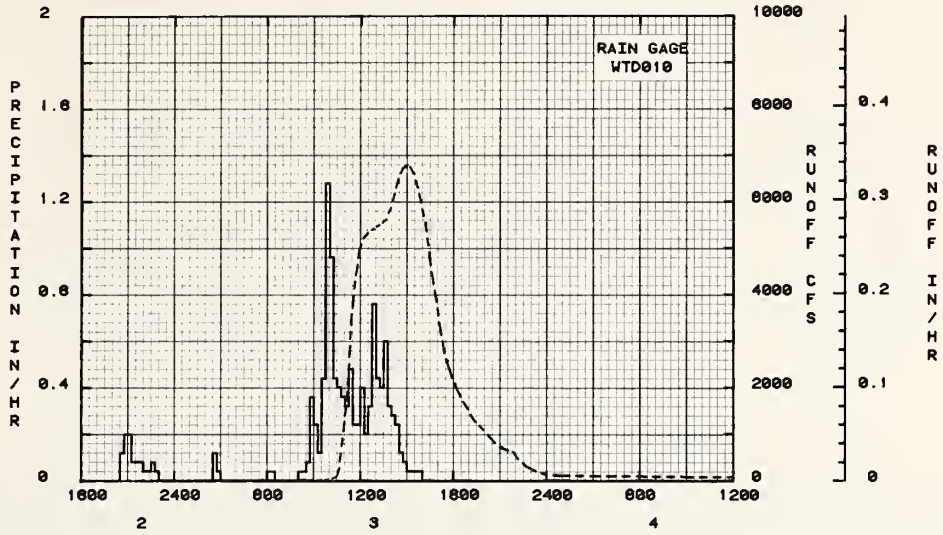
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62.001-1). Daily precipitation values Thiessen weighted from rain gages 3, 10 thru 14, 20, 21, 24 and 26. STA AV based on 14 yr (1957-70) record period.





1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-32				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF			MARCH 2 - 9, 1970 (CONTINUED)							
3- 3			630	0.0400	0.30	3- 3	1242	5391.977	0.3795	
			645	0.0	0.30		1250	5419.016	0.4152	
			700	0.0	0.30		1300	5464.695	0.4602	
			715	0.0	0.30		1312	5499.984	0.5146	
			730	0.0003	0.30		1324	5548.449	0.5694	
			745	0.0006	0.30		1338	5619.984	0.6340	
			800	0.0	0.30		1348	5747.977	0.6809	
			815	0.0400	0.31		1356	5859.984	0.7193	
			830	0.0393	0.32		1410	6155.973	0.7888	
			845	0.0800	0.34		1426	6491.973	0.8724	
			900	0.3600	0.43		1442	6723.977	0.9598	
			915	0.2400	0.49		1500	6787.973	1.0603	
			930	0.1200	0.52		1510	6747.977	1.1162	
			945	0.4400	0.63		1526	6595.977	1.2044	
			1000	1.2800	0.95		1540	6299.984	1.2790	
			1015	0.9600	1.19		1554	5979.980	1.3501	
			1030	0.4400	1.30		1612	5499.984	1.4355	
			1045	0.4000	1.40		1628	4779.984	1.5035	
			1100	0.3600	1.49		1642	4230.977	1.5556	
			1115	0.3200	1.57		1654	3843.995	1.5956	
			1130	0.4800	1.69		1712	3132.997	1.6475	
			1145	0.2400	1.75		1726	2739.997	1.6814	
			1200	0.2400	1.81		1740	2459.999	1.7115	
			1215	0.4000	1.91		1754	2219.997	1.7386	
			1230	0.2000	1.96		1810	2009.997	1.7666	
			1245	0.3200	2.04		1826	1819.999	1.7919	
			1300	0.7600	2.23		1840	1659.837	1.8120	
			1315	0.4400	2.34		1856	1543.278	1.8332	
			1330	0.4000	2.44		1910	1381.997	1.8501	
			1345	0.6000	2.59		1924	1264.372	1.8654	
			1400	0.3200	2.67		1940	1172.239	1.8815	
			1415	0.2800	2.74		1954	1086.117	1.8946	
			1430	0.2400	2.80		2018	939.695	1.9147	
			1445	0.1200	2.83		2040	814.261	1.9306	
			1500	0.0800	2.85		2102	712.367	1.9445	
			1515	0.0401	2.86		2132	637.614	1.9612	
			1530	0.0401	2.87		2150	608.312	1.9705	
			1545	0.0400	2.88		2210	457.615	1.9793	
			1600	0.0400	2.89		2238	313.885	1.9882	
			1615	0.0	2.89		2318	195.469	1.9966	
			1630	0.0	2.89		2340	154.205	1.9998	
			1645	0.0	2.89		2400	120.625	2.0021	
						3- 4	46	103.176	2.0064	
							128	98.488	2.0099	
							300	93.912	2.0172	
							428	89.424	2.0239	
							558	85.000	2.0304	
							858	74.250	2.0422	
							1158	66.010	2.0526	
							1458	56.064	2.0617	
							1756	46.729	2.0693	
							2056	28.843	2.0749	
							2400	19.608	2.0786	
						3- 5	2400	6.632	2.0942	
						3- 6	2400	3.936	2.1005	
						3- 7	2400	2.103	2.1041	
						3- 8	2400	0.929	2.1059	
						3- 9	2400	0.166	2.1066	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000496. Thiessen weighted storm rainfall, rain gages 3, 10 thru 14, 20, 21, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62010-1 and 2.



EVENT OF MARCH 2 - 9, 1970  
 OXFORD, MISSISSIPPI WATERSHED W-32

## OXFORD, MISSISSIPPI WATERSHED W-35

LOCATION: Marshall Co., Miss.; 9.3 mi. W of Chulahoma on State Highway No. 4; Cuffawa Creek, Pigeon Boost Creek Watershed, Yazoo River Basin.

AREA: 7550.00 acres 11.80 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														OXFORD, MISSISSIPPI WATERSHED W-35														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	1.15	3.97	6.52	6.67	7.25	4.53	3.53	4.21	2.32	6.68	2.69	3.08	52.59														
	Q	0.001	0.529	2.791	2.037	2.168	0.823	0.041	0.050	0.000	0.309	0.0	0.137	8.886														
STA AV	P	3.69	4.76	4.98	5.03	4.80	3.13	3.86	3.53	4.79	2.52	4.32	5.32	50.72														
	Q	1.311	1.718	1.928	1.436	1.074	0.186	0.309	0.293	0.480	0.117	0.644	1.510	11.008														

ANNUAL MAXIMUM DISCHARGE (in./hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	3- 3	0.358	3- 3	0.352	3- 3	0.677	3- 3	1.676	3- 3	1.908	5-10	2.099	5-10	2.139	5- 4	2.136

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
5-26 1963	0.880	5-26 1963	0.840	5-26 1963	1.480	2-23 1962	2.190	5- 6 1967	2.710	12- 3 1964	3.090	12-28 1969	3.784	3-24 1965	5.690

NOTES: Watershed conditions: About 31% in cultivation (cotton, corn, soybeans and ryegrass), fair cover November to March, poor cover April and May improving to good by mid-July; 31% in pasture and idle land; good cover April to October with fair cover remainder of year; 37% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 22% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.12-5. Monthly precipitation Thiessen weighted from 5 rain gages. Precipitation and runoff records began Jan. 1957. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

Day	1970 DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-35											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	1.23	0.24	1.24	0.38	1.40	0.0	3.25	0.0	0.0	0.0	0.0												
2	0.0	0.0	0.25	0.0	0.09	1.04	0.0	0.83	0.0	0.0	0.0	0.0												
3	0.0	0.0	2.57	0.0	0.0	0.0	0.08	0.0	0.32	0.0	0.0	0.0												
4	0.0	0.0	3.0	0.0	0.0	0.12	0.00	0.0	0.24	0.0	0.0	0.0												
5	0.0	0.17	0.0	0.0	0.0	0.33	0.0	1.01	0.0	0.0	0.0	0.0												
6	0.04	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
7	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.98	3.0	0.0												
8	0.0	0.32	0.0	0.0	0.0	0.0	2.05	0.74	0.0	0.0	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.33	0.0	0.89	1.13	0.0												
10	0.0	0.0	0.0	0.0	4.32	0.0	0.0	0.02	1.02	0.0	0.0	0.0												
11	0.62	0.0	0.14	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.40												
12	0.0	0.0	0.34	0.43	0.0	0.0	0.0	0.0	0.0	0.67	0.12	0.0												
13	0.0	0.0	0.0	0.01	0.0	0.14	0.0	0.0	0.13	2.48	0.34	0.0												
14	0.0	0.01	0.0	0.0	0.0	0.05	0.0	0.0	0.0	3.0	0.42	0.0												
15	0.0	1.39	0.0	0.0	0.0	1.09	0.01	0.0	0.0	0.0	0.0	0.73												
16	0.0	0.0	0.0	0.12	0.73	0.0	0.0	0.01	0.0	0.0	0.0	0.21												
17	0.0	0.0	0.76	1.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0												
19	0.02	0.0	1.15	1.33	0.0	0.0	0.0	0.02	0.0	0.31	0.36	0.09												
20	0.0	0.0	0.05	0.0	0.0	0.0	0.77	0.10	0.0	0.01	0.0	1.11												
21	0.0	0.0	0.49	0.0	0.0	0.11	0.0	0.25	0.0	0.0	0.0	0.0												
22	0.0	0.05	0.0	0.0	0.0	0.0	0.57	0.56	0.0	0.0	0.0	0.01												
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.09												
24	3.0	3.15	0.03	0.61	0.0	0.25	3.0	3.0	3.0	0.84	0.0	0.0												
25	0.0	0.42	0.43	0.57	0.12	0.0	0.04	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0												
27	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.09	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0												
29	0.47	0.0	0.0	3.0	1.08	0.0	0.0	0.0	0.0	0.0	0.0	0.03												
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.33												
31	0.0	0.0	0.0	0.43	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.08												
TOTAL	1.15	3.97	6.52	6.67	7.25	4.53	3.53	4.21	2.32	6.68	2.69	3.08												
STA AV	3.69	4.76	4.98	5.03	4.80	3.13	3.86	3.53	4.79	2.52	4.32	5.32												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 10, 11, 20, 21 and 24. STA AV based on 14 yr (1957-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					OXFORD, MISSISSIPPI				WATERSHED W-35			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	68.19	0.0	88.36	0.0	28.85	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	10.71	0.0	34.51	0.0	168.57	0.0	0.37	0.0	0.0	0.0	0.0	
3	0.0	0.0	611.60	6.20	0.0	4.92	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	17.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.72	0.0	0.0	12.80	0.0	4.76	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	5.98	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	13.02	10.88	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	415.46	0.0	0.0	0.0	0.10	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	261.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	3.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.14	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	68.69	0.0	0.0	0.0	39.91	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	20.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.07	12.57	222.93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	1.62	3.64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	167.32	212.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	15.17	11.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.74	
21	0.0	0.0	38.74	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.59	
22	0.0	0.0	9.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	4.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	3.92	9.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	7.03	49.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	1.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.41	0.0	0.0	0.0	6.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.013	5.996	28.554	21.537	22.179	8.701	0.420	0.516	0.003	3.166	0.0	1.398	
INCHES	0.001	0.529	2.791	2.037	2.168	0.823	0.041	0.050	0.000	0.309	0.0	0.137	
STA AV	1.311	1.718	1.928	1.436	1.074	0.186	0.309	0.293	0.480	0.117	0.644	1.510	

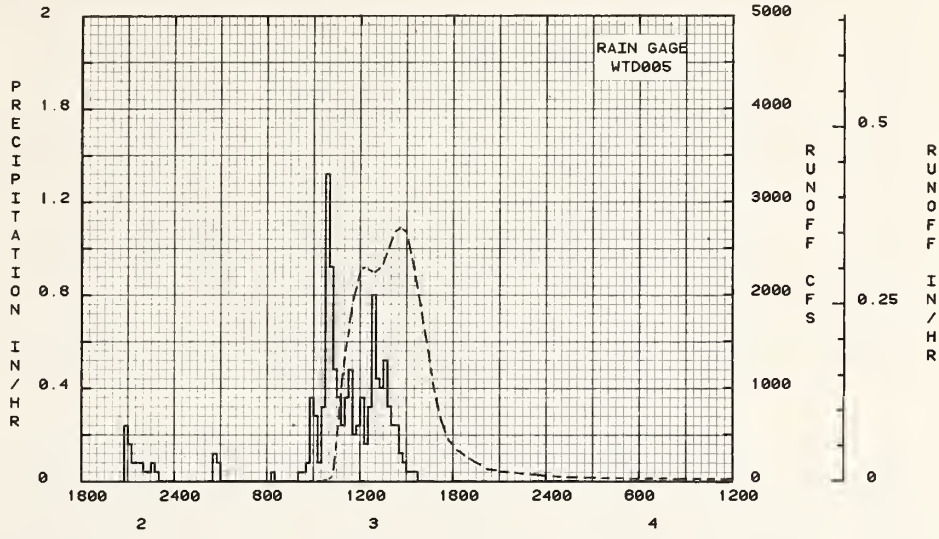
NOTES: To convert discharge in CFS to IN/DAY, multiply by 0.0031525. Quality of records: Fair, estimated to be within 15% of actual. STA AV based on 14 yr (1957-70) record period.

1970	SELECTED RUNOFF EVENT				OXFORD, MISSISSIPPI				WATERSHED W-35			
Date Mo-Day	ANTECEDENT CONDITIONS			Date Mo-Day	RAINFALL			Date Mo-Day	RUNOFF			
	Date	Rainfall (inches)	Runoff (inches)		Time of Day	Intensity (in/hr)	Acc. (inches)		Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MAR 2 - 5, 1970												
RG WTD005												
3- 2	0.03			3- 2	2045	0.0	0.0	3- 3	844	3.959	0.0	
3- 3		0.0			2100	0.2400	0.06		900	5.931	0.3002	
					2115	0.1600	0.10		916	6.518	0.0004	
					2130	0.0800	0.12		928	7.127	0.0006	
					2145	0.0797	0.14		940	13.850	0.0009	
WATERSHED CONDITIONS:												
About 31% of area in cultivation, primarily cotton, corn, soybeans and ryegrass, poor to fair cover; 31% in pasture and idle land, fair to good cover; 37% in woods, good cover; 1% in bare gullies.												
					2200	0.0802	0.16		950	20.200	0.0013	
					2215	0.0400	0.17		1002	28.600	0.0019	
					2230	0.0400	0.18		1012	53.000	0.0028	
					2245	0.0800	0.20		1020	190.536	0.0049	
					2300	0.0400	0.21		1032	519.998	0.0142	
					2315	0.0	0.21		1040	790.000	0.0257	
					2330	0.0	0.21		1050	1084.357	0.0462	
				3- 3	2345	0.0003	0.21		1100	1329.998	0.0726	
					145	0.0	0.21		1116	1630.000	0.1244	
					200	0.0009	0.21		1120	1737.682	0.1391	
					215	0.0	0.21		1128	1864.157	0.1706	
					230	0.0	0.21		1138	2009.373	0.2130	
					245	0.1200	0.24		1152	2173.402	0.2771	
					300	0.0800	0.26		1200	2245.954	0.3159	
					315	0.0	0.26		1208	2287.357	0.3556	
					330	0.0	0.26		1216	2293.592	0.3957	
					345	0.0	0.26		1230	2275.278	0.4657	
					400	0.0	0.26		1244	2251.837	0.5350	
					415	0.0	0.26		1256	2245.954	0.5941	
					430	0.0	0.26		1314	2287.357	0.6834	
					445	0.0	0.26		1328	2334.375	0.7542	
					500	0.0	0.26		1342	2446.312	0.8275	
					515	0.0	0.26		1354	2540.000	0.8930	
					530	0.0	0.26		1406	2621.157	0.9608	
					545	0.0	0.26		1414	2680.000	1.0072	
					600	0.0	0.26		1434	2726.719	1.1256	
					615	0.0	0.26		1444	2704.958	1.1850	
					630	0.0400	0.27		1500	2663.157	1.2791	
					645	0.0005	0.27		1516	2452.319	1.3687	
					700	0.0005	0.27		1524	2341.517	1.4107	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gages 10, 11, 20, 21 and 24. For 30-day antecedent P and Q, see tables on pp. 62012-1 and 2.

1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI			WATERSHED W-35				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
			EVENT OF MARCH 2 - 5, 1970 (CONTINUED)							
			3- 3	715	0.0005	0.27	3- 3	1538	2145.625	1.4795
				730	0.0005	0.27		1554	1878.479	1.5500
				745	0.0005	0.27		1604	1695.999	1.5891
				800	0.0005	0.27		1614	1557.999	1.6247
				815	0.0400	0.28		1630	1281.999	1.6745
				830	0.0400	0.29		1644	1026.875	1.7099
				845	0.0800	0.31		1658	835.000	1.7384
				900	0.3600	0.40		1714	649.999	1.7644
				915	0.2800	0.47		1730	525.000	1.7850
				930	0.0800	0.49		1744	436.360	1.7997
				945	0.3200	0.57		1800	393.000	1.8142
				1000	1.3200	0.90		1816	329.000	1.8268
				1015	0.9200	1.13		1824	316.982	1.8325
				1030	0.4800	1.25		1832	304.937	1.8379
				1045	0.3600	1.34		1844	273.132	1.8455
				1100	0.2400	1.40		1906	238.624	1.8578
				1115	0.3600	1.49		1946	173.000	1.8758
				1130	0.4806	1.61		2014	122.952	1.8849
				1145	0.2000	1.66		2046	113.004	1.8932
				1200	0.2400	1.72		2102	98.712	1.8969
				1215	0.3600	1.81		2134	95.016	1.9037
				1230	0.1600	1.85		2158	91.864	1.9086
				1245	0.3201	1.93		2232	78.456	1.9149
				1300	0.8900	2.13		2314	69.000	1.9217
				1315	0.4400	2.24		2400	54.600	1.9279
				1330	0.4000	2.34	3- 4	132	39.624	1.9374
				1345	0.5200	2.47		310	32.938	1.9452
				1400	0.3200	2.55		558	25.800	1.9560
				1415	0.2400	2.61		902	20.200	1.9653
				1430	0.2400	2.67		1202	17.400	1.9727
				1445	0.1200	2.70		1502	9.635	1.9780
				1500	0.0800	2.72		1632	6.518	1.9796
				1515	0.0399	2.73		1800	3.600	1.9806
				1530	0.0392	2.74		2102	2.850	1.9819
				1545	0.0400	2.75		2400	2.651	1.9830
				1600	0.0	2.75	3- 5	616	1.006	1.9845
				1615	0.0	2.75		1216	0.475	1.9851
				1630	0.0	2.75				
				1645	0.0	2.75				

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.0001314. Thiessen weighted storm rainfall, rain gages 10, 11, 20, 21 and 24. For 30-day antecedent P and Q, see tables on pp. 62012-1 and 2.



EVENT OF MARCH 2 - 5, 1970  
 OXFORD, MISSISSIPPI WATERSHED W-35

OXFORD, MISSISSIPPI WATERSHED W-17A

LOCATION: Marshall Co., Miss.; 7.8 mi. SW of Holly Springs on County road; Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 3200.00 acres 5.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-17A	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	1.19	4.71	6.12	8.46	5.25	6.25	3.42	2.06	1.92	5.74	2.58	5.23	52.92	
Q	0.183	0.664	2.447	3.240	1.255	0.899	0.036	0.0	0.0	0.012	0.004	0.489	9.228	
STA AV P	3.39	4.46	4.91	5.30	3.99	2.78	4.32	4.55	4.06	2.33	3.63	5.41	49.14	
Q	0.689	1.296	1.488	1.249	0.606	0.115	0.318	0.375	0.416	0.076	0.356	0.950	7.934	

ANNUAL MAXIMUM DISCHARGE (in/br) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		Maximum Volume for Selected Time Interval													
	Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.
1970	4-17	0.296	4-17	0.294	4-17	0.580	4-17	1.433	3- 3	1.894	3- 3	2.021	3- 3	2.080	4-17	2.426

MAXIMUMS FOR PERIOD OF RECORD																
7- 9	0.490	7- 9	0.490	7- 9	0.960	7- 9	2.570	7- 9	3.510	7- 9	3.650	7- 9	3.660	4- 9	4.287	
1967		1967		1967		1967		1967		1967		1967		1969		

NOTES: Watershed conditions: About 14% of area in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 17% in pasture and idle land, good cover April to October with fair cover remainder of year; 68% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1970. About 38% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, OSDA Misc. Pub. 945, p. 62.5-5. Monthly precipitation Thiessen weighted from rain gages 2, 17, 22 and 28. Precipitation and runoff records began Jan. 1957; but station averages were computed starting with 1958. Maximum discharges and volumes were not computed prior to 1961; poor records 1958-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

1970	DAILY PRECIPITATION (inches)												OXFORD, MISSISSIPPI WATERSHED W-17A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.22	0.10	1.74	0.68	2.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.27	0.0	0.17	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0
3	0.0	0.0	2.54	0.0	0.0	0.0	0.02	0.45	0.22	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.00	0.10	0.0	0.0	0.0	0.0	0.0
5	0.0	0.66	0.0	0.0	0.0	0.0	0.03	0.0	0.52	0.0	0.0	0.0	0.0	0.03
6	0.04	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.69	0.0	0.0	0.0
8	0.0	0.16	0.0	0.0	0.0	0.0	2.12	0.03	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.34	0.0	0.94	1.07	0.0	0.0	0.0
10	0.03	0.0	0.0	0.0	2.85	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0	0.0
11	0.61	0.0	0.17	0.0	0.01	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.35	0.0
12	0.0	0.0	0.32	0.46	0.0	0.0	0.0	0.0	0.0	0.52	0.04	0.0	0.0	0.0
13	0.0	0.0	0.0	0.02	0.0	0.48	0.0	0.0	0.0	1.92	0.25	0.0	0.0	0.0
14	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0
15	0.0	1.78	0.0	0.0	0.0	2.23	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0
16	0.0	0.0	0.0	0.04	0.59	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.16	0.0
17	0.0	0.0	0.76	3.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0
19	0.01	0.0	0.86	1.11	0.0	0.0	0.0	0.0	0.03	0.19	0.40	0.17	0.0	0.0
20	0.0	0.0	0.05	0.0	0.0	0.05	0.60	0.11	0.0	0.02	0.0	2.43	0.0	0.0
21	0.0	0.0	0.47	0.0	0.0	0.19	0.0	0.26	0.0	0.0	0.0	0.02	0.0	0.0
22	0.0	0.03	0.0	0.0	0.0	0.0	0.43	0.13	0.0	0.0	0.0	0.36	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.23	0.0	0.0	0.62	0.0	0.0
24	0.0	0.09	0.02	0.79	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.0
25	0.0	0.35	0.49	0.82	0.05	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.37	0.0	0.02	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0
29	0.51	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0
31	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0
TOTAL	1.19	4.71	6.12	8.46	5.25	6.25	3.42	2.06	1.92	5.74	2.58	5.23		
STA AV	3.39	4.46	4.91	5.30	3.99	2.78	4.32	4.55	4.06	2.33	3.63	5.41		

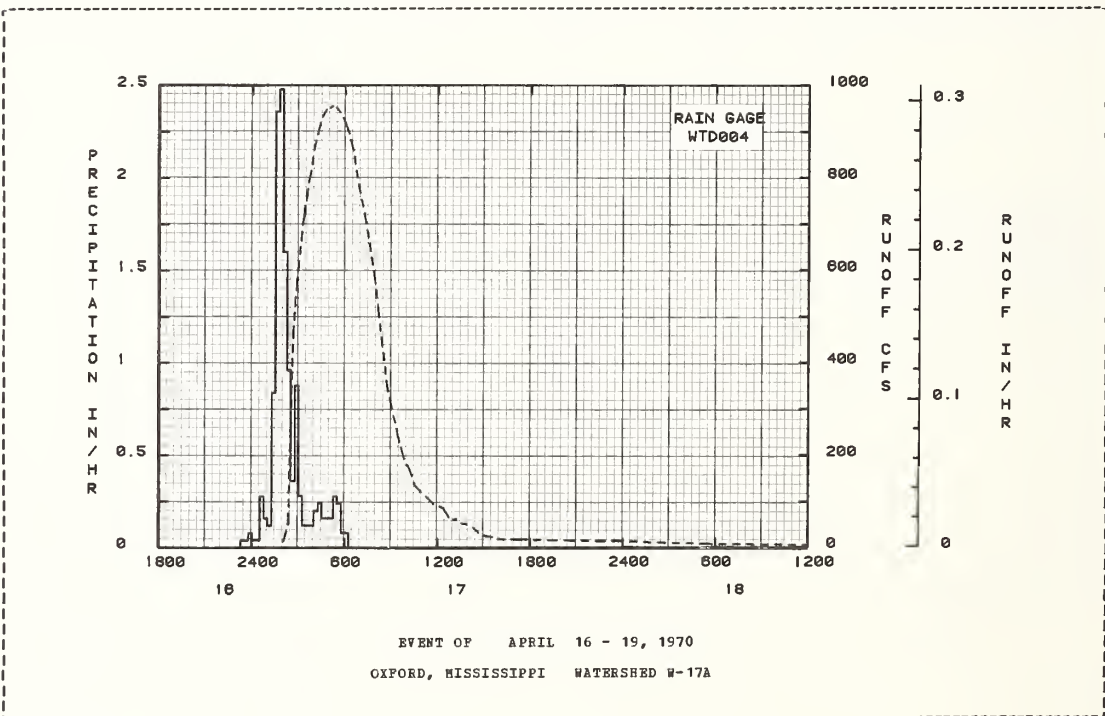
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p. 62.001-1). Daily precipitation values Thiessen weighted from rain gages 2, 17, 22 and 28. STA AV based on 13 yr (1958-70) record period.





1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI				WATERSHED #-17A			
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Hainfall	Rnnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 16 - 19, 1970 (CONTINUED)										
							4-17	948	192.000	1.5616
								1010	168.826	1.5821
								1032	133.856	1.5993
								1054	120.437	1.6137
								1132	102.032	1.6355
								1142	94.536	1.6406
								1222	85.000	1.6591
								1244	65.268	1.6676
								1302	60.895	1.6735
								1314	63.095	1.6773
								1336	52.059	1.6838
								1354	51.000	1.6886
								1416	43.968	1.6940
								1438	32.936	1.6984
								1508	24.595	1.7029
								1534	22.855	1.7061
								1554	18.680	1.7082
								1620	17.875	1.7107
								1702	17.875	1.7146
								1748	17.080	1.7188
								1918	15.520	1.7264
								2052	14.755	1.7337
								2222	13.249	1.7402
								2400	13.249	1.7469
							4-18	246	9.586	1.7567
								548	7.000	1.7645
								1254	4.331	1.7770
								2400	3.432	1.7904
							4-19	418	3.024	1.7947
								526	1.990	1.7956

NOTES: To convert rnnoff in CFS to IN/HR, multiply by 0.0003099. Thiessen weighted storm rainfall, rain gages 2, 17, 22 and 28. For 30-day antecedent P and Q, see tables on pp. 62017-1 and 2.



## OXFORD, MISSISSIPPI WATERSHED W-35A

LOCATION: Marshall Co., Miss.; 0.3 mi. W of Chulahoma on State Highway No. 4; Cuffawa Creek, Pigeon Roost Creek Watershed, Yazoo River Basin.

AREA: 1090.00 acres 1.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													OXFORD, MISSISSIPPI WATERSHED W-35A	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970 P	1.17	4.06	6.82	6.86	6.90	4.55	3.48	3.31	2.03	6.95	2.51	3.12	51.74	
1970 Q	0.229	1.388	3.950	2.700	2.214	1.014	0.050	0.040	0.006	0.318	0.070	0.530	12.508	
STA AV P	3.40	4.60	5.12	4.88	4.49	2.84	4.06	3.57	4.26	2.44	3.94	5.36	48.96	
STA AV Q	1.452	1.900	2.366	1.486	1.123	0.198	0.458	0.438	0.450	0.132	0.616	1.697	12.316	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	5-10	0.630	5-10	0.574	5-10	0.887	3- 3	1.983	3- 3	2.187	3- 3	2.262	3- 3	2.337	2-25	2.523
MAXIMUMS FOR PERIOD OF RECORD																
	7- 9	1.300	7- 9	1.270	7- 9	2.390	7- 9	3.240	7- 9	3.280	11-27	3.710	11-27	3.800	3-24	5.120
	1967		1967				1967		1967		1968		1968		1965	

NOTES: Watershed conditions: About 24% in cultivation (cotton, soybeans and corn), fair cover November to March, poor cover April and May improving to good by mid-July; 45% in pasture and idle land, good cover April to October with fair cover remainder of year; 30% in woods, good cover; 1% in bare gullies. Percentages of total area in various land use categories are based on the latest survey completed in 1971. About 6% of drainage area above small desilting and retention dams. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 62.12-5. Monthly precipitation Thiessen weighted from rain gages 3, 11, 24 and 26. Precipitation and runoff records began Jan. 1957; hut station averages were computed starting with 1958. Maximum discharges and volumes were not computed prior to 1961; poor records 1957-60. For long-time precipitation records, see National Weather Service records at Holly Springs, 4N, Mississippi.

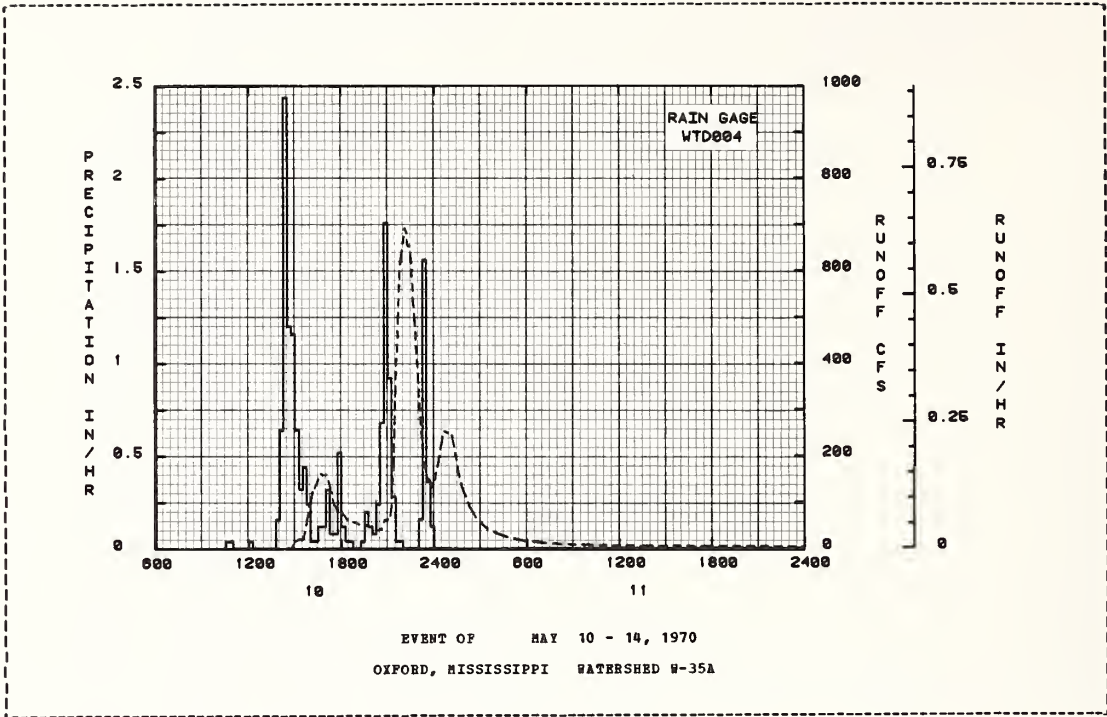
1970 DAILY PRECIPITATION (inches)													OXFORD, MISSISSIPPI WATERSHED W-35A	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	1.27	0.25	1.32	0.48	1.81	0.0	0.13	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.25	0.0	0.14	1.18	0.0	0.31	0.0	0.0	0.0	0.0		
3	0.0	0.0	2.71	0.0	0.0	0.0	0.20	0.03	0.31	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.08	0.00	0.0	0.22	0.0	0.0	0.0		
5	0.0	0.17	0.0	0.0	0.0	0.26	0.0	0.83	0.0	0.0	0.0	0.0		
6	0.05	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0		
8	0.0	0.32	0.0	0.0	0.0	0.0	2.06	0.57	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.36	0.0	1.02	1.14	0.0		
10	0.0	0.0	0.0	0.0	3.86	0.0	0.0	0.02	0.99	0.0	0.0	0.0		
11	0.64	0.0	0.15	0.0	0.01	0.0	0.0	0.0	0.0	0.02	0.0	0.37		
12	0.0	0.0	0.34	0.58	0.0	0.0	0.0	0.0	0.0	0.65	0.11	0.0		
13	0.0	0.0	0.0	0.01	0.0	0.15	0.0	0.0	0.01	2.65	0.33	0.0		
14	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.0		
15	0.0	1.38	0.0	0.0	0.0	0.98	0.02	0.0	0.0	0.0	0.0	0.75		
16	0.0	0.0	0.0	0.09	0.67	0.0	0.0	0.01	0.0	0.0	0.0	0.14		
17	0.0	0.0	0.87	2.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0		
19	0.03	0.0	1.09	1.29	0.0	0.0	0.0	0.0	0.0	0.28	0.23	0.15		
20	0.0	0.0	0.05	0.0	0.0	0.0	0.68	0.04	0.0	0.00	0.0	1.17		
21	0.0	0.0	0.50	0.0	0.0	0.07	0.0	0.22	0.0	0.0	0.0	0.0		
22	0.0	0.05	0.0	0.0	0.0	0.0	0.47	0.80	0.0	0.0	0.0	0.03		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.06		
24	0.0	0.16	0.03	0.59	0.0	0.02	0.0	0.0	0.0	0.87	0.0	0.0		
25	0.0	0.41	0.50	0.58	0.09	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.34	0.0	0.00	0.0	0.0	0.32	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.08	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0		
29	0.45	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.33		
31	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08		
TOTAL	1.17	4.06	6.82	6.86	6.90	4.55	3.48	3.31	2.03	6.95	2.51	3.12		
STA AV	3.40	4.60	5.12	4.88	4.49	2.84	4.06	3.57	4.26	2.44	3.94	5.36		

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-4C (p.62001-1). Daily precipitation values Thiessen weighted from rain gages 3, 11, 24 and 26. STA AV based on 13 yr (1958-70) record period.



1970 SELECTED RUNOFF EVENT			OXFORD, MISSISSIPPI				WATERSHED W-35A			
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 10 - 14, 1970 (CONTINUED)										
			5-10	1915	0.0	2.22	5-10	2130	350.995	0.4815
				1930	0.0400	2.23		2140	494.500	0.5455
				1945	0.2000	2.28		2148	617.000	0.6129
				2000	0.1200	2.31		2156	644.500	0.6894
				2015	0.0800	2.33		2206	692.000	0.7908
				2030	0.2400	2.39		2214	682.000	0.8741
				2045	0.6800	2.56		2218	654.500	0.9146
				2100	1.7600	3.00		2226	654.500	0.9940
				2115	0.9200	3.23		2232	617.000	1.0519
				2130	0.2800	3.30		2238	537.000	1.1044
				2145	0.0400	3.31		2246	482.000	1.1662
				2200	0.0400	3.32		2258	358.000	1.2426
				2215	0.0	3.32		2316	200.968	1.3189
				2230	0.0	3.32		2328	168.000	1.3525
				2245	0.0	3.32		2336	147.568	1.3716
				2300	0.0	3.32		2342	149.291	1.3851
				2315	0.1592	3.36		2346	129.353	1.3935
				2330	1.5600	3.75		2354	140.656	1.4099
				2345	0.3600	3.84		2400	149.291	1.4231
				2400	0.1200	3.87	5-11	16	185.050	1.4637
			5-11	15	0.0	3.87		32	241.668	1.5155
				30	0.0	3.87		40	254.268	1.5456
				45	0.0	3.87		52	250.095	1.5915
				100	0.0	3.87		108	243.784	1.6515
								118	220.926	1.6867
								132	169.814	1.7282
								146	135.619	1.7606
								202	112.952	1.7907
								216	91.355	1.8124
								240	67.320	1.8413
								300	56.120	1.8600
								328	42.120	1.8809
								400	33.320	1.8992
								444	24.795	1.9186
								524	19.355	1.9320
								558	15.702	1.9410
								714	11.319	1.9566
								814	8.900	1.9658
								1014	6.812	1.9801
								1342	4.666	1.9982
								1734	3.726	2.0130
								2400	2.608	2.0315
							5-12	2400	1.608	2.0775
							5-13	2400	1.133	2.1074
							5-14	2400	0.075	2.1206

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.0009098. Thiessen weighted storm rainfall, rain gages 3, 11, 24 and 26. For 30-day antecedent P and Q, see tables on pp. 62018-1 and 2.



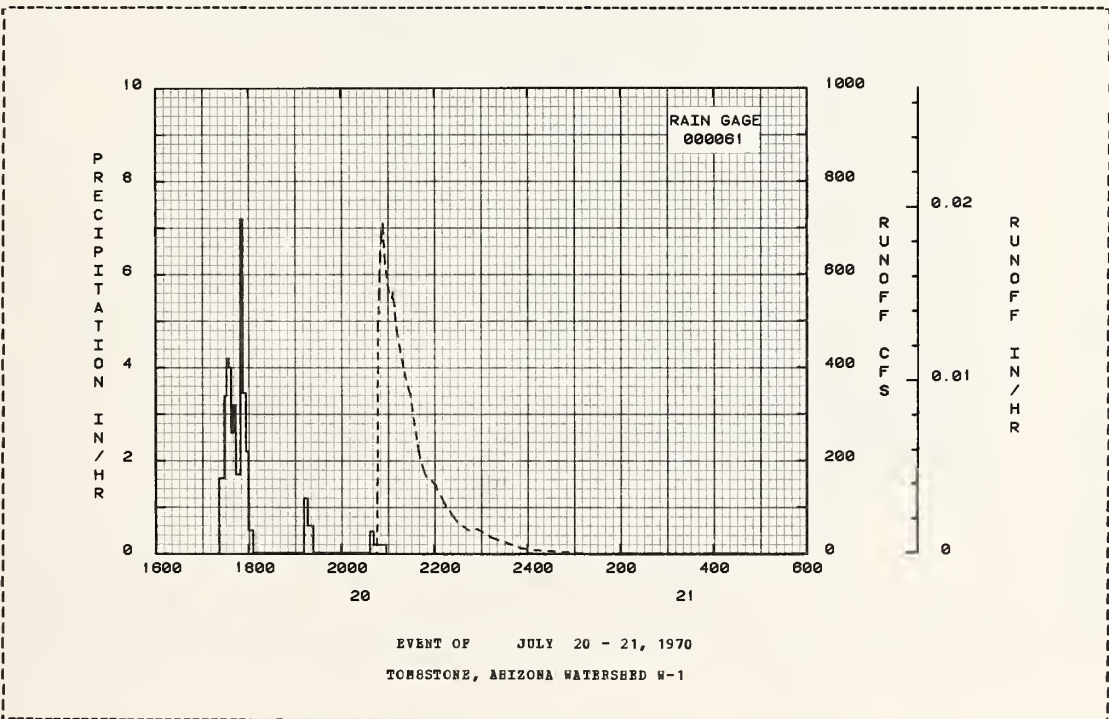






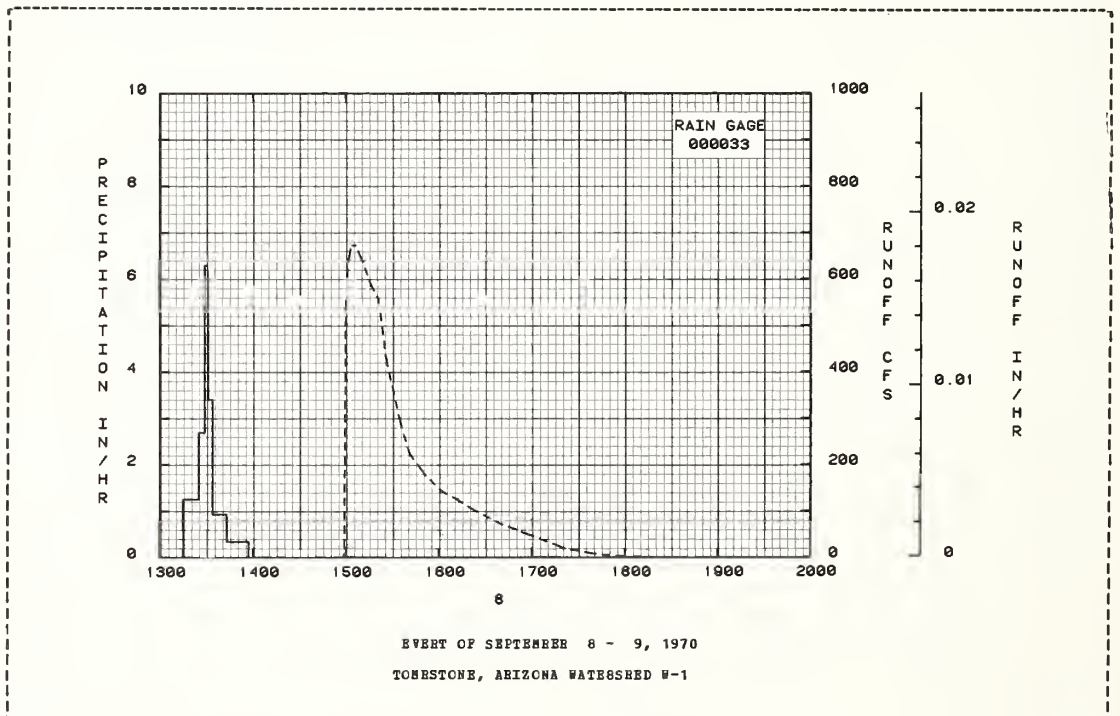
1970 SELECTED RUOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-1							
ANTCEDENT CONDITIONS			RAINFALL				RUOFF			
Date Mo-Day	Rainfall (inches)	Rnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 20 - 21, 1970										
7-20	EG 000061 0.0	0.0	7-20	EG 000061	0.0	0.0	7-20	2045	0.0	0.0
				1722	0.0	0.0		2046	3.368	0.0
				1729	1.6285	0.19		2047	117.951	0.0
				1732	3.3998	0.36		2048	485.896	0.0001
				1735	4.1997	0.57		2049	555.443	0.0004
				1738	3.9998	0.77				
				1741	2.6006	0.90		2050	595.561	0.0006
				1744	3.1998	1.06		2051	651.471	0.0009
				1750	1.6999	1.23		2052	673.157	0.0012
				1753	7.1996	1.59		2053	695.239	0.0016
				1757	3.4501	1.82		2054	710.177	0.0019
				1800	2.1999	1.93		2055	687.833	0.0022
				1806	0.5000	1.98		2057	623.167	0.0028
				1912	0.0182	2.00		2102	562.021	0.0041
				1917	1.2001	2.10		2106	548.906	0.0051
				1924	0.6000	2.17		2107	562.021	0.0053
				2037	0.0164	2.19		2112	479.829	0.0065
				2042	0.4799	2.23		2117	432.802	0.0075
				2058	0.1875	2.28		2122	388.449	0.0084
								2130	336.719	0.0097
								2135	276.100	0.0104
								2140	220.815	0.0109
								2145	187.318	0.0114
								2150	165.474	0.0118
								2200	150.682	0.0125
								2215	103.056	0.0134
								2230	68.157	0.0140
								2245	49.928	0.0144
								2255	53.352	0.0146
								2315	34.160	0.0150
								2351	12.179	0.0154
								2400	8.436	0.0154
							7-21	110	0.0	0.0155

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000269.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				ROROFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8 - 9, 1970										
9-8	RG 000033 0.0	0.0	9-8	1315	0.0	0.0	9-8	1458	0.0	0.0
				1325	1.2600	0.21		1459	8.436	0.0
				1329	2.7000	0.39		1500	555.443	0.0001
				1331	6.2999	0.60		1501	623.167	0.0003
				1334	3.4000	0.77		1503	665.885	0.0008
				1343	0.9333	0.91		1504	673.157	0.0012
				1357	0.3429	0.99		1506	673.157	0.0018
			9-9	1910	0.0	0.99		1511	637.232	0.0032
				1926	0.1875	1.04		1516	588.767	0.0046
				2019	0.0679	1.10		1521	555.443	0.0059
				2036	0.1412	1.14		1526	427.114	0.0070
				2051	0.0800	1.16		1531	351.810	0.0079
				2103	0.2500	1.21		1536	280.000	0.0086
				2119	0.1125	1.24		1541	224.313	0.0092
				2132	0.1385	1.27		1551	177.794	0.0101
				2149	0.0353	1.28		1601	144.956	0.0108
				2159	0.1200	1.30		1611	125.767	0.0114
								1621	105.471	0.0119
								1641	70.132	0.0127
								1701	45.000	0.0132
								1721	19.245	0.0135
								1741	6.645	0.0136

NOTES: To convert runoff in CFS to I#/88, multiply by 0.0000269.



## TOMBSTONE, ARIZONA WATERSHED W-2

LOCATION: Cochise County, Arizona; 2-3/4 miles NW of Tombstone, Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 28100.90 acres 43.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA WATERSHED W-2	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.0	0.32	1.32	0.23	0.02	0.04	2.98	3.82	1.52	0.05	0.0	0.40	10.71
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.059	0.119	0.027	0.0	0.0	0.0	0.205
STA AV	P	0.35	0.75	0.92	0.18	0.15	0.03	3.22	3.73	1.05	0.08	0.29	0.50	11.24
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.067	0.011	0.0	0.0	0.0	0.125

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days			
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	9-8	0.043		7-20	0.030	7-20	0.039	7-20	0.042	7-20	0.043	8-16	0.053	8-16	0.054	8-10	0.092

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	7-26	0.160	7-26	0.130	7-26	0.170	7-26	0.219	9-9	0.240	9-9	0.240	9-9	0.240	9-9	0.430
	1959		1959		1969		1959		1964		1964		1964		1964	

NOTES: Watershed Conditions: 55% of area in oak woodland and desert shrubs (whitethorn, creosotebrush, tarbush and artemisia), with a 25% crown spread cover. 45% of area supports grass (black grama, curly mesquite, tobosa, blue grama and sideoats grama), with a basal area of 2.5%, and a shrub cover of approximately 6% crown spread. For topographic, geological and vegetation maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: records began January 1954. Monthly totals are Thiessen weighted averages from 69 gages, station averages are for 3 yr only (1968-70). Runoff Data: Records began July 1959, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum value included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.34E	0.0	0.0	0.0	0.01	0.56E	0.0	0.01E	0.0	0.0		
2	0.0	0.0	0.31E	0.0	0.0	0.0	0.01	0.24E	0.01E	0.04E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.06E	0.20E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.62E	0.0	0.0	0.0		
5	0.0	0.0	0.37E	0.0	0.0	0.0	0.0	0.01	0.02E	0.0	0.0	0.0		
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.06	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.27E	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.34	0.0	0.0	0.0		
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.59E	0.00	0.0	0.0	0.0		
11	0.0	0.30E	0.07E	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.0	0.0	0.00		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.00	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53E	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.00	0.37E	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.07E	0.0	0.0	0.01E	0.01	0.0	0.0	0.0	0.00		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.05E	0.0	0.0	0.0	0.0		
20	0.0	0.01E	0.0	0.0	0.0	0.0	0.55E	0.00E	0.0	0.0	0.0	0.0		
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.01E	0.00	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.11E	0.0	0.0	0.0	0.0		
23	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.40E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.01	0.0	0.09E	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.09	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.01E	0.0	0.01	0.0	0.0	0.0	0.0	0.39		
28	0.0	0.0	0.0	0.0	0.0	0.02	0.48E	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.02	0.02E	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.05E	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.51E	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.0	0.32	1.32	0.23	0.02	0.04	2.98	3.82	1.52	0.05	0.0	0.40		
STA AV	0.35	0.75	0.92	0.18	0.15	0.03	3.22	3.73	1.05	0.08	0.29	0.50		

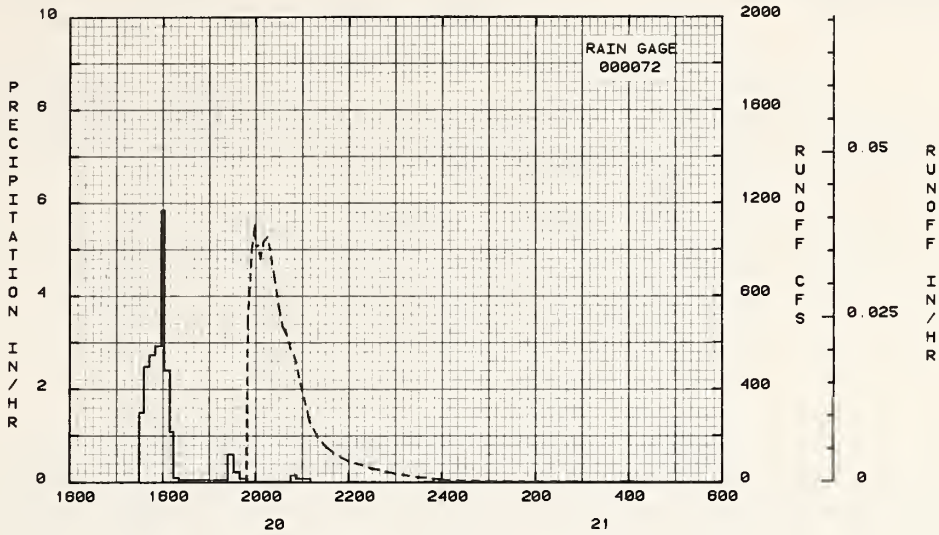
NOTES: Data are Thiessen weighted averages of values from 69 gages. STA AV are for 3 yr only (1968-70).

1970		MEAN DAILY DISCHARGE (cfs)					TOMBSTONE, ARIZONA WATERSHED W-2					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.948E	0.005E	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.923	0.005E	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.014	0.013E	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.035E	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.026E	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.009E	0.019E	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005E	0.013E	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003E	31.775E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.300	0.065E	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.157E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.380E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.035E	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.757E	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.662E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.419E	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044E	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	49.962E	0.044E	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.249E	0.044E	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.035E	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.026E	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019E	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	2.620	0.013E	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.009E	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	16.671E	0.005E	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	2.2421	4.5490	1.0652	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.059	0.119	0.027	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.067	0.011	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000847. STA AV are based on 1966, 1968-70 data.

1970		SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-2							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF JULY 20 - 21, 1970												
7-20	EG 000072 0.0	0.0	7-20	EG 000072 1730	0.0	0.0	7-20	1948	0.0	0.0		
					1736	1.5001	0.15		1950	715.49E	0.0004	
					1743	2.4857	0.44		1955	1000.000	0.0029	
					1750	2.7428	0.76		1959	1106.027	0.0054	
					1756	2.9250	1.15		2000	1015.937	0.0061	
					1802	5.8501	1.54		2003	1015.937	0.0078	
					1809	2.4000	1.82		2006	957.601	0.0096	
					1814	1.0801	1.91		2010	1032.011	0.0119	
					1821	0.0857	1.92		2015	1056.377	0.0151	
					1924	0.0381	1.96		2020	965.997	0.0180	
					1932	0.6000	2.04		2025	855.773	0.0206	
					1940	0.2250	2.07		2030	747.121	0.0230	
					1949	0.0667	2.08		2035	664.266	0.0250	
					2045	0.0107	2.09		2040	629.331	0.0269	
					2053	0.1500	2.11		2045	571.321	0.0287	
					2111	0.0667	2.13		2050	538.592	0.0303	
									2100	390.940	0.0331	
									2110	254.667	0.0350	
									2120	191.992	0.0363	
									2130	152.866	0.0373	
									2140	125.149	0.0381	
									2150	106.064	0.0388	
									2200	88.898	0.0394	
									2230	58.054	0.0407	
									2300	34.978	0.0415	
									2330	20.451	0.0420	
									2400	9.172	0.0423	
									7-21	1	7.674	0.0423
									30	4.194	0.0424	
									101	2.335	0.0425	
									129	1.119	0.0425	
									201	0.340	0.0425	
									231	0.044	0.0425	
									255	0.0	0.0425	

NOTES: To convert runoff in CFS to IN/EE, multiply by 0.0000353.



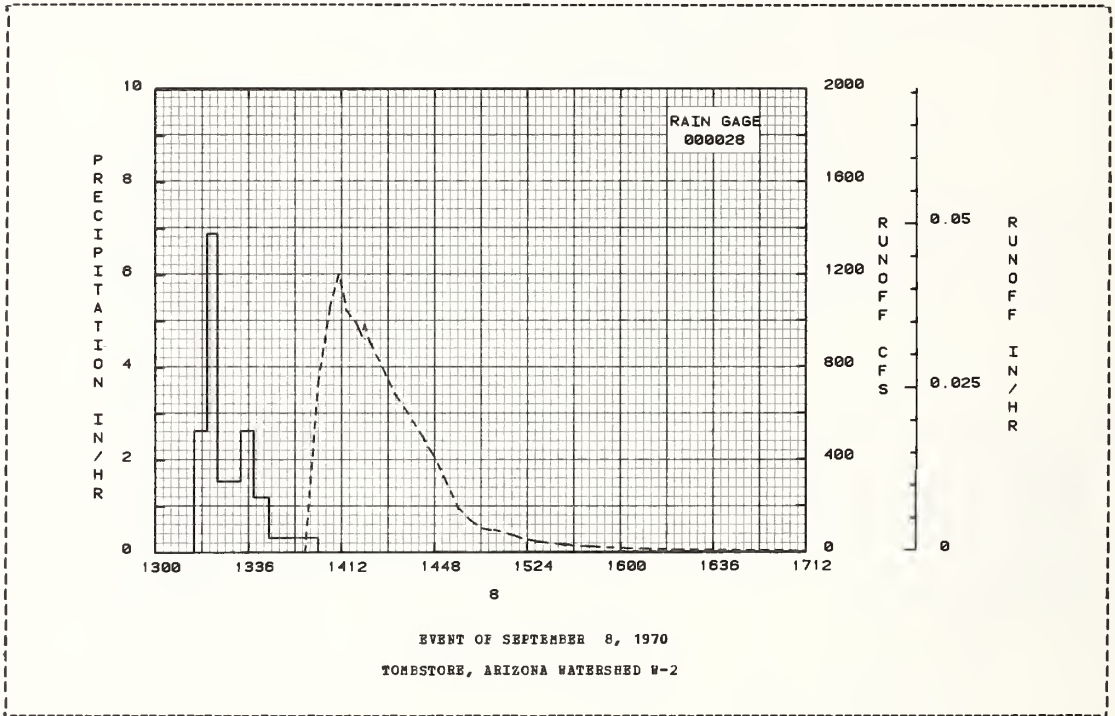
EVENT OF JULY 20 - 21, 1970  
TOMBSTONE, ARIZONA WATERSHED W-2

1970 ANTECEDENT CONDITIONS			1970 RAINFALL			1970 RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8, 1970										
9- 8	RG 000028 0.0	0.0	9- 8	RG 000028 1315	0.0	0.0	9- 8	1328	0.005	0.0
				1320	2.6400	0.22		1334	0.026	0.0
				1324	6.9000	0.68		1343	0.026	0.0
				1333	1.5333	0.91		1345	0.044	0.0
				1338	2.6400	1.13		1358	0.044	0.0
<b>WATERSHED CONDITIONS:</b> Oak woodland and desert shrubs (Whitethorn, creosotehsh, tarhsh, and mortonia) with a crown spread of 25% cover, occupy 55% of the area. The remaining 45% supports grass (black grama, curly mesquite, tohosa, blue grama, and sideoats grama) with a basal area of 2.5% cover, and a shrub cover of approximately 6% crown spread.				1344	1.2000	1.25		1403	731.741	0.0011
				1403	0.3158	1.35		1408	1084.844	0.0039
							1411	1203.730	0.0058	
							1413	1109.766	0.0072	
							1414	1043.981	0.0078	
							1418	986.604	0.0102	
							1420	934.075	0.0114	
							1421	986.604	0.0119	
							1423	908.448	0.0131	
							1428	796.489	0.0156	
							1433	677.825	0.0177	
							1438	598.153	0.0196	
							1443	505.434	0.0212	
							1448	410.940	0.0225	
							1452	318.594	0.0234	
				1457	193.936	0.0242				
				1502	136.298	0.0247				
				1507	100.000	0.0250				
				1510	94.039	0.0252				
				1511	96.985	0.0253				
				1517	77.749	0.0256				
				1522	59.442	0.0258				
				1527	46.324	0.0260				
				1532	35.139	0.0261				
				1537	33.245	0.0262				
				1542	27.818	0.0263				
				1547	24.055	0.0264				
				1552	21.122	0.0265				
				1602	15.669	0.0266				
				1612	11.430	0.0267				

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.

1970 SELECTED RUNOFF EVENT			TOMBSTORE, ARIZONA WATERSHED W-2							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 8, 1970 (CONTINUED)										
							9- 8	1622	8.902	0.0268
								1652	5.055	0.0269
								1724	2.933	0.0270
								1840	0.770	0.0271

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000353.



TOMBSTONE, ARIZONA WATERSHED W-3

LOCATION: Cochise County; 1.3 miles north of Tombstone; tributary of Walnut Gulch; San Pedro River, Gila River, Colorado River Basin.

AREA: 2220.00 acres 3.47 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA WATERSHED W-3
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 0.0	0.27	1.29	0.20	0.04	0.00	2.25	4.12	2.05	0.05	0.0	0.40	10.66
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.115	0.079	0.0	0.0	0.0	0.198
STA AV	P 0.53	0.40	0.47	0.15	0.09	0.22	3.44	3.07	1.32	0.43	0.41	0.75	11.28
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.096	0.029	0.0	0.0	0.0	0.148

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													
Date	Maximum Discharge Rate	Maximum Volume for Selected Time Interval											
		1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.					
1970	9-8 0.131	9-8 0.072	9-8 0.079	9-8 0.080	9-8 0.080	8-9 0.083	8-8 0.085	8-8 0.114					

MAXIMUMS FOR PERIOD OF RECORD													
Date	Maximum Discharge Rate	1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.					
8-16 1958	0.580	8-17 1961	0.240	8-17 1961	0.280	8-17 1961	0.280	8-17 1961	0.280	8-17 1961	0.280	8-14 1958	0.420

NOTES: Watershed conditions: Vegetative cover; Desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread approximately 30% and grasses with basal area of approximately 9.8% cover occupy 55% of the area. Grasses (black grama, curly mesquite, tobosa) with basal area of 2.6% cover and shrub cover of 2% occupy the remaining 45% of the area. For topography, geologic and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. No. 1226. Precipitation Data: Records began 1955. Monthly totals are Thiessen weighted averages of 13 gages, station averages are based on record period (1955-70). Runoff Data: Records began 1958, station averages are based on record period (1958-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA WATERSHED W-3
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.28	0.0	0.01	0.0	0.0	
2	0.0	0.0	0.20	0.0	0.0	0.0	0.01	0.21	0.01	0.04	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.20E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.69E	0.0	0.0	0.0	
5	0.0	0.0	0.40E	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.01	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.76E	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	0.33	0.0	0.0	0.0	
10	0.0	0.0	0.00E	0.0	0.0	0.0	0.0	1.60E	0.0	0.0	0.0	0.0	
11	0.0	0.25E	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.01	0.0	0.0	0.0	0.0	
20	0.0	0.01E	0.0	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.21	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.40	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.05	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.27	1.29	0.20	0.04	0.00	2.25	4.12	2.05	0.05	0.0	0.40	
STA AV	0.53	0.40	0.47	0.15	0.09	0.22	3.44	3.07	1.32	0.43	0.41	0.75	

NOTES: Data are Thiessen weighted averages from 13 rain gages. STA AV are based on record period (1955-70).

1970 MEAN DAILY DISCHARGE (cfs) TOMRSTONE, ARIZONA WATERSRED W-3												
Day	Jan	Feb	Mar	Apr	May	Jnn	Jul	Ang	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.411E	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.203	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.712E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.364	0.236E	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.529E	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0118	0.3446	0.2470	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.115	0.079	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.023	0.096	0.029	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.010722. STA AV based on record period (1958-70).

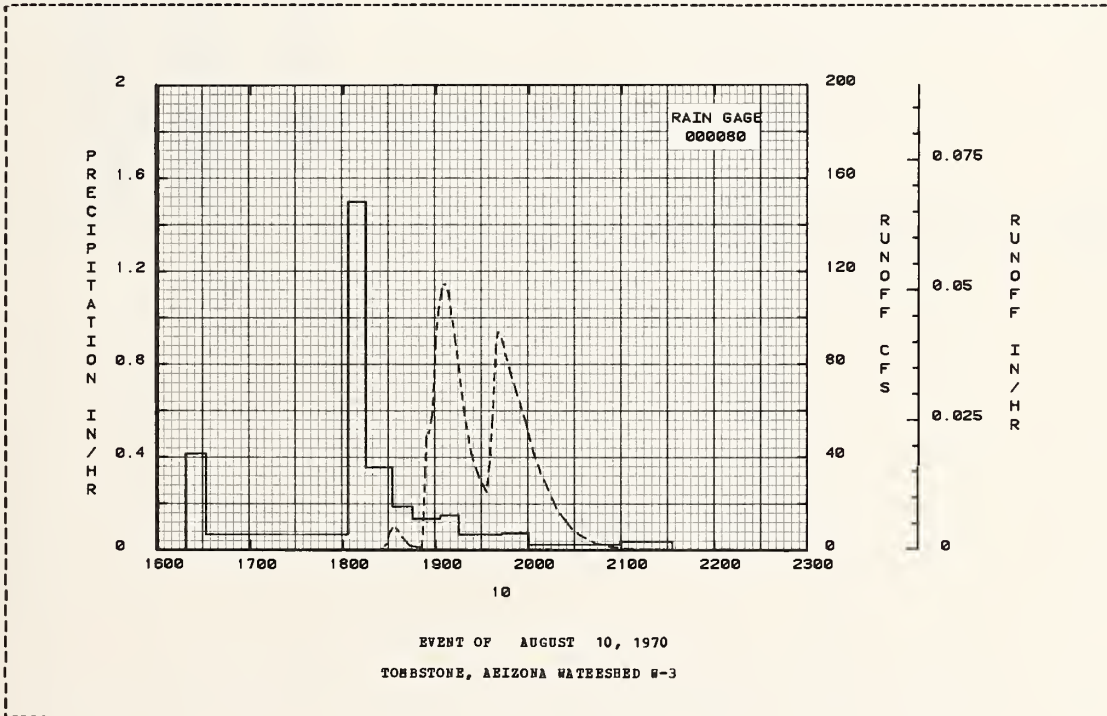
1970 SELECTED RUNOFF EVENT TOMRSTONE, ARIZONA WATERSRED W-3												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF AUGUST 10, 1970												
8-10	RG 000080 0.41	0.041	8-10	1618	0.0	0.0	8-10	1817	0.0	0.0		
				1631	0.4154	0.09		1818	0.025	0.0		
				1803	0.0652	0.19		1821	0.077	0.0		
				1815	1.4999	0.49		1823	0.115	0.0		
				1832	0.3530	0.59		1825	0.161	0.0		
WATERSRED CONDITIONS:				1845	0.1846	0.63		1826	0.437	0.0		
Vegetative Cover: Desert shrubs (whitethorn, creosote-bush, and tarbrush) with a crown spread approximately 30% and grasses with basal area of approximately 0.8% cover, occupy 55% of the area.				1903	0.1333	0.67		1827	1.658	0.0		
Grasses (black grama, cnrly mesquite, tobosa) with a basal area of 2.6% cover and sbrub cover of 2% occupy the remaining 45% of the area.				1915	0.1500	0.70		1828	2.507	0.0		
				1943	0.0643	0.73		1830	7.103	0.0001		
				2000	0.0706	0.75		1832	9.400	0.0002		
				2059	0.0203	0.77		1834	9.400	0.0003		
				2133	0.0353	0.79		1836	7.979	0.0004		
								1838	5.520	0.0005		
								1843	1.658	0.0006		
								1844	1.476	0.0006		
								1848	1.147	0.0006		
								1849	1.000	0.0006		
								1850	0.867	0.0006		
								1851	0.867	0.0006		
								1852	13.230	0.0006		
								1853	32.830	0.0008		
								1854	49.220	0.0011		
								1855	50.443	0.0014		
								1856	51.682	0.0018		
								1858	59.468	0.0027		
								1900	91.856	0.0039		
								1902	104.640	0.0053		
								1904	112.367	0.0070		
								1905	114.347	0.0078		
								1906	114.347	0.0086		
								1908	110.406	0.0104		
								1913	88.375	0.0140		
								1918	60.824	0.0167		
								1923	41.119	0.0187		
								1928	30.917	0.0200		

NOTES: To convert rnnoff in CFS to IN/HR, multiply by 0.000447.



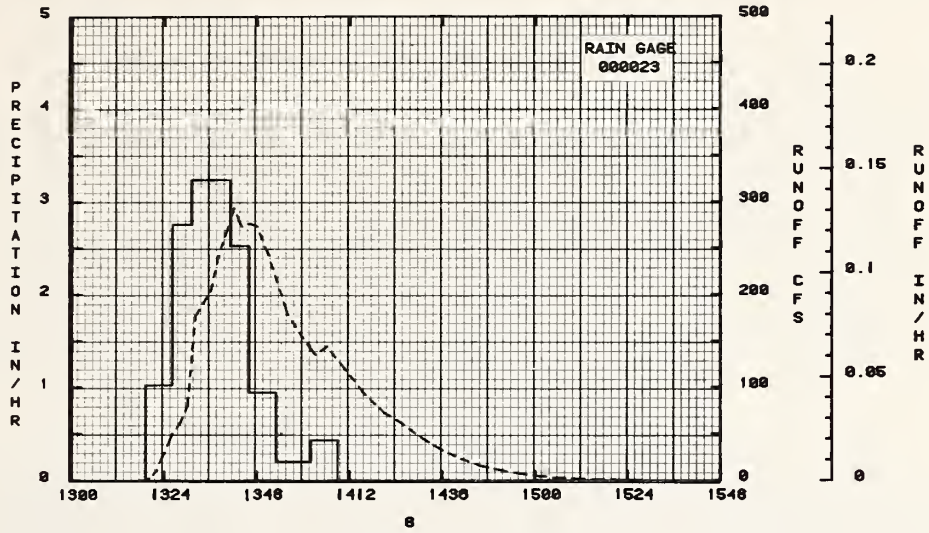
1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-3									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 10, 1970 (CONTINUED)												
				8-10				1933	24.715	0.0210		
								1935	37.890	0.0215		
								1937	58.129	0.0222		
								1939	88.375	0.0234		
								1940	93.626	0.0240		
								1941	93.626	0.0247		
								1943	90.106	0.0261		
								1948	76.862	0.0292		
								1953	66.418	0.0320		
								1958	55.500	0.0342		
								2003	42.227	0.0360		
								2008	32.830	0.0374		
								2013	25.555	0.0385		
								2018	17.805	0.0393		
								2023	13.230	0.0399		
								2028	8.911	0.0403		
								2033	6.284	0.0406		
								2043	2.750	0.0409		
								2053	1.147	0.0410		
								2103	0.354	0.0411		
								2119	0.0	0.0411		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA WATERSHED W-3							
ANTHCEDEENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8, 1970										
9- 8	RG 000023 0.0	0.0	9- 8	RG 000023 1319	0.0	0.0	9- 8	1317	0.0	0.0
				1326	1.0286	0.12		1318	0.530	0.0
				1331	2.7600	0.35		1319	0.745	0.0
				1336	3.2400	0.62		1320	2.276	0.0
				1341	3.2400	0.89		1321	5.895	0.0
WATERSHED CONDITIONS:				1346	2.5200	1.10		1322	11.499	0.0001
Vegetative cover: Desert shrubs (whitethorn, creosote-bnsh, and tarbrnsh) with a crown spread approximately 30% and grasses with basal area of approximately 0.8% cover, occupy 55% of the area.				1353	0.9429	1.21		1323	21.511	0.0002
Grasses (black grama, curly mesquite, tobosa) with a basal area of 2.6% cover and shrub cover of 2% occupy the remaining 45% of the area.				1402	9.2000	1.24		1324	29.985	0.0004
				1409	0.4286	1.29		1325	40.026	0.0006
								1326	50.443	0.0009
								1328	60.824	0.0018
								1330	81.638	0.0029
								1332	177.827	0.0047
								1334	190.832	0.0076
								1336	204.354	0.0104
								1338	241.965	0.0139
								1340	266.895	0.0175
								1342	293.205	0.0219
								1344	273.342	0.0259
								1346	276.596	0.0302
								1348	273.342	0.0340
								1351	241.965	0.0398
								1356	177.827	0.0475
								1401	146.404	0.0537
								1403	135.224	0.0557
								1406	144.128	0.0589
								1411	118.365	0.0637
								1416	91.856	0.0677
								1421	72.283	0.0707
								1426	59.468	0.0731
								1431	44.493	0.0751
								1436	31.866	0.0765
								1441	22.289	0.0775
								1446	15.098	0.0782
								1451	10.420	0.0787
								1456	6.686	0.0790
								1501	3.849	0.0792
								1506	2.058	0.0793
								1511	0.867	0.0794
								1516	0.354	0.0794
								1521	0.077	0.0794
								1527	0.0	0.0794

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000447.



EVENT OF SEPTEMBER 8, 1970  
TOMBSTONE, ARIZONA WATERSHED W-3

## TOMBSTONE, ARIZONA W-4

LOCATION: Cochise County, Arizona; 2 miles north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 560.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-4	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.0	0.28	1.33	0.19	0.06	0.0	1.63	4.21	2.23	0.05	0.0	0.42	10.39
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.190	0.0	0.0	0.0	0.223
STA AV	P	0.49	0.39	0.49	0.15	0.09	0.23	3.34	3.11	1.33	0.42	0.40	0.73	11.16
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.377	0.116	0.029	0.0	0.0	0.0	0.522

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	Maximum Volume for Selected Time Interval														
		1 Hour Date	1 Hour Vol.	2 Hours Date	2 Hours Vol.	6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.	
1970	9-8	0.360	9-8	0.185	9-8	0.190	9-8	0.190	9-8	0.190	9-7	0.190	9-6	0.190	8-31	0.190

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	7-19	2.250	7-19	0.980	7-19	1.100	7-19	1.100	7-19	1.100	7-19	1.630	7-19	1.630	7-19	4.370
	1955		1955		1955		1955		1955		1955		1955		1955	

NOTES: Watershed conditions: Vegetative cover: 100% dominated by desert shrubs (whitethorn, creosotebush, and tarbush) with a crown spread of approximately 38% and an understory of grasses with approximately 0.6% basal cover. For topography, geological, and vegetative maps, see pages 63.1-3, 63.1-4 and 63.1-5 respectively of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pnb. 1226. Precipitation Data: Record began July 1954. Monthly totals are Thiessen weighted averages of three rain gages, station averages are based on record period (1955-70). Runoff Data: Records began January 1955, station averages based on 14 yr (1955-58) and (1961-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)												TOMBSTONE, ARIZONA W-4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.19	0.0	0.0	0.0	0.01	0.24	0.0	0.05	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.22E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.72E	0.0	0.0	0.0	
5	0.0	0.0	0.43E	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	
6	0.0	0.0	0.24E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.31	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56	0.0	0.0	0.0	0.0	
11	0.0	0.27	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.01	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.25	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.08	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.28	1.33	0.19	0.06	0.0	1.63	4.21	2.23	0.05	0.0	0.42	
STA AV	0.49	0.39	0.49	0.15	0.09	0.23	3.34	3.11	1.33	0.42	0.40	0.73	

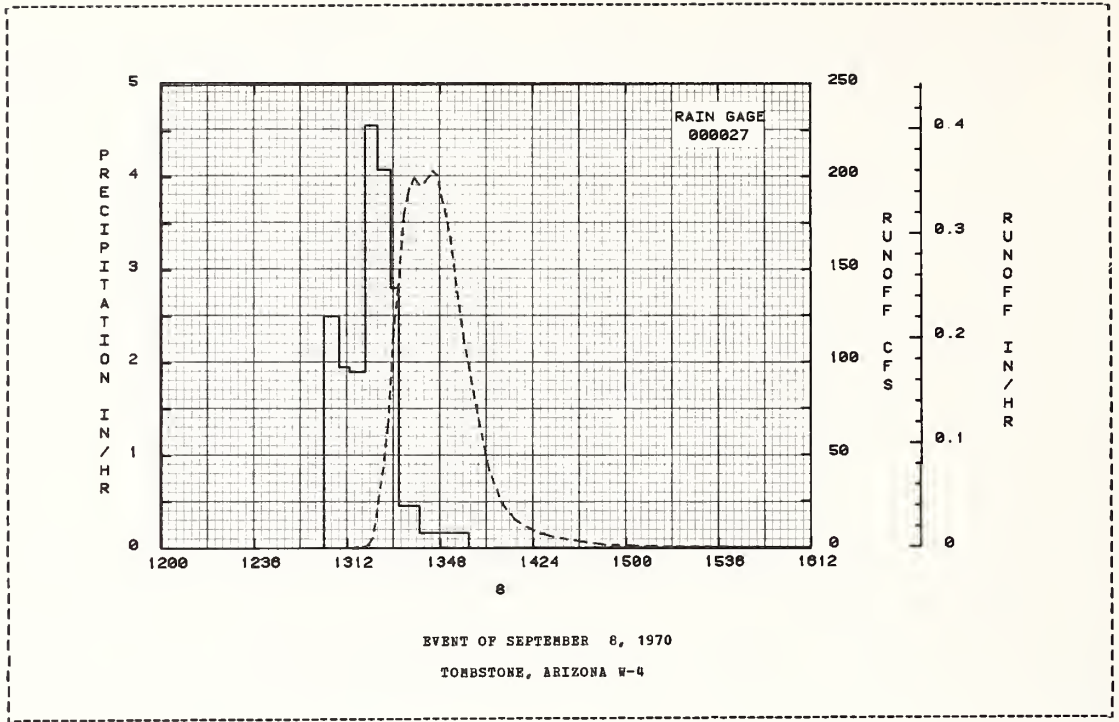
NOTES: Data are Thiessen weighted averages of values from three gages. STA AV are for record period (1955-70).

1970	MEAN DAILY DISCHARGE (cfs)						TOMBSTONE, ARIZONA W-4					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.466	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.763	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006E	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0248	0.1489	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.033	0.190	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.377	0.116	0.029	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.042503. STA AV based on record period (1955-58) and (1961-70).

1970	SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-4					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF SEPTEMBER 8, 1970												
9- 8	RG 000027 0.0	0.0	9- 8	RG 000027 1303	0.0	0.0	9- 8	1314	0.0	0.0		
				1309	2.5000	0.25		1316	0.692	0.0		
				1313	1.9500	0.38		1318	0.831	0.0		
				1319	1.9000	0.57		1319	0.584	0.0		
				1324	4.5600	0.95		1320	1.546	0.0		
				1329	4.0800	1.29		1322	5.619	0.0002		
				1332	2.8000	1.43		1324	24.867	0.0011		
				1340	0.4500	1.49		1326	43.484	0.0030		
				1359	0.1579	1.54		1328	69.370	0.0065		
								1330	118.043	0.0123		
								1332	142.483	0.0195		
								1334	179.651	0.0295		
								1336	193.258	0.0398		
								1338	199.580	0.0520		
								1340	195.776	0.0629		
								1342	197.041	0.0751		
								1344	200.855	0.0861		
								1345	203.415	0.0931		
								1347	200.855	0.1043		
								1352	167.648	0.1311		
								1357	113.992	0.1525		
								1402	76.309	0.1663		
								1407	41.582	0.1749		
								1412	23.832	0.1799		
								1417	15.026	0.1827		
								1422	10.665	0.1846		
								1427	7.467	0.1860		
								1432	5.619	0.1870		
								1442	3.122	0.1883		
								1452	1.342	0.1889		
								1502	0.831	0.1892		
								1512	0.359	0.1894		
								1537	0.029	0.1895		
								1552	0.0	0.1895		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001771.



## TOMBSTONE, ARIZONA W-6

LOCATION: Cochise County; 3/4 mile north of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 23500.00 acres 36.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.0	0.33	1.30	0.24	0.02	0.06	3.18	3.89	1.42	0.04	0.0	0.40	10.87
	Q	0.0	0.0	0.9	0.0	0.0	0.0	0.067	0.122	0.008	0.0	0.0	0.0	0.197
STA AV	P	0.35	0.76	0.91	0.19	0.15	0.03	3.27	3.78	1.01	0.08	0.29	0.51	11.35
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.057	0.061	0.008	0.0	0.0	0.0	0.126

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Discharge Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	7-20	0.047	7-20	0.036	7-20	0.043	7-24	0.045	7-24	0.045	8-16	0.063	8-16	0.065	8-10	0.092

MAXIMUMS FOR PERIOD OF RECORD															
Discharge Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1966	0.100	1966	0.080	1966	0.100	1966	0.110	1966	0.110	1966	0.110	1966	0.120	1963	0.180

NOTES: Watershed conditions: Vegetative cover: Oak woodland and desert shrubs (whitethorn, creosotebush, tarhush, mortonia) occupy approximately 45% of area, with a crown spread of 25% cover. The remaining 55% of the area supports a grass cover (black grama, curly mesquite, tobosa, blue grama, and sideoats grama) with a basal area of 2.5% cover and a shrub cover of approximately 6% crown spread. For topographic, geologic and vegetative maps, see pages 63.1-3, 63.1-4, and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1962. Monthly totals are Thiessen weighted averages of values from 57 gages, station averages are based on 1968-1970 record period. Runoff Data: Records began 1962, station averages based on 4 yr of data (1966, 1968-70). Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-6	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.32E	0.0	0.0	0.0	0.01	0.63E	0.0	0.01E	0.0	0.0		
2	0.0	0.0	0.32E	0.0	0.0	0.0	0.01	0.24E	0.01E	0.03E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.06E	0.20E	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.63E	0.0	0.0	0.0		
5	0.0	0.0	0.35E	0.0	0.0	0.0	0.0	0.01	0.02E	0.0	0.0	0.0		
6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.07	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.16E	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.35	0.0	0.0	0.0		
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.92E	0.00	0.0	0.0	0.0		
11	0.0	0.30E	0.08E	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.00		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.00	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.57E	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.00	0.41E	0.0	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.08E	0.0	0.0	0.02E	0.00	0.0	0.0	0.0	0.00		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.05E	0.0	0.0	0.0	0.0		
20	0.0	0.01E	0.0	0.0	0.0	0.0	1.02E	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.01E	0.00	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.11	0.0	0.0	0.0	0.0		
23	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.0	0.0	0.44E	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.01	0.0	0.09E	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.00E	0.0	0.02	0.0	0.0	0.0	0.0	0.39		
28	0.0	0.0	0.0	0.0	0.0	0.02	0.54E	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.05E	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.0	0.0	0.57E	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.0	0.33	1.30	0.24	0.02	0.06	3.18	3.89	1.42	0.04	0.0	0.40		
STA AV	0.35	0.76	0.91	0.19	0.15	0.03	3.27	3.78	1.01	0.08	0.29	0.51		

NOTES: Daily precipitation are Thiessen weighted averages of values from 57 gages. STA AV based on 3 yr only (1968-70).

1970		MEAN DAILY DISCHARGE (cfs)					TOMBSTONE, ARIZONA W-6					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.936E	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.371E	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.418	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.929	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.336E	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.078E	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.192	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.999	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.978E	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.040E	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	44.726E	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.013E	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.533	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.125	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	20.434E	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	2.1235	3.8821	0.2684	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.067	0.122	0.008	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.057	0.061	0.008	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001013. STA AV based on record period (1966, 1968-70).

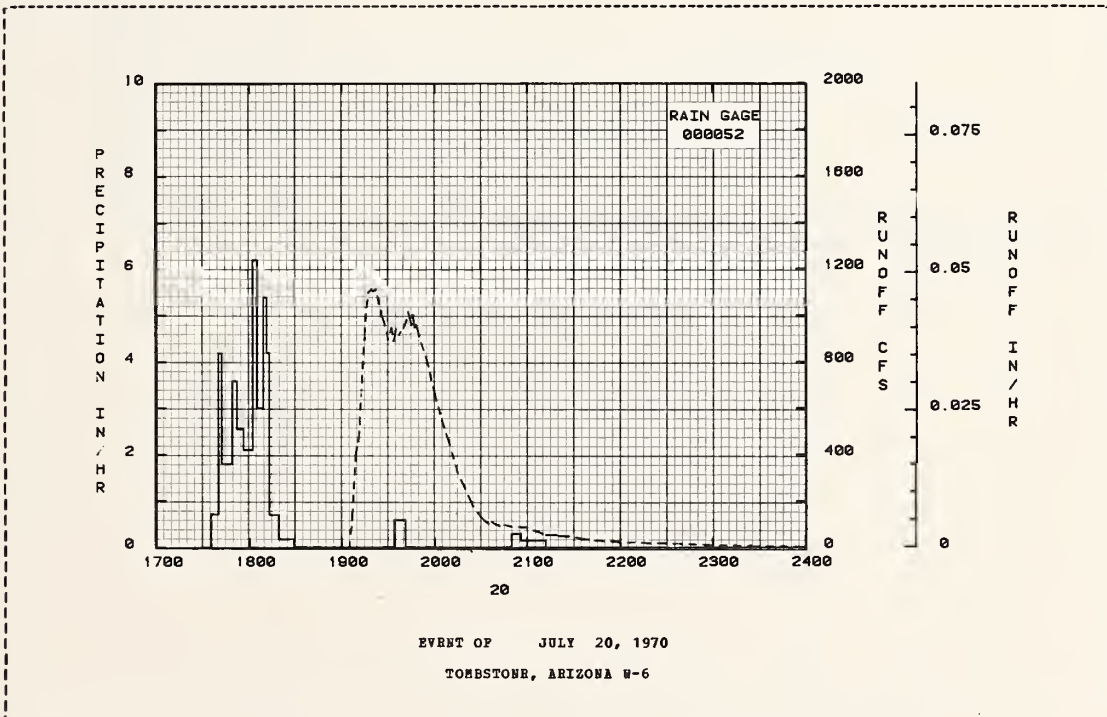
1970 ANTECEDENT CONDITIONS			1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-6		
Date	Rainfall	Runoff	Date	Time	EINFALL Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
RG 000052			EVENT OF JULY 20, 1970								
7-20	0.0	0.0	7-20	RG 000052			7-20	1905	0.0	0.0	
				1735	0.0	0.0		1907	164.988	0.0001	
				1749	0.7200	0.06		1909	400.000	0.0005	
				1742	4.1931	0.20		1911	472.451	0.0011	
				1749	1.8000	0.41		1913	713.425	0.0020	
				1752	3.6009	0.59		1915	948.802	0.0032	
WATERSHED CONDITIONS:				1756	2.5500	0.76		1917	1100.000	0.0046	
Vegetative Cover: Oak				1802	2.0999	0.97		1919	1113.845	0.0062	
woodland and desert shrubs				1805	6.1996	1.28		1920	1106.913	0.0069	
(whitethorn, creosotebush,				1809	3.0000	1.48		1922	1113.845	0.0084	
tarbush, mortonia) occupy				1811	5.4013	1.66		1924	1050.708	0.0100	
approximately 45% of the				1813	4.1991	1.80		1926	995.727	0.0113	
area, with a crown spread				1819	0.7000	1.87		1928	955.437	0.0127	
of 25% cover. The remaining				1829	0.1800	1.90		1930	896.531	0.0141	
55% of the area supports a				1934	0.0392	1.91		1932	948.802	0.0153	
grass cover (black grama,				1941	0.6001	1.98		1934	890.100	0.0167	
curly mesquite, tobosa, blue				2050	0.0087	1.99		1935	942.189	0.0173	
grama, and sideoats grama)				2056	0.3000	2.02		1937	915.965	0.0185	
with basal area of 2.5% cover				2112	0.1500	2.06		1938	929.631	0.0193	
and shrub cover of 6% crown								1940	948.802	0.0205	
spread.								1942	982.208	0.0219	
								1943	1016.176	0.0226	
								1945	962.096	0.0241	
								1946	1002.521	0.0247	
								1947	948.602	0.0253	
								1948	962.096	0.0259	
								1950	909.465	0.0273	
								1955	808.542	0.0303	
								2000	662.478	0.0330	
								2005	545.717	0.0351	
								2010	440.031	0.0368	
								2015	319.455	0.0382	
								2020	251.552	0.0392	
								2025	176.656	0.0399	
								2030	129.839	0.0405	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.



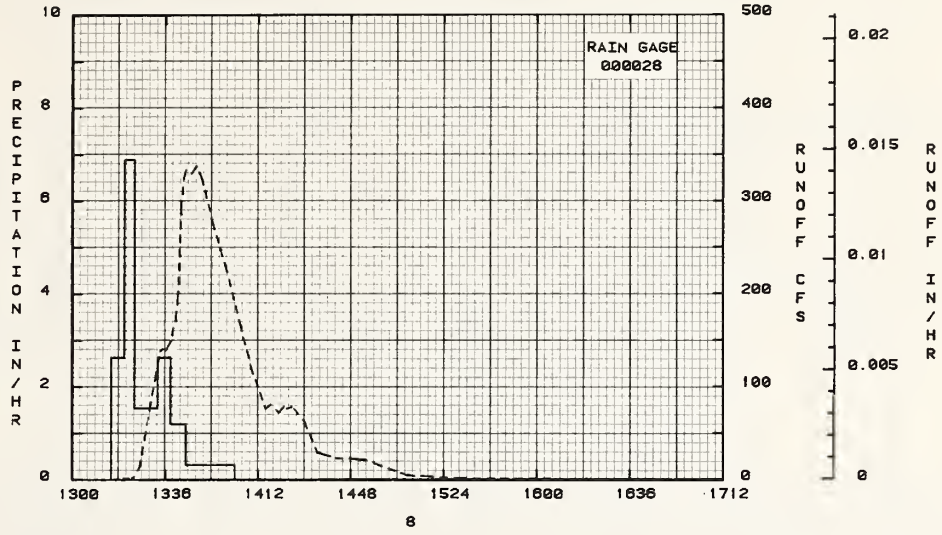
1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-6							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JULY 20, 1970 (CONTINUED)										
				7-20				2035	101.152	0.0409
								2037	110.314	0.0410
								2040	96.721	0.0412
								2041	94.543	0.0413
								2042	94.543	0.0414
								2045	96.721	0.0416
								2050	88.159	0.0419
								2055	88.159	0.0422
								2100	84.028	0.0425
								2105	71.132	0.0428
								2110	58.342	0.0430
								2112	52.626	0.0431
								2119	52.626	0.0434
								2120	49.929	0.0434
								2127	47.334	0.0436
								2135	37.941	0.0438
								2145	28.602	0.0440
								2200	22.259	0.0443
								2215	18.945	0.0445
								2230	15.976	0.0447
								2240	14.180	0.0448
								2300	8.485	0.0450
								2330	3.490	0.0451
								2400	1.170	0.0451

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-6									
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 8, 1970												
	RG 000028			RG 000028								
9- 8	0.0	0.0	9- 8	1315	0.0	0.0	9- 8	1316	0.0	0.0		
				1320	2.6400	0.22		1318	0.278	0.0		
				1324	6.9000	0.68		1320	1.354	0.0		
				1333	1.5333	0.91		1322	1.769	0.0		
				1338	2.6400	1.13		1323	2.000	0.0		
WATERSHED CONDITIONS:				1344	1.2000	1.25		1324	3.213	0.0		
Vegetative Cover: Oak				1403	0.3158	1.35		1326	13.114	0.0		
woodland and desert shrubs								1328	44.596	0.0		
(whitethorn, creosotebush,								1330	76.366	0.0001		
tarbush, mormonia) occupy								1332	108.852	0.0002		
approximately 45% of the												
area, with a crown spread								1334	138.959	0.0004		
of 25% cover. The remaining								1335	140.928	0.0005		
55% of the area supports a								1336	138.959	0.0006		
grass cover (black grama,								1338	148.904	0.0008		
curly mesquite, tobosa, blue								1340	173.770	0.0010		
grama, and sideoats grama)												
with a basal area of 2.5%								1341	203.210	0.0011		
cover and shrub cover of 6%								1342	292.757	0.0013		
crown spread.								1343	325.260	0.0015		
								1344	333.680	0.0017		
								1346	329.456	0.0022		
								1348	337.937	0.0026		
								1350	325.260	0.0031		
								1355	269.615	0.0041		
								1400	223.062	0.0050		
								1405	167.424	0.0057		
								1410	114.293	0.0062		
								1415	76.366	0.0065		
								1417	80.807	0.0066		
								1420	72.066	0.0068		
								1422	78.569	0.0069		
								1423	76.366	0.0070		
								1425	78.569	0.0071		
								1426	76.366	0.0072		
								1430	61.925	0.0074		
								1435	28.895	0.0076		
								1440	24.710	0.0077		
								1442	22.758	0.0077		
								1450	21.816	0.0078		
								1454	20.896	0.0079		
								1500	13.982	0.0080		
								1510	4.393	0.0081		
								1520	2.693	0.0081		
								1530	1.000	0.0081		
								1638	0.0	0.0081		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000042.



EVENT OF SEPTEMBER 8, 1970  
TOMBSTONE, ARIZONA W-6

TOMBSTONE, ARIZONA W-8

LOCATION: Cochise County; 1-1/2 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 3830.00 acres 5.98 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-8	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.0	0.29	1.14	0.22	0.00	0.03	3.30	3.98	1.44	0.05	0.0	0.41	10.86
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.075	0.253	0.014	0.0	0.0	0.0	0.342
STA AV	P	0.33	0.82	0.83	0.17	0.13	0.02	2.55	3.97	1.15	0.09	0.30	0.49	10.85
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.050	0.111	0.014	0.0	0.0	0.0	0.176

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge			1 Hour				2 Hours				Maximum Volume for Selected Time Interval			
Date	Rate		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	8-9	0.193	8-9	0.073	8-9	0.076	8-9	0.076	8-8	0.076	8-9	0.133	8-8	0.198
	8-8		7-22	0.310	7-22	0.320	7-22	0.340	7-22	0.340	7-22	0.340	7-22	0.340
	1964	1.110	1964		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Vegetative cover: approximately 33% of area is dominated by desert shrubs (white-thorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5% interspersed by desert shrubs with a crown spread of 5%. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 17 gages, station averages are based on 1968-70 data. Runoff Data: Records began 1963, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

1970	DAILY PRECIPITATION (inches)												TOMBSTONE, ARIZONA W-8
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.35E	0.0	0.0	0.0	0.00	0.54	0.0	0.02	0.0	0.0	
2	0.0	0.0	0.24E	0.0	0.0	0.0	0.03	0.14	0.02E	0.03	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.08E	0.20E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.61E	0.0	0.0	0.0	
5	0.0	0.0	0.31E	0.0	0.0	0.0	0.0	0.00	0.02E	0.0	0.0	0.0	
6	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.21E	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.37	0.0	0.0	0.0	
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	1.36E	0.0	0.0	0.0	0.0	
11	0.0	0.28	0.05E	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33E	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.30E	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.07	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.01	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.00	0.0	0.0	0.0	0.0	
20	0.0	0.01E	0.0	0.0	0.0	0.0	1.25	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.01E	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54E	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.14	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	
28	0.0	0.0	0.0	0.0	0.0	0.01	0.50	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.01	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.29	1.14	0.22	0.00	0.03	3.30	3.98	1.44	0.05	0.0	0.41	
STA AV	0.33	0.82	0.83	0.17	0.13	0.02	2.55	3.97	1.15	0.09	0.30	0.49	

NOTES: Data are Thiessen weighted averages from 17 rain gages. STA AV are based on 1968-70 data.

1970 MEAN DAILY DISCHARGE (cfs)												TOMBSTONE, ARIZONA W-8	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.138E	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.106E	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.017E	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.069E	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.139E	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.214E	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.658E	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.076E	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.526E	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	10.144E	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002E	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	1.192	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.053E	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.735E	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.3911	1.3141	0.0736	0.0	0.0	0.0	
INCHES	0.0	0.0	0.0	0.0	0.0	0.0	0.075	0.253	0.014	0.0	0.0	0.0	
STA AV	0.0	0.0	0.0	0.0	0.0	0.0	0.050	0.111	0.014	0.0	0.0	0.0	

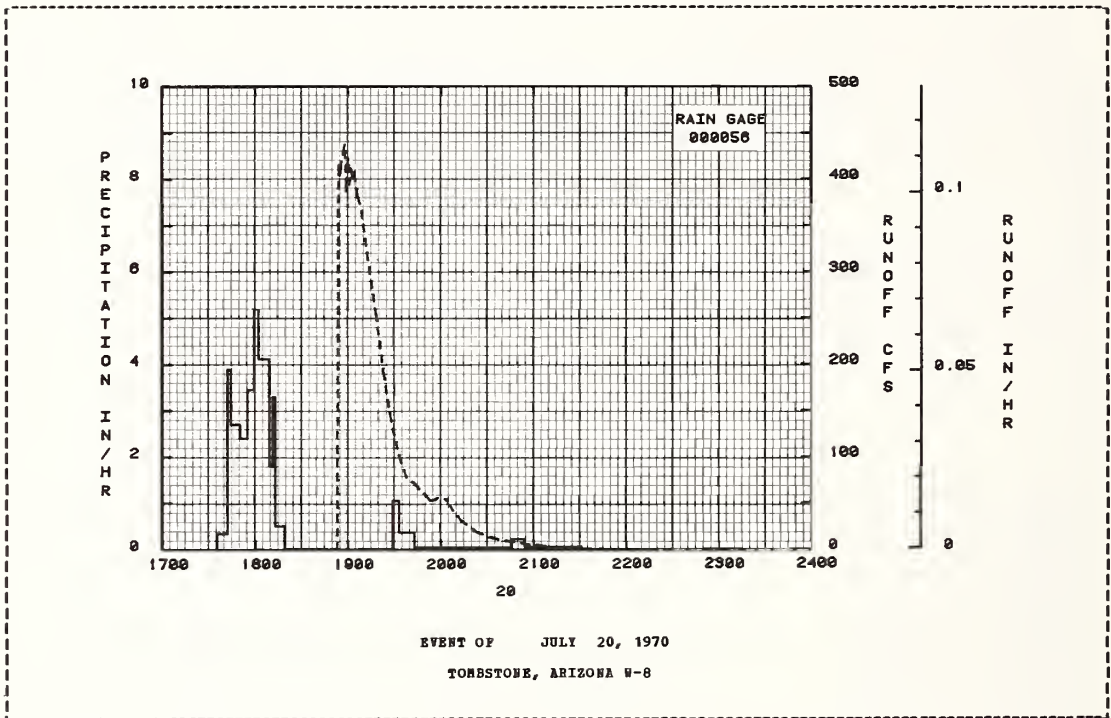
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.006215. STA AV are based on 4 yr only (1966, 1968-70).

1970 SELECTED RUNOFF EVENT						TOMBSTONE, ARIZONA W-8							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.			
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)			
EVENT OF JULY 20, 1970													
RG 000056			RG 000056				7-20	1853	0.0	0.0			
7-20	0.0	0.0	7-20	1735	0.0	0.0	1854	415.719	0.0008				
				1742	0.3429	0.04	1855	404.839	0.0025				
				1744	3.9010	0.17	1856	419.375	0.0042				
				1750	2.6998	0.44	1857	430.434	0.0063				
				1755	2.4001	0.64							
<b>WATERSHED CONDITIONS:</b> Vegetative cover: Approximately 33% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5%, interspersed by desert shrubs with a crown spread of about 5%.				1759	3.4501	0.87	1858	437.881	0.0081				
				1802	5.1997	1.13	1859	387.000	0.0098				
				1809	4.1142	1.61	1900	423.047	0.0118				
				1811	1.8005	1.67	1901	394.092	0.0135				
				1813	3.2993	1.78	1902	412.076	0.0151				
				1819	0.5000	1.83	1903	401.240	0.0167				
				1929	0.0086	1.84	1904	408.449	0.0187				
				1933	1.0500	1.91	1905	397.657	0.0203				
				1943	0.3600	1.97	1906	383.479	0.0219				
				2046	0.0381	2.01	1908	373.000	0.0253				
				2054	0.2250	2.04	1913	312.559	0.0326				
				2131	0.0486	2.07	1918	254.594	0.0386				
							1923	191.341	0.0436				
							1928	137.995	0.0471				
							1933	100.161	0.0496				
										1938	77.462	0.0516	
										1943	70.614	0.0532	
							1953	52.858	0.0559				
							1954	52.858	0.0561				
							1958	55.505	0.0570				
							2003	54.173	0.0582				
							2008	41.775	0.0593				
							2013	31.036	0.0601				
							2023	18.756	0.0612				
							2033	12.000	0.0619				
							2043	8.298	0.0623				
							2053	6.078	0.0626				
							2103	4.033	0.0628				
							2118	1.563	0.0630				
							2133	0.100	0.0631				

NOTES: To convert runoff in CFS to IN/88, multiply by 0.000259.

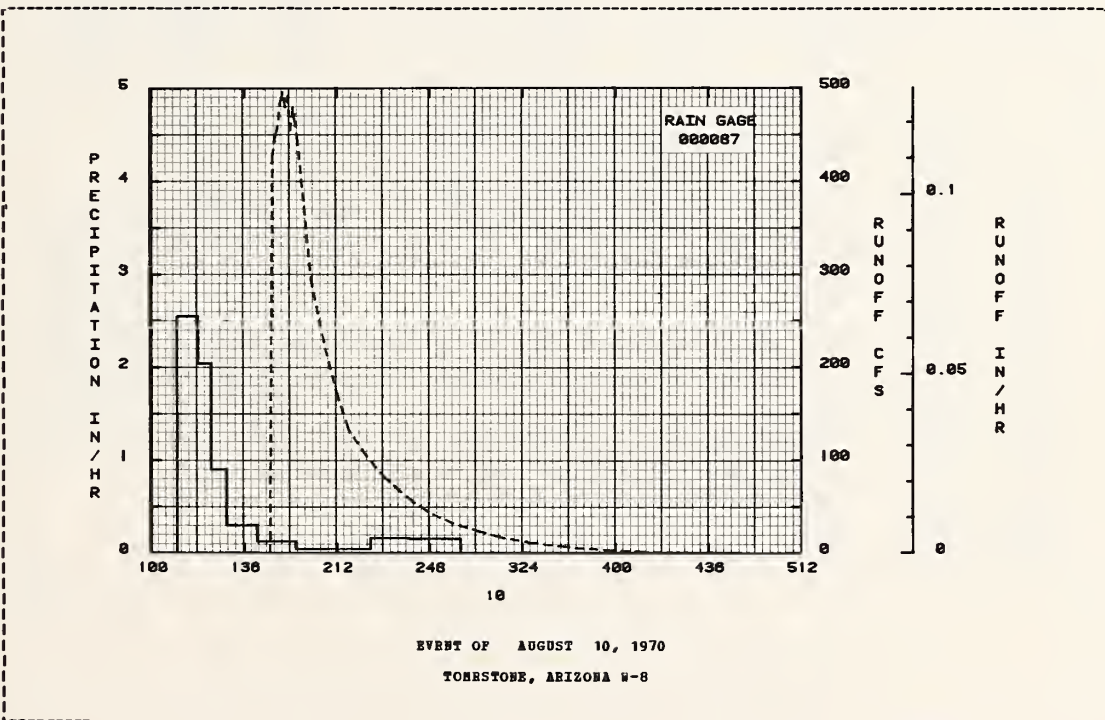
1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
			EVENT OF JULY 20, 1970 (CONTINUED)						2148	0.0	0.0631

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.000259.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date No-Day	Rainfall (inches)	Runoff (inches)	Date No-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date No-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 10, 1970										
8-10	0.0	0.0	8-10	110	0.0	0.0	8-10	146	0.0	0.0
				114	2.5500	0.17		147	427.112	0.0009
				118	2.5500	0.34		148	446.950	0.0027
				123	2.0400	0.51		149	459.063	0.0050
				129	0.9000	0.60		150	483.761	0.0069
				141	0.3000	0.66		151	496.344	0.0089
				156	0.1200	0.69		152	479.603	0.0109
				225	0.0414	0.71		153	492.134	0.0134
				240	0.1600	0.75		154	455.040	0.0153
				300	0.1500	0.80		155	479.603	0.0172
<b>WATERSHED CONDITIONS:</b> Vegetative cover: Approximately 33% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5%, interspersed by desert shrubs with a crown spread of about 5%.										
								156	459.063	0.0191
								157	438.961	0.0214
								202	294.540	0.0292
								207	227.123	0.0347
								212	171.569	0.0391
								217	130.000	0.0423
								222	110.071	0.0448
								227	91.963	0.0470
								232	77.194	0.0488
								237	65.259	0.0503
								242	54.424	0.0516
								247	44.669	0.0527
								257	31.582	0.0544
								307	23.152	0.0556
								317	15.893	0.0564
								327	10.885	0.0570
								342	6.000	0.0575
								357	2.849	0.0578
								412	1.000	0.0579
								432	0.0	0.0579

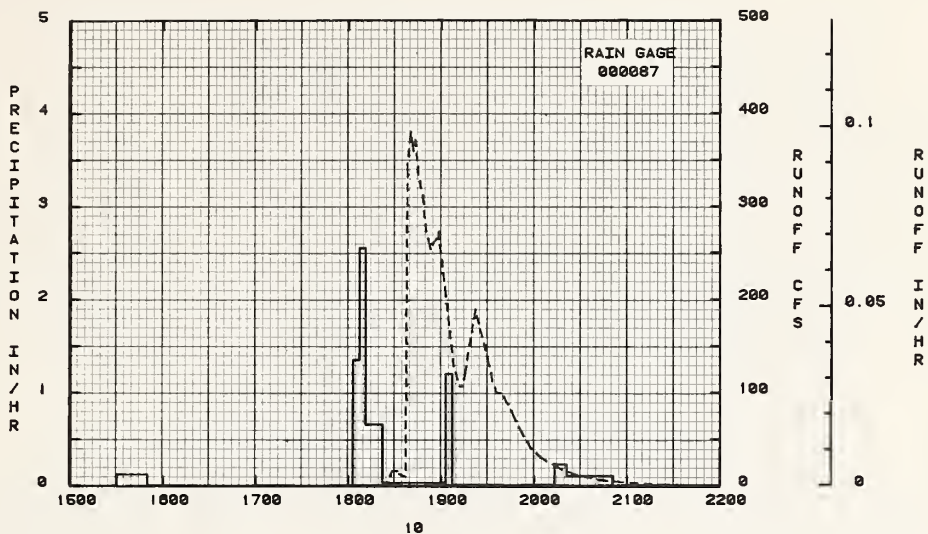
NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000259.



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-8							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 10, 1970										
8-10	EG 000087 0.80	0.058	8-10	EG 000087 1530	0.0	0.0	8-10	1823	0.0	0.0
				1550	0.1200	0.04		1825	3.890	0.0
				1803	0.0	0.04		1828	15.893	0.0001
				1807	1.3500	0.13		1832	15.292	0.0004
				1811	2.5500	0.30		1833	12.455	0.0005
WATERSHED CONDITIONS:				1822	0.6545	0.42		1837	9.417	0.0007
Vegetative cover: Approx-				1903	0.0293	0.44		1838	346.340	0.0016
imately 33% of the area is				1907	1.2000	0.52		1840	380.590	0.0045
dominated by desert shrubs				2013	0.0091	0.53		1842	358.969	0.0079
(whitethorn, creosotebush,				2021	0.2250	0.56		1843	371.854	0.0094
tarbush) with a crown spread										
of approximately 30% and an				2051	0.1000	0.61		1845	333.965	0.0126
understory of grasses with								1848	309.975	0.0165
less than 1% basal area.								1850	272.219	0.0191
The remaining 67% of the area								1853	253.742	0.0226
is dominated by grasses								1854	259.325	0.0236
(black grama, curly mesquite,										
sideoats grama) with a basal								1857	265.000	0.0270
area of about 2.5%, inter-								1858	272.219	0.0281
spersed by desert shrubs								1903	202.595	0.0331
with a crown spread of about								1908	127.924	0.0368
5%.								1912	106.305	0.0388
								1914	106.305	0.0397
								1916	127.924	0.0408
								1922	188.838	0.0428
								1931	127.924	0.0490
								1933	111.981	0.0500
								1936	98.990	0.0514
								1938	98.990	0.0523
								1940	95.441	0.0531
								1943	86.881	0.0543
								1948	69.605	0.0560
								1953	53.146	0.0574
								1958	39.109	0.0584
								2003	31.582	0.0592
								2008	25.840	0.0598
								2018	16.504	0.0607
								2028	10.885	0.0613
								2043	5.677	0.0618
								2058	3.097	0.0621
								2128	0.183	0.0623
								2146	0.0	0.0623

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.000259.





EVENT OF AUGUST 10, 1970  
TOMBSTONE, ARIZONA W-8

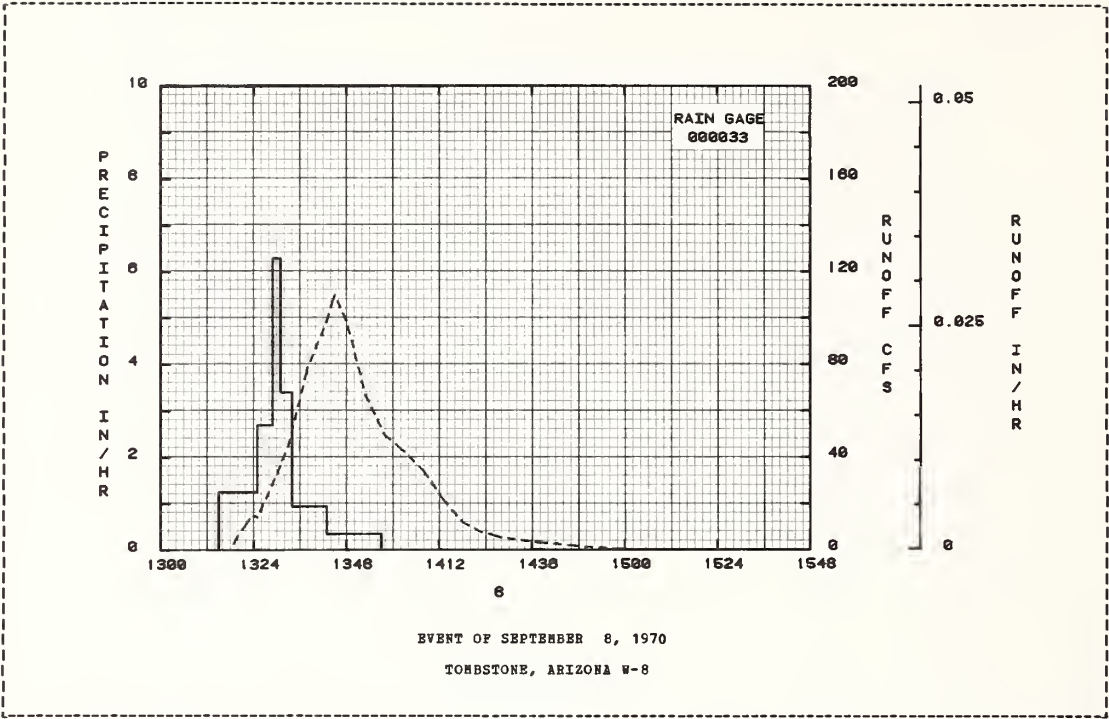
1970 SELECTED RUNOFF EVENT

TOMBSTONE, ARIZONA W-8

ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Rnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 8, 1970										
9- 8	RG 000033 0.0	0.0	9- 8	RG 000033 1315	0.0	0.0	9- 8	1317	0.0	0.0
				1325	1.2600	0.21		1318	0.306	0.0
				1329	2.7000	0.39		1320	6.387	0.0
				1331	6.2999	0.60		1323	13.556	0.0001
				1334	3.4000	0.77		1324	14.702	0.0002
				1343	0.9333	0.91		1325	14.124	0.0003
				1357	0.3429	0.99		1328	25.156	0.0006
								1333	44.669	0.0013
								1338	78.765	0.0027
								1343	98.990	0.0046
								1345	110.071	0.0056
								1348	98.990	0.0069
								1353	66.690	0.0087
								1358	49.413	0.0099
								1403	42.396	0.0109
								1408	33.860	0.0117
								1413	21.790	0.0123
								1418	11.920	0.0127
								1423	7.617	0.0129
								1428	5.361	0.0130
								1438	3.097	0.0132
								1448	1.534	0.0133
								1458	0.306	0.0133
								1508	0.031	0.0133
								1515	0.0	0.0133

WATERSHED CONDITIONS:  
Vegetative cover: Approximately 33% of the area is dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. The remaining 67% of the area is dominated by grasses (black grama, curly mesquite, sideoats grama) with a basal area of about 2.5%, interspersed by desert shrubs with a crown spread of about 5%.

NOTES: To convert runoff in cfs to in/hr, multiply by 0.000259.



TOMBSTONE, ARIZONA W-11

LOCATION: Cochise County; 4-1/3 miles northeast of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 2035.00 acres 3.18 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													TOMBSTONE, ARIZONA W-11
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	F 0.0	0.32	1.05	0.24	0.0	0.05	3.91	3.47	1.23	0.05	0.0	0.43	10.75
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.172	0.206	0.0	0.0	0.0	0.0	0.378
STA AV	F 0.35	0.79	0.82	0.18	0.15	0.03	2.60	4.10	1.06	0.11	0.33	0.50	11.02
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.120	0.144	0.019	0.0	0.0	0.0	0.283

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	7-20	0.240	7-20	0.121	7-20	0.128	7-24	0.128	7-24	0.128	7-23	0.128	8- 8	0.163	8- 7	0.174

MAXIMUMS FOR PERIOD OF RECORD														
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	9-11	0.520	9-10	0.620	9- 9	0.750	9- 9	0.770	9- 9	0.970	9- 9	0.970	9-10	1.460
	1964		1964		1964		1964		1964		1964		1964	1.700

NOTES: Watershed conditions: Approximately 20% of the area dominated by desert shrubs (whitethorn, creosotebush, tarbush) with a crown spread of approximately 30% and an understory of grasses with a basal area of less than 1%. The remaining 80% of the area supports a grass cover (black grama, curly mesquite, sideoats grama) with a basal cover of about 2.5% interspersed with desert shrubs averaging less than 5% crown. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 63.1-3. For geologic map (p. 63.1-4) and vegetation map (p.63.1-5) of foregoing reference. Precipitation Data: Records began 1963. Monthly totals are Thiessen weighted averages of 10 rain gages, station averages are for 3 yr (1968-70). Runoff Data: Records began 1963, station averages are based on 1966, 1968-70 data. Temperature Data: See table of daily maximum and minimum values included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

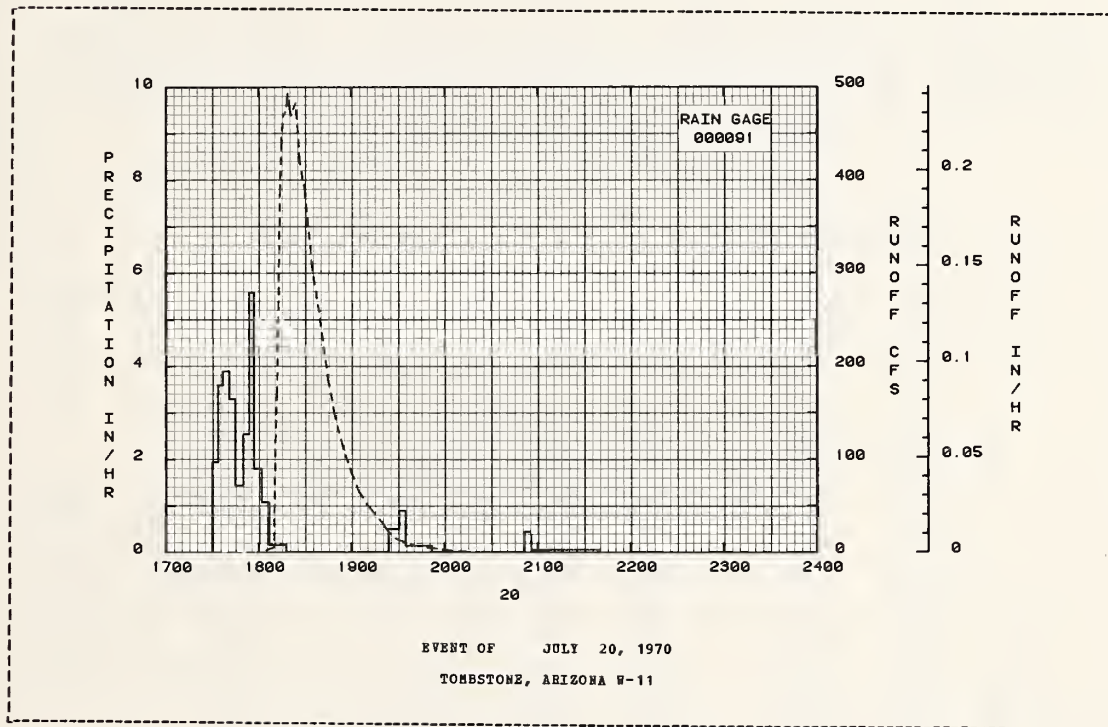
1970 DAILY PRECIPITATION (inches)													TOMBSTONE, ARIZONA W-11
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.34E	0.0	0.0	0.0	0.00	0.64	0.0	0.01	0.0	0.0	
2	0.0	0.0	0.22E	0.0	0.0	0.0	0.05	0.08	0.04E	0.04	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.06	0.21E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55E	0.0	0.0	0.0	
5	0.0	0.0	0.26E	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	
6	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.00	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.40	0.0	0.0	0.0	
10	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.20E	0.0	0.0	0.0	0.0	
11	0.0	0.30	0.04	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.26E	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.02	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.01	0.0	0.0	0.0	0.0	1.50	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	
28	0.0	0.0	0.0	0.0	0.0	0.01	0.64	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.00	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.32	1.05	0.24	0.0	0.05	3.91	3.47	1.23	0.05	0.0	0.43	
STA AV	0.35	0.79	0.82	0.18	0.15	0.03	2.60	4.10	1.06	0.11	0.33	0.50	

NOTES: Data are Thiessen weighted averages of 10 rain gages. STA AV are for 3 yr only (1968-70).



1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-11							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JULY 20, 1970 (CONTINUED)										
							7-20	2010	0.709	0.1280
								2020	0.151	0.1280
								2030	0.0	0.1280

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000487.



## TOMBSTONE, ARIZONA W-15

LOCATION: Cochise County; 3/4 miles east of Tombstone; Walnut Gulch, San Pedro River, Gila River, Colorado River Basin.

AREA: 5912.00 acres 9.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														TOMBSTONE, ARIZONA W-15
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.0	0.33	1.57	0.19	0.00	0.03	2.51	4.15	1.27	0.04	0.0	0.40	10.49
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.021	0.195	0.002	0.0	0.0	0.0	0.218
STA AV	P	0.45	0.58	0.54	0.14	0.17	0.12	3.67	3.50	1.29	0.06	0.27	1.28	12.06
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.024	0.134	0.020	0.0	0.0	0.0	0.179

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days				
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
		Maximum Volume for Selected Time Interval														
1970	8-17	0.145	8-17	0.080	8-17	0.100	8-17	0.120	8-17	0.121	8-16	0.177	8-16	0.181	8-10	0.184
MAXIMUMS FOR PERIOD OF RECORD																
	8-31 1963	0.181	8-19 1966	0.130	8-19 1966	0.170	8-19 1966	0.200	8-19 1966	0.200	8-19 1966	0.230	8-19 1966	0.250	8-19 1966	0.250

NOTES: Watershed conditions: Vegetative cover: Desert shrubs (whitethorn, creosotebush, tarbush) occupy 78% of the area with a crown spread of approximately 30% and an understory of grasses of less than 1% basal area. 22% of the area is in grass cover (black grama, tobosa grass, blue grama, sideoats grama, and curly mesquite grass) of approximately 2% basal area. For topographic, geologic, and vegetation maps, see pages 63.1-3, 63.1-4 and 63.1-5, respectively, of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pnh. 1226. Precipitation Data: Records began January 1965. Monthly totals Thiessen weighted averages of 15 rain gages. Runoff Data: Records began January 1965. Station averages for precipitation and runoff based on 1965-1970 record period. Temperature Data: For table of daily maximum and minimum values, see information included for Watershed 63.001. For long-time precipitation records, see National Weather Service records at Tombstone, Arizona.

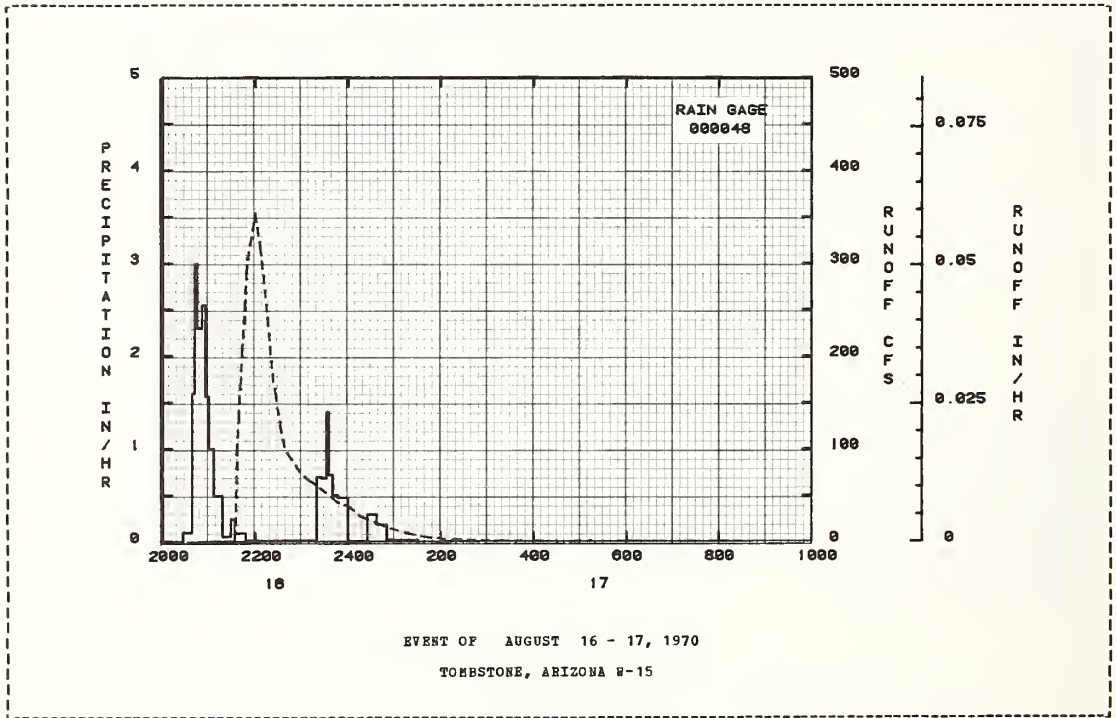
1970	DAILY PRECIPITATION (inches)												TOMBSTONE, ARIZONA W-15
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.35	0.0	0.0	0.0	0.00	0.51E	0.0	0.01	0.0	0.0	
2	0.0	0.0	0.40	0.0	0.0	0.0	0.01	0.39E	0.02	0.03	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33E	0.17E	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53E	0.0	0.0	0.0	
5	0.0	0.0	0.42E	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	
6	0.0	0.0	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.17	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.10	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.36	0.0	0.0	0.0	
10	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.51E	0.00	0.0	0.0	0.0	
11	0.0	0.28E	0.12E	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.00	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.99E	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.12	0.0	0.0	0.00	0.77E	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.06	0.0	0.0	0.01	0.00	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.16E	0.0	0.0	0.0	0.0	
20	0.0	0.02	0.0	0.0	0.0	0.0	0.45E	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.01	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.05	0.0	0.0	0.0	0.0	
23	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.00	0.0	0.06	0.0	0.0	0.0	0.0	0.39	
28	0.0	0.0	0.0	0.0	0.0	0.02	0.35	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.07E	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.74E	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.0	0.33	1.57	0.19	0.00	0.03	2.51	4.15	1.27	0.04	0.0	0.40	
STA AV	0.45	0.58	0.54	0.14	0.17	0.12	3.67	3.50	1.29	0.06	0.27	1.28	

NOTES: Data are Thiessen weighted averages of 15 rain gages. STA AV are based on 6 yr record period (1965-70).



1970 SELECTED RUNOFF EVENT				TOMBSTONE, ARIZONA W-15						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Rnnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 16 - 17, 1970 (CONTINUED)										
							8-16	2400	37.935	0.0551
							8-17	17	26.859	0.0566
								47	16.294	0.0584
								117	8.526	0.0594
								147	4.052	0.0599
								217	2.224	0.0602
								318	0.696	0.0604
								453	0.031	0.0605
								531	0.0	0.0605

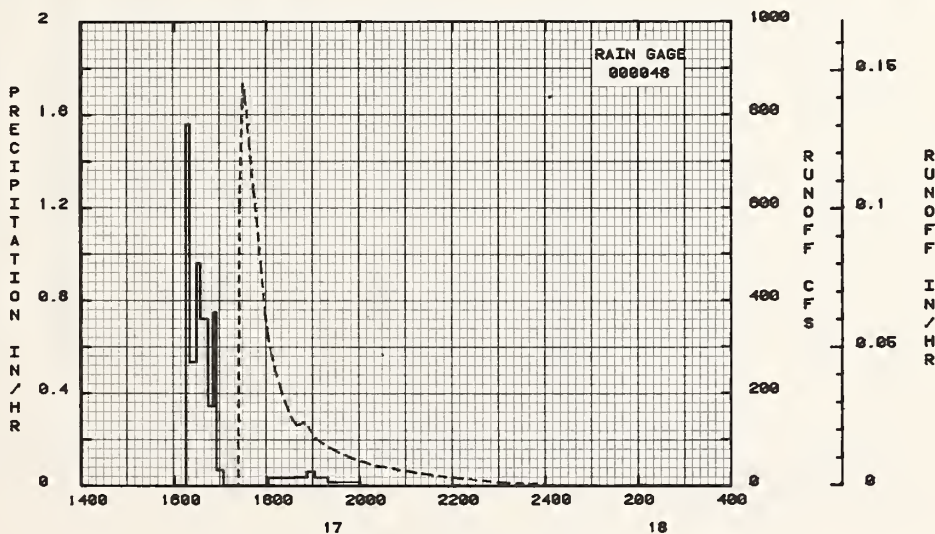
NOTES: To convert rnnoff in CFS to IN/HR, multiply by 0.000168.





1970 SELECTED RUNOFF EVENT			TOMBSTONE, ARIZONA W-15							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 17, 1970										
8-17	EG 000048 1.64	0.060	8-17	EG 000048 1615	0.0	0.0	8-17	1722	0.0	0.0
				1620	1.5601	0.13		1723	4.800	0.0
				1629	0.5334	0.21		1725	618.165	0.0016
				1634	0.9599	0.29		1728	818.808	0.0077
				1644	0.7200	0.41		1729	866.708	0.0099
WATERSHED CONDITIONS:										
Vegetative cover: Desert shrubs (whitethorn, creosote-bush, tarbush) occupy 78% of area with a crown spread of approximately 30% and an understory of grasses with less than 1% basal area. 22% of the area supports a grass cover (black grama, tobosa, blue grama, sideoats grama and curly mesquite) of approximately 2% basal area.										
				1651	0.3429	0.45		1731	850.601	0.0150
				1655	0.7500	0.50		1733	824.068	0.0194
				1704	0.0667	0.51		1738	725.418	0.0306
				1802	0.0	0.51		1743	637.062	0.0400
				1819	0.0353	0.52		1748	559.068	0.0482
				1836	0.0353	0.53		1753	459.436	0.0555
				1852	0.0375	0.54		1758	370.654	0.0612
				1902	0.0600	0.55		1803	312.506	0.0659
				1919	0.0353	0.56		1808	270.672	0.0701
				2001	0.0143	0.57		1813	235.531	0.0736
								1818	212.545	0.0767
								1823	182.168	0.0795
								1828	162.523	0.0819
								1833	144.111	0.0840
								1838	131.706	0.0860
								1841	131.706	0.0870
								1843	134.137	0.0878
								1846	136.594	0.0890
								1849	134.137	0.0902
								1854	126.916	0.0920
								1858	115.371	0.0933
								1903	102.316	0.0948
								1913	90.124	0.0975
								1923	80.614	0.0999
								1933	71.687	0.1020
								1953	57.068	0.1056
								2013	46.962	0.1085
								2034	39.159	0.1110
								2104	29.960	0.1139
								2134	22.102	0.1161
								2204	16.294	0.1177
								2304	5.620	0.1195
								2400	2.765	0.1202

NOTES: To convert runoff in CFS to IIN/HR, multiply by 0.000168.



EVENT OF AUGUST 17, 1970  
TOMBSTONE, ARIZONA W-15

## SANTA ROSA, NEW MEXICO WATERSHED W-1

LOCATION: Guadalupe and Quay Counties; 30 miles east of Santa Rosa; Alamogordo Creek, Tributary of Pecos River.

AREA: 42880.00 acres 67.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														SANTA ROSA, NEW MEXICO WATERSHED W-1														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.03	0.05	0.07	0.48	0.41	2.37	3.44	1.37	1.43	0.92	0.01	0.02	10.60														
	Q	0.0	0.0	0.0	0.0	0.0	0.327	0.063	0.004	0.000	0.0	0.0	0.0	0.093														
STA AV	P	0.24	0.18	0.38	0.68	1.37	1.88	3.59	2.19	1.45	1.38	0.22	0.17	13.73														
	Q	0.0	0.0	0.0	0.0	0.0	0.937	0.052	0.017	0.046	0.005	0.0	0.0	0.180														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
		Maximum Discharge				Maximum Volume for Selected Time Interval											
		Date	Date	1 Hour	2 Hours	6 Hours		12 Hours		1 Day		2 Days		8 Days			
		Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		
1970		7-23	0.015	7-23	0.014	7-23	0.023	7-23	0.041	7-23	0.045	7-23	0.046	7-23	0.046	7-17	0.046
MAXIMUMS FOR PERIOD OF RECORD																	
		5-29	0.034	5-29	0.031	5-29	0.053	5-29	0.096	5-29	0.108	5-29	0.110	6-1	0.110	6-5	0.122
		1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: Grazing land, about 75% of the area is grassland, vegetation consisting of blue grama, galleta, buffalo and ring shrub. Remaining 25% of area is pinon, juniper, and various shrubs, with some grasses interspersed. Monthly precipitation values are Thiessen weighted averages of 49 rain gages. For contour map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1969, DSDA Misc. Pub. 1370, p. 64.001-3. Precipitation and runoff records began in 1955. STA AV based on 3 yr (1968-70), previously published data are being reevaluated. For long-time precipitation records, see National Weather Service records at Santa Rosa, New Mexico.

1970 DAILY PRECIPITATION (inches)														SANTA ROSA, NEW MEXICO WATERSHED W-1													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.01S	0.0	0.0	0.0	0.0	0.47E	0.16E	0.02	0.0	0.0	0.0	0.0														
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.00	0.0	0.0														
3	0.0	0.0	0.0	0.00S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
4	0.0	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.04	0.22E	0.0	0.0	0.0														
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0														
6	0.0	0.0	0.0	0.0	0.0	0.29	0.01E	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.03S	0.01E	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.0	0.0	0.52E	0.35E	0.0	0.06S	0.0	0.0	0.00														
9	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0														
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00S	0.0	0.0	0.0														
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
12	0.0	0.0	0.0	0.0	0.0	0.0	0.56E	0.0	0.30	0.0	0.0	0.0	0.0														
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.42	0.0	0.0	0.0	0.0														
14	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.00	0.0	0.01H	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.02	0.23	0.39H	0.0	0.0	0.02H														
16	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.29	0.21H	0.0	0.0	0.00														
17	0.03	0.0	0.0	0.46E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00														
18	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0														
19	0.0	0.0	0.0	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0														
20	0.0	0.0	0.0	0.0	0.0	1.43E	0.00	0.70E	0.03	0.0	0.0	0.0	0.0														
21	0.0	0.04S	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0														
22	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.09	0.02	0.0	0.0	0.0														
23	0.0	0.0	0.0	0.0	0.0	0.46	1.28E	0.0	0.0	0.0	0.0	0.0	0.0														
24	0.0	0.0	0.0	0.0	0.0	0.02	0.01E	0.0	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
27	0.0	0.0	0.07S	0.0	0.25E	0.0	0.90E	0.0	0.0	0.04E	0.0	0.0	0.0														
28	0.0	0.0	0.0	0.0	0.02	0.00	0.01E	0.0	0.0	0.00	0.0	0.0	0.0														
29	0.0	0.0	0.0	0.0	0.0	0.17	0.04E	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
31	0.0	0.0	0.0	0.0	0.11	0.0	0.35E	0.04	0.0	0.0	0.0	0.0	0.0														
TOTAL	0.03	0.05	0.07	0.48	0.41	2.37	3.44	1.37	1.43	0.92	0.01	0.02	10.60														
STA AV	0.24	0.18	0.38	0.68	1.37	1.88	3.59	2.19	1.45	1.38	0.22	0.17	13.73														

NOTES: Daily values are Thiessen weighted average amounts from 49 rain gages. Precipitation records began in 1955. STA AV are based on 3 yr (1968-1970).

1970 MEAN DAILY DISCHARGE (cfs) SANTA ROSA, NEW MEXICO WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0 T	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	3.471	0.0	0.0	0.001	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	2.225E	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.002E	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	17.692E	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	6.919	0.0	0.395	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.027E	0.0	0.009	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0 E	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.093	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	25.590E	0.0	0.001	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	2.398E	0.0	6.157	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.009E	0.0	0.205E	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	18.143E	28.063	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	2.159	54.691E	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.043E	0.052E	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	1.6084	3.6500	0.2053	0.0173	0.0003	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.027	0.063	0.004	0.000	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.0	0.037	0.023	0.052	0.017	0.046	0.005	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000555. Runoff records began in 1955. STA AV based on 3 yr (1968-1970).

## NEWELL, SOUTH DAKOTA WATERSHED W-2

LOCATION: Butte Co., South Dakota, 33 mi. NE of Newell, Sand Creek, South Moreau River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-2	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.39	0.20	0.60	1.62	2.63	1.40	1.40	0.33	0.46	0.15	0.86	0.29	10.33
	Q	0.0	0.0	0.025	0.061	0.019	0.004	0.002	0.0	0.0	0.0	0.0	0.0	0.111
STA AV	P	0.21	0.24	0.44	1.13	2.06	3.21	1.89	0.99	1.01	0.38	0.32	0.26	12.15
	Q	0.007	0.062	0.142	0.019	0.086	0.083	0.143	0.0	0.007	0.0	0.0	0.0	0.551

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 19%; good - 64%; fair - 17%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.2-4. Precipitation from rain gage W-2A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.03S	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.06S	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.19	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.20	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.12S	0.0	0.0	0.0
8	0.0	0.0	0.03S	0.0	0.48	0.0	0.03	0.0	0.0	0.0	0.11S	0.0	0.0	0.0
9	0.0	0.0	0.08S	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16S
10	0.0	0.0	0.02S	0.0	0.66	0.11	0.0	0.0	0.0	0.0	0.04S	0.07S	0.0	0.0
11	0.0	0.0	0.0	0.83M	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.09M	0.0	0.87	0.0	0.0	0.0	0.09S	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.04	0.0	0.48	0.0	0.09S	0.0	0.15S	0.0	0.0	0.0
14	0.0	0.0	0.0	0.08S	0.09	0.0	0.0	0.0	0.05S	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.13S	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.02S	0.09S	0.04S	0.04S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.05S	0.01S	0.11S	0.24S	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.02S	0.0	0.0
19	0.03S	0.02S	0.02S	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.11	0.0	0.08	0.02	0.0	0.0	0.03S	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0
23	0.0	0.0	0.06S	0.03	0.0	0.0	0.76	0.0	0.06S	0.0	0.0	0.0	0.0	0.0
24	0.24S	0.0	0.0	0.0	0.07	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.17S	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	0.0
27	0.0	0.02S	0.20S	0.02	0.27	0.0	0.0	0.03	0.0	0.0	0.09S	0.0	0.0	0.0
28	0.0	0.06S	0.01S	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.39	0.20	0.60	1.62	2.63	1.40	1.40	0.33	0.46	0.15	0.86	0.29	10.33
STA AV		0.21	0.24	0.44	1.13	2.06	3.21	1.89	0.99	1.01	0.38	0.32	0.26	12.15

NOTES: Precipitation from rain gage W-2A. STA AV based on 13 yr (1958-70) record period.

1970		SPAN DAILY DISCHARGE (cfs)					NEWELL, SOUTH DAKOTA WATERSHED W-2					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.024	0.063	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.019	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.072	0.058	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0039	0.0098	0.0030	0.0006	0.0003	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.025	0.061	0.019	0.004	0.002	0.0	0.0	0.0	0.0	0.0
STA AV	0.007	0.062	0.142	0.019	0.086	0.083	0.143	0.0	0.007	0.0	0.0	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.20697.

## NEWELL, SOUTH DAKOTA WATERSHED W-5

LOCATION: Butte Co., South Dakota, 34 mi. NE of Newell, South Moreau River Watershed.

AREA: 46.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-5	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.48	0.43	1.01	2.15	3.63	1.31	1.24	0.41	0.65	0.27	1.22	0.70	13.50
	Q	0.0	0.023	0.033	0.106	0.175	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.337
STA AV	P	0.25	0.32	0.61	1.49	2.61	4.13	1.89	1.34	1.04	0.38	0.40	0.40	14.86
	Q	0.016	0.027	0.199	0.029	0.089	0.243	0.057	0.081	0.006	0.0	0.0	0.0	0.747

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 7%; good - 93%; Degree of grazing: moderate; Production of cover: 2163 pounds per acre of oven-dry material. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.5-4. Precipitation from rain gage W-5A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970	DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.04S	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.03S	0.0	0.0	0.0	0.0	0.04	0.15	0.0	0.0	0.0	0.0	0.0
3	0.03S	0.05S	0.0	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.07	0.14	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.05	0.0	0.23S	0.0	0.0	0.0
8	0.0	0.0	0.03S	0.0	0.70	0.0	0.0	0.0	0.03	0.0	0.12S	0.0	0.0	0.0
9	0.0	0.0	0.10S	0.0	0.40	0.07	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.30S
10	0.0	0.0	0.05S	0.02S	0.52	0.08	0.0	0.0	0.0	0.0	0.11S	0.0	0.0	0.23S
11	0.0	0.0	0.0	0.73S	0.21	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.23S	0.07	0.80	0.0	0.0	0.0	0.06S	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.18	0.0	0.47	0.0	0.11S	0.0	0.16S	0.0	0.0	0.0
14	0.0	0.03S	0.0	0.05S	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.02S	0.0	0.30S	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09S	0.0	0.0	0.0	0.0	0.0
17	0.0	0.12S	0.15S	0.20S	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02S	0.04S	0.13S	0.46S	0.0	0.0	0.0	0.0	0.0	0.0	0.10S	0.05S	0.0	0.0
19	0.10S	0.0	0.0	0.03S	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.01	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12S
23	0.0	0.0	0.13S	0.0	0.05	0.0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.26S	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0
25	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05S	0.21S	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16S	0.07S	0.0	0.0	0.0
27	0.02S	0.05S	0.0	0.13	0.13	0.0	0.0	0.0	0.0	0.0	0.22S	0.0	0.0	0.0
28	0.01S	0.12S	0.31S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.04S	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.48	0.43	1.01	2.15	3.63	1.31	1.24	0.41	0.65	0.27	1.22	0.70	
STA AV		0.25	0.32	0.61	1.49	2.61	4.13	1.89	1.34	1.04	0.38	0.40	0.40	

NOTES: Precipitation from rain gage W-5A. STA AV based on 13 yr (1958-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					NEWELL, SOUTH DAKOTA					WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.044	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.027	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.079	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.099	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.064	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0016	0.0021	0.0068	0.0109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INCHES	0.0	0.023	0.033	0.106	0.175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	0.016	0.027	0.199	0.029	0.389	0.243	0.057	0.081	0.006	0.0	0.0	0.0	

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.51743.

## NEWELL, SOUTH DAKOTA WATERSHED W-7

LOCATION: Butte Co., South Dakota, 35 mi. NE of Newell, Tributary Trail Creek, South Moreau Watershed.

AREA: 160.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-7	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.41	0.24	0.70	1.43	3.89	1.27	1.24	0.40	0.70	0.24	0.84	0.34	11.70
	Q	0.0	0.001	0.002	0.037	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.078
STA AV	P	0.22	0.27	0.56	1.24	2.46	3.65	1.80	1.20	0.95	0.36	0.37	0.33	13.41
	Q	0.021	0.016	0.152	0.019	0.033	0.394	0.028	0.015	0.002	0.0	0.0	0.0	0.380

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 82%; fair - 18%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.7-4. Precipitation from rain gage W-7A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.02S	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.04	0.16	0.0	0.0	0.0	0.0	0.0
3	0.02S	0.05S	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.10	0.14	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.07	0.0	0.0	0.21S	0.0	0.0
8	0.0	0.0	0.02S	0.0	1.01	0.0	0.0	0.0	0.03	0.0	0.0	0.15S	0.0	0.0
9	0.0	0.0	0.08S	0.0	0.11	0.05	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.17S
10	0.0	0.0	0.03S	0.02S	0.69	0.09	0.0	0.0	0.0	0.0	0.0	0.07S	0.0	0.07S
11	0.0	0.0	0.0	0.78S	0.02	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.07S	0.06	0.80	0.0	0.0	0.0	0.06S	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.12	0.0	0.50	0.0	0.09S	0.0	0.07S	0.0	0.0	0.0
14	0.0	0.03S	0.0	0.06S	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.01S	0.0	0.16S	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13S	0.0	0.0	0.0	0.0	0.0
17	0.0	0.06S	0.08S	0.14S	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02S	0.01S	0.08S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	0.0	0.03S	0.0
19	0.05S	0.0	0.0	0.02S	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.01	0.0	0.03	0.04	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07S
23	0.0	0.0	0.07S	0.0	0.15	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.25S	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.01S	0.0	0.0	0.0	0.0	0.0
25	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.14S	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12S	0.03S	0.0	0.0	0.0
27	0.02S	0.02S	0.0	0.02	0.18	0.0	0.0	0.0	0.0	0.0	0.09S	0.0	0.0	0.0
28	0.01S	0.06S	0.29S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.01S	0.0	0.0	3.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL		0.41	0.24	0.70	1.43	3.89	1.27	1.24	0.40	0.70	0.24	0.84	0.34	11.70
STA AV		0.22	0.27	0.56	1.24	2.46	3.65	1.80	1.20	0.95	0.36	0.37	0.33	13.41

NOTES: Precipitation from rain gage W-7A. STA AV based on 13 yr (1958-70) record period.



1970		MEAN DAILY DISCHARGE (cfs)					NEWELL, SOUTH DAKOTA WATERSHED #7					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.013	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.327	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.307	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.081	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.074	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.067	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0002	0.0004	0.0083	0.0082	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.001	0.002	0.037	0.038	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.021	0.016	0.152	0.019	0.033	0.094	0.028	0.015	0.002	0.0	0.0	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.14876.

## NEWELL, SOUTH DAKOTA WATERSHED W-12

LOCATION: Butte Co., South Dakota, 9 mi. East of Newell, Helle Fourche River Watershed.

AREA: 93.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)		NEWELL, SOUTH DAKOTA WATERSHED W-12												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
197J	P	0.17	0.18	0.49	2.04	3.92	0.92	1.40	0.40	0.78	0.53	0.87	0.20	11.90
	Q	0.0	0.040	0.0	0.169	0.800	0.0	0.0	0.0	0.004	0.023	0.0	0.0	1.036
STA AV	P	0.27	0.24	0.60	1.41	2.53	3.24	1.63	0.95	1.18	0.47	0.38	0.29	13.19
	Q	0.067	0.052	0.377	0.268	0.780	0.618	0.101	0.046	0.015	0.000	0.010	0.007	2.340

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 94%; fair - 6%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.12-4. Precipitation from rain gage W-12A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)		NEWELL, SOUTH DAKOTA WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.02S	0.0	0.0	0.02	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.04S	0.0	0.0	0.0
3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.035	0.0	0.10	0.05	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.31	0.13	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.22S	0.0	0.0	0.0
8	0.0	0.0	0.04S	0.0	0.93	0.0	0.03	0.0	0.0	0.0	0.12S	0.03S	0.0	0.0
9	0.0	0.0	0.09S	0.0	0.02	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07S
10	0.0	0.0	0.04S	0.11S	0.44	0.09	0.0	0.0	0.0	0.0	0.07S	0.08S	0.0	0.0
11	0.0	0.0	0.0	1.09S	0.0	0.16	0.08	0.0	0.0	0.0	0.01S	0.0	0.0	0.0
12	0.0	0.0	0.02S	0.10S	0.08	0.54	0.0	0.0	0.0	0.13S	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.36	0.0	0.50	0.0	0.19S	0.0	0.10S	0.0	0.0	0.0
14	0.0	0.01S	0.0	0.03S	0.50	0.0	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0
15	0.0	0.02S	0.0	0.11S	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.09S	0.10S	0.16S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.02S	0.0	0.03S	0.20S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S
19	0.07S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04S	0.0	0.0
22	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.05S	0.0	0.02S	0.0	0.02	0.0	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0
25	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06S	0.18S	0.0	0.0	0.0
26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.22S	0.0	0.0	0.0	0.0
27	0.0	0.0	0.01S	0.0	0.03	0.0	0.0	0.0	0.0	0.12S	0.09S	0.0	0.0	0.0
28	0.0	0.0	0.09S	0.05	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.19	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.17	0.18	0.49	2.04	3.92	0.92	1.40	0.40	0.78	0.53	0.87	0.20	11.90	
STA AV	0.27	0.24	0.60	1.41	2.53	3.24	1.63	0.95	1.18	0.47	0.38	0.29	13.19	

NOTES: Precipitation from rain gage W-12A. STA AV based on 13 yr (1958-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)										
NEWELL, SOUTH DAKOTA WATERSHED W-12												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.045	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.333	0.023	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.325	0.0	0.0	0.0	0.0	0.0	0.042	0.0
9	0.0	0.0	0.0	0.0	0.227	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.431	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.253	0.265	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	1.584	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.015	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.125	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0054	0.0	0.0213	0.0976	0.0	0.0	0.0	0.0	0.0005	0.0029	0.0
INCHES	0.0	0.040	0.0	0.169	0.800	0.0	0.0	0.0	0.0	0.004	0.023	0.0
STA AV	0.067	0.052	0.377	0.268	0.780	0.618	0.101	0.046	0.015	0.000	0.010	0.007

NOTES: STA AV based on 13 yr (1968-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.26446.

## NEWELL, SOUTH DAKOTA WATERSHED W-13

LOCATION: Meade Co., South Dakota, 26 mi. East of Newell, South Fork Sulphur Creek, Cheyenne River Watershed.

AREA: 160.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-13		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 0.23	0.19	0.53	1.86	3.29	1.04	1.01	1.46	0.80	0.50	0.82	0.24	11.57		
	Q 0.0	0.015	0.015	0.568	0.417	0.0	0.006	0.003	0.014	0.002	0.010	0.0	1.050		
STA AV	P 0.23	0.25	0.47	1.25	2.43	3.23	1.54	1.06	0.88	0.41	0.32	0.30	12.39		
	Q 0.0	0.059	0.241	0.092	0.319	0.286	0.001	0.000	0.001	0.000	0.001	0.0	1.001		

NOTES: Watershed conditions: 100% rangeland; Condition classes: excellent - 8%; good - 67%; fair - 25%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 65.13-4. Thiessen weighted precipitation from gages W-13B and W-13C. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970	DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-13	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0	
2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	
3	0.0	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.78	0.09	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.06	0.0	0.30S	0.0	0.0	
8	0.0	0.0	0.02S	0.0	1.09	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	
9	0.0	0.0	0.06S	0.0	0.06	0.01	0.0	0.0	0.05	0.0	0.0	0.13S	0.0	
10	0.0	0.0	0.0	0.10	0.36	0.36	0.0	0.0	0.0	0.0	0.06S	0.06S	0.0	
11	0.0	0.0	0.0	0.91	0.02	0.18	0.03	0.03	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.02S	0.09	0.03	0.70	0.0	0.0	0.0	0.15S	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.12	0.0	0.07S	0.0	0.0	
14	0.0	0.0	0.0	0.08	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.03S	0.0	0.15	0.0	0.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.02S	
17	0.0	0.07S	0.10S	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	
18	0.04S	0.01S	0.02S	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.07S	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.17S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10S	0.19S	0.0	0.0	
26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.21S	0.04S	0.0	0.0	
27	0.0	0.0	0.0	0.02	0.03	0.0	0.0	0.0	0.0	0.0	0.11S	0.0	0.0	
28	0.0	0.02S	0.15S	0.05	0.16	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.05S	0.04S	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.23	0.19	0.53	1.86	3.29	1.04	1.01	1.46	0.80	0.50	0.82	0.24	11.57	
STA AV	0.23	0.25	0.47	1.25	2.43	3.23	1.54	1.06	0.88	0.41	0.32	0.30	12.39	

NOTES: Thiessen weighted precipitation from gages W-13B and W-13C. STA AV based on 13 yr (1958-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)										NEWELL, SOUTH DAKOTA WATERSHED W-13											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0											
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.047	0.0	0.0	0.0											
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
6	0.0	0.0	0.0	0.639	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0											
7	0.0	0.0	0.101	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.027	0.0											
8	0.0	0.0	0.0	0.0	1.022	0.0	0.0	0.0	0.0	0.0	0.020	0.0											
9	0.0	0.0	0.0	0.0	0.713	0.0	0.0	0.0	0.013	0.0	0.0	0.0											
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0											
11	0.0	0.0	0.0	0.0	0.592	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0											
13	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.020	0.0	0.0	0.0											
14	0.0	0.0	0.0	0.0	0.457	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
23	0.0	0.0	0.0	1.620	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0											
24	0.0	0.0	0.0	1.035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
25	0.0	0.0	0.0	0.524	0.0	0.0	0.0	0.0	0.0	0.007	0.0	0.0											
26	0.0	0.101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
29	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
MEAN	0.0	0.0036	0.0033	0.1273	0.0904	0.0	0.0013	0.0007	0.0031	0.0004	0.0022	0.0											
INCHES	0.0	0.015	0.015	0.568	0.417	0.0	0.006	0.003	0.014	0.002	0.010	0.0											
STA AV	0.0	0.059	0.241	0.092	0.319	0.286	0.001	0.000	0.001	0.000	0.001	0.0											

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.14876.

## NEWELL, SOUTH DAKOTA WATERSHED W-14

LOCATION: Rutte Co., South Dakota, 16 mi. SE of Newell, Belle Fourche River Watershed.

AREA: 35.00 acres

		MONTHLY PRECIPITATION AND RUNOFF (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-14		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P	0.58	0.19	1.10	3.18	2.78	1.26	0.68	0.27	1.03	0.53	1.31	0.51	13.42		
	Q	0.0	0.140	0.0	0.739	0.173	0.005	0.0	0.0	0.0	0.013	0.0	1.070			
STA AV	P	0.40	0.34	0.71	1.81	2.34	3.05	1.93	0.97	1.10	0.49	0.45	0.43	14.02		
	Q	0.071	0.050	0.253	0.194	0.241	0.294	0.145	0.016	0.007	0.0	0.008	0.0	1.280		

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 54%; fair - 46%; Degree of grazing moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 65.14-4. Precipitation from rain gage W-14A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970		DAILY PRECIPITATION (inches)												NEWELL, SOUTH DAKOTA WATERSHED W-14	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.12S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.07S	0.0	0.0	0.0	
3	0.0	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.03	0.0	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.08S	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.18	0.03S	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.07	0.0	0.22S	0.0	0.0	0.0	
8	0.0	0.0	0.07S	0.0	0.44	0.0	0.03	0.0	0.0	0.0	0.15S	0.0	0.0	0.0	
9	0.0	0.0	0.25S	0.0	0.11	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.10S	
10	0.0	0.0	0.10S	0.18S	0.30	0.10	0.0	0.0	0.0	0.0	0.06S	0.29S			
11	0.0	0.0	0.05S	1.22S	0.05	0.09	0.10	0.0	0.0	0.08S	0.04S	0.0	0.0	0.0	
12	0.0	0.0	0.03S	0.20S	0.05	1.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.20	0.0	0.02	0.0	0.15S	0.0	0.26S	0.0	0.0	0.0	
14	0.0	0.05S	0.0	0.05S	0.63	0.0	0.0	0.0	0.10S	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.03S	0.0	0.32S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.01S	0.07S	0.23S	0.18S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.06S	0.03S	0.03S	0.53S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0	0.0	0.0	
20	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08S	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	
24	0.09S	0.0	0.10S	0.0	0.05	0.0	0.0	0.0	0.18S	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05S	0.05S	0.0	0.0	0.0	
26	0.0	0.0	0.10S	0.0	0.0	0.0	0.0	0.0	0.0	0.16S	0.22S	0.0	0.0	0.0	
27	0.07S	0.0	0.14S	0.0	0.0	0.0	0.0	0.0	0.0	0.15S	0.18S	0.0	0.0	0.0	
28	0.03S	0.0	0.0	0.30	0.0	0.0	0.05	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.20	0.68	0.0	0.0	0.0	0.0	0.04S	0.03S	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.58	0.19	1.10	3.18	2.78	1.26	0.68	0.27	1.03	0.53	1.31	0.51	13.42		
STA AV	0.40	0.34	0.71	1.81	2.34	3.05	1.93	0.97	1.10	0.49	0.45	0.43	14.02		

NOTES: Precipitation from rain gage W-14A. STA AV based on 13 yr (1958-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) NEWELL, SOUTH DAKOTA WATERSHED W-14												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.134	0.057	0.0	0.0	0.0	0.0	0.0	0.003T	0.0
12	0.0	0.0	0.0	0.059	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.010	0.197	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.081	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.415	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.016	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0074	0.0	0.0362	0.0082	0.0002	0.0	0.0	0.0	0.0	0.0006	0.0
INCHES	0.0	0.140	0.0	0.739	0.173	0.005	0.0	0.0	0.0	0.0	0.013	0.0
STA AV	0.071	0.050	0.253	0.194	0.241	0.294	0.145	0.016	0.007	0.0	0.008	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.68005.

## NEWELL, SOUTH DAKOTA WATERSHED W-15

LOCATION: Butte Co., South Dakota, 16 mi. SE of Newell, Belle Fourche River Watershed.

AREA: 115.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-15	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.39	0.15	0.66	2.56	2.59	1.05	0.76	0.30	0.95	0.48	1.00	0.30	11.19
	Q	0.0	0.032	0.0	1.203	0.293	0.014	0.0	0.012	0.0	0.010	0.0	1.564	
STA AV	P	0.41	0.29	0.67	1.78	2.40	3.07	2.00	0.95	1.08	0.52	0.43	0.37	13.95
	Q	0.059	0.021	0.131	0.232	0.319	0.249	0.155	0.007	0.008	0.0	0.008	0.0	1.190

NOTES: Watershed conditions: 100% rangeland; Condition classes: good - 41%; fair - 59%; Degree of grazing: moderate. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub 945, p. 65.15-4. Precipitation from rain gage W-15A. Precipitation and runoff records began January 1958. Precipitation and runoff STA AV based on 13 yr (1958-70) record period. For long-time precipitation records, see National Weather Service records at Newell, South Dakota.

1970 DAILY PRECIPITATION (inches)													NEWELL, SOUTH DAKOTA WATERSHED W-15	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.07S	0.0		
3	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.10	0.0	0.0	0.0	0.0		
6	0.07S	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.18	0.03S	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08	0.0	0.22S	0.0		
8	0.0	0.0	0.07S	0.0	0.42	0.0	0.03	0.0	0.0	0.0	0.10S	0.0		
9	0.0	0.0	0.10S	0.0	0.12	0.01	0.01	0.0	0.0	0.0	0.0	0.05S		
10	0.0	0.0	0.07S	0.35S	0.42	0.08	0.0	0.0	0.0	0.0	0.06S	0.09S		
11	0.0	0.0	0.03S	1.04S	0.02	0.20	0.19	0.0	0.0	0.08S	0.02S	0.0		
12	0.0	0.0	0.04S	0.12S	0.02	0.76	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.12	0.0	0.02	0.0	0.13S	0.0	0.16S	0.0		
14	0.0	0.03S	0.0	0.05S	0.64	0.0	0.0	0.0	0.02S	0.0	0.0	0.0		
15	0.0	0.02S	0.0	0.17S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.01S	0.07S	0.10S	0.11S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.06S	0.01S	0.05S	0.47S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0		
20	0.06S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0		
22	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.12S		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.02S		
24	0.08S	0.0	0.06S	0.0	0.02	0.0	0.0	0.0	0.18S	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03S	0.19S	0.0		
26	0.0	0.0	0.05S	0.0	0.0	0.0	0.0	0.0	0.0	0.13S	0.02S	0.0		
27	0.03S	0.0	0.09S	0.0	0.0	0.0	0.0	0.0	0.0	0.15S	0.11S	0.0		
28	0.03S	0.0	0.0	0.10	0.0	0.0	0.03	0.0	0.0	0.02S	0.03S	0.0		
29	0.0	0.0	0.0	0.15	0.60	0.0	0.0	0.0	0.0	0.04S	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL		0.39	0.15	0.66	2.56	2.59	1.05	0.76	0.30	0.95	0.48	1.00	0.30	
STA AV		0.41	0.29	0.67	1.78	2.40	3.07	2.00	0.95	1.08	0.52	0.43	0.37	

NOTES: Precipitation from rain gage W-15A. STA AV based on 13 yr (1958-70) record period.



1970		MEAN DAILY DISCHARGE (cfs)					NEWELL, SOUTH DAKOTA WATERSHED #15					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.010	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	1.237	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.285	0.0	0.068	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.068	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.024	1.261	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.058	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.116	0.0	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.338	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.111	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.053	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	2.227	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.570	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.435	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0055	0.0	0.1937	0.0457	0.0023	0.0	0.0	0.0019	0.0	0.0016	0.0
INCHES	0.0	0.032	0.0	1.203	0.293	0.014	0.0	0.0	0.012	0.0	0.010	0.0
STA AV	0.059	0.021	0.131	0.232	0.319	0.249	0.155	0.007	0.308	0.0	0.008	0.0

NOTES: STA AV based on 13 yr (1958-70) record period. To convert mean daily discharge in CFS to IN/DAY, multiply by 0.20697.

NORTH DANVILLE, VERMONT WATERSHED W-1

LOCATION: Caledonia County, Vermont, 5 mi. NW of St. Johnshury; Sleepers River, Connecticut River Basin.

AREA: 10611.20 acres 16.58 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													NORTH DANVILLE, VERMONT WATERSHED W-1		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970 P	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	44.88		
Q	0.983	2.037	0.850	6.376	2.594	0.912	0.423	0.175	0.222	0.308	0.526	0.593	16.000		
STA AV P	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	45.31		
Q	0.879	0.901	1.559	6.296	2.667	0.981	0.537	0.451	0.407	1.186	1.538	1.318	18.719		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge	Maximum Volume for Selected Time Interval													
		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970 4-24	0.045	4-24	0.045	4-24	0.089	4-24	0.252	4-24	0.435	4-24	0.651	4-24	0.979	4-21	2.682

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
10-24 1959	0.100	10-24 1959	0.100	10-24 1959	0.200	10-24 1959	0.500	10-24 1959	0.780	10-24 1959	1.150	10-24 1959	1.450	4-12 1960	3.860

NOTES: Watershed conditions: Predominately hardwood forest, 64%; cultivated-16% in long hay rotations and about 1% in row crops, total 17%; pasture, largely bluegrass 15%; idle land in grass and woody plants, 3%; and homesites and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1956-59, USDA Misc. Pub. 945, p. 67.1-4. Precipitation records began January 1, 1959. Runoff records began October 1959. Part year values not included in STA AV. For long-time precipitation records, see National Weather Service records at St. Johnshury, Vt.

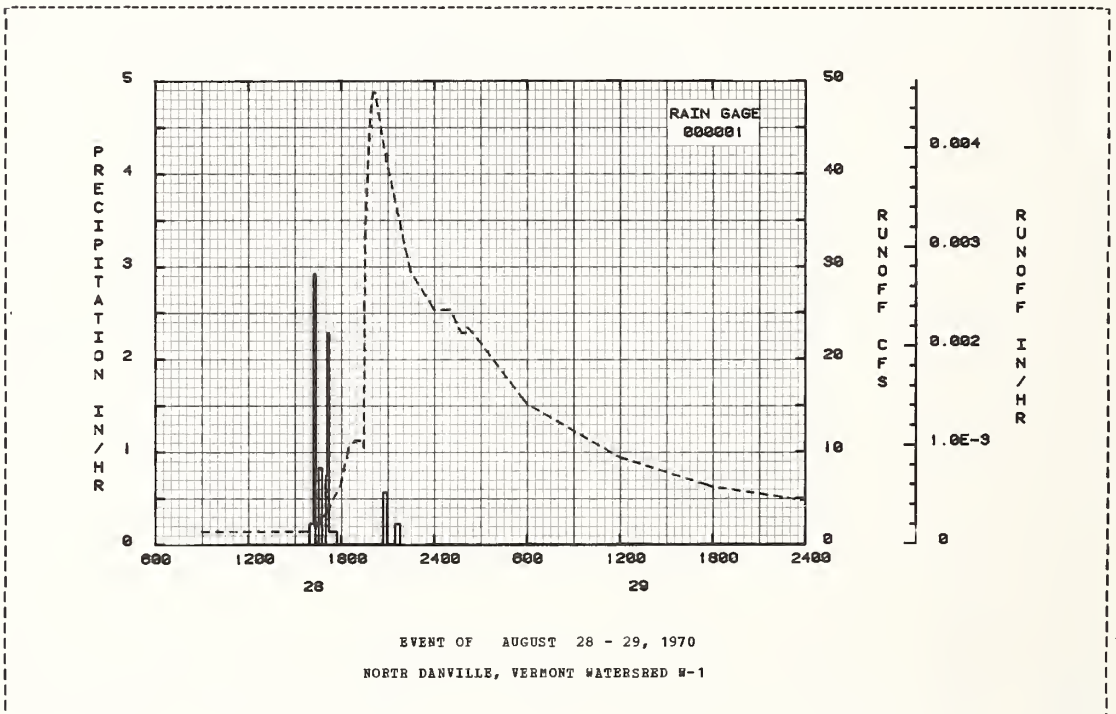
1970 DAILY AIR TEMPERATURE (degrees F)														NORTH DANVILLE, VERMONT WATERSHED W-1		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min	max min			
1	12 -9	40 10	26 14	40 14	84 51	81 65	76 52	79 62	56 40	54 35	58 30	39 22				
2	10 -12	42 22	32 14	34 27	74 46	86 62	62 58	83 60	62 40	53 34	66 34	56 36				
3	14 -10	40 10	30 6	34 24	46 32	74 51	76 58	74 55	60 32	61 46	50 28	45 30				
4	10 -14	10 -20	33 -2	34 18	62 27	86 46	74 62	66 47	76 54	52 34	53 28	34 12				
5	6 -18	12 -21	31 24	32 11	66 40	68 48	70 56	72 42	70 54	49 30	41 30	25 11				
6	17 0	32 11	24 20	38 4	40 28	62 50	76 53	76 50	56 51	59 24	42 32	23 14				
7	12 -8	31 8	32 15	42 25	40 26	68 48	79 47	78 46	60 50	72 50	51 28	13 -2				
8	12 -15	37 8	25 8	52 24	55 34	80 46	82 52	82 48	60 48	76 46	46 22	11 -6				
9	10 -8	34 7	20 5	58 33	60 44	82 51	84 58	84 49	57 49	77 44	49 18	23 2				
10	7 2	37 29	21 8	38 27	79 41	82 50	81 58	86 53	67 56	72 43	48 32	30 15				
11	5 -14	42 20	25 17	30 20	70 52	80 56	80 62	79 52	64 42	58 54	54 49	16 0				
12	5 -18	18 0	33 20	40 26	62 43	70 45	74 49	76 60	70 36	64 56	51 41	12 -6				
13	7 1	5 -13	30 20	44 25	65 43	60 37	70 46	85 54	71 42	62 56	50 40	20 9				
14	1 -8	11 -17	30 20	56 20	60 41	72 32	76 44	86 56	61 42	70 58	43 38	20 11				
15	4 -13	18 -10	25 6	52 24	61 30	77 38	72 60	88 58	47 43	61 46	38 32	18 -7				
16	8 -17	20 2	26 -2	58 24	57 46	76 46	74 62	88 58	70 46	45 30	34 22	17 -11				
17	27 11	29 -4	32 16	59 39	50 44	78 51	79 56	78 60	60 40	34 28	38 25	29 12				
18	14 -15	35 9	44 9	41 28	53 43	76 62	77 54	70 50	54 48	52 29	38 28	24 17				
19	1 -20	31 -2	48 10	40 23	70 44	76 55	70 42	78 42	66 43	45 24	45 33	30 18				
20	10 -24	18 -10	46 15	37 20	64 42	54 48	76 56	73 61	72 42	52 18	52 42	28 8				
21	-2 -12	20 4	34 30	40 30	70 35	70 45	68 53	70 53	69 42	52 26	52 41	14 -14				
22	1 -18	34 8	44 28	46 32	70 44	70 48	72 45	69 45	84 61	56 44	49 38	4 -20				
23	4 -22	25 -2	34 28	42 28	60 41	74 46	84 48	60 54	72 52	58 50	50 13	18 4				
24	10 -10	20 -2	38 28	42 36	54 36	82 44	86 51	69 48	72 48	56 49	20 7	23 8				
25	14 -2	26 -4	36 24	50 30	46 34	62 44	88 56	73 48	81 58	50 44	24 14	19 -6				
26	26 11	4 -17	38 16	68 26	60 43	68 35	84 64	80 52	76 52	50 40	28 8	21 10				
27	22 6	19 -15	36 28	75 35	60 41	54 45	88 60	68 48	64 40	50 24	33 24	17 13				
28	27 4	30 13	38 16	72 36	58 36	67 39	88 59	71 48	54 33	54 18	34 32	12 8				
29	44 27	24 10	70 40	69 29	72 38	85 64	68 51	50 41	54 20	34 32	14 4					
30	30 -4	33 6	72 36	75 38	62 56	88 60	65 41	50 36	52 20	39 32	9 2					
31	21 -10	36 8		84 43		80 68	62 48					24 0				
AV.	13 -7	24 1	33 15	46 25	62 39	69 46	78 55	75 52	62 44	57 37	42 28	22 6				
MEAN	2.5	12.4	23.8	35.9	50.7	57.8	66.7	63.5	53.1	46.7	35.2	14.3				
STA AV	22 3	23 3	34 15	46 27	58 37	71 46	74 52	72 49	64 42	53 34	38 23	24 9				

NOTES: Temperature data is from R-12 station. Readings taken daily from hygrothermograph charts. STA AV based on 1960-70 record period.



1970 SELECTED RUNOFF EVENT			NORTH DANVILLE, VERMONT WATERSHED W-1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 28 - 29, 1970										
8-28	RG 000001 0.0	0.001	8-28	RG 000001 1557	0.0	0.0	8-28	900	1.421	0.0
				1613	0.2250	0.06		1559	1.421	0.0009
				1621	2.9250	0.45		1637	2.511	0.0010
				1634	0.0	0.45		1706	3.587	0.0011
				1647	0.8308	0.63		1758	6.478	0.0015
WATERSHED CONDITIONS:				1700	0.0	0.63		1829	10.465	0.0019
Forest land, 64%; hay, 16%;				1708	0.7501	0.73		1852	11.244	0.0023
pastured land, 15%; idle				1713	2.2802	0.92		1914	11.244	0.0027
land with dense grass and				1744	0.1355	0.99		1928	10.465	0.0029
brush growth, 3%; seeded to				2042	0.0	0.99		1932	33.139	0.0030
corn, 1%; and homesites, 1%.				2058	0.5625	1.14		1951	45.911	0.0042
				2129	0.0	1.14		2002	48.774	0.0050
				2148	0.2210	1.21		2011	48.774	0.0057
								2055	41.372	0.0088
								2228	29.431	0.0139
								2400	25.330	0.0178
							8-29	101	25.330	0.0202
								146	22.801	0.0219
								200	22.801	0.0224
								209	23.418	0.0227
								230	22.801	0.0235
								559	15.184	0.0297
								1200	9.359	0.0366
								1759	6.197	0.0409
								2400	4.666	0.0440

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000935. For 30-day antecedent rainfall and runoff, see tables of daily values.

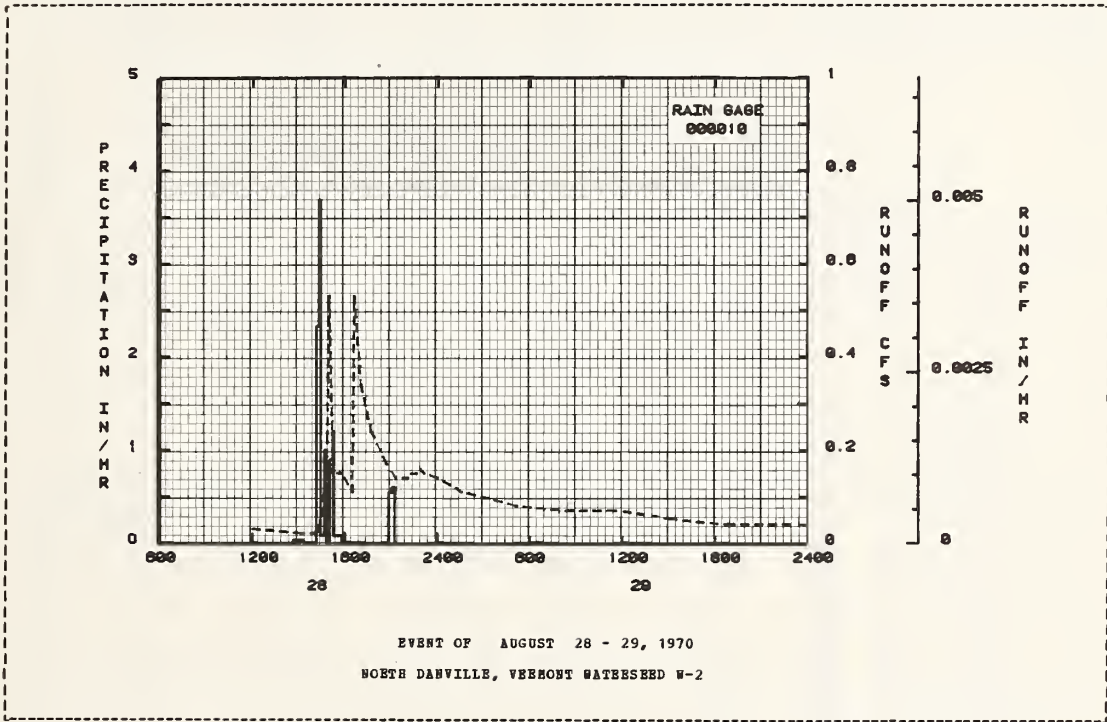






1970 SELECTED RUNOFF EVENT			NORTH DANVILLE, VERMONT WATERSHED W-2								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 28 - 29, 1970 (CONTINUED)											
									2400	0.044	0.0214

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.006793. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



## NORTH DANVILLE, VERMONT WATERSHED W-3

LOCATION: Caledonia County, Vermont; 7.5 mi. NW of St. Johnsbury; Pope Brook, Sleepers River, Connecticut River Basin.

AREA: 2067.00 acres 3.23 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													NORTH DANVILLE, VERMONT WATERSHED W-3			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	44.84		
	Q	1.269	1.597	1.199	6.450	3.425	1.392	0.753	0.547	0.589	0.669	0.781	0.799	19.469		
STA AV	P	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	45.31		
	Q	1.031	0.931	1.542	6.720	3.789	1.540	0.922	0.805	0.697	1.167	1.516	1.344	22.004		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	4-24	0.042	4-24	0.041	4-24	0.081	4-24	0.224	4-24	0.387	4-24	0.614	4-24	0.991	4-21	3.007
MAXIMUMS FOR PERIOD OF RECORD																
	5-20	0.076	4-21	0.070	4-21	0.130	4-14	0.320	4-14	0.590	4-15	1.080	4-16	1.860	4-20	4.440
	1969		1963		1963		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Forest, predominantly hardwoods, 67%; pasture of mostly bluegrass, 19%; cultivated land consisting of clover, orchard grass, and timothy hay with very small area in row crops, 11%; and idle land in tall grasses and woody plants, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pub. 994, p. 67.3-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970	DAILY PRECIPITATION (inches)												NORTH DANVILLE, VERMONT WATERSHED W-3
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.13	0.0	1.44	0.12	0.02	0.0	0.0	
2	0.0	0.77	0.08	1.59	0.09	0.0	0.15	0.21	0.0	0.0	0.0	0.08	
3	0.0	0.70	0.0	0.56	0.37	0.09	0.0	0.26	0.42	0.43	0.0	0.0	
4	0.0	0.29	0.11	0.0	0.0	0.0	0.47	0.0	0.53	0.05	0.0	1.24	
5	0.01	0.0	0.11	0.0	0.19	0.85	0.02	0.0	0.40	0.06	0.0	0.10	
6	0.03	0.0	0.0	0.0	0.22	0.18	0.02	0.0	0.34	0.0	0.14	0.39	
7	0.0	0.0	0.05	0.0	0.17	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
8	0.02	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
9	0.12	0.0	0.02	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.85	
10	0.08	0.05	0.12	0.0	0.42	0.0	0.09	0.04	0.17	0.0	0.05	0.06	
11	0.04	0.71	0.10	0.0	0.45	0.25	0.06	0.01	0.0	0.11	0.36	0.0	
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.12	0.02	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.0	0.31	
14	0.06	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.05	0.09	
15	0.0	0.45	0.09	0.0	0.0	0.0	0.0	0.0	0.30	0.63	0.64	0.03	
16	0.0	0.04	0.01	0.0	0.05	0.0	0.20	0.0	0.19	0.13	0.01	0.0	
17	0.05	0.0	0.0	0.36	1.17	0.0	0.02	0.0	0.05	0.05	0.02	0.73	
18	0.09	0.0	0.0	0.08	0.0	0.13	0.71	0.0	0.0	0.13	0.0	0.08	
19	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.21	
20	0.0	0.0	0.30	0.22	0.0	0.0	0.0	0.54	0.0	0.0	0.22	0.09	
21	0.05	0.05	0.46	0.26	0.0	0.0	0.0	0.14	0.0	0.0	0.39	0.05	
22	0.01	0.11	0.08	0.0	0.51	0.09	0.0	0.0	0.30	0.19	0.04	0.51	
23	0.07	0.11	0.23	0.0	0.0	0.0	0.0	1.25	0.05	0.52	0.32	0.03	
24	0.0	0.09	0.21	1.29	0.0	0.0	0.0	0.01	0.0	0.05	0.02	0.73	
25	0.08	0.24	0.16	0.0	0.10	0.07	0.0	0.07	0.0	0.0	0.03	0.0	
26	0.21	0.0	0.09	0.0	0.37	0.20	0.0	0.14	0.0	0.0	0.01	0.09	
27	0.0	0.04	0.17	0.0	0.0	1.16	0.0	0.0	0.79	0.0	0.0	0.09	
28	0.19	0.12	0.18	0.0	0.0	0.0	0.0	1.21	0.08	0.0	0.45	0.03	
29	0.23	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.20	0.0	0.05	0.03	
30	0.0	0.0	0.0	0.0	0.0	0.98	0.0	0.05	0.02	0.0	0.12	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	
TOTAL	1.49	4.09	3.32	4.36	4.23	4.46	1.74	5.49	3.97	2.69	3.15	5.85	
STA AV	2.74	3.34	3.28	3.70	3.78	4.13	3.72	4.56	3.27	4.14	4.66	3.99	

NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage K-01. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-70) record period.

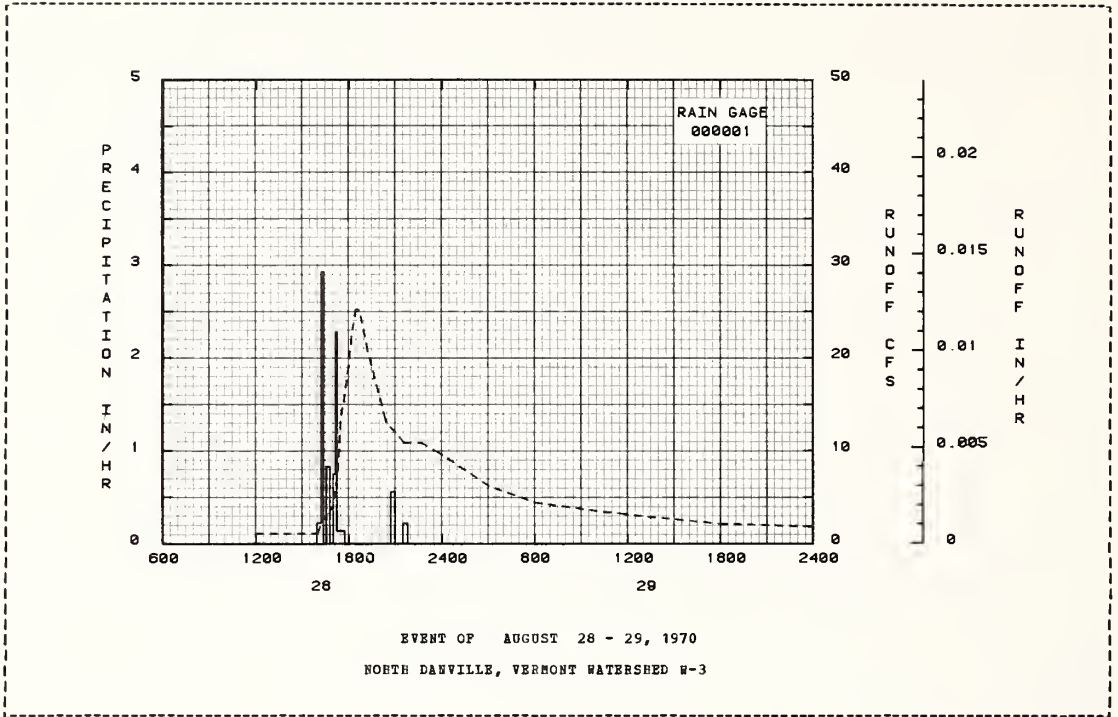


1970 MEAN DAILY DISCHARGE (cfs)													NORTH DANVILLE, VERMONT WATERSHED W-3												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	4.709	3.356	3.361	3.310	18.402	4.683	5.503	1.734	1.348	1.591	1.434	2.957													
2	4.583	5.184	3.361	5.160	15.916	4.425	3.526	2.576	1.467	1.467	1.445	3.276													
3	4.420	16.802	3.361	5.580	18.352	4.119	3.640	1.443	1.228	2.295	1.445	3.060													
4	4.139	9.445	3.361	4.757	13.297	3.649	3.586	1.503	3.495	2.173	1.445	2.775													
5	4.100	6.230	3.361	4.159	12.455	6.006	4.412	1.335	4.262	1.708	1.467	2.984													
6	4.100	5.223	3.292	4.184	3.706	12.829	2.898	1.270	2.396	1.557	1.534	2.620													
7	3.984	4.462	3.224	4.334	10.000	5.635	2.317	1.193	1.876	1.512	1.534	2.286													
8	3.833	4.258	3.224	5.448	10.373	4.592	2.056	1.141	1.591	1.445	1.467	2.126													
9	3.576	4.139	3.224	9.131	9.625	4.040	1.999	1.092	1.534	1.381	1.392	2.167													
10	3.503	4.100	3.224	9.396	11.204	3.632	1.804	1.040	1.533	1.329	1.516	2.235													
11	3.467	7.199	3.156	7.148	12.695	3.483	2.112	1.121	1.753	1.415	2.441	2.235													
12	3.361	6.386	3.089	7.599	10.774	3.498	1.789	1.121	1.299	1.478	1.947	2.194													
13	3.361	4.908	3.089	10.589	8.899	2.945	1.611	1.102	1.222	1.557	1.608	2.126													
14	3.361	4.539	3.089	15.366	8.176	2.632	1.591	1.047	1.183	2.066	1.568	2.126													
15	3.361	4.419	3.089	19.139	7.428	2.567	1.640	0.994	1.240	2.994	2.416	2.128													
16	3.361	4.259	2.894	22.007	7.077	2.539	1.932	0.976	2.069	2.921	2.849	2.126													
17	3.241	3.984	2.829	32.096	18.758	2.590	1.765	0.909	1.527	2.073	2.087	2.126													
18	3.224	3.946	2.829	35.905	11.319	2.763	2.687	0.835	1.413	1.879	1.879	2.126													
19	3.224	3.946	3.062	24.662	6.889	2.488	2.288	0.780	1.372	1.788	2.392	2.126													
20	3.224	3.833	3.650	20.480	7.761	2.273	1.769	0.878	1.198	1.625	3.173	2.153													
21	3.024	3.684	3.687	20.552	6.804	2.299	1.625	1.563	1.198	1.625	5.747	2.235													
22	2.957	3.647	3.908	23.781	8.533	2.359	1.456	1.041	1.770	1.661	3.244	2.235													
23	2.957	3.539	3.871	21.945	7.968	2.114	1.331	3.170	1.409	4.402	3.139	2.153													
24	2.957	3.503	3.657	44.182	6.267	1.967	1.291	2.028	1.242	2.732	2.401	2.126													
25	2.957	3.503	3.487	39.830	6.343	2.005	1.311	1.330	1.198	2.083	1.961	2.126													
26	2.957	3.396	3.258	34.120	9.013	1.997	1.302	1.138	1.179	1.802	2.008	2.126													
27	2.957	3.361	4.372	38.917	7.754	8.701	1.191	1.269	2.383	1.690	1.955	2.126													
28	2.957	3.361	3.911	33.601	5.908	3.614	1.215	5.031	2.063	1.625	3.479	2.126													
29	3.290		3.465	26.903	5.119	2.606	1.264	3.736	2.137	1.534	3.629	2.126													
30	5.171		3.421	21.870	4.722	11.605	1.270	1.574	1.842	1.371	3.230	2.046													
31	3.911		3.291		4.444		1.204	1.499		1.360		0.0													
MEAN	3.556	4.952	3.358	18.672	9.596	4.028	2.109	1.531	1.704	1.875	2.261	2.238													
INCHES	1.269	1.597	1.199	6.450	3.425	1.392	0.753	0.547	0.589	0.669	0.781	0.799													
STA AV	1.031	0.931	1.542	6.720	3.789	1.540	0.922	0.805	0.697	1.167	1.516	1.344													

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.011515. STA AV based on 11 yr (1960-70) record period.

1970 SELECTED RUNOFF EVENT													NORTH DANVILLE, VERMONT WATERSHED W-3												
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF													
Date	Rainfall	Rnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.															
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)															
EVENT OF AUGUST 28 - 29, 1970																									
8-28	RG 000001 0.0	0.006	8-28	RG 000001 1557	0.0	0.0	8-28	1200	1.121	0.0															
				1613	0.2250	0.06		1559	1.121	0.0021															
				1621	2.9250	0.45		1621	2.829	0.0024															
				1634	0.0	0.45		1632	2.582	0.0026															
				1647	3.8308	0.63		1659	4.100	0.0033															
				1700	0.0	0.63		1717	7.906	0.0042															
				1708	0.7501	0.73		1728	13.158	0.0051															
				1713	2.2802	0.92		1800	19.199	0.0093															
				1744	0.1355	0.99		1810	22.300	0.0109															
				2042	0.0	0.99		1825	25.230	0.0138															
				2058	0.5625	1.14		1839	25.230	0.0166															
				2129	0.0	1.14		1513	20.717	0.0228															
				2148	0.2210	1.21		2024	13.158	0.0324															
								2133	10.878	0.0390															
								2240	10.878	0.0448															
								2400	9.575	0.0514															
								301	6.216	0.0628															
								600	4.419	0.0704															
								1200	3.089	0.0812															
								1800	2.126	0.0887															
								2400	1.816	0.0944															

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0004798. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



## NORTH DANVILLE, VERMONT WATERSHED W-4

LOCATION: Caledonia County, Vermont; 4.7 mi. NW of St. Johnsbury; Morrill Brook, Sleepers River, Connecticut River Basin.

AREA: 10752.00 acres 16.80 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)		NORTH DANVILLE, VERMONT WATERSHED W-4												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	33.22
	Q	1.027	1.444	1.109	6.285	3.247	1.084	0.486	0.368	0.382	0.529	0.658	0.643	17.261
STA AV	P	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	35.55
	Q	0.874	0.798	1.629	5.841	3.559	1.389	0.723	0.589	0.507	0.995	1.413	1.195	19.512

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	1 Hour Rate	1 Hour Vol.	2 Hours Date	2 Hours Vol.	Maximum Volume for Selected Time Interval										
						6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.	
	4-24	0.041	4-24	0.040	4-24	0.079	4-24	0.227	4-24	0.401	4-24	0.616	4-24	0.943	4-21	2.656
MAXIMUMS FOR PERIOD OF RECORD																
	5-20	0.061	5-20	0.061	5-20	0.118	5-20	0.310	4-19	0.522	4-18	0.900	4-17	1.485	4-14	4.323
	1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Forest, 74%; cultivated, 12%; pasture, 12%; and idle, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 67.4-19. Precipitation records began 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY PRECIPITATION (inches)		NORTH DANVILLE, VERMONT WATERSHED W-4											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.69	0.09	0.0	0.0	0.03	
2	0.0	0.70	0.04	1.50	0.10	0.0	0.10	0.26	0.0	0.0	0.0	0.09	
3	0.0	0.64	0.0	0.08	0.26	0.0	0.0	0.25	0.38	0.33	0.0	0.0	
4	0.0	0.21	0.16	0.0	0.0	0.0	0.48	0.01	0.47	0.02	0.0	0.94	
5	0.0	0.0	0.15	0.0	0.10	1.13	0.0	0.0	0.09	0.0	0.0	0.07	
6	0.02	0.0	0.0	0.0	0.10	0.18	0.0	0.0	0.08	0.0	0.0	0.29	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	
9	0.0	0.0	0.02	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.69	
10	0.07	0.04	0.03	0.0	0.28	0.0	0.04	0.15	0.15	0.0	0.05	0.05	
11	0.01	0.20	0.01	0.0	0.24	0.12	0.30	0.01	0.01	0.10	0.29	0.0	
12	0.02	0.06	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.0	
13	0.06	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.26	
14	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01	0.09	
15	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.20	0.38	0.56	0.02	
16	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.16	0.04	0.04	0.02	
17	0.01	0.93	0.0	0.35	1.14	0.0	0.01	0.0	0.0	0.08	0.0	0.43	
18	0.06	0.0	0.0	0.01	0.0	0.10	0.37	0.0	0.05	0.0	0.0	0.16	
19	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04	
20	0.02	0.0	0.17	0.27	0.0	0.0	0.0	0.36	0.0	0.0	0.20	0.02	
21	0.03	0.02	0.35	0.27	0.0	0.0	0.0	0.26	0.0	0.0	0.29	0.0	
22	0.0	0.04	0.01	0.0	0.29	0.10	0.0	0.0	0.11	0.17	0.08	0.43	
23	0.03	0.03	0.08	0.0	0.0	0.0	0.0	1.05	0.0	0.33	0.19	0.06	
24	0.0	0.04	0.07	1.29	0.0	0.04	0.0	0.0	0.0	0.03	0.0	0.45	
25	0.06	0.13	0.06	0.0	0.05	0.03	0.0	0.0	0.04	0.0	0.0	0.0	
26	0.21	0.0	0.08	0.0	0.41	0.19	0.0	0.17	0.01	0.0	0.0	0.0	
27	0.03	0.04	0.08	0.0	0.0	1.03	0.0	0.0	0.32	0.0	0.0	0.0	
28	0.15	0.04	0.11	0.0	0.0	0.0	0.0	1.47	0.04	0.0	0.42	0.0	
29	0.14	0.0	0.0	0.0	0.0	0.22	0.05	0.0	0.16	0.0	0.03	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.05	0.0	0.0	0.10	0.0	
31	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	
TOTAL	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	
STA AV	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	

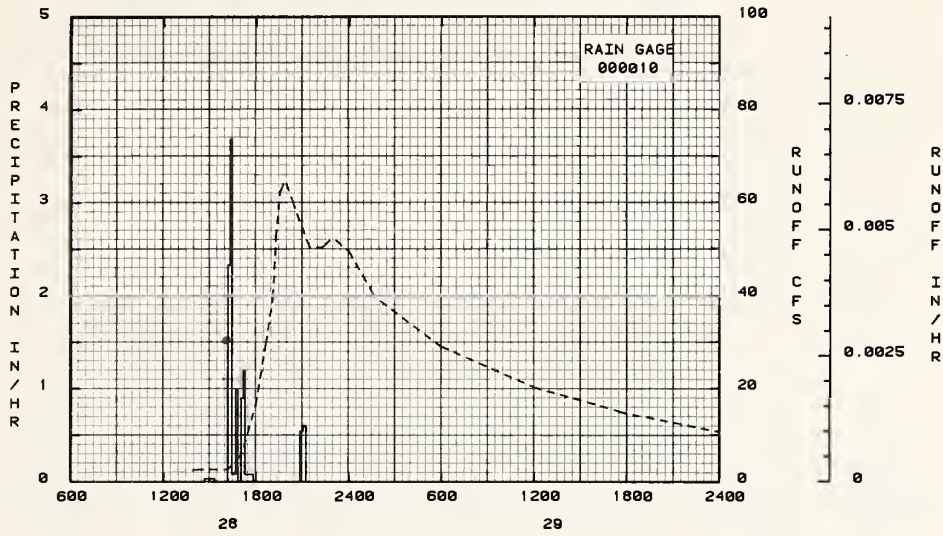
NOTES: For temperature data see table of daily maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage R-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-1970) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					NORTH DANVILLE, VERMONT WATERSHED #4						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	22.01	13.54	14.28	18.05	91.62	19.24	26.94	3.82	4.85	6.30	5.45	14.32
2	21.22	14.30	14.28	22.13	78.79	15.37	14.31	21.71	3.85	5.23	5.30	14.24
3	20.33	66.12	14.28	51.35	88.23	17.78	14.29	7.94	3.31	8.21	5.08	13.77
4	19.36	57.35	14.28	43.33	67.02	17.20	16.31	8.19	13.19	9.62	5.06	12.05
5	17.90	34.14	14.28	26.86	58.59	19.82	22.16	4.94	14.07	7.19	5.06	10.41
6	17.59	30.34	14.26	24.71	63.49	70.81	12.62	3.70	9.92	5.87	5.39	10.67
7	16.99	25.76	14.28	26.80	56.37	29.31	9.11	3.01	8.01	5.25	5.78	9.60
8	16.60	22.69	14.19	31.77	49.45	21.56	7.38	2.51	6.03	4.88	4.92	8.21
9	16.22	20.99	13.64	55.99	45.26	17.76	6.35	2.03	4.95	4.75	4.62	8.45
10	16.12	20.33	13.32	72.91	49.33	14.92	5.68	1.78	4.74	4.26	4.86	9.60
11	15.84	23.53	12.98	46.60	55.04	13.32	6.87	2.14	5.92	4.37	8.59	9.52
12	14.91	31.89	12.98	54.66	52.04	12.87	6.43	2.02	5.07	4.87	9.40	8.84
13	14.64	27.94	13.32	70.19	41.51	10.86	4.97	1.60	3.77	5.10	7.34	8.54
14	14.37	21.51	13.58	94.13	37.59	10.14	4.21	1.38	3.31	8.36	6.69	8.71
15	14.01	20.11	13.32	113.16	33.04	9.39	4.15	1.22	3.23	14.15	10.20	6.44
16	13.66	19.78	12.94	119.15	31.32	8.71	5.33	1.16	6.93	16.33	13.74	8.06
17	13.84	19.14	12.90	152.00	96.98	8.45	6.39	0.82	5.93	10.40	10.54	7.93
18	13.66	18.62	12.90	178.34	65.87	9.16	5.53	0.70	4.82	8.76	8.59	8.64
19	13.07	18.51	13.23	115.35	43.83	9.27	8.87	0.63	4.68	7.41	8.84	8.77
20	12.65	17.90	15.26	103.37	36.51	7.53	5.22	0.64	3.91	6.55	12.79	8.81
21	12.56	17.29	18.77	102.43	32.05	7.19	4.13	4.07	3.31	6.16	28.26	8.62
22	12.02	16.90	19.18	113.56	33.26	7.38	3.51	2.65	4.50	6.16	18.51	8.19
23	11.36	16.60	22.51	102.84	36.07	7.04	3.04	11.14	4.65	16.90	16.76	8.15
24	11.06	16.22	20.26	213.80	27.68	5.80	2.60	12.77	3.95	14.19	11.58	8.15
25	11.06	16.03	21.12	199.87	26.31	5.25	2.27	5.19	3.55	9.72	8.48	8.57
26	11.44	15.46	18.89	146.92	39.39	5.16	2.10	3.57	3.22	7.77	7.31	8.70
27	11.29	14.82	24.37	157.97	39.18	39.45	1.82	3.25	5.02	6.97	8.97	6.97
28	11.29	14.55	24.29	150.95	26.97	20.23	1.69	14.72	8.19	6.24	13.37	8.69
29	12.51	21.09	125.47	23.24	11.13	1.66	22.99	7.58	5.94	19.76	8.44	8.44
30	17.10	18.24	104.69	21.22	33.45	1.96	7.68	7.94	5.56	15.80	8.25	8.25
31	17.25	17.86	15.65	15.65	15.65	1.67	6.20		5.45		7.93	7.93
MEAN	14.964	23.298	16.164	94.643	47.318	16.320	7.083	5.360	5.747	7.708	9.903	9.364
INCHES	1.027	1.444	1.109	6.285	3.247	1.084	0.486	0.368	0.382	0.529	0.658	0.643
STA AV	0.874	0.798	1.629	5.841	3.559	1.389	0.723	0.589	0.507	0.995	1.413	1.195

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002213695. STA AV based on 11 yr (1960-1970) record period.

1970	SELECTED RUNOFF EVENT			NORTH DANVILLE, VERMONT WATERSHED #4						
	ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall (inches)	Runoff (inches)	Date	Time of Day	Intensity (in/hr)	Acc. (inches)	Date	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 28 - 29, 1970										
RG 000010										
8-28	0.0	0.004	8-28	1440	0.0	0.0	8-28	1354	2.521	0.0
				1520	0.0300	0.02		1435	2.650	0.0002
				1610	0.0	0.02		1609	2.650	0.0006
				1619	2.3332	0.37		1627	3.504	0.0007
				1626	3.6861	0.80		1706	6.074	0.0010
WATERSHED CONDITIONS:										
	74% forest land;	12% pastured		1641	0.0800	0.82		1759	16.506	0.0019
	land;	12% cultivated;	2% idle	1650	0.9999	0.97		1843	31.234	0.0035
	land with dense grass and	brush growth.		1702	0.0	0.97		1906	39.768	0.0048
				1712	0.9000	1.12		1919	54.143	0.0057
				1717	1.2000	1.22		1933	62.337	0.0069
				1749	0.0750	1.26		1945	64.058	0.0081
				2052	0.0	1.26		1957	64.058	0.0093
				2103	0.5455	1.36		2029	58.977	0.0123
				2114	0.5999	1.47		2129	50.361	0.0173
								2215	50.301	0.0209
								2245	51.818	0.0233
								2312	51.818	0.0254
								2400	49.553	0.0291
							8-29	142	39.766	0.0361
							559	29.017	0.0497	
								1200	20.216	0.0634
								1759	14.635	0.0730
								2400	10.679	0.0800

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000092. For 30-day antecedent rainfall and runoff see tables of daily amounts.



EVENT OF AUGUST 28 - 29, 1970  
NORTH DANVILLE, VERMONT WATERSHED W-4

## NORTE DANVILLE, VERMONT WATERSHED W-5

LOCATION: Caledonia County, Vermont; 2 mi. NW of St. Johnsbury; Sleepers River, Connecticut River Basin.

AREA: 27469.00 acres 42.92 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													NORTE DANVILLE, VERMONT WATERSHED W-5			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15	33.22		
	Q	0.952	1.692	1.064	6.878	2.890	0.963	0.444	0.245	0.274	0.400	0.633	0.901	17.335		
STA AV	P	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10	35.55		
	Q	1.327	1.191	2.341	6.048	2.943	1.795	0.595	0.486	0.431	0.938	1.421	1.347	20.163		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Date	Maximum Discharge Rate	1 Hour		2 Hours		Maximum Volume for Selected Time Interval									
			Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days					
	4-24	0.062	4-24	0.061	4-24	0.121	4-24	0.335	4-24	0.555	4-24	0.807	4-24	1.155	4-21	2.924
MAXIMUMS FOR PERIOD OF RECORD																
	5-20 1969	0.080	5-20 1969	0.077	5-20 1969	0.146	5-20 1969	0.351	5-20 1969	0.574	4-18 1969	0.861	4-17 1969	1.368	4-13 1969	3.928

NOTES: Watershed conditions: Forest predominantly hardwoods, 67%; cultivated land consisting of mostly clover, orchard grass, and timothy hay with very little in row crops, 17%; pasture of mostly bluegrass, 13%; idle land in tall grasses and woody plants, 2%; and homesites and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1960-61, USDA Misc. Pnh. 994, p. 67.5-5. Precipitation records began January 1, 1959. Runoff records began January 1, 1960. For long-time precipitation records, see National Weather Service records at St. Johnsbury, Vt.

1970 DAILY PRECIPITATION (inches)													NORTE DANVILLE, VERMONT WATERSHED W-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.69	0.09	0.0	0.0	0.03		
2	0.0	0.70	0.04	1.50	0.10	0.0	0.10	0.26	0.0	0.0	0.0	0.09		
3	0.0	0.64	0.0	0.08	0.26	0.0	0.0	0.25	0.38	0.33	0.0	0.0		
4	0.0	0.21	0.16	0.0	0.0	0.0	0.48	0.01	0.47	0.02	0.0	0.94		
5	0.0	0.0	0.15	0.0	0.10	1.13	0.0	0.0	0.09	0.0	0.0	0.07		
6	0.02	0.0	0.0	0.0	0.10	0.18	0.0	0.0	0.08	0.0	0.0	0.29		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01		
9	0.0	0.0	0.02	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.69		
10	0.07	0.04	0.03	0.0	0.28	0.0	0.04	0.15	0.15	0.0	0.05	0.05		
11	0.01	0.20	0.01	0.0	0.24	0.12	0.30	0.01	0.01	0.10	0.29	0.0		
12	0.02	0.06	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.0		
13	0.06	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.26		
14	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.01	0.09		
15	0.0	0.35	0.01	0.0	0.0	0.0	0.0	0.0	0.20	0.38	0.56	0.02		
16	0.0	0.0	0.0	0.0	0.02	0.0	0.19	0.0	0.16	0.04	0.04	0.02		
17	0.01	0.03	0.0	0.35	1.14	0.0	0.01	0.0	0.0	0.08	0.0	0.43		
18	0.06	0.0	0.0	0.01	0.0	0.10	0.37	0.0	0.05	0.0	0.0	0.16		
19	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.04		
20	0.02	0.0	0.17	0.27	0.0	0.0	0.0	0.36	0.0	0.0	0.20	0.02		
21	0.03	0.02	0.35	0.27	0.0	0.0	0.0	0.26	0.0	0.0	0.29	0.0		
22	0.0	0.04	0.31	0.0	0.29	0.10	0.0	0.0	0.11	0.17	0.08	0.43		
23	0.03	0.03	0.08	0.0	0.0	0.0	0.0	1.05	0.0	0.33	0.19	0.06		
24	0.0	0.04	0.07	1.29	0.0	0.04	0.0	0.0	0.0	0.03	0.0	0.45		
25	0.06	0.13	0.06	0.0	0.05	0.03	0.0	0.0	0.04	0.0	0.0	0.0		
26	0.21	0.0	0.08	0.0	0.41	0.19	0.0	0.17	0.01	0.0	0.0	0.0		
27	0.03	0.04	0.08	0.0	0.0	1.03	0.0	0.0	0.32	0.0	0.0	0.0		
28	0.15	0.04	0.11	0.0	0.0	0.0	0.0	1.47	0.04	0.0	0.42	0.0		
29	0.14	0.0	0.0	0.0	0.0	0.22	0.05	0.0	0.16	0.0	0.03	0.0		
30	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.05	0.0	0.0	0.10	0.0		
31	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0		
TOTAL	0.92	2.64	1.93	3.77	3.05	3.87	1.54	4.84	2.36	1.71	2.44	4.15		
STA AV	1.88	2.20	2.26	2.98	3.12	3.39	3.17	3.91	2.57	3.37	3.60	3.10		

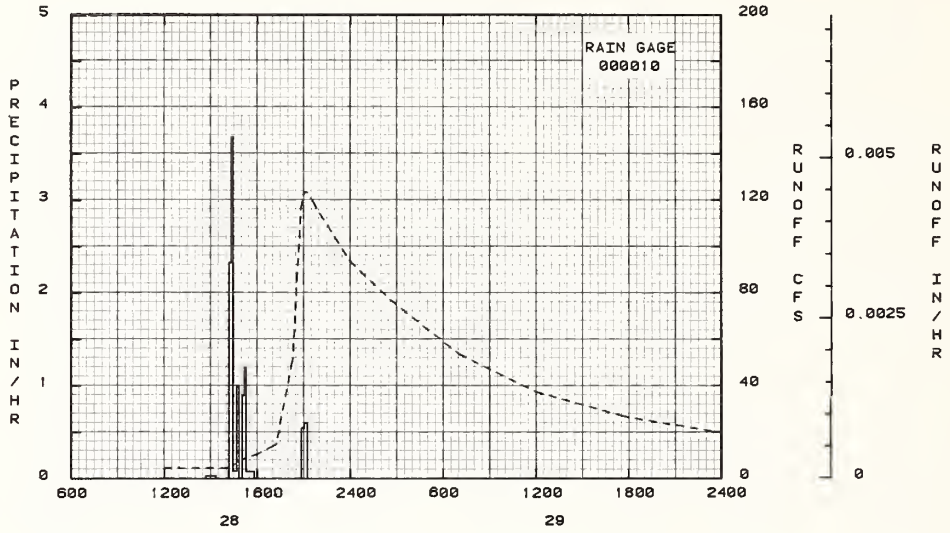
NOTES: For temperature data see table of maximum and minimum values included with information for Watershed 67.001. Daily precipitation values from rain gage R-10. All precipitation is rain except for the months of December, January, and February, during which all precipitation is snow or rain on snow. STA AV based on 12 yr (1959-1970) record period.

1970 MEAN DAILY DISCHARGE (cfs) NORTH DANVILLE, VERMONT WATERSHED W-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	55.63	36.46	32.48	46.63	202.83	38.30	78.07	5.44	8.43	11.23	10.30	51.34
2	52.82	39.00	33.79	57.52	171.97	39.39	35.38	31.82	6.65	9.35	10.30	49.41
3	48.47	400.61	33.51	158.05	210.30	34.91	35.20	13.32	5.34	16.56	9.99	50.72
4	45.57	239.41	34.03	125.33	151.02	34.91	42.02	12.21	28.20	20.45	9.45	42.58
5	41.61	95.41	34.03	68.78	127.08	36.80	65.56	8.18	33.86	14.13	9.32	36.26
6	40.71	90.52	33.38	63.03	140.68	194.91	31.29	6.19	16.02	11.41	9.36	38.20
7	39.83	68.10	32.14	70.66	124.17	71.76	20.49	4.57	14.47	17.85	9.68	34.39
8	38.68	56.68	32.35	88.07	106.62	48.12	16.77	3.51	11.21	8.96	8.88	28.55
9	37.56	50.26	30.48	170.93	94.15	38.10	13.54	2.92	9.15	8.23	8.97	29.02
10	36.45	48.16	29.62	217.12	115.79	31.98	11.42	2.90	9.01	7.15	9.15	31.99
11	37.84	65.90	28.78	132.24	122.27	28.86	13.45	3.34	9.85	7.22	15.80	32.41
12	36.46	100.72	28.43	152.82	124.19	27.47	12.63	3.52	8.20	8.71	18.46	30.47
13	35.09	75.44	29.02	195.82	92.05	21.84	9.69	2.73	6.56	9.22	14.83	29.98
14	34.29	53.37	29.02	267.59	81.25	20.15	8.85	2.35	5.92	13.85	12.89	30.72
15	32.99	47.49	28.78	319.90	70.30	17.95	8.85	2.09	5.46	25.73	20.44	30.35
16	30.48	46.65	30.72	339.08	65.55	17.02	10.53	1.83	11.88	32.69	31.74	29.26
17	30.72	43.71	30.96	447.58	257.90	16.32	12.46	1.65	11.00	19.65	23.23	29.08
18	31.97	42.04	31.19	551.18	168.70	17.66	13.14	1.35	8.55	16.06	17.92	30.72
19	31.48	41.37	32.19	302.54	131.76	17.60	15.80	1.21	8.58	13.72	17.78	31.09
20	29.26	39.98	38.07	263.65	80.75	14.25	9.47	1.22	7.14	11.82	27.57	32.22
21	28.78	36.87	48.42	263.86	67.28	14.06	8.11	7.39	5.78	11.34	60.46	32.29
22	27.15	36.17	47.88	302.62	70.63	14.40	6.85	5.17	7.28	11.39	43.52	30.23
23	25.58	34.57	60.88	267.01	85.80	14.06	5.83	20.10	7.95	35.85	53.03	29.98
24	25.36	33.77	54.82	709.49	59.51	11.51	4.94	24.67	6.71	30.46	36.84	29.98
25	25.36	34.03	58.11	590.04	55.05	9.81	4.04	9.09	6.40	20.17	27.38	30.72
26	26.02	33.25	46.36	398.78	94.01	9.43	3.95	6.15	6.06	16.07	21.89	31.72
27	26.24	31.47	65.72	438.65	99.41	85.59	3.67	5.78	7.77	14.96	28.32	32.73
28	26.24	30.96	62.24	388.18	60.30	43.87	3.32	22.58	14.71	12.22	41.69	31.97
29	29.20		53.96	302.36	50.23	22.63	3.16	44.37	13.62	11.40	67.03	30.96
30	44.26		52.40	238.82	44.58	117.59	3.74	14.89	14.86	10.88	54.37	30.23
31	46.02		45.07		39.63		3.24	9.70		13.38		29.98
MEAN	35.42	69.73	39.61	264.61	107.60	37.04	16.53	9.10	10.55	14.88	24.35	33.53
INCHES	0.952	1.692	1.064	6.878	2.890	0.963	0.444	0.245	0.274	0.400	0.633	0.901
STA AV	1.327	1.191	2.341	6.048	2.343	1.095	0.595	0.486	0.431	0.938	1.421	1.347

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0008665. STA AV based on 11 yr (1960-1970) record period.

1970 SELECTED RUNOFF EVENT NORTH DANVILLE, VERMONT WATERSHED W-5												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 28 - 29, 1970												
8-28	RG 000010		8-28	RG 000010			8-28					
	0.0	0.002		1440	0.0	0.0	1200		4.644	0.0		
				1520	0.0300	0.02	1605		4.644	0.0007		
				1610	0.0	0.02	1714		8.851	0.0010		
				1619	2.3332	0.37	1815		11.336	0.0014		
				1626	3.6861	0.80	1914		14.831	0.0019		
WATERSHED CONDITIONS:				1641	0.0800	0.82	2019		52.130	0.0032		
67% forest; 17% hay; 13%				1650	0.9999	0.97	2034		85.894	0.0038		
pastured land; 2% idle land				1702	0.0	0.97	2050		116.612	0.0048		
with dense brush and grass				1712	0.9000	1.12	2101		123.458	0.0056		
growth; 1% homesites and				1717	1.2000	1.22	2115		123.458	0.0066		
roads.				1749	0.0750	1.26	2149		116.612	0.0091		
				2052	0.0	1.26	2400		93.525	0.0174		
				2103	0.5455	1.36	8-29	237	76.910	0.0254		
				2114	0.5999	1.47	703		53.508	0.0358		
							1200		37.276	0.0439		
							1800		26.244	0.0508		
							2400		19.663	0.0558		

NOTES: To convert CFS to IN/HR, multiply by 0.000036104. For 30-day antecedent rainfall and runoff, see tables of daily amounts.



EVENT OF AUGUST 28 - 29, 1970  
NORTH DANVILLE, VERMONT WATERSHED W-5



REYNOLDS, IDAHO WATERSHED W-1 (036068)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; north flowing tributary to the Snake River.

AREA: 57700.00 acres 90.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO WATERSHED W-1 (036068)	
	Jan	Feh	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	5.75	0.79	2.10	2.13	1.36	1.60	0.46	0.20	0.87	1.72	3.87	2.12	22.97
	Q	3.620	0.260	0.308	0.271	0.832	0.245	0.054	0.023	0.017	0.016	0.094	0.213	2.952
STA AV	P	4.24	1.32	1.13	1.39	1.00	1.65	0.26	1.33	0.49	1.39	2.24	2.14	18.58
	Q	0.468	0.277	0.241	0.491	0.546	0.290	0.035	0.024	0.013	0.017	0.041	0.235	2.676

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	1-27	0.012	1-27	0.012	1-27	0.023	1-27	0.061	1-27	0.098	1-26	0.136	1-26	0.177	1-20	0.463

MAXIMUMS FOR PERIOD OF RECORD																
	12-23 1964	0.065	12-23 1964	0.064	12-23 1964	0.125	12-23 1964	0.270	12-23 1964	0.327	12-23 1964	0.453	12-23 1964	0.721	12-28 1965	1.313

NOTES: Watershed conditions: Predominately sagebrush rangeland, 95%; small stands of forest, 2%; permanent fields of flood irrigated alfalfa, 3%. For revised map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, USDA Misc. Pn. 1330, p. 68-1-6. Records began 1963. Precipitation data are Thiessen weighted average 'Computed Actual' amounts from 45 rain gages. Station average precipitation amounts are based on 1968-70 data. Station average runoff amounts are based on the 1963-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles N.E. of watershed.

1970 DAILY AIR TEMPERATURE (degrees F)													REYNOLDS, IDAHO WATERSHED W-1 (036068)											
Day	Jan		Feb		Mar		Apr		May		Jnn		Jnl		Ang		Sep		Oct		Nov		Dec	
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
1	31	12	39	30	56	25	54	25	63	32	81	39	84	46	93	52	81	53	75	46	58	30	35	28
2	35	19	42	29	39	24	45	29	72	33	86	45	86	53	81	53	80	50	77	40	48	19	40	28
3	35	14	50	29	40	31	52	20	76	37	90	50	93	55	87	49	86	49	81	40	46	29	41	29
4	26	19	37	24	43	30	64	24	80	41	90	57	95	64	96	51	59	44	85	40	48	34	41	26
5	28	10	39	26	49	25	67	41	75	45	89	59	91	57	90	75	63	46	67	34	50	38	50	26
6	23	5	49	28	52	25	71	39	60	45	88	51	84	55	96	59	73	51	47	30	50	35	53	36
7	26	7	49	29	61	37	47	29	63	40	71	51	89	55	89	57	84	53	53	33	48	35	51	39
8	36	21	50	28	41	32	57	31	61	35	73	49	91	53	77	52	65	41	58	31	46	29	41	32
9	45	29	53	29	45	24	65	29	57	41	63	47	89	58	82	44	65	32	59	43	48	38	40	32
10	46	33	54	30	45	26	49	35	49	35	60	40	82	60	88	48	76	35	59	36	46	32	37	24
11	40	33	52	32	44	25	44	26	54	27	63	41	89	53	96	51	70	37	75	39	51	36	36	22
12	37	27	55	33	45	25	46	23	53	36	60	39	95	57	95	55	58	33	61	32	44	33	32	16
13	47	41	49	34	53	33	45	27	49	33	58	45	80	53	85	58	55	30	60	28	43	26	35	18
14	47	39	49	31	59	36	41	33	63	30	69	49	85	47	82	51	56	27	57	28	42	20	36	18
15	47	38	56	35	49	34	44	30	74	33	70	50	94	50	91	49	61	28	60	23	42	29	38	28
16	45	33	57	41	54	29	47	22	89	42	74	43	97	67	100	53	70	47	63	26	50	32	39	27
17	49	40	43	33	39	28	53	25	79	53	77	46	89	57	87	57	80	39	65	28	51	30	30	20
18	46	41	38	27	43	27	53	31	77	49	83	47	95	52	86	53	82	54	58	35	42	32	32	16
19	49	41	43	22	45	22	43	34	73	47	88	51	100	59	90	50	55	39	60	32	44	30	28	10
20	52	40	45	20	55	23	45	25	59	45	93	53	98	58	98	58	59	37	55	35	46	32	32	10
21	54	40	48	22	52	30	47	21	73	45	95	52	91	64	89	52	59	35	53	33	43	20	33	20
22	50	29	51	24	55	27	50	30	74	40	95	60	75	51	93	51	70	35	47	35	27	18	30	18
23	53	36	54	26	57	29	55	29	63	45	95	61	82	48	95	55	63	36	53	37	35	27	31	10
24	42	27	49	23	50	31	56	33	71	43	95	65	91	48	96	61	52	34	46	35	58	37	28	24
25	39	25	53	24	51	26	51	29	82	43	95	63	85	55	91	57	59	25	42	32	47	33	29	12
26	45	36	54	24	49	31	42	30	80	51	96	63	91	53	86	56	66	29	40	24	34	28	28	12
27	45	29	58	26	52	25	44	24	69	46	69	57	88	60	87	50	74	32	44	20	43	35	30	16
28	35	24	47	32	47	35	47	31	65	38	63	52	90	56	87	46	80	36	46	19	49	32	40	18
29	37	20			41	33	54	37	69	37	67	42	83	52	87	50	82	37	50	21	42	28	40	28
30	39	25			49	31	54	33	63	41	69	43	78	48	89	63	79	44	51	20	41	30	42	28
31	41	25			45	26			71	35			87	47	94	60			59	31			43	28
AV.	41	28	49	28	49	29	51	29	68	40	79	50	89	55	89	54	69	39	58	32	45	30	37	23
MEAN	34.5		38.5		38.7		40.2		54.1		64.6		71.6		71.7		53.9		45.1		37.9		29.7	
STA AV	37	20	45	26	47	26	55	29	67	39	74	47	86	52	84	50	75	43	62	33	48	27	39	21

NOTES: Temperature data taken from hygrothermograph record at station 076X59. STA AV is average for 6 yr (1963-70) record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.17	0.01	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.03
2	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.13
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.21
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.01	0.05
5	0.00	0.0	0.00	0.0	0.04	0.00	0.36	0.06	0.05	0.00	0.21	0.00
6	0.00	0.0	0.00	0.00	0.06	0.04	0.00	0.00	0.00	0.01	0.12	0.00
7	0.00	0.0	0.58	0.00	0.00	0.09	0.0	0.0	0.00	0.00	0.03	0.31
8	0.11	0.00	0.11	0.0	0.21	0.13	0.02	0.00	0.00	0.00	0.17	0.09
9	0.16	0.0	0.00	0.00	0.16	0.05	0.02	0.0	0.00	0.22	0.41	0.04
10	0.20	0.0	0.00	0.46	0.15	0.11	0.00	0.00	0.00	0.10	0.00	0.02
11	0.03	0.00	0.11	0.02	0.01	0.00	0.0	0.00	0.0	0.01	0.39	0.03
12	0.15	0.20	0.01	0.00	0.04	0.01	0.00	0.00	0.00	0.01	0.04	0.00
13	0.06	0.00	0.06	0.36	0.07	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.31	0.00	0.20	0.50	0.00	0.05	0.0	0.0	0.0	0.00	0.00	0.04
15	0.03	0.0	0.00	0.01	0.00	0.04	0.0	0.0	0.0	0.0	0.00	0.07
16	0.62	0.24	0.29	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.18
17	0.38	0.24	0.11	0.05	0.0	0.02	0.0	0.00	0.0	0.00	0.00	0.00
18	0.37	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.09	0.01
19	0.29	0.0	0.0	0.31	0.06	0.0	0.00	0.00	0.33	0.01	0.00	0.00
20	0.05	0.0	0.0	0.00	0.09	0.00	0.05	0.0	0.15	0.15	0.00	0.10
21	0.65	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.05	0.00	0.10
22	0.54	0.0	0.0	0.0	0.10	0.00	0.00	0.0	0.00	0.07	0.14	0.02
23	0.12	0.0	0.00	0.0	0.28	0.06	0.0	0.00	0.0	0.75	0.54	0.02
24	0.26	0.0	0.00	0.02	0.00	0.00	0.0	0.00	0.0	0.02	0.77	0.01
25	0.04	0.0	0.0	0.12	0.00	0.00	0.0	0.00	0.0	0.14	0.32	0.01
26	0.65	0.0	0.11	0.17	0.07	0.04	0.00	0.00	0.0	0.17	0.08	0.02
27	0.59	0.00	0.0	0.02	0.01	0.39	0.00	0.0	0.0	0.00	0.01	0.05
28	0.00	0.07	0.04	0.07	0.00	0.45	0.00	0.0	0.0	0.0	0.00	0.22
29	0.00		0.16	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.25	0.21
30	0.0		0.08	0.00	0.00	0.00	0.00	0.11	0.0	0.0	0.28	0.04
31	0.11		0.0		0.00		0.0	0.01		0.00		0.09
TOTAL	5.75	0.79	2.10	2.13	1.36	1.60	0.46	0.20	0.87	1.72	3.87	2.12
STA AV	4.24	1.32	1.13	1.39	1.00	1.65	0.26	1.33	0.49	1.39	2.24	2.14

NOTES: Values are Thiessen weighted average 'Actual' amounts from 45 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Gello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where  $U$  = unshielded catchment,  $S$  = shielded catchment, and  $A$  = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

1970	DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO WATERSHED W-1 (036068)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.10	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.02
2	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.10
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.15
4	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.01	0.03
5	0.00	0.0	0.00	0.0	0.03	0.00	0.33	0.06	0.04	0.00	0.17	0.00
6	0.00	0.0	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.01	0.09	0.00
7	0.00	0.0	0.47	0.00	0.00	0.08	0.0	0.0	0.00	0.00	0.03	0.23
8	0.07	0.00	0.07	0.0	0.17	0.12	0.02	0.09	0.00	0.00	0.12	0.05
9	0.11	0.0	0.00	0.00	0.13	0.05	0.02	0.0	0.00	0.18	0.33	0.02
10	0.13	0.0	0.00	0.33	0.12	0.10	0.00	0.00	0.00	0.08	0.00	0.01
11	0.01	0.00	0.08	0.01	0.01	0.00	0.0	0.00	0.0	0.00	0.30	0.02
12	0.11	0.18	0.00	0.0	0.03	0.00	0.00	0.00	0.00	0.01	0.03	0.00
13	0.04	0.00	0.04	0.16	0.06	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.23	0.00	0.14	0.24	0.00	0.05	0.0	0.0	0.0	0.0	0.00	0.02
15	0.02	0.0	0.00	0.00	0.00	0.03	0.0	0.0	0.0	0.0	0.00	0.04
16	0.49	0.20	0.17	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.10
17	0.29	0.19	0.07	0.04	0.0	0.02	0.0	0.00	0.0	0.00	0.00	0.00
18	0.28	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.07	0.00
19	0.24	0.0	0.0	0.18	0.05	0.0	0.00	0.00	0.29	0.01	0.00	0.00
20	0.04	0.0	0.0	0.00	0.08	0.00	0.05	0.0	0.13	0.12	0.00	0.05
21	0.55	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.04	0.00	0.05
22	0.45	0.0	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.05	0.11	0.01
23	0.10	0.0	0.00	0.0	0.24	0.06	0.0	0.00	0.0	0.58	0.43	0.01
24	0.22	0.0	0.00	0.01	0.00	0.00	0.0	0.00	0.0	0.01	0.63	0.01
25	0.03	0.0	0.0	0.06	0.00	0.00	0.0	0.00	0.0	0.11	0.26	0.01
26	0.55	0.0	0.05	0.07	0.06	0.03	0.00	0.00	0.0	0.12	0.06	0.01
27	0.48	0.00	0.0	0.01	0.01	0.34	0.00	0.0	0.0	0.00	0.01	0.02
28	0.00	0.04	0.02	0.03	0.0	0.39	0.00	0.0	0.0	0.0	0.00	0.11
29	0.00		0.07	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.19	0.10
30	0.0		0.04	0.00	0.00	0.00	0.00	0.10	0.0	0.0	0.22	0.02
31	0.08		0.0		0.00		0.0	0.01		0.00		0.05
TOTAL	4.53	0.63	1.37	1.16	1.11	1.43	0.43	0.19	0.77	1.32	3.07	1.25

NOTES: Values are Thiessen weighted average amounts from 45 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970		DAILY PRECIPITATION (inches)										
REYNOLDS, IDAHO WATRESHED W-1 (036068)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.13	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.02
2	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.11
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.18
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.01	0.04
5	0.00	0.0	0.00	0.0	0.03	0.00	0.35	0.06	0.05	0.00	0.19	0.00
6	0.00	0.0	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.01	0.10	0.00
7	0.00	0.0	0.53	0.00	0.00	0.09	0.0	0.0	0.00	0.00	0.03	0.27
8	0.09	0.00	0.09	0.0	0.19	0.13	0.02	0.00	0.00	0.00	0.15	0.07
9	0.14	0.0	0.00	0.00	0.14	0.05	0.02	0.0	0.00	0.20	0.37	0.03
10	0.16	0.0	0.00	0.39	0.13	0.11	0.00	0.00	0.00	0.09	0.00	0.01
11	0.02	0.00	0.09	0.02	0.01	0.00	0.0	0.00	0.0	0.01	0.35	0.03
12	0.13	0.19	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.01	0.03	0.00
13	0.05	0.00	0.05	0.25	0.07	0.04	0.00	0.00	0.0	0.00	0.00	0.00
14	0.27	0.00	0.17	0.35	0.00	0.05	0.0	0.0	0.0	0.00	0.00	0.03
15	0.03	0.0	0.00	0.00	0.00	0.03	0.0	0.0	0.0	0.0	0.00	0.06
16	0.55	0.22	0.23	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.14
17	0.33	0.21	0.09	0.04	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.00
18	0.32	0.01	0.00	0.00	0.0	0.00	0.0	0.0	0.01	0.00	0.08	0.00
19	0.26	0.0	0.0	0.24	0.05	0.0	0.00	0.00	0.31	0.01	0.00	0.00
20	0.04	0.0	0.0	0.00	0.08	0.00	0.05	0.0	0.14	0.14	0.00	0.07
21	0.60	0.0	0.0	0.0	0.01	0.00	0.00	0.0	0.00	0.05	0.00	0.08
22	0.50	0.0	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.06	0.12	0.02
23	0.11	0.0	0.00	0.0	0.26	0.06	0.0	0.00	0.0	0.67	0.49	0.01
24	0.24	0.0	0.00	0.01	0.00	0.00	0.0	0.00	0.0	0.02	0.70	0.01
25	0.03	0.0	0.0	0.09	0.00	0.00	0.0	0.00	0.0	0.13	0.29	0.01
26	0.60	0.0	0.08	0.12	0.06	0.04	0.00	0.00	0.0	0.15	0.07	0.02
27	0.53	0.00	0.0	0.01	0.01	0.37	0.00	0.0	0.0	0.00	0.01	0.03
28	0.00	0.06	0.03	0.05	0.00	0.41	0.00	0.0	0.0	0.0	0.00	0.16
29	0.00	0.0	0.11	0.00	0.00	0.06	0.0	0.01	0.0	0.0	0.22	0.15
30	0.0	0.0	0.06	0.00	0.00	0.00	0.00	0.11	0.0	0.0	0.25	0.03
31	0.10	0.0	0.0	0.00	0.00	0.0	0.01	0.01	0.00	0.00	0.0	0.06
TOTAL	5.12	0.71	1.71	1.59	1.24	1.51	0.45	0.19	0.82	1.54	3.49	1.67
STA AV												

NOTES: Values are Thiessen weighted average amounts from 45 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970		MEAN DAILY DISCHARGE (cfs)										
REYNOLDS, IDAHO WATRESHED W-1 (036068)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.02	36.67	17.50	18.10	10.43	47.63	11.15	1.47	1.80	1.01	1.34	14.85
2	2.15	30.01	17.10	18.99	10.49	43.47	9.63	1.63	1.73	0.86	1.33	15.23
3	2.75	29.18	15.55	17.36	16.34	35.58	7.66	1.73	1.70	0.92	1.33	11.61
4	3.73	25.26	14.49	17.63	25.40	35.24	5.57	1.80	1.60	0.88	1.31	15.17
5	2.62	22.48	13.45	18.82	39.30	32.09	5.37	1.84	1.53	0.87	1.41	13.57
6	7.07	21.71	13.03	22.37	46.78	25.60	8.47	1.80	1.53	0.96	1.71	19.94
7	10.85	21.30	21.03	22.05	46.84	25.39	6.12	1.88	1.53	0.96	1.73	33.48
8	9.67	20.94	51.85	19.72	51.77	24.94	6.07	1.95	1.53	1.00	1.73	58.29
9	2.52	20.54	19.48	20.77	75.35	29.88	5.73	1.95	1.53	1.15	2.18	39.36
10	6.03	20.24	24.40	33.85	67.55	28.21	5.56	1.81	1.53	1.19	2.29	26.99
11	5.75	20.25	22.79	31.55	52.45	22.12	4.98	1.57	1.53	1.07	2.75	23.86
12	5.78	23.44	22.33	21.91	40.90	18.68	4.69	1.90	1.53	0.97	3.22	13.18
13	4.38	27.68	21.78	21.20	38.70	18.99	4.49	1.71	1.53	1.01	2.28	14.37
14	6.30	22.20	30.48	29.08	31.81	18.36	4.49	1.59	1.47	1.02	1.91	17.24
15	7.73	21.25	31.87	21.89	36.54	18.36	4.84	1.57	1.35	1.02	2.02	14.94
16	10.96	20.20	29.78	24.35	56.88	17.87	4.79	1.64	1.20	1.19	1.86	14.56
17	18.28	37.26	32.92	29.63	94.56	17.72	4.49	1.96	1.07	1.21	1.87	11.67
18	30.53	26.93	27.29	31.32	110.19	16.27	4.49	1.92	1.01	1.24	1.98	9.84
19	51.82	22.31	28.64	33.76	95.87	14.57	4.47	1.67	1.17	1.20	2.60	5.73
20	49.15	20.70	28.44	26.72	90.13	13.90	3.06	1.56	1.23	1.26	3.59	11.49
21	95.85	19.90	27.72	27.80	89.74	12.50	1.99	1.50	1.29	1.31	3.39	15.65
22	176.95	18.79	26.94	27.70	97.19	9.40	1.80	1.70	1.19	1.34	2.74	11.20
23	179.32	18.34	26.33	24.39	113.19	9.40	1.64	1.88	1.13	2.06	5.39	8.84
24	129.51	17.21	25.26	20.76	107.72	7.66	1.35	1.95	1.13	2.22	36.49	12.39
25	62.18	16.55	26.44	14.27	101.07	6.43	1.23	1.98	1.18	1.77	54.09	10.83
26	60.34	16.70	26.35	13.48	100.94	5.75	1.23	2.02	1.17	1.72	26.37	13.40
27	326.04	16.02	22.74	13.15	102.21	6.32	1.23	2.02	1.11	1.28	16.03	17.47
28	93.38	16.11	21.01	11.57	84.35	10.28	1.13	2.02	1.12	1.24	11.52	11.52
29	56.56	20.32	11.18	71.46	11.79	1.03	1.95	1.10	1.24	10.01	9.61	
30	41.32	20.66	11.18	59.69	10.08	1.17	1.87	1.14	1.33	20.41	9.45	
31	42.40	18.17	51.67			1.31	1.87		1.31		10.03	
MEAN	48.514	22.506	24.069	21.884	65.081	19.816	4.233	1.797	1.356	1.220	7.563	16.638
INCHES	0.620	0.260	0.308	0.271	0.832	0.245	0.054	0.023	0.017	0.016	0.094	0.213
STA AV	0.468	0.277	0.241	0.491	0.546	0.290	0.035	0.024	0.013	0.017	0.041	0.235

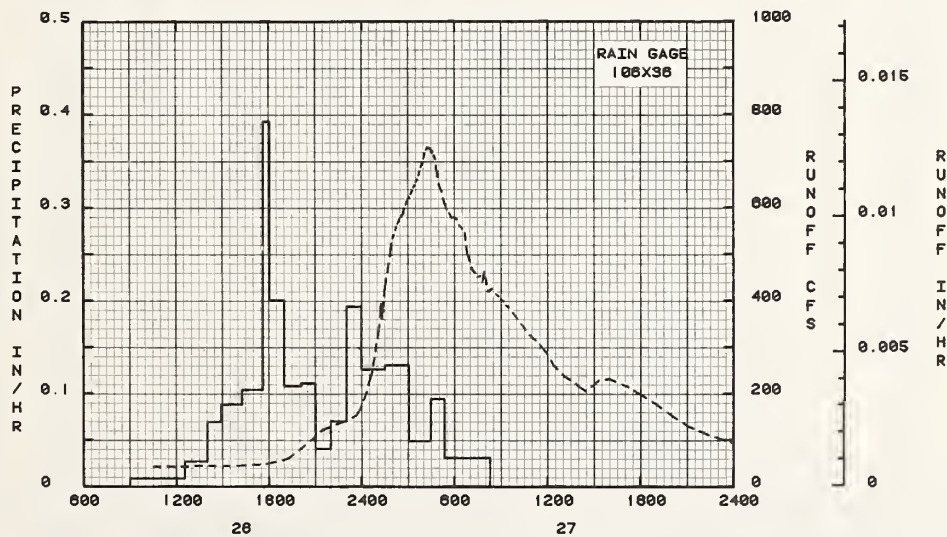
NOTES: To convert CFS to IN/DAY, multiply by 0.000413. STA AV based on 8 yr (1963-70) record period.

1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO WATERSHED W-1 (036068)							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 26 - 28, 1970										
1-26	RG 106X36 0.0	0.009	1-26	RG 106X36 901	0.0	0.0	1-26	1030	42.486	0.0
				1233	0.0085	0.03		1630	44.526	0.0945
				1402	0.0270	0.07		1800	48.787	0.0057
				1454	0.0692	0.13		1915	59.540	0.0069
				1616	0.0878	0.25		2020	87.983	0.0083
				1737	0.1037	0.39		2130	121.919	0.0104
				1803	0.3923	0.56		2300	140.468	0.0138
				1900	0.2000	0.75		2340	153.211	0.0155
				2007	0.1075	0.87		2400	171.716	0.0164
				2101	0.1111	0.97	1-27	20	203.872	0.0175
				2201	0.0400	1.01		40	246.169	0.0188
				2301	0.0700	1.08		110	347.992	0.0214
				2400	0.1932	1.27		115	392.729	0.0219
			1-27	131	0.1253	1.46		120	359.626	0.0224
				303	0.1304	1.66		125	395.230	0.0229
				430	0.0483	1.73		130	422.801	0.0235
				521	0.0941	1.81		135	446.235	0.0241
				818	0.0305	1.90		140	462.158	0.0247
								145	479.945	0.0254
								150	497.072	0.0261
								155	521.800	0.0268
								200	533.181	0.0276
								205	540.420	0.0284
								210	550.721	0.0292
								215	558.198	0.0300
								220	564.253	0.0308
								225	573.459	0.0316
								230	578.118	0.0324
								235	582.815	0.0332
								240	585.969	0.0340
								245	597.136	0.0348
								250	605.245	0.0357
								255	613.461	0.0366
								300	618.447	0.0375
								305	621.792	0.0384
								310	628.535	0.0393
								315	637.070	0.0402
								320	642.246	0.0411
								325	647.464	0.0420
								330	654.488	0.0429
								335	659.804	0.0438
								340	668.762	0.0448
								345	677.844	0.0458
								350	687.047	0.0468
								355	696.375	0.0478
								400	705.831	0.0488
								405	715.414	0.0498
								410	723.174	0.0508
								415	729.050	0.0518
								420	727.085	0.0528
								425	725.126	0.0538
								430	721.226	0.0548
								435	717.345	0.0558
								440	711.564	0.0568
								445	703.928	0.0578
								450	683.351	0.0588
								455	665.166	0.0598
								500	647.464	0.0607
								510	633.643	0.0625
								520	611.810	0.0643
								530	595.529	0.0660
								540	587.551	0.0677
								550	576.562	0.0694
								600	579.680	0.0711
								610	573.459	0.0728
								620	561.219	0.0744
								630	553.700	0.0760
								640	544.812	0.0776
								650	501.110	0.0791
								700	483.844	0.0805
								710	464.658	0.0819
								720	458.435	0.0832
								730	449.860	0.0845
								740	452.293	0.0858
								750	439.072	0.0871

NOTES: To convert CFS to IN/HR, multiply by 0.00001719.

1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO WATERSHED W-1 (036068)							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF JANUARY 26 - 28, 1970 (CONTINUED)										
							1-27	755	460.915	0.0877
								800	449.860	0.0884
								810	419.394	0.0896
								825	425.087	0.0914
								840	413.775	0.0932
								850	408.231	0.0944
								900	401.678	0.0956
								910	397.368	0.0967
								920	388.885	0.0978
								930	384.712	0.0989
								1055	322.486	0.1075
								1115	313.284	0.1093
								1130	304.272	0.1106
								1200	283.961	0.1131
								1225	259.247	0.1150
								1240	251.346	0.1161
								1305	237.283	0.1179
								1430	203.872	0.1233
								1520	227.392	0.1264
								1600	231.068	0.1290
								1715	213.075	0.1338
								1800	197.146	0.1364
								1900	176.822	0.1396
								2000	152.276	0.1424
								2100	130.130	0.1448
								2200	115.608	0.1469
								2300	102.939	0.1488
								2400	92.570	0.1505
							1-28	130	83.551	0.1528
								310	81.087	0.1552
								520	87.983	0.1583
								700	97.316	0.1610
								830	106.562	0.1636
								930	114.065	0.1655
								1330	119.525	0.1735
								1625	112.537	0.1793
								1900	82.930	0.1836
								2125	60.541	0.1866
								2400	47.483	0.1890

NOTES: To convert CFS to IN/HR, multiply by 0.00001719.



EVENT OF JANUARY 26 - 28, 1970  
REYNOLDS, IDAHO WATERSHED W-1 (036068)

## REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 8990.00 acres 14.05 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)						
		Jan	Feb	Mar	Apr	May	Jnn	Jnl	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	6.75	0.90	2.97	2.85	1.98	1.94	0.45	0.07	1.26	2.08	4.23	2.01	27.49					
	Q	1.220	0.324	0.441	0.460	0.355	0.107	0.023	0.002	0.006	0.036	0.125	0.276	3.374					
STA AV	P	4.55	1.57	1.46	1.90	1.44	1.98	0.23	1.22	0.68	1.83	2.37	2.16	21.38					
	Q	0.773	0.369	0.319	0.412	0.312	0.140	0.025	0.047	0.022	0.036	0.070	0.120	2.647					
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970		1-27	0.623	1-27	0.021	1-27	0.039	1-27	0.091	1-27	0.143	1-26	0.199	1-21	0.297	1-19	0.811		
MAXIMUMS FOR PERIOD OF RECORD																			
		8-23	0.073	8-23	0.044	8-23	0.056	1-20	0.115	1-28	0.268	1-28	0.379	1-28	0.766	1-28	1.495		
		1965		1965		1965		1969		1965		1965		1965		1965			

NOTES: Watershed conditions: Predominately sagebrush rangeland, 99%; irrigated pasture and hay crops, 1%. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. PUB. 1216, P. 68.2-7. Records began 1963. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 9 rain gages. Station average precipitation amounts are based on 1968-70 data. Station average runoff amounts are based on record period (1963-70). For long-time precipitation records, see National Weather Service records at Boise, Idaho; 59 miles N.E. of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jnl	Aug	Sep	Oct	Nov	Dec		
1	0.00	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03		
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.10		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.12		
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.07		
5	3.00	0.0	0.00	0.0	0.09	0.00	0.38	0.0	0.15	0.00	0.09	0.01		
6	0.0	0.0	0.0	0.00	0.09	0.04	0.0	0.0	0.00	0.06	0.09	0.01		
7	0.0	0.0	0.85	0.0	0.00	0.27	0.0	0.0	0.0	0.0	0.02	0.29		
8	0.12	0.0	0.09	0.0	0.22	0.04	0.02	0.00	0.01	0.00	0.26	0.08		
9	0.22	0.0	0.0	0.00	0.16	0.08	0.0	0.0	0.00	0.24	0.44	0.02		
10	0.34	0.0	0.0	0.76	0.21	0.10	0.0	0.0	0.0	0.20	0.01	0.03		
11	0.07	0.00	0.15	0.01	0.02	0.0	0.0	0.00	0.0	0.0	0.35	0.02		
12	0.13	0.25	0.02	0.0	0.06	0.01	0.0	0.0	0.0	0.0	0.05	0.0		
13	0.01	0.0	0.14	0.39	0.16	0.03	0.0	0.00	0.0	0.0	0.0	0.0		
14	0.43	0.0	0.22	0.82	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01		
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.08		
16	0.76	0.30	0.44	0.00	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.21		
17	0.43	0.21	0.23	0.15	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0		
18	0.61	0.61	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.11	0.00		
19	0.50	0.0	0.0	0.27	0.25	0.0	0.0	0.0	0.36	0.00	0.0	0.03		
20	0.04	0.0	0.0	0.0	0.08	0.0	0.05	0.0	0.19	0.20	0.0	0.08		
21	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.04	0.0	0.19		
22	0.59	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.16	0.04		
23	0.06	0.0	0.0	0.0	0.50	0.00	0.0	0.0	0.0	0.98	0.81	0.10		
24	0.28	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	0.69	0.07		
25	0.01	0.0	0.0	0.14	0.0	0.00	0.0	0.00	0.0	0.16	0.46	0.04		
26	0.58	0.0	0.16	0.17	0.06	0.11	0.0	0.00	0.0	0.11	0.08	0.00		
27	0.61	0.0	0.0	0.01	0.00	0.48	0.00	0.0	0.0	0.0	0.01	0.02		
28	0.0	0.12	0.07	0.11	0.0	0.64	0.0	0.0	0.0	0.0	0.0	0.03		
29	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.00	0.0	0.0	0.23	0.18		
30	0.0	0.0	0.10	0.00	0.0	0.0	0.0	0.04	0.0	0.0	0.38	0.03		
31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.12	0.12		
TOTAL		6.75	0.90	2.97	2.85	1.98	1.94	0.45	0.07	1.26	2.08	4.23	2.01	
STA AV		4.55	1.57	1.46	1.90	1.44	1.98	0.23	1.22	0.68	1.83	2.37	2.16	

NOTES: Values are Thiessen weighted average 'actual' amounts from 9 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by E. R. Hanson, "Computing Actual Precipitation", Proceedings WHO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watershed 68.001.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.08	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.09	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.05	
5	0.00	0.0	0.00	0.0	0.08	0.00	0.34	0.0	0.14	0.00	0.08	0.00	
6	0.0	0.0	0.0	0.00	0.07	0.03	0.0	0.0	0.00	0.05	0.07	0.01	
7	0.0	0.0	0.63	0.0	0.00	0.24	0.0	0.0	0.0	0.0	0.02	0.24	
8	0.08	0.0	0.07	0.0	0.20	0.03	0.02	0.00	0.01	0.00	0.20	0.06	
9	0.14	0.0	0.0	0.00	0.12	0.08	0.0	0.0	0.00	0.20	0.36	0.02	
10	0.22	0.0	0.0	0.44	0.15	0.09	0.0	0.0	0.0	0.17	0.00	0.02	
11	0.04	0.00	0.12	0.00	0.01	0.0	0.0	0.00	0.0	0.0	0.27	0.01	
12	0.10	0.23	0.02	0.0	0.05	0.01	0.0	0.0	0.0	0.0	0.03	0.0	
13	0.01	0.0	0.08	0.15	0.15	0.03	0.0	0.00	0.0	0.0	0.0	0.0	
14	0.27	0.0	0.18	0.32	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.00	
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.04	
16	0.62	0.25	0.19	0.00	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.13	
17	0.33	0.17	0.09	0.11	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0	
18	0.37	0.01	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.09	0.00	
19	0.39	0.0	0.0	0.11	0.21	0.0	0.0	0.0	0.33	0.00	0.0	0.01	
20	0.03	0.0	0.0	0.0	0.07	0.0	0.05	0.0	0.17	0.16	0.0	0.03	
21	0.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.09	
22	0.54	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.05	0.11	0.02	
23	0.05	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.79	0.60	0.04	
24	0.26	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.54	0.03	
25	0.00	0.0	0.0	0.06	0.0	0.0	0.0	0.00	0.0	0.13	0.37	0.02	
26	0.45	0.0	0.08	0.07	0.05	0.10	0.0	0.00	0.0	0.09	0.06	0.00	
27	0.47	0.0	0.0	0.00	0.00	0.42	0.00	0.0	0.0	0.0	0.00	0.01	
28	0.0	0.06	0.03	0.05	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.02	
29	0.0	0.12	0.0	0.0	0.0	0.05	0.0	0.00	0.0	0.0	0.18	0.09	
30	0.0	0.05	0.00	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.30	0.01	
31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.07	
TOTAL	5.22	0.73	1.79	1.33	1.66	1.71	0.41	0.07	1.14	1.69	3.28	1.24	
STA AV													

NOTES: Values are Thiessen weighted average amounts from 9 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.10	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.11	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.06	
5	0.00	0.0	0.00	0.0	0.09	0.00	0.36	0.0	0.14	0.00	0.09	0.09	
6	0.0	0.0	0.0	0.00	0.08	0.04	0.0	0.0	0.00	0.06	0.08	0.02	
7	0.0	0.0	0.74	0.0	0.00	0.26	0.0	0.0	0.0	0.0	0.02	0.26	
8	0.10	0.0	0.08	0.0	0.21	0.94	0.02	0.00	0.01	0.00	0.23	0.07	
9	0.19	0.0	0.0	0.00	0.13	0.08	0.0	0.0	0.00	0.22	0.40	0.02	
10	0.28	0.0	0.0	0.59	0.17	0.10	0.0	0.0	0.0	0.18	0.00	0.03	
11	0.05	0.00	0.14	0.00	0.02	0.0	0.0	0.00	0.0	0.0	0.31	0.01	
12	0.12	0.24	0.02	0.0	0.05	0.01	0.0	0.0	0.0	0.0	0.04	0.0	
13	0.01	0.0	0.10	0.25	0.15	0.03	0.0	0.00	0.0	0.0	0.0	0.0	
14	0.34	0.0	0.20	0.53	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01	
15	0.01	0.0	0.00	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.06	
16	0.69	0.28	0.30	0.00	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.17	
17	0.38	0.19	0.15	0.13	0.0	0.02	0.0	0.00	0.0	0.00	0.0	0.0	
18	0.48	0.01	0.0	0.0	0.0	0.00	0.0	0.0	0.05	0.00	0.10	0.00	
19	0.44	0.0	0.0	0.18	0.23	0.0	0.0	0.0	0.35	0.00	0.0	0.02	
20	0.04	0.0	0.0	0.0	0.07	0.0	0.05	0.0	0.18	0.18	0.0	0.05	
21	0.79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.04	0.0	0.14	
22	0.56	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.07	0.13	0.03	
23	0.06	0.0	0.0	0.0	0.47	0.00	0.0	0.0	0.0	0.89	0.71	0.06	
24	0.27	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.62	0.05	
25	0.01	0.0	0.0	0.09	0.0	0.00	0.0	0.00	0.0	0.14	0.42	0.03	
26	0.51	0.0	0.11	0.12	0.05	0.10	0.0	0.00	0.0	0.10	0.07	0.00	
27	0.53	0.0	0.0	0.01	0.00	0.45	0.00	0.0	0.0	0.0	0.01	0.01	
28	0.0	0.09	0.05	0.07	0.0	0.58	0.0	0.0	0.0	0.0	0.0	0.02	
29	0.0	0.18	0.0	0.0	0.05	0.0	0.0	0.00	0.0	0.0	0.21	0.13	
30	0.0	0.07	0.00	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.34	0.02	
31	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.09	
TOTAL	5.95	0.81	2.32	2.00	1.81	1.81	0.43	0.07	1.20	1.91	3.78	1.60	
STA AV													

NOTES: Values are Thiessen weighted average amounts from 9 shielded recording gages. STA AV do not apply to shielded rain gage records.

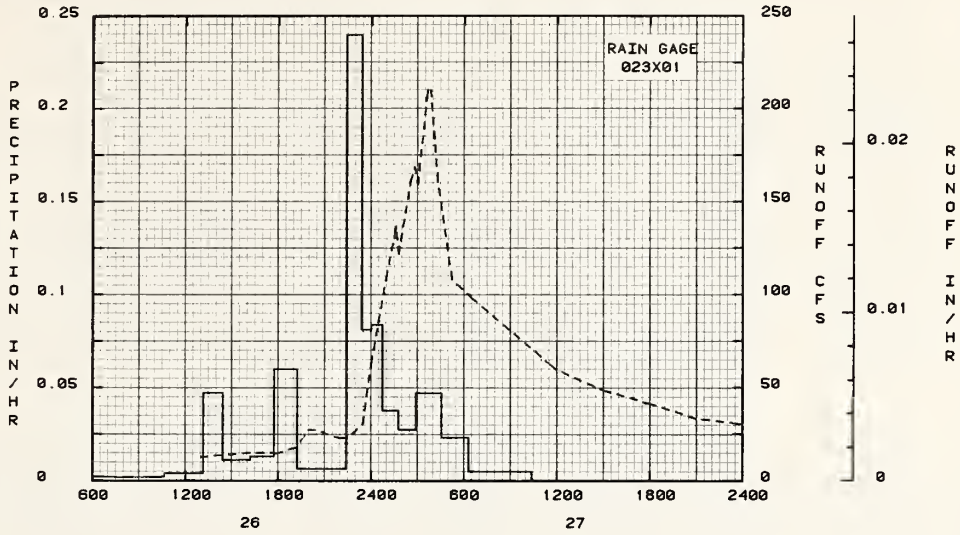
1970		MEAN DAILY DISCHARGE (cfs)					REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.608	8.146	3.261	4.083	6.182	2.129	0.853	0.056	0.016	0.154	0.541	3.071	
2	0.528	6.845	3.110	3.960	6.196	1.994	0.689	0.062	0.012	0.195	0.570	3.049	
3	0.567	6.534	3.092	3.722	6.140	1.845	0.548	0.062	0.009	0.203	0.564	2.594	
4	0.708	5.564	2.924	3.623	5.927	1.737	0.477	0.062	0.009	0.204	0.550	3.240	
5	0.847	5.053	2.627	3.625	5.990	1.650	0.591	0.056	0.009	0.181	0.652	3.346	
6	0.970	4.839	2.602	3.599	6.028	1.498	0.942	0.036	0.009	0.286	0.718	5.828	
7	1.013	4.552	4.755	3.511	5.509	1.882	0.540	0.042	0.006	0.283	0.711	7.202	
8	1.056	4.163	7.968	3.369	5.514	1.818	0.396	0.051	0.004	0.313	0.729	10.261	
9	1.034	3.976	5.714	3.254	5.617	1.830	0.370	0.035	0.002	0.400	1.093	7.767	
10	1.035	3.809	5.349	4.480	5.523	1.853	0.414	0.031	0.0	0.518	1.126	5.937	
11	0.907	3.649	5.136	4.166	5.048	1.595	0.344	0.031	0.0	0.400	1.277	5.114	
12	0.985	4.071	5.071	3.650	4.912	1.577	0.251	0.031	0.0	0.318	1.313	3.733	
13	1.345	4.088	5.253	3.737	4.901	1.675	0.231	0.031	0.0	0.341	1.042	3.367	
14	2.844	3.607	6.635	3.966	4.402	1.597	0.237	0.031	0.0	0.359	0.926	3.301	
15	3.375	3.418	6.444	4.453	4.015	1.491	0.199	0.031	0.0	0.351	0.970	2.992	
16	7.342	3.327	6.529	5.075	3.771	1.421	0.163	0.027	0.0	0.361	0.949	3.042	
17	17.874	6.641	7.018	7.004	3.607	1.291	0.142	0.019	0.0	0.360	0.929	2.463	
18	25.914	5.053	6.642	8.671	3.528	1.145	0.156	0.016	0.0	0.387	1.025	1.950	
19	32.363	4.187	6.741	10.317	3.683	1.005	0.149	0.016	0.098	0.420	0.949	0.957	
20	23.723	3.992	6.928	9.241	3.778	0.875	0.113	0.012	0.174	0.454	0.888	1.566	
21	36.558	3.857	6.954	8.894	3.254	0.787	0.103	0.009	0.197	0.455	0.824	2.735	
22	69.211	3.721	6.734	8.292	3.070	0.660	0.090	0.004	0.172	0.515	0.705	2.508	
23	34.258	3.535	6.460	8.049	4.359	0.592	0.093	0.0	0.145	1.135	1.540	1.997	
24	27.027	3.212	6.285	7.946	3.451	0.492	0.088	0.0	0.175	1.078	3.537	2.046	
25	16.396	3.179	5.896	7.729	3.161	0.444	0.074	0.0	0.200	0.771	6.719	1.632	
26	16.683	3.092	5.974	7.763	3.081	0.406	0.068	0.0	0.214	0.770	4.372	1.854	
27	75.219	3.092	5.370	7.177	3.006	0.888	0.056	0.0	0.214	0.476	3.240	2.008	
28	23.855	3.124	5.054	6.867	2.784	1.751	0.056	0.0	0.213	0.464	2.621	2.118	
29	15.512		5.079	6.833	2.671	1.494	0.056	0.0	0.203	0.513	2.535	2.162	
30	11.722		4.828	6.582	2.473	1.061	0.056	0.004	0.173	0.544	3.672	2.162	
31	9.369		4.095		2.331		0.056	0.012		0.523		2.135	
MEAN	14.866	4.369	5.371	5.788	4.320	1.349	0.277	0.025	0.075	0.443	1.576	3.359	
INCHES	1.220	0.324	0.441	0.460	0.355	0.107	0.023	0.002	0.006	0.036	0.125	0.276	
STA AV	0.773	0.369	0.319	0.412	0.312	0.140	0.025	0.047	0.022	0.036	0.070	0.120	

NOTES: To convert CPS to IN/DAY, multiply by 0.002648. STA AV amounts are based on 1963-70 record period.

1970		SELECTED RUNOFF EVENT			REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)						
ANTECEDENT CONDITIONS		RAINFALL			HUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 26 - 27, 1970											
	RG 023X01			RG 023X01							
1-26	0.0	0.020	1-26	600	0.0	0.0	1-26	1300	12.767	0.0	
				1038	0.0022	0.01		1610	15.084	0.0049	
				1309	0.0040	0.02		1750	14.585	0.0076	
				1425	0.0474	0.08		1912	17.893	0.0100	
				1613	0.0111	0.10		1958	27.274	0.0119	
WATERSHED CONDITIONS:				1745	0.0130	0.12		2022	27.275	0.0131	
Hunoff event was caused by a				1915	0.0600	0.21		2156	22.747	0.0174	
sustained winter rain fol-				2223	0.0064	0.23		2226	22.747	0.0187	
lowing about 10 days of inter-				2323	0.2400	0.47		2328	30.663	0.0217	
mittent rain and snowmelt.				2400	0.0811	0.52		2400	63.215	0.0245	
			1-27	43	0.0837	0.58	1-27	58	109.031	0.0337	
				147	0.0375	0.62		136	136.727	0.0423	
				253	0.0273	0.65		146	121.804	0.0447	
				435	0.0471	0.73		232	160.656	0.0566	
				619	0.0231	0.77		248	168.755	0.0614	
				1023	0.0049	0.79		300	159.332	0.0650	
								338	210.159	0.0779	
								350	210.159	0.0825	
								418	160.656	0.0920	
								514	108.009	0.1058	
								630	98.136	0.1202	
								1156	59.717	0.1675	
								1502	48.194	0.1860	
								1758	41.401	0.2005	
								2058	33.381	0.2129	
								2400	30.225	0.2235	

NOTES: To convert CFS to IN/HR, multiply by .0001103.





EVENT OF JANUARY 26 - 27, 1970  
 REYNOLDS, IDAHO SALMON CREEK WATERSHED (046017)

REYNOLDS, IDAHO MACKS CREEK WATERSHED (046084)

LOCATION: Owyhee County, Idaho; 34 miles south of Nampa; east flowing tributary to Reynolds Creek, Snake River Basin.

AREA: 7846.00 acres 12.26 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														REYNOLDS, IDAHO MACKS CREEK WATERSHED (046084)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	5.39	0.82	2.17	2.10	1.32	1.79	0.31	0.17	1.13	1.58	3.62	1.58	21.98
	Q	0.860	0.243	0.356	0.240	0.162	0.026	0.007	0.003	0.001	0.002	0.037	0.157	2.096
STA AV	P	3.95	1.31	1.18	1.49	1.06	1.82	0.18	1.18	0.67	1.41	2.08	1.75	18.08
	Q	0.526	0.196	0.270	0.286	0.119	0.059	0.009	0.002	0.002	0.002	0.010	0.047	1.526

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
1970	Maximum Discharge Date	1 Hour		2 Hours		Maximum Volume for Selected Time Interval											
		Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days							
	1-27	0.030		1-27	0.030	1-27	0.054	1-27	0.126	1-27	0.175	1-26	0.230	1-26	0.275	1-21	0.635

MAXIMUMS FOR PERIOD OF RECORD																
	1-21	0.039	1-21	0.037	1-20	0.069	1-20	0.183	1-20	0.294	1-20	0.457	1-20	0.649	1-19	0.969
	1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: The watershed topography is steep, except in the lower valley, with numerous basalt outcrops at the higher elevations. 98% is sagebrush rangeland with a varying cover of sagebrush, bitterbrush, mountain mahogany and willow with a fair cover of forage plants such as cheatgrass, bluebunch wheatgrass, and Idaho fescue. 35% of area has a vegetative cover of 0-25%, 33% of the area has a vegetative cover of 26-50%, 18% of area has a vegetative cover of 51-75%, and 12% of the area has a vegetative cover of 76-100%. 2% of area is in pasture and hay crops which receives limited irrigation. For map of Watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 68,3-4. Records began 1963. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 12 rain gages. Station average precipitation amounts are based on 1968-70 record period. Station average streamflow amounts are based on 1963-70. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles N.E. of watershed.

1970	DAILY PRECIPITATION (inches)												REYNOLDS, IDAHO MACKS CREEK WATERSHED (046084)
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.00	0.21	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.03	
2	0.0	0.0	0.04	0.01	0.01	0.00	0.00	0.0	0.0	0.0	0.00	0.04	
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.09	
4	0.01	0.0	0.00	0.0	0.00	0.00	0.0	0.01	0.39	0.00	0.0	0.02	
5	0.0	0.0	0.0	0.0	0.10	0.00	0.24	0.01	0.04	0.00	0.17	0.00	
6	0.0	0.0	0.0	0.01	0.08	0.02	0.00	0.0	0.00	0.00	0.12	0.00	
7	0.0	0.0	0.71	0.01	0.03	0.18	0.0	0.0	0.0	0.0	0.92	0.38	
8	0.10	0.00	0.04	0.0	0.22	0.09	0.00	0.0	0.0	0.00	0.12	0.01	
9	0.16	0.0	0.01	0.00	0.15	0.06	0.00	0.0	0.00	0.21	0.35	0.03	
10	0.14	0.0	0.0	0.54	0.09	0.07	0.0	0.0	0.00	0.11	0.00	0.01	
11	0.01	0.00	0.11	0.03	0.01	0.0	0.0	0.0	0.0	0.01	0.35	0.05	
12	0.10	0.25	0.00	0.0	0.02	0.01	0.00	0.00	0.00	0.00	0.05	0.0	
13	0.03	0.0	0.00	0.23	0.06	0.02	0.00	0.00	0.0	0.0	0.0	0.0	
14	0.41	0.0	0.31	0.37	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.02	
15	0.01	0.0	0.00	0.01	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.09	
16	0.57	0.27	0.21	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.20	
17	0.38	0.23	0.09	0.00	0.0	0.01	0.0	0.0	0.0	0.09	0.00	0.0	
18	0.42	0.00	0.0	0.01	0.0	0.0	0.0	0.0	0.01	0.02	0.07	0.01	
19	0.32	0.0	0.0	0.41	0.03	0.0	0.0	0.0	0.38	0.01	0.0	0.00	
20	0.06	0.0	0.0	0.00	0.06	0.00	0.05	0.0	0.29	0.16	0.0	0.04	
21	0.63	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.02	0.00	0.13	
22	0.54	0.0	0.0	0.0	0.17	0.00	0.0	0.0	0.00	0.05	0.12	0.02	
23	0.06	0.0	0.0	0.0	0.27	0.01	0.0	0.0	0.0	0.70	0.64	0.00	
24	0.25	0.0	0.0	0.02	0.0	0.01	0.0	0.00	0.0	0.01	0.83	0.00	
25	0.01	0.0	0.0	0.14	0.00	0.01	0.0	0.0	0.0	0.11	0.33	0.01	
26	0.57	0.0	0.16	0.17	0.04	0.05	0.0	0.0	0.0	0.17	0.04	0.03	
27	0.53	0.00	0.0	0.03	0.01	0.49	0.00	0.0	0.0	0.0	0.00	0.06	
28	0.0	0.06	0.05	0.13	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.05	
29	0.0		0.20	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.21	0.15	
30	0.0		0.02	0.00	0.00	0.00	0.00	0.13	0.0	0.0	0.18	0.01	
31	0.08		0.0		0.0		0.0	0.00		0.0		0.10	
TOTAL	5.39	0.82	2.17	2.10	1.32	1.79	0.31	0.17	1.13	1.58	3.62	1.58	
STA AV	3.95	1.31	1.18	1.49	1.06	1.82	0.18	1.18	0.67	1.41	2.08	1.75	

NOTES: Values are Thiessen weighted average 'Actual' amounts from 12 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. E. Bason, "Computing Actual Precipitation", Proceedings of WMO-IDES Symposium, Gello, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watershed 68.001.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.00	0.11	0.0	0.00	0.0	0.0	0.01	0.0	0.0	0.0	0.02	
2	0.0	0.0	0.02	0.01	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.03	
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.07	
4	0.01	0.0	0.00	0.0	0.0	0.00	0.0	0.01	0.34	0.00	0.0	0.02	
5	0.0	0.0	0.0	0.0	0.08	0.00	0.23	0.01	0.04	0.00	0.15	0.00	
6	0.0	0.0	0.0	0.00	0.06	0.02	0.0	0.0	0.00	0.00	0.11	0.0	
7	0.0	0.0	0.61	0.00	0.00	0.18	0.0	0.0	0.0	0.0	0.02	0.29	
8	0.08	0.00	0.04	0.0	0.18	0.09	0.00	0.0	0.0	0.00	0.11	0.01	
9	0.12	0.0	0.00	0.00	0.12	0.05	0.00	0.0	0.00	0.18	0.32	0.02	
10	0.11	0.0	0.0	0.46	0.07	0.06	0.0	0.0	0.00	0.09	0.00	0.01	
11	0.01	0.00	0.08	0.02	0.01	0.0	0.0	0.0	0.0	0.01	0.30	0.03	
12	0.08	0.21	0.00	0.0	0.02	0.01	0.0	0.00	0.00	0.00	0.04	0.0	
13	0.02	0.0	0.00	0.07	0.05	0.02	0.00	0.00	0.0	0.0	0.0	0.0	
14	0.35	0.0	0.24	0.17	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.01	
15	0.01	0.0	0.00	0.00	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.05	
16	0.51	0.22	0.11	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.11	
17	0.36	0.18	0.06	0.00	0.0	0.01	0.0	0.0	0.0	0.00	0.00	0.0	
18	0.39	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.01	0.01	0.06	0.00	
19	0.29	0.0	0.0	0.24	0.03	0.0	0.0	0.0	0.32	0.01	0.0	0.00	
20	0.06	0.0	0.0	0.03	0.06	0.00	0.05	0.0	0.24	0.13	0.0	0.02	
21	0.55	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.02	0.00	0.06	
22	0.48	0.0	0.0	0.0	0.15	0.00	0.0	0.0	0.00	0.04	0.10	0.01	
23	0.06	0.0	0.0	0.0	0.25	0.01	0.0	0.0	0.0	0.59	0.54	0.0	
24	0.23	0.0	0.0	0.01	0.0	0.00	0.0	0.00	0.0	0.01	0.69	0.00	
25	0.01	0.0	0.0	0.05	0.00	0.00	0.0	0.0	0.0	0.09	0.28	0.00	
26	0.53	0.0	0.06	0.06	0.04	0.03	0.0	0.0	0.0	0.13	0.03	0.01	
27	0.50	0.00	0.0	0.01	0.00	0.34	0.00	0.0	0.0	0.0	0.00	0.03	
28	0.0	0.03	0.02	0.04	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.02	
29	0.0	0.0	0.07	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.17	0.07	
30	0.0	0.01	0.00	0.00	0.00	0.00	0.00	0.12	0.0	0.0	0.15	0.00	
31	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.04	
TOTAL STA AV	4.83	0.65	1.44	1.14	1.12	1.32	0.29	0.17	0.97	1.31	3.08	0.94	

NOTES: Values are Thiessen weighted average amounts from 12 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO HACKS CREEK WATERSHED (046084)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.00	0.16	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0	0.02	
2	0.0	0.0	0.03	0.01	0.01	0.00	0.00	0.0	0.0	0.0	0.00	0.04	
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.08	
4	0.01	0.0	0.00	0.0	0.00	0.00	0.0	0.01	0.36	0.00	0.0	0.02	
5	0.0	0.0	0.0	0.0	0.09	0.00	0.23	0.01	0.04	0.00	0.16	0.00	
6	0.0	0.0	0.0	0.00	0.07	0.02	0.00	0.0	0.00	0.00	0.11	0.00	
7	0.0	0.0	0.67	0.01	0.00	0.18	0.0	0.0	0.0	0.0	0.02	0.33	
8	0.09	0.00	0.04	0.0	0.20	0.09	0.00	0.0	0.0	0.00	0.11	0.01	
9	0.14	0.0	0.00	0.00	0.13	0.05	0.00	0.0	0.00	0.20	0.34	0.02	
10	0.13	0.0	0.0	0.50	0.08	0.07	0.0	0.0	0.00	0.10	0.00	0.01	
11	0.01	0.00	0.09	0.02	0.01	0.0	0.0	0.0	0.0	0.01	0.33	0.04	
12	0.09	0.23	0.00	0.0	0.02	0.01	0.0	0.00	0.00	0.00	0.05	0.0	
13	0.03	0.0	0.00	0.12	0.05	0.02	0.00	0.00	0.0	0.0	0.0	0.0	
14	0.38	0.0	0.27	0.25	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.01	
15	0.01	0.0	0.00	0.00	0.0	0.04	0.0	0.0	0.0	0.0	0.00	0.07	
16	0.54	0.25	0.15	0.00	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.15	
17	0.37	0.20	0.07	0.00	0.0	0.01	0.0	0.0	0.0	0.00	0.00	0.0	
18	0.40	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.02	0.02	0.06	0.01	
19	0.30	0.0	0.0	0.31	0.03	0.0	0.0	0.0	0.35	0.01	0.0	0.00	
20	0.06	0.0	0.0	0.00	0.06	0.00	0.05	0.0	0.27	0.15	0.0	0.03	
21	0.59	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00	0.02	0.00	0.09	
22	0.51	0.0	0.0	0.0	0.16	0.00	0.0	0.0	0.00	0.04	0.11	0.02	
23	0.06	0.0	0.0	0.0	0.26	0.01	0.0	0.0	0.0	0.65	0.59	0.00	
24	0.24	0.0	0.0	0.01	0.0	0.01	0.0	0.00	0.0	0.01	0.77	0.00	
25	0.01	0.0	0.0	0.09	0.00	0.01	0.0	0.0	0.0	0.10	0.30	0.00	
26	0.55	0.0	0.10	0.10	0.04	0.04	0.0	0.0	0.0	0.16	0.04	0.02	
27	0.52	0.00	0.0	0.02	0.00	0.41	0.00	0.0	0.0	0.0	0.00	0.04	
28	0.0	0.04	0.03	0.08	0.0	0.47	0.0	0.0	0.0	0.0	0.0	0.03	
29	0.0	0.0	0.13	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.19	0.11	
30	0.0	0.0	0.02	0.00	0.00	0.00	0.00	0.13	0.0	0.0	0.16	0.01	
31	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.06	
TOTAL STA AV	5.12	0.74	1.77	1.53	1.24	1.52	0.30	0.17	1.06	1.46	3.37	1.23	

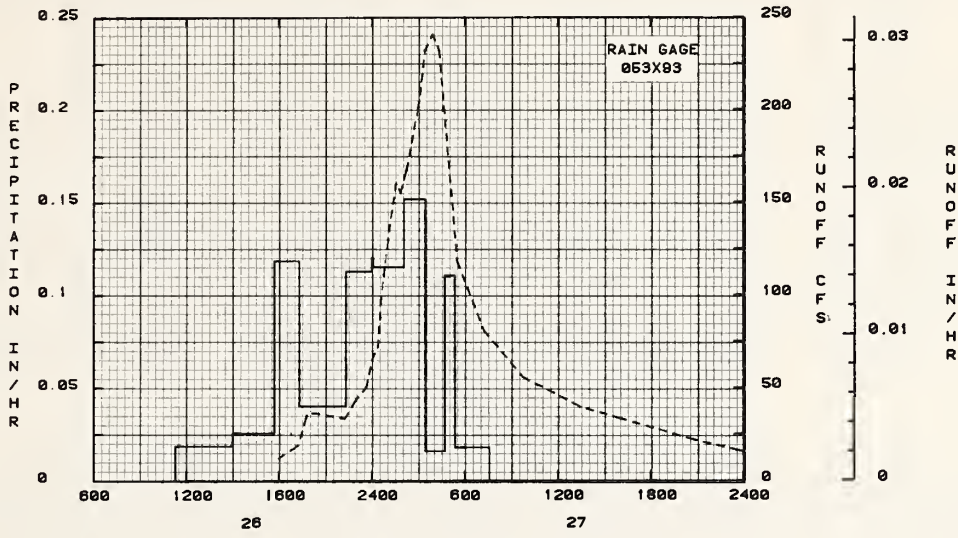
NOTES: Values are Thiessen weighted average amounts from 12 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970 MEAN DAILY DISCHARGE (cfs)													REYNOLDS, IDAHO MACRS CREEK WATERSHED (046084)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.096	4.984	2.254	2.684	2.354	0.501	0.138	0.023	0.011	0.014	0.023	0.858													
2	0.092	4.122	2.164	2.389	2.193	0.375	0.138	0.023	0.011	0.017	0.030	0.925													
3	0.093	4.340	2.008	2.249	2.321	0.328	0.130	0.020	0.011	0.017	0.038	0.906													
4	0.086	3.490	2.030	2.215	2.359	0.266	0.122	0.017	0.011	0.017	0.038	1.196													
5	0.088	3.277	1.876	2.152	2.483	0.273	0.114	0.035	0.011	0.014	0.038	1.311													
6	0.074	4.135	1.863	1.984	2.611	0.262	0.107	0.057	0.011	0.011	0.038	3.246													
7	0.068	3.215	5.562	1.869	2.490	0.270	0.107	0.057	0.011	0.011	0.042	5.627													
8	0.071	2.988	5.332	1.896	2.699	0.284	0.107	0.057	0.008	0.011	0.052	8.573													
9	0.112	2.728	4.300	1.904	3.218	0.296	0.107	0.052	0.006	0.014	0.075	4.376													
10	0.339	2.565	3.764	2.736	3.152	0.325	0.100	0.047	0.006	0.020	0.093	2.542													
11	0.238	2.470	3.577	2.280	2.916	0.337	0.093	0.047	0.006	0.023	0.137	2.128													
12	0.249	2.973	3.635	2.062	2.292	0.331	0.093	0.047	0.006	0.023	0.149	1.196													
13	0.352	2.734	3.768	2.111	2.465	0.418	0.093	0.047	0.006	0.023	0.100	1.305													
14	1.306	2.271	5.254	2.343	2.234	0.539	0.086	0.042	0.006	0.023	0.053	1.524													
15	1.215	2.153	4.601	2.562	1.937	0.552	0.074	0.038	0.008	0.023	0.105	1.299													
16	3.785	2.132	4.290	3.321	1.727	0.457	0.068	0.038	0.014	0.023	0.114	1.637													
17	9.729	4.060	4.613	4.570	1.546	0.380	0.068	0.038	0.017	0.023	0.100	1.222													
18	15.376	2.743	4.386	3.533	1.618	0.321	0.068	0.038	0.017	0.023	0.126	0.884													
19	12.123	2.386	4.531	3.381	1.339	0.250	0.068	0.030	0.017	0.026	0.122	0.588													
20	7.805	2.332	4.544	2.694	0.995	0.197	0.068	0.023	0.020	0.026	0.107	0.919													
21	19.245	2.239	4.443	2.691	1.026	0.184	0.062	0.017	0.026	0.023	0.109	1.014													
22	44.985	2.304	4.071	2.436	0.922	0.184	0.057	0.011	0.030	0.023	0.100	0.840													
23	17.699	2.456	4.006	2.461	1.186	0.169	0.051	0.011	0.030	0.023	0.398	0.743													
24	17.685	2.297	3.483	2.866	1.035	0.155	0.041	0.011	0.030	0.023	0.905	0.785													
25	9.757	2.195	3.423	2.796	0.729	0.158	0.038	0.011	0.024	0.023	4.756	0.861													
26	14.777	2.114	3.532	3.190	0.709	0.138	0.038	0.011	0.023	0.017	1.222	0.787													
27	72.504	2.055	3.096	2.826	0.566	0.147	0.034	0.011	0.025	0.011	0.700	0.791													
28	12.726	2.097	3.183	2.749	0.560	0.150	0.030	0.011	0.021	0.011	0.517	0.791													
29	8.476		3.192	3.153	0.621	0.154	0.026	0.011	0.016	0.014	0.600	0.823													
30	6.871		3.224	3.171	0.496	0.146	0.023	0.011	0.011	0.017	1.388	0.915													
31	5.546		2.865		0.595		0.023	0.011		0.020		1.227													
MEAN	9.1486	2.8662	3.7893	2.6425	1.7231	0.2842	0.0766	0.0291	0.0150	0.0190	0.4103	1.6721													
INCHES	0.860	0.243	0.356	0.240	0.162	0.026	0.007	0.003	0.001	0.002	0.037	0.157													
STA AV	0.526	0.196	0.270	0.286	0.119	0.059	0.009	0.002	0.002	0.002	0.010	0.047													

NOTES: To convert CFS to IN/DAY, multiply by 0.003034. STA AV amounts based on 1963-70 record period.

1970 SELECTED RUNOFF EVENT													REYNOLDS, IDAHO MACRS CREEK WATERSHED (046084)												
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF													
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.															
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)															
EVENT OF JANUARY 26 - 27, 1970																									
1-26	RG 053X93		1-26	RG 053X93			1-26																		
	0.0	0.019		1117	0.0	0.0		1758	12.075	0.0															
				1501	0.0187	0.07		1916	19.393	0.0026															
				1743	0.0259	0.14		1948	35.467	0.0944															
				1919	0.1187	0.33		2010	36.433	0.0061															
				2219	0.0400	0.45		2214	33.412	0.0152															
WATERSHED CONDITIONS:						2400	0.1129	0.64	2306	45.365	0.0195														
Runoff event was caused by a						5	0.1201	0.65	2338	54.333	0.0227														
sustained winter rain fol-						205	0.1150	0.88	2400	65.068	0.0254														
lowing about 10 days of inter-						328	0.1518	1.09	1-27	24	72.175	0.0289													
mittent rain and snowmelt.						444	0.0158	1.11	34	95.571	0.0307														
				522	0.1105	1.18		104	130.694	0.0378															
				736	0.0179	1.22		134	160.648	0.0470															
								152	155.140	0.0530															
								214	167.714	0.0605															
								216	167.714	0.0612															
								304	204.522	0.0800															
								326	231.834	0.0901															
								356	240.842	0.1050															
								422	231.834	0.1179															
								532	117.791	0.1437															
								716	80.658	0.1654															
								946	55.650	0.1869															
								1326	39.630	0.2090															
								1626	32.444	0.2227															
								2058	21.506	0.2382															
								2400	15.590	0.2453															

NOTES: To convert CFS to IN/HR, multiply by .00012640.



EVENT OF JANUARY 26 - 27, 1970  
 REYNOLDS, IDAHO MACKS CREEK WATERSHED (046004)

## REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)

LOCATION: Owyhee County, Idaho; 40 miles south of Nampa; main stem of Reynolds Creek which is tributary to the Snake River.

AREA: 13453.00 acres 21.02 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	9.50	1.13	2.85	3.12	1.90	2.28	0.71	0.37	1.00	2.89	6.27	4.36	36.39
	Q	1.193	0.559	0.657	0.873	4.074	1.764	0.245	0.025	0.030	0.076	0.347	0.448	10.290
STA AV	P	6.79	2.18	1.60	2.01	1.25	2.02	0.42	1.67	0.59	1.98	3.72	4.00	28.22
	Q	0.788	0.506	0.589	1.363	3.128	1.507	0.214	0.035	0.022	0.062	0.168	0.209	8.592

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	1-27	0.018	1-27	0.017	1-27	0.033	1-27	0.086	1-26	0.145	1-26	0.211	5-17	0.380	5-17	1.436

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	1-21	0.030	1-21	0.029	1-21	0.057	1-21	0.157	1-21	0.283	1-20	0.454	1-20	0.612	5-17	1.523
	1969		1969		1969		1969		1969		1969		1969		1967	

NOTES: Watershed condition - Watershed is generally sagebrush rangeland except for scattered stands of Douglas fir and aspen and mountain meadows. The topography is steep with numerous rock outcrops on the ridges. The watershed is used mainly for cattle grazing except during the winter when snow blankets most of the area. Vegetation consists predominately of big sagebrush, little sagebrush, rabbitbrush, snowberry, blue bunch wheatgrass, Idaho fescue, and squirreltail grass. 25% of the area has a vegetative cover of 0-25%, 15% of the area has a vegetative cover of 26-50%, 15% of the area has a vegetative cover of 51-75%, and 45% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, DSDA Misc. Pub. 1262, p. 68.4-6. Records began: Precipitation - 1963; Runoff - 1967. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 16 rain gages. Station average precipitation amounts are based on 1968-70 record period. Station average runoff amounts are based on 1967-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho; 50 miles E.E. of watershed.

Course#	SNOW COURSE DATA: DATE OF MEASUREMENT/AVERAGE WATER CONTENT (INCHES)													
	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches	Date	Inches
144062	010270	3.00	011470	5.44	012270	8.02	012870	9.58	021070	10.25	022570	11.00	022570	11.00
144062	031070	12.25	032470	12.60	040770	10.80	042170	8.80	050470	7.80	051970	7.80	060270	3.50
144062	121670	5.70	123070	7.90										
155054	010270	2.65	011570	4.75	012270	7.11	012870	8.45	021070	8.25	022570	9.40	022570	9.40
155054	031070	10.00	032470	10.60	040770	9.20	042170	7.80	050470	2.20	051970	4.80	060270	4.80
155054	123070	7.00												
163020	010270	9.64	011570	13.50	012270	21.70	021070	22.82	022570	24.58	031070	26.40	031070	26.40
163020	032470	28.20	040770	28.00	042170	32.20	050570	31.50	051970	27.00	060270	13.30	060270	13.30
163020	120470	8.90	121670	14.50	123070	13.80								
163098	010270	8.10	011570	14.17	012270	22.60	021070	23.00	022570	23.50	031070	26.04	031070	26.04
163098	032470	28.40	040770	28.30	042170	31.20	050570	30.00	051970	23.50	060270	6.70	060270	6.70
163098	120270	7.20	121670	12.00	123070	14.44								
167007	010270	2.90	011570	5.25	012270	10.60	021070	10.40	022570	11.40	031070	12.40	031070	12.40
167007	032470	12.20	040770	12.60	042170	13.20	050570	11.00	051970	2.70	060270	6.40	060270	6.40
167007	123070	7.80												
174026	010270	6.98	011570	10.80	012270	16.20	021070	21.00	022570	23.25	031070	23.00	031070	23.00
174026	031070	25.60	032470	27.25	040770	28.00	042170	32.30	050570	29.50	051970	23.50	051970	23.50
174026	060270	6.30	120270	6.20	121670	11.20								

NOTES: For snow course location information, see map on p. 68.001-6 of Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1968, DSDA Misc. Pub. 1330.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.01	0.24	0.02	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04	
2	0.99	0.01	0.12	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.26	
3	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.53	
4	0.01	0.00	0.0	0.0	0.00	0.0	0.00	0.0	0.30	0.0	0.05	0.07	
5	0.01	0.0	0.0	0.0	0.01	0.00	0.52	0.16	0.08	0.00	0.48	0.30	
6	0.00	0.0	0.00	0.01	0.12	0.02	0.02	0.00	0.01	0.01	0.15	0.00	
7	0.01	0.0	0.67	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.10	0.57	
8	0.20	0.0	0.20	0.0	0.42	0.39	0.06	0.00	0.00	0.00	0.29	0.23	
9	0.23	0.0	0.00	0.0	0.25	0.10	0.04	0.0	0.0	0.42	0.88	0.09	
10	0.30	0.0	0.00	0.63	0.26	0.19	0.00	0.00	0.0	0.13	0.01	0.02	
11	0.06	0.00	0.14	0.05	0.03	0.0	0.0	0.0	0.0	0.31	0.70	0.05	
12	0.39	0.21	0.00	0.00	0.10	0.00	0.00	0.0	0.0	0.02	0.05	0.01	
13	0.18	0.02	0.00	0.64	0.07	0.10	0.00	0.0	0.0	0.00	0.00	0.01	
14	0.50	0.00	0.32	0.65	0.00	0.06	0.0	0.0	0.0	0.00	0.00	0.13	
15	0.10	0.0	0.00	0.01	0.00	0.10	0.0	0.0	0.0	0.0	0.00	0.11	
16	0.98	0.30	0.42	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.16	
17	0.61	0.38	0.07	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.01	
18	0.59	0.04	0.00	0.01	0.0	0.00	0.0	0.0	0.01	0.00	0.15	0.02	
19	0.50	0.0	0.0	0.49	0.00	0.0	0.0	0.00	0.50	0.02	0.00	0.00	
20	0.08	0.0	0.0	0.00	0.17	0.09	0.05	0.0	0.10	0.23	0.00	0.30	
21	1.13	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.0	0.14	0.00	0.16	
22	0.74	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.11	0.18	0.05	
23	0.21	0.0	0.00	0.0	0.29	0.08	0.0	0.00	0.0	1.22	0.79	0.01	
24	0.39	0.0	0.0	0.05	0.00	0.0	0.0	0.0	0.0	0.04	1.11	0.00	
25	0.09	0.6	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.17	0.30	0.01	
26	1.07	0.0	0.14	0.31	0.06	0.03	0.01	0.00	0.0	0.30	0.13	0.05	
27	0.89	0.0	0.0	0.04	0.00	0.45	0.0	0.0	0.0	0.00	0.03	0.11	
28	0.00	0.12	0.06	0.08	0.00	0.58	0.01	0.0	0.0	0.0	0.0	0.73	
29	0.0	0.0	0.22	0.02	0.00	0.10	0.0	0.02	0.0	0.0	0.36	0.35	
30	0.0	0.20	0.01	0.00	0.0	0.0	0.0	0.16	0.0	0.0	0.49	0.11	
31	0.21	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.14	
TOTAL	9.50	1.13	2.85	3.12	1.90	2.28	0.71	0.37	1.00	2.89	6.27	4.36	
STA AV	6.79	2.18	1.60	2.01	1.25	2.02	0.42	1.67	0.59	1.98	3.72	4.00	

NOTES: Values are Thiessen weighted average 'Actual' amounts from 15 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. H. Haas, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is:  $\log_e(O/A) = \log_e(O/S) \times 1.80$ , where O = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watersheds 68.001 and 68.014.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.00	0.01	0.13	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.03	
2	0.00	0.01	0.07	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.22	
3	0.0	0.01	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.39	
4	0.01	0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.25	0.0	0.04	0.04	
5	0.01	0.0	0.0	0.0	0.01	0.00	0.45	0.16	0.06	0.00	0.37	0.00	
6	0.00	0.0	0.00	0.00	0.09	0.02	0.01	0.00	0.00	0.01	0.12	0.00	
7	0.01	0.0	0.46	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.08	0.38	
8	0.11	0.0	0.12	0.0	0.33	0.35	0.05	0.00	0.00	0.00	0.22	0.12	
9	0.15	0.0	0.00	0.0	0.20	0.09	0.04	0.0	0.0	0.29	0.66	0.04	
10	0.18	0.0	0.00	0.37	0.21	0.17	0.00	0.00	0.0	0.10	0.00	0.01	
11	0.03	0.00	0.08	0.03	0.02	0.0	0.0	0.0	0.0	0.00	0.51	0.03	
12	0.23	0.17	0.00	0.0	0.07	0.00	0.00	0.0	0.0	0.02	0.03	0.01	
13	0.11	0.01	0.00	0.31	0.05	0.09	0.00	0.0	0.0	0.00	0.00	0.00	
14	0.33	0.00	0.20	0.33	0.00	0.06	0.0	0.0	0.0	0.0	0.00	0.07	
15	0.07	0.0	0.00	0.01	0.00	0.09	0.0	0.0	0.0	0.0	0.00	0.06	
16	0.62	0.23	0.28	0.00	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.07	
17	0.39	0.28	0.05	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.01	
18	0.39	0.03	0.00	0.01	0.0	0.0	0.0	0.0	0.01	0.00	0.11	0.01	
19	0.38	0.0	0.0	0.25	0.00	0.0	0.0	0.00	0.45	0.01	0.00	0.00	
20	0.07	0.0	0.0	0.00	0.15	0.00	0.05	0.0	0.09	0.21	0.00	0.16	
21	0.87	0.0	0.0	0.0	0.01	0.00	0.3	0.0	0.0	0.09	0.00	0.08	
22	0.60	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.07	0.14	0.02	
23	0.15	0.0	0.00	0.0	0.25	0.07	0.0	0.00	0.0	0.86	0.63	0.00	
24	0.27	0.0	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.03	0.92	0.00	
25	0.06	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.11	0.24	0.00	
26	0.82	0.0	0.06	0.13	0.05	0.02	0.01	0.00	0.0	0.19	0.10	0.02	
27	0.66	0.0	0.0	0.02	0.00	0.41	0.0	0.0	0.0	0.00	0.03	0.04	
28	0.00	0.07	0.03	0.05	0.0	0.53	0.01	0.0	0.0	0.0	0.0	0.34	
29	0.0	0.10	0.01	0.00	0.00	0.10	0.0	0.02	0.0	0.0	0.30	0.15	
30	0.0	0.09	0.00	0.00	0.00	0.0	0.0	0.14	0.0	0.0	0.39	0.05	
31	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.07	
TOTAL	6.65	0.82	1.69	1.59	1.54	2.08	0.63	0.34	0.86	2.02	4.90	2.44	
STA AV													

NOTES: Values are Thiessen weighted average amounts from 16 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.01	0.19	0.01	9.0	0.00	0.0	0.0	0.00	0.0	0.0	0.04
2	0.00	0.01	0.09	0.00	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.24
3	0.0	0.02	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.00	0.46
4	0.01	0.00	0.0	0.0	0.00	0.0	0.00	0.0	0.27	0.0	0.05	0.05
5	0.01	0.0	0.0	0.0	0.01	0.00	0.48	0.16	0.07	0.00	0.42	0.00
6	0.00	0.0	0.00	0.00	0.11	0.02	0.01	0.00	0.01	0.01	0.14	0.00
7	0.01	0.0	0.56	0.0	0.0	0.02	0.0	0.0	0.00	0.00	0.09	0.47
8	0.15	0.0	0.16	0.0	0.38	0.37	0.06	0.00	0.00	0.00	0.26	0.17
9	0.19	0.0	0.00	0.0	0.23	0.10	0.04	0.0	0.0	0.36	0.77	0.06
10	0.23	0.0	0.00	0.49	0.24	0.18	0.00	0.00	0.0	0.11	0.01	0.02
11	0.04	0.00	0.11	0.04	0.02	0.0	0.0	0.0	0.0	0.01	0.61	0.04
12	0.30	0.19	0.90	0.00	0.09	0.00	0.00	0.0	0.0	0.02	0.04	0.01
13	0.14	0.01	0.00	0.46	0.06	0.10	0.00	0.0	0.0	0.00	0.00	0.01
14	0.41	0.00	0.26	0.48	0.00	0.06	0.0	0.0	0.0	0.00	0.00	0.10
15	0.08	0.0	0.00	0.01	0.00	0.09	0.0	0.0	0.0	0.0	0.00	0.09
16	0.79	0.27	0.35	0.0	0.00	0.0	0.00	0.0	0.0	0.00	0.0	0.12
17	0.49	0.33	0.07	0.00	0.0	0.05	0.0	0.0	0.0	0.00	0.0	0.01
18	0.48	0.04	0.00	0.01	0.0	0.00	0.0	0.0	0.01	0.00	0.13	0.01
19	0.44	0.0	0.0	0.36	0.00	0.0	0.0	0.00	0.47	0.02	0.00	0.00
20	0.07	0.0	0.0	0.00	0.16	0.00	0.05	0.0	0.09	0.25	0.00	0.23
21	1.01	0.0	0.0	0.0	0.01	0.00	0.0	0.0	0.0	0.11	0.00	0.13
22	0.67	0.0	0.0	0.0	0.08	0.00	0.00	0.0	0.0	0.10	0.16	0.04
23	0.18	0.0	0.00	0.0	0.27	0.07	0.0	0.00	0.0	1.04	0.71	0.01
24	0.33	0.0	0.0	0.03	0.00	0.0	0.0	0.0	0.0	0.04	1.02	0.00
25	0.08	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.14	0.27	0.00
26	0.96	0.0	0.09	0.21	0.06	0.02	0.01	0.00	0.0	0.25	0.12	0.04
27	0.78	0.0	0.0	0.02	0.00	0.44	0.0	0.0	0.0	0.00	0.03	0.08
28	0.00	0.09	0.04	0.06	0.00	0.56	0.01	0.0	0.0	0.0	0.0	0.52
29	0.0	0.0	0.15	0.01	0.00	0.10	0.0	0.02	0.0	0.0	0.33	0.25
30	0.0	0.0	0.14	0.01	0.00	0.0	0.0	0.15	0.0	0.0	0.44	0.08
31	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.00	0.0	0.11
TOTAL	8.03	0.97	2.24	2.30	1.73	2.20	0.67	0.36	0.94	2.46	5.62	3.38
STA AV												

NOTES: Values are Thiessen weighted average amounts from 16 shielded recording gages. STA AV do not apply to shielded rain gage records.

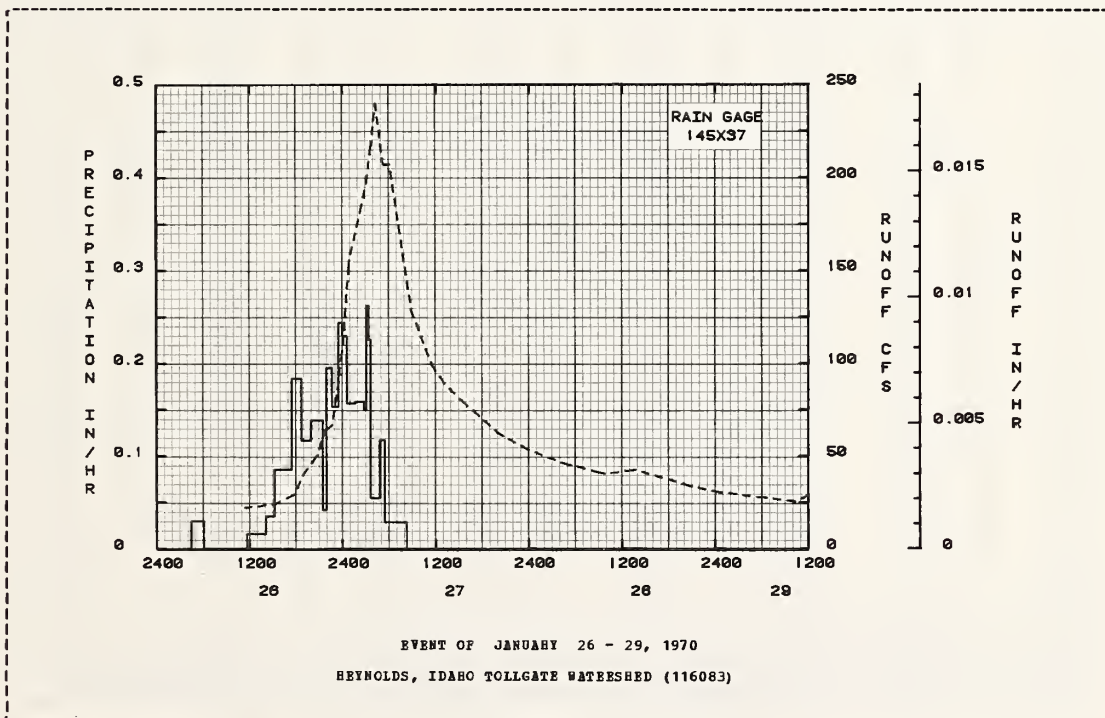
1970		MEAN DAILY DISCHARGE (cfs)					REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.25	16.36	9.80	9.40	17.64	67.23	10.88	1.29	0.10	0.55	1.80	8.95
2	1.20	14.08	9.14	9.31	26.69	66.83	9.46	1.17	0.07	0.58	1.65	8.22
3	1.35	12.70	8.24	8.82	39.23	65.09	8.63	1.21	0.07	0.71	1.49	7.90
4	1.26	11.14	8.06	9.42	53.23	62.53	7.91	0.93	0.48	0.78	1.50	7.44
5	1.33	10.24	7.54	12.57	63.01	59.36	9.27	1.00	0.73	0.82	2.56	7.22
6	0.93	10.29	7.59	18.62	68.49	55.17	8.78	1.14	0.66	0.95	2.86	9.68
7	0.83	10.28	15.76	17.02	68.69	52.50	6.92	0.72	0.51	0.99	2.51	27.23
8	1.13	10.45	23.15	15.48	73.16	50.63	6.37	0.72	0.43	1.06	2.28	26.28
9	1.59	10.96	13.15	18.35	81.65	53.42	5.94	0.59	0.48	1.49	6.78	16.64
10	1.90	11.50	11.56	32.89	72.37	46.48	5.69	0.64	0.48	1.63	5.23	11.46
11	1.69	11.97	10.81	27.17	58.10	37.74	5.22	0.52	0.38	1.31	5.78	10.14
12	1.90	15.17	10.23	20.55	50.36	33.66	4.70	0.38	0.46	1.19	5.23	8.37
13	2.49	14.22	11.20	18.18	44.10	30.82	4.43	0.27	0.64	1.19	3.42	8.60
14	3.80	11.58	15.62	17.51	40.18	29.10	4.17	0.28	0.71	1.16	2.71	7.72
15	3.22	10.53	14.19	16.58	47.21	27.07	3.77	0.28	0.78	1.14	2.82	7.20
16	6.40	10.48	14.91	16.48	67.70	23.24	3.55	0.28	0.68	1.14	2.73	6.86
17	14.66	19.01	15.24	18.12	92.41	22.65	3.29	0.27	0.38	1.14	2.53	6.17
18	16.70	12.21	13.03	18.79	108.65	20.59	3.06	0.23	0.28	1.16	2.56	5.76
19	17.52	10.61	12.49	19.25	106.34	20.44	2.75	0.24	0.75	1.19	2.45	5.53
20	12.59	19.42	12.44	16.65	95.16	17.77	2.56	0.22	0.86	1.39	2.29	5.21
21	64.04	9.94	12.48	15.49	98.58	16.51	2.64	0.23	0.77	1.58	1.99	4.87
22	95.62	9.66	12.02	15.37	98.38	15.37	2.39	0.17	0.73	1.71	1.71	4.61
23	78.28	9.32	12.37	15.78	107.28	15.15	2.28	0.13	0.69	3.49	7.49	4.68
24	56.79	8.77	13.12	16.03	103.68	14.02	2.07	0.11	0.73	2.90	36.75	4.55
25	29.29	8.39	12.51	15.54	100.37	13.22	1.90	0.10	0.73	2.02	35.68	4.81
26	32.42	8.44	12.40	16.34	106.30	12.52	1.77	0.10	0.71	1.88	13.10	4.90
27	117.56	8.40	11.13	14.59	98.05	15.67	1.73	0.10	0.69	1.32	9.51	4.70
28	41.09	8.69	11.07	13.88	88.22	21.95	1.71	0.10	0.64	1.51	8.08	4.59
29	27.43	10.48	14.35	81.69	17.33	1.61	1.61	0.10	0.58	1.64	9.50	4.76
30	21.02	10.44	14.82	76.06	12.85	1.53	1.53	0.18	0.55	1.61	11.14	4.19
31	16.90	9.40		69.75		1.45	1.45	0.26		1.80		4.06
MEAN	21.747	11.279	11.987	16.444	74.281	33.229	4.465	0.451	0.559	1.389	6.538	8.168
INCHES	1.193	0.559	0.657	0.873	4.074	1.764	0.245	0.025	0.030	0.076	0.347	0.448
STA AV	0.788	0.506	0.589	1.363	3.128	1.507	0.214	0.035	0.022	0.062	0.168	0.209

NOTES: To convert CFS to IN/DAY, multiply by 0.001769. STA AV amounts based on 1967-70 record period.



1970 SELECTED RUNOFF EVENT			REYNOLDS, IDAHO TOLLGATE WATERSHED (116083)								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF JANUARY 26 - 29, 1970											
1-26	RG 145X37 0.0	0.019	1-26	EG 145X37 424	0.0	0.0	1-26	1120	22.371	0.0	
				604	0.0300	0.05		1506	23.892	0.0064	
				1138	0.0	0.05		1746	29.362	0.0116	
				1405	0.0163	0.09		1856	40.335	0.0146	
				1513	0.0353	0.13		2020	48.194	0.0192	
WATERSHED CONDITIONS: Runoff event was caused by a sustained winter rain following about 10 days of intermittent rain and snowmelt.				1726	0.0857	0.32		2046	50.614	0.0208	
				1841	0.1840	0.55		2144	63.931	0.0249	
				1958	0.1169	0.70		2240	66.848	0.0294	
				2129	0.1385	0.91		2314	82.767	0.0325	
				2158	0.0414	0.93		2400	106.993	0.0379	
				2241	0.1954	1.07	1-27	52	155.404	0.0463	
				2328	0.1532	1.19		230	185.760	0.0668	
				2400	0.2437	1.32		306	197.709	0.0753	
			1-27	34	0.2294	1.45		344	219.833	0.0850	
				139	0.1569	1.62		414	240.062	0.0935	
				247	0.1588	1.80		514	207.000	0.1100	
				307	0.1500	1.85		604	207.000	0.1227	
				323	0.2623	1.92		852	128.549	0.1573	
				339	0.2251	1.98		1128	99.095	0.1791	
				445	0.0545	2.04		1308	88.885	0.1906	
				526	0.1171	2.12		1526	79.401	0.2049	
				814	0.0286	2.20		1738	71.387	0.2171	
								1956	62.505	0.2284	
								2400	53.113	0.2457	
							1-28	436	45.853	0.2625	
								944	40.335	0.2788	
								1344	42.486	0.2910	
								2100	33.381	0.3113	
								2400	30.663	0.3184	
							1-29	638	27.274	0.3326	
								1016	25.426	0.3397	

NOTES: To convert CFS to IN/HR, multiply by 0.00007372.



## REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)

LOCATION: Owyhee County, Idaho; 35 miles south of Nampa, Idaho; an east-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 306.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 6.74	0.91	2.73	2.22	1.86	3.23	0.36	0.05	1.39	1.78	4.14	2.00	27.41	
	Q 2.555	0.779	0.866	0.997	0.924	0.219	0.059	0.003	0.003	0.022	0.222	0.618	7.258	
STA AV	P 4.71	1.60	1.54	1.85	1.43	2.84	0.22	1.06	0.68	1.93	2.45	2.26	22.50	
	Q 1.607	0.716	0.760	1.213	0.779	0.258	0.050	0.002	0.001	0.010	0.107	0.254	5.757	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval							
	Date	Rate	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	1-27	0.060	1-27	0.050	1-27	0.094	1-27	0.216	1-27	0.303	1-26	0.400	1-26	0.535
	1-27	0.060	1-21	0.050	1-20	0.096	1-20	0.261	1-20	0.445	1-20	0.720	1-20	1.050
	1970		1969		1969		1969		1969		1969		1969	1969

NOTES: Watershed conditions: Watershed is sagebrush rangeland used almost exclusively for cattle grazing. Willows are common along watercourses and in seep areas. Vegetation consists largely of big sagebrush, bitterbrush, Idaho fescue, Sandberg bluegrass, bluebunch wheatgrass, squirreltail grass, and snowberry. 10% of the area has a vegetative cover of 0-25%, 35% of the area has a vegetative cover of 26-50%, 20% of the area has a vegetative cover of 51-75%, and 35% of the area has a vegetative cover of 76-100%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 68.11-6. Records started: Precipitation - 1963; Runoff - 1967. Precipitation: Thiessen weighted average 'Computed Actual' amounts from 3 rain gages. Station average precipitation amounts based on 1968-70 record period. Station average runoff amounts based on 1967-70 record period. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles N.E. of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05		
2	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10		
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.07		
5	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.10	0.01	0.16	0.02		
6	0.0	0.0	0.0	0.0	0.68	0.05	0.0	0.0	0.01	0.02	0.12	0.01		
7	0.0	0.0	0.96	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.05	0.40		
8	0.14	0.0	0.06	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.26	0.09		
9	0.21	0.0	0.0	0.01	0.23	0.09	0.0	0.0	0.00	0.22	0.52	0.04		
10	0.22	0.0	0.0	0.82	0.10	0.08	0.0	0.0	0.0	0.14	0.0	0.00		
11	0.05	0.0	0.15	0.05	0.01	0.0	0.0	0.0	0.0	0.0	0.37	0.05		
12	0.16	0.29	0.03	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.05	0.0		
13	0.04	0.0	0.01	0.11	0.12	0.04	0.0	0.01	0.0	0.0	0.0	0.0		
14	0.57	0.0	0.28	0.30	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01		
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.09		
16	0.60	0.34	0.29	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.32		
17	0.42	0.17	0.11	0.00	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0		
18	0.63	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.01	0.10	0.00		
19	0.62	0.0	0.0	0.40	0.23	0.0	0.0	0.0	0.46	0.02	0.0	0.00		
20	0.05	0.0	0.0	0.0	0.11	0.0	0.06	0.0	0.37	0.22	0.0	0.06		
21	0.69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.13		
22	0.55	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.07	0.14	0.03		
23	0.07	0.0	0.0	0.0	0.36	0.01	0.0	0.0	0.0	0.83	0.81	0.03		
24	0.28	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.01	0.59	0.00		
25	0.0	0.0	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.10	0.38	0.00		
26	0.62	0.0	0.13	0.17	0.07	0.08	0.0	0.0	0.0	0.10	0.03	0.01		
27	0.70	0.0	0.0	0.01	0.0	0.80	0.0	0.0	0.0	0.0	0.01	0.05		
28	0.0	0.10	0.09	0.20	1.0	1.49	0.0	0.0	0.0	0.0	0.0	0.16		
29	0.0	0.31	0.0	0.0	0.0	0.03	0.0	0.0	0.00	0.00	0.25	0.18		
30	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.31	0.02		
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08		
TOTAL	6.74	0.91	2.73	2.22	1.86	3.23	0.36	0.05	1.39	1.78	4.14	2.00		
STA AV	4.71	1.60	1.54	1.85	1.43	2.84	0.22	1.06	0.68	1.93	2.45	2.20		

NOTES: Values are Thiessen weighted average 'Actual' amounts from 3 recording pairs of gages (shielded and unshielded). 'Actual' amounts were computed as per relationship developed by W. R. Saxon, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Gailo, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for Watersheds 68.001 and 68.014.

1970		DAILY PRECIPITATION (inches)				REYNOLDS, IDAHO MURPHY CREEK WATERSHED (643004)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.01	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.04	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.04	
5	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.09	0.01	0.15	0.02	
6	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	0.01	0.01	0.11	0.0	
7	0.0	0.0	0.66	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.04	0.35	
8	0.09	0.0	0.04	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.24	0.04	
9	0.14	0.0	0.0	0.09	0.22	0.09	0.0	0.0	0.00	0.19	0.47	0.03	
10	0.14	0.0	0.0	0.55	0.09	0.08	0.0	0.0	0.0	0.12	0.0	0.00	
11	0.03	0.0	0.11	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.30	0.04	
12	0.12	0.23	0.01	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.03	0.0	
13	0.03	0.0	0.00	0.07	0.10	0.04	0.0	0.01	0.0	0.0	0.0	0.0	
14	0.47	0.0	0.19	0.19	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.00	
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.05	
16	0.53	0.26	0.14	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.15	
17	0.41	0.13	0.05	0.00	0.0	0.04	0.0	0.0	0.0	0.01	0.0	0.0	
18	0.58	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.07	0.00	
19	0.55	0.0	0.0	0.25	0.15	0.0	0.0	0.0	0.40	0.02	0.0	0.06	
20	0.05	0.0	0.0	0.0	0.08	0.0	0.06	0.0	0.31	0.18	0.0	0.03	
21	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02	0.0	0.08	
22	0.54	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.04	0.09	0.02	
23	0.06	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.67	0.59	0.0	
24	0.25	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.00	
25	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.07	0.30	0.00	
26	0.58	0.0	0.04	0.06	0.07	0.02	0.0	0.0	0.0	0.08	0.02	0.01	
27	0.64	0.0	0.0	0.00	0.0	0.22	0.0	0.0	0.0	0.0	0.00	0.03	
28	0.0	0.05	0.03	0.07	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.05	
29	0.0	0.10	0.0	0.0	0.0	0.01	0.0	0.00	0.0	0.0	0.19	0.11	
30	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.25	0.02	
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.06	
TOTAL	5.97	0.67	1.56	1.29	1.60	1.36	0.36	0.05	1.21	1.44	3.32	1.27	
STA AV													

NOTES: Values are Thiessen weighted average amounts from 3 unshielded recording gages. STA AV do not apply to unshielded rain gage records.

1970		DAILY PRECIPITATION (inches)				REYNOLDS, IDAHO MURPHY CREEK WATERSHED (643004)							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.01	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
2	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.07	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	
4	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.06	
5	0.0	0.0	0.0	0.0	0.09	0.01	0.30	0.0	0.10	0.01	0.15	0.02	
6	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	0.01	0.01	0.11	0.01	
7	0.0	0.0	0.82	0.0	0.01	0.31	0.0	0.0	0.0	0.0	0.04	0.38	
8	0.12	0.0	0.05	0.0	0.31	0.08	0.01	0.0	0.0	0.01	0.25	0.07	
9	0.17	0.0	0.0	0.01	0.22	0.09	0.0	0.0	0.00	0.21	0.50	0.04	
10	0.18	0.0	0.0	0.68	0.09	0.08	0.0	0.0	0.0	0.13	0.0	0.00	
11	0.04	0.0	0.12	0.04	0.01	0.0	0.0	0.0	0.0	0.0	0.34	0.04	
12	0.14	0.26	0.02	0.0	0.03	0.02	0.0	0.0	0.0	0.0	0.04	0.0	
13	0.04	0.0	0.00	0.09	0.11	0.04	0.0	0.01	0.0	0.0	0.9	0.0	
14	0.52	0.0	0.24	0.24	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.01	
15	0.02	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.07	
16	0.57	0.30	0.21	0.01	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.23	
17	0.41	0.15	0.08	0.00	0.0	0.05	0.0	0.0	0.0	0.01	0.0	0.0	
18	0.60	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.01	0.09	0.00	
19	0.58	0.0	0.0	0.31	0.19	0.0	0.0	0.0	0.43	0.02	0.0	0.00	
20	0.05	0.0	0.0	0.0	0.09	0.0	0.06	0.0	0.34	0.21	0.0	0.05	
21	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02	0.0	0.10	
22	0.54	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.06	0.12	0.03	
23	0.06	0.0	0.0	0.0	0.33	0.01	0.0	0.0	0.0	0.76	0.70	0.00	
24	0.27	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.01	0.54	0.00	
25	0.0	0.0	0.0	0.05	0.0	0.01	0.0	0.0	0.0	0.09	0.35	0.00	
26	0.60	0.0	0.08	0.11	0.07	0.04	0.0	0.0	0.0	0.10	0.03	0.01	
27	0.66	0.0	0.0	0.01	0.0	0.44	0.0	0.0	0.0	0.0	0.01	0.04	
28	0.0	0.07	0.05	0.12	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.07	
29	0.0	0.19	0.0	0.0	0.0	0.02	0.0	0.00	0.0	0.0	0.22	0.14	
30	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.29	0.02	
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.07	
TOTAL	6.36	0.79	2.10	1.71	1.71	2.03	0.36	0.05	1.30	1.65	3.76	1.63	
STA AV													

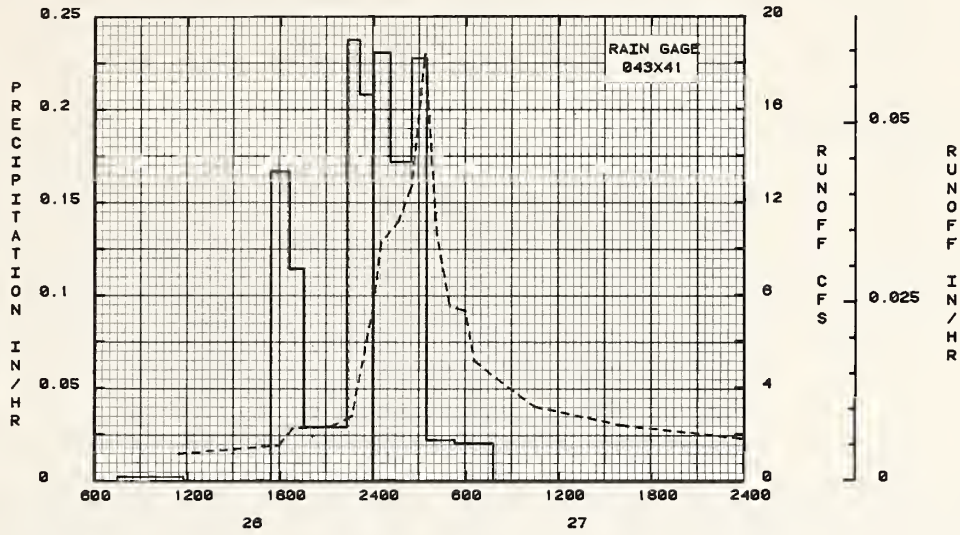
NOTES: Values are Thiessen weighted average amounts from 3 shielded recording gages. STA AV do not apply to shielded rain gage records.

1970		MEAN DAILY DISCHARGE (cfs)					REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.035	0.707	0.203	0.286	0.576	0.152	0.060	0.004	0.0	0.002	0.027	0.152	
2	0.030	0.640	0.197	0.275	0.537	0.145	0.050	0.003	0.0	0.003	0.032	0.133	
3	0.030	0.651	0.189	0.242	0.503	0.123	0.047	0.003	0.0	0.003	0.034	0.146	
4	0.032	0.537	0.189	0.223	0.486	0.115	0.041	0.003	0.0	0.003	0.034	0.144	
5	0.034	0.505	0.174	0.205	0.516	0.139	0.043	0.003	0.0	0.003	0.036	0.308	
6	0.027	0.444	0.152	0.197	0.556	0.136	0.050	0.003	0.0	0.003	0.039	0.611	
7	0.019	0.437	0.478	0.189	0.556	0.139	0.044	0.003	0.0	0.003	0.039	0.914	
8	0.020	0.420	0.683	0.181	0.564	0.127	0.039	0.003	0.0	0.003	0.044	0.926	
9	0.036	0.373	0.405	0.181	0.556	0.116	0.039	0.003	0.0	0.006	0.069	0.559	
10	0.041	0.300	0.355	0.263	0.556	0.110	0.039	0.003	0.0	0.006	0.093	0.319	
11	0.044	0.274	0.387	0.223	0.537	0.135	0.039	0.003	0.0	0.005	0.079	0.286	
12	0.061	0.379	0.387	0.214	0.518	0.100	0.034	0.002	0.0	0.005	0.082	0.244	
13	0.084	0.326	0.433	0.223	0.503	0.105	0.030	0.002	0.0	0.005	0.063	0.214	
14	0.334	0.373	0.564	0.232	0.454	0.105	0.030	0.002	0.0	0.005	0.053	0.214	
15	0.258	0.214	0.454	0.269	0.420	0.190	0.027	0.001	0.0	0.005	0.050	0.214	
16	0.972	0.238	0.420	0.413	0.387	0.095	0.022	0.001	0.001	0.005	0.050	0.225	
17	1.758	0.543	0.461	0.674	0.355	0.035	0.016	0.0	0.001	0.005	0.050	0.189	
18	2.345	0.312	0.403	0.622	0.340	0.084	0.019	0.0	0.001	0.005	0.050	0.167	
19	2.495	0.299	0.415	0.633	0.308	0.072	0.015	0.0	0.001	0.005	0.050	0.150	
20	1.353	0.286	0.432	0.567	0.286	0.070	0.012	0.0	0.003	0.007	0.050	0.139	
21	2.603	0.263	0.427	0.537	0.263	0.061	0.008	0.0	0.004	0.007	0.044	0.139	
22	3.866	0.252	0.420	0.643	0.242	0.054	0.003	0.0	0.003	0.006	0.041	0.152	
23	1.951	0.233	0.387	0.731	0.253	0.052	0.003	0.0	0.003	0.023	0.172	0.166	
24	1.865	0.223	0.355	0.707	0.244	0.041	0.005	0.0	0.002	0.019	0.322	0.166	
25	1.362	0.223	0.340	0.684	0.214	0.039	0.006	0.0	0.002	0.017	0.473	0.166	
26	1.679	0.197	0.326	0.708	0.201	0.039	0.005	0.0	0.002	0.013	0.213	0.166	
27	4.926	0.189	0.326	0.640	0.197	0.059	0.005	0.0	0.002	0.013	0.134	0.159	
28	1.598	0.197	0.312	0.597	0.181	0.134	0.005	0.0	0.002	0.021	0.116	0.152	
29	1.187	0.299	0.664	0.181	0.093	0.005	0.0	0.002	0.002	0.025	0.118	0.145	
30	0.988	0.286	0.597	0.181	0.070	0.005	0.0	0.002	0.002	0.025	0.154	0.139	
31	0.807	0.274	0.567	0.166	0.166	0.005	0.0	0.002	0.002	0.025	0.139	0.139	
MEAN	1.0595	0.3535	0.3592	0.4275	0.3833	0.0939	0.0243	0.0014	0.0011	0.0091	0.0951	0.2563	
INCHES	2.555	0.770	0.866	0.997	0.924	0.219	0.059	0.003	0.003	0.022	0.222	0.618	
STA AV	1.607	0.716	0.760	1.213	0.775	0.258	0.050	0.002	0.001	0.010	0.107	0.254	

NOTES: To convert CFS to IN/DAY, multiply by 0.077783. STA AV based on 1967-70 record period.

1970		SELECTED RUNOFF EVENT		REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)							
ANTECEDENT CONDITIONS		RUNOFF		RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF JANUARY 26 - 28, 1970											
EG 043X41			EG 043X41								
1-26	0.0	0.044	1-26	728	0.0	0.0	1-26	1126	1.183	0.0	
				1143	0.0024	0.01		1756	1.542	0.0287	
				1723	0.0	0.01		1846	2.259	0.0338	
				1835	0.1667	0.21		2120	2.361	0.0530	
				1933	0.1138	0.32		2238	2.803	0.0639	
WATERSHED CONDITIONS:				2219	0.0289	0.40		2400	7.510	0.0867	
Runoff event was caused by a				2307	0.2376	0.59	1-27	30	10.271	0.1011	
sustained winter rain fol-				2359	0.2077	0.77		136	11.141	0.1393	
lowing about 10 days of inter-				2400	0.0	0.77		230	12.727	0.1741	
mittent rain and snowmelt.				1-27	105	0.2308	1.02	320	18.388	0.2161	
				229	0.1714	1.26		408	10.546	0.2536	
				327	0.2276	1.48		458	7.510	0.2780	
				517	0.0218	1.52		558	7.287	0.3026	
				747	0.0200	1.57		634	5.118	0.3141	
								1026	3.168	0.3660	
								1606	2.361	0.4168	
								2400	1.790	0.4699	
								1-28	942	1.542	0.5223

NOTES: To convert CFS to IN/HR, multiply by .003241



EVENT OF JANUARY 26 - 28, 1970  
REYNOLDS, IDAHO MURPHY CREEK WATERSHED (043004)

REYNOLDS, IDAHO SUMMIT WATERSHED (048077)

LOCATION: Owyhee County, Idaho; 30 miles south of Nampa, Idaho, a west-flowing tributary to Reynolds Creek, tributary to the Snake River.

AREA: 205.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 2.04	0.30	0.91	1.23	1.03	0.99	0.11	0.05	0.56	0.74	1.99	0.66	10.61
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	P 2.22	0.53	0.48	0.64	0.80	1.45	0.10	1.27	0.24	0.87	1.09	0.85	10.54
	Q 0.002	0.0	0.0	0.0	0.0	0.018	0.0	0.021	0.0	0.0	0.0	0.0	0.041

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		Maximum Volume for Selected Time Interval													
	Rate	1 Hour Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.								
1970	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0		
	6-19 1969	0.258	6-19 1969	0.059	6-19 1969	0.059	6-19 1969	0.070	6-20 1969	0.370	6-20 1969	0.070	6-19 1969	0.070	8-9 1968	0.083

NOTES: Watershed conditions: Sagebrush rangeland with almost exclusive cattle grazing in early spring and late fall. Numerous barren ridges. Vegetation consists largely of big sagebrush, cheatgrass, Sandberg bluegrass, bluebunch wheatgrass, and squirreltail grass. 25% of the area has a vegetative cover of 0-25% and 75% of the area has a vegetative cover of 25-50%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pnb. 1262, p. 68.12-5. Records started: Precipitation - 1963; Runoff - 1967. Precipitation: 'Computed Actual' amounts from 1 rain gage. Station average precipitation amounts are based on 1968-70 period of record. Station average runoff amounts are based on 1967-70 period of record. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Boise, Idaho, 50 miles of watershed.

1970 DAILY PRECIPITATION (inches)													REYNOLDS, IDAHO SUMMIT WATERSHED (048077)
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.11	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.06	0.0	
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.04	
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.14	0.04	
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.21	0.0	
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06	
11	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.16	0.0	
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.08	0.21	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.06	0.0	0.0	0.51	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
16	0.77	0.02	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	
17	0.0	0.06	0.16	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.15	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.15	0.01	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.39	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.10	0.0	
23	0.34	0.0	0.0	0.0	0.18	0.15	0.0	0.0	0.0	0.30	0.28	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	
25	0.04	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.13	0.21	0.04	
26	0.07	0.0	0.09	0.14	0.42	0.02	0.0	0.0	0.0	0.10	0.05	0.0	
27	0.14	0.0	0.0	0.0	0.02	0.33	0.01	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.06	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.20	0.38	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.09	0.0	
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.03	
TOTAL	2.04	0.30	0.91	1.23	1.03	0.99	0.11	0.05	0.56	0.74	1.99	0.66	
STA AV	2.22	0.53	0.48	0.64	0.80	1.45	0.10	1.27	0.24	0.87	1.09	0.85	

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) at Station 049161. 'Actual' amounts were computed as per relationship developed by W. R. Hanson, "Computing Actual Precipitation", Proceedings of WMO-IDHS Symposium, Geilo, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period. For temperature information, see table of daily maximum and minimum values included for 68.001.

1970 DAILY PRECIPITATION (inches)												
REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.09	0.0
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.03
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.12	0.04
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.15	0.0
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06
11	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.12	0.0
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.04	0.10	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0
14	0.06	0.0	0.0	0.24	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	0.66	0.02	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12
17	0.0	0.06	0.08	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.12	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.02	0.0	0.04	0.0	0.12	0.01	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.39	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01	0.09	0.0
23	0.34	0.0	0.0	0.0	0.14	0.14	0.0	0.0	0.0	0.25	0.24	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0
25	0.04	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.10	0.18	0.04
26	0.07	0.0	0.09	0.12	0.34	0.02	0.0	0.0	0.0	0.08	0.04	0.0
27	3.14	0.0	0.0	0.0	0.02	0.31	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.06	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.17	0.08
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.07	0.0
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.03
TOTAL	1.93	0.30	0.66	0.78	0.88	0.94	0.11	0.75	0.41	0.64	1.64	0.45
STA AV												

NOTES: Values are amounts from unshielded recording gage 049461. STA AV do not apply to unshielded rain gage records.

1970 DAILY PRECIPITATION (inches)												
REYNOLDS, IDAHO SUMMIT WATERSHED (048077)												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.10	0.0
6	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0
7	0.0	0.0	0.25	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.03	0.03
8	0.04	0.0	0.03	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.14	0.05
9	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.17	0.0
10	0.03	0.0	0.0	0.12	0.04	0.11	0.0	0.0	0.0	0.09	0.0	0.06
11	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.14	0.0
12	0.03	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.05	0.16	0.12	0.01	0.0	0.0	0.0	0.0	0.0	0.0
14	0.06	0.0	0.0	0.36	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	0.72	0.02	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20
17	0.0	0.06	0.11	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.05	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.13	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.14	0.01	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.39	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.10	0.0
23	0.34	0.0	0.0	0.0	0.15	0.14	0.0	0.0	0.0	0.28	0.26	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0
25	0.04	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.11	0.19	0.04
26	0.07	0.0	0.09	0.13	0.39	0.03	0.0	0.0	0.0	0.10	0.05	0.0
27	0.14	0.0	0.0	0.0	0.02	0.31	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.06	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.19	0.08
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.07	0.0
31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.03
TOTAL	1.99	0.30	0.77	0.99	0.96	0.96	0.11	0.05	0.49	0.70	1.82	0.55
STA AV												

NOTES: Values are amounts from shielded recording gage 049561. STA AV do not apply to shielded rain gage records.





1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06
2	0.0	0.04	0.41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.46
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.03	0.08
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.05	0.11	0.0	0.28	0.0
6	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0	0.0	0.0	0.26	0.0
7	0.0	0.0	0.95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.85
8	0.22	0.0	0.61	0.0	0.63	0.49	0.23	0.0	0.0	0.0	0.42	0.09
9	0.22	0.0	0.0	0.0	0.27	0.10	0.0	0.0	0.0	0.39	1.01	0.11
10	0.31	0.0	0.0	0.51	0.32	0.28	0.0	0.0	0.0	0.06	0.0	0.12
11	0.09	0.0	0.13	0.08	0.06	0.0	0.0	0.0	0.0	0.0	0.78	0.0
12	0.36	0.28	0.04	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.04	0.0
13	0.17	0.0	0.0	1.04	0.21	0.11	0.0	0.0	0.0	0.05	0.0	0.22
14	0.53	0.0	0.43	0.91	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.11
15	0.31	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0	0.0	0.15
16	1.41	0.36	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17	1.00	0.41	0.11	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0
18	1.21	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.0
19	0.45	0.0	0.0	0.84	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0
20	0.20	0.0	0.0	0.0	0.20	0.0	0.11	0.0	0.08	0.28	0.0	0.39
21	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.09
22	0.68	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.12	0.18	0.07
23	0.10	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	1.71	1.06	0.0
24	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	1.12	0.0
25	0.08	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.35	0.41	0.0
26	1.28	0.0	0.13	0.49	0.12	0.93	0.0	0.0	0.0	0.53	0.32	0.04
27	2.40	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.16
28	0.97	0.30	0.14	0.02	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.96
29	0.0	0.41	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.28	0.48
30	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.0	0.80	0.16
31	0.60	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.46
TOTAL	13.08	1.41	4.42	4.07	2.46	2.58	0.28	1.08	1.08	3.82	7.35	6.59
STA AV	9.31	3.14	2.38	2.68	1.51	2.14	0.41	1.61	0.57	2.60	4.57	6.51

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) at Station 166X94. 'Actual' amounts were computed as per relationship developed by W. R. Hamon, "Computing Actual Precipitation", Proceedings of WMO-IPHS Symposium, Geilo, Norway, August, 1972. The equation used is:  $\log_e (U/S) = \log_e (U/A) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

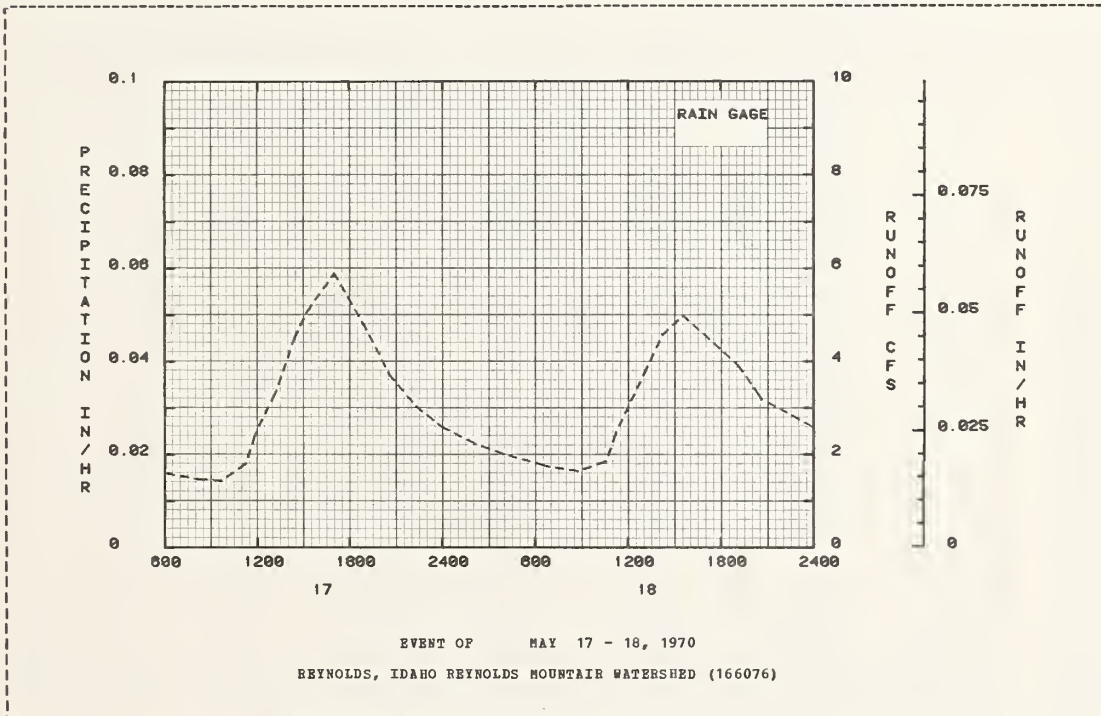
1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
2	0.0	0.04	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.0	0.03	0.03
5	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.05	0.09	0.0	0.23	0.0
6	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0	0.0	0.0	0.22	0.0
7	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.38
8	0.22	0.0	0.05	0.0	0.47	0.49	0.23	0.0	0.0	0.0	0.34	0.02
9	0.22	0.0	0.0	0.0	0.20	0.10	0.0	0.0	0.0	0.39	0.85	0.03
10	0.31	0.0	0.0	0.35	0.24	0.28	0.0	0.0	0.0	0.06	0.0	0.04
11	0.09	0.0	0.07	0.06	0.03	0.0	0.0	0.0	0.0	0.0	0.48	0.0
12	0.36	0.23	0.02	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.02	0.0
13	0.10	0.0	0.0	0.32	0.10	0.11	0.0	0.0	0.0	0.05	0.0	0.07
14	0.26	0.0	0.22	0.28	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.10
15	0.15	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.15
16	0.71	0.17	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17	0.48	0.19	0.06	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0
18	0.59	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0
19	0.22	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.63	0.0	0.0	0.0
20	0.14	0.0	0.0	0.0	0.18	0.0	0.11	0.0	0.08	0.28	0.0	0.38
21	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.09
22	0.67	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.05	0.17	0.07
23	0.05	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.70	0.98	0.0
24	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	1.06	0.0
25	0.04	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.14	0.27	0.0
26	0.64	0.0	0.03	0.14	0.12	0.03	0.0	0.0	0.0	0.21	0.16	0.01
27	0.64	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.07
28	0.02	0.10	0.03	0.02	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.48
29	0.0	0.0	0.09	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.14	0.19
30	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.43	0.03
31	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.11
TOTAL	7.26	0.74	1.16	1.48	1.86	2.58	0.61	0.22	1.02	2.02	5.72	3.20
STA AV												

NOTES: Values are amounts from unshielded recording gage 166494. STA AV do not apply to unshielded rain gage records.



1970 SELECTED RUNOFF EVENT				REYNOLDS, IDAHO REYNOLDS MOUNTAIN WATERSHED (166076)						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF MAY 17 - 18, 1970										
5-17	HG 0.0	0.123	5-17	RG 2400	0.0	0.0	5-17	610	1.592	0.0
								815	1.463	0.0316
								940	1.441	0.0520
								1115	1.813	0.0776
								1155	2.478	0.0918
<p>WATERSHED CONDITIONS:                      For Watershed W-13(166076)                      runoff event occurred as the                      result of warmer temperatures                      and winds. This is a strictly                      snowmelt event with no                      precipitation.</p>										
								1315	3.379	0.1305
								1425	4.513	0.1761
								1515	5.079	0.2157
								1700	5.889	0.3109
								1905	4.691	0.4202
								2035	3.707	0.4827
								2220	3.021	0.5411
								2400	2.584	0.5874
							5-18	210	2.221	0.6390
								355	2.014	0.6757
								655	1.728	0.7314
								845	1.635	0.7620
								1035	1.849	0.7937
								1115	2.478	0.8080
								1305	3.746	0.8646
								1415	4.566	0.9127
								1535	4.985	0.9758
								1910	3.905	1.1338
								2040	3.182	1.1865
								2400	2.577	1.2817

NOTES: To convert CFS to IN/HR, multiply by 0.009917.





1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO LOWER SREEP CREEK WATERSHED (117066)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.03	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.21	0.04	0.0	0.11	0.0	
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0	
7	0.0	0.0	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.21	
8	0.03	0.0	0.15	0.0	0.14	0.11	0.0	0.0	0.0	0.0	0.08	0.16	
9	0.14	0.0	0.0	0.0	0.13	0.05	0.0	0.0	0.0	0.14	0.22	0.0	
10	0.06	C.C	0.0	0.18	0.21	0.15	0.0	0.0	0.0	0.01	0.0	0.0	
11	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01	
12	0.06	0.16	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0	
13	0.02	C.C	0.0	0.70	0.03	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.14	0.0	0.08	0.31	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.33	0.25	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
17	0.23	0.11	0.10	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.34	0.10	0.0	0.02	
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	
22	0.29	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.07	0.08	0.0	
23	0.07	0.0	0.0	0.0	0.46	0.23	0.0	0.0	0.0	0.45	0.18	0.0	
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04	
25	0.06	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.06	0.13	0.0	
26	0.57	0.0	0.05	0.15	0.0	0.04	0.0	0.0	0.0	0.22	0.04	0.0	
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.13	0.05	0.05	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.21	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.45	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.10	0.02	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
TOTAL	3.46	0.71	1.83	1.61	1.27	1.47	0.32	0.36	0.68	1.16	2.49	0.59	
STA AV	2.73	0.68	0.84	0.89	1.00	1.34	0.25	1.01	0.39	0.96	1.59	1.13	

NOTES: Values are 'Actual' amounts from a pair of recording gages (shielded and unshielded) 127X07. 'Actual' amounts were computed as per relationship developed by W. E. Ramon, "Computing Actual Precipitation", Proceedings of WHO-IDRS Symposium, Geilo, Norway, August, 1972. The equation used is:  $\log_e (U/A) = \log_e (U/S) \times 1.80$ , where U = unshielded catchment, S = shielded catchment, and A = actual amount of precipitation. STA AV values are based on 3 yr (1968-70) record period.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO LOWER SREEP CREEK WATERSHED (117066)						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	0.0	0.03	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.19	0.04	0.0	0.11	0.0	
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0	
7	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.14	
8	0.02	0.0	0.11	0.0	0.09	0.10	0.0	0.0	0.0	0.0	0.08	0.12	
9	0.09	0.0	0.0	0.0	0.08	0.04	0.0	0.0	0.0	0.11	0.22	0.0	
10	0.04	0.0	0.0	0.18	0.13	0.14	0.0	0.0	0.0	0.01	0.0	0.0	
11	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01	
12	0.06	0.16	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.04	0.0	0.0	
13	0.02	0.0	0.0	0.20	0.02	0.06	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.14	0.0	0.08	0.09	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.33	0.25	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	
17	0.23	0.11	0.04	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.04	0.10	0.0	0.02	
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	
22	0.29	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.06	0.08	0.0	
23	0.07	0.0	0.0	0.0	0.37	0.23	0.0	0.0	0.0	0.37	0.17	0.0	
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04	
25	0.06	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	0.13	0.0	
26	0.57	0.0	0.05	0.06	0.0	0.04	0.0	0.0	0.0	0.18	0.04	0.0	
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.11	0.02	0.02	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.10	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.26	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.06	0.02	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	
TOTAL	3.38	0.69	1.06	0.68	0.95	1.44	0.32	0.34	0.65	0.98	2.25	0.47	
STA AV													

NOTES: Values are amounts from unshielded recording gage 127407. STA AV do not apply to unshielded rain gage records.

1970		DAILY PRECIPITATION (inches)					REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.11	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.03	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.20	0.04	0.0	0.11	0.0
6	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.15	0.0
7	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.18
8	0.02	0.0	0.13	0.0	0.12	0.10	0.0	0.0	0.0	0.0	0.08	0.14
9	0.12	0.0	0.0	0.0	0.11	0.35	0.0	0.0	0.0	0.13	0.22	0.0
10	0.05	0.0	0.0	0.18	0.16	0.14	0.0	0.0	0.0	0.01	0.0	0.0
11	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.01
12	0.06	0.15	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.04	0.0	0.0
13	0.02	0.0	0.0	0.40	0.03	0.06	0.0	0.0	0.0	0.0	0.0	0.0
14	0.14	0.0	0.08	0.18	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.33	0.25	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
17	0.23	0.11	0.07	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0
18	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
19	0.10	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0
20	0.06	0.0	0.0	0.0	0.10	0.0	0.04	0.0	0.04	0.10	0.0	0.02
21	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0
22	0.29	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.06	0.08	0.0
23	0.07	0.0	0.0	0.0	0.42	0.23	0.0	0.0	0.0	0.41	0.18	0.0
24	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.04
25	0.06	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.06	0.13	0.0
26	0.57	0.0	0.05	0.10	0.0	0.04	0.0	0.0	0.0	0.20	0.04	0.0
27	0.48	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.12	0.03	0.03	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.15	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.36	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.08	0.02
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
TOTAL	3.42	0.70	1.41	1.06	1.12	1.45	0.32	0.35	0.67	1.08	2.38	0.54
STA AV												

NOTES: Values are amounts from shielded recording gage 127507. STA AV do not apply to shielded rain gage records.

1970		MEAN DAILY DISCHARGE (cfs)					REYNOLDS, IDAHO LOWER SHEEP CREEK WATERSHED (117066)					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0 T	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.002	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0006	0.0001	0.0003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.014	0.001	0.006	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.098	0.009	0.116	0.008	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0

NOTES: To convert CFS to IN/DAY, multiply by 0.721262. STA AV based on 4 yr (1967-70) record period.

CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

LOCATION: Washita River above Anadarko, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Caddo, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--NW1/4 sec. 15, T. 7 N., R. 10 W., lat. 35 deg. 05 min., long. 98 deg. 14 min.; North edge of Anadarko, Okla., 35 feet npstream from U.S. Highway 281 bridge over Washita River; at river mile 305.2, approximately 8.1 miles npstream from confluence of Sngar Creek.

AREA: 2339800.00 acres 3656.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA		WATERSHED 100 AT ANADARKO		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	Q	0.033	0.027	0.033	0.052	0.073	0.044	0.005	0.031	0.012	0.010	0.011	0.013	0.344				
	Q	0.044	0.042	0.048	0.061	0.147	0.144	0.054	0.044	0.103	0.087	0.090	0.049	0.914				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																		
1970	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days					
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.				
	5-31	0.001	5-31	0.001	5-31	0.001	5-31	0.004	5-31	0.007	5-31	0.014	5-30	0.024	5-29	0.047		
MAXIMUMS FOR PERIOD OF RECORD																		
	9-23	0.004	9-23	0.004	9-23	0.009	9-23	0.026	9-23	0.052	9-23	0.100	9-23	0.188	9-23	0.384		
	1965		1965		1965		1965		1965		1965		1965		1965			

NOTES: Watershed conditions not applicable. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69-7-21. Since this is the inflow station to a study reach, precipitation data are not applicable. Runoff records began Oct. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 MEAN DAILY DISCHARGE (cfs)													CHICKASHA, OKLAHOMA		WATERSHED 100 AT ANADARKO	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	98.7	101.3	96.1	112.2	451.4	818.5	27.4	17.9	53.4	47.9	31.6	42.6				
2	96.1	98.7	96.1	123.7	983.7	408.3	22.3	7.9	49.7	44.3	31.6	44.3				
3	96.1	96.1	93.5	123.7	395.5	581.7	21.1	35.8	44.3	30.2	30.2	46.1				
4	96.1	96.1	93.5	138.8	204.8	306.7	19.9	36.2	39.3	36.1	31.6	46.1				
5	98.7	96.1	91.0	148.4	165.0	171.9	18.8	18.7	37.7	28.8	34.6	42.6				
6	96.1	96.1	101.3	145.2	161.6	126.6	17.9	16.3	31.6	26.1	31.6	42.6				
7	93.5	98.7	115.0	126.6	142.0	109.4	22.3	14.7	28.8	18.8	31.6	42.6				
8	91.0	98.7	112.2	117.9	132.7	91.0	15.5	9.8	27.4	17.1	34.6	42.6				
9	88.5	98.7	109.4	109.4	126.6	98.7	9.2	6.2	24.8	16.3	34.6	39.3				
10	96.1	98.7	115.0	109.4	123.7	91.0	9.2	2.7	22.3	17.1	37.7	34.6				
11	106.7	98.7	115.0	109.4	117.9	186.3	8.5	6.7	19.9	19.9	37.7	39.3				
12	101.3	96.1	112.2	106.7	115.0	153.4	8.5	6.2	17.9	27.4	40.9	39.3				
13	112.2	96.1	101.3	104.0	106.7	135.6	8.5	4.6	17.9	26.1	39.3	40.9				
14	109.4	98.7	98.7	98.7	106.7	218.4	5.6	15.5	18.7	28.8	42.6	40.9				
15	115.0	96.1	98.7	93.5	142.0	118.5	4.6	34.6	17.1	27.4	39.3	40.9				
16	115.0	96.1	106.7	101.3	142.0	86.0	4.6	46.1	17.9	30.2	39.3	42.6				
17	115.0	96.1	101.3	101.5	160.5	67.6	3.6	44.3	18.7	34.6	39.3	42.6				
18	104.0	96.1	104.0	172.9	181.1	59.3	4.1	102.4	19.9	36.1	34.6	36.1				
19	104.0	91.0	98.7	44.1.7	99.7	67.6	3.6	36.1	19.9	36.1	36.1	39.3				
20	104.0	93.5	96.1	395.5	101.3	67.6	5.1	17.9	18.8	36.1	39.3	42.6				
21	98.7	93.5	101.3	284.6	96.1	63.4	6.2	61.5	28.8	34.6	42.6	44.3				
22	98.7	93.5	104.0	373.9	91.0	39.3	6.7	601.6	42.6	36.1	39.3	46.1				
23	101.3	93.5	112.2	266.2	86.0	44.3	6.7	323.3	49.7	37.7	39.3	40.9				
24	112.2	93.5	112.2	197.2	76.5	44.3	16.7	410.3	49.7	39.3	39.3	42.6				
25	106.7	93.5	109.4	175.4	72.0	42.6	18.7	526.2	78.9	34.6	34.6	40.9				
26	112.2	91.0	101.3	175.4	69.8	39.3	34.6	326.4	132.7	34.6	36.1	42.6				
27	112.2	93.5	98.7	161.6	72.0	36.1	46.1	124.1	109.4	34.6	39.3	42.6				
28	112.2	96.1	101.3	148.4	65.5	34.6	49.7	74.3	74.3	34.6	36.1	42.6				
29	109.4	106.7	106.7	135.7	140.3	31.6	36.1	47.9	55.4	33.1	39.3	36.1				
30	101.3	106.7	106.7	172.5	878.6	30.2	31.6	34.6	49.7	33.1	42.6	40.9				
31	101.3	106.7	106.7	1324.1	1324.1	30.2	30.2	51.5		33.1	39.3	39.3				
MEAN	103.34	95.92	103.75	169.05	230.06	145.66	16.89	98.78	40.57	31.32	36.89	41.51				
INCHES	0.033	0.027	0.033	0.052	0.073	0.044	0.005	0.031	0.012	0.010	0.011	0.013				
STA AV	0.044	0.042	0.048	0.061	0.147	0.144	0.054	0.044	0.103	0.087	0.090	0.049				

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. To convert discharge in CFS to IN/DAY, multiply by 0.00001017. To convert discharge in inches to AC-FT, multiply by 194.983. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARRO								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
			EVENT OF MAY 29 - JUNE 10, 1970								
5-29		0.0					5-29	1	61.300	0.0	
								400	78.900	0.0001	
								730	81.200	0.0072	
								1030	81.200	0.0003	
								1300	98.700	0.0004	
WATERSHED CONDITIONS:								1530	182.600	0.0005	
Not applicable								1800	208.600	0.0007	
								2100	193.500	0.0012	
								2230	284.100	0.0012	
								2400	431.000	0.0014	
							5-30	200	589.698	0.0018	
								500	657.499	0.0026	
								800	692.898	0.0035	
								1030	774.099	0.0043	
								1430	1019.299	0.0058	
								1800	1141.198	0.0074	
								2100	1166.698	0.0089	
								2400	1170.999	0.0104	
							5-31	300	1175.300	0.0119	
								600	1217.999	0.0134	
								900	1269.098	0.0150	
								1200	1345.798	0.0167	
								1530	1447.800	0.0188	
								1800	1468.799	0.0203	
								2100	1430.499	0.0221	
								2400	1324.100	0.0239	
							6- 1	300	1226.098	0.0255	
								600	1081.198	0.0270	
								1200	743.898	0.0293	
								1800	557.000	0.0310	
								2400	436.500	0.0323	
							6- 2	600	366.300	0.0333	
								1100	331.100	0.0340	
								1300	341.000	0.0343	
								1800	442.198	0.0351	
								2400	563.500	0.0364	
							6- 3	600	602.798	0.0379	
								1200	616.298	0.0395	
								1600	602.798	0.0405	
								2100	538.000	0.0417	
								2400	471.100	0.0423	
							6- 4	600	361.100	0.0434	
								1200	279.500	0.0442	
								1800	240.600	0.0449	
								2400	220.400	0.0455	
							6- 5	1200	171.900	0.0472	
							6- 6	1200	126.600	0.0485	
							6- 7	1200	109.400	0.0496	
							6- 8	1200	91.000	0.0505	
							6- 9	1200	98.700	0.0515	
							6-10	1200	91.000	0.0524	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000004239. No precipitation record is shown because all of the watershed lies outside of the area in which precipitation is measured.





EVENT OF MAY 29 - JUNE 10, 1970  
 CHICKASHA, OKLAHOMA WATERSHED 100 AT ANADARKO

## CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN

LOCATION: Washita River above Verden, Okla.; Southwest Central Okla. and Texas Panhandle; in Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 7, T. 7 N., R. 8 W., lat. 35 deg. 05 min., long. 98 deg. 05 min.; North edge of Verden, Okla. at county road bridge over Washita River; at river mile 283.4, approximately 8.4 miles upstream from confluence with Ionee Creek.

AREA: 2612500.00 acres 4082.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.10	0.22	2.61	2.99	3.82	2.45	1.63	1.08	3.99	1.32	0.41	0.28	20.90	
	Q 0.032	0.026	0.034	0.052	0.069	0.053	0.005	0.023	0.012	0.009	0.010	0.013	0.339	
STA AV	P 0.56	0.93	1.47	2.85	3.73	3.55	1.78	2.66	4.67	1.51	1.76	0.92	26.39	
	Q 0.048	0.044	0.048	0.061	0.142	0.145	0.052	0.040	0.098	0.086	0.088	0.051	0.903	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	6-1	0.001	6-1	0.001	6-1	0.001	6-1	0.004	5-31	0.007	5-31	0.012	5-30	0.021	5-29	0.048
MAXIMUMS FOR PERIOD OF RECORD																
	5-6	0.002	5-7	0.002	9-24	0.005	9-24	0.014	9-24	0.028	9-23	0.055	9-23	0.108	9-21	0.344
	1969		1969		1965		1965		1965		1965		1965		1965	

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 24%; row crop - 5%; alfalfa - 7%; pasture and range - 49%; and miscellaneous - 15%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, OSDA Misc. Phn. 1216, p. 69.7-21. Precipitation data obtained from a Thiessen weighted average of 66 rain gages for the reach between stations at Anadarko and Verden. Precipitation records began Oct. 1961; runoff records began Sept. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.43	0.0	0.06	0.0	0.0	0.0	0.01	0.10	0.0		
2	0.0	0.01	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.28	0.0	0.0	0.05	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.20	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0		
6	0.0	0.0	0.87	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.40	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.01	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	1.05	0.40	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.02	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.49	0.0	0.31	0.0		
14	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.09	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.04	0.0	0.11	0.0	0.0	0.01	0.0	0.22		
16	0.0	0.0	0.49	0.65	0.0	0.0	0.0	0.0	0.18	0.10	0.0	0.0		
17	0.09	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.01	0.25	0.0	0.0		
18	0.01	0.0	0.04	0.01	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.0	0.0	0.0	0.01	0.13	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.76	0.32	0.24	0.0	0.0	0.0	0.03		
21	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.0	0.03		
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.24	2.83	0.0	0.0	0.0		
23	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
24	0.0	0.03	0.0	0.0	0.01	0.13	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.04	0.0	0.06	0.0	0.0	0.01	0.0	0.0	0.0		
27	0.0	0.02	0.0	0.0	0.04	0.0	0.18	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.05	0.53	0.0	0.21	0.0	0.33	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.45	2.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.17	1.19	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.11	0.54	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.10	0.22	2.61	2.99	3.82	2.45	1.63	1.08	3.99	1.32	0.41	0.28		
STA AV	0.56	0.93	1.47	2.85	3.73	3.55	1.78	2.66	4.67	1.51	1.76	0.92		

NOTES: For daily air temperatures in the vicinity, see table for Watershed #700, (69-007) of this publication. Daily precipitation values Thiessen weighted average of 66 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	114.6	104.6	107.0	151.6	365.4	1226.1	32.0	26.8	53.1	52.2	30.7	41.5
2	117.2	107.0	105.8	178.1	861.3	502.6	30.0	18.3	52.2	49.6	32.0	42.3
3	114.6	103.4	103.4	153.3	638.1	587.2	26.2	9.0	45.5	43.9	32.7	43.9
4	114.6	103.4	102.1	148.9	323.2	473.5	24.4	26.6	38.5	32.0	31.4	44.7
5	104.6	102.1	103.4	177.9	209.7	281.6	23.2	30.3	34.8	42.3	29.4	45.5
6	102.1	102.1	132.0	177.9	174.7	210.9	22.1	17.7	34.1	37.0	31.4	48.8
7	98.5	103.4	154.8	170.0	160.8	158.6	20.4	12.6	30.0	28.1	32.0	48.0
8	95.0	103.4	141.7	159.3	151.8	127.6	20.9	10.5	28.7	25.0	31.4	48.0
9	92.7	102.1	125.1	147.4	151.8	105.8	19.3	8.7	30.0	22.1	32.7	47.1
10	95.0	100.9	121.1	143.1	147.4	107.0	13.0	3.6	26.8	20.4	32.0	45.5
11	98.5	98.5	129.1	138.8	138.8	177.1	10.9	2.2	27.4	21.5	32.0	47.1
12	98.5	98.5	123.7	133.2	126.4	361.1	10.1	3.2	25.0	23.2	32.7	57.6
13	110.8	98.5	117.2	123.7	118.5	165.5	8.7	4.6	26.8	26.8	37.0	56.6
14	130.5	98.5	109.5	119.8	112.2	229.4	8.0	2.2	28.7	26.8	37.7	55.7
15	130.5	99.7	107.0	114.6	200.4	185.1	6.3	9.0	21.5	28.7	37.7	53.1
16	134.6	99.7	110.8	110.8	169.4	108.7	4.6	27.2	19.8	30.7	37.7	50.5
17	137.4	98.5	127.8	172.7	132.7	80.6	3.4	35.9	22.6	40.8	37.7	48.8
18	104.6	100.9	123.7	202.8	214.0	66.0	3.6	44.3	22.1	43.9	37.7	47.1
19	98.5	97.3	127.8	288.4	152.1	56.6	3.9	76.1	21.5	42.3	36.3	42.3
20	92.7	95.0	121.1	394.3	102.1	66.5	5.2	31.5	21.5	40.8	37.0	42.3
21	92.7	96.2	119.8	305.3	107.0	125.5	7.3	28.7	19.8	37.7	38.5	46.3
22	95.0	99.7	121.1	314.0	95.0	78.6	7.3	254.9	37.5	35.5	41.5	47.1
23	104.6	100.9	119.8	294.0	93.8	50.5	6.0	370.3	119.5	35.5	38.5	48.8
24	117.2	102.1	122.4	227.0	88.1	55.7	5.7	259.0	61.5	34.8	38.5	45.5
25	150.3	100.9	119.8	185.9	80.4	54.0	11.3	407.2	54.9	34.1	39.2	45.5
26	126.4	99.7	114.6	170.0	76.2	51.3	16.3	372.4	101.0	32.0	37.7	46.3
27	126.4	98.5	112.1	168.4	75.1	47.1	25.6	184.8	123.7	30.7	38.5	47.1
28	125.1	105.8	121.1	163.8	76.2	44.7	49.1	106.5	97.3	30.0	39.2	48.0
29	121.1		126.4	154.8	604.4	40.0	49.6	72.5	73.1	30.7	39.2	48.0
30	114.6		127.8	318.8	543.8	34.8	37.0	51.3	59.4	30.7	39.2	44.7
31	108.3		138.8		1092.0		32.0	41.5		30.0		47.1
MEAN	111.84	100.76	120.57	190.29	244.61	195.33	17.53	82.24	45.28	33.54	35.64	47.44
INCHES	0.032	0.026	0.034	0.052	0.069	0.053	0.005	0.023	0.012	0.009	0.010	0.013
STA AV	0.048	0.044	0.048	0.061	0.142	0.145	0.052	0.040	0.098	0.086	0.088	0.051

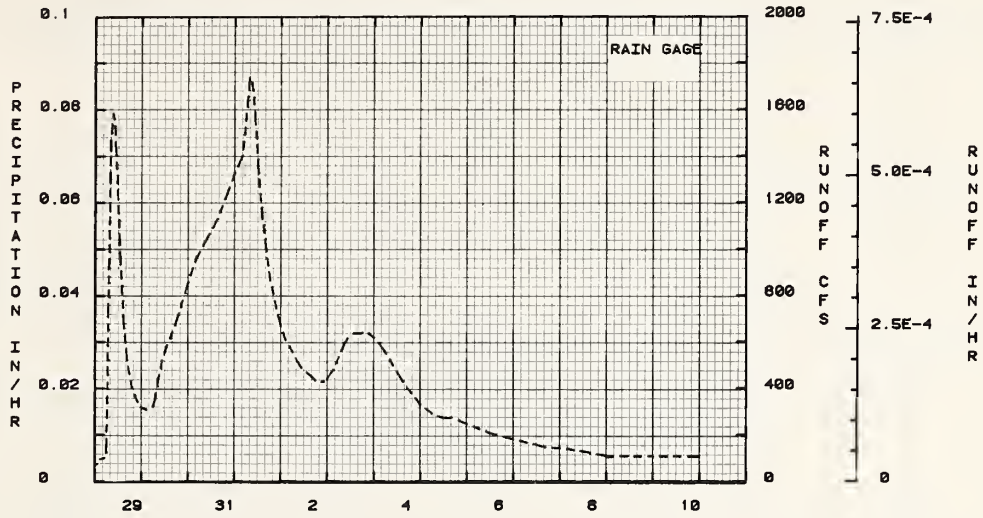
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000009111. To convert discharge in inches to AC-FT, multiply by 217,708. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 200 AT VERDEN											
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 29 - JUNE 10, 1970											
5-29		0.0					5-29	1	74.100	0.0	
								42	74.800	0.0	
								236	98.000	0.0001	
								500	101.600	0.0002	
								548	125.800	0.0002	
WATERSHED CONDITIONS:											
For area not included above											
subwatersheds as determined											
from a 1967 survey; sowed											
crop - 24%; row crop - 5%;											
alfalfa - 7%; pasture and											
range - 49%; and miscel-											
laneous - 15%.											
								600	183.900	0.0002	
								618	308.698	0.0002	
								624	464.698	0.0002	
								636	589.300	0.0002	
								648	764.799	0.0003	
								700	929.099	0.0004	
								718	1110.398	0.0005	
								736	1305.898	0.0006	
								800	1471.599	0.0008	
								824	1510.398	0.0010	
								900	1586.299	0.0014	
								930	1560.599	0.0017	
								1000	1523.998	0.0020	
								1030	1435.998	0.0023	
								1130	1244.600	0.0028	
								1230	1049.300	0.0032	
								1300	934.100	0.0034	
								1348	807.398	0.0037	
								1454	658.398	0.0040	
								1630	522.100	0.0044	
								1900	400.398	0.0048	
								2200	342.000	0.0052	
								2400	317.800	0.0055	
								230	308.898	0.0058	
								600	326.000	0.0062	
								730	380.698	0.0064	
								900	460.100	0.0066	
								1030	523.300	0.0069	
								1200	561.600	0.0072	
								1800	695.898	0.0086	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003796. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 200 AT VEEDEN							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 29 - JUNE 10, 1970 (CONTINUED)										
							5-30	2400	861.898	0.0104
							5-31	412	963.500	0.0119
								912	1040.799	0.0138
								1500	1131.298	0.0162
								2000	1238.698	0.0184
								2400	1331.198	0.0204
							6- 1	400	1404.598	0.0225
								630	1628.198	0.0239
								730	1737.998	0.0245
								830	1718.099	0.0252
								930	1681.998	0.0258
								1030	1565.299	0.0264
								1200	1357.498	0.0272
								1400	1160.198	0.0282
								1600	1019.098	0.0290
								1830	865.198	0.0299
								2130	745.398	0.0308
								2400	668.898	0.0315
							6- 2	230	608.800	0.0321
								1042	488.198	0.0338
								1800	435.800	0.0351
								2100	429.100	0.0356
								2206	427.898	0.0358
								2400	441.800	0.0361
							6- 3	300	481.500	0.0366
								800	580.500	0.0376
								1030	616.398	0.0382
								1330	638.198	0.0389
								1800	640.198	0.0400
								2100	636.398	0.0407
								2800	619.898	0.0418
							6- 4	624	550.000	0.0428
								1454	429.300	0.0444
								2400	330.600	0.0457
							6- 5	600	293.398	0.0464
								1200	271.898	0.0470
								1630	275.800	0.0475
								2400	246.700	0.0482
							6- 6	1200	207.300	0.0492
								2400	182.400	0.0501
								1630	147.200	0.0511
								2400	143.000	0.0515
							6- 8	1200	129.000	0.0521
								2400	109.500	0.0526
							6- 9	1200	105.800	0.0531
								2400	106.400	0.0536
							6-10	1200	107.000	0.0546

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003796. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970  
 CHICKASBA, OKLAHOMA WATERSHED 200 AT VERDEN

CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA

LOCATION: Washita River Watershed above Chickasha, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--SE1/4 sec. 23, T. 7 N., R. 7 W., lat. 35 deg. 05 min.; long. 97 deg. 54 min., 1 mile Northeast of Chickasha, Okla., at H.E. Bailey Turnpike bridge over Washita River; at river mile 256.5, approximately 1.3 miles downstream from confluence of Line Creek.

AREA: 2768000.00 acres 4325.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.10	0.38	2.51	4.34	4.65	2.13	1.29	1.33	4.30	2.11	0.62	0.27	24.03														
	Q	0.026	0.025	0.032	0.063	0.101	0.067	0.004	0.023	0.013	0.012	0.009	0.013	0.389														
STA AV	P	0.69	1.05	1.52	3.04	3.60	3.10	1.68	2.88	3.89	1.52	2.04	0.83	25.83														
	Q	0.039	0.036	0.042	0.069	0.160	0.100	0.045	0.040	0.080	0.077	0.070	0.044	0.802														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																			
		Maximum Discharge				Maximum Volume for Selected Time Interval													
		1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days											
		Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date						
1970		5-29	0.002	5-29	0.002	5-29	0.004	5-29	0.012	5-29	0.022	5-29	0.032	5-29	0.039	5-29	0.077		
MAXIMUMS FOR PERIOD OF RECORD																			
		4-12	0.003	5-29	0.002	4-12	0.005	4-12	0.015	5-7	0.029	5-6	0.055	5-6	0.102	5-5	0.329		
		1967		1970		1967		1967		1969		1969		1969		1969			

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 33%; row crop - 4%; alfalfa - 7%; pasture and range - 45%; and miscellaneous - 11%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pnh. 1216, p. 69.7-21, (Composite). The station at Chickasha (4th St.) Watershed 400 was discontinued in 1967, therefore, causing a new Thiessen weighted average for this watershed. Precipitation data obtained from a Thiessen weighted average of 42 gages for the reach between Verden (200) and Chickasha (500). Precipitation records began Oct. 1961; runoff records began Jan. 1964. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 500 NEAR CHICKASHA													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.27	0.0	0.15	0.0	0.01	0.0	0.02	0.16	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.34	0.01	0.0	0.10	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.23	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0															
6	0.0	0.0	0.92	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.0	0.0															
8	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.54	0.0	0.0															
9	0.0	0.0	0.0	0.01	0.0	0.0	0.05	0.06	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.84	0.12	0.0	0.01	0.0	0.0	0.0															
12	0.0	0.0	0.01	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.46	0.0															
14	0.0	0.0	0.0	0.0	1.63	0.0	0.0	0.0	0.08	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.0	0.20															
16	0.0	0.0	0.50	0.40	0.0	0.0	0.0	0.0	0.30	0.05	0.0	0.0															
17	0.09	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.03	0.22	0.0	0.0															
18	0.01	0.0	0.02	0.03	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.47	0.23	0.05	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.02	0.01	0.0	0.0	0.0															
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.05	3.00	0.03	0.0	0.0															
23	0.0	0.04	0.0	0.0	0.02	0.0	0.0	0.0	0.03	0.03	0.0	0.0															
24	0.0	0.05	0.0	0.0	0.01	0.16	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0															
27	0.0	0.03	0.0	0.0	0.05	0.0	0.10	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.13	0.60	0.0	0.14	0.0	0.36	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	1.74	2.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.10	1.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.04	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.10	0.38	2.51	4.34	4.65	2.13	1.29	1.33	4.30	2.11	0.62	0.27															
STA AV	0.69	1.05	1.52	3.04	3.60	3.10	1.68	2.88	3.89	1.52	2.04	0.83															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 42 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA				WATERSHED 500 NEAR CHICKASHA			
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	95.1	105.1	102.8	133.4	631.7	1289.2	33.8	17.3	34.5	55.6	31.2	40.7	
2	94.1	103.9	108.5	146.0	573.5	790.0	31.9	19.8	47.5	50.6	31.9	42.2	
3	91.9	101.7	105.1	160.4	749.1	535.5	30.6	16.4	45.9	45.2	31.9	42.9	
4	90.9	100.6	101.7	148.6	422.8	652.7	27.6	7.7	40.0	41.5	31.9	43.7	
5	89.8	99.5	94.1	146.0	265.0	408.4	24.1	7.6	33.8	48.1	30.6	44.4	
6	88.7	99.5	124.9	163.1	209.3	266.7	22.4	28.6	31.9	219.2	31.2	43.7	
7	87.7	100.6	142.2	161.8	190.8	198.4	19.8	14.6	30.6	65.3	31.9	47.5	
8	81.5	100.6	155.1	148.6	174.0	161.8	17.8	8.4	24.1	54.6	33.2	50.6	
9	80.5	101.7	144.8	146.0	164.5	138.4	18.3	5.9	21.4	94.2	32.5	49.8	
10	89.8	100.6	129.7	128.5	155.1	121.3	21.9	5.3	19.3	36.1	33.2	49.0	
11	94.1	100.6	124.9	121.3	147.3	126.4	14.1	3.4	17.3	25.8	33.8	46.7	
12	93.0	100.6	131.0	122.5	138.4	1097.4	15.2	1.5	17.3	24.1	33.2	46.7	
13	97.3	100.6	128.5	120.1	129.7	363.7	12.1	0.6	17.2	23.0	36.5	57.2	
14	101.7	101.7	122.5	114.2	144.1	197.2	8.4	0.3	20.8	25.2	38.6	59.8	
15	115.4	100.6	116.6	110.8	717.5	251.6	6.8	0.2	20.6	25.8	37.2	61.6	
16	105.1	101.7	116.6	111.9	246.7	169.4	5.3	0.2	23.4	27.0	37.2	59.8	
17	103.9	102.8	118.9	114.2	163.8	117.7	3.4	8.9	21.9	30.6	37.2	56.4	
18	91.9	101.7	116.6	163.7	134.4	95.1	2.4	21.9	20.8	35.8	36.5	52.3	
19	95.1	103.9	116.6	181.3	198.3	82.5	1.4	64.3	20.3	40.7	36.5	51.4	
20	93.0	103.9	117.7	333.6	137.1	77.3	2.0	82.3	19.8	40.7	35.8	46.7	
21	93.0	101.7	120.1	371.5	106.2	96.6	2.4	33.8	18.8	38.6	35.2	45.9	
22	82.5	101.7	120.1	277.1	107.3	119.8	2.2	19.3	91.0	39.3	35.8	49.8	
23	106.2	103.9	120.1	323.3	99.5	78.5	2.8	377.1	261.4	37.9	37.9	50.6	
24	111.9	102.8	120.1	269.0	97.3	55.1	2.8	315.3	153.7	35.2	36.5	52.3	
25	131.0	103.9	120.1	215.3	91.9	56.0	2.6	362.4	71.3	36.5	37.2	50.6	
26	117.7	105.1	115.4	196.0	85.6	53.4	3.2	533.7	46.7	36.5	40.0	50.6	
27	109.6	103.9	110.8	185.0	84.6	46.7	8.0	367.6	96.9	32.5	39.3	51.4	
28	111.9	106.2	120.1	169.9	82.5	41.2	11.3	157.9	111.9	29.4	37.9	51.4	
29	110.8	122.5	161.1	3423.9	41.2	34.8	93.1	89.6	29.4	39.3	51.4	51.4	
30	108.5	126.1	2189.9	956.4	38.1	38.6	62.5	67.0	30.6	40.7	52.3	52.3	
31	108.5	127.3		969.7		26.4	49.0		31.2		49.0	49.0	
MEAN	99.10	102.18	120.69	244.47	380.57	258.91	14.66	86.67	51.22	44.71	35.39	49.95	
INCHES	0.026	0.025	0.032	0.063	0.101	0.067	0.004	0.023	0.013	0.012	0.009	0.013	
STA AV	0.039	0.036	0.042	0.069	0.160	0.100	0.045	0.040	0.080	0.077	0.070	0.044	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000008599. To convert discharge in inches to AC-FT, multiply by 230,667. STA AV based on 7 yr (1964-70) record period.

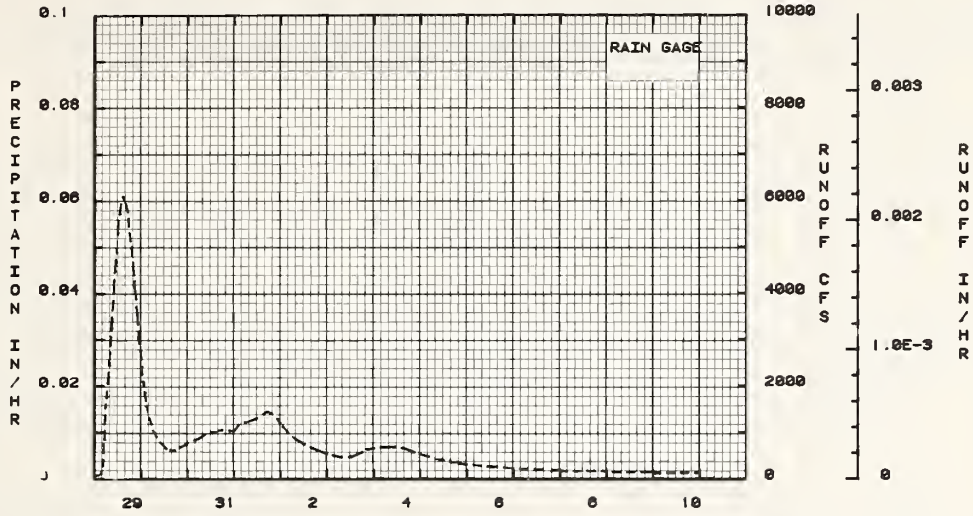
1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 500 NEAR CHICKASHA			
	ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			
Date	Rainfall	Ennoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
			EVENT OF			MAY 29 - JUNE 10, 1970				
5-29		0.0					5-29	1	82.500	0.0
								206	86.800	0.0001
								300	124.500	0.0001
								342	193.700	0.0001
								418	285.500	0.0002
WATERSEED CONDITIONS:										
For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 33%; row crop - 4%; alfalfa - 7%; pasture and range - 45%; and miscellaneous - 11%.										
								430	425.398	0.0002
								442	581.500	0.0002
								448	748.600	0.0002
								500	862.100	0.0003
								512	1052.798	0.0004
								518	1232.098	0.0004
								530	1385.398	0.0005
								536	1545.198	0.0006
								548	1628.498	0.0007
								606	1758.898	0.0009
								624	1904.698	0.0011
								648	2069.698	0.0014
								712	2308.599	0.0017
								730	2574.498	0.0020
								748	2739.998	0.0023
								812	2925.198	0.0027
								836	3227.300	0.0031
								854	3493.499	0.0035
								918	3709.798	0.0040
								942	4034.198	0.0046
								1000	4310.086	0.0050
								1024	4520.984	0.0056
								1048	4735.984	0.0063
								1118	4968.484	0.0072
								1148	5325.184	0.0081
								1212	5575.785	0.0089
								1248	5785.484	0.0101
								1324	5949.184	0.0114
								1424	6097.984	0.0136
								1500	6022.086	0.0149

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003583. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLABOMA			WATERSHED 500 NEAR CHICKASHA				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF			MAY 29 -	JUNE 10, 1970			(CONTINUED)			
							5-29	1600	5941.285	0.0170
								1700	5753.684	0.0191
								1724	5442.586	0.0199
								1830	5135.785	0.0220
								1924	4812.184	0.0236
								2000	4406.883	0.0246
								2036	4170.586	0.0255
								2112	3880.100	0.0264
								2142	3602.398	0.0271
								2212	3335.300	0.0277
								2236	3056.498	0.0282
								2300	2922.198	0.0286
								2330	2778.198	0.0291
								2400	2572.698	0.0296
							5-30	30	2257.600	0.0300
								48	2102.698	0.0302
								118	2028.698	0.0306
								148	1859.398	0.0309
								218	1693.198	0.0312
								248	1576.898	0.0315
								330	1449.398	0.0319
								412	1318.299	0.0322
								512	1182.498	0.0326
								618	1041.398	0.0330
								748	913.798	0.0335
								1000	780.898	0.0342
								1300	656.800	0.0350
								1500	612.800	0.0355
								1730	625.000	0.0361
								1948	682.698	0.0366
								2400	779.799	0.0377
							5-31	600	886.198	0.0395
								906	972.999	0.0405
								1200	1012.698	0.0415
								1800	1064.598	0.0437
								2400	1029.100	0.0460
							6- 1	224	1169.500	0.0469
								600	1224.000	0.0484
								1200	1315.398	0.0511
								1700	1454.898	0.0536
								1930	1400.398	0.0549
								2212	1294.398	0.0562
								2400	1199.198	0.0570
							6- 2	100	1147.099	0.0574
								342	1006.198	0.0584
								718	874.698	0.0596
								1218	745.898	0.0611
								1830	624.000	0.0626
								2400	538.398	0.0637
							6- 3	300	507.600	0.0643
								730	467.600	0.0651
								1200	473.698	0.0659
								1800	582.100	0.0670
								2030	641.698	0.0675
								2400	658.100	0.0683
							6- 4	430	692.698	0.0694
								1100	697.398	0.0710
								1600	653.898	0.0722
								2100	575.198	0.0733
								2400	530.000	0.0739
							6- 5	430	478.000	0.0747
								1200	402.500	0.0759
								1800	347.000	0.0767
								2400	313.898	0.0774
							6- 6	1200	265.100	0.0786
								2400	222.800	0.0796
								1200	197.700	0.0805
								2400	175.200	0.0813
							6- 8	1200	161.800	0.0820
							6- 9	1200	138.400	0.0832
							6-10	1200	121.300	0.0843

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0000003583. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.





EVENT OF MAY 29 - JUNE 10, 1970  
 CHICKASAW, OKLAHOMA WATERSHED 500 NEAR CHICKASAW

## CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER

LOCATION: Washita River Watershed above Tabler, Okla.: Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham, and Boyer Mills Counties, Okla.; and Beaphill, Wheeler, and Gray Counties, Tex.: Washita River, Red River Basin. GAGING STATION--NW1/4 sec. 23, T. 6 N., R. 6 W., lat. 34 deg. 59 min., long. 97 deg. 48 min. A cableway (no bridge) over the river about 4-1/2 miles south and 1 mile east of Tabler; at river mile 236.1, approximately 7.8 miles downstream from the confluence of the Little Washita River.

AREA: 3011800.00 acres 4706.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.10	0.61	2.65	2.85	2.49	1.74	1.25	1.12	6.20	2.03	0.82	0.29	22.15														
	Q	0.030	0.027	0.035	0.065	0.112	0.067	0.003	0.018	0.034	0.016	0.011	0.015	0.435														
STA AV	P	1.00	1.29	1.77	2.85	4.16	2.14	1.70	3.19	4.25	1.71	1.78	0.80	26.65														
	Q	0.042	0.037	0.047	0.076	0.167	0.103	0.041	0.037	0.077	0.069	0.066	0.042	0.804														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	1 Hour		2 Hours		Maximum Volume for Selected Time Interval				1 Day		2 Days		8 Days		
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
	5-29	0.002	5-29	0.002	5-29	0.004	5-29	0.010	5-29	0.020	5-29	0.033	5-29	0.041	5-29	0.078
MAXIMUMS FOR PERIOD OF RECORD																
	5- 7	0.003	5- 7	0.003	5- 7	0.007	5- 7	0.019	5- 7	0.036	5- 6	0.066	5- 6	0.113	5- 5	0.336
	1969		1969		1969		1969		1969		1969		1969		1969	

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; sowed crop -20%; row crop - 6%; alfalfa - 12%; pasture and range - 52%; and miscellaneous - 10%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.7-9 (Geologic); 1965, OSDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began July 1963. STA AV (P) based on a Thiessen weighted average of 66 gages for the reach between stations at Chickasha (Turnpike) and Tabler, Okla., for record period of Jan. 1964 to Dec. 1970. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.17	0.0	0.10	0.0	0.0	0.02	0.01	0.13	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.02	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.25	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0															
6	0.0	0.0	1.10	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.08	0.10	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.44	0.0	0.0															
9	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.05	0.14	0.0	0.01	0.0	0.0	0.0															
12	0.0	0.0	0.02	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.68	0.0															
14	0.0	0.0	0.0	0.0	1.22	0.0	0.0	0.0	0.18	0.0	0.01	0.0															
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.04	0.0	0.20															
16	0.0	0.0	0.58	0.40	0.0	0.0	0.0	0.0	0.56	0.06	0.0	0.0															
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0															
18	0.01	0.0	0.01	0.07	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.93	0.25	0.07	0.0	0.0	0.0	0.01															
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.25	0.02	0.0	0.0	0.0	0.07														
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.03	4.21	0.40	0.0	0.0															
23	0.0	0.07	0.0	0.02	0.04	0.0	0.0	0.0	0.04	0.03	0.0	0.0															
24	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.02	0.01	0.0	0.0															
27	0.0	0.16	0.0	0.0	0.14	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.13	0.58	0.0	0.01	0.0	0.29	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.79	0.80	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.02	0.88	0.01	0.0	0.0	0.05	0.0	0.0	0.0	0.01															
31	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.10	0.61	2.65	2.85	2.49	1.74	1.25	1.12	6.20	2.03	0.82	0.29															
STA AV	1.00	1.29	1.77	2.85	4.16	2.14	1.70	3.19	4.25	1.71	1.78	0.80															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. STA AV values are a Thiessen weighted average of 66 rain gages on the watershed for record period of Jan. 1964 to Dec. 1970. STA AV based on 7 yr (1964-70) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASAW, OKLAHOMA			WATERSHED 600 NEAR TABLER			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	105.3	134.7	131.8	156.3	1252.4	1294.3	35.5	4.7	44.7	75.1	37.7	54.0
2	150.0	128.9	133.3	164.4	558.2	975.2	32.7	1.5	34.1	69.0	40.0	53.1
3	118.9	127.4	131.8	184.6	846.9	569.3	28.7	1.4	41.5	62.2	41.5	53.1
4	112.0	124.5	127.4	186.3	595.8	653.2	27.4	1.4	37.7	58.5	41.5	53.1
5	105.3	123.1	123.1	179.4	375.6	509.5	22.6	1.2	32.0	72.9	41.5	53.1
6	98.8	121.7	143.5	179.4	277.1	324.4	22.1	1.1	28.7	232.6	40.0	54.9
7	96.3	121.7	199.7	181.1	238.0	235.2	22.6	0.9	25.6	168.1	40.0	54.9
8	93.8	123.1	184.6	174.3	215.1	193.3	16.7	0.8	26.2	108.4	42.3	57.6
9	92.5	121.7	172.7	161.1	195.1	167.7	14.4	0.6	21.5	144.1	41.5	60.3
10	92.5	121.7	151.6	154.7	182.9	145.3	18.3	0.5	15.8	93.1	40.0	60.3
11	92.5	121.7	137.7	145.3	167.7	142.3	22.1	0.5	13.0	46.3	40.0	59.4
12	92.5	121.7	140.7	140.7	154.7	883.5	20.4	0.4	13.0	38.5	40.8	57.6
13	98.8	121.7	139.2	139.2	143.8	509.0	21.5	0.4	13.0	36.3	47.1	59.4
14	140.7	121.7	134.7	136.2	133.3	269.0	14.4	0.4	17.7	34.1	59.4	68.0
15	166.0	121.7	127.4	134.7	855.4	227.6	11.7	0.4	16.3	35.5	59.4	71.0
16	145.3	121.7	131.8	137.7	411.2	213.2	9.0	0.4	15.8	37.0	53.1	74.1
17	139.2	123.1	143.8	191.0	247.6	149.4	6.0	0.2	29.4	39.2	51.3	72.0
18	118.9	121.7	150.0	191.6	190.5	118.9	3.4	0.1	26.2	43.1	51.3	67.0
19	101.4	121.7	154.7	200.5	197.6	98.8	2.6	14.2	23.8	49.6	49.6	62.2
20	86.4	124.5	151.6	250.3	181.7	90.5	2.6	81.6	23.2	52.2	48.8	61.3
21	86.4	126.0	153.1	442.4	127.4	146.6	3.0	75.3	22.1	50.5	48.0	59.4
22	105.3	124.5	140.7	361.2	116.1	126.8	2.6	27.4	829.1	53.2	47.1	64.1
23	116.1	126.0	142.3	324.2	113.4	104.1	2.2	121.9	1976.0	86.2	47.1	62.2
24	171.0	128.9	139.2	324.8	106.6	72.6	1.8	377.6	303.5	51.3	48.8	62.2
25	177.7	127.4	134.7	242.0	105.3	55.1	1.7	258.9	149.8	47.1	49.6	61.3
26	176.0	126.0	133.3	207.7	96.3	55.1	1.7	423.1	95.2	45.5	50.5	58.5
27	153.1	121.7	133.3	207.7	92.5	51.3	1.4	405.7	88.0	43.9	51.3	60.3
28	145.3	126.0	136.2	189.1	96.3	44.1	1.4	220.3	129.1	39.2	52.2	61.3
29	143.8	151.6	177.7	2858.0	40.7	1.2	115.7	115.9	38.5	53.1	62.2	62.2
30	142.3	153.1	242.1	2062.7	39.1	18.2	74.1	91.5	37.0	54.0	62.2	61.3
31	139.2	154.7	1010.7			23.1	54.9		37.7			
MEAN	122.69	124.15	144.63	276.19	458.25	283.50	13.32	73.15	143.31	65.35	46.95	60.69
INCRS	0.030	0.027	0.035	0.065	0.112	0.067	0.003	0.018	0.034	0.016	0.011	0.015
STA AV	0.042	0.037	0.047	0.076	0.167	0.103	0.041	0.037	0.077	0.069	0.066	0.042

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000007903. To convert discharge in inches to AC-FT, multiply by 250,983. STA AV based on 8 yr (1963-70) record period.

1970		SELECTED RUNOFF EVENT				CHICKASAW, OKLAHOMA			WATERSHED 600 NEAR TABLER			
ANTECEDENT CONDITIONS		RUNOFF		RAINFALL		ACCUMULATION		RUNOFF		ACCUMULATION		
Date	Rainfall	Date	Runoff	Date	Intensity	Date	Rate	Date	Rate	Date	Rate	
Mo-Day	(inches)	Mo-Day	(inches)	Mo-Day	(in/hr)	Mo-Day	(inches)	Mo-Day	(cfs)	Mo-Day	(inches)	
EVENT OF MAY 29 - JUNE 10, 1970												
5-29		0.0						5-29	1	93.800	0.0	
									212	94.000	0.0001	
									300	103.200	0.0001	
									530	109.400	0.0002	
									848	110.300	0.0003	
WATERSHED CONDITIONS: For area not included above subwatersheds as determined from a 1967 survey; sowed crop - 20%; row crop - 6%; alfalfa - 12%; pasture and range - 52%; and miscellaneous - 10%.												
									900	182.900	0.0003	
									906	314.500	0.0003	
									912	475.000	0.0003	
									918	646.398	0.0003	
									924	910.299	0.0003	
									930	1160.198	0.0003	
									936	1348.398	0.0003	
									942	1556.800	0.0003	
									948	1782.799	0.0004	
									954	1933.798	0.0005	
									1000	1961.398	0.0006	
									1012	2219.799	0.0007	
									1018	2563.498	0.0008	
									1030	2818.898	0.0010	
									1042	3085.799	0.0012	
									1100	3245.198	0.0015	
									1124	3474.800	0.0019	
									1142	3661.999	0.0023	
									1212	3942.500	0.0029	
									1242	4178.586	0.0036	
									1330	4388.785	0.0047	
									1430	4624.484	0.0062	
									1530	4906.086	0.0078	
									1630	5118.883	0.0095	
									1830	5447.086	0.0130	
									2030	5423.184	0.0166	
									2230	5247.086	0.0201	
									2400	4924.785	0.0226	
								5-30	100	4605.883	0.0242	
									230	4196.184	0.0264	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003293. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.

1970 SELECTED RUNOFF EVENT				CRICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLEE							
ANTECEDENT CONDITIONS				RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF				MAY	29	-	JUNE	10,	1970 (CONTINUED)		
							5-30	330	3854.198	0.0277	
								430	3453.098	0.0289	
								500	3261.800	0.0295	
								600	2971.198	0.0305	
								700	2642.800	0.0314	
								800	2315.398	0.0322	
								900	2019.898	0.0329	
								1000	1802.500	0.0335	
								1100	1618.798	0.0341	
								1200	1476.500	0.0346	
								1400	1266.999	0.0355	
								1700	1077.099	0.0367	
								2100	935.398	0.0380	
								2400	901.799	0.0389	
							5-31	600	934.698	0.0407	
								1200	1001.500	0.0426	
								1800	1076.499	0.0447	
								2300	1098.499	0.0465	
								2330	1232.299	0.0467	
								2400	1501.198	0.0469	
							6- 1	30	1568.398	0.0472	
								130	1380.599	0.0477	
								230	1316.298	0.0481	
								500	1238.698	0.0492	
								830	1206.198	0.0506	
								1200	1227.898	0.0520	
								1800	1304.898	0.0545	
								2200	1385.698	0.0563	
								2400	1375.698	0.0572	
							6- 2	300	1303.598	0.0585	
								730	1099.898	0.0603	
								1200	919.099	0.0618	
								1930	746.398	0.0639	
								2400	671.698	0.0650	
							6- 3	600	597.100	0.0663	
								1200	541.100	0.0674	
								1600	519.100	0.0681	
								1800	524.000	0.0684	
								2400	569.000	0.0695	
							6- 4	600	649.300	0.0707	
								1200	692.300	0.0720	
								1800	670.898	0.0733	
								2400	631.898	0.0746	
							6- 5	600	573.000	0.0758	
								1500	475.600	0.0774	
								2400	390.000	0.0787	
							6- 6	900	335.300	0.0798	
								2400	267.698	0.0813	
							6- 7	1200	231.800	0.0823	
								2400	209.400	0.0832	
							6- 8	1200	193.300	0.0840	
								6- 9	1200	167.700	0.0854
								6-10	1200	145.300	0.0866

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003293. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



EVENT OF MAY 29 - JUNE 10, 1970  
 CHICKASHA, OKLAHOMA WATERSHED 600 NEAR TABLER

CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX

LOCATION: Washita River Watershed above Alex, Okla.; Southwest Central Oklahoma and Texas Panhandle; in Grady, Caddo, Canadian, Kiowa, Washita, Custer, Beckham and Roger Mills Counties, Okla.; and Hemphill, Wheeler, and Gray Counties, Tex.; Washita River, Red River Basin. GAGING STATION--NW1/4 sec. 7, T. 5 N., R. 5 W., lat. 34 deg. 55 min., long. 97 deg. 46 min., 1 mile north of Alex, Okla.; at county road bridge over Washita River at river mile 226.5 approximately 3.8 miles downstream from confluence of Winter Creek.

AREA: 3061120.00 acres 4783.00 sq. miles

Monthly Precipitation and Runoff (inches) and Annual Maximum Discharge and Maximum Volumes of Runoff (inches) for Selected Time Intervals. Table with columns for months (Jan-Dec) and Annual. Includes data for 1970 and STA AV. Sub-section: ANNUAL MAXIMUM DISCHARGE and MAXIMUM VOLUMES OF RUNOFF FOR SELECTED TIME INTERVALS. Includes data for 1970 with discharge rate and volume for 1, 2, 6, 12, 24, and 48 hours. Includes table for MAXIMUMS FOR PERIOD OF RECORD (5-7 1969, 5-7 1969, 5-7 1969, 9-20 1962, 9-20 1962, 5-7 1969, 5-6 1969, 5-5 1965).

NOTES: Watershed conditions: For area not included above subwatersheds as determined from a 1967 survey; feeded crop 11%; row crop - 9%; alfalfa - 7%; pasture and range - 66%; and miscellaneous - 7%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Precipitation records began Oct. 1961; runoff records began Sept. 1961. STA AV (P) values are a Thiessen weighted average of 21 gages for 1963-69 and for 77 gages for 1970 on the reach from Tahler to Alex., Okla., for total period of record (1963-70). For long-term precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY AIR TEMPERATURE (degrees F) CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX. Large table with columns for months (Jan-Dec) and rows for days (1-31). Each cell contains a range of minimum and maximum temperatures.

NOTES: AV and STA AV are rounded to the nearest degree. Mean rounded to the nearest tenth of a degree. STA AV based on records from Sept. 1962 through Dec. 1970. For Chickasha Experiment Station Evaporation Data, see National Weather Service Climatological Data for Oklahoma.

1970		DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.16	0.0	0.14	0.0	0.0	0.02	0.01	0.13	0.0
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.02	0.0	0.0	0.0
4	0.0	0.0	0.0	0.26	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0
6	0.0	0.0	1.02	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.10	0.14	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.51	0.0	0.0
9	0.0	0.0	0.0	0.01	0.0	0.0	0.10	0.01	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.11	0.14	0.0	0.01	0.0	0.0	0.0
12	0.0	0.0	0.02	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.73	0.0
14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.21	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.04	0.0	0.21
16	0.0	0.0	0.59	0.38	0.0	0.0	0.0	0.0	0.58	0.06	0.0	0.0
17	0.09	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.42	0.20	0.0	0.0
18	0.01	0.0	0.01	0.09	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.92	0.23	0.06	0.0	0.0	0.0	0.02
21	0.0	0.0	0.06	0.0	0.0	0.01	0.0	0.24	0.02	0.0	0.0	0.07
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.03	4.59	0.46	0.0	0.0
23	0.0	0.07	0.0	0.04	0.03	0.0	0.0	0.0	0.04	0.03	0.0	0.0
24	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.02	0.02	0.0	0.0
27	0.0	0.15	0.0	0.0	0.14	0.0	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.14	0.57	0.0	0.01	0.0	0.27	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.67	0.83	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.02	0.85	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.01
31	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.10	0.62	2.55	2.69	2.57	1.85	1.18	1.20	6.73	2.28	0.86	0.31
STA AV	1.30	1.38	1.76	2.80	4.38	2.07	2.03	2.92	4.20	1.44	1.52	0.83

NOTES: STA AV (P) values are a Thiessen weighted average of 21 gages for 1963-69 and for 77 gages for 1970. STA AV based on 8 yr for total period of record (1963-70).

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	105.0E	133.0	149.0	164.0	1520.0	1510.0	38.0	12.0	46.0	100.0	44.0	56.0
2	105.0E	126.0	144.0	172.0	579.0	1100.0	34.0	4.0	34.0	84.0	45.0	57.0
3	108.0E	123.0	141.0	186.0	852.0	601.0	30.0	2.0	40.0	70.0	48.0	59.0
4	108.0E	122.0	137.0	194.0	626.0	660.0	29.0	1.9	38.0	63.0	48.0	57.0
5	108.0E	120.0	132.0	186.0	408.0	536.0	25.0	1.7	34.0	111.0	47.0	57.0
6	108.0E	122.0	144.0	184.0	315.0	347.0	22.0	1.3	29.0	224.0	48.0	58.0
7	108.0E	123.0	202.0	192.0	257.0	249.0	22.0	1.0	28.0	220.0	45.0	57.0
8	104.0E	125.0	190.0	188.0	228.0	203.0	20.0	0.9	27.0	314.0	47.0	61.0
9	101.0E	125.0	179.0	170.0	205.0	181.0	17.0	0.5	22.0	216.0	46.0	63.0
10	104.0E	126.0	162.0	164.0	183.0	149.0	18.0	0.2	16.0	162.0	45.0	65.0
11	108.0E	125.0	151.0	155.0	170.0	147.0	21.0	0.1	14.0	89.0	44.0	63.0
12	128.0E	126.0	147.0	152.0	159.0	750.0	20.0	0.1	12.0	68.0	45.0	62.0
13	140.0E	128.0	151.0	146.0	144.0	490.0	22.0	0.0	11.0	61.0	56.0	62.0
14	155.0E	129.0	146.0	141.0	133.0	257.0	16.0	0.0	16.0	50.0	74.0	71.0
15	151.0E	130.0	135.0	137.0	608.0	209.0	14.0	0.0	15.0	47.0	71.0	78.0
16	147.0E	130.0	138.0	137.0	435.0	222.0	10.0	0.0	16.0	45.0	63.0	84.0
17	140.0E	130.0	155.0	174.0	253.0	156.0	8.4	0.0	31.0	48.0	60.0	79.0
18	112.0E	129.0	160.0	199.0	199.0	120.0	5.6	0.0	29.0	51.0	59.0	74.0
19	108.0E	126.0	162.0	228.0	187.0	96.0	6.4	2.0	23.0	55.0	58.0	65.0
20	109.0E	126.0	160.0	252.0	197.0	88.0	2.9	33.0	22.0	59.0	56.0	64.0
21	108.0E	126.0	159.0	419.0	140.0	147.0	3.3	125.0	21.0	58.0	55.0	64.0
22	108.0E	125.0	151.0	365.0	122.0	122.0	3.3	33.0	1310.0	58.0	52.0	74.0
23	113.0E	132.0	146.0	335.0	115.0	114.0	2.7	46.0	2810.0	140.0	51.0	70.0
24	167.0E	141.0	143.0	352.0	109.0	79.0	2.4	355.0	478.0	83.0	52.0	68.0
25	162.0E	141.0	141.0	274.0	111.0	58.0	2.0	254.0	264.0	70.0	53.0	68.0
26	162.0E	141.0	141.0	228.0	103.0	56.0	2.0	382.0	175.0	64.0	54.0	65.0
27	147.0E	137.0	133.0	218.0	96.0	54.0	1.9	421.0	147.0	57.0	55.0	65.0
28	141.0E	144.0	144.0	207.0	100.0	48.0	1.9	246.0	172.0	50.0	55.0	66.0
29	141.0E	160.0	160.0	192.0	2380.0	42.0	2.2	127.0	160.0	47.0	55.0	67.0
30	138.0E	160.0	2090.0	2630.0	40.0	4.9	82.0	126.0	44.0	57.0	68.0	67.0
31	137.0E	160.0	160.0	1060.0	40.0	24.0	58.0	44.0	44.0	44.0	57.0	67.0
MEAN	125.19	128.96	152.35	273.37	478.19	294.37	13.93	70.64	205.53	92.00	52.53	65.68
INCHES	0.030	0.028	0.037	0.064	0.115	0.069	0.003	0.017	0.048	0.022	0.012	0.016
STA AV	0.050	0.046	0.054	0.080	0.153	0.151	0.051	0.041	0.092	0.081	0.088	0.052

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.000007776. To convert discharge in inches to AC-FT, multiply by 255.093. STA AV based on 10 yr (1961-70) record period.

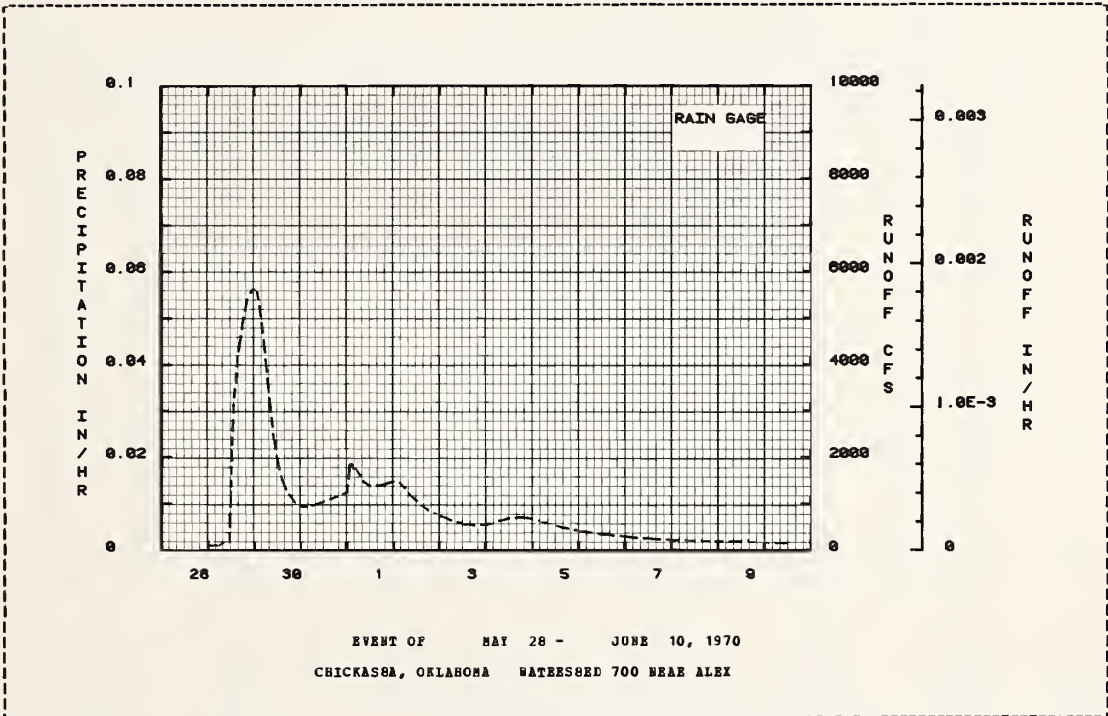
1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 700 NEAR ALEX				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
			EVENT OF							
			MAY 28 -			JUNE 10, 1970				
5-28		0.0					5-28	2400	57.300	0.0
							5-29	430	104.000	0.0001
								600	113.600	0.0002
								809	172.000	0.0003
								1100	172.200	0.0005
WATERSHED CONDITIONS:								1112	349.500	0.0005
For area not included above								1124	499.300	0.0005
subwatersheds as determined								1130	790.598	0.0005
from a 1967 survey; sowed								1136	1031.198	0.0005
crop - 11%; row crop - 9%;								1142	1277.999	0.0005
alfalfa - 7%; pasture and								1148	1374.998	0.0005
range - 66%; and miscel-								1200	1497.898	0.0006
laneous - 7%.								1212	1972.600	0.0007
								1218	2145.098	0.0008
								1230	2277.698	0.0009
								1242	2606.000	0.0011
								1300	2818.299	0.0014
								1318	3141.999	0.0017
								1336	3305.898	0.0020
								1400	3479.598	0.0024
								1430	3665.000	0.0030
								1500	3996.600	0.0036
								1609	4320.883	0.0049
								1700	4617.285	0.0063
								1830	5019.285	0.0086
								2030	5411.484	0.0120
								2300	5613.680	0.0165
								2400	5616.980	0.0183
							5-30	136	5557.984	0.0212
								300	5185.184	0.0236
								430	4684.684	0.0260
								530	4266.785	0.0275
								630	3847.198	0.0286
								730	3422.796	0.0300
								800	3201.898	0.0305
								839	2988.698	0.0310
								900	2846.496	0.0315
								930	2663.998	0.0319
								1000	2466.598	0.0323
								1100	2186.898	0.0331
								1200	1927.798	0.0338
								1300	1741.898	0.0344
								1430	1514.598	0.0352
								1630	1317.498	0.0361
								1800	1198.698	0.0367
								2100	1034.598	0.0378
								2400	938.000	0.0388
							5-31	309	927.499	0.0397
								600	964.298	0.0406
								1200	1052.398	0.0426
								2400	1249.800	0.0471
							6- 1	100	1575.098	0.0476
								130	1843.109	0.0479
								230	1870.158	0.0485
								330	1764.298	0.0491
								500	1740.798	0.0500
								900	1467.799	0.0521
								1200	1382.598	0.0535
								1800	1403.959	0.0562
								2400	1488.298	0.0590
							6- 2	330	1456.898	0.0607
								600	1338.658	0.0618
								1200	1058.500	0.0641
								1800	861.898	0.0660
								2400	740.100	0.0676
							6- 3	600	647.600	0.0685
								1200	571.398	0.0701
								1800	534.858	0.0712
								2400	555.898	0.0723
							6- 4	1200	686.398	0.0747
								1800	714.698	0.0761
								2400	665.800	0.0774
							6- 5	600	607.100	0.0786
								1500	490.198	0.0802
								2400	418.800	0.0815

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 700 NEAR ALEX								
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF MAY 28 - JUNE 10, 1970 (CONTINUED)											
							6- 6		636	368.500	0.0823
									1130	346.000	0.0829
									1800	316.898	0.0836
									2400	293.600	0.0842
							6- 7		600	264.800	0.0847
									1200	247.900	0.0852
									1800	227.500	0.0857
									2400	216.000	0.0861
							6- 8		1200	202.700	0.0869
							6- 9		1200	180.900	0.0884
							6-10		1200	148.900	0.0897

NOTES: To convert runoff in CFS to IN/88, multiply by 0.0000003240. No precipitation record is shown because most of the watershed lies outside of the area in which precipitation is measured.



## CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX

LOCATION: Big Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Washita River; Red River Basin.

AREA: 4845.00 acres 7.57 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.08	0.62	2.27	1.63	3.65	1.92	0.71	1.24	9.59	2.34	1.09	0.34	25.48														
	Q	0.048	0.060	0.067	0.054	0.030	0.216	0.007	0.0	1.114	0.150	0.036	0.046	1.828														
STA AV	P	1.05	1.22	1.70	2.47	3.84	2.63	1.87	2.46	4.44	1.67	2.08	0.92	26.34														
	Q	0.075	0.088	0.101	0.148	0.279	0.204	0.067	0.028	0.255	0.056	0.081	0.061	1.443														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge				Maximum Volume for Selected Time Interval																						
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.											
1970		9-22	0.145	9-22	0.128	9-22	0.212	9-22	0.375	9-22	0.563	9-22	0.668	9-22	0.740	9-22	1.024											
MAXIMUMS FOR PERIOD OF RECORD																												
		5-9	0.501	5-9	0.423	5-9	0.557	5-9	0.649	5-9	0.667	5-9	0.880	5-9	0.988	5-6	1.154											
		1964		1964		1964		1964		1964		1964		1964		1964												

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 3%; row crop - 5%; alfalfa - 2%; pasture and range - 90%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, pp. 69.8-5 (Topography), 69.7-9 (Geologic) and 1965, p. 69.7-21 (Composite). Precipitation data obtained from Thiessen weighted average of 7 gages. Precipitation records began Oct. 1961; runoff records began Dec. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 611 NEAR ALEX													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.16	0.0	0.16	0.0	0.0	0.0	0.0	0.14	0.0															
2	0.0	0.0	0.02	0.0	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.35	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07	0.0	0.0															
6	0.0	0.0	0.73	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.08	0.09	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.31	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.01	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.28	0.13	0.0	0.02	0.0	0.0	0.0															
12	0.0	0.0	0.02	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.64	0.0	0.95	0.0															
14	0.0	0.0	0.0	0.0	0.67	0.0	0.0	0.0	0.72	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.05	0.0	0.24															
16	0.0	0.0	0.77	0.28	0.0	0.0	0.0	0.0	1.54	0.05	0.0	0.0															
17	0.02	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.12	0.25	0.0	0.0															
18	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.66	0.14	0.0	0.0	0.0	0.0	0.03															
21	0.0	0.0	0.03	0.0	0.0	0.02	0.0	0.51	0.0	0.0	0.0	0.07															
22	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	5.38	0.49	0.0	0.0															
23	0.0	0.06	0.0	0.02	0.02	0.0	0.0	0.0	0.06	0.01	0.0	0.0															
24	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0															
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.18	0.47	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.16	0.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.0	0.0	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.08	0.62	2.27	1.63	3.65	1.92	0.71	1.24	9.59	2.34	1.09	0.34															
STA AV	1.05	1.22	1.70	2.47	3.84	2.63	1.87	2.46	4.44	1.67	2.08	0.92															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Daily precipitation values Thiessen weighted average of 7 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA			WATERSHED 611 NEAR ALEX			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.30	0.80	0.40	0.50	0.30	33.97	0.10	0.0	0.0	3.00	0.30	0.30
2	0.30	0.70	0.40	0.40	0.30	1.90	0.10	0.0	0.0	2.10	0.30	0.30
3	0.30	0.50	0.40	0.40	0.30	1.20	0.10	0.0	0.0	1.80	0.30	0.30
4	0.30	0.60	0.40	0.40	0.30	1.20	0.10	0.0	0.0	1.60	0.30	0.30
5	0.30	0.50	0.40	0.50	0.20	0.80	0.10	0.0	0.0	4.19	0.20	0.30
6	0.30	0.50	0.60	0.40	0.20	0.60	0.10	0.0	0.0	1.60	0.30	0.30
7	0.30	0.50	0.50	0.40	0.20	0.50	0.10	0.0	0.0	1.20	0.30	0.30
8	0.30	0.50	0.50	0.40	0.30	0.30	0.10	0.0	0.0	1.40	0.20	0.30
9	0.30	0.40	0.40	0.40	0.30	0.20	0.10	0.0	0.0	1.00	0.20	0.30
10	0.30	0.40	0.40	0.40	0.30	0.20	0.10	0.0	0.0	0.90	0.20	0.30
11	0.40	0.40	0.40	0.40	0.20	0.20	0.10	0.0	0.0	0.80	0.20	0.30
12	0.30	0.40	0.40	0.40	0.20	0.30	0.10	0.0	0.0	0.80	0.20	0.30
13	0.30	0.40	0.40	0.30	0.10	0.20	0.10	0.0	0.0	0.80	0.40	0.30
14	0.30	0.40	0.40	0.30	0.31	0.20	0.0 T	0.0	1.32	0.70	0.40	0.30
15	0.40	0.40	0.40	0.30	0.38	0.10	0.0	0.0	0.10	0.60	0.20	0.30
16	0.40	0.40	0.50	0.40	0.20	0.10	0.0	0.0	10.06	0.60	0.20	0.30
17	0.30	0.40	0.60	0.40	0.20	0.10	0.0	0.0	3.73	0.70	0.30	0.30
18	0.30	0.40	0.50	0.40	0.10	0.10	0.0	0.0	0.23	0.60	0.20	0.30
19	0.30	0.30	0.50	0.40	0.10	0.10	0.0	0.0	0.10	0.60	0.20	0.30
20	0.30	0.30	0.50	0.30	0.10	0.47	0.0	0.0	0.0 T	0.50	0.20	0.30
21	0.30	0.30	0.50	0.30	0.10	0.31	0.0	0.0	0.0	0.50	0.20	0.30
22	0.30	0.30	0.40	0.30	0.10	0.10	0.10	0.0	105.45	0.50	0.20	0.30
23	0.30	0.40	0.40	0.30	0.10	0.10	0.0 T	0.0	38.05	0.92	0.20	0.30
24	0.40	0.40	0.40	0.30	0.10	0.10	0.0	0.0	14.20	0.50	0.20	0.30
25	0.40	0.40	0.40	0.30	0.10	0.10	0.0	0.0	12.80	0.60	0.20	0.30
26	0.30	0.40	0.30	0.30	0.10	0.10	0.0	0.0	11.70	0.50	0.30	0.30
27	0.30	0.40	0.60	0.30	0.10	0.10	0.0	0.0	10.10	0.30	0.20	0.30
28	0.30	0.50	0.50	0.30	0.10	0.10	0.0	0.0	8.10	0.30	0.20	0.30
29	0.30		0.50	0.30	0.20	0.10	0.0	0.0	6.40	0.30	0.30	0.30
30	0.30		0.40	0.50	0.10	0.10	0.0	0.0	4.50	0.30	0.30	0.30
31	0.30		0.40		0.42		0.0	0.0		0.30		0.30
MEAN	0.3161	0.4393	0.4387	0.3667	0.1971	1.4649	0.0452	0.0	7.5608	0.9843	0.2467	0.3000
INCHES	0.048	0.060	0.067	0.054	0.030	0.216	0.007	0.0	1.114	0.150	0.036	0.046
STA AV	0.075	0.088	0.101	0.148	0.279	0.204	0.067	0.028	0.255	0.056	0.081	0.061

NOTES: To convert runoff in CPS to IN/DAY, multiply by 0.004913. STA AV based on 10 yr (1961-1970) record period.

## CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX

LOCATION: Little Dry Creek Watershed above State Road 19 bridge in Grady County, Okla.; tributary to Big Dry Creek, Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 33, T. 6 N., R. 6 W., lat. 35 deg. 57 min., long. 97 deg. 51 min., 5 miles Northwest of Alex, Okla.; on state road 19 bridge over little Dry Creek.

AREA: 563.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P 0.09	0.56	2.14	1.63	3.74	2.62	0.84	0.98	9.06	2.56	1.12	0.34	25.68															
	Q 0.008	0.0	0.0	0.001	0.069	0.136	0.0	0.0	0.643	0.038	0.007	0.0	0.903															
STA AV	P 1.03	1.18	1.64	2.75	3.72	2.69	2.08	2.44	4.46	1.66	2.00	0.89	26.56															
	Q 0.097	0.067	0.068	0.181	0.129	0.220	0.091	0.009	0.195	0.022	0.030	0.112	1.220															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
	9-22	0.405	9-22	0.239	9-22	0.266	9-22	0.444	9-22	0.593	9-22	0.609	9-21	0.609	9-15	0.626												
MAXIMUMS FOR PERIOD OF RECORD																												
	7-1	0.493	6-23	0.345	6-23	0.549	6-23	0.733	6-23	0.756	6-23	0.756	6-23	0.756	6-23	0.785												
	1968		1963		1963		1963		1963		1963		1963		1963													

NOTES: Watershed conditions: From a 1967 survey; alfalfa - 17%; and pasture and range 83%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69.8-5 (Topography) and p. 69.7-9 (Geologic); 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 2 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Nov. 1961. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.19	0.0	0.42	0.0	0.0	0.0	0.0	0.14	0.0													
2	0.0	0.0	0.03	0.0	0.0	0.03	0.0	0.0	0.06	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.30	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0													
6	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.06	0.10	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0													
9	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.18	0.10	0.0	0.01	0.0	0.0	0.0													
12	0.0	0.0	0.02	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.98	0.0													
14	0.0	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.82	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.22													
16	0.0	0.0	0.62	0.32	0.0	0.0	0.0	0.0	0.91	0.07	0.0	0.0													
17	0.07	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.13	0.22	0.0	0.0													
18	0.02	0.0	0.01	0.11	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0													
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	1.28	0.15	0.0	0.0	0.0	0.0	0.03													
21	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.08													
22	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.02	5.41	0.70	0.0	0.0													
23	0.0	0.05	0.0	0.0	0.01	0.0	0.0	0.0	0.05	0.0	0.0	0.0													
24	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.01	0.06	0.0	0.0													
27	0.0	0.13	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.16	0.41	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.15	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01													
31	0.0	0.0	0.0	0.0	2.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.09	0.56	2.14	1.63	3.74	2.62	0.84	0.98	9.06	2.56	1.12	0.34													
STA AV	1.03	1.18	1.64	2.75	3.72	2.69	2.08	2.44	4.46	1.66	2.00	0.89													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 2 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	2.734	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.485	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.090	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.177	0.0
14	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.401	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.223	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.170	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.431	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.060	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.0	13.837	0.325	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.569	0.003	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	1.632	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0065	0.0	0.0	0.0005	0.0529	0.1075	0.0	0.0	0.5067	0.0291	0.0059	0.0
INCHES	0.008	0.0	0.0	0.001	0.069	0.136	0.0	0.0	0.643	0.038	0.007	0.0
STA AV	0.097	0.067	0.068	0.181	0.129	0.220	0.091	0.009	0.195	0.022	0.030	0.112

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.04228. To convert discharge in inches to AC-FT, multiply by 46.92. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 612 NEAR ALEX												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Rnnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22, 1970												
9-22	0.0	0.0	9-22	340	0.0	0.0	9-22	1236	0.0	0.0		
				358	0.7333	0.22		1242	3.400	0.0003		
				521	0.0217	0.25		1248	9.500	0.0014		
				537	0.3000	0.33		1254	36.400	0.0055		
				800	0.0168	0.37		1300	110.900	0.0187		
				845	0.2000	0.52		1306	173.100	0.0431		
				900	2.6800	1.19		1312	229.900	0.0791		
				910	2.8200	1.66		1318	225.000	0.1182		
				925	2.5600	2.30		1330	150.400	0.1854		
				952	0.0667	2.33		1342	77.600	0.2254		
				1015	0.2348	2.42		1354	32.200	0.2447		
				1053	0.0474	2.45		1406	12.300	0.2525		
				1106	2.6308	3.02		1430	5.300	0.2587		
				1140	0.3176	3.20		1436	4.500	0.2595		
				1237	0.0211	3.22		1442	7.300	0.2606		
				1242	1.2000	3.32		1448	29.800	0.2638		
				1314	0.0375	3.34		1454	50.300	0.2710		
				1329	1.0400	3.60		1500	75.100	0.2822		
				1353	0.2250	3.69		1506	80.200	0.2956		
				1403	1.4400	3.93		1512	80.200	0.3099		
				1617	0.1478	4.26		1524	59.700	0.3344		
				1747	0.2600	4.65		1542	22.800	0.3563		
				1831	0.5182	5.03		1600	10.090	0.3659		
				1915	0.4909	5.39		1630	4.700	0.3715		
				2019	0.1687	5.57		1700	2.800	0.3748		
								1712	5.100	0.3762		
								1718	7.600	0.3773		
								1724	8.300	0.3787		
								1730	8.900	0.3802		
								1742	13.400	0.3841		
								1800	38.200	0.3978		
								1812	48.100	0.4129		
								1824	37.300	0.4279		
								1842	18.100	0.4426		
								1900	10.400	0.4502		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001762.

## CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above County road South of Anadarko in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 34, T. 7 N., R. 10 W., lat. 35 deg. 03 min., long. 98 deg. 15 min., 2 miles South of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 16634.00 acres 26.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.07	0.35	3.19	2.47	1.80	2.89	1.36	1.52	5.14	1.24	0.51	0.21	20.75																	
	Q	0.047	0.045	0.074	0.068	0.039	0.029	0.000	0.0	0.013	0.0	0.004	0.006	0.327																	
STA AV	P	0.62	1.02	1.47	2.69	3.64	2.98	1.83	2.44	3.99	1.56	1.94	0.75	24.93																	
	Q	0.080	0.085	0.099	0.150	0.175	0.068	0.036	0.016	0.051	0.029	0.068	0.062	0.920																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval		1 Day		2 Days		8 Days																	
		Date		Date		Date		6 Hours Date	Vol.	12 Hours Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970		6-11	0.006	6-11	0.005	6-11	0.007	6-11	0.011	6-11	0.012	6-11	0.013	6-11	0.014	3-28	0.024														
		MAXIMUMS FOR PERIOD OF RECORD																													
		5-10	0.046	5-10	0.044	5-10	0.080	5-10	0.135	5-10	0.149	5-9	0.234	5-9	0.295	5-9	0.320														
		1964		1964		1964		1964		1964		1964		1964		1964															

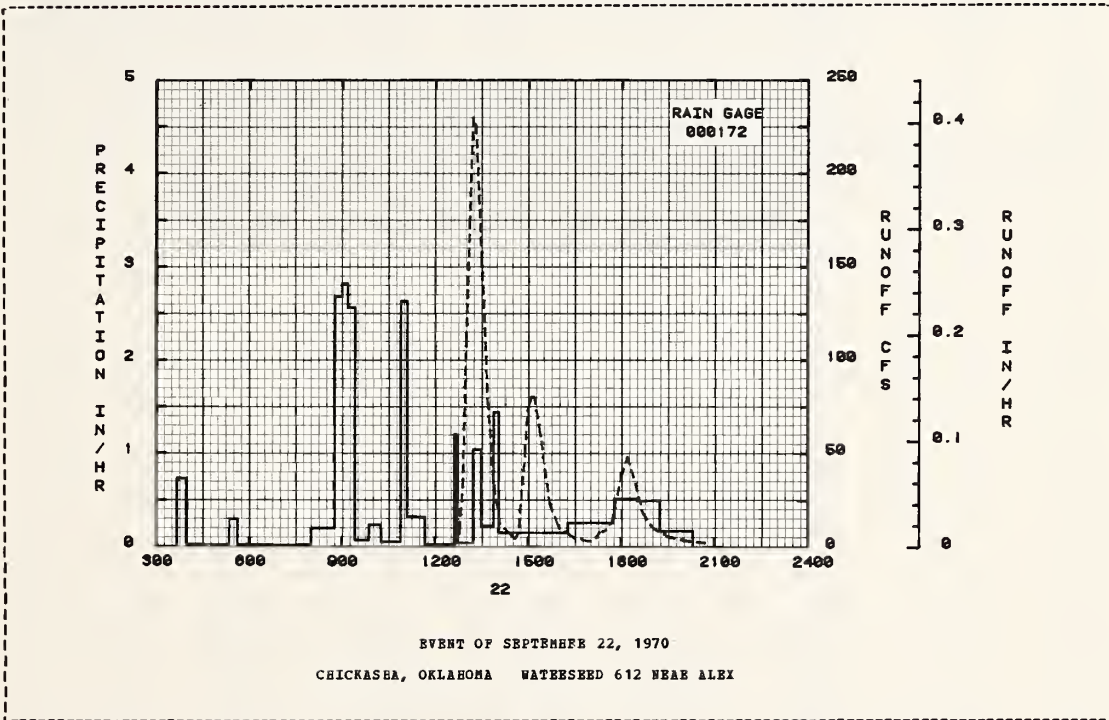
NOTES: Watershed conditions: From a 1967 survey; sowed crop - 14%; row crop - 4%; alfalfa - 2%; pasture and range - 72%; and miscellaneous - 8%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69-71 and 1962, USDA Misc. Pub. 1070, p. 69,7-9 (Geologic) and p. 69,10-4 (Topography). Precipitation data obtained from a Thiessen weighted average of 6 gages on the watershed. Precipitation records began Oct., 1961; runoff records began June 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED 111 NEAR ANADARKO													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.37	0.0	0.05	0.0	0.0	0.0	0.03	0.10	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.19	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0															
6	0.0	0.0	1.33	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.36	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	1.08	0.61	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.02	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.90	0.0	0.41	0.0															
14	0.0	0.0	0.0	0.0	1.35	0.0	0.0	0.0	0.05	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.02	0.0	0.0															
16	0.0	0.0	0.48	0.51	0.0	0.0	0.0	0.0	0.35	0.12	0.0	0.0															
17	0.07	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.02	0.24	0.0	0.0															
18	0.0	0.0	0.02	0.01	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	1.26	0.23	0.64	0.0	0.0	0.0	0.03															
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.02															
22	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.23	2.78	0.0	0.0	0.0															
23	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.01	0.0	0.0	0.0															
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0															
27	0.0	0.07	0.0	0.0	0.05	0.0	0.04	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.05	0.66	0.0	0.03	0.0	0.29	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.45	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.05	0.77	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.07	0.35	3.19	2.47	1.80	2.89	1.36	1.52	5.14	1.24	0.51	0.21															
STA AV	0.62	1.02	1.47	2.69	3.64	2.98	1.83	2.44	3.99	1.56	1.94	0.75															

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 6 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 612 NEAR ALEX				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22, 1970 (CONTINUED)										
				9-22	1930			5.500		0.4572
					2000			3.400		0.4611
					2030			2.300		0.4636
					2042			2.100		0.4644

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.001762.



1970 Day	MEAN DAILY DISCHARGE (cfs)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.000	1.000	1.300	2.600	1.600	0.400	0.0	0.0	0.0	0.0	0.0	0.100
2	1.300	1.100	1.200	2.300	1.300	0.500	0.0	0.0	0.0	0.0	0.0	0.100
3	1.000	0.800	1.200	2.500	1.300	0.600	0.0	0.0	0.0	0.0	0.0	0.100
4	1.100	0.900	1.200	2.000	1.400	0.800	0.0	0.0	0.0	0.0	0.0	0.100
5	1.100	1.100	1.200	2.000	1.200	1.000	0.0	0.0	0.0	0.0	0.0	0.100
6	0.800	1.000	3.793	1.800	1.100	0.500	0.0	0.0	0.0	0.0	0.100	0.100
7	0.700	1.000	2.600	1.500	1.100	0.300	0.0	0.0	0.0	0.0	0.100	0.100
8	0.800	1.000	2.000	1.400	0.900	0.200	0.0	0.0	0.0	0.0	0.100	0.100
9	0.700	1.100	1.600	1.400	0.800	0.100	0.0	0.0	0.0	0.0	0.100	0.100
10	1.100	1.200	1.500	1.400	0.700	0.100	0.0	0.0	0.0	0.0	0.100	0.100
11	1.500	1.200	1.400	1.300	0.700	8.696	0.0	0.0	0.0	0.0	0.100	0.100
12	1.100	1.200	1.400	1.200	0.600	1.162	0.077	0.0	0.0	0.0	0.100	0.100
13	1.100	1.200	1.400	1.100	0.500	0.400	0.0	0.0	0.0	0.0	0.200	0.100
14	1.200	1.200	1.300	1.100	0.500	0.200	0.0	0.0	0.0	0.0	0.200	0.100
15	1.200	1.200	1.200	1.200	2.847	0.100	0.0	0.0	0.0	0.0	0.100	0.200
16	1.200	1.100	1.700	1.400	0.800	0.100	0.0	0.0	0.0	0.0	0.100	0.200
17	1.200	1.200	2.100	2.100	0.600	0.0	0.0	0.0	0.0	0.0	0.100	0.200
18	1.000	1.100	1.700	1.600	0.500	0.0	0.0	0.0	0.0	0.0	0.100	0.200
19	1.000	1.100	2.000	1.400	0.400	0.0	0.0	0.0	0.0	0.0	0.100	0.200
20	1.000	1.100	1.700	1.100	0.400	0.129	0.0	0.0	0.0	0.0	0.100	0.200
21	1.000	1.100	1.700	1.100	0.300	3.519	0.0	0.0	0.0	0.0	0.100	0.200
22	1.000	1.200	1.700	1.100	0.300	0.800	0.0	0.0	5.298	0.0	0.100	0.100
23	1.200	1.300	1.500	1.100	0.945	0.500	0.0	0.0	3.100	0.0	0.100	0.100
24	1.300	1.300	1.500	1.000	1.700	0.200	0.0	0.0	0.800	0.0	0.100	0.100
25	1.400	1.300	1.500	1.100	1.000	0.200	0.0	0.0	0.075	0.0	0.100	0.100
26	1.200	1.200	1.300	1.300	0.700	0.100	0.0	0.0	0.0	0.0	0.100	0.100
27	1.100	1.200	1.300	1.400	0.600	0.0	0.0	0.0	0.0	0.0	0.100	0.200
28	1.100	1.300	2.400	1.500	0.700	0.0	0.0	0.0	0.0	0.0	0.100	0.200
29	1.100	1.100	1.500	1.500	0.900	0.0	0.0	0.0	0.0	0.0	0.100	0.200
30	1.000	1.100	1.700	4.558	0.500	0.0	0.0	0.0	0.0	0.0	0.100	0.200
31	0.900	1.100	1.700	1.700	0.500	0.0	0.0	0.0	0.0	0.0	0.100	0.100
MEAN	1.0677	1.1321	1.6740	1.5919	0.8836	0.6869	0.0025	0.0	0.3091	0.0	0.0900	0.1355
INCHES	0.047	0.045	0.074	0.068	0.039	0.029	0.000	0.0	0.013	0.0	0.004	0.006
STA AV	0.080	0.085	0.099	0.150	0.175	0.068	0.036	0.016	0.051	0.029	0.068	0.062

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001431. To convert discharge in inches to C-PT, multiply by 1.386. STA AV based on 9 yr (1962-70) record period.



## CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO

LOCATION: Delaware Creek Watershed above Conroy road bridge East of Anadarko in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 29, T. 7 N., R. 9 W., lat 35 deg. 03 min., long. 98 deg. 10 min., 3 miles East and 1 mile South of Anadarko, Okla., at section line road bridge.

AREA: 25660.00 acres 40.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.12	0.40	3.34	3.11	2.18	2.40	1.50	0.82	4.92	1.66	0.57	0.20	21.22	
	Q 0.033	0.031	0.086	0.086	0.053	0.026	0.0	0.0	0.013	0.0	0.000	0.003	0.331	
STA AV	P 0.75	1.12	1.54	2.89	3.90	2.80	1.89	2.46	4.04	1.74	2.15	0.83	26.11	
	Q 0.051	0.063	0.079	0.114	0.155	0.032	0.004	0.003	0.014	0.009	0.027	0.034	0.584	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
Date	Maximum Discharge	Maximum Volume for Selected Time Interval										
		1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date				
1970	6-20 0.007	6-20 0.006	6-20 0.010	6-20 0.015	6-20 0.018	6-20 0.020	4-30 0.024	4-26 0.036				

MAXIMUMS FOR PERIOD OF RECORD															
Date	Maximum Discharge	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date							
5-9 1968	0.028	5-9 1968	5-9 1968	5-9 1968	5-9 1968	5-6 1969	5-6 1969	5-4 1969	0.028	0.054	0.112	0.147	0.173	0.234	0.333

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 8%; row crop - 4%; alfalfa - 2%; pasture and range - 71%; and miscellaneous - 15%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pnh. 1070, p. 69.11-4 (Topography) and 1965, USDA Misc. Pnh. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Aug. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

Day	DAILY PRECIPITATION (inches)											
	1970	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	0.0	0.0	0.0	0.35	0.0	0.06	0.0	0.0	0.02	0.03	0.12	0.0
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.15	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.25	0.0	0.02	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.19	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.47	0.0	0.0	0.3	0.0	0.0	0.0	0.66	0.0	0.0
6	3.0	0.0	1.10	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0
8	0.0	0.02	0.0	0.0	0.0	3.0	0.0	0.0	0.07	0.60	0.0	0.0
9	0.0	0.0	0.0	0.01	0.0	0.0	0.08	0.01	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.19	0.40	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.04	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.45	0.0
14	0.0	0.0	0.0	0.0	1.62	0.0	0.0	0.0	0.06	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.03	0.0	0.13
16	0.0	0.0	0.53	0.43	0.0	0.0	0.0	0.0	0.32	0.10	0.0	0.0
17	0.12	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.07	0.24	0.0	0.0
18	0.0	0.0	0.02	0.03	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0
19	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	1.80	0.27	0.38	0.0	0.0	0.0	0.04
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.03
22	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.06	3.40	0.0	0.0	0.0
23	0.0	0.01	0.0	0.0	0.04	0.0	0.0	0.0	0.02	0.0	0.0	0.0
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	3.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0
27	0.0	0.10	0.0	0.0	0.02	0.0	0.01	0.0	0.0	0.0	0.0	0.0
28	0.0	0.06	0.71	0.0	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.95	0.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.04	0.95	0.0	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0
31	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.12	0.40	3.34	3.11	2.18	2.40	1.50	0.82	4.92	1.66	0.57	0.20
STA AV	0.75	1.12	1.54	2.89	3.90	2.80	1.89	2.46	4.04	1.74	2.15	0.83

NOTES: For daily air temperatures in the vicinity, see table for watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED 131 NEAR ANADARKO							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	1.100	1.200	1.800	5.299	4.601	0.400	0.0	0.0	0.0	0.0	0.0	0.0	
2	1.100	1.190	1.500	4.100	3.001	0.500	0.0	0.0	0.0	0.0	0.0	0.0	
3	1.100	0.900	1.400	3.300	2.600	0.500	0.0	0.0	0.0	0.0	0.0	0.0	
4	1.200	1.100	1.200	3.300	2.100	0.800	0.0	0.0	0.0	0.0	0.0	0.0	
5	1.000	1.100	1.200	3.600	1.600	0.700	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.800	1.100	7.573	3.090	1.300	0.400	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.700	1.200	5.301	2.700	1.100	0.200	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.700	1.200	3.601	2.500	1.000	0.100	0.0	0.0	0.0	0.0	0.0	0.100	
9	0.600	1.100	2.800	2.300	1.000	0.100	0.0	0.0	0.0	0.0	0.0	0.100	
10	0.700	1.100	4.899	2.300	0.900	0.0	T	0.0	0.0	0.0	0.0	0.100	
11	0.700	1.100	2.501	2.300	0.800	0.126	0.0	0.0	0.0	0.0	0.0	0.100	
12	1.000	1.000	2.300	2.000	0.700	0.100	0.0	0.0	0.0	0.0	0.0	0.100	
13	1.300	1.200	2.100	2.100	0.600	0.0	T	0.0	0.0	0.0	0.0	0.100	
14	1.600	1.200	2.000	1.800	2.626	0.0	0.0	0.0	0.0	0.0	0.048	0.100	
15	1.600	1.100	1.900	1.900	19.533	0.0	0.0	0.0	1.900	0.0	0.0	T	0.200
16	1.600	1.100	2.800	2.100	2.300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200
17	1.500	1.200	4.000	4.599	1.400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200
18	1.600	1.100	3.300	3.300	1.200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.100
19	0.900	1.000	3.900	2.300	1.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.100
20	0.900	1.000	3.900	1.900	1.000	5.257	0.0	0.0	0.0	0.0	0.0	0.0	0.100
21	0.990	1.200	3.200	1.500	0.700	16.802	0.0	0.0	0.0	0.0	0.0	0.0	0.200
22	1.200	1.500	3.000	1.500	0.600	0.900	0.0	0.0	9.858	0.0	0.0	0.0	0.200
23	1.500	1.600	2.600	1.500	0.600	0.500	0.0	0.0	3.722	0.0	0.0	0.0	0.100
24	1.900	1.500	2.500	1.500	0.700	0.200	0.0	0.0	0.0	T	0.0	0.0	0.100
25	1.500	1.500	2.100	1.600	0.700	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.100
26	1.300	1.300	2.000	1.800	0.500	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.100
27	1.300	1.300	1.600	2.200	0.600	0.0	T	0.0	0.0	0.0	0.0	0.0	0.100
28	1.300	1.800	5.286	1.300	0.500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200
29	1.100		4.300	1.400	1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.025	0.200
30	1.000		3.700	2.744	0.600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200
31	1.100		3.600		0.300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200
MEAN	1.1548	1.2071	2.9975	3.0915	1.8472	0.9262	0.0	0.0	0.4527	0.0	0.0024	0.1064	
INCHES	0.033	0.031	0.086	0.086	0.053	0.026	0.0	0.0	0.013	0.0	0.000	0.003	
STA AV	0.051	0.063	0.079	0.114	0.155	0.032	0.004	0.003	0.014	0.009	0.027	0.034	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0009276. To convert discharge in inches to AC-FT, multiply by 2,138. STA AV based on 9 yr (1962-70) record period.

## CRICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA

LOCATION: Line Creek Watershed above D.S. Highway 81 bridge at Chickasha, Grady and Caddo Counties, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NR1/4 sec. 29, T. 7 N., R. 7 W., lat. 35 deg. 03 min., long. 97 deg. 58 min., Northwest edge of Chickasha, Okla., at D.S. Highway 81 bridge.

AREA: 33300.00 acres 52.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CRICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.10	0.40	2.74	4.24	2.70	1.57	1.41	0.59	4.65	1.75	0.59	0.21	20.95	
	Q 0.001	0.000	0.002	0.049	0.074	0.008	0.004	0.005	0.021	0.016	0.005	0.001	0.187	
STA AV	P 0.68	1.05	1.49	2.80	3.48	2.76	1.77	2.59	3.94	1.48	2.05	0.82	24.90	
	Q 0.003	0.004	0.006	0.063	0.085	0.024	0.010	0.044	0.029	0.006	0.029	0.005	0.309	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge	1 Hour		2 Hours		Maximum Volume for Selected Time Interval										
	Date	Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	2 Days	8 Days						
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.			
1970	4-30	0.003	4-30	0.003	4-30	0.006	4-30	0.019	4-30	0.035	4-30	0.058	4-29	0.081	4-26	0.104

MAXIMUMS FOR PERIOD OF RECORD															
Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
8-28 1965	0.060	8-28 1965	0.053	8-28 1965	0.096	8-28 1965	0.204	8-28 1965	0.274	8-28 1965	0.302	8-28 1965	0.316	5-4 1969	0.437

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 29%; row crop - 4%; alfalfa - 7%; pasture and range - 51%; and miscellaneous - 9%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, DSDA Misc. Pub. 1070, p. 69.12-4 (Topography) and 1965, DSDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 13 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Sept. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CRICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.27	0.0	0.15	0.0	0.0	0.01	0.02	0.14	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.18	0.0	0.13	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.92	0.0	0.0		
6	0.0	0.0	0.88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.03	0.02	0.0	0.0		
8	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.43	0.0	0.0		
9	0.0	0.0	0.0	0.01	0.0	0.0	0.04	0.07	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.04	0.19	0.0	0.01	0.0	0.0	0.0		
12	0.0	0.0	0.03	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.45	0.0		
14	0.0	0.0	0.0	0.0	1.22	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.01	0.0	0.0	0.01	0.0	0.0		0.14
16	0.0	0.0	0.53	0.36	0.0	0.0	0.0	0.0	0.48	0.06	0.0	0.0		0.0
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.20	0.0	0.0		0.0
18	0.01	0.0	0.02	0.03	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		0.0
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0		0.0
20	0.0	0.0	0.0	0.0	0.0	0.97	0.25	0.03	0.0	0.0	0.0	0.0		0.01
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.08	0.02	0.0	0.0	0.0		0.06
22	0.0	0.10	0.0	0.01	0.0	0.0	0.0	0.02	3.27	0.09	0.0	0.0		0.0
23	0.0	0.05	0.0	0.0	0.04	0.0	0.0	0.0	0.02	0.0	0.0	0.0		0.0
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
26	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0		0.0
27	0.0	0.09	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0	0.0	0.0		0.0
28	0.0	0.08	0.59	0.0	0.03	0.0	0.54	0.0	0.0	0.0	0.0	0.0		0.0
29	0.0	0.0	0.0	2.04	1.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
30	0.0	0.0	0.04	1.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
31	0.0	0.0	0.02	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.10	0.40	2.74	4.24	2.70	1.57	1.41	0.59	4.65	1.75	0.59	0.21		0.21
STA AV	0.68	1.05	1.49	2.80	3.48	2.76	1.77	2.59	3.94	1.48	2.05	0.82		0.82

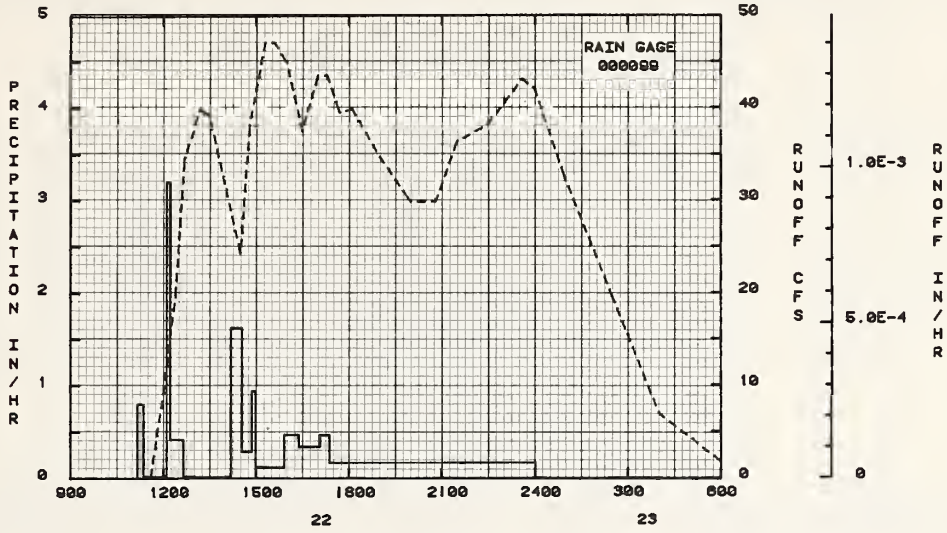
NOTES: For daily air temperatures in the vicinity, see table for Watershed #700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 13 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.158	0.0	0.0	0.188	49.298	0.708	0.100	0.0 T	0.0	0.200	0.444	0.100
2	0.463	0.0	0.0	0.0	17.400	0.100	0.100	0.0	0.100	0.200	0.200	0.200
3	0.171	0.0	0.0	0.0	9.270	1.377	0.100	0.100	0.0 T	0.200	0.200	0.100
4	0.076	0.0	0.0	0.170	2.078	0.871	0.100	0.100	0.0	0.200	0.200	0.100
5	0.0	0.0	0.0	0.0	0.200	0.100	0.100	0.100	0.0	7.708	0.200	0.100
6	0.0	0.0	1.787	0.0	0.200	0.100	0.100	0.100	0.0	0.200	0.200	0.0 T
7	0.0	0.0	0.236	0.0	0.200	0.100	0.100	0.100	0.007	0.200	0.100	0.100
8	0.0	0.0	0.0	0.0	0.200	0.100	0.0 T	0.0 T	0.0	5.537	0.0 T	0.100
9	0.0	0.0	0.0	0.0	0.100	0.100	0.697	0.108	0.273	0.200	0.0	0.100
10	0.145	0.0	0.0	0.0	0.200	0.100	0.147	0.100	0.100	0.200	0.0	0.100
11	9.025	0.0	0.0	0.0	0.200	0.100	0.0	0.100	0.100	0.200	0.0	0.0 T
12	0.0	0.0	0.0	0.0	0.200	0.100	1.675	0.100	0.100	0.200	0.200	0.0
13	0.0	0.0	0.0	0.0	0.200	0.100	0.0 T	0.100	1.987	0.200	3.753	0.0
14	0.0	0.0	0.0	0.034	4.594	0.100	0.0	0.100	0.100	0.200	0.200	0.100
15	0.0	0.0	0.0	0.0	3.285	0.100	0.0	0.100	0.100	0.200	0.100	0.534
16	0.0	0.0	0.509	0.344	0.200	0.100	0.0	0.100	0.200	0.200	0.200	0.100
17	0.038	0.0	0.042	0.015	0.200	0.100	0.0	0.100	0.200	1.201	0.200	0.0 T
18	0.0	0.0	0.0	0.0	0.200	0.100	0.0	1.066	0.200	0.200	0.200	0.0
19	0.0	0.0	0.165	0.0	0.200	0.100	0.0	3.038	0.200	0.200	0.100	0.0
20	0.0	0.0	0.0	0.0	0.200	5.438	0.230	0.100	0.200	0.200	0.100	0.0
21	0.0	0.0	0.042	0.0	0.200	0.587	0.100	0.100	0.200	0.200	0.100	0.100
22	0.0	0.065	0.0	0.0	0.200	0.200	0.0 T	0.100	18.354	2.595	0.100	0.0 T
23	0.0	0.066	0.0	0.0	0.100	0.200	0.486	0.100	5.105	0.200	0.100	0.0
24	0.0	0.050	0.0	0.0	0.200	0.200	0.0 T	0.100	0.600	0.200	0.100	0.0
25	0.0	0.0	0.0	0.0	0.200	0.100	0.0	0.100	0.200	0.200	0.100	0.0
26	0.0	0.0	0.0	1.957	0.200	0.100	0.579	0.100	0.200	0.200	0.100	0.0
27	0.0	0.0	0.0	0.169	0.100	0.100	0.0	0.100	0.200	0.200	0.100	0.0
28	0.0	0.232	0.701	0.0	0.200	0.100	0.276	0.0 T	0.200	0.200	0.100	0.100
29	0.0	0.0	0.0	1.971	6.615	0.100	0.0	0.0	0.200	0.200	0.100	0.0 T
30	0.0	0.0	0.0	63.779	5.200	0.100	0.100	0.0	0.200	0.200	0.100	0.0
31	0.0	0.0	0.0	1.201	1.201	0.100	0.100	0.0	0.200	0.200	0.100	0.0
MEAN	0.0347	0.0147	0.1123	2.2876	3.3238	0.3927	0.1642	0.2036	0.9775	0.7239	0.2532	0.0624
INCHES	0.001	0.000	0.002	0.049	0.074	0.008	0.004	0.005	0.021	0.016	0.005	0.001
STA AV	0.003	0.004	0.006	0.063	0.085	0.024	0.010	0.044	0.029	0.006	0.029	0.005

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0007148. To convert discharge in inches to AC-FT, multiply by 2,775. STA AV based on 9 yr (1962-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
9-22	0.0	0.0	9-22	1110	0.0	0.0	9-22	1136	0.200	0.0		
				1122	0.8900	0.16		1200	9.200	0.0001		
				1207	0.0133	0.17		1224	19.900	0.0003		
				1213	3.2000	0.49		1242	34.700	0.0005		
				1239	0.4154	0.67		1312	39.900	0.0011		
				1412	0.0129	0.69		1330	39.200	0.0015		
				1433	1.6286	1.26		1430	24.300	0.0024		
				1452	0.2842	1.35		1448	38.200	0.0027		
				1459	0.9429	1.46		1518	47.100	0.0033		
				1555	0.1179	1.57		1536	47.100	0.0037		
				1623	0.4714	1.79		1600	44.900	0.0043		
				1704	0.3366	2.02		1630	37.500	0.0049		
				1722	0.4667	2.16		1700	43.500	0.0055		
				2136	0.1654	2.86		1718	43.500	0.0059		
			9-23	1	0.1655	3.26		1742	39.500	0.0064		
								1806	39.900	0.0069		
								1900	34.700	0.0079		
								2000	29.800	0.0089		
								2048	29.800	0.0096		
								2130	36.400	0.0103		
								2230	38.200	0.0114		
								2336	43.100	0.0127		
								2400	42.000	0.0132		
							9-23	100	32.100	0.0143		
								230	19.600	0.0155		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002978.



EVENT OF SEPTEMBER 22 - 23, 1970

CHICKASHA, OKLAHOMA WATERSHED 411 AT CHICKASHA

## CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER

LOCATION: West Hitter Creek Watershed above U.S. Highway 62 bridge, East of Chickasha in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 29, T. 7 N., R. 6 W., lat. 35 deg. 03 min., long. 97 deg. 51 min., 4 miles East of Chickasha, Okla., at U.S. highway 62 bridge.

AHEA: 38020.00 acres 59.40 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)						CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER							
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 0.08	0.44	2.10	3.95	4.51	1.23	1.81	1.95	5.46	2.45	0.84	0.34	25.16
	Q 0.040	0.029	0.041	0.362	0.774	0.081	0.002	0.019	0.291	0.086	0.013	0.019	1.758
STA AV	P 0.73	1.09	1.82	3.03	3.23	2.86	1.95	3.40	3.87	1.53	2.02	0.91	26.42
	Q 0.042	0.044	0.087	0.332	0.251	0.138	0.023	0.172	0.199	0.034	0.085	0.046	1.452

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval		1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.		
		5-29	0.074	5-29	0.073	5-29	0.144	5-29	0.351	5-29	0.432	5-29	0.479	5-29	0.518	5-29

MAXIMUMS FOR PERIOD OF RECORD															
4-12	0.086	4-12	0.086	4-12	0.169	4-12	0.460	4-12	0.606	4-12	0.670	4-12	0.784	4-9	0.896
1967		1967		1967		1967		1967		1967		1967		1967	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 21%; row crop - 5%; alfalfa - 3%; pasture and range - 63%; and miscellaneous - 8%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, OSDA Misc. Pub. 1216, p. 69.13-11 (Topography) and p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began Oct. 1962. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER							
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.13	0.0	0.17	0.0	0.0	0.0	0.03	0.16	0.0	
2	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.04	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.65	0.01	0.0	0.11	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.25	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.24	0.0	0.0	
6	0.0	0.0	0.68	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.01	0.04	0.0	0.0	0.0	0.0	0.0	0.03	0.15	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.64	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.03	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.67	0.0	
14	0.0	0.0	0.0	0.0	1.80	0.0	0.0	0.0	0.24	0.0	0.01	0.0	
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.27	
16	0.0	0.0	0.49	0.61	0.0	0.0	0.0	0.0	0.31	0.02	0.0	0.0	
17	0.07	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.13	0.17	0.0	0.0	
18	0.01	0.0	0.02	0.05	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.16	0.20	0.0	0.0	0.0	0.0	0.01	
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	
22	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.09	4.05	0.15	0.0	0.0	
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.05	0.0	0.0	
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
27	0.0	0.03	0.0	0.0	0.03	0.0	0.08	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.11	0.57	0.0	0.01	0.0	0.83	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	1.02	2.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.07	1.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.08	0.44	2.10	3.95	4.51	1.23	1.81	1.95	5.46	2.45	0.84	0.34	
STA AV	0.73	1.09	1.82	3.03	3.23	2.86	1.95	3.40	3.87	1.53	2.02	0.91	

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 15 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TAELER												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.20	1.70	2.10	2.30	59.87	18.30	0.0 T	0.0	0.0	3.29	0.30	0.90
2	2.20	1.70	2.10	2.10	25.61	13.30	0.0	0.0	0.0	0.30	0.20	0.80
3	2.30	1.60	2.00	2.00	16.10	8.29	0.0	0.0	0.0	0.29	0.29	0.90
4	2.20	1.50	1.90	1.80	12.10	27.82	0.0	0.0	0.0	0.10	0.40	0.70
5	2.10	1.50	1.70	2.00	7.00	13.70	0.0	0.0	0.0	38.48	0.40	0.60
6	1.50	1.70	2.60	2.30	5.10	8.20	0.0	0.0	0.0	24.23	0.50	1.20
7	1.50	1.70	3.70	2.00	4.00	5.50	0.0	0.0	0.0	3.10	0.50	0.80
8	1.50	1.80	2.70	1.60	3.40	4.70	0.0	0.0	0.0	40.84	0.70	0.80
9	1.30	1.70	2.20	1.50	3.20	3.80	0.0	0.0	0.0	15.01	0.50	0.90
10	1.30	1.60	1.80	1.50	2.80	3.20	0.0	0.0	0.0	2.80	0.40	1.00
11	1.50	1.70	1.70	1.40	2.60	3.20	0.0	0.0	0.0	1.30	0.40	0.90
12	1.70	1.50	1.70	1.40	2.20	3.20	0.0	0.0	0.0	0.90	0.30	0.80
13	2.30	1.60	1.60	1.30	1.90	2.80	0.0	0.0	0.0	0.60	0.50	0.90
14	2.60	1.70	1.50	1.20	1.80	2.20	0.0	0.0	0.0	0.60	3.49	0.90
15	2.70	1.70	1.50	1.20	182.25	2.10	0.0	0.0	0.0	0.43	1.69	1.00
16	3.00	1.60	1.90	1.50	20.59	1.70	0.0	0.0	0.0	0.30	1.00	1.30
17	3.00	1.50	2.60	8.36	9.00	1.40	0.0	0.0	0.0	0.40	0.90	1.30
18	2.00	1.40	2.80	5.50	5.70	0.80	0.0	0.0	0.0	0.60	0.80	1.20
19	1.80	1.40	2.60	3.10	3.70	0.60	0.0	26.76	0.0	0.60	0.70	1.10
20	1.90	1.20	2.30	2.00	3.00	0.60	0.0	2.63	0.0	0.40	0.60	1.00
21	1.90	1.20	2.30	1.40	2.40	0.70	0.0	0.20	0.0	0.30	0.60	1.00
22	1.90	1.50	2.10	1.50	2.10	0.60	0.0	0.0 T	240.14	0.50	0.60	1.20
23	2.90	1.90	2.00	1.50	1.90	0.50	0.0	0.0	212.07	1.00	0.30	1.30
24	2.30	2.30	1.90	1.50	1.80	0.40	0.0	0.0	8.66	1.00	0.20	1.20
25	2.80	2.20	1.80	1.50	1.90	0.40	0.0	0.0	1.90	1.20	0.30	1.00
26	2.80	1.80	1.60	1.60	1.40	0.40	0.0	0.0	0.80	0.60	0.70	1.00
27	2.30	1.70	1.50	2.00	1.30	0.30	0.0	0.0	0.60	0.30	1.00	1.00
28	2.20	2.00	1.90	2.30	1.50	0.20	0.0	0.0	0.40	0.20	0.80	1.00
29	2.10	3.00	1.60	1.60	745.57	0.10	3.42	0.0	0.30	0.20	0.70	1.00
30	1.80	2.70	517.93	75.21	0.10	0.35	0.0	0.0	0.20	0.20	0.80	1.00
31	1.70	2.30	29.16	0.0 T	0.0	0.0	0.0	0.0	0.30	0.30	1.00	1.00
MEAN	2.077	1.657	2.132	19.296	39.877	4.301	0.122	0.954	15.502	4.425	0.680	0.990
INCHES	0.040	0.029	0.041	0.362	0.774	0.081	0.002	0.019	0.291	0.086	0.013	0.019
STA AV	2.042	0.044	0.087	0.332	0.251	0.138	0.023	0.172	0.199	0.334	0.085	0.046

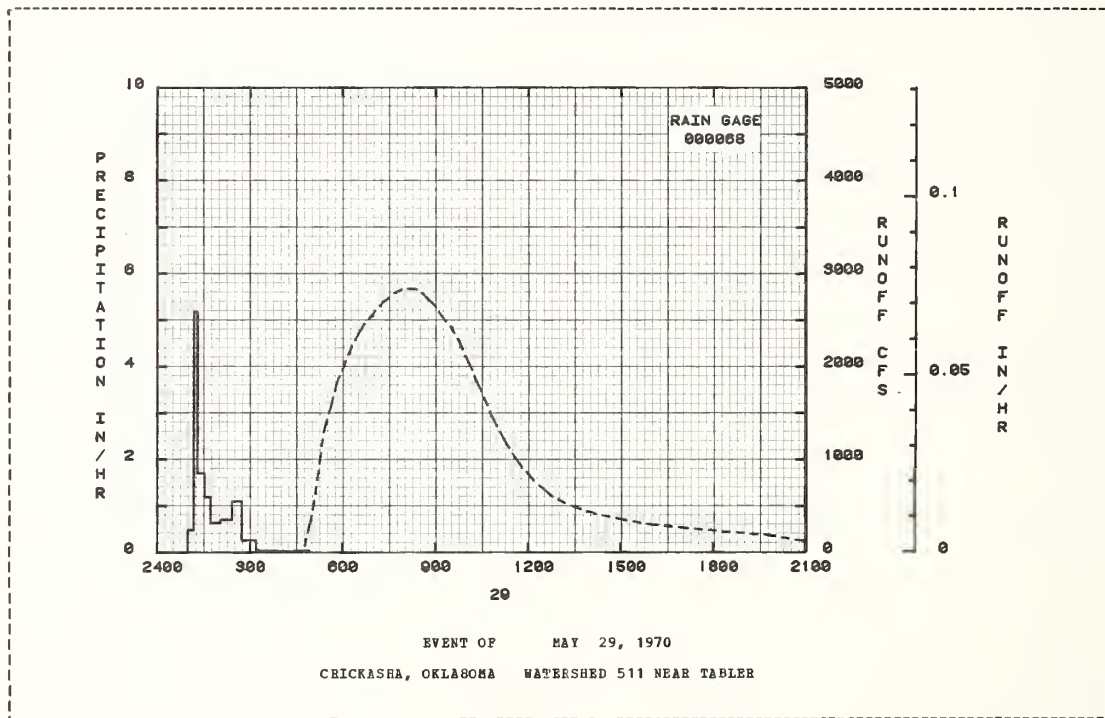
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0006260. To convert discharge in inches to AC-FT, multiply by 3,168. STA AV based on 9 yr (1962-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TAELER												
ANTECEDENT CONDITIONS			RAINFALL					RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MAY 29, 1970												
5-29	RG 000068	0.000	5-29	RG 000068	100	0.0	0.0	5-29	430	3.000	0.0	
	0.0			111	0.4909	0.09		442	8.200	0.0		
				119	5.1750	0.78		448	74.400	0.0001		
				132	1.7077	1.15		454	249.900	0.0005		
				144	1.2000	1.39		500	393.698	0.0013		
				203	0.6316	1.59		506	559.898	0.0025		
				225	0.7091	1.85		512	809.600	0.0043		
				244	1.1053	2.20		518	1071.898	0.0068		
				312	0.2571	2.32		524	1299.898	0.0099		
				456	0.0404	2.39		530	1429.398	0.0135		
								536	1547.898	0.0174		
								542	1670.000	0.0216		
								548	1810.100	0.0261		
								554	1896.300	0.0309		
								600	1954.600	0.0359		
								606	2058.398	0.0411		
								612	2146.100	0.0466		
								618	2222.800	0.0523		
								630	2351.000	0.0642		
								642	2459.497	0.0767		
								654	2540.396	0.0897		
								718	2695.595	0.1170		
								742	2799.896	0.1457		
								754	2830.496	0.1604		
								806	2840.696	0.1752		
								824	2830.496	0.1974		
								842	2745.795	0.2192		
								900	2648.996	0.2403		
								912	2540.396	0.2538		
								930	2427.295	0.2732		
								948	2253.800	0.2915		
								1000	2100.600	0.3029		
								1012	1966.398	0.3135		
								1018	1864.500	0.3185		
								1030	1736.698	0.3279		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002608.

1970 SELECTED RUNOFF EVENT			CRICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 29, 1970 (CONTINUED)										
							5-29	1036	1639.800	0.3323
								1042	1585.500	0.3365
								1048	1492.100	0.3405
								1100	1362.800	0.3480
								1112	1238.198	0.3548
								1124	1125.398	0.3610
								1136	1021.600	0.3666
								1148	921.800	0.3717
								1200	851.300	0.3763
								1212	772.898	0.3805
								1230	685.898	0.3862
								1248	605.000	0.3912
								1300	565.198	0.3943
								1330	490.600	0.4012
								1412	414.000	0.4095
								1512	344.100	0.4194
								1600	299.300	0.4261
								1712	257.800	0.4348

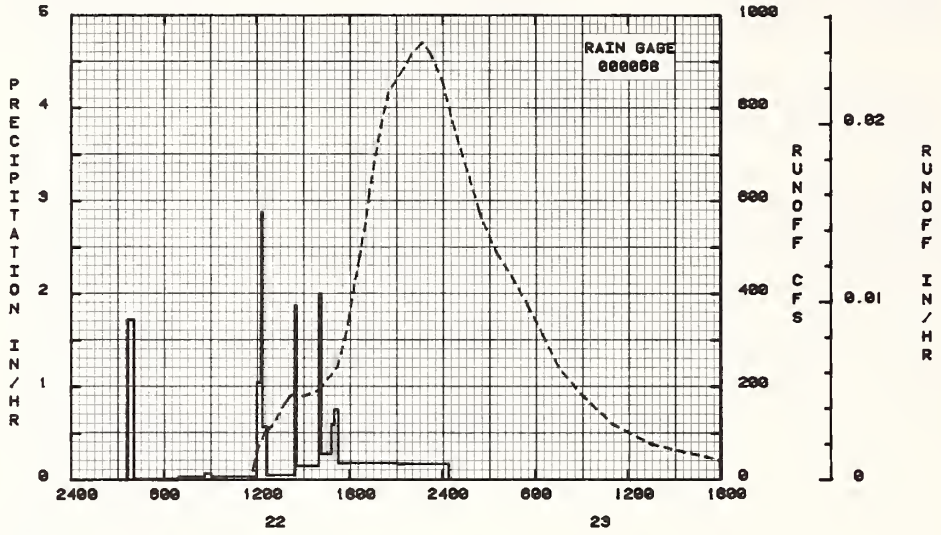
NOTES: To convert runoff in CFS to IN/8R, multiply by 0.00002608.





1970 SELECTED RUNOFF EVENT			CRICKASHA, OKLAHOMA			WATERSHED 511 NEAR TARTLER				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	RG 000068 0.0	0.0	9-22	RG 000068 340	0.0	0.0	9-22	1136	0.0	0.0
				404	1.7250	0.69		1142	4.900	0.0
				657	0.0069	0.71		1148	29.100	0.0
				839	0.0353	0.77		1200	60.100	0.0002
				905	0.3692	0.80		1230	101.000	0.0013
				1201	0.0341	0.90		1300	116.800	0.0027
				1217	1.0500	1.18		1348	163.600	0.0056
				1222	2.8800	1.42		1412	181.400	0.0074
				1241	0.5684	1.60		1418	182.900	0.0079
				1427	0.0509	1.69		1430	181.400	0.0089
				1435	1.8750	1.94		1500	179.900	0.0113
				1601	0.1465	2.15		1600	192.700	0.0162
				1610	2.0001	2.45		1712	242.100	0.0230
				1649	0.2769	2.63		1742	304.500	0.0266
				1701	0.6000	2.75		1800	357.398	0.0292
				1717	0.7500	2.95		1818	417.100	0.0322
				2106	0.1782	3.63		1842	490.600	0.0370
			9-23	25	0.1658	4.18		1900	551.000	0.0411
								1918	623.500	0.0456
								1936	684.000	0.0507
								2000	758.800	0.0583
								2030	832.398	0.0687
								2130	885.198	0.0911
								2200	915.300	0.1028
								2242	941.398	0.1197
								2312	919.698	0.1318
								2400	857.600	0.1504
							9-23	48	752.800	0.1671
								136	664.898	0.1819
								230	565.198	0.1964
								330	487.300	0.2101
								430	436.300	0.2221
								530	375.398	0.2327
								630	311.500	0.2417
								730	242.100	0.2489
								900	182.900	0.2572
								1100	119.100	0.2651
								1330	76.200	0.2715
								1800	41.000	0.2784

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00002608.



EVENT OF SEPTEMBER 22 - 23, 1970  
 CHICKASHA, OKLAHOMA WATERSHED 511 NEAR TABLER

## CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO

LOCATION: Tonkawa Creek Watershed above county road East-Northeast of Anadarko, in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NE1/4 sec. 18, T. 7 N., R. 9 W., lat. 35 deg. 05 min., long. 98 deg. 11 min., 2-1/2 miles East of Anadarko, Okla., on upstream side of section line road bridge.

AREA: 25020.00 acres 39.10 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.08	0.36	3.17	2.57	1.89	3.23	1.55	1.51	5.06	1.38	0.49	0.21	21.50	
	Q 0.0	0.0	0.0	0.001	0.000	0.002	0.000	0.001	0.002	0.000	0.0	0.0	0.006	
STA AV	P 0.62	1.02	1.47	2.76	3.54	3.01	1.79	2.45	3.96	1.53	1.92	0.75	24.82	
	Q 0.0	0.002	0.004	0.027	0.068	0.005	0.000	0.001	0.000	0.000	0.003	0.0	0.110	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days			
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	6-11	0.001	6-11	0.000	6-11	0.001	6-11	0.001	6-11	0.002	6-11	0.002	6-10	0.002	6-4	0.002
MAXIMUMS FOR PERIOD OF RECORD																
	5-11	0.004	5-11	0.004	5-11	0.007	5-11	0.021	5-11	0.038	5-6	0.070	5-6	0.127	5-4	0.278
	1964		1964		1964		1964		1964		1969		1969		1969	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 27%; row crop - 6%; alfalfa - 10%; pasture and range - 33%; and miscellaneous - 24%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1962, USDA Misc. Pub. 1070, p. 69-10-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69-7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 10 gages on the watershed. Precipitation records began Oct. 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

Day	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 110 NEAR ANADARKO	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.36	0.0	0.05	0.0	0.0	0.0	0.04	0.10	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.19	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0		
6	0.0	0.0	0.88	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.66	0.38	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	1.37	0.58	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.02	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.39	0.0		
14	0.0	0.0	0.0	0.0	1.27	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.01	0.0	0.16		
16	0.0	0.0	0.50	0.49	0.0	0.0	0.0	0.0	0.33	0.11	0.0	0.0		
17	0.08	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.01	0.25	0.0	0.0		
18	0.0	0.0	0.03	0.01	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	1.37	0.23	0.64	0.0	0.0	0.0	0.03		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.02		
22	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.27	2.85	0.0	0.0	0.0		
23	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0		
27	0.0	0.07	0.0	0.0	0.05	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.06	0.66	0.0	0.05	0.0	0.49	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.53	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.06	0.86	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0		
31	0.0	0.06	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.08	0.36	3.17	2.57	1.89	3.23	1.55	1.51	5.06	1.38	0.49	0.21		
STA AV	0.62	1.02	1.47	2.76	3.54	3.01	1.79	2.45	3.96	1.53	1.92	0.75		

NOTES: For daily air temperatures in the vicinity, see table for Watershed #700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 10 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CRICKASHA, OKLAHOMA			WATERSHED 110 NEAR ANADARKO		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.239	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.112	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	1.702	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.187	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.773	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.370	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.335	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.537	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.195	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.121	0.451	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.734	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0285	0.0146	0.0630	0.0063	0.0369	0.0624	0.0113	0.0	0.0
INCHES	0.0	0.0	0.0	0.001	0.000	0.002	0.000	0.001	0.002	0.000	0.0	0.0
STA AV	0.0	0.002	0.004	0.027	0.068	0.005	0.000	0.001	0.000	0.000	0.003	0.0

NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by .0009513. To convert discharge in inches to AC-FT, multiply by 2.085. STA AV based on 8 yr (1963-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH

LOCATION: Little Washita River Watershed above U.S. highway 81 bridge South of Chickasha in Grady and Caddo Counties, Okla.; tributary to Washita River; Ped River Basin. GAGING STATION--SE1/4 sec. 32, T. 6 N., R. 7 W., lat. 34 deg. 57 min., long. 97 deg. 57 min., 5-1/2 miles South of Chickasha, Okla., at U.S. highway 81 bridge.

AREA: 132990.00 acres 207.89 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH																
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																
1970	P	0.10	0.64	3.04	2.86	1.57	1.94	1.08	0.79	5.93	1.64	0.74	0.26	20.59															
	Q	0.054	0.057	0.116	0.149	0.082	0.036	0.002	0.0	0.112	0.025	0.026	0.038	0.697															
STA AV	P	0.86	1.17	1.68	2.74	3.88	2.73	1.82	2.39	4.16	1.80	2.06	0.84	26.14															
	Q	0.070	0.077	0.103	0.152	0.268	0.130	0.032	0.043	0.069	0.039	0.092	0.056	1.130															
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																													
1970	Maximum Discharge	1 Hour		2 Hours		Maximum Volume for Selected Time Interval						2 Days		8 Days															
	Date Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
	4-30	0.011	4-30	0.010	4-30	0.019	4-30	0.038	9-22	0.063	9-22	0.093	9-22	0.100	9-22	0.108													
MAXIMUMS FOR PERIOD OF RECORD																													
	5-10	0.056	5-10	0.055	5-10	0.108	5-9	0.253	5-9	0.316	5-9	0.365	5-9	0.476	5-3	0.536													
	1964		1964		1964		1964		1964		1964		1964		1969														

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 12%; row crop - 3%; alfalfa - 3%; pasture and range - 66%; and miscellaneous - 16%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.15-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 36 gages on the watershed. Precipitation records began Oct. 1961; runoff records began April 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED 522 NEAR MINNEKAH												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.20	0.0	0.01	0.0	0.0	0.02	0.0	0.10	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.01	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0													
6	0.0	0.0	1.39	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.11	0.02	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.36	0.0	0.0													
9	0.0	0.0	0.0	0.02	0.0	0.0	0.09	0.01	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0													
11	0.0	0.0	0.0	0.0	0.0	0.05	0.23	0.0	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.03	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.63	0.0													
14	0.0	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.07	0.0	0.01	0.0													
15	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.07	0.0	0.17													
16	0.0	0.0	0.64	0.36	0.0	0.0	0.0	0.0	0.62	0.08	0.0	0.0													
17	0.10	0.0	0.01	0.01	0.0	0.0	0.0	0.0	0.37	0.22	0.0	0.0													
18	0.0	0.0	0.01	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0													
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0													
20	0.0	0.0	0.0	0.0	0.0	1.30	0.28	0.13	0.0	0.0	0.0	0.02													
21	0.0	0.0	0.07	0.0	0.0	0.01	0.0	0.39	0.04	0.0	0.0	0.06													
22	0.0	0.09	0.0	0.01	0.0	0.0	0.0	0.01	3.86	0.35	0.0	0.0													
23	0.0	0.07	0.0	0.03	0.07	0.0	0.0	0.0	0.02	0.03	0.0	0.0													
24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0													
27	0.0	0.20	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.12	0.61	0.0	0.01	0.0	0.17	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.97	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.01	0.67	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.01													
31	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.10	0.64	3.04	2.86	1.57	1.94	1.08	0.79	5.93	1.64	0.74	0.26													
STA AV	0.96	1.17	1.68	2.74	3.88	2.73	1.82	2.39	4.16	1.80	2.06	0.84													

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 36 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA				WATERSHED 522 NEAR MINNEKAH			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	8.20	10.80	18.00	18.70	41.44	7.80	0.40	0.0	0.0	2.80	4.90	6.00	
2	8.20	10.80	15.40	20.80	23.00	9.20	0.40	0.0	0.0	2.80	4.60	6.80	
3	7.80	9.70	14.20	16.00	21.50	9.70	0.20	0.0	0.0	2.50	4.60	6.80	
4	7.30	10.80	13.60	16.70	18.00	16.70	0.20	0.0	0.0	2.00	4.60	6.80	
5	6.90	11.30	13.00	20.10	16.70	12.40	0.20	0.0	0.0	2.30	4.30	7.60	
6	6.40	11.30	31.63	15.40	15.40	9.20	0.70	0.0	0.0	7.98	4.90	6.40	
7	6.00	11.30	39.37	14.80	14.20	6.90	1.10	0.0	0.0	2.80	4.90	6.00	
8	4.10	11.30	23.70	13.60	12.40	5.20	0.10	0.0	0.0	2.50	5.30	5.60	
9	3.80	10.20	20.10	14.20	11.30	4.50	0.20	0.0	0.0	8.37	5.30	5.60	
10	4.10	11.30	19.40	15.40	11.30	4.10	0.0 T	0.0	0.0	3.90	4.90	6.00	
11	8.70	11.30	18.70	15.40	9.70	4.10	1.72	0.0	0.0	2.80	4.60	6.40	
12	14.80	11.30	18.70	14.80	9.20	5.20	3.35	0.0	0.0	3.10	4.60	6.40	
13	19.40	11.30	20.10	12.40	9.20	4.50	0.40	0.0	0.0	3.30	5.60	6.00	
14	18.00	11.90	17.30	11.90	10.50	3.80	0.0 T	0.0	0.0	3.60	8.40	6.40	
15	16.00	11.90	16.00	12.40	73.60	2.80	0.0	0.0	0.0	3.60	6.80	6.40	
16	13.00	11.90	20.80	13.60	25.30	3.40	0.0	0.0	0.0	3.30	4.90	7.20	
17	11.30	11.30	38.09	60.57	16.70	3.10	0.0	0.0	5.82	4.30	4.60	7.20	
18	7.80	11.30	23.01	24.50	9.70	2.50	0.0	0.0	3.80	5.60	4.60	6.80	
19	4.10	9.70	20.10	18.70	7.30	1.70	0.0	0.0	0.40	4.60	3.90	6.40	
20	3.10	8.70	20.10	14.20	7.30	2.46	0.0	0.0	0.0 T	4.60	3.30	7.20	
21	3.10	8.70	19.40	11.90	7.80	52.82	0.0	0.0	0.0	4.30	3.60	12.70	
22	5.20	9.70	20.80	11.30	6.90	10.37	2.90	0.0	255.64	5.52	4.30	8.90	
23	7.30	10.80	18.00	11.90	7.30	4.10	1.70	0.0	292.94	10.70	3.60	6.80	
24	9.70	13.60	18.70	13.00	8.70	3.10	0.10	0.0	21.16	7.60	3.60	6.00	
25	12.40	15.40	18.70	11.90	7.30	2.50	0.0 T	0.0	16.70	6.00	4.60	5.60	
26	14.80	12.40	18.00	13.60	6.90	1.70	0.0	0.0	9.70	4.90	4.60	5.60	
27	16.00	11.30	16.00	20.10	8.70	1.50	0.0	0.0	6.00	4.60	4.60	6.80	
28	15.40	16.70	24.50	13.60	11.30	2.50	0.0	0.0	4.80	5.30	4.60	7.20	
29	14.20		31.80	13.60	10.80	1.30	0.0	0.0	4.10	4.90	4.60	7.60	
30	12.40		20.80	349.52	9.70	0.90	0.0	0.0	3.40	5.60	5.60	7.60	
31	11.30		18.00		9.20		0.0	0.0		5.30			
MEAN	9.703	11.357	20.839	27.820	14.785	6.668	0.438	0.0	20.816	4.564	4.777	6.852	
INCHES	0.054	0.057	0.116	0.149	0.082	0.036	0.002	0.0	0.112	0.025	0.026	0.038	
STA AV	0.070	0.077	0.103	0.152	0.268	0.130	0.032	0.043	0.069	0.039	0.092	0.056	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0001790. To convert discharge in inches to AC-FT, multiply by 11,083. Yearly mean discharge, 10.7 CFS. STA AV based on 8 yr (1963-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER

LOCATION: East Bitter Creek Watershed above U.S. Highway 62 bridge at Tabler, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--SW1/4 sec. 27, T. 7 N., R. 6 W., lat. 35 deg. 05 min., long. 97 deg. 50 min., at Tabler, Okla., at U.S. highway 62 bridge.

AREA: 22530.00 acres 35.20 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.09	0.65	2.13	2.47	3.72	1.29	1.46	2.19	7.42	2.90	1.04	0.32	25.68														
	Q	0.077	0.072	0.094	0.121	0.309	0.053	0.002	0.018	0.591	0.124	0.046	0.059	1.558														
STA AV	P	0.85	1.23	1.74	2.87	3.55	3.14	2.23	3.41	4.20	1.72	2.14	0.95	28.03														
	Q	0.091	0.099	0.149	0.307	0.343	0.182	0.082	0.192	0.199	0.067	0.155	0.079	1.944														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
Maximum Discharge													Maximum Volume for Selected Time Interval															
Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.													
1970	9-22	0.054	9-22	0.052	9-22	0.103	9-22	0.279	9-22	0.455	9-22	0.556	9-22	0.576	9-22	0.585												
MAXIMUMS FOR PERIOD OF RECORD																												
	8-8	0.134	8-8	0.129	8-8	0.244	8-7	0.472	8-7	0.523	9-22	0.556	4-12	0.610	4-9	0.742												
	1965		1965		1965		1965		1965		1970		1967		1967													

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 4%; pasture and range - 84%; and miscellaneous - 6%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pnb. 1216, p. 69.16-8 (Topography and p. 69.7-21 (Composite). Precipitation records began Oct. 1961; runoff records began Aug. 1963. STA AV (P) values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-70 on the watershed. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLER											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.12	0.0	0.16	0.0	0.0	0.02	0.04	0.17	0.0												
2	0.0	0.0	0.01	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.26	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.0												
6	0.0	0.0	0.62	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.04	0.40	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.07	0.04	0.0	0.06	0.0	0.0	0.0												
12	0.0	0.0	0.01	0.0	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.53	0.0	0.87	0.0												
14	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.63	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.24												
16	0.0	0.0	0.49	0.37	0.0	0.0	0.0	0.0	0.34	0.04	0.0	0.0												
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.40	0.15	0.0	0.0												
18	0.0	0.0	0.02	0.23	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	1.01	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.15	0.29	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08												
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.16	5.22	0.52	0.0	0.0												
23	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0												
24	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
27	0.0	0.12	0.0	0.0	0.17	0.0	0.02	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.14	0.59	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.34	1.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.02	1.08	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.09	0.65	2.13	2.47	3.72	1.29	1.46	2.19	7.42	2.90	1.04	0.32												
STA AV	0.85	1.23	1.74	2.87	3.55	3.14	2.23	3.41	4.20	1.72	2.14	0.95												

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. STA AV values are a Thiessen weighted average of 10 gages for 1961-66 and 31 gages for 1967-70 on the watershed. STA AV based on 10 yr for total period of record (1961-70).

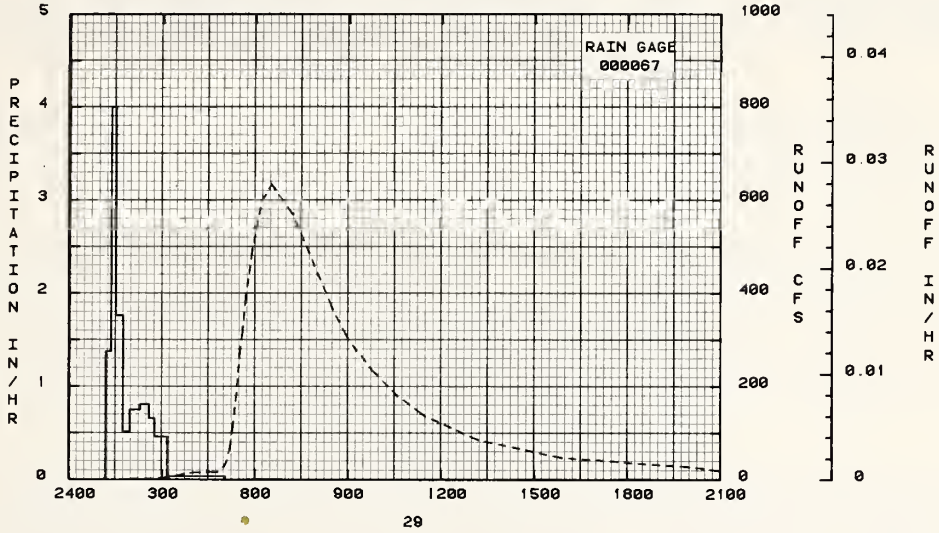
1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA			WATERSHED 512 AT TABLE			
	Jan	Feb	Mar	Apr	May	Jun	Jnl	Aug	Sep	Oct	Nov	Dec
1	2.00	2.40	3.10	3.00	7.19	5.54	0.0	0.0	0.0	0.70	1.00	1.80
2	2.00	2.50	2.80	2.90	3.80	3.80	0.0	0.0	0.0	0.70	1.30	1.80
3	2.00	2.30	2.80	2.50	2.60	4.14	0.0	0.0	0.0	0.60	1.30	1.80
4	2.00	2.30	2.60	2.70	2.40	7.50	0.0	0.0	0.0	0.50	1.20	1.80
5	1.80	2.30	2.50	3.00	2.30	4.70	0.0	0.0	0.0	32.35	1.20	1.80
6	1.80	2.40	3.50	2.80	2.20	3.30	0.0	0.0	0.0	8.10	1.20	1.60
7	1.80	2.40	4.30	2.60	2.00	2.60	0.0	0.0	0.0	7.09	1.20	1.60
8	1.80	2.50	3.60	2.40	1.90	2.20	0.0	0.0	0.0	26.11	1.20	1.80
9	1.80	2.50	3.00	2.40	1.90	1.80	0.0	0.0	0.0	5.61	1.20	1.90
10	2.00	2.40	2.60	2.30	1.80	1.60	0.0	0.0	0.0	2.10	1.20	2.10
11	2.20	2.30	2.50	2.30	1.70	1.70	0.0	0.0	0.0	1.60	1.40	1.90
12	2.50	2.30	2.50	2.20	1.50	2.00	1.21	0.0	0.0	1.20	1.20	1.80
13	3.00	2.50	2.50	2.10	1.50	1.60	0.20	0.0	0.0	1.20	2.29	1.80
14	3.00	2.50	2.50	2.10	1.95	1.30	0.10	0.0	2.19	1.20	3.87	1.60
15	3.00	2.50	2.40	2.30	83.25	1.10	0.0 T	0.0	0.10	1.20	2.10	1.80
16	3.40	2.30	2.60	2.70	6.40	0.90	0.0	0.0	0.0 T	1.10	1.80	2.00
17	3.40	2.20	3.90	3.60	3.40	0.70	0.0	0.0	0.10	1.30	1.60	1.80
18	2.20	2.20	3.40	4.30	2.40	0.50	0.0	0.0	0.10	1.40	1.40	1.60
19	2.00	2.10	3.10	4.30	1.90	0.40	0.0	16.38	0.0 T	1.30	1.40	1.70
20	1.80	2.00	2.60	2.90	1.60	0.40	0.0	0.89	0.0	1.20	1.30	1.60
21	1.80	2.00	3.60	2.40	1.50	0.60	0.0	0.20	0.0	1.20	1.30	1.80
22	1.80	2.30	3.00	2.20	1.30	0.40	0.0	0.0 T	392.09	3.03	1.20	2.00
23	2.20	2.70	2.60	2.30	1.30	0.30	0.0	0.0	149.18	6.85	1.00	1.90
24	3.00	2.70	2.30	2.30	1.30	0.30	0.0	0.0	7.31	1.60	1.10	1.60
25	3.00	3.00	2.10	2.30	1.30	0.30	0.0	0.0	2.70	1.50	1.20	1.70
26	3.00	3.00	2.00	2.40	1.20	0.30	0.0	0.0	1.60	1.20	1.30	1.60
27	2.60	2.70	2.10	2.40	1.30	0.20	0.0	0.0	1.30	1.00	1.40	1.70
28	2.60	3.10	3.40	2.30	2.00	0.10	0.0	0.0	1.00	1.00	1.40	1.80
29	2.60		3.50	2.60	121.15	0.0 T	0.0	0.0	0.90	1.10	1.60	1.90
30	2.50		2.90	38.07	13.33	0.0	0.0	0.0	0.80	1.00	1.80	2.00
31	2.40		2.90		5.00		0.0	0.0		1.00		1.90
MEAN	2.355	2.443	2.877	3.822	9.173	1.676	0.049	0.563	18.646	3.785	1.455	1.790
INCHES	0.077	0.072	0.094	0.121	0.303	0.353	0.002	0.018	0.591	0.124	0.046	0.059
STA AV	0.091	0.099	0.149	0.307	0.343	0.182	0.082	0.192	0.199	0.067	0.155	0.079

NOTES: To convert mean daily discharge in CPS to IN/DAY, multiply by 0.001056. To convert discharge in inches to AC-FT, multiply by 1,878. STA AV based on 8 yr (1963-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 512 AT TABLE				
	ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Mainfall (inches)	Runoff (inches)	Date	Time of Day	Intensity (in/hr)	Acc. (inches)	Date	Time of Day	Fate (cfs)	Acc. (inches)	
EVENT OF MAY 29, 1970											
5-29	RG 000167	0.000	5-29	HG 000067	110	0.0	0.0	5-29	200	1.800	0.0
	0.0				120	1.3800	0.23		300	2.700	0.0001
					129	4.0000	0.83		342	11.600	0.0003
					144	1.7600	1.27		400	15.000	0.0005
					157	0.5077	1.38		448	16.000	0.0010
					217	0.7500	1.63		500	27.400	0.0012
					234	0.8118	1.86		506	41.300	0.0014
					245	0.6545	1.98		512	68.100	0.0016
					310	0.4560	2.17		518	124.600	0.0020
					503	0.0319	2.23		524	185.700	0.0027
									530	270.398	0.0037
									536	329.000	0.0050
									542	399.800	0.0066
									554	496.000	0.0105
									612	599.398	0.0177
									630	634.398	0.0258
									712	568.599	0.0443
									800	442.398	0.0621
									830	364.398	0.0710
									900	299.800	0.0783
									948	232.400	0.0877
									1036	178.300	0.0949
									1130	135.400	0.1011
									1312	84.300	0.1093
									1554	46.100	0.1170

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.0004402.





EVENT OF MAY 29, 1970  
CHICKASBA, OKLAHOMA WATERSHED 512 AT TABLER

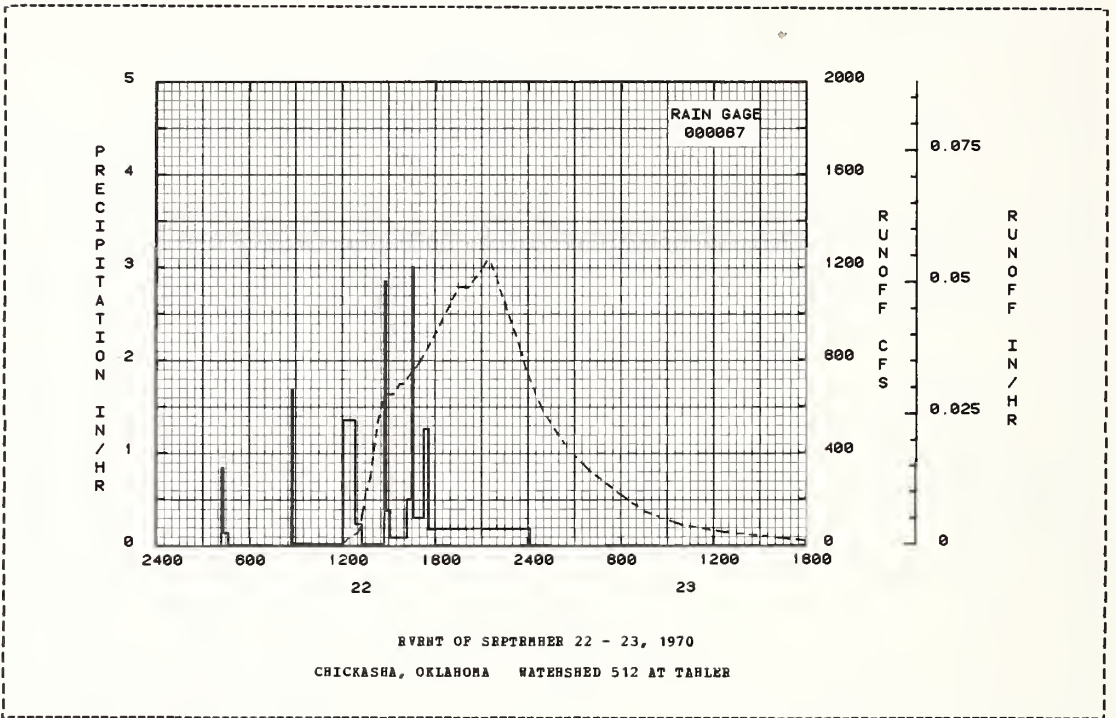
1970 SELECTED RUNOFF EVENT CHICKASBA, OKLAHOMA WATERSHED 512 AT TABLER

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	RG 000067 0.0	0.0	9-22	RG 000067 410	0.0	0.0	9-22	1012	0.100	0.0
				420	0.8400	0.14		1030	1.400	0.0
				438	0.1333	0.18		1048	4.000	0.0
				714	0.0038	0.19		1106	4.400	0.0001
				842	0.0	0.19		1130	4.400	0.0002
				847	1.6800	0.33		1200	3.800	0.0003
				1204	0.0213	0.40		1212	16.000	0.0004
				1250	1.3565	1.44		1224	33.700	0.0006
				1316	0.2308	1.54		1300	56.800	0.0018
				1442	0.0140	1.56		1312	79.800	0.0024
				1450	2.8500	1.94		1318	137.900	0.0029
				1506	0.3750	2.04		1330	217.200	0.0045
				1611	0.0831	2.13		1348	289.800	0.0078
				1629	0.5000	2.28		1400	380.698	0.0108
				1635	2.9998	2.58		1418	533.000	0.0168
				1716	0.2927	2.78		1442	654.100	0.0273
				1736	1.2600	3.20		1518	654.100	0.0445
			9-23	5	0.1771	4.36		1542	697.898	0.0565
								1554	697.898	0.0626
								1700	791.198	0.0987
								1818	953.300	0.1485
								1930	1116.198	0.2033
								2006	1111.898	0.2326
								2100	1190.100	0.2783
								2118	1225.800	0.2941
								2136	1216.800	0.3103
								2230	1045.100	0.3552
								2330	848.398	0.3969
								2400	732.898	0.4143
							9-23	100	577.698	0.4431
								230	422.000	0.4761
								400	320.500	0.5006
								600	217.200	0.5243
								730	146.700	0.5363
								1000	86.100	0.5491

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004402.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 512 AT TABLE							
ANTECEDENT CONDITIONS			HAIRFALL			RUROFF				
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
							1300	53.300	0.5583	

NOTES: To convert rnnoff in CFS to IN/HR, multiply by 0.00004402.



## CHICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLER

LOCATION: Winter Creek Watershed above county farm to market road bridge North of Alex in Grady County, Okla., tributary to Washita River; Red River Basin. GAGING STATION--NE1/4 sec. 18, T. 6 N., R. 5 W., lat. 35 deg. 00 min., long. 97 deg. 46 min., 5 miles North and 1 mile East of Alex, Okla., about 1,000 feet downstream from County section line farm to market road bridge over Winter Creek.

AREA: 21310.00 acres 33.30 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA		WATERSHED 621 NEAR TABLER	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual				
1970	P 0.12	0.77	1.95	1.87	3.11	1.59	1.15	1.85	9.40	4.21	1.09	0.39	27.50				
	Q 0.100	0.105	0.157	0.129	0.125	0.090	0.012	0.003	1.336	0.682	0.146	0.120	3.005				
STA AV	P 1.10	1.24	1.60	2.80	4.03	2.91	2.18	2.96	4.59	1.82	2.09	0.96	28.27				
	Q 0.130	0.142	0.168	0.252	0.495	0.189	0.129	0.127	0.349	0.153	0.190	0.111	2.436				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days			
	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	9-22	0.112	9-22	0.096	9-22	0.166	9-22	0.410	9-22	0.649	9-22	0.791	9-22	0.957	9-22	1.310	
MAXIMUMS FOR PERIOD OF RECORD																	
	5-10	0.207	5-10	0.179	5-10	0.269	9-22	0.410	9-22	0.649	9-22	0.791	9-22	0.957	9-22	1.310	
	1964		1964		1964		1970		1970		1970		1970		1970		

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 2%; pasture and range - 82%; and miscellaneous - 10%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.17-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA		WATERSHED 621 NEAR TABLER	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
1	0.0	0.0	0.0	0.16	0.0	0.23	0.0	0.0	0.06	0.03	0.17	0.0				
2	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.03	0.0	0.0	0.0				
3	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0	0.0				
4	0.0	0.0	0.0	0.28	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.0				
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	0.0	0.0				
6	0.0	0.0	0.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
7	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.18	0.64	0.0	0.0				
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.99	0.0	0.0				
9	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0				
10	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.01	0.0	0.0	0.0				
11	0.0	0.0	0.0	0.0	0.0	0.35	0.10	0.0	0.02	0.0	0.0	0.0				
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0				
13	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.75	0.0	0.92	0.0				
14	0.0	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.32	0.0	0.0	0.0				
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.28
16	0.0	0.0	0.48	0.27	0.0	0.0	0.0	0.0	0.33	0.02	0.0	0.0				0.0
17	0.11	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.63	0.19	0.0	0.0				0.0
18	0.01	0.0	0.0	0.17	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.0				0.0
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.0				0.0
20	0.0	0.0	0.0	0.0	0.0	0.35	0.21	0.0	0.0	0.0	0.0	0.0				0.02
21	0.0	0.0	0.03	0.0	0.0	0.01	0.0	0.05	0.0	0.0	0.0	0.09				
22	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.06	7.00	1.01	0.0	0.0				
23	0.0	0.08	0.0	0.02	0.0	0.0	0.0	0.0	0.06	0.05	0.0	0.0				
24	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
26	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0				
27	0.0	0.09	0.0	0.0	0.16	0.0	0.01	0.0	0.0	0.0	0.0	0.0				
28	0.0	0.21	0.54	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0				
29	0.0	0.0	0.10	1.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
30	0.0	0.0	0.83	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
31	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	0.12	0.77	1.95	1.87	3.11	1.59	1.15	1.85	9.40	4.21	1.09	0.39				
STA AV	1.10	1.24	1.60	2.80	4.03	2.91	2.18	2.96	4.59	1.82	2.09	0.96				

NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 10 yr (1961-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA			WATERSHED 621 NEAR TABLER		
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.90	3.10	5.40	4.90	4.30	23.56	0.0	0.0	0.0	14.40	5.80	3.80
2	1.90	3.80	4.70	4.70	3.10	9.00	0.0	0.0	0.0	12.10	5.40	3.80
3	1.90	3.20	4.70	4.10	2.60	6.50	0.0	0.0	0.0	10.00	5.10	3.60
4	1.90	3.60	4.30	4.70	2.50	7.60	0.0	0.0	0.0	7.60	4.70	3.20
5	1.90	3.20	4.10	4.70	2.00	5.60	0.0	0.0	0.0	27.21	4.50	3.20
6	1.90	3.20	7.10	3.80	1.60	3.90	0.0	0.0	0.0	20.30	4.50	3.10
7	1.90	3.20	6.30	3.40	1.30	2.80	0.0	0.0	0.0	20.86	4.70	2.90
8	1.60	3.20	5.60	3.40	1.50	2.00	0.0	0.0	0.0	143.73	4.70	3.10
9	1.60	3.20	4.50	3.40	1.40	1.40	1.60	0.0	0.0	47.40	4.10	3.20
10	1.60	3.10	4.30	3.60	1.20	1.10	2.00	0.0	0.0	37.50	3.90	3.40
11	1.90	3.10	3.90	3.60	1.10	1.70	2.10	0.0	0.0	29.40	3.90	3.80
12	2.20	3.10	3.80	4.70	0.80	2.00	2.60	0.0	0.0	19.30	3.60	2.80
13	4.70	3.10	3.40	3.90	0.80	1.20	1.20	0.0	0.0	16.50	7.28	2.90
14	4.70	3.10	3.40	3.60	1.47	1.10	0.80	0.0	0.44	12.80	7.90	2.90
15	4.70	3.10	3.40	3.60	9.16	0.90	0.20	0.0	0.16	11.00	5.40	4.10
16	4.70	3.10	5.40	3.60	2.60	0.70	0.0 T	0.0	0.38	8.40	4.70	4.50
17	3.40	2.80	5.10	4.90	2.00	0.40	0.0	0.0	1.40	8.40	4.50	3.80
18	1.60	2.80	4.30	5.40	1.40	0.30	0.0	0.0	1.20	7.10	4.30	3.40
19	1.60	2.60	5.10	4.70	1.30	0.10	0.0	2.66	0.50	7.10	4.30	3.60
20	1.60	2.20	4.50	3.60	1.10	1.87	0.0	0.40	0.20	6.50	4.50	3.40
21	1.60	2.10	4.50	2.90	1.00	3.02	0.0	0.0	0.10	6.30	3.90	3.80
22	1.60	3.10	4.50	2.60	0.90	0.80	0.0	0.0	517.49	18.93	3.80	3.80
23	3.20	3.90	4.50	2.60	0.90	0.70	0.0	0.0	267.67	35.30	2.80	3.80
24	5.80	4.70	4.10	2.80	0.90	0.60	0.0	0.0	119.77	20.80	2.80	3.40
25	4.90	4.70	3.90	2.60	0.90	0.60	0.0	0.0	85.00	14.40	2.60	3.20
26	4.50	4.10	3.20	2.80	0.90	0.40	0.0	0.0	68.51	12.40	2.80	3.20
27	4.30	3.90	3.10	2.60	1.10	0.30	0.0	0.0	52.51	9.00	2.90	3.40
28	4.10	5.80	5.80	2.50	1.20	0.10	0.0	0.0	37.51	7.60	3.10	3.40
29	3.90		4.90	2.90	33.42	0.0 T	0.0	0.0	25.20	6.50	3.80	3.40
30	3.40		4.50	8.92	15.70	0.0	0.0	0.0	17.90	6.10	3.90	3.60
31	3.40		4.50		11.70		0.0	0.0		5.60		3.60
MEAN	2.900	3.361	4.542	3.851	3.608	2.675	0.339	0.099	39.865	19.695	4.353	3.455
INCHES	0.100	0.105	0.157	0.129	0.125	0.090	0.012	0.003	1.336	0.682	0.146	0.120
STA AV	0.130	0.142	0.168	0.252	0.495	0.189	0.129	0.127	0.349	0.153	0.190	0.111

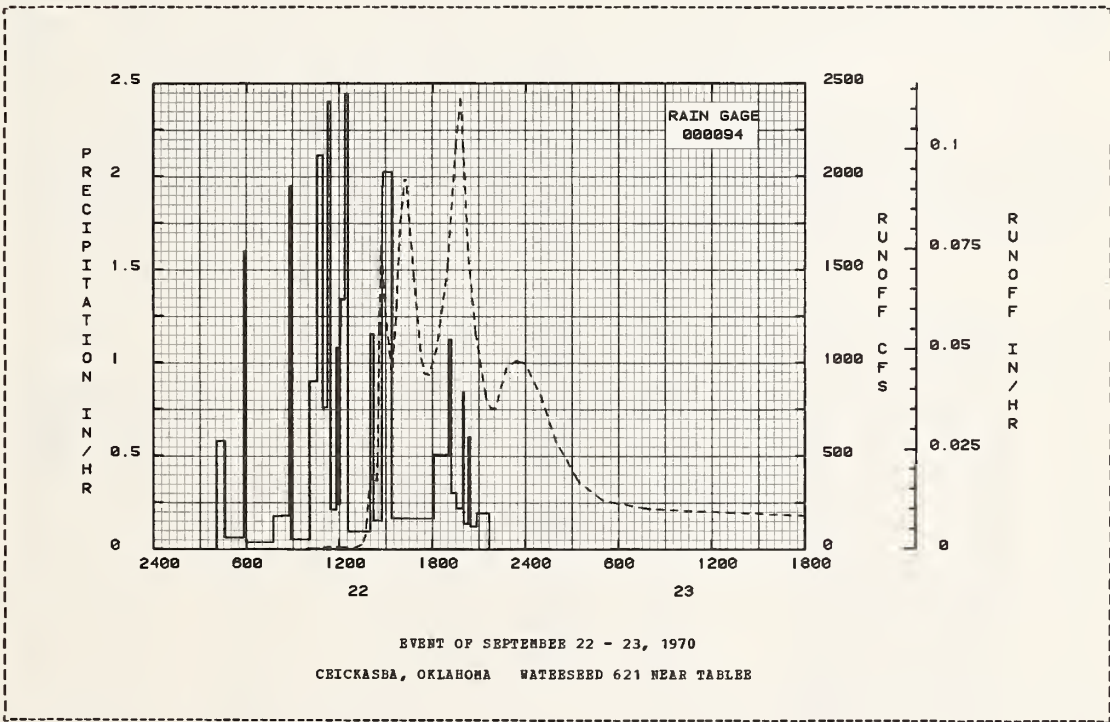
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001117. To convert discharge in inches to AC-FT, multiply by 1,776. STA AV based on 8 yr (1963-70) record period.

1970		SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 621 NEAR TABLER		
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
<b>EVENT OF SEPTEMBER 22 - 23, 1970</b>										
9-22	RG 00009a 0.0	0.000	9-22	RG 00009a 405	0.0	0.0	9-22	954	1.900	0.0
				438	0.5818	0.32		1042	2.200	0.0001
				550	0.0583	0.39		1100	9.000	0.0002
				559	1.6000	0.63		1129	11.400	0.0004
				744	0.0343	0.69		1206	7.100	0.0007
<b>WATERSHED CONDITIONS:</b>										
From a 1967 survey; sowed										
crop - 5%; low crop - 1%;										
alfalfa - 2%; pasture and										
range - 82%; and miscel-										
laneous - 10%.										
				818	0.1765	0.79		1300	4.300	0.0009
				845	0.1778	0.87		1324	21.400	0.0011
				853	1.9500	1.13		1336	39.300	0.0014
				1007	0.0486	1.19		1342	72.900	0.0017
				1035	0.9000	1.61		1348	161.300	0.0022
				1056	2.1143	2.35		1354	274.398	0.0032
				1115	0.7579	2.59		1400	362.300	0.0047
				1126	2.4000	3.03		1412	400.600	0.0082
				1149	0.2087	3.11		1424	366.000	0.0118
				1154	1.0800	3.20		1430	513.600	0.0139
				1204	0.2400	3.24		1436	1177.100	0.0177
				1208	1.2000	3.32		1442	1625.997	0.0243
				1221	1.3385	3.61		1500	1246.398	0.0444
				1235	2.4429	4.18		1524	941.198	0.0647
				1400	0.0918	4.31		1542	1300.198	0.0804
				1413	1.1538	4.56		1554	1712.897	0.0944
				1445	0.1500	4.64		1612	1980.897	0.1203
				1449	1.9500	4.77		1618	1980.897	0.1293
				1524	2.0229	5.95		1648	1471.598	0.1695
				1808	0.1610	6.39		1718	1015.698	0.1984
				1905	0.5053	6.87		1730	941.198	0.2076
				1913	1.1250	7.02		1748	934.000	0.2206
				1933	0.3000	7.12		1818	1078.300	0.2440
				1958	0.2160	7.21		1900	1521.799	0.2865
				2003	0.8400	7.28		1930	2157.697	0.3293
				2021	0.1333	7.32		1948	2415.198	0.3609
				2027	0.6000	7.38		2000	2131.798	0.3824
				2052	0.1200	7.43		2018	1604.800	0.4082
				2142	0.1920	7.59		2048	1160.198	0.4404
								2130	803.898	0.4725

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00004654.

1970 SELECTED RUNOFF EVENT			CEICKASHA, OKLAHOMA WATERSHED 621 NEAR TABLEE							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
							9-22	214E	753.198	0.4833
								2206	753.198	0.4938
								2248	970.600	0.5218
								2324	1008.100	0.5495
								2400	993.000	0.5775
							9-23	100	823.500	0.6198
								200	572.600	0.6523
								330	353.898	0.6846
								500	259.000	0.7060
								600	241.800	0.7177
								800	211.900	0.738E
								1330	192.700	0.7906

NOTES: To convert rnnoff in CPS to IN/HR, multiply by 0.00004654.



## CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT

LOCATION: Sugar Creek Watershed above Gracemont in Caddo County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 9, T. 8 N., R. 10 W., lat. 35 deg. 11 min., long. 98 deg. 16 min., West side of Gracemont, Okla., on downstream side of county road bridge.

AREA: 131780.00 acres 205.90 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.09	0.12	2.23	3.02	3.80	1.89	1.80	1.09	3.53	1.05	0.34	0.30	19.26
	Q	0.055	0.039	0.086	0.151	0.214	0.115	0.033	0.001	0.012	0.011	0.006	0.030	0.724
STA AV	P	0.53	0.86	1.43	2.64	3.73	3.69	1.82	2.66	5.27	1.47	1.62	0.98	26.69
	Q	0.052	0.325	0.085	0.135	0.262	0.118	0.014	0.027	0.228	0.032	0.038	0.051	1.367

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days			
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1970	5-29	0.023		5-29	0.020	5-29	0.038	5-29	0.098	5-29	0.133	5-29	0.149	5-29	0.158	5-28	0.234

MAXIMUMS FOR PERIOD OF RECORD																	
Date	Maximum Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
1965	9-21	0.064		9-21	0.062	9-21	0.122	9-21	0.318	9-21	0.497	9-21	0.653	9-21	0.815	9-21	1.238
1965				1965		1965		1965		1965		1965		1965		1965	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 9%; row crop - 13%; alfalfa - 3%; pasture and range - 53%; and miscellaneous - 22%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1963, USDA Misc. Pub. 1164, p. 69.18-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). The stream gaging station was maintained from Oct. 1955 to Oct. 1963 by the U.S. Geological Survey. Precipitation data obtained from a Thiessen weighted average of 32 gages on the watershed. Precipitation records began Oct. 1961; runoff records began Oct. 1963. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT	
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.48	0.0	0.05	0.0	0.0	0.0	0.0	0.0	1.07	0.0	
2	0.0	0.01	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.07	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.19	0.0	0.09	0.03	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	
6	0.0	0.0	0.82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.39	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.01	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.46	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.27	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.11	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.20	0.0	0.0	0.01	0.0	0.26	
16	0.0	0.0	0.46	0.82	0.0	0.0	0.0	0.0	0.0	0.11	0.12	0.0	0.0	
17	0.08	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0	
18	0.01	0.0	0.06	0.01	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.38	0.05	0.0	0.0	0.0	0.03	
21	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.01	
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.27	2.84	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
24	0.0	0.01	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.29	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.01	0.40	0.0	0.16	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.37	2.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.25	1.14	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	
31	0.0	0.13	0.0	0.97	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.09	0.12	2.23	3.02	3.80	1.89	1.80	1.09	3.53	1.05	0.34	0.30		
STA AV	0.53	0.86	1.43	2.64	3.73	3.69	1.82	2.66	5.27	1.47	1.62	0.98		

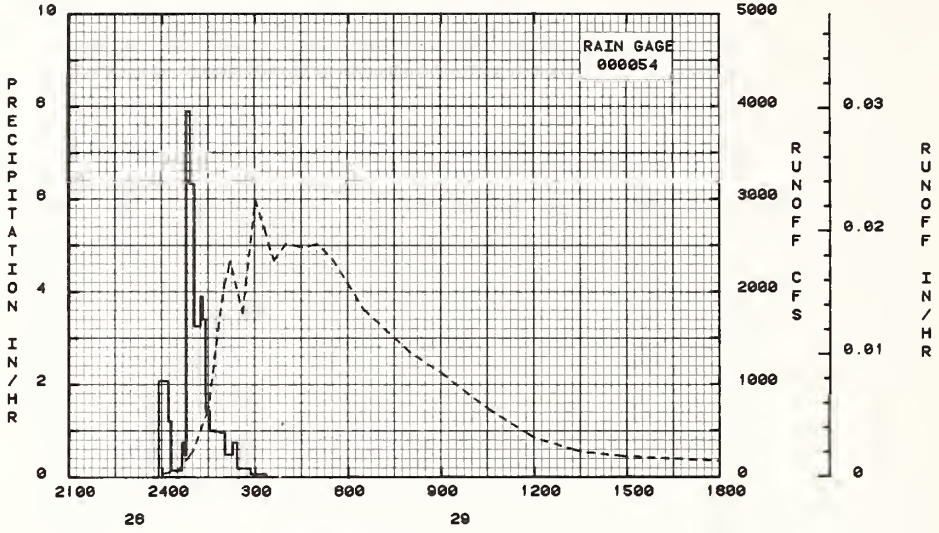
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 32 rain gages on the watershed. STA AV based on 10 yr. (1961-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA			WATERSHED 121 AT GRACEMONT			
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	10.50	6.60	7.50	48.89	51.41	272.44	1.50	0.20	0.10	0.10	0.30	1.20	
2	15.20	8.40	8.40	41.80	24.21	56.51	1.50	0.20	0.10	0.10	2.91	1.30	
3	9.40	7.50	7.50	24.21	22.50	31.90	1.20	0.20	0.10	0.10	0.80	1.50	
4	5.80	8.40	5.80	31.40	19.40	20.90	1.00	0.20	0.10	0.10	0.20	2.49	
5	5.80	9.40	16.60	33.40	18.00	14.50	0.80	0.20	0.0 T	2.31	0.41	7.10	
6	5.80	9.40	25.90	31.40	15.20	13.20	0.30	0.10	0.0	1.24	0.40	4.10	
7	4.40	10.50	24.20	29.50	12.70	10.70	0.30	0.10	0.0	0.20	0.20	4.10	
8	2.60	11.60	21.00	25.90	11.60	9.60	0.30	0.10	0.10	0.60	0.20	1.60	
9	2.60	10.50	19.40	22.50	9.40	8.00	0.90	0.10	0.10	0.50	0.10	2.20	
10	3.70	10.50	21.00	16.60	7.50	6.70	0.30	0.10	0.0 T	0.50	0.10	11.82	
11	4.40	8.40	12.70	18.00	6.60	72.60	0.40	0.20	0.10	0.40	3.78	23.60	
12	6.60	9.40	9.40	13.90	8.40	24.61	0.90	0.20	0.10	0.50	1.00	22.70	
13	15.20	9.40	12.70	13.90	5.80	18.30	0.20	0.20	0.30	0.10	1.30	21.80	
14	10.50	9.40	7.50	16.60	8.48	13.20	0.10	0.10	0.30	0.20	1.30	20.90	
15	7.50	9.40	7.50	16.60	15.21	7.10	0.96	0.10	0.10	7.29	1.20	8.00	
16	10.50	8.40	15.20	21.00	5.80	4.70	1.00	0.10	0.20	11.30	1.00	3.80	
17	12.70	12.70	24.20	74.85	4.40	3.80	0.30	0.10	0.20	11.90	1.20	2.70	
18	5.80	12.70	21.00	41.80	2.60	2.40	0.20	0.10	0.20	8.50	1.00	2.70	
19	2.60	5.10	21.00	31.40	2.10	1.30	0.20	0.20	0.10	7.10	1.00	2.20	
20	0.70	1.30	21.00	24.20	1.70	3.96	0.60	0.20	0.10	1.80	1.60	2.20	
21	0.70	1.30	16.60	16.60	1.70	12.55	0.60	0.30	0.10	0.70	1.60	2.00	
22	0.70	2.10	10.50	18.00	1.70	3.20	0.30	0.30	33.24	0.80	1.20	1.80	
23	41.79	3.70	9.40	15.20	3.70	2.70	0.20	0.20	28.38	0.80	1.00	1.50	
24	44.10	5.10	7.50	11.60	3.70	2.20	0.20	0.10	2.00	1.20	1.30	1.20	
25	15.21	5.80	8.40	8.40	3.70	8.89	0.20	0.10	0.80	0.90	1.80	0.60	
26	12.70	5.10	11.60	9.40	4.40	4.70	0.20	0.10	0.20	3.90	1.60	0.60	
27	10.50	5.10	9.40	9.40	3.10	2.90	0.20	0.10	0.10	0.80	1.80	0.80	
28	11.60	6.60	18.00	6.60	3.70	1.80	1.00	0.10	0.10	0.70	1.60	1.80	
29	9.40	9.40	19.40	7.50	825.89	1.80	0.50	0.10	0.10	0.80	1.80	0.90	
30	6.60	25.90	158.12	51.42	2.51	0.30	0.20	0.10	0.10	0.30	1.60	5.50	
31	6.60	29.50		26.87		0.20	0.20	0.20	0.10	0.10		2.90	
MEAN	9.748	7.636	15.345	27.956	38.158	21.293	0.544	0.155	2.248	2.027	1.177	5.497	
INCHES	0.055	0.039	0.086	0.151	0.214	0.115	0.003	0.001	0.012	0.011	0.006	0.030	
STA AV	0.052	0.025	0.085	0.135	0.262	0.118	0.014	0.027	0.228	0.032	0.038	0.051	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0001806. To convert discharge in inches to AC-FT, multiply by 10,982. STA AV based on 8 yr (1963-70) record period.

1970		SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 121 AT GRACEMONT			
ANTECEDENT CONDITIONS		RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF MAY 28 - 29, 1970											
RG 000054		RG 000054									
5-28	0.0		5-28	2353	0.0	0.0	5-29	1	41.800	0.0	
5-29		0.0	5-29	12	2.0842	0.66		30	65.530	0.0002	
				17	1.2000	0.76		100	293.100	0.0009	
				30	0.1385	0.79		130	759.100	0.0029	
				38	0.1500	0.81		148	1595.000	0.0056	
WATERSHED CONDITIONS:											
From a 1967 survey; sowed											
crop - 9%; row crop - 13%;											
alfalfa - 3%; pasture and											
range - 53%; and miscel-											
laneous - 22%.											
				42	0.7500	0.86		200	2069.898	0.0084	
				47	0.4800	0.90		212	2329.598	0.0117	
				53	7.9000	1.69		236	1769.298	0.0179	
				102	6.3334	2.64		242	2084.600	0.0194	
				114	3.2500	3.29		300	2994.198	0.0251	
				118	3.9000	3.55		318	2675.698	0.0315	
				124	3.4000	3.89		336	2334.500	0.0372	
				132	1.4250	4.08		400	2522.099	0.0445	
				141	1.0000	4.23		430	2478.098	0.0539	
				152	0.9818	4.41		500	2515.198	0.0633	
				202	0.9600	4.57		530	2347.898	0.0724	
				217	0.4800	4.69		630	1806.300	0.0880	
				225	0.7500	4.79		800	1340.898	0.1058	
				251	0.1846	4.87		900	1121.598	0.1151	
				322	0.0581	4.90		1030	734.698	0.1256	
								1200	418.898	0.1321	
								1330	268.100	0.1360	
								1500	216.700	0.1387	
								1800	170.900	0.1431	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00007526.



EVENT OF MAY 28 - 29, 1970  
CHICKASHA, OKLAHOMA WATERSHED 121 AT GRACEMONT



## CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

LOCATION: Bedingfield Watershed is the West branch of East Bitter Creek 1.4 miles above East Bitter Creek gaging station, in Grady County, Okla.; tributary to East Bitter Creek; Washita River; Red River Basin. GAGING STATION--SE 1/4 sec. 22, T. 7 N., R. 6 W., lat. 35 deg. 03 min. 53 sec., long. 97 deg. 49 min. 13 sec.

AREA: 12314.00 acres 19.24 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER	
		Jan	Feb	Mar	Apr	May	Jnn	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.10	0.62	2.09	2.76	4.04	1.25	1.55	2.46	7.10	2.75	1.03	0.31	26.06
	Q	0.080	0.069	0.086	0.123	0.389	0.049	0.0	0.028	0.552	0.109	0.041	0.053	1.581
STA AV	P	0.92	1.21	1.85	3.25	3.47	2.31	2.34	3.86	4.38	1.74	1.19	0.92	27.43
	Q	0.096	0.100	0.164	0.431	0.356	0.208	0.098	0.229	0.257	0.060	0.068	0.069	2.136

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	9-22	0.068	9-22	0.064	9-22	0.123	9-22	0.284	9-22	0.427	9-22	0.524	9-22	0.543	9-22	0.549

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	8- 8	0.169	8- 8	0.164	8- 8	0.307	8- 7	0.562	6-14	0.611	6-14	0.651	4-12	0.754	4- 9	0.875
	1965		1965		1965		1965		1969		1969		1967		1967	

NOTES: Watershed conditions: From a 1967 survey; sowed crop - 5%; row crop - 1%; alfalfa - 2%; pasture and range - 90%; and miscellaneous - 2%. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.16-8 (Topography) and p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 18 gages on the watershed. Precipitation and runoff records began Jan. 1965. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER	
Day	Jan	Feb	Mar	Apr	May	Jnn	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.09	0.0	0.13	0.0	0.0	0.02	0.04	0.17	0.0		
2	0.0	0.0	0.01	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.26	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26	0.0	0.0		
6	0.0	0.0	0.60	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.01	0.11	0.0	0.0	0.0	0.0	0.0	0.02	0.30	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.0	0.07	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.86	0.0		
14	0.0	0.0	0.0	0.0	1.75	0.0	0.0	0.0	0.53	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.24
16	0.0	0.0	0.48	0.46	0.0	0.0	0.0	0.0	0.36	0.03	0.0	0.0		
17	0.09	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.34	0.14	0.0	0.0		
18	0.01	0.0	0.03	0.27	0.0	0.0	0.0	1.10	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.14	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.11	0.28	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.07		
22	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.21	5.09	0.38	0.0	0.0		
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.02	0.0	0.0		
24	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
27	0.0	0.11	0.0	0.0	0.10	0.0	0.03	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.12	0.62	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.38	1.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.02	1.21	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.10	0.62	2.09	2.76	4.04	1.25	1.55	2.46	7.10	2.75	1.03	0.31		
STA AV	0.92	1.21	1.85	3.25	3.47	2.31	2.34	3.86	4.38	1.74	1.19	0.92		

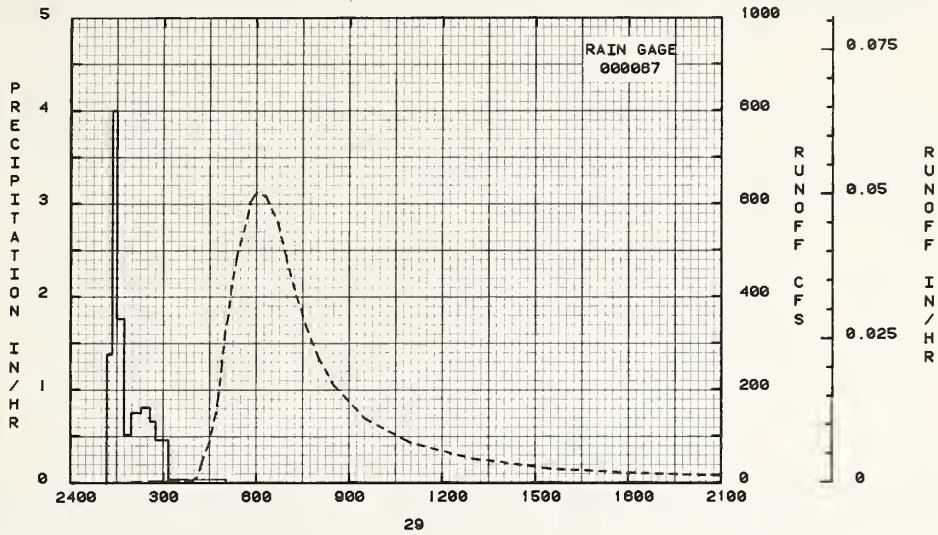
NOTES: For daily air temperatures in the vicinity, see table for Watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 18 rain gages on the watershed. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLE												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.10	1.30	1.60	1.30	3.20	2.20	0.0	0.0	0.0	0.20	0.50	0.80
2	1.10	1.20	1.50	1.20	1.80	1.90	0.0	0.0	0.0	0.30	0.60	0.70
3	1.10	1.10	1.40	1.10	1.50	2.63	0.0	0.0	0.0	0.20	0.60	0.70
4	1.00	1.30	1.30	1.10	1.40	4.23	0.0	0.0	0.0	0.10	0.50	0.70
5	0.90	1.30	1.20	1.40	1.20	2.80	0.0	0.0	0.0	22.67	0.60	0.80
6	1.00	1.30	1.80	1.10	1.00	2.10	0.0	0.0	0.0	4.32	0.60	0.70
7	1.10	1.30	2.10	1.10	1.00	1.50	0.0	0.0	0.0	3.13	0.60	0.80
8	1.00	1.30	1.60	1.10	1.00	1.10	0.0	0.0	0.0	10.88	0.60	0.80
9	1.00	1.20	1.40	1.19	1.00	0.90	0.0	0.0	0.0	1.80	0.50	0.80
10	1.20	1.20	1.20	0.82	1.00	0.80	0.0	0.0	0.0	0.80	0.50	0.90
11	1.80	1.30	1.20	0.28	0.90	0.90	0.0	0.0	0.0	0.60	0.50	0.80
12	1.70	1.20	1.20	0.24	0.90	1.00	0.0	0.0	0.0	0.60	0.50	0.80
13	1.50	1.30	1.20	0.90	0.90	0.70	0.0	0.0	0.0	0.60	1.17	0.80
14	1.50	1.30	1.20	1.00	1.88	0.60	0.0	0.0	0.0	0.50	1.70	0.80
15	1.60	1.30	1.20	1.00	57.84	0.50	0.0	0.0	0.0	0.50	0.90	1.00
16	1.80	1.20	1.40	1.30	3.65	0.40	0.0	0.0	0.0	0.50	0.30	1.20
17	1.60	1.20	1.60	2.00	1.90	0.30	0.0	0.0	0.0	0.60	0.70	1.00
18	1.30	1.10	1.60	2.50	1.40	0.20	0.0	0.0	0.0	0.60	0.80	1.00
19	1.20	1.00	1.60	2.20	1.00	0.10	0.0	14.22	0.0	3.60	0.70	0.90
20	1.30	1.00	1.50	1.30	1.00	0.10	0.0	0.30	0.0	0.50	0.60	0.90
21	1.30	1.10	1.50	1.10	0.70	0.10	0.0	0.0 T	0.0	0.50	0.70	1.00
22	1.30	1.30	1.40	1.10	0.60	0.10	0.0	0.0	204.50	0.60	0.60	1.10
23	1.50	1.50	1.50	1.10	0.60	0.10	0.0	0.0	75.19	1.30	0.50	0.90
24	1.70	1.50	1.30	1.19	0.60	0.10	0.0	0.0	3.11	0.70	0.60	0.90
25	1.70	1.30	1.20	1.10	0.60	0.0 T	0.0	0.0	1.10	0.60	0.60	0.90
26	1.50	1.70	1.10	1.10	0.50	0.10	0.0	0.0	0.60	0.60	0.80	0.90
27	1.40	1.40	1.10	1.30	0.60	0.0 T	0.0	0.0	0.40	0.40	0.80	0.90
28	1.50	1.70	1.80	1.10	0.70	0.0	0.0	0.0	0.30	0.40	0.80	1.00
29	1.30	1.30	1.90	1.30	100.35	0.0	0.0	0.0	0.30	0.50	0.80	1.00
30	1.30	1.50	1.50	29.18	7.98	0.0	0.0	0.0	0.20	0.50	0.90	1.00
31	1.30	1.30	1.30	2.80	2.80	0.0	0.0	0.0	0.0	0.40	0.90	1.00
MEAN	1.3419	1.2821	1.4323	2.1203	6.5002	0.8486	0.0	0.4684	9.5232	1.8227	0.7022	0.8871
INCHES	0.080	0.069	0.086	0.123	0.389	0.049	0.0	0.028	0.552	0.109	0.041	0.053
STA AV	0.096	0.100	0.164	0.431	0.356	0.208	0.098	0.229	0.257	0.060	0.068	0.069

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001933. To convert discharge in inches to AC-FT, multiply by 1,026. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLE												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Hainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF MAY 29, 1970												
5-29	RG 000067	0.000	5-29	110	0.0	0.0	5-29	124	1.000	0.0		
	0.0			120	1.3800	0.23		154	1.100	0.0		
				129	4.0000	0.83		218	1.900	0.0		
				144	1.7600	1.27		236	2.900	0.0001		
				157	0.5077	1.38		300	2.800	0.0002		
				217	0.7500	1.63		306	3.200	0.0002		
				234	0.8118	1.86		330	3.200	0.0003		
				245	0.6545	1.98		354	2.900	0.0004		
				310	3.4560	2.17		406	11.700	0.0005		
				503	0.0319	2.23		412	32.700	0.0007		
								418	55.300	0.0011		
								430	89.000	0.0023		
								442	150.700	0.0042		
								448	193.700	0.0056		
								454	263.000	0.0074		
								500	325.898	0.0098		
								506	360.600	0.0126		
								512	423.698	0.0158		
								524	496.398	0.0232		
								542	570.100	0.0361		
								548	602.800	0.0408		
								600	624.198	0.0507		
								618	615.000	0.0657		
								642	557.398	0.0886		
								700	473.198	0.0971		
								718	400.198	0.1076		
								736	337.198	0.1165		
								800	268.898	0.1263		
								830	208.500	0.1359		
								930	137.400	0.1498		
								1100	84.200	0.1632		
								1300	50.400	0.1740		
								1530	28.700	0.1820		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.0008054.



EVENT OF MAY 29, 1970  
CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

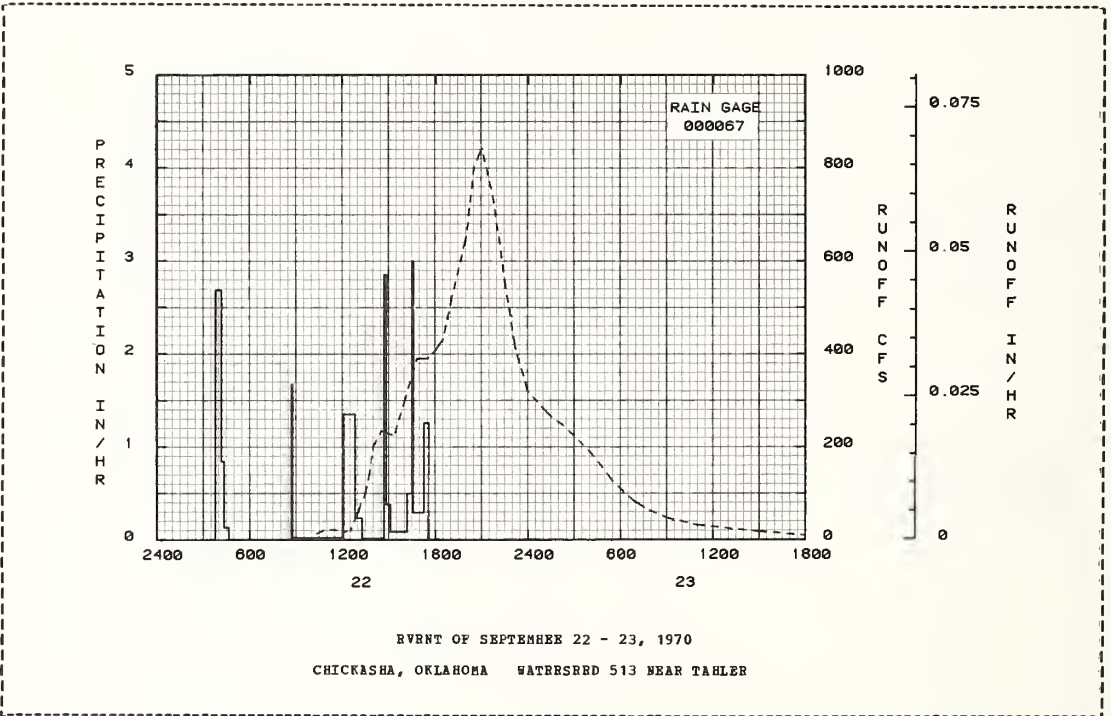
1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER

ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall (inches)	Rnoff (inches)	Date	Time of Day	Intensity (in/hr)	Acc. (inches)	Date	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF SEPTEMBER 22 - 23, 1970											
9-22	BG 000067 0.0	0.0	9-22	BG 000067 347	0.0	0.0	9-22	954	0.100	0.0	
				410	2.6870	1.03		1000	3.000	0.0	
				420	0.8400	1.17		1018	13.100	0.0002	
				438	0.1333	1.21		1048	21.400	0.0009	
				714	0.0038	1.22		1112	22.200	0.0016	
				842	0.0	1.22		1212	17.400	0.0032	
				847	1.6800	1.36		1218	19.200	0.0033	
				1204	0.0213	1.43		1230	18.500	0.0036	
				1250	1.3565	2.47		1236	25.600	0.0038	
				1316	0.2308	2.57		1254	50.400	0.0047	
				1442	0.0140	2.59		1312	77.800	0.0063	
				1450	2.8500	2.97		1330	100.100	0.0085	
				1506	0.3750	3.07		1348	150.700	0.0115	
				1611	0.0831	3.16		1400	201.800	0.0144	
				1629	0.5000	3.31		1430	234.700	0.0232	
				1635	2.9998	3.61		1512	225.800	0.0362	
				1716	0.2927	3.81		1524	231.100	0.0399	
				1736	1.2600	4.23		1600	297.600	0.0527	
								1648	390.100	0.0748	
								1730	390.100	0.0969	
								1800	408.000	0.1130	
								1830	431.698	0.1299	
								1900	511.198	0.1489	
								2000	652.600	0.1958	
								2030	802.198	0.2251	
								2100	842.498	0.2582	
								2148	725.000	0.3085	
								2230	555.300	0.3448	
								2312	410.500	0.3720	
								2400	319.198	0.3955	
								9-23	130	264.898	0.4308
									218	245.800	0.4472
									400	190.500	0.4771
									530	126.200	0.4962
									612	103.300	0.5027

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00008054.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 513 NEAR TABLER								
ANTECEDENT CONDITIONS			RAINFALL						RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)											
							9-23	648	85.100	0.5072	
								730	70.000	0.5116	
								900	47.100	0.5187	
								1100	31.700	0.5250	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00008054.



## CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET

LOCATION: Salt Creek Watershed 1/2 mile East of U.S. highway 81 near Pocasset, in Grady County, Okla.; tributary to Washita River; Red River Basin. GAGING STATION--NW1/4 sec. 28, T. 8 N., R. 7 W., lat. 35 deg. 08 min. 44 sec., long. 97 deg. 57 min. 30 sec.

AREA: 15206.00 acres 23.76 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.09	0.36	2.35	4.67	4.86	2.90	1.20	2.11	3.64	2.28	0.59	0.28	25.35														
	Q	0.006	0.003	0.006	0.605	0.963	0.408	0.002	0.029	0.613	0.063	0.003	0.005	2.097														
STA AV	P	0.74	0.87	1.82	4.28	4.53	3.15	1.68	2.16	4.08	2.21	1.32	0.72	27.55														
	Q	0.010	0.010	0.022	0.754	0.724	0.198	0.005	0.007	0.029	0.097	0.028	0.009	1.892														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																	
	Maximum Discharge Date	1 Hour		2 Hours		Maximum Volume for Selected Time Interval				2 Days		8 Days					
		Date	Vol.	Date	Vol.	6 Hours	12 Hours	1 Day	Date	Vol.	Date	Vol.	Date	Vol.			
1970	5-29	0.089		5-29	0.089	5-29	0.176	5-29	0.488	5-29	0.686	5-29	0.740	5-29	0.762	5-29	0.780

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	4-12	0.320	4-12	0.314	4-12	0.600	4-12	1.201	4-12	1.310	4-12	1.338	4-12	1.424	4- 9	1.720
	1967		1967		1967		1967		1967		1967		1967		1967	

NOTES: Watershed conditions: 36% of area in cultivation (alfalfa, sowed crops and row crops; the pasture or range land (64%) is mostly short grass on moderately steep slopes. About 10% is severely eroded. For maps of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 69.27-4 (Topography) and 1965, USDA Misc. Pub. 1216, p. 69.7-21 (Composite). Precipitation data obtained from a Thiessen weighted average of 9 gages on the watershed. Precipitation and runoff records began Jan. 1967. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.25	0.0	0.13	0.0	0.04	0.0	0.01	0.16	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.01	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.42	0.02	0.0	0.23	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.26	0.0	0.10	0.01	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	0.0	0.0												
6	0.0	0.0	0.87	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.61	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.03	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.0	1.65	0.04	0.0	0.02	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.43	0.0												
14	0.0	0.0	0.0	0.0	1.67	0.0	0.0	0.0	0.10	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.06	0.0	0.01	0.0	0.0	0.0	0.0	0.21												
16	0.0	0.0	0.46	0.42	0.0	0.0	0.0	0.0	0.23	0.04	0.0	0.0												
17	0.08	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.01	0.24	0.0	0.0												
18	0.01	0.0	0.02	0.04	0.0	0.0	0.0	1.76	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.28	0.24	0.0	0.0	0.0	0.0	0.03												
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04												
22	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.03	2.44	0.0	0.0	0.0												
23	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.04	0.0	0.0												
24	0.0	0.03	0.0	0.0	0.01	0.30	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
27	0.0	0.0	0.0	0.0	0.05	0.0	0.15	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.15	0.55	0.0	0.29	0.0	0.20	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	1.89	2.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.16	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.09	0.38	2.35	4.67	4.86	2.90	1.20	2.11	3.64	2.28	0.59	0.28												
STA AV	0.74	0.87	1.82	4.28	4.53	3.15	1.68	2.16	4.08	2.21	1.32	0.72												

NOTES: For daily air temperatures in the vicinity, see table for watershed W-700, (69.007) of this publication. Precipitation values are a Thiessen weighted average of 9 rain gages on the watershed. STA AV based on 4 yr (1967-70) record period.

1970 Day	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.10	0.10	0.10	0.20	13.70	2.20	0.10	0.0	0.0	0.0	0.0	0.10
2	0.10	0.10	0.10	0.20	2.80	1.70	0.10	0.0	0.0	0.0	0.0	0.10
3	0.10	0.0 T	0.10	0.20	1.60	1.40	0.10	0.0	0.0	0.0	0.0	0.10
4	0.10	0.0	0.10	0.20	1.23	2.20	0.10	0.0	0.0	0.0	0.0	0.10
5	0.10	0.0	0.10	0.20	0.90	1.40	0.10	0.0	0.0	0.76	0.0	0.10
6	0.10	0.0	0.30	0.20	0.60	1.10	0.10	0.0	0.0	13.95	0.0	0.10
7	0.10	0.0	0.20	0.20	0.50	0.90	0.10	0.0	0.0	3.49	0.10	0.0 T
8	0.10	0.0	0.10	0.20	0.40	0.70	0.0 T	0.0	0.0	12.10	0.10	0.10
9	0.10	0.0	0.10	0.20	0.30	0.50	0.0	0.0	0.0	6.94	0.0 T	0.10
10	0.20	0.10	0.10	0.20	0.30	0.40	0.10	0.0	0.0	1.80	0.0	0.10
11	0.30	0.10	0.10	0.10	0.30	165.22	0.10	0.0	0.0	0.60	0.0	0.10
12	0.20	0.0 T	0.10	0.10	0.20	66.96	0.10	0.0	0.0	0.20	0.0	0.10
13	0.20	0.10	0.10	0.10	0.20	5.10	0.10	0.0	0.0	0.10	0.10	0.10
14	0.20	0.10	0.10	0.10	18.84	1.90	0.0 T	0.0	0.0	0.10	0.20	0.10
15	0.20	0.10	0.10	0.10	73.99	1.60	0.0	0.0	0.0	0.0 T	0.10	0.10
16	0.10	0.10	0.10	0.10	4.85	1.20	0.0	0.0	0.0	0.0	0.10	0.10
17	0.10	0.10	0.10	0.10	1.30	0.80	0.0	0.0	0.0	0.10	0.10	0.10
18	0.10	0.10	0.10	0.10	0.70	0.60	0.0	0.0	0.0	0.10	0.10	0.10
19	0.10	0.10	0.10	0.10	0.40	0.59	0.0	8.27	0.0	0.0 T	0.10	0.10
20	0.10	0.10	0.10	0.10	0.40	0.50	0.0	4.26	0.0	0.0	0.10	0.10
21	0.10	0.0 T	0.10	0.10	0.30	1.10	0.0	0.20	0.0	0.0	0.10	0.10
22	0.20	0.10	0.10	0.10	0.20	0.50	0.0	0.0 T	4.80	0.0	0.10	0.10
23	0.10	0.10	0.10	0.0 T	0.20	0.40	0.0	0.0	3.34	0.0	0.10	0.10
24	0.10	0.10	0.10	0.0	0.22	0.49	0.0	0.0	4.0 T	0.0	0.10	0.10
25	0.20	0.10	0.10	0.10	0.10	0.40	0.0	0.0	0.0	0.0	0.10	0.10
26	0.10	0.10	0.10	0.10	0.10	0.30	0.0	0.0	0.0	0.0	0.10	0.10
27	0.10	0.10	0.10	0.10	0.10	0.30	0.0	0.0	0.0	0.0	0.10	0.20
28	0.10	0.10	0.30	0.10	0.10	0.20	0.0	0.0	0.0	0.0	0.10	0.20
29	0.10	0.20	0.20	9.71	470.82	0.10	0.0	0.0	0.0	0.0	0.10	0.20
30	0.0 T	0.20	373.18	16.05	0.10	0.0	0.0	0.0	0.0	0.0	0.10	0.20
31	0.0	0.20	0.20	3.54	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.20
MEAN	0.123	0.068	0.126	12.883	19.844	8.690	0.036	0.411	0.271	1.298	0.070	0.113
INCHES	0.006	0.003	0.006	0.605	0.963	0.408	0.002	0.020	0.013	0.063	0.003	0.005
STA AV	0.010	0.010	0.022	0.754	0.724	0.198	0.005	0.007	0.029	0.097	0.028	0.009

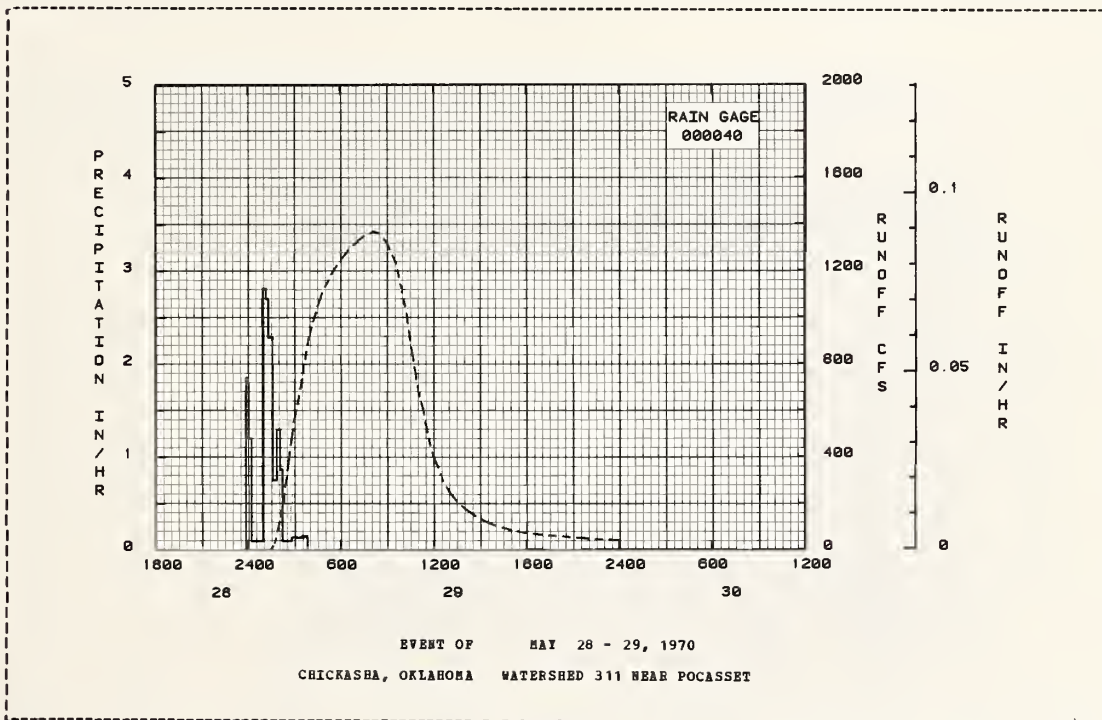
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.001565. To convert discharge in inches to AC-FT, multiply by 1,267. STA AV based on 4 yr (1967-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED 311 NEAR POCASSET				
	ANTHEDHNT Date Mo-Day	CONDITIONS Rainfall (inches)	RUNOFF Runoff (inches)	Date Mo-Day	TIME Time of Day	HAINFALL Intensity (in/hr)	Acc. (inches)	Date Mo-Day	TIME Time of Day	RUNOFF Rate (cfs)	Acc. (inches)
EVENT OF MAY 28 - 29, 1970											
5-28	HG 000040			5-28				5-29			
5-29	0.0	0.0		5-29	2350	0.0	0.0		106	0.200	0.0
					1	1.8545	0.34		124	2.500	0.0
					11	1.2000	0.54		130	5.800	0.0
					56	0.0933	0.61		136	16.300	0.0001
					109	2.8154	1.22		142	29.900	0.0003
WATERSHED CONDITIONS:											
36% of area in cultivation, alfalfa, sowed crops and row crops; the pasture or range land (64%) is mostly short grass on moderately steep slopes. About 10% is severely eroded.											
					119	2.7300	1.67		148	50.800	0.0006
					135	2.2875	2.28		150	90.700	0.0011
					151	0.7500	2.48		204	117.400	0.0018
					263	1.3000	2.74		206	146.000	0.0027
					212	0.8667	2.87		212	177.700	0.0038
					249	0.0973	2.93		218	212.400	0.0051
					329	0.1350	3.02		224	277.000	0.0067
					349	0.1500	3.07		230	313.800	0.0086
									236	373.198	0.0108
									242	422.800	0.0134
									248	475.000	0.0163
									254	521.898	0.0196
									306	602.100	0.0269
									318	664.800	0.0352
									324	702.898	0.0397
									330	735.198	0.0444
									342	825.300	0.0546
									354	905.500	0.0659
									406	956.600	0.0780
									424	1022.998	0.0974
									448	1106.998	0.1252
									530	1200.698	0.1779
									630	1292.600	0.2592
									730	1350.898	0.3454
									806	1369.898	0.3986
									830	1361.500	0.4342
									900	1320.698	0.4779
									936	1231.698	0.5278
									1000	1106.898	0.5583
									1018	1003.898	0.5789

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00006522.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF MAY 28 - 29, 1970 (CONTINUED)										
				5-29				1030	902.500	0.5913
								1042	815.300	0.6025
								1054	734.198	0.6126
								1106	662.398	0.6217
								1118	610.898	0.6300
								1130	546.698	0.6376
								1136	507.398	0.6410
								1148	448.600	0.6472
								1200	399.398	0.6527
								1218	353.398	0.6601
								1236	296.198	0.6665
								1300	252.500	0.6737
								1330	208.900	0.6812
								1400	176.900	0.6875
								1442	143.600	0.6948
								1524	120.600	0.7008
								1600	103.300	0.7052
								1700	84.500	0.7113
								1800	71.700	0.7164
								1900	63.400	0.7208

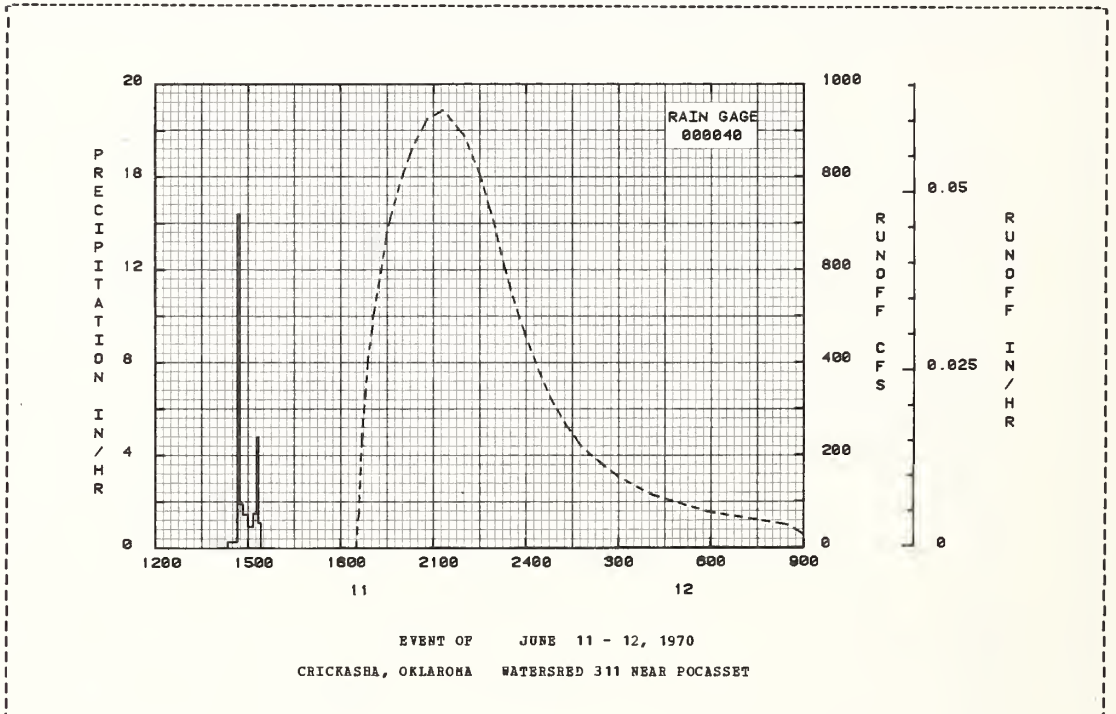
NOTES: To convert runoff in CPS to IN/HR, multiply by 0.00006522.



1970 SELECTED RUNOFF EVENT			CRICKASHA, OKLAHOMA WATERSHED 311 NEAR POCASSET							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF JUNE 11 - 12, 1970										
6-11	EG 000040 0.0	0.001	6-11	RG 000040 1420	0.0	0.0	6-11	1830	0.400	0.0
				1439	0.2842	0.09		1836	83.800	0.0003
				1444	14.4001	1.29		1842	248.600	0.0014
				1450	1.9000	1.48		1848	327.898	0.0033
				1500	1.4400	1.72		1854	414.000	0.0057
				1510	0.9000	1.87		1900	464.600	0.0086
				1518	1.5000	2.07		1906	519.698	0.0118
				1520	4.7999	2.23		1918	595.800	0.0191
				1525	1.0800	2.32		1930	682.300	0.0274
								1936	711.100	0.0319
								2000	805.500	0.0517
								2018	861.000	0.0680
								2048	926.000	0.0971
								2118	943.600	0.1276
								2200	887.800	0.1694
								2230	805.300	0.1970
								2248	736.898	0.2121
								2300	691.100	0.2214
								2318	605.500	0.2341
								2330	556.698	0.2417
								2348	493.898	0.2520
								2400	454.600	0.2582
							6-12	30	368.198	0.2716
								48	322.198	0.2783
								118	264.500	0.2879
								148	218.200	0.2958
								224	183.700	0.3037
								300	152.000	0.3103
								406	113.100	0.3198
								554	77.100	0.3310

WATERSHED CONDITIONS:  
36% of area in cultivation, alfalfa, sowed crops and row crops; the pasture or range land (64%) is mostly short grass on moderately steep slopes. About 10% is severely eroded.

NOTES: To convert runoff in CPS to IN/EE, multiply by 0.00006522.





CHICKASHA, OKLAHOMA WATERSHED C-1

LOCATION: Grady County, Oklahoma; SW 1/4 sec. 26, R. 7 W., T. 7 N., about 2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 17.83 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED C-1	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.11	0.49	2.80	2.33	3.75	1.27	1.00	1.29	5.03	1.87	0.93	0.34	21.21	
	Q 0.0	0.0	0.0	0.007	0.576	0.0	0.0	0.0	0.947	0.016	0.0	0.0	1.546	
STA AV	P 0.87	1.03	1.96	2.98	3.42	2.27	1.76	4.07	3.96	1.59	1.13	0.73	25.76	
	Q 0.0	0.001	0.007	0.044	0.323	0.140	0.057	0.488	0.285	0.068	0.150	0.0	1.563	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		8 Days					
	Rate	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.	Date Vol.					
1970	5-14	0.057	5-14	0.049	5-22	0.094	5-22	0.267	5-22	0.496	5-22	0.820	5-22	0.946	5-22	0.947

MAXIMUMS FOR PERIOD OF RECORD													
Discharge Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
4-12	0.081	8-28	0.065	8-28	0.128	8-28	0.349	8-28	0.614	8-28	0.920	8-28	1.049
1967		1965		1965		1965		1965		1965		1965	

NOTES: Watershed conditions: Continuous cotton - tillage during fallow period consisted of shredding stalks, disking, chiseling, spring-tooth harrowing and spike-tooth harrowing. Cotton was planted during mid-June. Tillage during the growing season consisted of rotary hoeing and cultivating. Principal drain with less than 0.05 ft. grade per 100 feet was maintained during the growing season by use of field cultivator. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.30-1 and 69.30-3. Monthly precipitation values obtained from one recording rain gage, No. 173, located near the 1.5 ft. H-flume. Precipitation and runoff records began January 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED C-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.04	0.14	0.0		
2	0.0	0.0	0.0	0.11	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.21	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.68	0.0	0.0		
6	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0	0.07	0.15	0.0	0.0		
8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.79	0.0		
14	0.0	0.0	0.0	0.0	2.80	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.25		
16	0.0	0.0	0.54	0.37	0.0	0.0	0.0	0.0	0.48	0.05	0.0	0.0		
17	0.10	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.15	0.16	0.0	0.0		
18	0.01	0.0	0.05	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.36	0.20	0.0	0.0	0.0	0.0	0.02		
21	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.07		
22	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.01	3.74	0.38	0.0	0.0		
23	0.0	0.07	0.0	0.0	0.04	0.0	0.0	0.0	0.03	0.02	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
27	0.0	0.15	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.16	0.64	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.36	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.11	0.49	2.80	2.33	3.75	1.27	1.00	1.29	5.03	1.87	0.93	0.34		
STA AV	0.87	1.03	1.96	2.98	3.42	2.27	1.76	4.07	3.96	1.59	1.13	0.73		

NOTES: Values obtained from one recording rain gage, No. 173. STA AV based on 6 yr (1965-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED C-2

LOCATION: Grady County, Oklahoma; SE 1/4, sec. 4, R. 8 W., T. 7 N., about 6 miles West and 4 miles North of Chickasha Oklahoma; Washita River Basin.

AREA: 32.54 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-2														
		Jan	Feh	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.10	0.34	2.44	3.95	3.38	0.78	1.58	0.60	3.44	1.74	0.47	0.21	19.03														
	Q	0.0	0.0	0.0	0.010	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.012													
STA AV	P	0.67	0.99	1.57	3.00	3.33	2.98	1.64	2.62	3.51	1.39	1.71	0.73	24.12														
	Q	0.0	0.0	0.0	0.027	0.082	0.068	0.0	0.004	0.004	0.003	0.0	0.020	0.209														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.										
1970		4-30	0.002	4-30	0.002	4-30	0.004	4-30	0.008	4-29	0.310	4-29	0.010	4-29	0.010	4-29	0.010	0.010										
MAXIMUMS FOR PERIOD OF RECORD																												
		4-12 1967	0.099	4-12 1967	0.075	5- 5 1969	0.115	5- 5 1969	0.225	5- 4 1969	0.294	5- 6 1969	0.375	5- 5 1969	0.550	5- 3 1969	0.728											

NOTES: Watershed conditions: 100% cropland. Entire watershed seeded to wheat in the fall of 1969 and harvested in mid-June 1970. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.31-1 and 69.31-3. Monthly precipitation values obtained from one weighting type rain gage, No. 174. Precipitation and runoff records began May 1, 1962. STA AV based on 9 yr (1962-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-2													
Day	Jan	Feh	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.20	0.0	0.14	0.0	0.0	0.0	0.03	0.15	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.18	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89	0.0	0.0															
6	0.0	0.0	1.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.56	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.24	0.11	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.32	0.0															
14	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.04	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.13															
16	0.0	0.0	0.42	0.22	0.0	0.0	0.0	0.0	0.27	0.05	0.0	0.0															
17	0.09	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0															
18	0.01	0.0	0.0	0.03	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.18	0.0	0.0	0.0	0.02	0.34	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.14	0.19	0.09	0.0	0.0	0.0	0.03															
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05															
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.09	2.49	0.0	0.0	0.0															
23	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0															
24	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0															
27	0.0	0.02	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.13	0.58	0.0	0.06	0.0	0.83	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	1.73	2.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.05	1.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.10	0.34	2.44	3.95	3.38	0.78	1.58	0.60	3.44	1.74	0.47	0.21															
STA AV	0.67	0.99	1.57	3.00	3.33	2.98	1.64	2.62	3.51	1.39	1.71	0.73															

NOTES: Values obtained from one weighting type rain gage, No. 174. STA AV based on 9 yr (1962-70) record period.

CHICKASHA, OKLAHOMA WATERSHED C-3

LOCATION: Grady County, Oklahoma; NE 1/4 sec. 35, E. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 44.26 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-3														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.10	0.52	2.52	2.17	3.33	1.35	1.10	1.33	5.35	2.07	0.88	0.33	21.05														
	Q	0.002	0.0	0.006	0.027	0.968	0.001	0.0	0.0	1.236	0.040	0.0	0.0	2.280														
STA AV	P	0.81	1.09	2.03	3.07	3.33	1.95	2.14	2.98	3.89	1.58	1.07	0.72	24.71														
	Q	0.011	0.006	0.352	0.416	0.512	0.380	0.342	0.582	0.456	0.082	0.098	0.0	2.937														

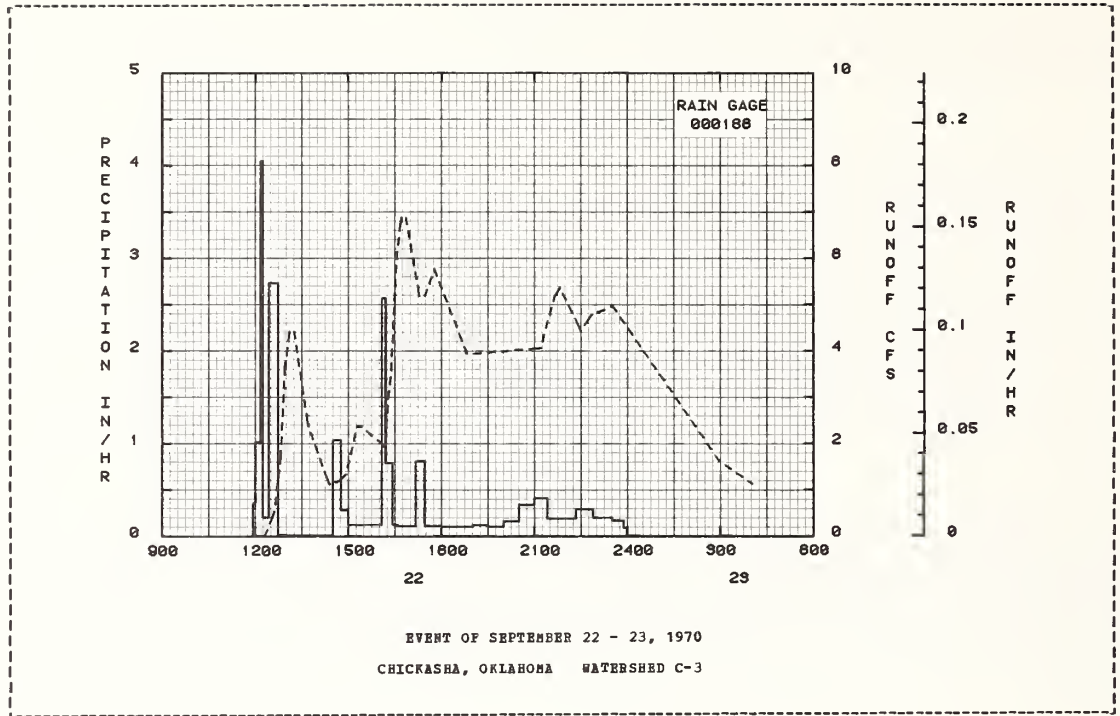
  

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
			Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	5-14	0.428	5-14	0.399	5-14	0.621	5-14	0.956	5-22	1.046	5-22	1.235	5-22	1.236	5-22	1.236
MAXIMUMS FOR PERIOD OF RECORD																
	5-14	0.428	5-14	0.399	5-14	0.621	8-29	1.029	8-29	1.093	5-22	1.235	4-12	1.333	8-21	1.768
	1970		1970		1970		1966		1966		1970		1967		1966	

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed disked and moldboard plowed 8-10 inches deep in mid-Dec. 1969. Spring preplanting tillage consisted of disking, spring-tooth harrowing, incorporating fertilizer and herbicide. Entire watershed planted to cotton during early June. Tillage during growing season consisted of rotary hoeing and cultivating with sweep type cultivator as needed. Area irrigated four times, commencing July 7 and ending Sept. 3 with total applied about 10 inches. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.32-1 and 69.32-3. Monthly precipitation data obtained from two recording weighting type rain gages, No. 186 and Cotton Research Station gage. Precipitation and runoff records began September 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 SELECTED RUNOFF EVENT												CHICKASHA, OKLAHOMA WATERSHED C-3											
ANTECEDENT CONDITIONS						RAINFALL						RUNOFF											
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.													
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)													
EVENT OF SEPTEMBER 22 - 23, 1970																							
9-22	0.0	0.0	9-22	1155	0.0	0.0	9-22	1218	0.0	0.0													
				1200	0.3600	0.03		1237	0.536	0.0019													
				1210	1.0200	0.20		1249	1.697	0.0070													
				1214	4.0500	0.47		1257	3.618	0.0149													
				1226	0.2000	0.51		1306	4.422	0.0282													
WATERSHED CONDITIONS:																							
100% cultivation, continuous				1244	2.7333	1.33	1315	4.422	0.0433														
irrigated cotton. Cultivated July 23 and irrigated on Sept. 1.				1430	0.0113	1.35	1342	2.367	0.0775														
				1445	1.0400	1.61	1423	1.117	0.1041														
				1500	9.2800	1.68	1444	1.206	0.1132														
				1605	0.1200	1.81	1455	1.340	0.1184														
30 Day Antecedent Conditions:																							
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.													
	(inches)	(inches)		of Day	(in/hr)	(inches)		of Day	(cfs)	(inches)													
08-18	0.61	0.000		1612	2.5714	2.11	1517	2.367	0.1336														
08-19	0.46	0.000		1625	0.7846	2.28	1526	2.367	0.1415														
08-21	0.26	0.000		1635	0.1200	2.30	1611	1.921	0.1775														
09-02	0.03	0.000		1710	0.1029	2.36	1617	2.993	0.1831														
09-07	0.12	0.000		1727	0.8117	2.59	1622	3.440	0.1890														
09-11	0.01	0.000		1800	0.1091	2.65	1633	5.986	0.2083														
09-13	0.43	0.000		1900	0.1000	2.75	1642	6.879	0.2303														
09-14	0.07	0.000		1930	0.1200	2.81	1651	6.879	0.2531														
09-16	0.53	0.000		2000	9.1000	2.86	1717	5.182	0.3117														
09-17	0.18	0.000		2030	0.1600	2.94	1727	5.182	0.3312														
09-22	0.28	0.000		2100	0.3400	3.11	1746	5.762	0.3699														
				2125	0.4080	3.28	1849	3.931	0.4839														
				2220	0.1855	3.45	2112	4.065	0.6972														
				2253	0.2909	3.61	2139	5.182	0.7437														
				2330	0.1946	3.73	2149	5.360	0.7635														
				2352	0.1636	3.79	2230	4.422	0.8384														
				2359	0.0857	3.80	2250	4.780	0.8726														
							2331	4.958	0.9471														
							9-23	258	1.608	1.2006													
								402	1.117	1.2331													

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.02241.



## CHICKASHA, OKLAHOMA WATERSHED C-4

LOCATION: Grady County, Oklahoma; NE 1/4, sec. 35, R. 7 W., T. 7 N., about 2-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 29.93 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED C-4	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.11	0.52	2.54	2.12	3.27	1.31	1.06	1.38	5.47	2.15	0.88	0.33	21.44	
	Q 0.004	0.0	0.001	0.008	1.070	0.0	0.033	0.0	0.948	0.015	0.0	0.0	2.079	
STA AV	P 0.82	1.09	2.10	3.02	3.39	1.97	2.16	3.04	3.88	1.59	1.05	0.74	24.85	
	Q 0.004	0.006	0.032	0.227	0.480	0.249	0.329	0.434	0.299	0.038	0.098	0.0	2.195	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS												
Date	Discharge Rate	Maximum Volume for Selected Time Interval										
		1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date				
1970	5-14 0.418	5-14 0.362	5-14 0.671	5-14 1.062	5-14 1.070	5-14 1.070	5-13 1.070	5-7 1.070				

MAXIMUMS FOR PERIOD OF RECORD												
Date	Discharge Rate	1 Hour Date	2 Hours Date	6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date				
1970	5-14 0.418	1970 5-14 0.362	1970 5-14 0.671	1970 5-14 1.062	1970 5-14 1.070	1970 5-14 1.070	1970 5-13 1.070	1970 8-21 1.326				

NOTES: Watershed conditions: 100% cropland, previously graded and smoothed for row irrigation. Entire watershed moldboard plowed 8-10 inches deep in mid-Dec. 1969. Spring preplanting tillage consisted of disking, spring-tooth harrowing, incorporating fertilizer and herbicides. Cotton was planted during early June 1970. Tillage during growing season consisted of rotary hoeing, followed by cultivating with sweep type cultivator as needed. Watershed was irrigated four times, commencing July 2 and ending Sept. 2, 1970, with total applied about 10 inches. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.33-1 and 69.33-3. Monthly precipitation data obtained from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 186 and 187. Precipitation and runoff records began September 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED C-4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.08	0.0	0.36	0.0	0.0	0.0	0.04	0.13	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.24	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0		
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.12	0.39	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	1.54	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.75	0.0		
14	0.0	0.0	0.0	0.0	2.41	0.0	0.0	0.0	0.07	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.01	0.0	0.25		
16	0.0	0.0	0.49	0.32	0.0	0.0	0.0	0.0	0.61	0.05	0.0	0.0		
17	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0		
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.39	0.27	0.0	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.07		
22	0.0	0.11	0.0	0.0	0.0	0.0	0.01	3.98	0.31	0.0	0.0	0.0		
23	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.02	0.03	0.0	0.0	0.0		
24	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.16	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.10	0.57	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.01	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.11	0.52	2.54	2.12	3.27	1.31	1.06	1.38	5.47	2.15	0.88	0.33		
STA AV	0.02	1.09	2.10	3.02	3.39	1.97	2.16	3.04	3.88	1.59	1.05	0.74		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 186 and 187. STA AV based on 6 yr (1965-70) record period.

1970	MEAN DAILY DISCHARGE (cfs)					CHICKASHA, OKLAHOMA WATERSRED C-4							
	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.037	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	1.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.001	0.0	0.0	0.0	0.0	0.294	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.865	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.326	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0002	0.0	0.0	0.0003	0.0434	0.0	0.0013	0.0	0.0397	0.0006	0.0	0.0	0.0
INCHES	0.004	0.0	0.001	0.0003	0.0434	0.0	0.033	0.0	0.948	0.015	0.0	0.0	0.0
STA AV	0.004	0.006	0.032	0.227	0.480	0.249	0.329	0.434	0.299	0.038	0.098	0.0	0.0

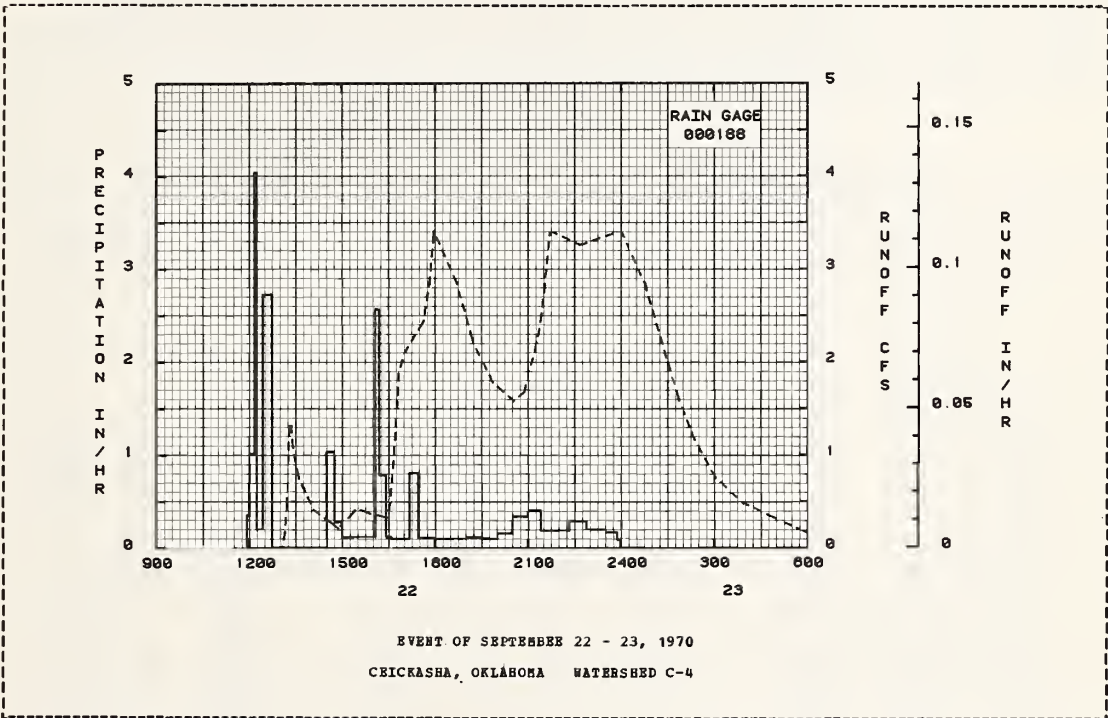
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.795244. STA AV based on 6 yr (1965-70) record period.

1970	SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSRED C-4						
	ANTECEDENT CONDITIONS			RAINFALL				RUNOFF		
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	RG 000186	0.0	9-22	RG 000186	0.0	0.0	9-22	1301	0.0	0.0
					1155	0.0		1305	0.023	0.0
					1200	0.3600		1309	0.184	0.0002
					1210	1.0200		1313	0.538	0.0010
					1214	4.0500		1317	1.236	0.0030
					1226	0.2000				
WATERSRED CONDITIONS:				1244	2.7333	1.33	1319	1.318	0.0045	
100% cultivation, continuous				1430	0.0113	1.35	1321	1.318	0.0059	
irrigated cotton. Cultivated				1485	1.0400	1.61	1325	1.082	0.0085	
July 8 and irrigated on Sept. 1.				1500	0.2800	1.68	1336	0.751	0.0141	
				1605	0.1200	1.81	1405	0.407	0.0234	
30 Day Antecedent Conditions:				1612	2.5714	2.11	1432	0.298	0.0287	
Date	Rainfall	Runoff		1625	0.7846	2.28	1453	0.209	0.0317	
	(inches)	(inches)		1635	0.1203	2.30	1456	0.236	0.0320	
08-18	0.60	0.000		1710	0.1029	2.36	1502	0.266	0.0328	
08-19	0.46	0.000		1727	0.8117	2.59	1525	0.407	0.0371	
08-21	0.31	0.000								
08-22	0.01	0.000								
09-02	1.03	0.000		1800	0.1091	2.65	1536	0.407	0.0396	
09-07	0.12	0.000		1900	0.1000	2.75	1555	0.368	0.0437	
09-13	0.44	0.000		1930	0.1200	2.81	1628	0.332	0.0501	
09-14	0.08	0.000		2000	0.1000	2.86	1633	0.492	0.0512	
09-16	0.61	0.000		2030	0.1600	2.94	1640	0.940	0.0540	
09-17	0.20	0.000								
09-22	0.28	0.000		2100	0.3400	3.11	1647	1.584	0.0589	
				2125	0.4080	3.28	1650	1.881	0.0618	
				2220	0.1855	3.45	1701	2.097	0.0739	
				2253	0.2909	3.61	1738	2.449	0.1204	
				2330	0.1946	3.73	1749	2.837	0.1365	
				2352	0.1636	3.79	1758	3.409	0.1519	
				2359	0.0857	3.80	1843	2.837	0.2296	
							1914	2.211	0.2728	
							1934	1.987	0.2962	
							1952	1.778	0.3147	
							2033	1.584	0.3528	
							2053	1.679	0.3710	
							2117	2.211	0.3967	
							2125	2.449	0.4070	
							2133	2.837	0.4186	

NOTES: To convert runoff in CFS to IN/RR, multiply by 0.03314. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 186 and 187.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA			WATERSHED C-4				
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
							9-22	2143	3.409	0.4360
								2240	3.260	0.5410
								2400	3.409	0.6888
							9-23	46	2.837	0.7681
								153	1.584	0.8500
								223	1.157	0.8727
								303	0.751	0.8937
								354	0.492	0.9113
								503	0.298	0.9263

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03314. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 186 and 187.



## CRICKASRA, OKLAHOMA WATERSHED C-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 12.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CRICKASRA, OKLAHOMA WATERSHED C-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.10	0.49	2.51	2.09	3.16	1.18	0.96	1.36	5.40	2.13	0.83	0.33	20.54	
	Q 0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.706	0.0	0.0	0.0	0.711	
STA AV	P 0.81	1.06	2.06	2.95	3.27	2.01	1.90	3.89	3.81	1.56	1.01	0.72	25.05	
	Q 0.0	0.0	0.078	0.250	0.107	0.049	0.004	0.067	0.122	0.002	0.012	0.0	0.691	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	9-22	0.112	9-22	0.102	9-22	0.195	9-22	0.425	9-22	0.686	9-22	0.706	9-21	0.706	9-15	0.706

MAXIMUMS FOR PERIOD OF RECORD													
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
4-12 1967	0.280	4-12 1967	0.250	4-12 1967	0.409	4-12 1967	0.673	4-12 1967	0.775	4-12 1967	0.812	4-12 1967	0.935
4-9 1967	1.180												

NOTES: Watershed conditions: 100% cropland, planted to wheat in the fall of 1969 and harvested for grain in June 1970. Watershed was moldboard plowed soon after harvest and remained in rough condition until about mid-Aug. 1970 when watershed was disked, spring-tooth harrowed, in preparation for seeding to wheat. Watershed was freshly spring-tooth and spike-tooth harrowed just prior to seeding to wheat in mid-Oct. 1970. For general description of map, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, USDA Misc. Pnh. 1216, p. 69.34-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

Day	DAILY PRECIPITATION (inches)												CHICKASRA, OKLAHOMA WATERSHED C-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.09	0.0	0.34	0.0	0.0	0.0	0.04	0.12	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.23	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0		
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.11	0.39	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.71	0.0		
14	0.0	0.0	0.0	0.0	2.32	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.24		
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.63	0.05	0.0	0.0		
17	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0		
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.31	0.27	0.0	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08		
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.01	3.90	0.30	0.0	0.0		
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.10	0.55	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.01	0.02	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.10	0.49	2.51	2.09	3.16	1.18	0.96	1.36	5.40	2.13	0.83	0.33		
STA AV	0.81	1.06	2.06	2.95	3.27	2.01	1.90	3.89	3.81	1.56	1.01	0.72		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based on 6 yr (1965-70) record period.



1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED C-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.321	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.058	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0127	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.706	0.0	0.0	0.0
STA AV	0.0	0.0	0.078	0.250	0.107	0.049	0.004	0.067	0.122	0.002	0.012	0.0

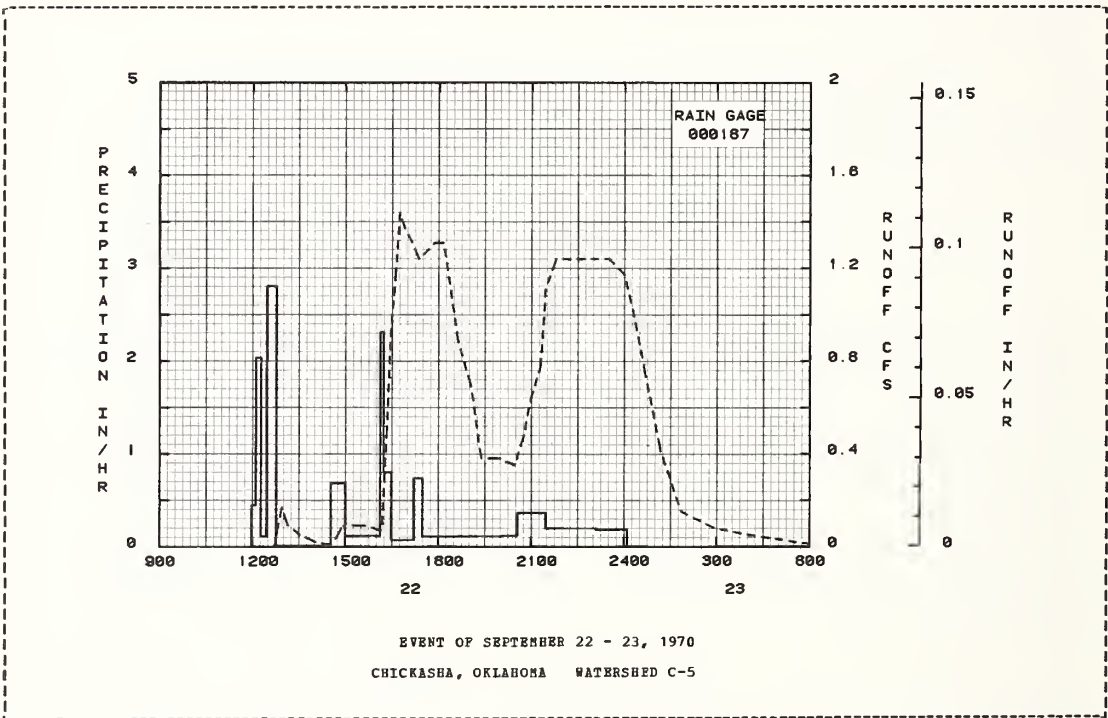
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.859504. STA AV based on 6 yr (1965-73) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED C-5												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Rnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
9-22	RG 000187 0.0	0.0	9-22	BG 000187 1158	0.0	0.0	9-22	1241	0.0	0.0		
				1206	0.4500	0.06		1243	0.011	0.0		
				1216	2.0400	3.40		1244	0.022	0.0		
				1227	0.1091	0.42		1246	0.045	0.0001		
				1246	2.8195	1.31		1247	0.062	0.0002		
WATERSHED CONDITIONS:				1432	0.0113	1.33		1250	0.100	0.0005		
100% cultivation, continuous				1500	0.6857	1.65		1257	0.174	0.0017		
dry land wheat. Harvested				1607	0.1164	1.78		1304	0.121	0.0030		
June 7, chiseled June 27.				1614	2.3142	2.05		1309	0.089	0.0037		
Disked Aug. 20, Sept. 11				1629	0.8000	2.25		1332	0.045	0.0057		
and Sept. 21.				1712	0.0698	2.30		1342	0.039	0.0062		
30 Day Antecedent Conditions:				1729	0.7412	2.51		1402	0.018	0.0069		
Rainfall Runoff				1834	0.1108	2.63		1422	0.011	0.0073		
Date	(inches)	(inches)		2004	0.1133	2.80		1433	0.011	0.0075		
08-18	0.57	0.000		2034	0.1200	2.86		1443	0.039	0.0078		
08-19	0.47	0.000										
08-21	0.31	0.000										
08-22	0.01	0.000		2128	0.3667	3.19		1452	0.078	0.0085		
09-02	0.03	0.000		2306	0.1959	3.51		1456	0.089	0.0089		
09-07	0.11	0.000	9-23	6	0.1800	3.69		1501	0.100	0.0095		
09-13	0.43	0.000						1517	0.089	0.0114		
09-14	0.06	0.000						1538	0.089	0.0138		
09-16	0.63	0.000										
09-17	0.19	0.000						1608	0.070	0.0169		
09-22	0.20	0.000						1611	0.100	0.0172		
								1616	0.318	0.0186		
								1620	0.517	0.0207		
								1628	0.937	0.0282		
								1636	1.174	0.0391		
								1644	1.445	0.0526		
								1654	1.374	0.0709		
								1708	1.305	0.0952		
								1721	1.235	0.1164		
								1751	1.305	0.1657		
								1809	1.305	0.1961		
								1838	0.883	0.2372		
								1903	0.685	0.2624		
								1923	0.378	0.2762		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07748. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-5								
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)											
							9-22	1959	0.378	0.2937	
								2028	0.347	0.3073	
								2045	0.480	0.3164	
								2059	0.641	0.3264	
								2118	0.780	0.3438	
								2127	1.112	0.3550	
								2147	1.239	0.3852	
								2330	1.239	0.5502	
								2400	1.174	0.5969	
				9-23				13	1.051	0.6154	
								42	0.732	0.6489	
								111	0.410	0.6702	
								151	0.155	0.6848	
								254	0.078	0.6943	
								401	0.045	0.6996	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.07748. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



## CHICKASHA, OKLAHOMA WATERSHED C-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 W., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 13.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED C-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.10	0.49	2.50	2.09	3.14	1.18	0.96	1.37	5.42	2.13	0.83	0.33	20.54
	Q	0.016	0.0	0.0	0.0	0.016	0.0	0.0	0.0	0.888	0.0	0.0	0.0	0.920
STA AV	P	0.81	1.05	2.04	2.96	3.27	2.00	1.89	3.89	3.80	1.56	1.01	0.72	25.01
	Q	0.003	0.014	0.139	0.232	0.141	0.068	0.006	0.145	0.166	0.013	0.037	0.0	0.965

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
Date	Maximum Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
9-22	0.284	9-22	0.180	9-22	0.276	9-22	0.514	9-22	0.830	9-22	0.888	9-22	0.888	9-22	0.888
MAXIMUMS FOR PERIOD OF RECORD															
8-28 1965	0.305	4-12 1967	0.259	4-12 1967	0.398	4-12 1967	0.634	9-22 1970	0.830	9-22 1970	0.888	4-12 1967	0.895	4-9 1967	1.050

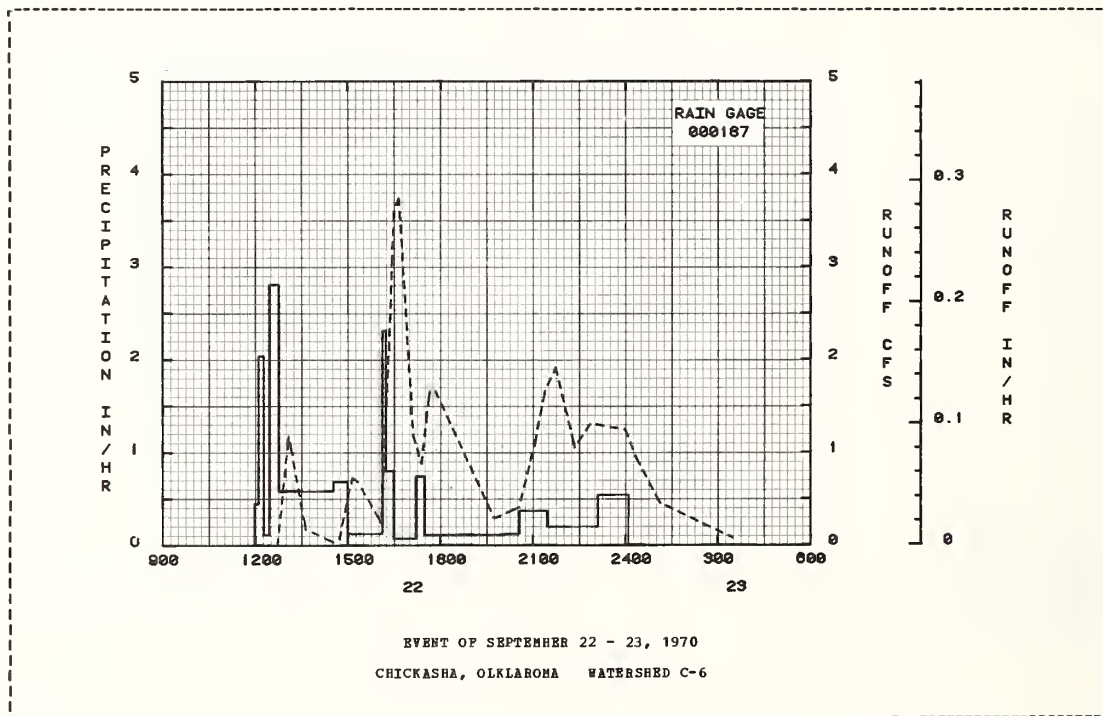
NOTES: Watershed conditions: 100% cropland, planted to wheat in fall of 1969 and harvested for grain in June 1970. Watershed was moldboard plowed soon after harvest and remained in rough condition until about mid-Aug. 1970, when watershed was disked and spring-tooth harrowed, in preparation for seeding to wheat. Watershed was freshly spring-tooth and spike-tooth harrowed just prior to seeding wheat in mid-Oct. 1970. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 69.35-1. Maps - revised composite, p. 69.7-21; topography, p. 69.34-3 of foregoing reference. Monthly precipitation data obtained from Thiessen weighted rainfall values from two weighting recording type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

Day	1970 DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED C-6	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.09	0.0	0.34	0.0	0.0	0.0	0.04	0.12	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.03	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.23	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0		
6	0.0	0.0	1.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.11	0.39	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.71	0.0		
14	0.0	0.0	0.0	0.0	2.30	0.0	0.0	0.0	0.06	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.24		
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.64	0.05	0.0	0.0		
17	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.15	0.0	0.0		
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.57	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.31	0.27	0.0	0.0	0.0	0.0	0.01		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08		
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.01	3.90	0.30	0.0	0.0		
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	3.04	0.03	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.10	0.55	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.28	0.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.01	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.10	0.49	2.50	2.09	3.14	1.18	0.96	1.37	5.42	2.13	0.83	0.33		
STA AV	0.81	1.05	2.04	2.96	3.27	2.00	1.89	3.89	3.80	1.56	1.01	0.72		

NOTES: Precipitation values obtained from two weighting recording type rain gages, Nos. 185 and 187. STA AV based 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-6							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	HG 000187 0.0	0.0	9-22	HG 000187 1158	0.0	0.0	9-22	1243	0.0	0.0
				1206	0.4500	0.06		1305	1.180	0.0165
				1216	2.0400	0.40		1309	1.049	0.0222
				1227	0.1091	0.42		1338	0.170	0.0447
				1246	2.8105	1.31		1432	0.026	0.0514
WATERSHED CONDITIONS: 100% cultivation, continuous dry land wheat. Harvested June 7, chiseled June 27. Disked Aug. 20, Sept. 11 and Sept. 21.				1432	0.0113	1.33		1444	0.066	0.0521
				1500	0.6857	1.65		1458	0.446	0.0567
				1607	0.1164	1.78		1509	0.734	0.0650
				1614	2.3142	2.05		1520	0.682	0.0749
				1629	0.8000	2.25		1605	0.236	0.1011
30 Day Antecedent Conditions:				1712	0.0698	2.30		1623	2.569	0.1333
				1729	0.7412	2.51		1626	3.120	0.1435
				1834	0.1108	2.63		1630	3.605	0.1615
				2004	0.1133	2.80		1639	3.736	0.2031
				2034	0.1200	2.86		1707	1.180	0.2902
				2128	0.3667	3.19		1723	0.878	0.3114
				2306	0.1959	3.51		1734	1.442	0.3277
			9-23	6	0.5400	4.05		1739	1.665	0.3374
								1750	1.665	0.3607
								1944	0.288	0.5021
								2033	0.406	0.5237
								2104	1.114	0.5539
								2123	1.665	0.5874
								2144	1.914	0.6349
								2221	1.049	0.7046
								2251	1.311	0.7496
								2400	1.245	0.8620
							9-23	21	0.931	0.8908
								107	0.446	0.9310
								329	0.066	0.9773

NOTES: To convert runoff in CPS to IN/HR, multiply by 0.07629. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



## CHICKASHA, OKLAHOMA WATERSHED C-7

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, R. 7 N., T. 7 N., about 3 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 26.52 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-7	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 0.09	0.47	2.51	2.07	3.11	1.16	0.92	1.37	5.41	2.10	0.83	0.32	20.36		
	Q 0.0	0.0	0.0	0.091	0.377	0.0	0.0	0.0	0.586	0.005	0.0	0.0	0.969		
STA AV	P 0.81	1.03	2.02	2.93	3.24	1.99	1.88	3.86	3.79	1.54	1.01	0.71	24.82		
	Q 0.0	0.016	0.015	0.393	0.209	0.211	0.149	0.431	0.201	0.082	0.041	0.0	1.749		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																				
1970	Maximum Discharge		Maximum Volume for Selected Time Interval				1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	5-14	0.411	5-14	0.286	5-14	0.334	5-14	0.373	9-22	0.493	9-22	0.586	9-22	0.586	9-22	0.586	9-22	0.586	9-22	0.586

MAXIMUMS FOR PERIOD OF RECORD																				
	4-12	0.957	4-12	0.637	4-12	0.824	4-12	0.944	4-12	0.969	4-12	1.050	4-10	1.228	4-9	1.634				
	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967				

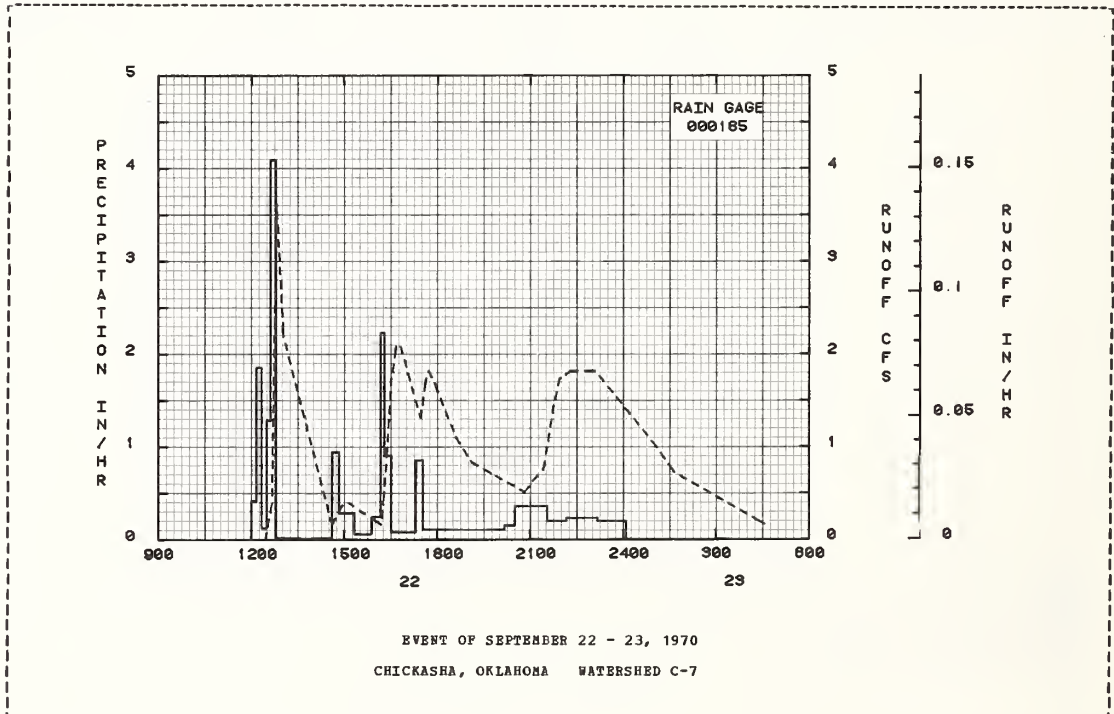
NOTES: Watershed conditions: 100% cropland. North portion was planted to alfalfa in fall of 1969. South portion of watershed was planted to grain and forage sorghums and soy beans. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United, USDA Misc. Pub. 1216, pp. 69.36-1 and 69.36-3. Monthly precipitation data from Thiessen weighted rainfall value from two recording weighting type rain gages, Nos. 185 and 187. Precipitation and runoff records began May 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
1	0.0	0.0	0.0	0.08	0.0	0.33	0.0	0.0	0.0	0.04	0.13	0.0			
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0			
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0			
4	0.0	0.0	0.0	0.24	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0			
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0			
6	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
7	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.10	0.39	0.0	0.0			
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0			
9	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0			
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0			
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0			
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43	0.0	0.70	0.0			
14	0.0	0.0	0.0	0.0	2.27	0.0	0.0	0.0	0.06	0.0	0.0	0.0			
15	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.01	0.0	0.23			
16	0.0	0.0	0.49	0.31	0.0	0.0	0.0	0.0	0.65	0.06	0.0	0.0			
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.14	0.0	0.0			
18	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0			
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0			
20	0.0	0.0	0.0	0.0	0.0	0.29	0.26	0.0	0.0	0.0	0.0	0.0			
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.31	0.0	0.0	0.0	0.08			
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.02	3.90	0.30	0.0	0.0			
23	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.02	0.0	0.0			
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
26	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0			
27	0.0	0.15	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
28	0.0	0.10	0.55	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0			
29	0.0	0.0	0.0	0.28	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
30	0.0	0.0	0.0	0.91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
31	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TOTAL	0.09	0.47	2.51	2.07	3.11	1.16	0.92	1.37	5.41	2.10	0.83	0.32			
STA AV	0.81	1.03	2.02	2.93	3.24	1.99	1.88	3.86	3.79	1.54	1.01	0.71			

NOTES: Precipitation values obtained from two recording weighting type rain gages, Nos. 185 and 187. STA AV based 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-7							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Rnnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	RG 000185 0.0	0.0	9-22	RG 000185 1200	0.0	0.0	9-22	1227	0.0	0.0
				1210	0.4200	0.07		1240	0.401	0.0016
				1220	1.8600	0.38		1245	2.378	0.0061
				1230	0.1200	0.40		1249	3.607	0.0135
				1237	1.2857	0.55		1302	2.191	0.0368
WATERSHED CONDITIONS: 100 % cultivation, north portion of field in alfalfa, last harvested July 14. South portion of field in cotton, soybeans and grain sorghum.				1248	4.0909	1.30		1436	0.160	0.1057
				1436	0.0167	1.33		1456	0.374	0.1091
				1450	0.9429	1.55		1507	0.401	0.1117
				1520	0.2800	1.69		1611	0.160	0.1229
				1553	0.0545	1.72		1617	0.508	0.1242
30 Day Antecedent Conditions:				1610	0.2471	1.79		1623	0.989	0.1270
				1617	2.2285	2.05		1631	1.737	0.1338
				1631	0.9000	2.26		1640	2.084	0.1444
				1718	0.0766	2.32		1649	2.084	0.1563
				1732	0.8571	2.52		1727	1.309	0.1965
				2010	0.1063	2.80		1738	1.737	0.2069
				2030	0.1500	2.85		1743	1.817	0.2124
				2133	0.3619	3.23		1756	1.657	0.2264
				2210	0.1946	3.35		1836	1.096	0.2608
				2310	0.2300	3.58		1906	0.828	0.2788
			9-23	5	0.1964	3.76		2049	0.508	0.3217
								2106	0.641	0.3278
								2126	0.775	0.3366
								2145	1.443	0.3499
								2157	1.737	0.3617
								2218	1.817	0.3848
								2305	1.817	0.4382
							9-23	105	0.989	0.5432
								139	0.721	0.5614
								434	0.160	0.6095

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03740. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 185 and 187.



## CHICKASHA, OKLAHOMA WATERSHED C-8

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 35, E. 7 W., T. 7 N., about 3-1/2 miles Southeast of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.28 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														CHICKASHA, OKLAHOMA WATERSHED C-8														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.09	0.48	2.50	2.06	2.87	1.12	0.95	1.37	5.16	2.28	0.88	0.37	20.13														
	Q	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.115	0.0	0.0	0.0	0.117														
STA AV	P	0.81	1.06	2.04	2.74	3.28	1.99	1.92	3.81	3.72	1.58	1.02	0.73	24.69														
	Q	0.0	0.0	0.013	0.090	0.029	0.015	0.078	0.217	0.148	0.001	0.0	0.0	0.592														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge Date Rate		1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval				1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.												
1970		9-22	0.038	9-22	0.024	9-22	0.038	9-22	0.059	9-22	0.110	9-22	0.115	9-22	0.115	9-22	0.115											
MAXIMUMS FOR PERIOD OF RECORD																												
		9-19 1965	0.257	9-19 1965	0.190	9-19 1965	0.249	8-29 1966	0.374	8-29 1966	0.430	8-29 1966	0.436	9-19 1965	0.610	8-21 1966	0.678											

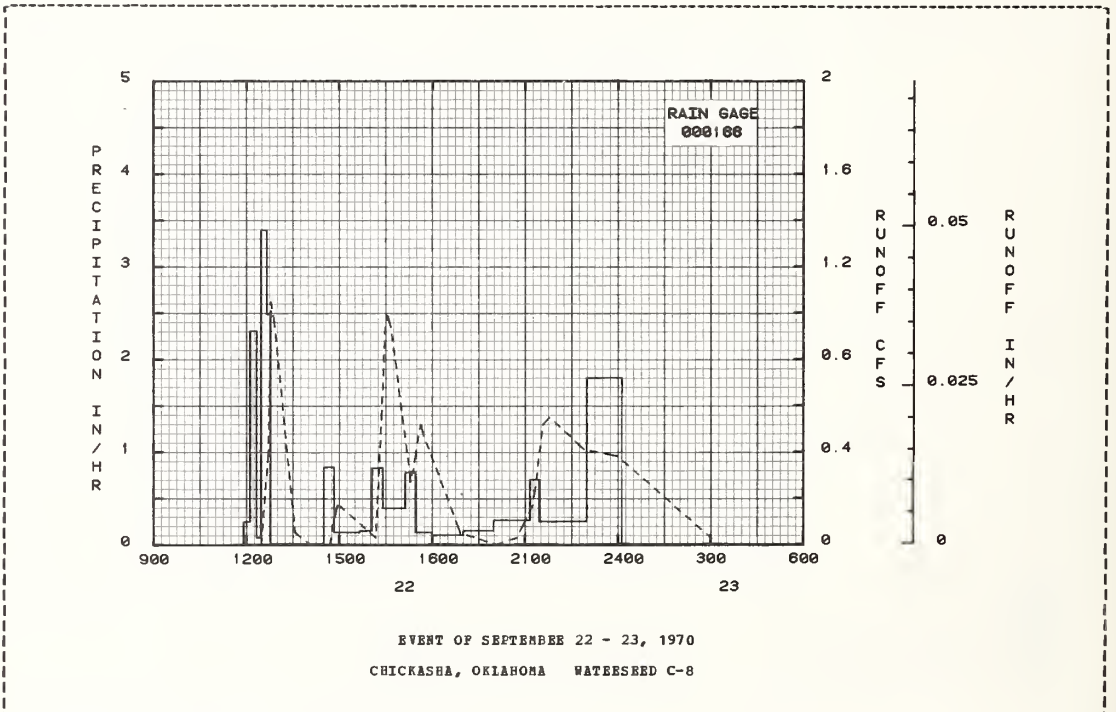
NOTES: Watershed conditions: 100% cropland, entire watershed was planted to wheat in mid-Oct. 1965 and harvested for grain in mid-June 1970. Watershed was moldboard plowed 8-10 inches deep in late June 1970. Area remained in rough condition until mid-Aug. 1970 when watershed was disked and spring-tooth harrowed in preparation for seeding to wheat. Watershed was seeded to wheat in mid-Oct. 1970. For general map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, OSDA Misc. Pub. 1216, p. 69.37-1. Maps - revised composite, p. 69.7-21; topography, p. 69.37-5 of foregoing reference. Monthly precipitation obtained from Thiessen weighted rainfall values from two recording weighting type rain gages, Nos. 185 and 188. Precipitation and runoff records began April 1, 1965. STA AV based on 6 yr (1965-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)														CHICKASHA, OKLAHOMA WATERSHED C-8													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.08	0.0	0.28	0.0	0.0	0.0	0.04	0.13	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.24	0.0	0.15	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0															
6	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.10	0.39	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0															
9	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.75	0.0															
14	0.0	0.0	0.0	0.0	2.06	0.0	0.0	0.0	0.07	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.01	0.0	0.27															
16	0.0	0.0	0.49	0.33	0.0	0.0	0.0	0.0	0.72	0.06	0.0	0.0															
17	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.16	0.0	0.0															
18	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.52	0.0	0.0	0.0	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.30	0.26	0.0	0.0	0.0	0.0	0.01															
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.09															
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.02	3.51	0.37	0.0	0.0															
23	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.03	0.0	0.0															
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.0	0.0	0.3	0.24	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0															
27	0.0	0.16	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.10	0.55	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.28	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.01	0.03	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.09	0.48	2.50	2.06	2.87	1.12	0.95	1.37	5.16	2.28	0.88	0.37															
STA AV	0.81	1.06	2.04	2.74	3.28	1.99	1.92	3.81	3.72	1.58	1.02	0.73															

NOTES: Precipitation values obtained from two recording type rain gages, Nos. 185 and 188. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED C-8							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	0.0	0.0	9-22	1155	0.0	0.0	9-22	1229	0.0	0.0
				1207	0.2500	0.05		1243	0.413	0.0018
				1220	2.3077	0.55		1248	1.046	0.0039
				1228	0.0750	0.56		1255	0.936	0.0082
				1240	3.4000	1.24		1335	0.055	0.0202
WATERSHED CONDITIONS:				1247	2.4857	1.53		1404	0.0	0.0207
100% cultivation. Harvested				1430	0.0117	1.55		1442	0.0	0.0207
wheat June 6. Chiseled 24-				1450	0.8400	1.83		1456	0.165	0.0213
30 inches deep June 26.				1540	0.1320	1.94		1500	0.165	0.0218
Disked 4-6 inches deep Aug.				1604	0.1500	2.00		1611	0.028	0.0259
2 1/2 Spring-tooth harrowed										
Sept. 10.				1625	0.8286	2.29		1622	0.551	0.0278
30 Day Antecedent Conditions:				1708	0.3907	2.57		1629	0.936	0.0310
Date	Rainfall	Runoff		1728	0.7800	2.83		1634	0.991	0.0340
08-18	0.54	0.000		1800	0.1312	2.90		1640	0.936	0.0374
08-19	0.52	0.000		1900	0.1000	3.00		1719	0.275	0.0518
08-21	0.29	0.000		2000	0.1500	3.15		1728	0.385	0.0536
08-22	0.02	0.000		2110	0.2657	3.46		1733	0.468	0.0548
09-02	0.02	0.000		2128	0.7000	3.67		1738	0.523	0.0564
09-07	0.10	0.000		2200	0.2837	3.80		1744	0.468	0.0581
09-13	0.44	0.000		2300	0.2500	4.05		1855	0.055	0.0694
09-14	0.07	0.000								
09-16	0.72	0.000	9-23	8	0.2118	4.29		2004	0.0	0.0705
09-17	0.21	0.000						2044	0.028	0.0709
09-22	0.11	0.000						2102	0.110	0.0716
								2115	0.165	0.0727
								2121	0.248	0.0734
								2135	0.523	0.0767
								2148	0.551	0.0809
								2254	0.413	0.1002
								2400	0.385	0.1162
							9-23	315	0.0	0.1389

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03636. Some intermediate breakpoints have been removed to shorten the listing above. Thiessen weighted rainfall using rain gages 185 and 188.





## CHICKASHA, OKLAHOMA WATERSHED R-1

LOCATION: Caddo County, Oklahoma; NE 1/4, sec. 21, T. 8 N., R. 9 W., about 4-3/4 miles North and 3-1/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 17.76 acres

		MONTHLY PRECIPITATION AND RUNOFF (inches)											CHICKASHA, OKLAHOMA WATERSHED R-1	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.18	0.31	3.80	3.12	4.94	2.93	1.38	0.87	4.53	2.27	0.59	0.31	25.23
	Q	0.0	0.0	0.0	0.003	0.053	0.257	0.001	0.0	0.006	0.005	0.0	0.0	0.325
STA AV	P	0.61	0.98	1.68	3.32	3.47	4.12	1.45	3.12	4.10	1.69	1.75	0.78	27.08
	Q	0.0	0.0	0.0	0.018	0.015	0.041	0.000	0.004	0.006	0.001	0.003	0.0	0.089

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-2, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. The watershed was fertilized and sprig-sodded to bermuda in 20-inch rows in spring of 1970. Because of unfavorable weather conditions, a poor stand resulted. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.38-1 and 69.38-2. Precipitation data obtained from recording rain gage No. 189. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970		DAILY PRECIPITATION (inches)											CHICKASHA, OKLAHOMA WATERSHED R-1	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.52	0.0	0.04	0.0	0.0	0.0	0.0	0.19	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.14	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.31	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.11	0.0	0.0		
6	0.0	0.0	1.34	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.74	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	2.42	0.37	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.87	0.0	0.40	0.0		
14	0.0	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.09	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.03	0.0	0.21		
16	0.0	0.0	0.89	0.37	0.0	0.0	0.0	0.0	0.28	0.12	0.0	0.0		
17	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.0	0.0		
18	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.29	0.31	0.07	0.0	0.0	0.0	0.02		
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.08		
22	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.20	2.83	0.0	0.0	0.0		
23	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
24	0.0	0.04	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0		
27	0.0	0.02	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.14	0.84	0.0	0.51	0.0	0.24	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.44	3.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.16	1.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.15	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.18	0.31	3.80	3.12	4.94	2.93	1.38	0.87	4.53	2.27	0.59	0.31		
STA AV	0.61	0.98	1.68	3.32	3.47	4.12	1.45	3.12	4.10	1.69	1.75	0.78		

NOTES: Precipitation values obtained from one recording rain gage, No. 189. STA AV based on 9 yr (1962-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-2

LOCATION: Caddo County, Oklahoma; NW 1/4, sec. 22, T. 8 N., R. 9 W., about 4-1/2 miles North and 2-3/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 24.08 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-2	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.15	0.32	3.05	2.92	4.59	2.71	1.29	0.73	4.14	2.15	0.54	0.32	22.91
	Q	0.0	0.0	0.0	0.004	0.047	0.097	0.0	0.0	0.005	0.006	0.0	0.0	0.159
STA AV	P	0.56	0.93	1.50	3.24	3.38	4.03	1.41	3.01	3.96	1.64	1.69	0.76	26.11
	Q	0.001	0.0	0.002	0.055	0.031	0.049	0.001	0.031	0.033	0.008	0.010	0.004	0.223

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds H-1, R-3 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.39-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 190. Precipitation records began Jan. 1, 1962. Runoff records began July 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.45	0.0	0.03	0.0	0.0	0.0	0.0	0.20	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.06	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.25	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.15	0.0	0.0		
6	0.0	0.0	1.22	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.34	0.67	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	2.27	0.35	0.0	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.01	0.0	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.80	0.0	0.34	0.0		
14	0.0	0.0	0.0	0.0	0.96	0.0	0.0	0.0	0.08	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.02	0.0	0.22		
16	0.0	0.0	0.57	0.31	0.0	0.0	0.0	0.0	0.24	0.08	0.0	0.0		
17	0.15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0		
18	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.25	0.26	0.09	0.0	0.0	0.0	0.02		
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0		
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.19	2.59	0.0	0.0	0.0		
23	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0		
27	0.0	0.01	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.70	0.0	0.46	0.0	0.23	0.0	0.0	0.0	0.0	0.0		
29	0.0		0.0	0.46	3.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0		0.16	1.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0		0.10		0.02		0.0	0.0		0.0				
TOTAL	0.15	0.32	3.05	2.92	4.59	2.71	1.29	0.73	4.14	2.15	0.54	0.32		
STA AV	0.56	0.93	1.50	3.24	3.38	4.03	1.41	3.01	3.96	1.64	1.69	0.76		

NOTES: Precipitation values obtained from one recording rain gage, No. 190. STA AV based on 9 yr (1962-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-3

LOCATION: Caddo County, Oklahoma; NE 1/4, sec/ 21. T. 8 N., R. 9 W., about 4-1/2 miles North and 3-1/4 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 25.84 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)		CHICKASHA, OKLAHOMA WATERSHED R-3												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.14	0.33	3.02	2.85	4.36	2.72	1.22	0.71	4.07	2.15	0.50	0.31	22.38
	Q	0.0	0.0	0.0	0.002	0.020	0.032	0.0	0.0	3.002	0.003	3.0	0.0	0.059
STA AV	P	0.55	0.93	1.51	3.21	3.30	4.0	1.39	2.98	3.87	1.63	1.66	0.74	25.76
	Q	0.0	0.0	0.001	0.023	0.011	0.017	0.0	0.013	0.016	0.004	0.004	0.001	0.091

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds R-1, R-2 and R-4. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.40-1 and 69.39-2. Precipitation data obtained from recording rain gage No. 191. Precipitation records began Jan. 1, 1962. STA AV based on 9 yr (1962-70) record period. Runoff measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-3											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	3.0	3.0	0.0	0.42	0.0	7.02	0.0	0.0	0.0	0.0	0.19	0.0												
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.05	0.0	0.0	0.0	0.0												
4	3.0	0.0	0.0	0.25	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17	0.0	0.0												
6	0.0	0.0	1.22	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.66	0.0	0.0												
9	3.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	3.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	2.30	0.32	0.0	0.0	0.0	0.0	0.0												
12	0.0	0.0	0.01	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.31	0.0												
14	0.0	0.0	0.0	0.0	0.87	0.0	0.0	0.0	0.08	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.02	0.0	0.21												
16	0.0	0.0	0.55	0.33	0.0	0.0	0.0	0.0	0.24	0.09	0.0	0.0												
17	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0												
18	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.26	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.23	0.23	0.09	0.0	0.0	0.0	0.03												
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.07												
22	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.19	2.55	0.0	0.0	0.0												
23	0.0	0.01	0.0	0.0	0.06	0.0	0.0	0.0	0.01	0.0	0.0	0.0												
24	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0												
27	0.0	0.02	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.14	0.70	0.0	0.43	0.0	0.21	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.45	2.97	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.13	1.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.10	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.14	0.33	3.02	2.85	4.36	2.72	1.22	0.71	4.07	2.15	0.50	0.31												
STA AV	0.55	0.93	1.51	3.21	3.30	4.00	1.39	2.98	3.87	1.63	1.66	0.74												

NOTES: Precipitation values obtained from one recording rain gage, No. 191. STA AV based on 9 yr (1962-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-4

LOCATION: Caddo County, Oklahoma; NW 1/4, sec. 22, T. 8 N. R. 9 W., about 4-1/2 miles North and 2-1/2 miles West of Verden, Oklahoma; Washita River Basin.

AREA: 18.12 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)							CHICKASHA, OKLAHOMA WATERSHED R-4						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	0.12	0.34	3.11	3.07	5.25	3.25	1.29	0.75	4.52	2.15	0.47	0.31	24.63
Q	0.0	0.0	0.0	0.001	0.036	0.085	0.0	0.0	0.001	0.0	0.0	0.0	0.123
STA AV P	0.59	0.89	1.49	3.33	3.53	4.21	1.39	3.05	4.06	1.71	1.71	0.75	26.70
Q	0.0	0.0	0.0	0.069	0.018	0.034	0.0	0.021	0.018	0.004	0.004	0.0	0.167

NOTES: Watershed conditions: Watershed is in range and pasture grasses and within the same fence enclosure as Watersheds B-1, B-2 and B-3. All have essentially the same grazing management. There is a good hydrologic cover of weeds, annual grasses, low order perennial grasses, and some climax grass species, however, the range condition class is poor. For description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, pp. 69.41-1 and 69.41-2. Precipitation data obtained from recording rain gage No. 192. Precipitation records began Jan. 1, 1962. STA AV based on 9 yr (1962-70) record period. Run-off measured by stage-volume change in a farm pond. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970	DAILY PRECIPITATION (inches)					CHICKASHA, OKLAHOMA WATERSHED R-4						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.46	0.0	0.02	0.0	0.0	0.0	0.0	0.17	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.07	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.30	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	0.0	0.0
6	0.0	0.0	1.33	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.70	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	2.76	0.30	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.01	0.0	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.88	0.0	0.30	0.0
14	0.0	0.0	0.0	0.0	1.15	0.0	0.0	0.0	0.08	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.01	0.0	0.20
16	0.0	0.0	0.49	0.20	0.0	0.0	0.0	0.0	0.27	0.09	0.0	0.0
17	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.0	0.0
18	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0
19	0.0	0.0	0.19	0.0	0.0	0.0	0.03	0.25	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.26	0.26	0.09	0.0	0.0	0.0	0.03
21	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.08
22	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.22	2.81	0.0	0.0	0.0
23	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.0	0.02	0.0	0.0	0.0
24	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0
27	0.0	0.02	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0
28	0.0	0.14	0.65	0.0	0.38	0.0	0.27	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.43	0.43	3.60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.15	1.68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.10	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.12	0.34	3.11	3.07	5.25	3.25	1.29	0.75	4.52	2.15	0.47	0.31
STA AV	0.59	0.89	1.49	3.33	3.53	4.21	1.39	3.05	4.06	1.71	1.71	0.75

NOTES: Precipitation obtained from one recording rain gage, No. 192. STA AV based on 9 yr (1962-70) record period.

## CHICKASHA, OKLAHOMA WATERSHED R-5

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 8 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 23.72 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-5	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.13	0.67	2.28	2.71	3.32	1.25	1.08	1.96	7.06	3.02	1.10	0.37	24.95	
	Q 0.0	0.0	0.0	0.002	0.037	0.0	0.0	0.0	0.291	0.017	0.0	0.0	0.347	
STA AV	P 0.91	1.10	2.11	3.20	4.24	2.41	2.86	2.58	4.32	2.03	1.40	0.92	28.08	
	Q 0.0	0.038	0.057	0.269	0.178	0.115	0.066	0.0	0.061	0.003	0.005	0.0	0.792	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													
Maximum Discharge Date	1 Hour Date	2 Hours Date	Maximum Volume for Selected Time Interval										
			6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date						
1970	9-22 0.129	9-22 0.093	9-22 0.130	9-22 0.218	9-22 0.280	9-22 0.291	9-21 0.291	9-15 0.291					

MAXIMUMS FOR PERIOD OF RECORD															
4-12 1967	0.879	4-12 1967	0.577	4-12 1967	0.721	4-12 1967	0.790	4-12 1967	0.806	4-12 1967	0.813	4-10 1967	0.947	4-9 1967	1.066

NOTES: Watershed conditions: 100% rangeland, native grass rangeland, continuously grazed by beef cattle during recent years. Range condition class during 1970 was good, however, entire area was slightly overgrazed during the spring and summer. The vegetative cover in early December 1970, based on 25 clipped samples uniformly spaced, averaged 1,450 pounds of standing grass, 200 pounds of weeds, and 1,900 pounds of mulch per acre. Prior to Oct. 1970 this watershed was within the same pasture area as Watershed R-6, however, was subjected to a slightly heavier grazing rate. For general description of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, p. 69.42-1; maps - topography, 1966, p. 69.42-3 of foregoing reference; revised composite, 1965, USDA Misc. Pub. 1216, p. 69.7-21. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 195 and 196. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Okla.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-5	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.14	0.0	0.13	0.0	0.0	0.0	0.02	0.18	0.0		
2	0.0	0.0	0.01	0.0	0.0	0.02	0.0	0.0	0.05	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.34	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0		
6	0.0	0.0	0.62	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0	0.02	0.68	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.07	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.92	0.0		
14	0.0	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.62	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.27		
16	0.0	0.0	0.50	0.38	0.0	0.0	0.0	0.0	0.34	0.05	0.0	0.0		
17	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.12	0.0	0.0		
18	0.0	0.0	0.03	0.41	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.10	0.36	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.10		
22	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.12	4.78	0.45	0.0	0.0		
23	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.03	0.0	0.0		
24	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
27	0.0	0.12	0.0	0.0	0.19	0.0	0.03	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.63	0.0	0.0	0.0	0.22	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.43	1.42	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.01	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.13	0.67	2.28	2.71	3.32	1.25	1.08	1.96	7.06	3.02	1.10	0.37		
STA AV	0.91	1.10	2.11	3.20	4.24	2.41	2.86	2.58	4.32	2.03	1.40	0.92		

NOTES: Precipitation obtained from Thiessen weighted values from two gages, Nos. 195 and 196. STA AV based on 5 yr (1966-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED R-5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.270	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.020	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0001	0.0012	0.0	0.0	0.0	0.0097	0.0006	0.0	0.0
INCHES	0.0	0.0	0.0	0.002	0.037	0.0	0.0	0.0	0.291	0.017	0.0	0.0
STA AV	0.0	0.038	0.057	0.269	0.178	0.115	0.066	0.0	0.061	0.003	0.005	0.0

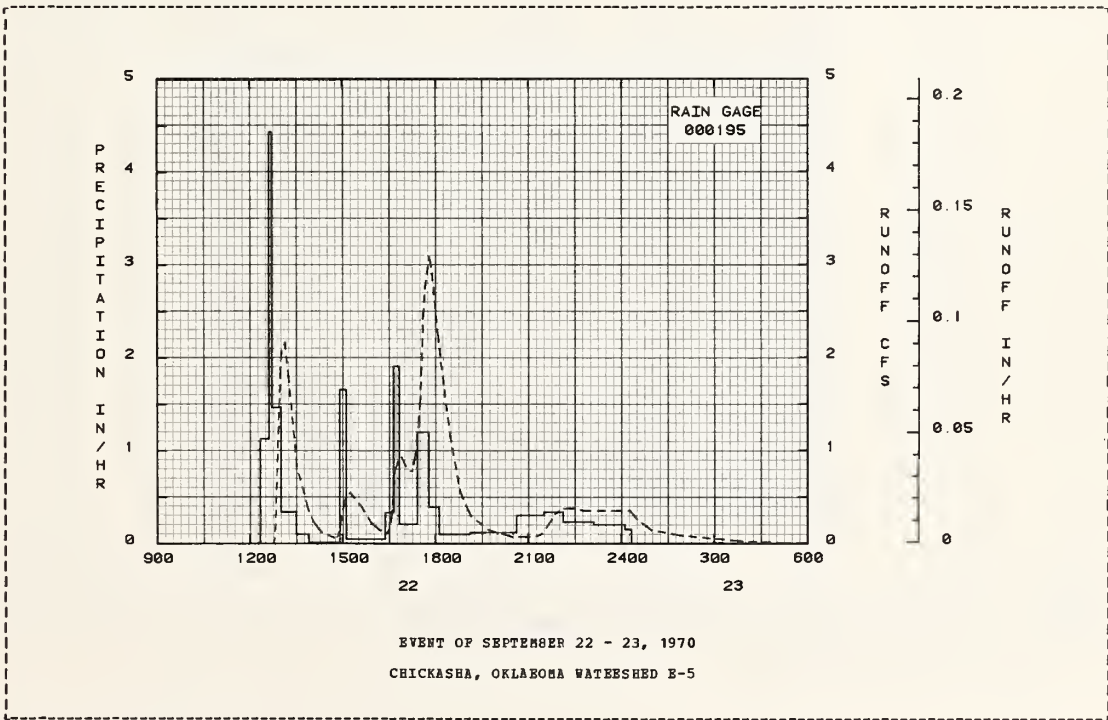
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.003442. STA AV based on 5 yr (1966-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED R-5												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
RG 000195			RG 000195									
9-22	0.0	0.0	9-22	1220	0.0	0.0	9-22	1246	0.0	0.0		
				1237	1.1294	0.32		1248	0.057	0.0		
				1242	4.4400	0.69		1259	1.819	0.0072		
				1300	1.4667	1.13		1301	2.077	0.0101		
				1330	0.3400	1.30		1308	2.168	0.0205		
WATERSHED CONDITIONS:												
100% virgin rangeland.			1354 0.1000 1.34 1316 1.738 0.0314									
Vegetation consisted of tall			1454 0.0100 1.35 1331 0.826 0.0448									
and mid-tall grasses. Area			1507 1.6615 1.71 1354 0.346 0.0542									
subjected to continuous			1623 0.0474 1.77 1405 0.216 0.0564									
grazing, slightly in excess			1639 0.3375 1.86 1419 0.121 0.0581									
of optimum. Range con-												
dition class good to ex-												
cellent.												
30 Day Antecedent Conditions:												
Rainfall Runoff												
Date	(inches)	(inches)										
08-18	1.07	0.000	2037	0.1200	3.18	0.000	1501	0.376	0.0615			
08-19	0.75	0.000	2130	0.3057	3.45	0.000	1505	0.478	0.0627			
08-21	0.02	0.000	2207	0.3405	3.66	0.000	1515	0.554	0.0663			
08-22	0.12	0.000	2307	0.2300	3.89	0.000	1535	0.409	0.0730			
09-02	0.05	0.000	9-23	7	0.2000	4.09	1556	0.216	0.0775			
09-07	0.02	0.000										
09-11	0.07	0.000	19	0.1500	4.12	0.000	1613	0.137	0.0796			
09-13	0.53	0.000										
09-14	0.62	0.000										
09-16	0.34	0.000										
09-17	0.51	0.000										
09-22	0.53	0.000										
			1638 0.515 0.0827									
			1640 0.682 0.0835									
			1641 0.776 0.0840									
			1647 0.878 0.0875									
			1654 0.931 0.0919									
			1702 0.826 0.0968									
			1711 0.776 0.1018									
			1715 0.776 0.1041									
			1718 0.878 0.1057									
			1722 0.987 0.1083									

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.04181. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 195 and 196.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED E-5								
ANTECEDENT CONDITIONS			RAINFALL			HUNOFF					
Date	Rainfall	Rnnoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)											
							9-22	1724	1.105	0.1098	
								1727	1.297	0.1124	
								1730	1.507	0.1154	
								1733	1.903	0.1187	
								1736	2.454	0.1233	
								1740	2.763	0.1305	
								1748	3.094	0.1468	
								1752	2.981	0.1552	
								1806	2.168	0.1804	
								1828	1.167	0.2060	
								1848	0.554	0.2180	
								1909	0.289	0.2242	
								1944	0.137	0.2294	
								2028	0.068	0.2325	
								2044	0.068	0.2333	
								2102	0.068	0.2342	
								2117	0.079	0.2350	
								2127	0.106	0.2357	
								2137	0.194	0.2367	
								2146	0.263	0.2382	
								2152	0.317	0.2394	
								2159	0.386	0.2410	
								2208	0.376	0.2433	
								2227	0.376	0.2483	
								2247	0.346	0.2533	
							9-23	2400	0.346	0.2709	
								17	0.346	0.2750	
								30	0.263	0.2778	
								39	0.216	0.2793	
								58	0.137	0.2816	
								158	0.079	0.2861	
								354	0.020	0.2901	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00181. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 195 and 196.



## CHICKASHA, OKLAHOMA WATERSHED R-6

LOCATION: Grady County, Oklahoma; SW 1/4, sec. 12, T. 7 N., R. 6 W., about 8-1/2 miles east and 3 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.22 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-6															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.12	0.66	2.29	2.65	3.33	1.26	1.03	2.02	7.16	2.98	1.14	0.34	24.98														
	Q	0.0	0.0	0.0	0.017	0.047	0.0	0.0	0.0	0.252	0.028	0.0	0.0	0.344														
STA AV	P	0.92	1.15	2.11	3.13	4.36	2.40	2.84	2.60	4.36	2.00	1.40	0.92	28.17														
	Q	0.0	0.019	0.039	0.282	0.215	0.077	0.050	0.007	0.062	0.007	0.008	0.0	0.766														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days														
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.													
	9-22	0.092	9-22	0.065	9-22	0.099	9-22	0.158	9-22	0.240	9-22	0.252	9-22	0.252	9-22	0.252												
MAXIMUMS FOR PERIOD OF RECORD																												
	4-12	1.066	4-12	0.658	4-12	0.808	4-12	0.879	4-12	0.689	4-12	0.892	4-11	0.589	4-10	1.098												
	1967		1967		1967		1967		1967		1967		1967		1967													

NOTES: Watershed conditions: 100% rangeland, native grass continuously grazed by beef cattle during recent years. Range condition class during the year was good to excellent, however, entire area was slightly overgrazed throughout the year. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, averaged 2,500 pounds of standing grass, 200 pounds of weeds, and 2,700 pounds of mulch. This watershed was in the same pasture area as Watershed R-5, however, was subjected to a slightly lighter grazing rate. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.43-1 and 69.43-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

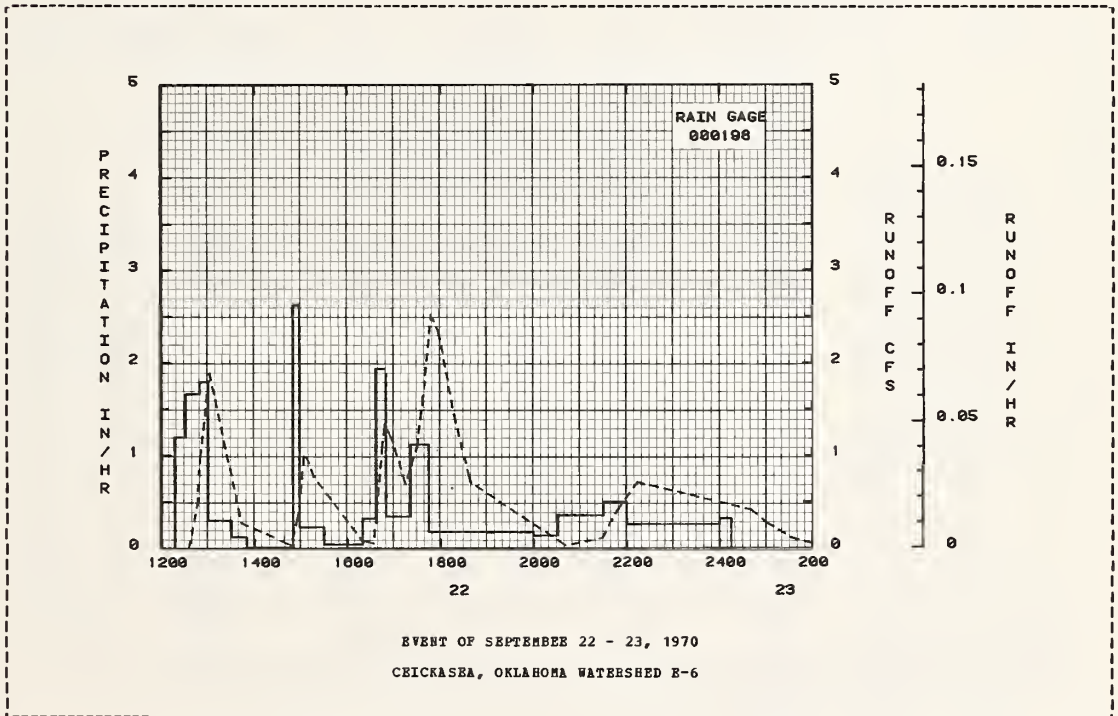
1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-6											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
1	0.0	0.0	0.0	0.16	0.0	0.11	0.0	0.0	0.0	0.02	0.19	0.0												
2	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.05	0.0	0.0	0.0												
3	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0												
4	0.0	0.0	0.0	0.34	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.0												
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07	0.0	0.0												
6	0.0	0.0	0.59	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0												
7	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.02	0.72	0.0	0.0												
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0												
9	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
11	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.08	0.0	0.0	0.0												
12	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0												
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.95	0.0												
14	0.0	0.0	0.0	0.0	1.63	0.0	0.0	0.0	0.67	0.0	0.0	0.0												
15	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.25												
16	0.0	0.0	0.54	0.35	0.0	0.0	0.0	0.0	0.33	0.04	0.0	0.0												
17	0.12	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.50	0.13	0.0	0.0												
18	0.0	0.0	0.04	0.32	0.0	0.0	0.0	1.06	0.0	0.0	0.0	0.0												
19	0.0	0.0	0.15	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0												
20	0.0	0.0	0.0	0.0	0.0	0.10	0.36	0.0	0.0	0.0	0.0	0.0												
21	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.09												
22	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.13	4.83	0.43	0.0	0.0												
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.02	0.0	0.0												
24	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
26	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0												
27	0.0	0.14	0.0	0.0	0.19	0.0	0.02	0.0	0.0	0.0	0.0	0.0												
28	0.0	0.15	0.63	0.0	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0												
29	0.0	0.0	0.0	0.44	1.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
30	0.0	0.0	0.0	0.98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
31	0.0	0.0	0.01	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
TOTAL	0.12	0.66	2.29	2.65	3.33	1.26	1.03	2.02	7.16	2.98	1.14	0.34												
STA AV	0.92	1.15	2.11	3.13	4.36	2.40	2.84	2.60	4.36	2.00	1.40	0.92												

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 196 and 197. STA AV based on 5 yr (1966-70) record period.



1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED E-6							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970										
9-22	EG 000196 0.0	0.0	9-22	EG 000196 1217	0.0	0.0	9-22	1235	0.0	0.0
				1231	1.2000	0.28		1246	0.466	0.0016
				1249	1.6667	0.78		1250	0.987	0.0033
				1300	1.8000	1.11		1302	1.892	0.0138
				1330	0.3000	1.26		1343	0.274	0.0408
				1350	0.1200	1.30		1447	0.027	0.0466
				1450	0.0100	1.31		1457	0.384	0.0479
				1458	2.6250	1.66		1504	0.987	0.0508
				1530	0.2250	1.78		1507	0.987	0.0525
				1620	0.0360	1.81		1517	0.768	0.0579
				1637	0.3177	1.90		1619	0.082	0.0739
				1650	1.9384	2.32		1634	0.055	0.0745
				1722	0.3375	2.50		1646	1.152	0.0789
				1745	1.1217	2.93		1649	1.344	0.0812
				1900	0.1760	3.15		1659	1.152	0.0887
WATERSHED CONDITIONS:										
100% virgin rangeland. Vegetation consisted of tall and mid-tall grasses. Area subjected to continuous grazing, slightly in excess of optimum. Range condition class good to excellent.										
30 Day Antecedent Conditions:										
Date	Rainfall	Runoff								
	(inches)	(inches)								
08-18	1.06	0.000								
08-19	0.81	0.000		2000	0.1700	3.32		1715	0.686	0.0977
08-21	0.02	0.000		2032	0.1313	3.39		1730	1.097	0.1059
08-22	0.13	0.000		2130	0.3517	3.73		1738	1.646	0.1125
09-02	0.05	0.000		2200	0.5000	3.98		1748	2.523	0.1250
09-07	0.02	0.000		2400	0.2550	4.49		1758	2.331	0.1398
09-11	0.08	0.000								
09-13	0.54	0.000								
09-14	0.67	0.000	9-23	15	0.3200	4.57		1818	1.426	0.1626
09-16	0.33	0.000						1839	0.713	0.1763
09-17	0.50	0.000						2041	0.027	0.2037
09-22	0.57	0.000						2129	0.110	0.2057
								2148	0.411	0.2087
								2214	0.713	0.2176
								9-23 41	0.411	0.2678
								101	0.274	0.2719
								133	0.110	0.2757
								159	0.055	0.2770

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03643. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 196 and 197.



## CHICKASHA, OKLAHOMA WATERSHED R-7

LOCATION: Grady County, Oklahoma; NW 1/4, sec. 13, T. 7 N., R. 6 W., about 8 miles east and 2-1/2 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 19.19 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-7		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 0.12	0.68	2.19	2.47	3.10	1.17	1.11	1.91	6.96	2.95	0.98	0.30	23.94		
	Q 0.011	0.0	0.0	0.214	0.422	0.007	0.0	0.055	1.789	0.415	0.005	0.0	2.920		
STA AV	P 0.90	1.04	2.05	2.97	4.11	2.36	2.74	2.59	4.19	1.88	1.30	0.87	26.99		
	Q 0.076	0.082	0.202	0.659	0.735	0.465	0.419	0.138	0.647	0.177	0.147	0.0	3.748		

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	9-22	0.819	9-22	0.504	9-22	0.580	9-22	1.293	9-22	1.730	9-22	1.772	9-21	1.773	9-15	1.774

MAXIMUMS FOR PERIOD OF RECORD																
1969	5-6	2.179	4-12	0.939	6-13	1.143	4-12	1.322	9-22	1.730	9-22	1.772	9-21	1.773	4-9	2.266
1969	1969	1967	1967	1969	1967	1967	1967	1970	1970	1970	1970	1970	1970	1967	1967	1967

NOTES: Watershed conditions: Formerly cultivated from about 1907 until about 1935 when the land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970 based on 25 uniformly spaced clipped samples, averaged 1,400 pounds of standing grass, 200 pounds of weeds, and 1,000 pounds per acre of mulch. Prior to Oct. 1970, this watershed was within the same pasture area as Watershed R-8, however, it was enclosed by separate fence in order to implement an improved management program. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pnh. 1226, pp. 69.44-1 and 69.44-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 193 and 194. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1970	DAILY PRECIPITATION (inches)												CHICKASHA, OKLAHOMA WATERSHED R-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.16	0.0	0.12	0.0	0.0	0.0	0.03	0.17	0.0		
2	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.06	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.27	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0	0.0		
6	0.0	0.0	0.63	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.04	0.73	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.48	0.0	0.0		
9	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.06	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.81	0.0		
14	0.0	0.0	0.0	0.0	1.48	0.0	0.0	0.0	0.66	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.11	0.3	0.0	0.0	0.0	0.0	0.0	0.21		
16	0.0	0.0	0.50	0.36	0.0	0.0	0.0	0.0	0.29	0.04	0.0	0.0		
17	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	0.13	0.0	0.0		
18	0.0	0.0	0.01	0.32	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.11	0.29	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.09		
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.10	4.80	0.43	0.0	0.0		
23	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.02	0.0	0.0		
24	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
27	0.0	0.15	0.0	0.0	0.13	0.0	0.02	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.15	0.57	0.0	0.0	0.0	0.25	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.40	1.26	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.01	0.12	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.12	0.68	2.19	2.47	3.10	1.17	1.11	1.91	6.96	2.95	0.98	0.30		
STA AV	0.90	1.04	2.05	2.97	4.11	2.36	2.74	2.59	4.19	1.88	1.30	0.87		

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 193 and 194. STA AV based on 5 yr (1966-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) CHICKASHA, OKLAHOMA WATERSHED R-7												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.097	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.138	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.093	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.098	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.091	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0
14	0.0	0.0	0.0	0.0	0.179	0.0	0.0	0.0	0.011	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.044	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.365	0.007	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.065	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.155	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0003	0.0	0.0	0.0058	0.0110	0.0002	0.0	0.0014	0.0481	0.0198	0.0001	0.0
INCHES	0.011	0.0	0.0	0.214	0.422	0.007	0.0	0.055	1.789	0.415	0.005	0.0
STA AV	0.076	0.082	0.202	0.659	0.735	0.465	0.419	0.138	0.647	0.177	0.147	0.0

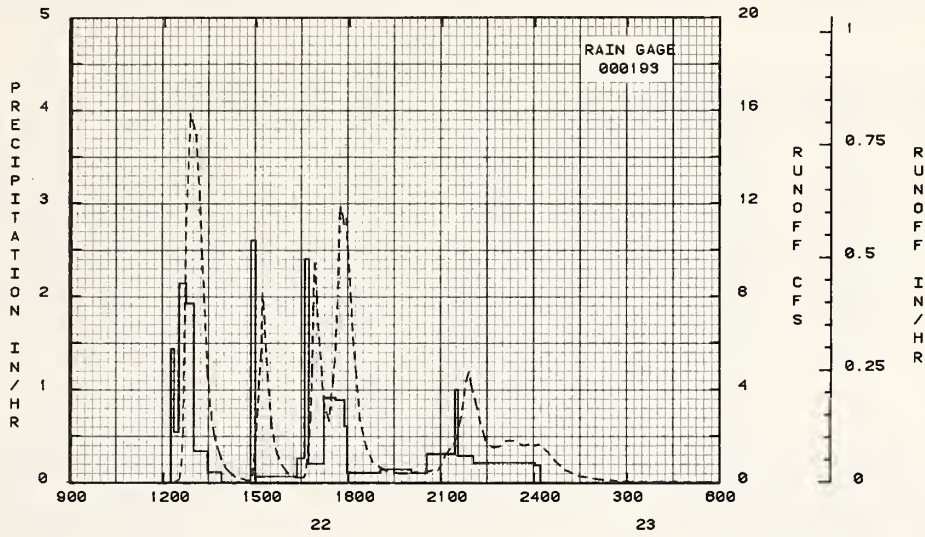
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 1.240315. STA AV based on 5 yr (1966-70) record period.

1970 SELECTED RUNOFF EVENT CHICKASHA, OKLAHOMA WATERSHED R-7											
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date Mo-Day	Rainfall (inches)	Rnoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)	
EVENT OF SEPTEMBER 22 - 23, 1970											
9-22	RG 000193 0.0	0.002	9-22	RG 000193	0.0	0.0	9-22	1218	0.0	0.0	
				1215	1.4400	0.12		1223	0.020	0.0	
				1230	0.5400	0.21		1225	0.057	0.0001	
				1244	2.1429	0.71		1227	0.091	0.0002	
				1259	1.9200	1.19		1231	0.120	0.0006	
WATERSHED CONDITIONS:				1326	0.3333	1.34		1235	0.721	0.0020	
100% rangeland, formerly cultivated but returned to range use during the 1930-40 period after severe erosion. Grass cover primarily annual three-awn and little bluestem with a large percent of bare ground between bluestem bunches. Area subjected to continuous grazing. Range condition class was poor.				1353	0.1111	1.39		1238	2.334	0.0060	
30 Day Antecedent Conditions:				1450	0.0	1.39		1243	11.090	0.0344	
Date	Rainfall (inches)	Runoff (inches)		1459	2.6000	1.78		1251	15.860	0.1268	
08-18	1.02	0.005		1620	0.0593	1.86		1259	15.240	0.2335	
08-19	0.75	0.054		1634	0.2571	1.92		1302	14.940	0.2731	
08-21	0.04	0.000		1642	2.4000	2.24		1310	12.120	0.3659	
08-22	0.10	0.000		1712	0.2000	2.34		1314	9.880	0.4036	
09-02	0.06	0.000		1735	0.9130	2.69		1319	7.718	0.4427	
09-07	0.04	0.000	9-23	1752	0.8824	2.94		1325	4.764	0.4742	
09-11	0.06	0.000		1757	0.5999	2.99		1332	2.954	0.4976	
09-13	0.50	0.000		1902	0.1015	3.10		1341	1.802	0.5158	
09-14	0.66	0.000		2002	0.1490	3.24		1353	0.978	0.5304	
09-16	0.29	0.000		2032	0.1000	3.29		1403	0.549	0.5369	
09-17	0.45	0.002		2126	0.3111	3.57		1419	0.236	0.5424	
09-22	0.66	0.002						1446	0.047	0.5457	
								1453	0.286	0.5467	
								1459	1.643	0.5516	
								1510	5.707	0.5865	
								1512	8.124	0.5991	
								1514	7.718	0.6119	
								1523	4.331	0.6593	
								1531	2.334	0.6822	
								1540	1.284	0.6961	
								1551	0.721	0.7056	
								1603	0.373	0.7112	
								1618	0.192	0.7148	
								1629	0.192	0.7166	
								1632	0.192	0.7171	
								1636	0.342	0.7180	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.05168. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 193 and 194.

1970 SELECTED RUNOFF EVENT			CRICKASRA, OKLAHOMA WATERSHED R-7							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF SEPTEMBER 22 - 23, 1970 (CONTINUED)										
							9-22	1639	0.978	0.7197
								1643	1.970	0.7248
								1646	2.737	0.7310
								1649	5.067	0.7412
								1651	7.718	0.7515
								1653	9.421	0.7671
								1658	7.718	0.8034
								1703	5.875	0.8322
								1708	4.617	0.8555
								1710	3.665	0.8622
								1713	3.297	0.8713
								1722	2.633	0.8940
								1729	4.331	0.9151
								1733	5.381	0.9318
								1738	7.718	0.9609
								1741	11.340	0.9840
								1744	11.850	1.0144
								1750	11.090	1.0746
								1754	11.340	1.1131
								1759	9.649	1.1576
								1804	7.718	1.1961
								1809	5.875	1.2249
								1815	4.472	1.2520
								1822	2.633	1.2728
								1835	1.421	1.2957
								1847	0.869	1.3075
								1902	0.631	1.3172
								1915	0.473	1.3234
								1939	0.373	1.3321
								1954	0.373	1.3369
								2007	0.438	1.3414
								2015	0.438	1.3445
								2029	0.438	1.3497
								2041	0.510	1.3546
								2054	0.510	1.3604
								2109	1.219	1.3716
								2116	1.421	1.3796
								2126	1.721	1.3929
								2139	2.844	1.4187
								2148	4.331	1.4462
								2153	4.764	1.4664
								2158	4.192	1.4854
								2207	3.417	1.5146
								2216	2.531	1.5380
								2226	1.802	1.5564
								2239	1.493	1.5750
								2254	1.567	1.5948
								2306	1.802	1.6121
								2320	1.802	1.6339
								2339	1.567	1.6614
								2349	1.643	1.6753
								2400	1.567	1.6905
							9-23	9	1.643	1.7028
								21	1.421	1.7186
								41	0.922	1.7387
								101	0.510	1.7511
								128	0.260	1.7600
								214	0.091	1.7669

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.05168. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 193 and 194.



EVENT OF SEPTEMBER 22 - 23, 1970  
CHICKASHA, OKLAHOMA WATERSHED R-7

## CRICKASHA, OKLAHOMA WATERSHED R-8

LOCATION: Grady County, Oklahoma; NW 1/4 sec. 13, T. 7 N., R. 6 W., about 8-1/2 miles east and 2-1/2 miles north of Chickasha, Oklahoma; Washita River Basin.

AREA: 27.55 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													CHICKASHA, OKLAHOMA WATERSHED R-8
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 0.14	0.66	2.30	2.37	3.20	1.21	0.99	2.02	7.07	2.85	1.05	0.30	24.16
	Q 0.0	0.0	0.0	0.058	0.265	0.003	0.0	0.042	1.393	0.245	0.001	0.0	2.007
STA AV	P 0.92	1.16	2.14	2.96	4.36	2.40	2.78	2.57	4.29	1.89	1.34	0.91	27.71
	Q 0.020	0.046	0.088	0.385	0.533	0.302	0.266	0.064	0.414	0.094	0.056	0.001	2.270

ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Date	Maximim Discharge	Maximum Volume for Selected Time Interval												
		1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days						
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	9-22	0.614	9-22	0.335	9-22	0.434	9-22	0.944	9-22	1.325	9-22	1.359	9-22	1.359

MAXIMIMS FOR PERIOD OF RECORD													
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
5-6	1.828	5-6	0.724	4-12	0.840	4-12	0.957	9-22	1.325	9-22	1.359	9-22	1.359
1969		1969		1967		1967		1970		1970		1970	1967

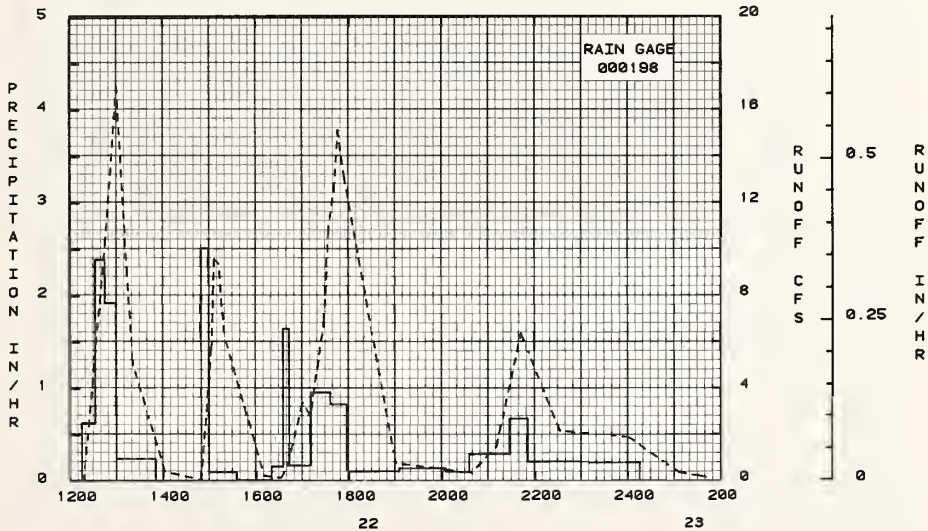
NOTES: Watershed conditions: Formerly cultivated from about 1907, when land use was changed to pasture because of severe erosion. Range condition class during the year was poor to fair. The vegetative cover in mid-Nov. 1970, based on 25 uniformly spaced clipped samples, average 1,400 pounds of standing grass, 100 pounds of weeds, and 1,200 pounds per acre of mulch. For general description and map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1966, USDA Misc. Pub. 1226, pp. 69.45-1 and 69.45-3. Monthly precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. Precipitation and runoff records began July 1, 1966. STA AV based on 5 yr (1966-70) record period. For long-time precipitation records, see National Weather Service records at Chickasha, Oklahoma.

1970 DAILY PRECIPITATION (inches)													CHICKASHA, OKLAHOMA WATERSHED R-8
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.16	0.0	0.13	0.0	0.0	0.0	0.02	0.16	0.0	
2	0.0	0.0	0.01	0.0	0.0	0.03	0.0	0.0	0.05	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.68	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.30	0.0	0.21	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.01	0.0	0.0	
6	0.0	0.0	0.60	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.28	0.0	0.0	0.0	0.0	0.0	0.03	0.72	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.08	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.89	0.0	
14	0.0	0.0	0.0	0.0	1.61	0.0	0.0	0.0	0.77	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.21	
16	0.0	0.0	0.55	0.32	0.0	0.0	0.0	0.0	0.32	0.04	0.0	0.0	
17	0.13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.14	0.0	0.0	
18	0.01	0.0	0.02	0.23	0.0	0.0	0.0	1.03	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.10	0.31	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.09	
22	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.13	4.76	0.41	0.0	0.0	
23	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.01	0.0	0.0	
24	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	
27	0.0	0.13	0.0	0.0	0.17	0.0	0.01	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.16	0.60	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.42	1.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.01	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.14	0.66	2.30	2.37	3.20	1.21	0.99	2.02	7.07	2.85	1.05	0.30	
STA AV	0.92	1.16	2.14	2.96	4.36	2.40	2.78	2.57	4.29	1.89	1.34	0.91	

NOTES: Precipitation obtained from Thiessen weighted rainfall values from two gages, Nos. 197 and 198. STA AV based on 5 yr (1966-70) record period.

1970 SELECTED RUNOFF EVENT			CHICKASHA, OKLAHOMA WATERSHED H-8									
ANTECEDENT CONDITIONS			RAINFALL						RUNOFF			
Date Mo-Day	Rainfall (inches)	Ennoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)		
EVENT OF SEPTEMBER 22 - 23, 1970												
9-22	RG 000198 0.0	0.0	9-22	RG 000198 1215	0.0	0.0	9-22	1217	0.0	0.0		
				1232	0.6353	0.18		1246	10.556	0.0920		
				1245	2.4000	0.70		1300	17.057	0.2085		
				1259	1.9286	1.15		1313	9.167	0.3099		
				1350	0.2471	1.36		1321	5.056	0.3439		
<b>WATERSHED CONDITIONS:</b> 100% rangeland, formerly cultivated but returned to range use during the 1930-40 period after severe erosion. Grass cover primarily annual three-awn and little bluestem with a large percent of bare ground between bluestem bunches. Area subjected to continuous grazing. Range condition class was poor.												
30 Day Antecedent Conditions:			2005	0.1400	3.15	1710	2.834	0.6742				
Date	Rainfall	Ennoff	2035	0.1000	3.20	1728	6.917	0.7270				
08-18	1.03	0.005	2127	0.2885	3.45	1734	11.028	0.7598				
08-19	0.83	0.036	2150	0.6783	3.71	1741	12.584	0.8080				
08-21	0.02	0.000	2305	0.2080	3.97	1746	15.168	0.8509				
08-22	0.13	0.000										
09-02	0.05	0.000	9-23	15	0.1971	4.20	1754	13.140	0.9185			
09-07	0.03	0.000					1900	0.778	1.1945			
09-11	0.08	0.000					2014	0.444	1.2216			
09-13	0.51	0.000					2038	0.361	1.2274			
09-14	0.77	0.030					2110	1.500	1.2452			
09-16	0.32	0.000										
09-17	0.44	0.003					2142	6.362	1.3209			
09-22	0.70	0.007					2232	2.139	1.4482			
							2400	1.889	1.5547			
							9-23	105	0.361	1.5985		
								140	0.139	1.6038		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.03600. Antecedent precipitation amounts are from Thiessen weighted rainfall using rain gages 197 and 198.



EVENT OF SEPTEMBER 22 - 23, 1970  
CHICKASHA, OKLAHOMA WATERSHED H-8

SONORA, TEXAS WATERSHED W-14

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowery Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 30720.00 acres 48.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-14			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P	0.31	2.00	1.24	1.55	2.45	2.61	0.01	2.25	2.90	1.04	0.0	0.0	16.35		
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
STA AV	P	0.76	1.30	0.96	2.65	3.08	1.64	1.43	1.49	3.94	1.83	1.44	0.76	21.27		
	Q	0.0	0.0	0.0	0.0	0.013	0.0	0.0	0.0	0.093	0.008	0.0	0.0	0.115		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0
MAXIMUMS FOR PERIOD OF RECORD																
	9-23	0.060	9-23	0.060	9-23	0.120	9-23	0.220	9-23	0.270	9-23	0.380	9-23	0.610	9-21	0.800
	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964

NOTES: Watershed conditions: 0.4% caliche and paved roads; 0.3% urban area; 0.3% cropland; 99.0% rangeland. Cropland seeded to oats in fall for winter grazing. Rangeland moderately to severely overgrazed during the year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.1-7. Precipitation data by Thiessen method using rain gages 1, 1-A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY AIR TEMPERATURE (degrees F)													SONORA, TEXAS WATERSHED W-14											
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min
1	54	26	68	32	72	55	76	50	73	44	89	61	89	68	97	70	86	68	79	59	76	42	79	50
2	51	32	59	34	73	58	67	25	67	46	77	49	89	68	97	70	89	69	79	58	59	35	77	49
3	47	25	54	17	72	52	70	36	72	41	80	46	90	63	96	70	92	72	81	56	58	30	75	57
4	47	26	60	34	68	49	69	43	78	44	80	47	95	61	94	71	92	73	79	59	57	31	75	45
5	49	38	59	39	68	39	68	30	79	45	85	51	95	64	93	70	92	69	81	64	64	30	74	49
6	33	17	67	45	67	49	75	34	78	48	86	58	95	62	94	68	91	72	85	66	74	37	69	30
7	39	9	65	47	67	42	75	40	79	55	87	58	95	68	96	70	91	72	87	67	81	42	66	37
8	44	19	63	46	66	30	79	54	87	59	85	59	92	68	97	69	92	68	86	51	80	55	69	50
9	43	29	59	33	76	43	78	59	88	61	84	66	93	68	101	70	92	67	66	37	74	38	73	47
10	50	34	59	30	75	35	73	51	89	65	86	68	93	64	101	69	92	64	71	43	72	40	71	53
11	62	32	72	38	77	30	83	50	90	69	95	72	93	67	100	72	92	67	81	58	69	39	66	35
12	65	29	71	34	44	27	82	51	84	68	96	73	95	67	97	68	90	67	81	52	68	35	58	27
13	63	33	72	45	59	21	81	50	85	68	92	71	95	69	99	67	89	71	81	48	67	51	57	42
14	46	36	72	50	68	32	73	55	80	60	92	73	90	66	99	72	86	70	80	55	51	39	52	35
15	50	33	72	43	71	39	82	62	67	53	93	71	87	63	93	68	86	69	77	55	54	26	68	47
16	58	41	63	28	70	53	83	61	76	45	97	68	89	66	95	70	90	65	56	46	65	30	65	37
17	63	34	72	33	70	34	82	64	82	50	95	65	91	63	95	69	90	68	58	48	73	38	69	36
18	61	23	83	38	71	48	77	61	82	52	93	64	93	67	99	72	87	68	58	48	70	37	73	49
19	53	21	83	36	67	39	75	53	83	54	93	65	95	66	98	71	86	66	65	49	72	42	71	47
20	65	29	43	37	46	34	85	51	85	59	92	56	96	67	97	73	89	68	73	47	71	37	58	43
21	75	27	51	35	54	29	85	49	83	56	92	64	96	65	96	74	89	69	74	55	71	47	72	57
22	46	30	50	42	67	34	86	64	82	62	85	64	92	68	99	74	87	73	80	58	73	46	76	55
23	69	35	55	49	70	37	85	69	83	63	86	66	90	67	99	68	87	53	79	65	60	24	75	41
24	68	38	60	50	75	45	77	61	81	58	90	69	92	69	91	65	81	58	80	43	48	20	64	23
25	77	32	53	42	75	45	80	63	83	62	96	67	92	64	94	65	84	68	83	54	65	35	62	35
26	76	42	61	50	60	29	86	60	84	66	97	69	93	68	94	63	84	51	83	63	75	43	62	27
27	72	44	58	42	63	37	89	68	87	58	97	65	94	71	95	62	54	50	81	57	74	48	70	37
28	78	56	65	51	62	34	90	68	87	56	87	63	93	72	93	60	60	48	63	34	72	51	75	46
29	77	38			65	28	91	65	85	68	85	69	93	70	92	62	76	55	65	32	69	53	72	47
30	66	20			75	45	77	49	87	67	88	72	95	70	89	67	79	55	72	36	72	53	69	43
31	59	33			77	51			87	59			97	71	86	66			78	42			65	30
AV.	58	31	63	39	66	39	79	53	82	57	89	64	93	67	96	69	86	65	76	52	68	39	69	42
MEAN	44.7		51.3		52.7		66.3		69.3		76.5		79.7		82.2		75.5		63.7		53.5		55.4	
STA AV	59	32	60	35	69	42	79	53	83	59	89	65	93	67	93	67	85	62	78	52	69	43	61	35

NOTES: Temperature data taken daily with maximum and minimum thermometers. Readings were taken at 1630 of the day shown. STA AV based on 7 yr record period.



1970		DAILY PRECIPITATION (inches)										SONORA, TEXAS WATERSHED W-14	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.25	0.0	0.0	0.0	0.01E	0.0	0.0	0.01E	0.0	0.0	0.0	
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	
3	0.0	0.0	0.01E	0.0	0.0	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18E	0.0	0.0	
6	0.0	0.01E	0.32E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0	
13	0.13E	0.0	0.0	0.0	0.42	0.0	0.0	0.0	0.33E	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.88	0.0	0.0	0.03E	0.17E	0.0	0.0	0.0	
15	0.06E	0.0	0.0	0.0	0.26	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	
18	0.0 S	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.01E	0.54	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.43E	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.07E	0.0	0.0	1.19	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.06E	0.62	0.0	0.0	0.03E	1.30	0.0	1.01	0.38E	0.0	0.0	0.0	
23	0.0	0.18E	0.0	0.0	0.51E	0.0	0.0	0.0	0.00	0.11E	0.0	0.0	
24	0.0	0.85	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.07E	0.07E	0.0	0.0	0.0	1.60	0.01E	0.0	0.0	
27	0.0	0.08E	0.0	0.0	0.10E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.00E	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	1.17	0.08E	0.0	0.0	0.58E	0.0	0.0	0.0	0.0	
31	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	
TOTAL	0.31	2.00	1.24	1.55	2.45	2.61	0.01	2.25	2.90	1.04	0.0	0.0	
STA AV	0.76	1.30	0.96	2.65	3.08	1.64	1.43	1.49	3.94	1.83	1.44	0.76	

NOTES: Precipitation values are Thiessen weighted average of rain gages 1, 1-A, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED S-9

LOCATION: Sutton County, Texas; gaging station on Water Street at Sonora city limit; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 1774.00 acres 2.77 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-9	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.28	2.01	1.37	1.72	4.10	3.66	0.0	2.43	3.10	0.90	0.0	0.0	19.55
	Q	0.0	0.000	0.0	0.0	0.004	0.040	0.0	0.001	0.0	0.0	0.0	0.0	0.045
STA AV	P	0.75	1.30	1.00	2.39	3.02	1.84	1.35	1.35	4.16	1.75	1.27	0.79	20.96
	Q	0.0	0.000	0.001	0.001	0.008	0.018	0.0	0.000	0.300	0.002	0.0	0.004	0.333

ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Discharge Rate	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	6-22	0.027	6-22	0.014	6-22	0.017	6-22	0.021	6-22	0.039	6-21	0.039	6-21	0.040	6-21	0.040

MAXIMUMS FOR PERIOD OF RECORD															
Date	Discharge Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
9-23 1964	1.190	9-23 1964	0.570	9-23 1964	0.800	9-23 1964	1.040	9-23 1964	1.070	9-23 1964	1.270	9-22 1964	1.450	9-19 1964	2.680

NOTES: Watershed conditions: 0.3% caliche roads; 99.7% rangeland. Rangeland fair condition to moderately overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.2-5. Precipitation data by Thiessen method using rain gages 1 and 1-A. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970	DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED S-9	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.24	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0
3	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28E	0.0	0.0	0.0	0.0
6	0.0	0.05E	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0
13	0.09E	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	2.08	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0
15	0.07E	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0 S	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.07E	0.0	0.0	1.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.05E	0.58	0.0	0.0	0.0	1.69	0.0	1.28	0.51	0.0	0.0	0.0	0.0	0.0
23	0.0	0.20	0.0	0.0	0.93	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0
24	0.0	0.85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.07E	0.20E	0.0	0.0	0.0	1.58	0.0	0.0	0.0	0.0	0.0
27	0.0	0.09E	0.0	0.0	0.11E	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.01E	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	1.34	0.07E	0.0	0.0	0.38E	0.0	0.0	0.0	0.0	0.0	0.0
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.28	2.01	1.37	1.72	4.10	3.66	0.0	2.43	3.10	0.90	0.0	0.0	0.0	19.55
STA AV	0.75	1.30	1.00	2.39	3.02	1.84	1.35	1.35	4.16	1.75	1.27	0.79	0.004	0.333

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14 (70.001). Precipitation values are Thiessen weighted average of rain gages 1 and 1-A. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)										SONORA, TEXAS WATERSHED S-9	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.259	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.045	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.062	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	2.911	0.0	0.042	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0007	0.0	0.0	0.0098	0.0991	0.0	0.0014	0.0	0.0	0.0	0.0	
INCHES	0.0	0.0000	0.0	0.0	0.0004	0.0040	0.0	0.001	0.0	0.0	0.0	0.0	
STA AV	0.0	0.000	0.001	0.001	0.008	0.018	0.0	0.000	0.300	0.002	0.0	0.004	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.013417. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

## SONORA, TEXAS WATERSHED S-10

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 6 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 5392.00 acres 8.42 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-10	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.28	2.14	1.21	1.47	3.13	3.22	0.04	2.08	2.84	0.92	0.0	0.0	17.53
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	P	0.76	1.29	0.96	2.50	3.00	1.83	1.23	1.41	3.95	1.68	1.40	0.76	20.78
	Q	0.0	0.0	0.0	0.0	0.028	0.015	0.0	0.0	0.213	0.012	0.0	0.006	0.272

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge			Maximum Volume for Selected Time Interval											
Date	Rate	1 Hour Date Vcl.	2 Hours Date Vcl.	6 Hours Date Vcl.	12 Hours Date Vcl.	1 Day Date Vcl.	2 Days Date Vcl.	6 Days Date Vcl.						
1970	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	1 Hour Date Vcl.	2 Hours Date Vcl.	6 Hours Date Vcl.	12 Hours Date Vcl.	1 Day Date Vcl.	2 Days Date Vcl.	6 Days Date Vcl.							
9-23 1964	0.81D	9-23 1964	0.720	9-23 1964	0.950	9-23 1964	1.110	9-23 1964	1.150	9-23 1964	1.230	9-23 1964	1.520	9-19 1964	1.930

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.3-b. Thiessen weighted rainfall using rain gages 1, 1-A, 2, 4, 5, 6, and 7. Precipitation and runoff records began May 1961; part-year amounts not included in averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation &c. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-10	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.25	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0	0.0
3	0.0	0.0	0.00E	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0
6	0.0	0.06E	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0
13	0.12E	0.0	0.0	0.0	0.29	0.0	0.0	0.0	0.32E	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	1.54	0.0	0.0	0.0DE	0.13E	0.0	0.0	0.0	0.0	0.0
15	0.05E	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0 S	0.0	0.0	0.30E	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.08E	0.0	0.0	1.43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.05E	0.55	0.0	0.0	0.02E	1.71	0.0	0.99	0.33	0.0	0.0	0.0	0.0	0.0
23	0.0	0.13	0.0	0.0	0.52	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0
24	0.0	1.02	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.07E	0.10E	0.0	0.0	0.0	1.52	0.0	0.0	0.0	0.0	0.0
27	0.0	0.07E	0.0	0.0	0.11E	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.00E	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.98	0.08E	0.0	0.0	0.51E	0.0	0.0	0.0	0.0	0.0	0.0
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.28	2.14	1.21	1.47	3.13	3.22	0.04	2.08	2.84	0.92	0.0	0.0	0.0	0.0
STA AV	0.76	1.29	0.96	2.50	3.00	1.83	1.23	1.41	3.95	1.68	1.40	0.76	0.76	20.78

NOTES: For daily air temperatures, in the vicinity, see table for watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 1, 1-A, 2, 4, 5, 6, and 7. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED S-11

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 4 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10787.00 acres 16.85 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-11
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P 0.29	2.02	1.22	1.54	2.87	2.89	0.0	2.03	2.53	0.96	0.0	0.0	16.35
	Q 0.0	0.0	0.0	0.001	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.0	0.032
ST& AV	P 0.78	1.28	0.92	2.69	3.26	1.74	1.55	1.48	3.90	1.65	1.40	0.77	21.40
	Q 0.0	0.0	0.0	0.022	0.108	0.010	0.0	0.0	0.148	0.049	0.001	0.009	0.347

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	6-22	0.023	6-22	0.014	6-22	0.020	6-22	0.028	6-22	0.028	6-21	0.028	6-21	0.030
	9-23	0.390	9-23	0.310	9-23	0.550	9-23	0.770	9-23	0.780	9-23	0.780	9-23	0.910
	1964		1964		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Caliche roads - 0.4%; rangeland - 99.6%. Range condition poor to fair; moderately to severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pnb. 1262, p. 70.4-8. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-11
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	
6	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.10R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.04R	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.05R	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	
13	0.12E	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	1.28	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	
15	0.04E	0.0	0.0	0.0	0.45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.14E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0 S	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.63	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.09E	0.0	0.0	0.78	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.06E	0.51	0.0	0.0	0.0	2.05	0.0	1.03	0.29	0.0	0.0	0.0	
23	0.0	0.18	0.0	0.0	0.39	0.0	0.0	0.0	0.0	0.08E	0.0	0.0	
24	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.10E	0.13E	0.0	0.0	0.0	1.45	0.0	0.0	0.0	
27	0.0	0.07E	0.0	0.0	0.12E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.95	0.06E	0.0	0.0	0.48	0.0	0.0	0.0	0.0	
31	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.29	2.02	1.22	1.54	2.87	2.89	0.0	2.03	2.53	0.96	0.0	0.0	
ST& AV	0.78	1.28	0.92	2.69	3.26	1.74	1.55	1.48	3.90	1.65	1.40	0.77	

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 5, 6, 7, 8, 9, 10, and 11. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)										SONORA, TEXAS WATERSHED S-11	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.857	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	12.863	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.623	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0208	0.0	0.8573	0.0	0.0	0.0	0.0	0.0	0.0	
INCHES	0.0	0.0	0.0	0.001	0.0	0.030	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	0.0	0.0	0.0	0.022	0.108	0.010	0.0	0.0	0.148	0.049	0.001	0.009	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.002206. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

## SONORA, TEXAS WATERSHED S-12

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 2 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 2801.00 acres 4.38 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED S-12	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.32	1.70	1.15	1.45	1.67	1.99	0.0	2.05	2.57	1.15	0.0	0.0	14.07	
	Q 0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.012	
STA AV	P 0.74	1.26	0.88	2.82	3.20	1.41	1.69	1.45	3.72	1.87	1.39	0.72	21.14	
	Q 0.0	0.0	0.0	0.065	0.211	0.001	0.013	0.0	0.180	0.092	0.0	0.029	0.592	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	6-22	0.017	6-22	0.005	6-22	0.006	6-22	0.011	6-22	0.012	6-22	0.012	6-22	0.012	6-22	0.012
MAXIMUMS FOR PERIOD OF RECORD																
	9-23	1.200	9-23	0.790	9-23	1.900	9-23	1.080	9-23	1.090	9-23	1.090	9-23	1.150	9-19	1.620
	1964		1964		1964		1964		1964		1964		1964		1964	

NOTES: Watershed conditions: Paved roads - 0.2% of the area; rangeland - 99.8%. Range conditions poor to fair, with moderate to severe overgrazing during a year depending on climatic conditions and stocking rates. For map of watershed see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.5-7. Thiessen weighted rainfall using rain gages 8, 10, 11, 12, and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, approximately 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED S-12	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.26	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0		
6	0.0	0.0	0.32E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.26E	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
13	0.14E	0.0	0.0	0.0	0.47	0.0	0.0	0.0	0.31	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.17	0.0	0.0	0.0		
15	0.05E	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.21E	0.0	0.0	0.0	0.0	0.03E	0.51	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29E	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.06E	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.07E	0.59	0.0	0.0	0.0	0.85	0.0	1.08	0.37E	0.0	0.0	0.0		
23	0.0	0.14	0.0	0.0	0.56	0.0	0.0	0.0	0.01	0.12E	0.0	0.0		
24	0.0	0.63	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.05E	0.03E	0.0	0.0	0.0	1.44	0.03E	0.0	0.0		
27	0.0	0.09E	0.0	0.0	0.09E	0.0	0.0	0.0	0.06E	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	1.08	0.08E	0.0	0.0	0.0	0.56	0.0	0.0	0.0	0.0		
31	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.00E	0.0	0.0	0.0	0.0		
TOTAL	0.32	1.70	1.15	1.45	1.67	1.99	0.0	2.05	2.57	1.15	0.0	0.0		
STA AV	0.74	1.26	0.88	2.82	3.20	1.41	1.69	1.45	3.72	1.87	1.39	0.72		

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation values are Thiessen weighted average of rain gages 8, 10, 11, 12, and 13. Records began May 1961, part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970												
MEAN DAILY DISCHARGE (cfs)						SONGBA, TEXAS WATERSHED S-12						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	1.266	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0457	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.0	0.065	0.211	0.091	0.013	0.0	0.180	0.092	0.0	0.029

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.008498. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.



## SONORA, TEXAS WATERSHED S-13

LOCATION: Sutton County, Texas; gaging station on flood detention reservoir, 0.5 mi. SE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 686.00 acres 1.07 sq. miles

SONORA, TEXAS WATERSHED S-13																		
MONTHLY PRECIPITATION AND RUNOFF (inches)																		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual					
1970	P	0.35	1.57	1.08	1.40	1.47	1.74	0.0	0.95	2.75	1.52	0.0	0.0	12.82				
	Q	0.0	0.0	0.0	0.000	0.0	0.000	0.0	0.0	0.001	0.0	0.0	0.0	0.001				
STA AV	P	0.80	1.34	0.89	2.81	2.98	1.41	1.37	1.24	3.43	1.88	1.40	0.73	20.29				
	Q	0.0	0.0	0.001	0.081	0.083	0.000	0.001	0.0	0.107	0.071	0.0	0.008	0.351				
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																		
1970	Maximum Discharge Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	Maximum Volume for Selected Time Interval		6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.
	9-23	0.006	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-23	0.001	9-17	0.001
MAXIMUMS FOR PERIOD OF RECORD																		
9-23	0.770	9-23	0.460	9-23	0.600	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680	9-23	0.680	9-19	0.850	1964
1964		1964		1964		1964		1964		1964		1964		1964		1964		1964

NOTES: Watershed conditions: Paved roads - 1.5% of the area, rangeland - 98.5%. Range in poor to fair condition, severely overgrazed during a year depending on climatic conditions and stocking rates. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.6-7. Precipitation data by Thiessen method using rain gages 12 and 13. Precipitation and runoff records began May 1961; part-year amounts not included in averages. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

SONORA, TEXAS WATERSHED S-13													
DAILY PRECIPITATION (inches)													
1970	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0
	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0	0.0
	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08E	0.0	0.0
	6	0.0	0.0	0.22E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	7	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	8	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0
	9	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	11	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.73	0.0	0.0
	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0
	13	0.13E	0.0	0.0	0.0	0.39	0.0	0.0	0.0	0.32	0.0	0.0	0.0
	14	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.16	0.0	0.0	0.0
	15	0.08E	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	16	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18	0.0 S	0.0	0.0	0.27E	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0
	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22E	0.0	0.0	0.0	0.0
	20	0.0	0.0	0.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	21	0.0	0.0	0.36E	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0
	22	0.09E	0.64	0.0	0.0	0.0	0.83	0.0	0.32	0.97	0.0	0.0	0.0
	23	0.0	0.13	0.0	0.0	0.57	0.0	0.0	0.0	0.00	0.18E	0.0	0.0
	24	0.0	0.45	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0
	26	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0
	27	0.0	0.11E	0.0	0.0	0.10E	0.0	0.0	0.0	0.17E	0.0	0.0	0.0
	28	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29	0.0	0.0	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0
	30	0.0	0.0	0.0	1.00	0.07E	0.0	0.0	0.33	0.0	0.0	0.0	0.0
	31	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0
TOTAL		0.35	1.57	1.08	1.40	1.47	1.74	0.0	0.95	2.75	1.52	0.0	0.0
STA AV		0.80	1.34	0.89	2.81	2.98	1.41	1.37	1.24	3.43	1.88	1.40	0.73

NOTES: For daily air temperatures, in the vicinity, see table for W-14 p. 70.001. Precipitation values are Thiessen weighted average of rain gages 12 and 13. Records began May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period. Estimate codes may indicate that non-significant event totals are included.

1970		MEAN DAILY DISCHARGE (cfs)										SONORA, TEXAS WATERSHED S-13	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.081	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0		0.0	0.015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0		0.0		0.0		0.0	0.0		0.0		0.0	
MEAN	0.0	0.0	0.0	0.0005	0.0	0.0016	0.0	0.0	0.0027	0.0	0.0	0.0	
INCRS	0.0	0.0	0.0	0.000	0.0	0.000	0.0	0.0	0.001	0.0	0.0	0.0	
STA AV	0.0	0.0	0.001	0.081	0.083	0.000	0.001	0.0	0.107	0.071	0.0	0.008	

NOTES: To convert mean daily discharge in CFS to IN/LAY, multiply by 0.034696. Records began in May 1961; part-year amounts not included in averages. STA AV based on 9 yr record period.

## SONORA, TEXAS WATERSHED W-1

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 10.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-1															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual															
1970	P	0.25	1.83	1.09	0.89	4.66	1.63	0.0	2.59	4.08	1.01	0.0	0.0	18.03														
	Q	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
STA AV	P	1.18	1.62	0.82	2.72	2.88	2.08	2.10	2.22	3.87	2.03	1.26	0.57	23.35														
	Q	0.097	0.004	0.0	0.224	0.137	0.065	0.014	0.034	0.225	0.143	0.001	0.0	0.945														
ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days													
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.												
1970	3-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0												
MAXIMUMS FOR PERIOD OF RECORD																												
	4-30	1.680	4-30	0.990	4-30	1.130	4-30	1.280	4-30	1.300	4-30	1.300	4-29	1.490	9-21	1.570												
	1966		1966		1966		1966		1966		1966		1966		1964													

NOTES: Watershed conditions: 100% rangeland; root plowed for brush control, August 1970; fair level of management; stocking rate, 30-35 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.7-7. Precipitation data from rain gage 15. Precipitation and runoff records began October 1963; part-year amounts not included in station averages. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14. Watershed is on substation property.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0													
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
6	0.0	0.40	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0													
9	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.22E	0.0	0.30	0.0	0.0	0.0	0.0													
11	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0													
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0													
13	0.13E	0.0	0.0	0.0	1.49	0.0	0.0	0.0	1.22	0.0	0.0	0.0													
14	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
16	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	0.0	0.0	0.0													
18	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0													
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	0.0													
20	0.0	0.06E	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.02E	0.0	0.0	0.73	0.0	0.0	0.06E	0.0	0.0	0.0													
22	0.0	0.75	0.0	0.0	0.35	0.43	0.0	0.24	0.68	0.0	0.0	0.0													
23	0.0	0.23	0.0	0.0	0.91	0.0	0.0	0.17	0.0	0.35	0.0	0.0													
24	0.0	0.25	0.0	0.08E	0.30	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12	0.0	0.0	0.0													
27	0.0	0.14E	0.0	0.0	1.17	0.0	0.0	0.0	0.08E	0.06E	0.0	0.0													
28	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.05E	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.85	0.0	0.0	0.0	0.0													
31	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0													
TOTAL	0.25	1.83	1.09	0.89	4.66	1.63	0.0	2.59	4.08	1.01	0.0	0.0													
STA AV	1.18	1.62	0.82	2.72	2.88	2.08	2.10	2.22	3.87	2.03	1.26	0.57													

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001. Precipitation data obtained from rain gage 15. Records began October 1963; part-year amounts not included in averages. STA AV based on 7 yr record period. Estimate codes may indicate that non-significant event totals are included.

## SONORA, TEXAS WATERSHED W-2

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 8.60 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.32	1.62	1.11	0.87	4.26	1.48	0.0	2.38	3.57	1.05	0.0	0.0	16.66	
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	P 0.77	1.47	0.77	2.67	2.78	2.00	1.83	2.09	2.98	1.96	1.32	0.53	21.15	
	Q 0.0	0.002	0.0	0.361	0.170	0.058	0.0	0.035	0.0	0.213	0.002	0.0	0.840	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		Maximum Volume for Selected Time Interval													
	Date	Rate	1 Hour Date	1 Hour Vol.	2 Hours Date	2 Hours Vol.	6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.
1970	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0
	4-30	1.550	4-30	1.250	4-30	1.710	4-30	1.960	4-30	2.000	4-30	2.000	4-29	2.140	4-24	2.160
	1966		1966		1966		1966		1966		1966		1966		1966	

NOTES: Watershed conditions: 100% rangeland; low good level of management; stocking rate, 32 animal units per section. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.8-6. Precipitation data from rain gage 16. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14. Watershed is on substation property.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.22E	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.27	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.0	0.0		
13	0.20E	0.0	0.0	0.0	1.42	0.0	0.0	0.0	1.08	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.11E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0		
18	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0		
19	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.14E	0.0	0.0	0.0	0.0		
20	0.0	0.04E	0.57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.03E	0.0	0.0	0.68	0.0	0.0	0.06E	0.0	0.0	0.0		
22	0.0	0.74	0.0	0.0	0.23	0.29	0.0	0.27	0.62	0.0	0.0	0.0		
23	0.0	0.23E	0.0	0.0	0.85	0.0	0.0	0.16	0.0	0.40	0.0	0.0		
24	0.0	0.25E	0.0	0.08E	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09	0.0	0.0	0.0		
27	0.0	0.14E	0.0	0.0	0.95	0.0	0.0	0.0	0.05E	0.04E	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.04E	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.84	0.0	0.0	0.0	0.0		
31	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.21E	0.0	0.0	0.0	0.0		
TOTAL	0.32	1.62	1.11	0.87	4.26	1.48	0.0	2.38	3.57	1.05	0.0	0.0		
STA AV	0.77	1.47	0.77	2.67	2.78	2.00	1.83	2.09	2.98	1.96	1.32	0.53		

NOTES: For daily air temperatures, in the vicinity, see table for W-14, p. 70.001. Precipitation data obtained from rain gage 16. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

## SONORA, TEXAS WATERSHED W-3

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 6.70 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-3	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.25	1.35	1.08	1.19	3.88	1.39	0.0	3.42	3.19	0.78	0.0	0.10	16.63
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	P	0.75	1.51	0.81	2.90	3.04	2.02	1.73	2.52	2.83	2.23	1.34	0.55	22.22
	Q	0.0	0.0	0.0	0.211	0.010	0.0	0.0	0.0	0.0	0.012	0.0	0.0	0.233

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
1970	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
		Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
	0-0	0.0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0

MAXIMUMS FOR PERIOD OF RECORD															
4-30 1966	1.670	4-30 1966	1.020	4-30 1966	1.220	4-30 1966	1.260	4-30 1966	1.260	4-30 1966	1.260	4-30 1966	1.260	4-30 1966	1.260

NOTES: Watershed conditions: 100% rangeland; range in fair condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, OSOA Misc. Pub. 1262, p. 70-9-4. Precipitation data from rain gage 17. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970	DAILY PRECIPITATION (inches)												SONORA, TEXAS WATERSHED W-3	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.18E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	3.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	9.33	0.0	0.79	0.0	0.0	0.0	0.0	0.0	0.0
11	3.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0
13	0.13E	0.0	0.0	0.0	1.07	0.0	0.0	0.0	0.93	0.0	0.0	0.0	0.10E	0.0
14	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0 E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.21E	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0	0.0	0.0
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.04E	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.04E	0.0	0.0	0.30	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0
22	0.0	0.76	0.0	0.0	0.0	0.32	0.0	0.20	0.75	0.0	0.0	0.0	0.0	0.0
23	0.0	0.18E	0.0	0.0	1.24	0.0	0.0	0.14	0.02	0.0	0.0	0.0	0.0	0.0
24	0.0	0.23E	0.0	0.06E	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0
27	3.0	0.14E	0.0	0.0	1.19	0.0	0.0	0.0	0.06E	0.08E	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.03E	0.0	0.0	0.28E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.17E	0.0	0.0	0.0	1.44	0.0	0.0	0.0	0.0	0.0	0.0
31	0.12E	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.25	1.35	1.08	1.19	3.88	1.39	0.0	3.42	3.19	0.78	0.0	0.10	0.10	16.63
STA AV	0.75	1.51	0.81	2.90	3.04	2.02	1.73	2.52	2.83	2.23	1.34	0.55	0.55	22.22

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, 70.001. Precipitation data obtained from rain gage 17. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

## SONORA, TEXAS WATERSHED W-4

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 4.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-4																		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																		
1970	P	0.34	1.44	0.95	1.24	3.72	1.24	0.0	3.92	2.79	0.78	0.0	0.0	16.42																		
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0																		
STA AV	P	0.79	1.38	0.97	3.56	2.21	2.10	2.26	2.97	3.34	2.44	1.50	0.46	23.97																		
	Q	0.0	0.0	0.0	0.048	0.0	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.062																		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																																
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days																
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.															
1970			0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0														
			4-30	0.320	4-30	0.200	4-30	0.240	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250	4-30	0.250														
		1966		1966		1966		1966		1966		1966		1966		1966																
MAXIMUMS FOR PERIOD OF RECORD																																
		4-30		0.320		4-30		0.240		4-30		0.250		4-30		0.250																
		1966		1966		1966		1966		1966		1966		1966		1966																

NOTES: Watershed conditions: Bangeland - 100% range in low good condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.10-4. Precipitation data from rain gage 18. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-4													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0	0.0														
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
6	0.0	0.11E	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
9	0.0	0.0	0.0	0.7)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
10	0.0	0.0	0.0	0.0	0.0	0.30	0.0	0.90	0.0	0.0	0.0	0.0	0.0														
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0														
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0														
13	0.19E	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.0														
14	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
16	0.0	0.0	0.06E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0														
18	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.55	0.0	0.0	0.0														
19	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
20	0.0	0.06E	0.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
21	0.0	0.0	0.0	0.0	0.0	0.41	0.0	0.0	0.06E	0.0	0.0	0.0	0.0														
22	0.0	0.72	0.0	0.0	0.0	0.21E	0.0	0.32	0.57	0.0	0.0	0.0	0.0														
23	0.0	0.18E	0.0	0.0	1.09	0.0	0.0	0.12	0.0	0.11E	0.0	0.0	0.0														
24	0.0	0.24E	0.0	0.06E	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.14	0.0	0.0	0.0	0.0														
27	0.0	0.13E	0.0	0.0	1.02	0.0	0.0	0.0	0.04E	0.05E	0.0	0.0	0.0														
28	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
29	0.0	0.0	0.03E	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	1.56	0.0	0.0	0.0	0.0	0.0														
31	0.15E	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.0	0.0	0.0	0.0	0.0														
TOTAL	0.34	1.44	0.95	1.24	3.72	1.24	0.0	3.92	2.79	0.78	0.0	0.0															
STA AV	0.79	1.38	0.97	3.56	2.21	2.10	2.26	2.97	3.34	2.44	1.50	0.46															

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 18. records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.

SONORA, TEXAS WATERSHED W-5

LOCATION: Edwards County, Texas; 28 mi. (bigway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 7.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-5														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.22	1.16	0.93	1.29	3.28	1.02	0.0	3.85	2.51	0.67	0.0	0.0	14.93														
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
STA AV	P	0.74	1.21	0.93	3.38	2.08	2.00	2.01	2.91	2.81	2.30	1.33	0.43	22.12														
	Q	0.0	0.0	0.0	0.234	0.013	0.024	0.004	0.024	0.001	0.125	0.0	0.0	0.465														

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS													
Date	Maximum Discharge Rate	Maximum Volume for Selected Time Interval											
		1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.					
1970	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0	0-0 0.0

MAXIMUMS FOR PERIOD OF RECORD													
Date	Maximum Discharge Rate	1 Hour Date Vol.	2 Hours Date Vol.	6 Hours Date Vol.	12 Hours Date Vol.	1 Day Date Vol.	2 Days Date Vol.	8 Days Date Vol.					
4-30 1966	1.380	0.790	1.010	1.080	1.080	1.080	1.130	1.150					
4-30 1966		0.790	1.010	1.080	1.080	1.080	1.130	1.150					

NOTES: Watershed conditions: Rangeland - 100%; range overgrazed, low poor condition. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.11-5. Precipitation data from rain gage 19. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-5													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
6	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07E	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0														
9	0.0	0.0	0.0	0.75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
10	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.97	0.0	0.0	0.0	0.0														
11	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.13	0.0	0.0	0.0	0.0	0.0														
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0														
13	0.12E	0.0	0.0	0.0	1.09	0.0	0.0	0.0	0.63	0.0	0.0	0.0	0.0														
14	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
16	0.0	0.0	0.07E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02E	0.0	0.0	0.0	0.0														
18	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	0.0	0.0	0.51	0.0	0.0	0.0														
19	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
20	0.0	0.03E	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
21	0.0	0.0	0.0 E	0.0	0.0	0.0	0.26E	0.0	0.0	0.05E	0.0	0.0	0.0														
22	0.0	0.61	0.0	0.0	0.0	0.0	0.14E	0.0	0.29	0.61	0.0	0.0	0.0														
23	0.0	0.17E	0.0	0.0	0.84	0.0	0.0	0.11	0.0	0.03E	0.0	0.0	0.0														
24	0.0	0.24E	0.0	0.04E	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0														
27	0.0	0.11E	0.0	0.0	1.04	0.0	0.0	0.0	0.07E	0.06E	0.0	0.0	0.0														
28	0.0	0.0	0.0	0.0	0.05	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
29	0.0	0.04E	0.0	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.25E	0.0	0.0	0.0	1.59	0.0	0.0	0.0	0.0	0.0														
31	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0														
TOTAL	0.22	1.16	0.93	1.29	3.28	1.02	0.0	3.85	2.51	0.67	0.0	0.0															
STA AV	0.74	1.21	0.93	3.38	2.08	2.00	2.01	2.91	2.81	2.30	1.33	0.43															

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 19. Records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.

## SONORA, TEXAS WATERSHED W-6

LOCATION: Edwards County, Texas; 28 mi. (highway) south of Sonora; East Fork Devils River, Devils River, Rio Grande River Basin.

ARBA: 6.90 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														SONORA, TEXAS WATERSHED W-6														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	0.29	1.38	1.16	1.25	3.94	1.28	0.0	3.55	3.18	0.78	0.0	0.0	16.61														
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
STA AV	P	0.82	1.32	1.05	3.55	2.19	2.03	2.06	2.99	3.20	2.41	1.61	0.43	23.65														
	Q	0.0	0.0	0.0	0.184	0.006	0.016	0.0	0.008	0.0	0.011	0.0	0.0	0.227														
ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
		Maximum Discharge				Maximum Volume for Selected Time Interval																						
		Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.											
1970		0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0											
MAXIMUMS FOR PERIOD OF RECORD																												
		4-30	1.900	4-30	0.840	4-30	3.910	4-30	0.910	4-30	0.910	4-30	0.910	4-24	0.920													
		1966		1966		1966		1966		1966		1966		1966														

NOTES: Watershed conditions: Rangeland - 100%; range condition - poor. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pub. 1262, p. 70.12-4. Precipitation data from rain gage 20. Precipitation and runoff records began January 1966. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)														SONORA, TEXAS WATERSHED W-6													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
6	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05E	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.15E	0.0	0.0	0.0	0.0	0.0	0.0															
9	0.0	0.0	0.0	0.77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.38	0.0	0.89	0.0	0.0	0.0	0.0															
11	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0															
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06E	0.0	0.0	0.0															
13	0.16E	0.0	0.0	0.0	1.15	0.0	0.0	1.00	0.0	0.0	0.0	0.0															
14	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.02E	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
16	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13E	0.0	0.0	0.0															
18	0.0	0.0	0.0	0.23E	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0															
19	0.0	0.0	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
20	0.0	0.04E	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.02E	0.0	0.0	0.38	0.0	0.0	0.05E	0.0	0.0	0.0															
22	0.0	0.72	0.0	0.0	0.0	0.17E	0.0	0.23	0.73	0.0	0.0	0.0															
23	0.0	0.20E	0.0	0.0	1.31	0.0	0.0	0.16	0.0	0.06E	0.0	0.0															
24	0.0	0.25E	0.0	0.06E	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.0															
27	0.0	0.17E	0.0	0.0	1.19	0.0	0.0	0.0	0.06E	0.07E	0.0	0.0															
28	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.05E	0.0	0.0	0.0	0.20E	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.19E	0.0	0.0	0.0	0.0	1.40	0.0	0.0	0.0	0.0															
31	0.13E		0.0	0.0	0.0		0.0	0.50		0.0		0.0															
TOTAL	0.29	1.38	1.16	1.25	3.94	1.28	0.0	3.55	3.18	0.78	0.0	0.0															
STA AV	0.82	1.32	1.05	3.55	2.19	2.03	2.06	2.99	3.20	2.41	1.61	0.43															

NOTES: For daily air temperature, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 20. Records began January 1966. STA AV based on 5 yr record period. Estimate codes may indicate that non-significant event totals are included.



1970 MEAN DAILY DISCHARGE (cfs) / TREYNOR, IOWA WATERSHED 1												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.025	0.025	0.027	0.020	0.023	0.025	0.013	0.018	0.009	0.010	0.014	0.022
2	0.025	0.025	0.082	0.020	0.020	0.025	0.013	3.122	0.014	0.010	0.019	0.020
3	0.025	0.036	0.046	0.020	0.020	0.025	0.013	0.039	0.012	0.014	0.021	0.020
4	0.025	0.032	0.022	0.020	0.018	0.025	0.014	0.025	0.009	0.014	0.018	0.023
5	0.022	0.027	0.020	0.020	0.018	0.025	0.014	0.022	0.011	0.013	0.017	0.022
6	0.020	0.030	0.020	0.017	0.018	0.025	0.014	0.020	0.010	0.011	0.017	0.020
7	0.020	0.027	0.020	0.014	0.017	0.025	0.014	0.020	0.010	0.016	0.017	0.020
8	0.020	0.025	0.020	0.014	0.018	0.016	0.014	0.020	0.009	0.048	0.057	0.020
9	0.020	0.025	0.020	0.014	0.022	0.017	0.012	0.020	0.012	0.067	0.038	0.020
10	0.020	0.025	0.020	0.014	0.020	0.017	0.015	0.017	0.010	0.025	0.025	0.027
11	0.020	0.025	0.020	0.064	0.025	0.025	0.014	0.014	0.009	0.026	0.025	0.014
12	0.017	0.025	0.020	0.036	1.610	0.022	0.014	0.012	0.010	0.025	0.025	0.014
13	0.014	0.025	0.020	0.025	0.178	0.020	0.036	0.012	0.012	0.025	0.025	0.018
14	0.014	0.025	0.020	0.027	0.038	0.020	0.044	0.012	0.070	0.022	0.025	0.015
15	0.014	0.025	0.020	0.025	0.035	0.022	0.017	0.014	0.025	0.020	0.025	0.014
16	0.014	0.022	0.020	0.025	0.032	0.027	0.014	0.014	0.017	0.020	0.025	0.014
17	0.014	0.020	0.020	0.025	0.028	0.024	0.014	0.021	0.023	0.020	0.025	0.014
18	0.014	0.022	0.020	0.063	0.025	0.020	0.023	0.014	0.014	0.020	0.025	0.014
19	0.014	0.034	0.020	0.032	0.025	0.020	0.017	0.014	0.014	0.020	0.030	0.014
20	0.014	0.029	0.020	0.025	0.025	0.023	0.014	0.012	0.014	0.020	0.025	0.014
21	0.014	0.034	0.020	0.028	0.025	0.020	0.014	0.021	0.011	0.020	0.025	0.014
22	0.014	0.032	0.020	0.026	0.025	0.020	0.014	0.014	0.011	0.020	0.025	0.014
23	0.014	0.032	0.017	0.025	0.025	0.020	0.014	0.012	0.019	0.038	0.025	0.014
24	0.014	0.030	0.014	0.025	0.026	0.020	0.014	0.013	0.014	0.022	0.025	0.014
25	0.017	0.028	0.014	0.022	0.025	0.020	0.014	0.012	0.015	0.020	0.025	0.014
26	0.182	0.033	0.014	0.020	0.025	0.014	0.025	0.013	0.014	0.023	0.025	0.014
27	0.320	0.032	0.012	0.020	0.025	0.013	0.029	0.013	0.013	0.021	0.025	0.017
28	0.704	0.035	0.016	0.016	0.025	0.013	0.112	0.011	0.011	0.015	0.025	0.020
29	0.032	0.014	0.020	0.025	0.025	0.013	0.022	0.012	0.009	0.014	0.025	0.020
30	0.025	0.014	0.024	0.025	0.025	0.013	0.020	0.011	0.010	0.014	0.025	0.020
31	0.025	0.017		0.025	0.025		0.017	0.011		0.014		0.020
MEAN	0.0559	0.0282	0.0216	0.0249	0.0804	0.0206	0.0206	0.1164	0.0147	0.0216	0.0250	0.0175
INCHES	0.554	0.252	0.214	0.239	0.796	0.197	0.204	1.153	0.141	0.214	0.239	0.173
STA AV	0.327	0.546	0.541	0.362	0.666	2.535	0.387	0.497	0.594	0.313	0.236	0.225

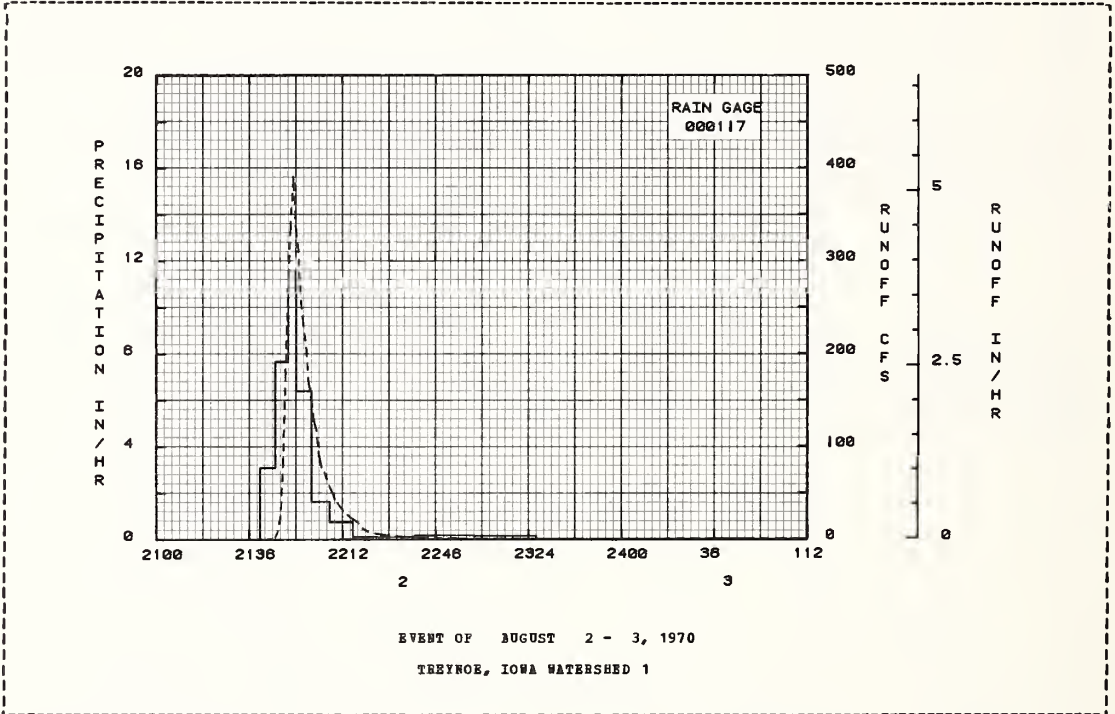
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.31949. STA AV based on 7 yr record period.

1970 SELECTED RUNOFF EVENT / TREYNOR, IOWA WATERSHED 1												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 2 - 3, 1970												
8- 2	RG 000117 0.73	0.096	8- 2	RG 000117 2140	0.0	0.0	8- 2	2140	0.025	0.0		
				2146	3.0998	0.31		2141	0.254	0.0		
				2151	7.6805	0.95		2143	0.427	0.0002		
				2154	11.5993	1.53		2145	0.620	0.0004		
				2200	6.3996	2.17		2146	2.871	0.0008		
WATERSHED CONDITIONS:				2207	1.6288	2.36		2147	9.493	0.0021		
95% Contoured corn, 8 ft. tall, late milk stage, hail damaged; 60% canopy; 5% gullies and grassed waterways, grass 12 in. tall.				2216	0.7333	2.47		2148	25.538	0.0057		
				2240	0.1000	2.51		2149	80.967	0.0195		
				2303	0.1826	2.58		2150	183.960	0.0471		
				2327	0.1500	2.64		2151	268.482	0.0942		
								2152	343.212	0.1578		
								2153	391.329	0.2533		
								2154	333.610	0.3287		
								2155	309.902	0.3956		
								2156	256.334	0.4545		
								2157	229.676	0.5177		
								2158	205.068	0.5629		
								2159	168.756	0.6018		
								2200	150.599	0.6433		
								2201	128.642	0.6723		
								2202	117.038	0.6979		
								2203	89.195	0.7193		
								2204	77.386	0.7410		
								2205	72.354	0.7566		
								2207	56.848	0.7835		
								2209	43.554	0.8070		
								2210	39.378	0.8156		
								2212	31.775	0.8322		
								2215	23.848	0.8510		
								2218	17.906	0.8640		
								2220	11.559	0.8709		
								2222	8.302	0.8750		
								2225	6.022	0.8798		
								2230	4.111	0.8856		
								2235	2.761	0.8894		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01331. Event precipitation totals for rain gages 116 and 118 are 2.48 and 2.72 in., respectively and Thiessen weighted average total for event is 2.62 in.

1970 SELECTED RUNOFF EVENT			TREYNOE, IOWA WATERSHED 1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 2 - 3, 1970 (CONTINUED)										
							8- 2	2245	1.490	0.8942
								2255	0.859	0.8968
								2300	0.663	0.8977
								2308	0.427	0.8987
								2315	0.364	0.8993
								2325	0.254	0.9000
								2336	0.167	0.9005
								2345	0.132	0.9008
								2400	0.089	0.9012
							8- 3	100	0.076	0.9023
								300	0.055	0.9040

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01331. Event precipitation totals for rain gages 116 and 118 are 2.48 and 2.72 in., respectively and Thiessen weighted average total for event is 2.62 in.



1970		DAILY PRECIPITATION (inches)					TREYNOR, IOWA WATERSHED 3						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.23	0.0	0.0	0.0	0.0	2.16	0.57	0.0	0.10	0.0	
3	0.0	0.0	0.13	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.13	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.06	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.53	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	1.09	0.75	0.0	
9	0.0	0.0	0.04	0.0	0.12	0.0	0.0	0.0	0.28	0.92	0.14	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.11	0.08	0.0	0.0	0.0	0.0	0.48	
11	0.0	0.0	0.0	1.69	0.17	0.70	0.0	0.0	0.0	0.11	0.0	0.0	
12	0.0	0.0	0.0	0.0	1.94	0.08	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.02	0.0	0.14	0.07	0.0	0.60	0.0	0.22	0.0	0.03	0.0	
14	0.0	0.01	0.0	0.0	0.04	0.0	1.19	0.0	1.93	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.05	0.0	0.46	0.0	0.0	0.49	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.31	0.0	0.0	0.05	
17	0.01	0.0	0.0	0.0	0.0	0.20	0.0	0.97	0.14	0.0	0.0	0.0	
18	0.01	0.0	0.10	0.78	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.22	0.23	0.0	0.02	0.0	0.0	0.0	0.0	0.25	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	0.0	0.04	0.0	0.0	
22	0.0	0.0	0.0	0.16	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.93	0.0	0.0	
24	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.04	0.0	0.0	0.02	0.0	0.0	0.09	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.91	0.0	0.0	0.50	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.26	0.0	0.0	0.02	0.0	1.22	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.02	0.29	0.85	3.43	2.74	2.12	4.75	4.02	4.53	4.12	1.40	0.53	
STA AV	0.47	0.53	0.94	3.46	3.93	6.84	3.66	3.44	4.39	2.80	0.75	0.85	

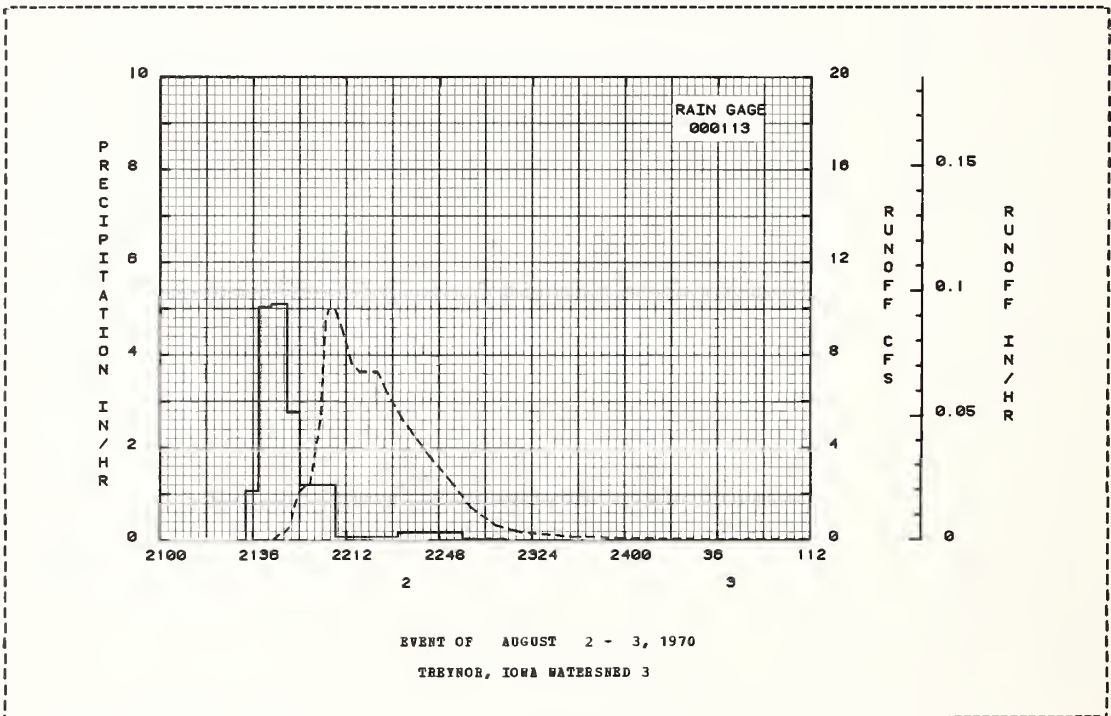
NOTES: Daily precipitation amounts are arithmetic average values from stations 113 and 114 before April 1 and after November 3; Thiessen weighted average values from rain gages 112, 113 and 114 for remainder of year. STA AV based on 7 yr record period.

1970		MEAN DAILY DISCHARGE (cfs)					TREYNOR, IOWA WATERSHED 3						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.022	0.073	0.037	0.027	0.047	0.033	0.014	0.014	0.010	0.011	0.022	0.027	
2	0.022	0.064	0.049	0.027	0.039	0.030	0.014	0.310	0.016	0.009	0.022	0.027	
3	0.022	0.055	0.045	0.027	0.039	0.030	0.014	0.031	0.012	0.010	0.023	0.024	
4	0.022	0.055	0.036	0.027	0.039	0.030	0.014	0.020	0.009	0.010	0.022	0.022	
5	0.022	0.055	0.033	0.027	0.039	0.030	0.013	0.017	0.011	0.011	0.022	0.022	
6	0.022	0.055	0.033	0.027	0.039	0.029	0.015	0.015	0.009	0.012	0.020	0.022	
7	0.022	0.051	0.033	0.027	0.036	0.026	0.016	0.013	0.008	0.014	0.019	0.022	
8	0.022	0.047	0.033	0.027	0.036	0.025	0.014	0.015	0.009	0.080	0.063	0.022	
9	0.022	0.047	0.033	0.027	0.041	0.025	0.014	0.017	0.013	0.132	0.098	0.022	
10	0.022	0.047	0.033	0.027	0.039	0.026	0.016	0.014	0.011	0.038	0.030	0.025	
11	0.022	0.047	0.033	0.048	0.037	0.032	0.014	0.014	0.010	0.030	0.027	0.022	
12	0.019	0.047	0.033	0.054	0.226	0.029	0.014	0.014	0.010	0.027	0.027	0.022	
13	0.017	0.047	0.033	0.047	0.055	0.024	0.020	0.012	0.013	0.027	0.027	0.024	
14	0.017	0.047	0.033	0.047	0.053	0.025	0.034	0.011	0.089	0.027	0.027	0.027	
15	0.017	0.047	0.033	0.051	0.045	0.027	0.013	0.011	0.038	0.027	0.027	0.027	
16	0.017	0.043	0.033	0.055	0.044	0.033	0.011	0.012	0.025	0.027	0.027	0.027	
17	0.017	0.039	0.033	0.055	0.043	0.030	0.009	0.028	0.021	0.027	0.027	0.027	
18	0.017	0.039	0.033	0.053	0.039	0.025	0.014	0.012	0.017	0.027	0.027	0.024	
19	0.017	0.043	0.033	0.049	0.036	0.025	0.012	0.008	0.017	0.027	0.029	0.022	
20	0.017	0.039	0.033	0.047	0.036	0.026	0.009	0.008	0.014	0.027	0.027	0.022	
21	0.017	0.039	0.033	0.047	0.036	0.025	0.009	0.019	0.014	0.027	0.027	0.022	
22	0.017	0.039	0.033	0.050	0.038	0.024	0.008	0.010	0.016	0.027	0.027	0.022	
23	0.017	0.039	0.033	0.047	0.039	0.023	0.008	0.008	0.022	0.160	0.026	0.022	
24	0.017	0.036	0.033	0.047	0.038	0.023	0.010	0.008	0.016	0.045	0.024	0.022	
25	0.017	0.033	0.033	0.047	0.037	0.024	0.011	0.008	0.018	0.039	0.027	0.022	
26	0.025	0.033	0.033	0.047	0.035	0.023	0.029	0.008	0.016	0.052	0.027	0.022	
27	0.090	0.033	0.033	0.047	0.033	0.022	0.018	0.008	0.015	0.029	0.027	0.022	
28	0.464	0.035	0.035	0.042	0.031	0.020	0.051	0.007	0.014	0.022	0.027	0.022	
29	0.078	0.033	0.033	0.047	0.031	0.022	0.015	0.006	0.011	0.022	0.027	0.022	
30	0.073	0.030	0.030	0.052	0.030	0.016	0.015	0.006	0.011	0.022	0.027	0.022	
31	0.073	0.027	0.027	0.031	0.031	0.016	0.014	0.008	0.022	0.022	0.027	0.022	
MEAN	0.0415	0.0455	0.0339	0.0417	0.0448	0.0261	0.0155	0.0224	0.0171	0.0344	0.0293	0.0233	
INCHES	0.286	0.283	0.234	0.278	0.309	0.174	0.107	0.154	0.114	0.237	0.196	0.161	
STA AV	0.272	0.518	0.501	0.321	0.311	0.801	0.360	0.256	0.294	0.351	0.229	0.218	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.22245. STA AV based on 7 yr record period.

1970 SELECTED RUNOFF EVENT			TREYNOR, IOWA WATERSHED 3							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF AUGUST 2 - 3, 1970										
8- 2	BG 000113 0.54	0.010	8- 2	BG 000113 2133	0.0	0.0	8- 2	2138	0.017	0.0
				2138	1.0799	0.09		2142	0.027	0.0
				2143	5.0403	0.51		2144	0.083	0.0
				2149	5.0997	1.02		2146	0.274	0.0001
				2154	2.7602	1.25		2148	0.342	0.0002
WATERSHED CONDITIONS: 96% Permanent brome grass pasture, moderately grazed in rotation, 8-10 in. tall, 90% canopy; 4% gravel roads and farmstead.				2208	1.2000	1.53		2150	0.582	0.0004
				2232	0.0750	1.56		2152	1.501	0.0007
				2257	0.1680	1.63		2154	2.161	0.0013
				2314	0.0353	1.64		2156	2.341	0.0020
								2158	2.436	0.0028
								2202	5.171	0.0051
								2204	9.483	0.0075
								2206	10.283	0.0104
								2208	9.883	0.0137
								2211	8.883	0.0178
								2214	7.643	0.0217
								2217	7.292	0.0252
								2224	7.292	0.0331
								2228	6.332	0.0373
								2234	5.171	0.0427
								2238	4.562	0.0457
								2244	3.636	0.0494
								2254	2.341	0.0541
								2300	1.440	0.0559
								2310	0.653	0.0575
								2320	0.342	0.0583
								2340	0.147	0.0591
								2400	0.094	0.0595
							8- 3	30	0.055	0.0598

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.009269. Event precipitation totals for rain gage 112 and 114 are 1.46 and 1.29 in., respectively, and the Thiessen weighted average event precipitation is 1.44 in.



## TREYNOR, IOWA WATERSHED 2

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Keg Creek, Missouri River Basin.

AREA: 62.80 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 2																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.02	0.21	0.82	3.54	2.92	2.31	5.45	4.76	4.55	4.29	1.37	0.53	30.77																	
	Q	0.548	0.236	0.273	0.229	0.692	0.164	0.182	0.891	0.174	0.258	0.250	0.240	4.136																	
STA AV	P	0.59	0.51	1.00	3.36	3.97	7.01	3.93	3.90	4.58	2.82	0.80	0.86	33.24																	
	Q	0.338	0.616	0.564	0.331	0.635	2.378	0.319	0.428	0.548	0.317	0.225	0.223	6.921																	
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970	H-2	3-384	8-2	0.694	8-2	0.703	8-2	0.706	8-2	0.709	8-2	0.738	8-2	0.747	7-26	0.796															
	MAXIMUMS FOR PERIOD OF RECORD																														
		6-20	4.866	6-20	2.701	6-20	3.693	6-20	3.780	6-20	3.786	6-20	3.796	6-20	3.810	6-4	5.531														
		1967		1967		1967		1967		1967		1967		1967		1967															

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rain gage 117 before April 1 and after November 3; Thiessen average of rain gages 115, 116, and 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 3, 1964. January 1 to February 3, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.2-5. For long-time precipitation records, see National Weather Service records period at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)														TREYNOR, IOWA WATERSHED 2													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0															
2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	3.27	0.49	0.0	0.03	0.0															
3	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0															
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.05	0.0	0.0	0.0															
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.65	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	1.27	0.72	0.0															
9	0.0	0.0	0.04	0.0	0.15	0.0	0.0	0.0	0.17	0.90	0.16	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.13	0.09	0.0	0.0	0.0	0.0	0.48															
11	0.0	0.0	0.0	1.85	0.38	0.71	0.0	0.0	0.0	0.11	0.0	0.0															
12	0.0	0.0	0.0	0.0	1.82	0.03	0.0	0.0	0.0	0.0	0.0	0.0															
13	0.0	0.01	0.0	0.16	0.21	0.0	1.16	0.0	0.27	0.0	0.03	0.0															
14	0.0	0.01	0.0	0.0	0.03	0.0	0.99	0.0	2.05	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.06	0.0	0.52	0.0	0.0	0.45	0.0	0.0	0.0															
16	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.24	0.0	0.0	0.05															
17	0.01	0.0	0.0	0.0	0.0	0.31	0.0	0.65	0.22	0.0	0.0	0.0															
18	0.01	0.0	0.05	0.75	0.0	0.0	0.64	0.0	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.30	0.24	0.0	0.94	0.0	0.0	0.0	0.0	0.26	0.0															
20	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0															
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.0	0.04	0.0	0.0															
22	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.82	0.0	0.0															
24	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.10	0.0	0.0	0.0															
26	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	0.0	0.50	0.0	0.0															
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
28	0.0	0.19	0.0	0.0	0.03	0.0	1.26	0.0	0.0	0.0	0.0	0.0															
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.0	0.0	0.0	0.38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
31	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
TOTAL	0.02	0.21	0.82	3.54	2.92	2.31	5.45	4.76	4.55	4.29	1.37	0.53															
STA AV	0.50	0.51	1.00	3.36	3.97	7.01	3.93	3.90	4.58	2.82	0.80	0.86															

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 115, 116, and 118 for period of April 1 through November 3, and from station 117 for remainder of year. STA AV based on 7 yr record period.

1970 MEAN DAILY DISCHARGE (cfs) TEBYNOB, IOWA WATERSHED 2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.027	0.027	0.039	0.027	0.027	0.027	0.015	0.014	0.015	0.016	0.022	0.030
2	0.027	0.027	0.103	0.028	0.023	0.027	0.014	2.570	0.023	0.015	0.024	0.027
3	0.027	0.027	0.046	0.027	0.020	0.024	0.014	0.035	0.018	0.015	0.029	0.027
4	0.027	0.027	0.027	0.027	0.020	0.024	0.015	0.019	0.015	0.014	0.027	0.027
5	0.027	0.032	0.024	0.027	0.024	0.024	0.015	0.017	0.017	0.014	0.027	0.027
6	0.027	0.034	0.021	0.027	0.019	0.023	0.016	0.017	0.014	0.016	0.024	0.027
7	0.027	0.035	0.019	0.027	0.017	0.021	0.015	0.017	0.014	0.023	0.022	0.027
8	0.027	0.033	0.019	0.024	0.019	0.020	0.014	0.017	0.013	0.090	0.050	0.027
9	0.027	0.033	0.023	0.024	0.027	0.020	0.014	0.017	0.019	0.083	0.068	0.027
10	0.027	0.033	0.027	0.024	0.021	0.021	0.019	0.016	0.016	0.030	0.030	0.030
11	0.027	0.033	0.029	0.070	0.027	0.028	0.016	0.016	0.015	0.028	0.027	0.024
12	0.027	0.030	0.028	0.036	1.681	0.022	0.014	0.014	0.015	0.027	0.027	0.024
13	0.027	0.027	0.028	0.028	0.065	0.018	0.035	0.014	0.019	0.027	0.027	0.026
14	0.027	0.027	0.027	0.025	0.027	0.014	0.040	0.014	0.077	0.024	0.027	0.027
15	0.027	0.027	0.029	0.022	0.026	0.020	0.017	0.016	0.034	0.022	0.027	0.027
16	0.027	0.029	0.031	0.022	0.023	0.029	0.014	0.017	0.025	0.022	0.027	0.027
17	0.027	0.030	0.030	0.019	0.022	0.024	0.014	0.031	0.027	0.022	0.027	0.027
18	0.027	0.027	0.028	0.045	0.020	0.015	0.025	0.023	0.020	0.022	0.027	0.027
19	0.027	0.026	0.034	0.034	0.021	0.016	0.019	0.020	0.018	0.023	0.031	0.027
20	0.027	0.026	0.033	0.027	0.018	0.018	0.016	0.018	0.017	0.025	0.027	0.027
21	0.027	0.030	0.031	0.022	0.020	0.014	0.015	0.030	0.016	0.025	0.027	0.027
22	0.027	0.030	0.027	0.022	0.020	0.013	0.014	0.018	0.017	0.024	0.027	0.027
23	0.027	0.030	0.027	0.021	0.022	0.014	0.014	0.014	0.026	0.083	0.027	0.027
24	0.027	0.027	0.027	0.020	0.021	0.014	0.015	0.015	0.017	0.027	0.027	0.027
25	0.032	0.027	0.027	0.019	0.025	0.015	0.014	0.014	0.020	0.027	0.027	0.027
26	0.168	0.027	0.027	0.019	0.025	0.014	0.030	0.015	0.017	0.035	0.027	0.027
27	0.307	0.027	0.027	0.019	0.023	0.013	0.031	0.014	0.016	0.027	0.027	0.027
28	0.661	0.032	0.031	0.018	0.025	0.011	0.089	0.015	0.016	0.023	0.027	0.027
29	0.037	0.028	0.019	0.025	0.025	0.012	0.018	0.014	0.015	0.022	0.027	0.027
30	0.027	0.027	0.027	0.025	0.025	0.015	0.015	0.014	0.015	0.022	0.030	0.027
31	0.027	0.027	0.027	0.027	0.027	0.015	0.014	0.014	0.015	0.022	0.027	0.027
MEAN	0.0615	0.0293	0.0307	0.0265	0.0776	0.0190	0.0204	0.0999	0.0201	0.0289	0.0290	0.0270
INCHES	0.548	0.236	0.273	0.229	0.692	0.164	0.182	0.891	0.174	0.258	0.250	0.240
STA AV	0.338	0.616	0.564	0.331	0.635	2.378	0.319	0.428	0.548	0.317	0.225	0.223

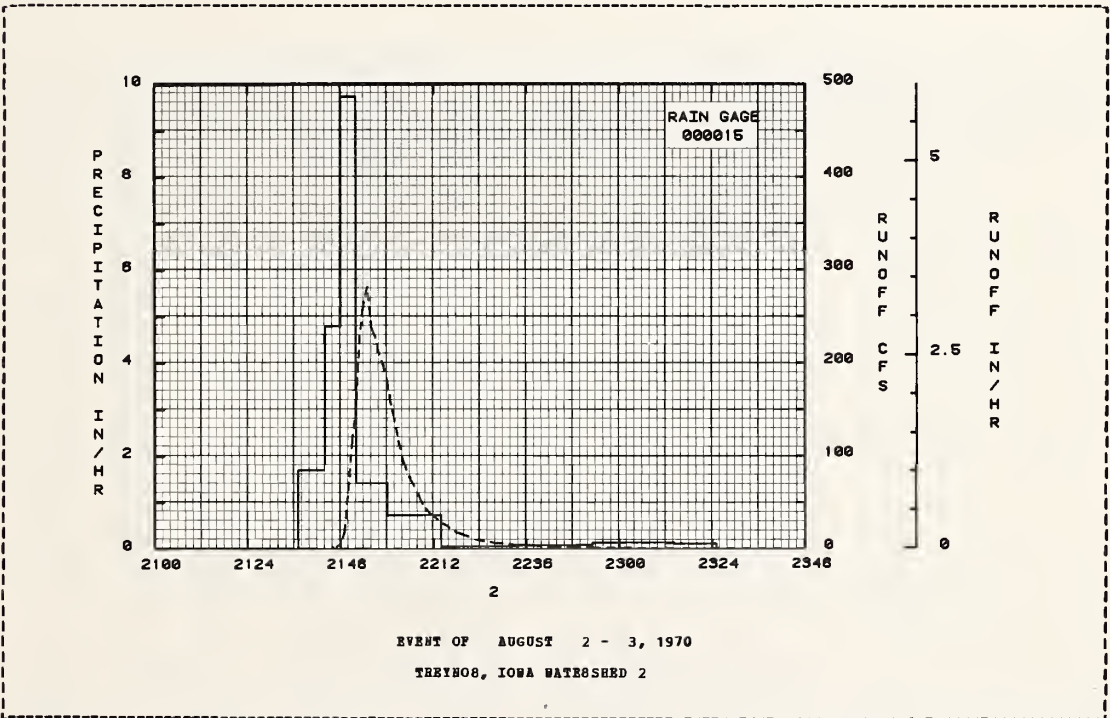
NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.28746. STA AV based on 7 yr record period.

1970 SELECTED RUNOFF EVENT TEBYNOB, IOWA WATERSHED 2												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF AUGUST 2 - 3, 1970												
8- 2	RG 000115 0.78	0.035	8- 2	EG 000115 2137	0.0	0.0	8- 2	2138	0.017	0.0		
				2144	1.7143	0.20		2139	0.033	0.0		
				2148	4.8001	0.52		2140	0.094	0.0		
				2152	9.7501	1.17		2141	0.214	0.0		
				2200	1.4249	1.36		2143	0.514	0.0002		
WATERSHED CONDITIONS: 95% Contoured corn, 8 ft. tall, late milk stage, hail damaged, 60% canopy; 5% gullies and grassed waterways, grass 12 in. tall.												
				2214	0.7286	1.53		2144	0.999	0.0003		
				2234	0.0600	1.55		2145	1.560	0.0006		
				2253	0.0947	1.58		2146	2.541	0.0010		
				2314	0.1429	1.63		2147	3.451	0.0016		
				2325	0.1091	1.65		2148	5.642	0.0025		
								2149	19.107	0.0054		
								2150	64.246	0.0132		
								2151	116.288	0.0301		
								2152	154.351	0.0554		
								2153	229.476	0.1003		
								2154	266.187	0.1467		
								2155	282.492	0.1980		
								2156	238.279	0.2467		
								2157	227.975	0.3012		
								2158	209.469	0.3421		
								2159	198.665	0.3803		
								2200	180.459	0.4246		
								2201	156.551	0.4561		
								2202	138.096	0.4837		
								2203	115.338	0.5074		
								2204	96.937	0.5322		
								2205	84.928	0.5492		
								2206	74.475	0.5641		
								2207	68.217	0.5775		
								2208	59.740	0.5925		
								2209	49.641	0.6027		
								2211	38.763	0.6192		
								2213	32.050	0.6341		
								2216	23.128	0.6509		
								2218	17.946	0.6586		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 2.48 and 2.72 respectively, and Thiessen weighted average total for event is 2.23 in.

1970 SELECTED RUNOFF EVENT			TREYNOS, IOWA WATERSHED 2							
PRECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF AUGUST 2 - 3, 1970 (CONTINUED)										
							8- 2	2221	13.605	0.6682
								2223	10.364	0.6732
								2225	8.343	0.6767
								2228	6.737	0.6813
								2233	4.542	0.6868
								2238	3.331	0.6909
								2243	2.445	0.6937
								2248	1.771	0.6958
								2255	1.261	0.6979
								2303	0.814	0.6996
								2313	0.514	0.7009
								2328	0.319	0.7021
								2338	0.233	0.7027
								2343	0.196	0.7029
								2348	0.163	0.7031
								2400	0.132	0.7035
							8- 3	30	0.094	0.7042
								200	0.055	0.7055
								500	0.039	0.7072

NOTES: To convert runoff in CFS to IN/88, multiply by 0.01198. Event precipitation totals for rain gage 116 and 118 are 2.48 and 2.72 respectively, and Thiessen weighted average total for event is 2.23 in.



TREYNOR, IOWA WATERSHED 3

LOCATION: Pottawattamie County, Iowa; approximately 3 miles southwest of Treynor; Silver Creek, West Nishnabotna River, Missouri River Basin.

AREA: 107.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TREYNOR, IOWA WATERSHED 3	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.02	0.29	0.85	3.43	2.74	2.12	4.75	4.02	4.53	4.12	1.40	0.53	28.80	
	Q 0.286	0.283	0.234	0.278	0.399	0.174	0.107	0.154	0.114	0.237	0.196	0.161	2.533	
STA AV	P 0.47	0.53	0.94	3.46	3.93	6.84	3.66	3.44	4.39	2.80	0.75	0.85	32.07	
	Q 0.272	0.518	0.501	0.321	0.311	0.801	0.360	0.256	0.294	0.351	0.229	0.218	4.432	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		Maximum Volume for Selected Time Interval													
	Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.
1970	8-2	0.095	8-2	0.053	8-2	0.059	1-28	0.083	1-26	0.090	1-27	0.111	1-27	0.129	1-27	0.218
	6-20	2.010	6-20	1.095	6-20	1.267	6-20	1.336	6-20	1.350	6-20	1.371	2-27	1.408	6-14	1.741
	1967		1967		1967		1967		1967		1967		1965		1967	

NOTES: Watershed conditions: 96% permanent pasture with controlled grazing; 4% gravel roads and farmstead. Precipitation: Arithmetic average of rain gages 113 and 114 before April 1 and after November 3; Thiessen average of gages 112, 113 and 114 for remainder of year. Precipitation records began January 1, 1964. Runoff records began January 2, 1964, January 1, 1964 runoff estimated and included in average. For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.3-4. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY AIR TEMPERATURE (degrees F)													TREYNOR, IOWA WATERSHED 3												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	
1	39	15	48	18	38	32	36	22	48	36	66	60	100	77	87	62	95	66	84	50	45	28	61	40	
2	15	2	18	-2	60	35	57	20	68	34	74	56	100	73	91	66	84	66	81	50	40	35	56	25	
3	19	1	22	-3	58	30	46	26	81	41	72	53	82	62	82	64	90	63	63	41	38	33	57	29	
4	18	2	47	21	49	24	53	21	76	49	72	48	76	53	85	64	86	61	79	41	45	32	54	20	
5	6	-6	50	24	54	28	68	32	71	51	86	54	82	52	90	70	81	65	86	62	57	28	39	15	
6	9	-5	56	32	49	30	64	36	74	46	86	58	82	60	86	71	96	73	74	62	66	35	32	8	
7	0	-8	48	31	59	32	80	40	84	56	90	60	90	61	88	73	82	62	68	40	42	32	50	22	
8	2	-12	42	24	61	30	64	41	86	60	89	62	88	65	81	70	88	56	41	36	52	42	55	31	
9	13	-3	36	21	32	24	71	36	66	54	88	69	88	58	74	67	87	55	38	29	45	36	40	26	
10	28	0	42	26	30	21	80	35	72	48	82	66	83	60	84	67	72	45	54	30	60	32	29	20	
11	28	10	36	25	35	20	81	51	83	58	83	61	88	66	84	64	76	48	58	42	47	33	19	15	
12	22	2	48	20	34	20	54	37	83	62	73	60	92	65	88	64	64	53	60	43	37	31	30	19	
13	36	8	21	12	30	19	42	36	76	60	88	60	93	69	92	64	53	44	53	37	38	32	36	19	
14	26	12	16	11	32	18	46	35	61	54	94	73	97	68	92	64	54	44	51	32	32	19	32	18	
15	35	22	31	8	38	14	66	40	62	43	90	72	81	60	84	62	62	51	53	32	35	14	38	25	
16	26	2	36	18	43	14	65	34	72	43	86	65	88	62	83	59	57	51	59	30	49	24	30	22	
17	2	-7	66	28	44	18	58	34	80	50	88	70	92	65	76	65	67	55	59	32	53	30	32	30	
18	-1	-10	46	4	35	30	48	41	89	60	78	64	88	66	92	68	80	57	59	34	48	30	31	15	
19	8	-14	34	2	36	30	52	38	66	62	74	55	78	60	88	63	75	60	58	40	39	31	20	8	
20	9	-15	43	2	42	28	48	34	89	64	72	58	74	52	79	59	91	67	64	40	48	26	27	7	
21	10	-16	61	28	50	23	65	32	90	70	74	53	76	52	75	52	75	62	69	46	48	34	25	21	
22	38	9	54	26	38	28	74	36	90	64	78	56	80	53	79	59	65	54	68	54	36	14	32	14	
23	26	18	50	22	44	28	61	32	76	63	89	56	80	55	83	56	56	54	64	55	16	6	14	5	
24	41	25	50	31	53	27	72	40	84	60	85	62	87	62	85	57	73	52	66	57	28	8	40	5	
25	44	33	32	16	42	32	78	46	76	52	88	57	89	68	85	56	63	48	62	48	52	26	27	9	
26	46	30	54	26	42	28	81	51	80	50	84	62	90	68	90	62	64	37	54	37	32	25	36	18	
27	42	29	48	29	33	11	84	66	86	62	85	56	84	70	92	65	68	42	49	38	32	24	27	9	
28	42	29	35	30	40	8	90	65	78	60	94	64	90	70	94	68	81	46	47	33	33	32	26	8	
29	34	16			45	20	84	56	82	62	98	74	96	73	92	66	83	50	47	29	58	32	34	8	
30	45	24			46	30	56	41	86	63	94	76	98	74	86	60	86	50	43	35	62	34	38	22	
31	46	28			46	26			76	62			90	71	84	56			42	30				39	17
AV.	24	7	42	19	43	24	64	36	78	55	83	61	87	64	86	63	75	55	60	41	44	28	36	18	
MEAN	15.6		30.4		33.9		51.2		66.3		72.4		75.4		74.5		64.9		50.3		35.9			26.8	
STA AV	28	10	35	15	46	24	61	38	73	51	80	59	86	65	82	60	73	52	63	41	47	28	34	17	

NOTES: Temperature data taken from hygrothermograph charts. The recording period is from 0001 to 2400 for the date shown. STA AV based on 6 yr record period.



## TREYNOR, IOWA WATERSHED 4

LOCATION: Pottawattamie County, Iowa; approximately 3 miles southwest of Treynor; Silver Creek, West Nishnabotna River, Missouri River Basin.

AREA: 150.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TREYNOR, IOWA WATERSHED 4	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.02	0.26	0.82	3.38	2.66	2.10	4.62	4.15	4.45	4.44	1.36	0.51	28.77
	Q	0.388	0.412	0.419	0.365	0.392	0.423	0.317	0.255	0.197	0.259	0.319	0.360	4.104
STA AV	P	0.46	0.53	0.93	3.47	3.69	6.93	3.67	3.45	4.75	2.93	0.77	0.81	32.58
	Q	0.410	0.425	0.614	0.476	0.539	1.047	0.835	0.553	0.554	0.544	0.485	0.443	6.925

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge Date	1 Hour Date	2 Hours Date	Maximum Volume for Selected Time Interval												
				6 Hours Date	12 Hours Date	1 Day Date	2 Days Date	8 Days Date								
	5-12	0.068	5-12	0.014	5-12	0.016	1-28	0.027	1-28	0.033	1-27	0.047	1-27	0.063	1-27	0.150
MAXIMUMS FOR PERIOD OF RECORD																
	6-25 1966	0.296	6-22 1964	0.166	6-20 1967	0.228	2-28 1965	0.352	2-28 1965	0.496	2-28 1965	0.645	2-28 1965	0.758	6-20 1967	1.072

NOTES: Watershed conditions: 82% contoured corn above level terraces which have a capacity of 2 inches of runoff; 7% contoured corn below the bottom terraces; 10% grassed terrace backslopes; 1% gully. Precipitation from rain gage 113 before April 1 and after November 3; Thiessen average of gages 111, 112 and 113 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 27, 1964. January 1 to February 27, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1194, p. 71.4-4. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)													TREYNOR, IOWA WATERSHED 4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.20	0.0	0.0	0.0	0.0	2.28	0.44	0.0	0.08	0.0		
3	0.0	0.0	0.16	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.15	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.59	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	1.09	0.68	0.0		
9	0.0	0.0	0.04	0.0	0.13	0.0	0.0	0.0	0.30	1.13	0.21	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.09	0.08	0.0	0.0	0.0	0.0	0.45		
11	0.0	0.0	0.0	1.65	0.16	0.70	0.0	0.0	0.0	0.11	0.0	0.0		
12	0.0	0.0	0.0	0.0	1.89	0.08	0.0	0.0	0.0	0.0	0.0	0.0		
13	0.0	0.01	0.0	0.12	0.07	0.0	0.61	0.0	0.23	0.0	0.03	0.0		
14	0.0	0.01	0.0	0.0	0.04	0.0	1.16	0.0	1.89	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.05	0.0	0.43	0.0	0.0	0.51	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.38	0.0	0.0	0.06		
17	0.01	0.0	0.0	0.0	0.0	0.20	0.0	1.00	0.11	0.0	0.0	0.0		
18	0.01	0.0	0.08	0.78	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.22	0.24	0.0	0.02	0.0	0.0	0.0	0.0	0.25	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.67	0.0	0.04	0.0	0.0		
22	0.0	0.0	0.0	0.16	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.47	0.94	0.0	0.0		
24	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.03	0.0	0.0	0.02	0.0	0.0	0.07	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.0	0.0	0.0	0.81	0.0	0.0	0.54	0.0	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0		
28	0.0	0.24	0.0	0.0	0.02	0.0	1.13	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
31	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.02	0.26	0.82	3.38	2.66	2.10	4.62	4.15	4.45	4.44	1.36	0.51		
STA AV	0.46	0.53	0.93	3.47	3.89	6.93	3.67	3.45	4.75	2.93	0.77	0.81		

NOTES: Daily precipitation amounts are Thiessen weighted average values from stations 111, 112 and 113 for period of April 1 through November 3, and from 113 for remainder of year. STA AV based on 7 yr record period.

1970		MEAN DAILY DISCHARGE (cfs)						TREYNOR, IOWA WATERSHED 4					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.073	0.094	0.094	0.083	0.065	0.094	0.064	0.054	0.039	0.037	0.054	0.073	
2	0.073	0.094	0.096	0.083	0.064	0.094	0.064	0.098	0.044	0.037	0.054	0.073	
3	0.073	0.094	0.099	0.083	0.064	0.094	0.064	0.066	0.043	0.039	0.054	0.073	
4	0.073	0.094	0.094	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073	
5	0.073	0.094	0.054	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073	
6	0.073	0.094	0.086	0.083	0.064	0.094	0.064	0.054	0.039	0.039	0.054	0.073	
7	0.073	0.094	0.083	0.083	0.058	0.094	0.064	0.054	0.039	0.042	0.054	0.073	
8	0.073	0.094	0.083	0.083	0.064	0.094	0.064	0.054	0.037	0.062	0.063	0.073	
9	0.073	0.094	0.083	0.083	0.074	0.094	0.064	0.054	0.042	0.080	0.089	0.073	
10	0.073	0.094	0.083	0.083	0.073	0.094	0.064	0.054	0.039	0.054	0.073	0.077	
11	0.073	0.094	0.083	0.104	0.074	0.100	0.064	0.050	0.039	0.054	0.073	0.073	
12	0.073	0.094	0.083	0.098	0.211	0.094	0.064	0.050	0.039	0.054	0.073	0.073	
13	0.068	0.054	0.083	0.089	0.078	0.094	0.071	0.050	0.039	0.054	0.073	0.073	
14	0.064	0.094	0.083	0.073	0.073	0.094	0.096	0.050	0.072	0.054	0.073	0.073	
15	0.064	0.094	0.083	0.073	0.073	0.097	0.094	0.050	0.057	0.054	0.073	0.073	
16	0.064	0.094	0.083	0.073	0.073	0.099	0.068	0.049	0.049	0.054	0.073	0.073	
17	0.064	0.094	0.083	0.073	0.073	0.094	0.064	0.062	0.046	0.054	0.073	0.073	
18	0.064	0.094	0.083	0.079	0.074	0.094	0.064	0.050	0.039	0.054	0.073	0.073	
19	0.064	0.094	0.086	0.079	0.076	0.094	0.064	0.054	0.039	0.054	0.077	0.073	
20	0.064	0.094	0.083	0.073	0.076	0.094	0.059	0.050	0.039	0.054	0.073	0.073	
21	0.064	0.094	0.083	0.073	0.077	0.054	0.054	0.053	0.039	0.054	0.073	0.073	
22	0.064	0.094	0.083	0.074	0.077	0.094	0.054	0.052	0.039	0.054	0.073	0.073	
23	0.064	0.094	0.083	0.068	0.083	0.083	0.054	0.047	0.045	0.073	0.068	0.073	
24	0.064	0.094	0.083	0.064	0.082	0.073	0.054	0.047	0.046	0.054	0.064	0.073	
25	0.064	0.088	0.083	0.064	0.083	0.073	0.054	0.047	0.039	0.054	0.064	0.073	
26	0.064	0.083	0.083	0.064	0.077	0.073	0.084	0.047	0.039	0.061	0.064	0.073	
27	0.107	0.083	0.083	0.064	0.078	0.073	0.064	0.043	0.039	0.059	0.064	0.073	
28	0.276	0.085	0.083	0.058	0.094	0.073	0.067	0.039	0.036	0.054	0.064	0.073	
29	0.095		0.083	0.058	0.094	0.068	0.054	0.039	0.031	0.054	0.068	0.073	
30	0.094		0.083	0.069	0.094	0.064	0.054	0.039	0.034	0.054	0.073	0.073	
31	0.094		0.083	0.094	0.094	0.064	0.054	0.039	0.034	0.054	0.073	0.073	
MEAN	0.0788	0.0927	0.0852	0.0767	0.0797	0.0888	0.0644	0.0518	0.0413	0.0527	0.0671	0.0731	
INCHES	0.388	0.412	0.419	0.365	0.392	0.423	0.317	0.255	0.197	0.259	0.319	0.360	
STA AV	0.410	0.425	0.614	0.476	0.539	1.047	0.835	0.553	0.554	0.544	0.485	0.443	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.15868. STA AV based on 7 yr record period.

1970		SELECTED RUNOFF EVENT				TREYNOR, IOWA WATERSHED 4					
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 2 - 3, 1970											
	RG 000113			RG 000113							
8- 2	0.54	0.010	8- 2	2133	0.0	0.0	8- 2	2142	0.054	0.0	
				2138	1.0799	0.09		2146	0.215	0.0001	
				2143	5.0403	0.51		2152	0.395	0.0003	
				2149	5.0997	1.02		2200	0.548	0.0007	
				2154	2.7602	1.25		2206	0.693	0.0011	
WATERSHED CONDITIONS:				2208	1.2000	1.53		2210	0.951	0.0015	
82% Contoured corn above				2232	0.0750	1.56		2212	1.201	0.0018	
level terraces; 7% contoured				2257	0.1680	1.63		2214	1.320	0.0021	
corn below terraces, all corn				2314	0.0353	1.64		2217	1.320	0.0025	
8 ft. tall, milk stage, 90%								2222	1.101	0.0032	
canopy; 10% grassed terrace											
backslopes, broom grass 12 in.								2226	0.731	0.0036	
tall; 1% gullies.								2233	0.514	0.0041	
								2238	0.395	0.0044	
								2243	0.319	0.0046	
								2251	0.295	0.0049	
								2306	0.215	0.0053	
								2320	0.147	0.0056	
								2334	0.132	0.0058	
								2400	0.104	0.0061	
								8- 3	300	0.073	
										0.0079	

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.00661. Event precipitation totals for rain gages 111 and 112 are 1.44 and 1.46 in., respectively and the Thiessen average event precipitation is 1.50 in.

COTTONWOOD, SOUTE DAKOTA WATERSHED M-1

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.35 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COTTONWOOD, SOUTH DAKOTA WATERSHED M-1	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P 0.40	0.21	0.64	2.03	1.03	1.09	2.96	1.37	1.72	0.48	0.76	0.31	13.00	
	Q 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STA AV	P 0.29	0.27	0.61	1.95	2.58	3.67	1.80	1.26	1.29	0.52	0.28	0.42	14.93	
	Q 0.0	0.0	0.372	0.0	0.169	0.234	0.010	0.002	0.0	0.0	0.0	0.0	0.787	

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
1970	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0	0-0	0.0

MAXIMUMS FOR PERIOD OF RECORD													
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
5-30 1963	2.030	5-30 1963	0.710	5-30 1963	0.760	5-30 1963	1.122	5-30 1963	1.122	5-30 1963	1.122	3-8 1966	1.538
												3-6 1966	1.913

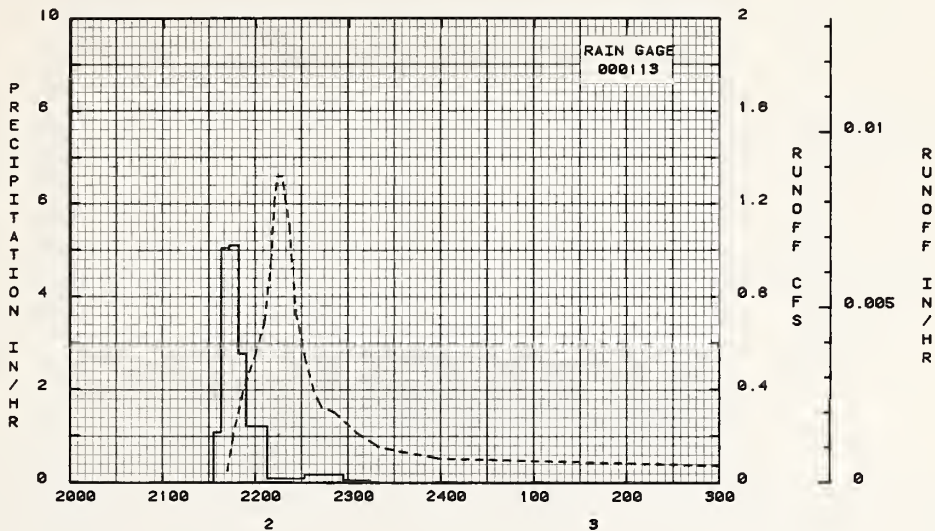
NOTES: Watershed conditions: 100% moderately grazed rangeland. Vegetative cover in late July was 1948 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.5-7. Arithmetic mean of rain gages RM-1, RM-2, RM-3 and RM-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. No runoff during 1970. For long-time precipitation records, see National Weather Service records at Cottonwood, South, Dakota.

1970 DAILY AIR TEMPERATURE (degrees F)																	COTTONWOOD, SOUTH DAKOTA WATERSHED M-1								
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
1	23	9	45	12	29	24	48	11	60	30	73	41	96	48	91	63	101	72	85	38	38	23	58	27	
2	28	8	16	-4	47	27	54	30	76	34	80	37	95	50	90	57	98	69	84	39	34	29	51	21	
3	28	0	46	13	37	17	47	19	78	37	80	45	93	53	81	56	88	53	78	27	34	28	42	20	
4	19	-3	46	19	37	14	64	15	61	32	76	38	88	46	93	54	101	54	90	36	35	22	60	19	
5	11	-15	47	14	51	18	65	37	80	39	85	40	97	53	92	69	96	71	89	36	59	14	37	13	
6	11	-11	46	9	62	12	76	23	85	50	89	45	98	53	92	68	95	56	86	45	59	31	44	11	
7	6	-8	46	23	68	13	84	42	88	43	94	45	98	64	97	67	87	54	48	29	47	27	56	19	
8	3	-19	46	15	59	30	59	27	81	47	91	62	97	51	95	62	92	56	49	29	40	30	56	26	
9	26	-24	62	9	35	9	67	22	54	40	93	58	96	64	90	56	88	49	48	20	56	31	42	20	
10	35	4	49	15	20	-10	76	23	68	33	80	58	88	62	88	59	78	37	45	26	52	31	23	13	
11	36	18	46	25	34	-12	68	40	73	45	76	43	97	62	98	62	83	46	64	25	37	28	24	-14	
12	22	-4	35	9	30	-6	49	28	73	48	72	56	96	62	101	58	74	40	78	30	40	26	36	6	
13	8	-9	26	1	26	-6	36	26	69	45	76	49	96	68	105	55	48	33	68	35	34	29	31	4	
14	18	-8	35	11	29	3	35	28	49	42	86	61	87	65	103	57	45	38	52	32	38	22	18	-7	
15	16	-3	34	21	25	2	38	31	66	34	83	48	87	51	92	58	64	41	58	18	55	18	33	3	
16	10	-8	61	20	41	18	40	20	80	36	84	46	99	53	96	49	64	38	71	22	61	21	39	3	
17	1	-11	69	29	39	20	38	22	91	45	85	50	99	58	102	61	80	37	72	25	55	33	34	6	
18	-3	-20	51	5	34	22	32	30	90	48	77	47	98	58	100	56	90	43	65	21	45	21	27	6	
19	14	-34	31	-4	36	18	37	30	74	44	86	50	81	60	92	60	95	56	71	34	45	20	8	-16	
20	12	-10	44	-1	39	12	37	29	83	48	83	52	83	54	90	42	90	48	70	31	46	19	2	-22	
21	25	-3	52	22	48	18	44	24	78	50	82	43	92	58	95	62	85	39	73	32	41	21	11	-9	
22	44	3	52	26	43	29	42	29	67	47	96	51	90	67	91	47	70	35	69	24	24	4	14	-9	
23	53	22	55	24	53	22	54	30	76	48	94	59	86	60	94	48	79	39	64	41	24	2	19	-11	
24	53	24	46	26	51	32	64	32	76	50	86	50	92	54	101	57	69	40	75	32	51	17	19	1	
25	41	31	52	16	43	27	66	35	74	36	95	61	101	63	101	58	59	38	63	24	58	27	31	-6	
26	45	24	54	26	46	14	64	36	67	34	92	50	93	61	109	53	70	30	48	17	29	19	39	8	
27	59	28	44	29	39	2	64	34	85	43	106	50	91	57	101	59	75	39	46	23	36	18	16	-6	
28	47	20	34	23	50	7	60	41	74	53	104	68	98	61	86	61	81	37	41	30	54	17	19	-8	
29	39	10			46	31	61	36	78	40	100	79	98	61	99	59	86	34	34	30	62	25	40	-2	
30	47	17			42	16	57	30	79	52	97	68	99	59	98	58	86	35	39	26	65	31	37	17	
31	51	14			38	24			67	49			97	58	100	56			38	19				42	23
AV.	27	1	45	15	41	14	54	29	75	43	87	52	94	58	96	58	81	45	63	29	45	23	33	5	
MEAN	14.1		30.5		27.9		41.5		59.1		69.3		75.9		76.7		62.9		46.1		34.0				18.8
STA AV	32	6	36	9	45	18	61	32	71	42	81	52	91	59	89	55	79	46	65	33	49	20	36	10	

NOTES: Temperature data from National Weather Service records at Cottonwood, South Dakota for 24 hour period ending at 1700. STA AV based on 61 yr (1910-70) record period.

1970		DAILY PRECIPITATION (inches)					COTTONWOOD, SOUTH DAKOTA WATERSHED M-1						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.05S	0.0	
3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.30	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.25	0.14S	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.05	0.0	0.03	0.0	0.74	0.08S	0.16S	0.0	
8	0.0	0.0	0.13S	0.0	0.02	0.0	0.0	0.0	0.0	0.01S	0.24S	0.0	
9	0.0	0.0	0.26S	0.0	0.0	0.0	1.77	0.85	0.0	0.0	0.03S	0.04S	
10	0.0	0.0	0.0	0.0	0.17	0.07	0.0	0.0	0.0	0.0	0.01S	0.20S	
11	0.0	0.0	0.0	0.29	0.01	0.30	0.0	0.0	0.0	0.0	0.0	0.01S	
12	0.0	0.0	0.01S	0.34	0.0	0.48	0.0	0.0	0.0	0.06S	0.0	0.02S	
13	0.0	0.03S	0.02S	0.0	0.26	0.0	0.0	0.0	0.54S	0.01S	0.05S	0.0	
14	0.0	0.0	0.02S	0.24	0.07	0.0	0.0	0.14	0.09S	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.38	0.0	0.03	0.0	0.07	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.03S	0.09S	0.05S	0.29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.08S	0.06S	0.03S	0.37	0.0	0.0	0.49	0.0	0.0	0.01S	0.02S	0.03S	
19	0.0	0.01S	0.03S	0.01	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.07	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.61	0.0	0.0	0.0	0.0	0.0	
24	0.25S	0.0	0.0	0.0	0.08	0.19	0.0	0.0	0.0	0.0	0.0	0.01S	
25	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.12S	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.04S	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01S	0.01S	0.0	
28	0.0	0.0	0.03S	0.03	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	0.0	
29	0.0		0.04S	0.0	0.02	0.0	0.0	0.0	0.0	0.08S	0.0	0.0	
30	0.0		0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	
31	0.0		0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.40	0.21	0.64	2.03	1.03	1.09	2.96	1.37	1.72	0.48	0.76	0.31	
STA AV	0.29	0.27	0.61	1.95	2.58	3.67	1.80	1.26	1.29	0.52	0.28	0.42	

NOTES: Arithmetic mean of rain gages RM-1, RM-2, RM-3 and RM-4. STA AV based on 8 yr (1963-70) record period.



EVENT OF AUGUST 2 - 3, 1970

TREYNOR, IOWA WATERSHED 4

## TEEYNOE, IOWA WATERSHED 5

LOCATION: Pottawattamie County, Iowa; approximately 9 miles southeast of Treenor and 3 miles southwest of Macedonia; West Nishnabotna River, Missouri River Basin.

AREA: 389.00 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													TEEYNOE, IOWA WATERSHED 5														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual													
1970	P	0.04	0.30	0.69	3.98	2.45	2.51	4.38	3.46	3.92	4.43	1.19	0.30	27.65													
	Q	0.279	0.220	0.245	0.316	0.351	0.222	0.219	0.186	0.125	0.216	0.209	0.142	2.729													
STA AV	P	0.47	0.53	1.19	3.30	3.27	6.46	3.35	3.62	4.27	2.47	0.92	0.89	30.72													
	Q	0.268	0.358	0.572	0.359	0.336	1.081	0.522	0.323	0.436	0.317	0.279	0.257	5.089													
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																											
		Maximum Discharge				Maximum Volume for Selected Time Interval																					
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.										
1970		8-2	0.029	8-2	0.022	8-2	0.032	8-2	0.041	8-2	0.042	8-2	0.053	5-12	0.083	1-25	0.141										
MAXIMUMS FOR PERIOD OF RECORD																											
		6-20	1.250	6-20	0.890	6-20	1.271	6-20	1.529	6-20	1.575	6-20	1.636	6-20	1.744	6-20	2.460										
		1967		1967		1967		1967		1967		1967		1967		1967											

NOTES: Watershed conditions: Percent crop distribution of area above or below level terraces, respectively is: corn, 34 and 4; beans, 18 and 2; small grain, 4 and 0; hay and clover, 8 and 0; pasture, 18 and 8; and roads and farmsteads, 1 and 3. Precipitation: Before April 5 and after November 3 arithmetic average of rain gages 101 and 108; Thiessen average of seven recording rain gages for remainder of year. Precipitation and runoff records began February 6, 1963. January 1 to February 6, 1963 precipitation and runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.5-6. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)													TEEYNOE, IOWA WATERSHED 5												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec													
1	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.0	0.0													
2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	1.91	0.23	0.0	0.0	0.05													
3	0.0	0.0	0.05	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.13													
4	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
5	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.05	0.0	0.0	0.0													
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0													
8	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	1.28	0.41	0.0													
9	0.0	0.0	0.05	0.0	0.15	0.0	0.0	0.0	0.19	0.79	0.18	0.0													
10	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	0.0	0.0	0.22													
11	0.0	0.0	0.0	2.09	0.09	0.61	0.0	0.0	0.0	0.12	0.0	0.0													
12	0.0	0.0	0.0	0.04	1.17	0.09	0.0	0.0	0.0	0.0	0.0	0.0													
13	0.0	0.03	0.0	0.20	0.84	0.0	0.83	0.0	0.30	0.0	0.03	0.0													
14	0.0	0.01	0.0	0.0	0.03	0.0	1.26	0.0	1.74	0.0	0.0	0.0													
15	0.0	0.0	0.0	0.07	0.0	0.76	0.0	0.0	0.31	0.0	0.0	0.0													
16	0.0	0.0	0.0	0.0	0.0	0.50	0.0	0.0	0.14	0.0	0.0	0.08													
17	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.58	0.09	0.0	0.0	0.0													
18	0.02	0.0	0.05	0.77	0.0	0.0	0.42	0.0	0.0	0.0	0.02	0.0													
19	0.0	0.0	0.25	0.41	0.0	0.02	0.0	0.0	0.0	0.0	0.37	0.0													
20	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0													
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.85	0.0	0.04	0.0	0.0													
22	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.38	0.78	0.0	0.0													
24	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
25	0.0	0.0	0.04	0.0	0.0	0.02	0.0	0.0	0.49	0.0	0.0	0.0													
26	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.0	0.0	0.96	0.0	0.0													
27	0.0	0.0	0.0	0.0	0.0	0.0	1.05	0.0	0.0	0.0	0.0	0.0													
28	0.0	0.26	0.0	0.0	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0													
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
30	0.0	0.0	0.0	0.34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0													
TOTAL	0.04	0.30	0.69	3.98	2.45	2.51	4.38	3.46	3.92	4.43	1.19	0.30													
STA AV	0.47	0.53	1.19	3.30	3.27	6.46	3.35	3.62	4.27	2.47	0.92	0.89													

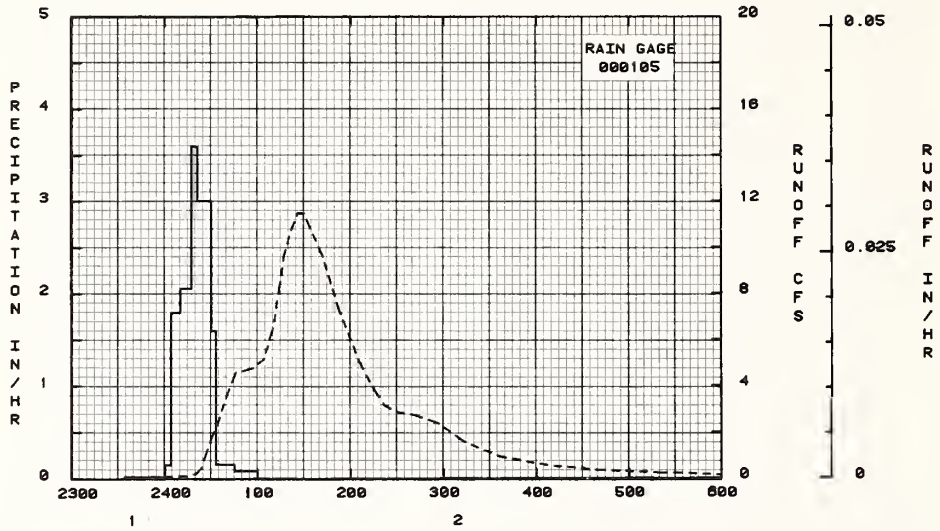
NOTES: Daily precipitation amounts are Thiessen weighted average values from seven stations (101 through 107) for period of April 1 through November 3 and are arithmetic averages from stations 101 and 108 for remainder of the year. STA AV based on 8 yr record period.

1970		MEAN DAILY DISCHARGE (cfs)					TREYNOR, IOWA WATERSHED 5					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.102	0.218	0.153	0.122	0.190	0.130	0.075	0.068	0.047	0.639	0.086	0.100
2	0.102	0.170	0.191	0.122	0.158	0.115	0.075	0.865	0.054	0.031	0.098	0.086
3	0.102	0.098	0.211	0.112	0.154	0.114	0.084	0.187	0.056	0.031	0.114	0.086
4	0.102	0.109	0.169	0.102	0.152	0.115	0.080	0.075	0.045	0.035	0.094	0.086
5	0.102	0.122	0.153	0.102	0.152	0.107	0.081	0.082	0.057	0.039	0.086	0.072
6	0.102	0.128	0.141	0.102	0.147	0.106	0.094	0.086	0.046	0.045	0.086	0.059
7	0.102	0.153	0.141	0.094	0.172	0.106	0.094	0.076	0.031	0.052	0.086	0.070
8	0.102	0.153	0.141	0.086	0.150	0.107	0.083	0.078	0.040	0.409	0.113	0.100
9	0.102	0.141	0.131	0.086	0.170	0.109	0.060	0.086	0.049	0.526	0.232	0.075
10	0.102	0.141	0.122	0.086	0.136	0.094	0.086	0.077	0.041	0.090	0.102	0.071
11	0.102	0.141	0.122	0.360	0.133	0.102	0.076	0.068	0.037	0.095	0.102	0.071
12	0.102	0.131	0.122	0.455	0.704	0.112	0.077	0.066	0.035	0.094	0.102	0.071
13	0.102	0.122	0.112	0.176	0.656	0.122	0.166	0.060	0.049	0.086	0.102	0.071
14	0.102	0.122	0.094	0.165	0.226	0.122	0.634	0.054	0.406	0.086	0.094	0.071
15	0.102	0.122	0.086	0.167	0.178	0.131	0.112	0.053	0.128	0.082	0.096	0.071
16	0.102	0.122	0.104	0.131	0.162	0.375	0.091	0.059	0.069	0.074	0.120	0.071
17	0.102	0.129	0.122	0.122	0.154	0.244	0.082	0.115	0.071	0.071	0.122	0.071
18	0.102	0.130	0.122	0.426	0.159	0.122	0.120	0.075	0.059	0.071	0.122	0.071
19	0.102	0.088	0.129	0.418	0.147	0.115	0.116	0.059	0.059	0.078	0.162	0.071
20	0.102	0.086	0.130	0.202	0.144	0.111	0.095	0.055	0.049	0.086	0.111	0.071
21	0.102	0.105	0.122	0.182	0.126	0.100	0.086	0.153	0.043	0.086	0.102	0.071
22	0.102	0.127	0.122	0.177	0.133	0.107	0.086	0.087	0.047	0.086	0.071	0.071
23	0.121	0.124	0.122	0.165	0.141	0.105	0.086	0.066	0.083	0.217	0.047	0.071
24	0.141	0.127	0.122	0.137	0.139	0.102	0.086	0.064	0.058	0.086	0.074	0.071
25	0.141	0.120	0.122	0.130	0.135	0.098	0.086	0.058	0.142	0.086	0.172	0.071
26	0.211	0.122	0.122	0.130	0.155	0.094	0.086	0.049	0.054	0.392	0.152	0.071
27	0.177	0.122	0.122	0.146	0.136	0.102	0.150	0.047	0.047	0.107	0.149	0.071
28	0.782	0.124	0.093	0.147	0.134	0.102	0.280	0.047	0.049	0.086	0.122	0.071
29	0.277	0.122	0.112	0.141	0.140	0.081	0.071	0.037	0.042	0.086	0.137	0.071
30	0.259	0.122	0.122	0.172	0.134	0.082	0.067	0.032	0.041	0.086	0.158	0.078
31	0.213	0.122	0.122	0.133	0.133	0.082	0.068	0.044	0.086	0.086	0.086	0.086
MEAN	0.1473	0.1285	0.1290	0.1721	0.1852	0.1211	0.1153	0.0978	0.0679	0.1138	0.1138	0.0748
INCHES	0.279	0.220	0.245	0.316	0.351	0.222	0.219	0.186	0.125	0.216	0.209	0.142
STA AV	0.268	0.358	0.572	0.339	0.336	1.081	0.522	0.323	0.436	0.317	0.279	0.257

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.06119. STA AV based on 8 yr record period.

1970		SELECTED RUNOFF EVENT			TREYNOR, IOWA WATERSHED 5						
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF AUGUST 1 - 2, 1970											
8- 1	RG 000105 0.12	0.004	8- 1	2334	0.0	0.0	8- 1	2400	0.086	0.0	
				2400	0.0231	0.01	8- 2	18	0.122	0.0001	
			8- 2	4	0.1500	0.02	20	0.216	0.0001		
				10	1.8000	0.20	24	0.502	0.0002		
				17	2.0571	0.44	26	1.004	0.0003		
WATERSHED CONDITIONS:											
Percent of Watershed In:											
Above											
Terraces											
Corn	34	4		21	3.6000	0.68	30	1.749	0.0005		
Beans	18	2		30	3.0000	1.13	34	2.361	0.0008		
Small Grain	4	0		33	1.6000	1.21	40	3.601	0.0015		
Alfalfa and				45	0.1500	1.24	46	4.605	0.0026		
Clover	8	0		100	0.0800	1.26	57	4.793	0.0048		
Pasture	18	8					104	5.182	0.0063		
Roads and							110	6.511	0.0078		
Farmstead	1	3					114	8.229	0.0090		
Crops Heights: Corn, 8 ft. tall, milkstage, 90% canopy;							117	9.614	0.0102		
Soybeans, 2 ft. tall, 80% canopy; small grain, harvested; alfalfa and clover							122	10.834	0.0123		
hay, 18-24 in., 95% canopy;							126	11.485	0.0142		
pasture, 6-10 in., 60-90% canopy.							130	11.485	0.0163		
							134	10.834	0.0182		
							142	9.614	0.0217		
							152	7.394	0.0253		
							206	4.985	0.0290		
							216	3.750	0.0309		
							222	3.150	0.0318		
							230	2.852	0.0328		
							242	2.722	0.0342		
							257	2.361	0.0358		
							314	1.549	0.0372		
							336	0.941	0.0384		
							407	0.545	0.0394		
							440	0.341	0.0400		
							520	0.216	0.0405		

NOTES: To convert runoff in CFS to IN/HR, multiply by 0.002549. Event precipitation totals for rain gages 101, 102, 103, 104, 106 and 107 are 1.21, 1.20, 1.30, 1.17, 1.22 and 1.16, respectively and the Thiessen average event precipitation is 1.20 in.



EVENT OF AUGUST 1 - 2, 1970  
TREYNOR, IOWA WATERSHED 5



## COTTONWOOD, SOUTH DAKOTA WATERSHED H-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.13 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COTTONWOOD, SOUTH DAKOTA WATERSHED H-2	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.37	0.18	0.58	1.85	0.57	1.10	3.03	1.36	1.74	0.45	0.74	0.27	12.64
	Q	0.0	0.0	0.0	0.092	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.094
STA AV	P	0.27	0.28	0.61	1.92	2.56	3.66	1.79	1.26	1.32	0.49	0.26	0.41	14.82
	Q	0.068	0.0	0.284	0.016	0.167	0.352	0.053	0.013	0.013	0.0	0.0	0.0	0.966

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge Date	1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days		
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	
1970	4-25	0.025	4-25	0.023	4-25	0.043	4-25	0.072	4-25	0.077	4-24	0.078	4-23	0.086	4-17	0.092

MAXIMUMS FOR PERIOD OF RECORD																
	5-30	3.577	5-30	0.608	5-30	0.629	5-30	1.129	5-30	1.129	5-30	1.129	3-17	1.462	3-11	1.571
	1963		1963		1963		1963		1963		1963		1969		1969	

NOTES: Watershed conditions: 100% heavily grazed rangeland. Vegetative cover in late July was 2245 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.1-5. For temperature information, see table of maximum and minimum values included for Watershed 72.005. Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1970	DAILY PRECIPITATION (inches)												COTTONWOOD, SOUTH DAKOTA WATERSHED H-2
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.02S	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.05S	0.0	
2	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	
3	0.01S	0.02S	0.03S	0.0	0.0	0.0	0.0	0.0	0.08	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.30	0.52	0.16S	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.05	0.0	0.04	0.0	0.52	0.08S	0.16S	0.0	
8	0.0	0.0	0.10S	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.23S	0.0	
9	0.0	0.0	0.20S	0.0	0.0	0.0	1.69	0.78	0.0	0.0	0.02S	0.04S	
10	0.0	0.0	0.0	0.0	0.14	0.06	0.0	0.0	0.0	0.0	0.02S	0.16S	
11	0.0	0.0	0.0	0.29S	0.02	0.33	0.0	0.0	0.0	0.0	0.0	0.02S	
12	0.0	0.0	0.0	0.23S	0.0	0.45	0.0	0.0	0.0	0.06S	0.0	0.01S	
13	0.0	0.04S	0.02S	0.0	0.24	0.0	0.0	0.0	0.56S	0.01S	0.04S	0.0	
14	0.0	0.0	0.0	0.22S	0.08	0.0	0.0	0.18	0.04S	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.36S	0.0	0.02	0.0	0.08	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.03S	0.06S	0.07S	0.29S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.06S	0.05S	0.03S	0.31S	0.0	0.0	0.62	0.0	0.0	0.01S	0.04S	0.0	
19	0.0	0.01S	0.03S	0.02S	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.03S	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.08	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0	0.0	0.0	
24	0.24S	0.0	0.0	0.0	0.08	0.20	0.0	0.0	0.0	0.0	0.0	0.01S	
25	0.0	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.12S	0.0	
26	0.0	0.0	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.02S	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.01S	0.04S	0.0	
28	0.0	0.0	0.04S	0.04	0.0	0.0	0.0	0.0	0.0	0.03S	0.0	0.0	
29	0.0	0.0	0.03S	0.0	0.01	0.0	0.0	0.0	0.0	0.04S	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TOTAL	0.37	0.18	0.58	1.85	0.57	1.10	3.03	1.36	1.74	0.45	0.74	0.27	
STA AV	0.27	0.28	0.61	1.92	2.56	3.66	1.79	1.26	1.32	0.49	0.26	0.41	

NOTES: Arithmetic mean of rain gages RH-1, RH-2, RH-3 and RH-4. STA AV based on 8 yr (1963-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)										COTTONWOOD, SOUTH DAKOTA WATERSHED H-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
25	0.0	0.0	0.0	0.007	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
INCHES	0.0	0.0	0.0	0.002	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	
STA AV	0.068	0.0	0.284	0.016	0.167	0.352	0.053	0.013	0.013	0.0	0.0	0.0	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 11.745. STA AV based on 8 yr (1963-70) record period.

COTTONWOOD, SOUTH DAKOTA WATERSHED L-2

LOCATION: Jackson County, South Dakota; approximately 3 miles east southeast of Cottonwood, Bad River Basin.

AREA: 2.38 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													COTTONWOOD, SOUTH DAKOTA WATERSHED L-2	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
1970	P	0.33	0.17	0.46	1.98	1.05	1.20	2.69	1.54	1.72	0.39	0.71	0.23	12.47
	Q	0.0	0.0	0.0	0.029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.029
STA AV	P	0.26	0.26	0.56	1.92	2.56	3.65	1.77	1.29	1.32	0.49	0.26	0.33	14.65
	Q	0.0	0.0	0.316	0.004	0.034	0.246	0.004	0.0	0.0	0.0	0.0	0.0	0.604

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
	Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days	
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	4-25	0.008	4-25	0.008	4-25	0.015	4-25	0.029	4-25	0.029	4-24	0.029	4-23	0.029	4-17	0.029

MAXIMUMS FOR PERIOD OF RECORD																
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
	6-15	0.542	6-15	0.388	6-15	0.540	6-15	1.073	6-15	1.164	6-15	1.243	6-15	1.243	3-8	1.544
	1963		1963		1963		1963		1963		1963		1963		1966	

NOTES: Watershed conditions: 100% lightly grazed rangeland. Vegetative cover in late July was 2608 lbs./acre (oven-dry weight). For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 72.2-4. For temperature information, see table of maximum and minimum values included for Watershed 72.005. Arithmetic mean of rain gages EL-1, EL-2, EL-3 and EL-4. Precipitation and runoff records began January 1963. Precipitation and runoff STA AV based on 8 yr record period. For long-time precipitation records, see National Weather Service records at Cottonwood, South Dakota.

1970	DAILY PRECIPITATION (inches)												COTTONWOOD, SOUTH DAKOTA WATERSHED L-2	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.01S	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.01	0.0	0.0	0.0		
2	0.01S	0.0	0.02S	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.03S	0.0		
3	0.01S	0.02S	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0		
6	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.26	0.27	0.12S	0.0	0.0		
7	0.0	0.0	0.0	0.0	0.05	0.0	0.04	0.0	0.72	0.09S	0.15S	0.0		
8	0.0	0.0	0.06S	0.0	0.01	0.0	0.0	0.0	0.0	0.01S	0.20S	0.0		
9	0.0	0.0	0.16S	0.0	0.0	0.0	1.69	1.08	0.0	0.0	0.02S	0.02S		
10	0.0	0.0	0.0	0.0	0.15	0.08	0.0	0.0	0.0	0.0	0.02S	0.14S		
11	0.0	0.0	0.0	0.26S	0.0	0.29	0.0	0.0	0.0	0.0	0.0	0.02S		
12	0.0	0.0	0.03S	0.31S	0.0	0.63	0.0	0.0	0.0	0.08S	0.0	0.02S		
13	0.0	0.02S	0.01S	0.0	0.24	0.0	0.0	0.0	0.56S	0.02S	0.03S	0.0		
14	0.0	0.0	0.0	0.20S	0.06	0.0	0.0	0.09	0.07S	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.45S	0.0	0.03	0.0	0.10	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.01S	0.09S	0.04S	0.27S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.04S	0.03S	0.02S	0.39S	0.0	0.0	0.31	0.0	0.0	0.01S	0.02S	0.03S		
19	0.0	0.01S	0.02S	0.01S	0.0	0.0	0.0	0.0	0.0	0.02S	0.0	0.0		
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.0	0.0	0.0	0.05	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	0.60	0.0	0.0	0.0	0.0	0.0		
24	0.24S	0.0	0.0	0.0	0.10	0.12	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.01S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.13S	0.0		
26	0.0	0.0	0.03S	0.0	0.0	0.0	0.0	0.0	0.0	0.02S	0.02S	0.0		
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.01S	0.03S	0.0		
28	0.0	0.0	0.03S	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.01S	0.0		
29	0.0	0.04S	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	0.0	0.30	0.0	0.0	0.0	0.0	0.0	0.05S	0.0		
31	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TOTAL	0.33	0.17	0.46	1.98	1.05	1.20	2.69	1.54	1.72	0.39	0.71	0.23		
STA AV	0.26	0.26	0.56	1.92	2.56	3.65	1.77	1.29	1.32	0.49	0.26	0.33		

NOTES: Arithmetic mean of rain gages EL-1, EL-2, EL-3 and EL-4. STA AV based on 8 yr (1963-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					COTTONWOOD, SOUTH DAKOTA WATERSHED 1-2					
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
INCHES	0.0	0.0	0.0	0.029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	0.0	0.0	0.316	0.004	0.034	0.246	0.004	0.0	0.0	0.0	0.0	0.0

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.007. STA AV based on 8 yr (1963-70) record period.

## AHOSKIE, NORTH CAROLINA WATERSHED W-A1

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 3/4 mile southwest of Ahoskie; Chowan River Basin.

AREA: 36480.00 acres 57.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													AHOSKIE, NORTH CAROLINA WATERSHED W-A1		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual		
1970	P 2.65	3.97	3.78	4.49	2.53	4.25	8.59	1.79	2.54	3.92	1.63	2.32	42.46		
	Q 1.591	3.969	1.946	3.865	0.947	0.392	1.392	0.362	0.119	0.208	0.297	0.488	15.574		
STA AV	P 3.23	3.29	3.32	2.44	3.82	4.62	6.23	4.34	2.84	2.49	1.70	2.86	41.17		
	Q 1.866	2.431	2.756	1.282	0.962	0.843	1.329	1.252	0.321	0.516	0.219	0.884	14.660		
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
	Maximum Discharge Date Rate	1 Hour Date Vol.		2 Hours Date Vol.		Maximum Volume for Selected Time Interval 6 Hours Date Vol.		12 Hours Date Vol.		1 Day Date Vol.		2 Days Date Vol.		8 Days Date Vol.	
1970	2-3 0.030	2-3 0.030	2-3 0.060	2-3 0.190	2-3 0.380	2-3 0.740	2-3 1.420	1-30 2.550							
MAXIMUMS FOR PERIOD OF RECORD															
	10-5 0.070	10-5 0.070	10-5 0.140	10-5 0.420	10-5 0.830	10-5 1.650	10-5 3.020	10-3 4.140							
	1964	1964	1964	1964	1964	1964	1964	1964							

NOTES: Watershed conditions: Woodland, 65%; row crops, 30%; pasture, 2%; roads, urban, and homesites, 3%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation began in 1964. Records of runoff began in 1950. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 10 gages. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY AIR TEMPERATURE (degrees F)														AHOSKIE, NORTH CAROLINA WATERSHED W-A1												
Day	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec			
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min		
1	55	32	59	24	58	26	57	34	83	56	84	62	90	66	92	70	91	65	77	44	69	56	62	32		
2	47	23	63	41	62	38	75	45	80	50	85	60	90	68	92	68	83	58	76	43	66	56	73	45		
3	49	25	63	43	59	44	69	40	78	56	85	61	91	68	92	62	88	62	86	59	70	52	73	34		
4	46	20	46	14	68	42	70	35	61	49	84	60	92	72	91	69	91	72	81	48	61	46	71	41		
5	47	16	42	16	63	55	61	40	75	45	86	67	92	68	85	58	90	67	75	36	60	37	57	24		
6	42	27	52	21	58	39	63	37	75	49	86	64	83	62	84	62	89	64	79	40	64	32	51	20		
7	37	31	51	26	57	25	60	39	66	33	84	59	86	58	84	65	87	56	81	44	68	36	42	17		
8	34	12	56	24	68	40	70	30	83	44	84	50	36	56	85	60	83	52	82	51	74	34	47	15		
9	22	7	62	37	66	37	81	53	88	58	84	50	87	66	84	64	85	56	84	58	71	44	63	22		
10	32	7	54	38	57	25	80	43	88	60	87	56	88	72	78	65	90	67	85	59	74	48	68	37		
11	44	12	54	32	66	31	71	40	84	62	89	56	86	65	84	63	87	68	85	61	64	57	69	34		
12	47	30	53	29	60	42	75	40	86	62	91	60	86	65	85	57	NR	NR	82	58	67	54	74	45		
13	40	19	54	23	53	37	74	37	90	63	91	64	89	63	86	62	85	53	84	51	70	48	71	44		
14	51	19	54	26	NR	NR	NR	NR	69	53	91	62	84	57	88	67	88	67	89	57	86	58	68	41	50	23
15	45	20	70	30	50	25	58	43	90	56	81	51	89	69	91	67	90	56	82	55	69	55	55	22		
16	54	17	69	34	45	25	71	42	NR	NR	88	55	90	72	90	67	92	63	77	49	58	30	52	35		
17	68	25	37	31	55	18	72	40	77	57	93	66	90	60	89	68	91	62	58	32	57	27	58	42		
18	61	45	58	32	61	37	80	51	71	44	95	68	87	57	92	68	92	68	69	28	53	30	55	27		
19	51	28	70	42	50	37	65	49	84	42	98	72	90	59	89	65	90	70	75	32	63	31	66	30		
20	31	23	63	26	52	40	84	51	90	55	97	65	90	64	90	65	84	52	79	39	72	44	63	47		
21	28	11	45	17	55	44	87	54	87	60	92	61	87	68	91	69	89	57	73	50	63	36	51	40		
22	29	3	NR	22	60	43	86	41	85	53	88	66	85	62	90	67	95	65	70	61	68	25	60	41		
23	30	10	63	NR	58	33	77	58	91	60	88	65	86	68	89	70	92	68	72	59	63	42	64	52		
24	38	22	63	23	57	34	86	60	92	64	86	57	87	70	87	70	91	63	72	52	45	17	65	44		
25	60	25	62	41	71	32	84	59	90	60	89	68	89	69	85	65	93	66	68	53	43	15	47	22		
26	68	47	48	15	75	48	76	50	83	63	87	65	90	67	85	67	92	66	70	56	56	23	44	27		
27	64	27	56	20	74	33	69	55	83	56	87	70	99	67	88	59	90	60	65	54	68	25	47	29		
28	62	28	NR	NR	74	32	75	51	84	60	85	54	91	65	89	62	66	53	68	49	72	35	42	16		
29	79	50	NR	NR	75	47	79	56	77	53	81	50	91	69	92	66	68	42	71	53	70	39	36	18		
30	76	39	NR	NR	50	34	84	51	80	55	87	57	48	68	93	61	75	40	65	57	70	42	38	16		
31	48	21	NR	NR	52	36	NR	NR	83	52	NR	NR	89	67	95	71	NR	NR	65	55	NR	NR	NR	NR		
AV.	48	23	56	28	60	36	74	46	83	55	88	61	88	66	88	65	87	60	75	50	65	39	57	31		
MEAN	35.6	42.2	48.2	59.8	68.6	74.1	77.1	76.7	73.8	73.8	76.7	73.8	73.8	76.7	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	43.9	
STA AV	51	28	53	31	62	37	73	46	80	54	86	61	89	66	87	64	82	58	73	47	63	37	52	30		

NOTES: Temperature data from National Weather Service records at Lewiston, North Carolina. STA AV based on 17 yr (1954-70) record period.

1970		DAILY PRECIPITATION (inches)					ABOSKIE, NORTH CAROLINA WATERSHED #A-1						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	3.16	0.0	0.0	0.30	0.0	0.0	0.0	0.03	0.0	0.0	0.12	0.0	
2	0.0	0.56	0.09	0.27	0.0	0.0	0.25	0.0	0.0	0.0	0.02	0.0	
3	0.0	1.62	0.0	0.0	0.0	0.0	0.03	0.0	0.04	0.0	0.08	0.0	
4	0.0	0.0	0.15	0.0	1.05	0.0	0.40	0.0	0.28	0.0	0.06	0.0	
5	0.0	0.0	0.0	0.0	0.0	1.22	0.72	0.0	0.29	0.0	0.05	0.0	
6	0.63	0.0	0.0	0.37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.15	0.0	0.0	0.0	0.0	0.55	0.04	0.0	0.0	0.0	0.0	
10	0.06	0.05	0.0	0.0	0.0	0.0	1.02	1.19	0.0	0.0	0.81	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.03	0.06	0.0	0.24	0.0	
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.0	0.07	0.0	0.03	0.0	
13	0.0	0.0	0.0	0.99	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	
14	0.0	0.0	0.0	1.25	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	
16	0.0	0.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	0.02	1.42	
17	0.30	0.65	0.0	0.0	0.10	0.0	0.0	0.08	0.0	0.04	0.0	0.03	
18	0.20	0.0	0.37	0.0	0.02	0.24	0.0	0.04	0.0	0.0	0.01	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	
20	0.0	0.0	0.39	0.16	0.0	0.01	1.04	0.0	0.0	0.0	0.10	0.0	
21	0.0	0.0	0.19	0.0	0.0	0.89	0.61	0.0	0.0	0.40	0.0	0.34	
22	0.0	0.0	0.67	0.0	0.0	0.05	1.32	0.0	0.0	1.53	0.0	0.01	
23	0.0	0.0	0.0	0.0	0.0	0.03	1.04	0.38	0.0	0.68	0.0	0.38	
24	0.0	0.0	0.0	0.0	0.0	0.01	0.03	0.0	0.0	0.05	0.0	0.0	
25	0.0	0.39	0.0	0.0	0.09	0.27	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.06	0.0	0.42	0.94	1.27	1.53	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	1.26	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.53	0.0	0.0	0.0	
29	0.47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
30	0.65	0.09	0.0	0.0	0.0	0.0	1.06	0.0	0.0	0.19	0.0	0.0	
31	0.0	1.25	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.25	0.0	0.14	
TOTAL	2.65	3.97	3.78	4.49	2.53	4.25	8.59	1.79	2.54	3.92	1.63	2.32	
STA AV	3.23	3.29	3.32	2.44	3.82	4.62	6.23	4.34	2.84	2.49	1.70	2.86	

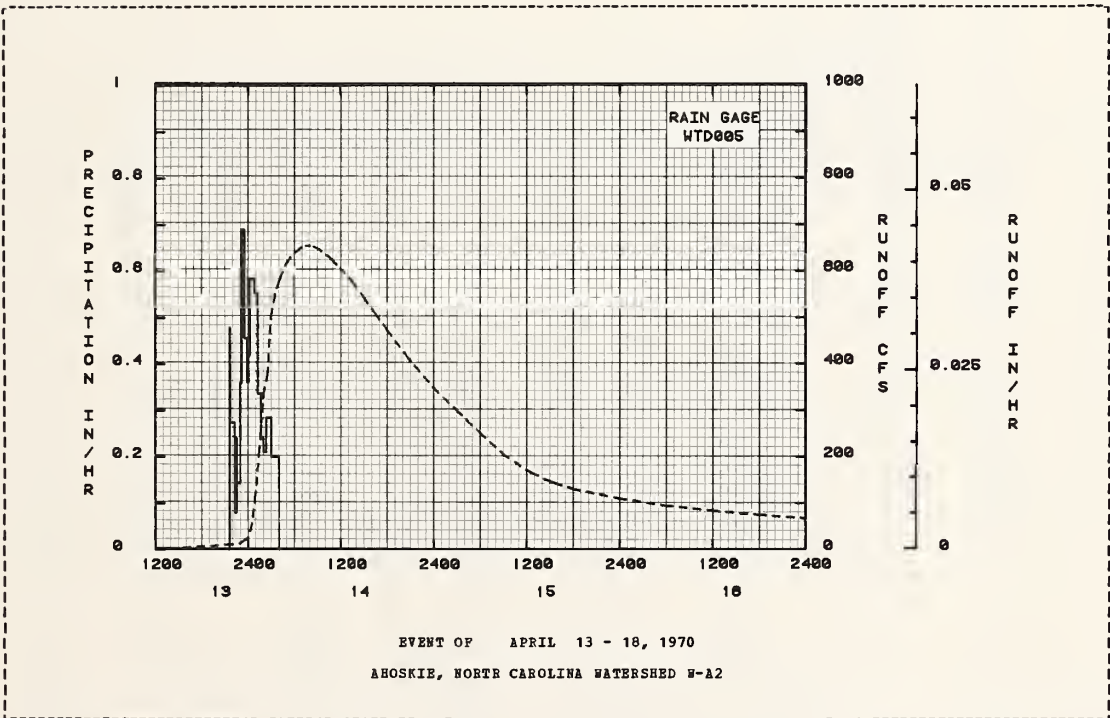
NOTES: Precipitation values are Thiessen weighted averages of 10 gages. STA AV based on 6 yr (1965-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					ABOSKIE, NORTH CAROLINA WATERSHED #A-1						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	86.0	153.0	56.0	660.0	77.0	9.7	10.0	129.0	6.6	5.5	11.0	9.3	
2	84.0	170.0	53.0	483.0	60.0	9.7	11.0	70.0	6.6	5.5	13.0	9.0	
3	72.0	919.0	51.0	361.0	50.0	8.8	11.0	37.0	6.8	5.5	11.0	9.0	
4	63.0	1100.0	49.0	204.0	106.0	8.5	9.7	23.0	7.4	4.8	10.0	9.0	
5	54.0	728.0	52.0	130.0	324.0	18.0	32.0	17.0	7.4	4.8	9.3	8.6	
6	57.0	302.0	55.0	93.0	174.0	128.0	31.0	15.0	6.8	4.5	9.6	9.0	
7	200.0	192.0	47.0	114.0	100.0	30.0	17.0	13.0	8.0	4.5	9.0	9.0	
8	161.0	138.0	41.0	92.0	72.0	20.0	12.0	13.0	6.3	4.5	8.6	9.0	
9	97.0	111.0	38.0	71.0	56.0	15.0	15.0	12.0	6.0	4.5	8.3	9.0	
10	69.0	133.0	36.0	57.0	44.0	13.0	30.0	13.0	5.8	4.5	9.0	9.0	
11	54.0	121.0	32.0	45.0	36.0	11.0	111.0	21.0	5.8	4.5	72.0	9.0	
12	53.0	108.0	31.0	38.0	30.0	10.0	45.0	22.0	5.8	4.5	41.0	9.0	
13	56.0	89.0	33.0	35.0	27.0	9.4	22.0	15.0	5.8	4.5	28.0	9.0	
14	53.0	69.0	33.0	851.0	24.0	9.1	16.0	13.0	5.5	4.2	22.0	8.6	
15	46.0	66.0	32.0	886.0	22.0	8.8	18.0	12.0	5.5	4.2	18.0	8.6	
16	43.0	64.0	29.0	371.0	22.0	8.5	14.0	11.0	5.5	6.8	16.0	13.0	
17	41.0	356.0	27.0	206.0	20.0	8.2	12.0	10.0	5.5	7.7	15.0	83.0	
18	78.0	342.0	29.0	140.0	20.0	8.0	11.0	9.0	5.2	5.2	14.0	47.0	
19	93.0	201.0	45.0	103.0	18.0	8.0	10.0	8.5	5.0	4.8	13.0	32.0	
20	76.0	136.0	53.0	88.0	16.0	7.4	15.0	8.0	5.0	4.8	13.0	26.0	
21	61.0	97.0	65.0	81.0	15.0	12.0	59.0	8.0	5.0	6.3	12.0	24.0	
22	46.0	81.0	377.0	71.0	14.0	26.0	79.0	8.0	5.0	8.5	12.0	33.0	
23	38.0	68.0	319.0	63.0	13.0	12.0	492.0	8.0	5.0	102.0	11.0	45.0	
24	34.0	60.0	175.0	59.0	13.0	9.4	459.0	8.5	5.0	29.0	11.0	82.0	
25	33.0	56.0	114.0	53.0	12.0	8.8	165.0	8.2	4.8	15.0	10.0	55.0	
26	37.0	80.0	95.0	52.0	16.0	90.0	79.0	8.0	4.8	12.0	10.0	43.0	
27	41.0	78.0	146.0	146.0	23.0	49.0	45.0	7.5	5.5	10.0	9.6	34.0	
28	38.0	65.0	109.0	138.0	14.0	19.0	29.0	7.0	9.1	9.3	9.6	29.0	
29	36.0	85.0	133.0	13.0	12.0	15.0	21.0	6.8	9.7	9.0	9.6	25.0	
30	282.0	72.0	99.0	11.0	11.0	11.0	22.0	6.6	6.0	8.6	9.3	22.0	
31	256.0	607.0	19.0	19.0	19.0	19.0	230.0	6.6	9.0	9.0	21.0	21.0	
MEAN	78.65	217.25	96.23	197.43	46.81	20.04	68.80	17.89	6.07	10.27	15.16	24.13	
INCHES	1.591	3.969	1.946	3.865	0.947	0.392	1.392	0.362	0.119	0.208	0.297	0.488	
STA AV	1.866	2.431	2.756	1.282	0.962	0.843	1.329	1.252	0.321	0.516	0.219	0.884	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0006525. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT			AOSKIE, NORTH CAROLINA WATERSHED W-A2							
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF				
Date Mo-Day	Rainfall (inches)	Runoff (inches)	Date Mo-Day	Time of Day	Intensity (in/hr)	Acc. (inches)	Date Mo-Day	Time of Day	Rate (cfs)	Acc. (inches)
EVENT OF APRIL 13 - 18, 1970 (CONTINUED)										
							4-15	1330	158.500	0.9938
								1500	147.300	1.0086
								1630	138.200	1.0224
								1800	129.800	1.0354
								2400	109.000	1.0817
							4-16	600	94.000	1.1210
								1200	83.500	1.1554
								1800	74.500	1.1860
								2400	66.500	1.2133
							4-17	1200	54.800	1.2603
								2400	46.800	1.2997
							4-18	1200	41.200	1.3338
								2400	34.000	1.3629

NOTES: To convert CFS to IN/HR, multiply by 0.00006457. Precipitation is Thiessen average of 2 rain gages.



## AHOSKIE, NORTH CAROLINA WATERSHED W-A3

LOCATION: Northampton County, North Carolina, approximately 3 miles southeast of Rich Square; Chowan River Basin.

AREA: 2368.00 acres 3.70 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)														AHOSKIE, NORTH CAROLINA WATERSHED W-A3														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual														
1970	P	2.59	3.73	3.58	4.30	2.20	3.64	9.63	1.76	3.33	4.31	1.34	2.29	42.70														
	Q	1.252	3.076	1.710	3.100	0.412	0.045	3.120	0.755	0.012	0.040	0.025	0.040	13.587														
STA AV	P	3.31	3.25	3.15	2.48	3.88	4.75	5.57	4.37	2.85	2.63	1.73	2.92	40.87														
	Q	1.100	1.748	1.730	0.955	0.790	0.438	0.923	0.723	0.183	0.302	0.030	0.588	9.511														
ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																												
Maximum Discharge		1 Hour				2 Hours				Maximum Volume for Selected Time Interval																		
Date	Date	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.													
1970	2-3	0.070	2-3	0.060	2-3	0.130	2-3	0.340	2-3	0.550	2-3	0.840	2-3	1.070	2-1	1.800												
MAXIMUMS FOR PERIOD OF RECORD																												
	10-5	0.120	10-5	0.120	10-5	0.240	10-5	0.670	10-5	1.240	10-5	1.880	10-4	2.570	10-4	3.490												
	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964												

NOTES: Watershed conditions: Woodland, 88%; row crops, 10%; homesites, pastures, and roads, 2%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included with data for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

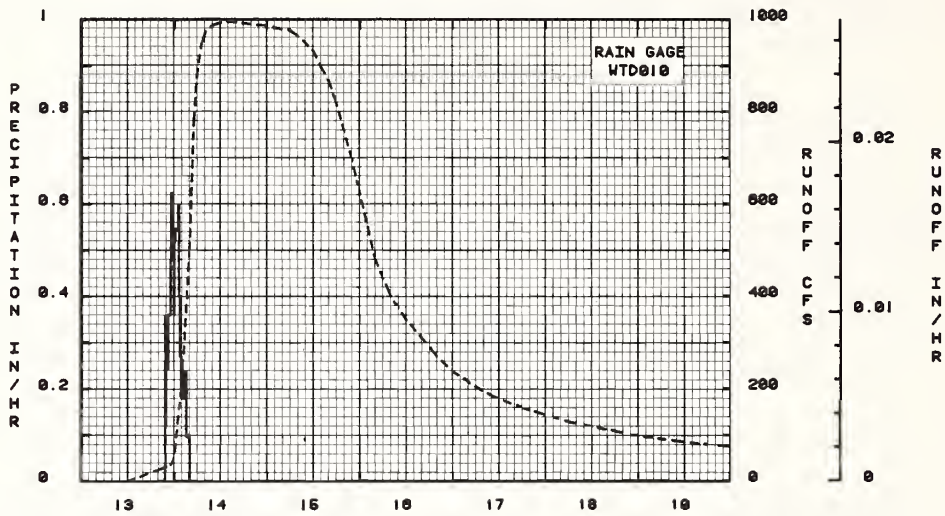
1970 DAILY PRECIPITATION (inches)														AHOSKIE, NORTH CAROLINA WATERSHED W-A3													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.16	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.0															
2	0.0	0.54	0.07	0.24	0.0	0.0	0.94	0.0	0.0	0.0	0.0	0.0															
3	0.0	1.43	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.12	0.0															
4	0.0	0.0	0.17	0.0	0.90	0.0	0.47	0.0	0.20	0.0	0.11	0.0															
5	0.0	0.0	0.0	0.0	0.0	0.59	0.81	0.0	0.33	0.0	0.01	0.0															
6	0.64	0.0	0.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
7	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
9	0.0	0.12	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.0	0.0	0.0															
10	0.0	0.0	0.0	0.0	0.0	0.0	0.90	1.18	0.0	0.0	0.59	0.0															
11	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.06	0.34	0.0	0.21	0.0															
12	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0															
13	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
14	0.0	0.0	0.0	1.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
16	0.0	0.52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.71	0.0	1.27															
17	0.30	0.73	0.0	0.0	0.09	0.0	0.0	0.15	0.0	0.0	0.0	0.0															
18	0.24	0.0	0.40	0.0	0.0	0.19	0.0	0.08	0.0	0.0	0.0	0.0															
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0															
20	0.0	0.0	0.25	0.0	0.0	0.0	1.34	0.0	0.0	0.0	0.04	0.0															
21	0.0	0.0	0.22	0.0	0.0	0.93	1.01	0.0	0.0	0.47	0.0	0.42															
22	0.0	0.0	0.55	0.0	0.0	0.03	1.34	0.0	0.0	1.27	0.0	0.0															
23	0.0	0.0	0.0	0.0	0.0	0.07	0.91	0.29	0.0	1.11	0.0	0.34															
24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.0															
25	0.0	0.39	0.0	0.0	0.06	0.10	0.0	0.0	0.0	0.0	0.0	0.0															
26	0.06	0.0	0.53	0.75	1.10	1.73	0.0	0.0	0.0	0.0	0.0	0.0															
27	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	1.86	0.0	0.0	0.0															
28	0.0	0.0	0.0	0.35	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0															
29	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0															
30	0.64	0.10	0.0	0.0	0.0	0.0	0.95	0.0	0.0	0.43	0.0	0.0															
31	0.0	1.12	0.0	0.0	0.0	0.0	0.43	0.0	0.0	0.32	0.0	0.26															
TOTAL	2.59	3.73	3.58	4.30	2.20	3.64	9.63	1.76	3.33	4.31	1.34	2.29															
STA AV	3.31	3.25	3.15	2.48	3.88	4.75	5.57	4.37	2.85	2.63	1.73	2.92															

NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 6 yr (1965-70) record period.



1970 SELECTED RUNOFF EVENT			AHOSKIE, NORTH CAROLINA WATERSHED W-A1							
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF			
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 13 - 23, 1970										
4-13	RG WTD010 0.0	0.0	4-13	RG WTD010	0.0	0.0	4-13	1200	0.0	0.0
				2135	0.3600	0.03		2200	32.000	0.0043
				2150	0.1200	0.05		2300	35.500	0.0052
				2215	0.3360	0.19		2400	51.000	0.0064
				2230	0.2400	0.25	4-14	200	217.000	0.0137
				2300	0.3600	0.43		400	515.600	0.0336
				2310	0.4800	0.51		500	785.000	0.0513
				2335	0.6240	0.77		600	893.000	0.0741
				2355	0.5400	0.95		700	947.000	0.0991
				2400	0.3600	0.98		800	974.000	0.1252
			4-14	15	0.5200	1.11		1000	988.000	0.1785
				100	0.5467	1.52		1200	994.000	0.2324
				115	0.6000	1.67		1400	996.000	0.2865
				130	0.4000	1.77		1600	994.000	0.3406
				150	0.2700	1.86		1800	992.000	0.3946
				230	0.1800	1.98		2400	986.000	0.5559
				305	0.2400	2.12	4-15	200	962.000	0.6094
				330	0.0960	2.16		600	976.000	0.7159
				400	0.1000	2.21		800	964.000	0.7686
								1200	931.000	0.8716
								1400	896.000	0.9213
								1600	865.000	0.9692
								1800	814.000	1.0148
								2200	693.398	1.0968
								2400	621.398	1.1325
							4-16	400	479.800	1.1924
								800	400.000	1.2402
								1200	348.198	1.2809
								1600	310.398	1.3167
								2000	269.800	1.3482
								2400	237.300	1.3758
							4-17	600	203.800	1.4116
								1000	184.600	1.4329
								1800	158.600	1.4702
								2400	143.200	1.4948
								600	127.800	1.5169
								1200	117.000	1.5369
								1800	108.000	1.5553
								2400	98.100	1.5721
							4-19	1200	83.700	1.6018
								2400	74.700	1.6276
								600	71.100	1.6395
								800	70.200	1.6433
								1000	72.000	1.6472
								1200	72.000	1.6511
								2000	72.000	1.6668
								2400	70.200	1.6745
							4-21	1200	63.000	1.6962
								1800	59.000	1.7061
								2400	57.400	1.7156
								600	56.600	1.7249
								1200	54.200	1.7339
								2400	50.200	1.7509
							4-23	1200	47.000	1.7668
								2400	44.600	1.7817

NOTES: To convert CPS to IN/HR, multiply by 0.00002719. Precipitation is Thiessen average of 10 rain gages.



EVENT OF APRIL 13 - 23, 1970  
 ABOSKIE, NORTH CAROLINA WATERSHED W-11

## AHOSKIE, NORTH CAROLINA WATERSHED W-A2

LOCATION: Hertford, Bertie, and Northampton Counties, North Carolina; approximately 5 miles northwest of Anlander; Chowan River Basin.

AREA: 15360.00 acres 24.00 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													AHOSKIE, NORTH CAROLINA WATERSHED W-A2
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970 P	2.57	3.75	3.58	4.38	2.40	4.09	8.47	1.78	2.71	4.09	1.53	2.26	41.61
Q	1.390	3.519	1.978	3.040	0.569	0.430	1.658	0.393	0.096	0.247	0.372	0.638	14.329
STA AV P	3.20	3.14	3.23	2.38	3.79	4.69	5.81	4.21	2.78	2.51	1.70	2.80	40.23
Q	1.589	2.252	2.280	1.092	0.907	0.942	1.150	0.984	0.224	0.535	0.198	0.805	12.957

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																
Date	Maximum Discharge		Maximum Volume for Selected Time Interval													
	Date	Rate	1 Hour Date	Vol.	2 Hours Date	Vol.	6 Hours Date	Vol.	12 Hours Date	Vol.	1 Day Date	Vol.	2 Days Date	Vol.	8 Days Date	Vol.
1970	2-3	0.040	2-3	0.040	2-3	0.080	2-3	0.230	2-3	0.420	4-13	0.800	4-13	1.040	1-30	1.520

MAXIMUMS FOR PERIOD OF RECORD															
Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.		
10-5 1964	0.080	10-5 1964	0.080	10-5 1964	0.170	10-5 1964	0.500	10-5 1964	0.970	10-5 1964	1.640	10-4 1964	2.370	10-3 1964	3.060

NOTES: Watershed conditions: woodland, 75%; row crops, 22%; pasture, 2%; roads & homesites, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75-1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 5 gages. For temperature information, see table of maxima and minima values included with data for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970	DAILY PRECIPITATION (inches)												AHOSKIE, NORTH CAROLINA WATERSHED W-A2
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	0.12	0.0	0.0	0.32	0.0	0.0	0.0	0.02	0.0	0.0	0.23	0.0	
2	0.0	0.59	0.08	0.22	0.0	0.0	0.21	0.0	0.0	0.0	0.03	0.0	
3	0.0	1.43	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.09	0.0	
4	0.0	0.0	0.20	0.0	1.03	0.0	0.45	0.0	0.11	0.0	0.08	0.0	
5	0.0	0.0	0.0	0.0	0.0	1.02	0.59	0.0	0.35	0.0	0.04	0.0	
6	0.60	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.15	0.0	0.0	0.0	0.0	0.34	0.04	0.0	0.0	0.0	0.0	
10	0.04	0.04	0.0	0.0	0.0	0.0	1.03	1.24	0.0	0.0	0.62	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.03	0.09	0.0	0.23	0.0	
12	0.0	0.0	0.16	0.0	0.0	0.0	0.0	0.07	0.0	0.0	0.04	0.0	
13	0.0	0.0	0.0	0.81	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	
14	0.0	0.0	0.0	1.38	0.0	0.0	0.29	0.0	0.0	0.0	0.0	0.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	
16	0.0	0.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.03	1.31	
17	0.30	0.68	0.0	0.0	0.07	0.0	0.0	0.12	0.0	0.06	0.0	0.04	
18	0.28	0.0	0.35	0.0	0.04	0.29	0.0	0.09	0.0	0.0	0.01	0.0	
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	
20	0.0	0.0	0.32	0.12	0.0	0.0	1.04	0.0	0.0	0.0	0.07	0.0	
21	0.0	0.0	0.20	0.0	0.0	0.90	0.80	0.0	0.0	0.40	0.0	0.37	
22	0.0	0.0	0.64	0.0	0.0	0.02	1.20	0.0	0.0	1.23	0.0	0.01	
23	0.0	0.0	0.0	0.0	0.0	0.07	1.04	0.24	0.0	1.05	0.0	0.36	
24	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.08	0.0	0.0	
25	0.0	0.37	0.0	0.0	0.05	0.10	0.0	0.0	0.0	0.0	0.0	0.0	
26	0.02	0.0	0.46	0.80	1.20	1.69	0.0	0.0	0.0	0.0	0.0	0.0	
27	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.46	0.0	0.0	0.0	
28	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0	
29	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	
30	0.63	0.09	0.0	0.0	0.0	0.0	1.18	0.0	0.0	0.26	0.0	0.0	
31	0.0	0.0	1.08	0.0	0.0	0.0	0.23	0.0	0.0	0.27	0.0	0.17	
TOTAL	2.57	3.75	3.58	4.38	2.40	4.09	8.47	1.78	2.71	4.09	1.53	2.26	
STA AV	3.20	3.14	3.23	2.38	3.79	4.69	5.81	4.21	2.78	2.51	1.70	2.80	

NOTES: Precipitation values are Thiessen weighted averages of 5 gages. STA AV based on 6 yr (1965-70) record period.

1970 MEAN DAILY DISCHARGE (cfs) AHOSKIE, NORTH CAROLINA WATERSHED W-A2												
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	30.00	42.00	22.00	167.00	18.00	3.00	2.60	81.00	1.80	1.90	11.00	3.50
2	28.00	70.00	21.00	166.00	13.90	2.90	3.00	29.00	1.70	1.90	5.50	3.50
3	25.00	508.00	22.00	111.00	10.00	3.10	4.20	13.00	1.60	2.00	3.30	3.50
4	22.00	346.00	19.00	68.00	36.00	3.30	4.70	7.20	1.70	2.20	3.00	3.30
5	19.00	119.00	27.00	49.00	78.00	14.00	15.00	5.40	1.70	2.20	5.10	3.30
6	26.00	82.00	25.00	40.00	43.00	18.00	9.20	4.40	5.50	2.00	4.20	3.00
7	63.00	65.00	19.00	57.00	24.00	11.00	4.50	5.40	2.30	2.00	3.00	3.00
8	46.00	53.00	16.00	41.00	16.00	6.70	3.10	4.10	2.00	2.00	2.80	2.80
9	35.00	30.00	14.00	31.00	11.00	4.90	2.90	3.70	1.70	2.00	2.80	2.80
10	28.00	62.00	12.00	25.00	9.00	4.20	16.00	7.90	1.60	2.00	17.00	2.80
11	23.00	53.00	11.00	19.00	7.90	4.70	36.00	18.00	1.70	1.90	56.00	2.80
12	22.00	43.00	12.00	16.00	6.90	5.20	8.50	10.00	2.20	1.80	28.00	2.80
13	24.00	35.00	13.00	15.00	6.00	5.50	4.40	6.00	1.90	1.60	20.00	2.80
14	22.00	30.00	11.00	492.00	5.50	6.20	4.60	4.20	1.70	1.60	14.00	2.80
15	22.00	27.00	9.60	193.00	4.30	6.40	4.70	3.70	1.70	1.50	11.00	2.80
16	21.00	27.00	8.80	84.00	4.10	6.70	3.30	3.40	1.60	8.00	7.20	21.00
17	21.00	171.00	8.80	55.00	4.70	6.90	2.80	3.70	1.50	2.50	4.50	49.00
18	35.00	114.00	14.00	41.00	5.50	8.30	3.70	3.50	1.40	1.80	4.00	25.00
19	34.00	74.00	24.00	30.00	6.20	7.00	3.90	3.50	1.40	1.80	4.00	17.00
20	28.00	53.00	27.00	26.00	6.40	6.70	20.00	3.00	1.40	1.60	3.50	13.00
21	23.00	40.00	52.00	21.00	5.50	21.00	22.00	3.10	1.40	2.20	4.00	15.00
22	18.00	32.00	166.00	15.00	4.80	11.00	111.00	2.90	1.40	11.00	3.00	24.00
23	17.00	20.00	99.00	13.00	4.10	7.30	274.00	3.00	1.40	74.00	3.30	40.00
24	17.00	24.00	60.00	11.00	3.70	6.50	172.00	4.20	1.40	9.60	2.50	48.00
25	17.00	22.00	42.00	9.60	3.40	10.30	58.00	3.50	1.40	3.30	2.50	32.00
26	20.00	40.00	44.00	12.00	10.00	61.00	24.00	3.30	1.40	2.20	2.50	23.00
27	20.00	33.00	68.00	48.00	6.20	13.00	13.00	3.10	2.20	2.30	2.80	17.00
28	14.00	28.00	46.00	40.00	3.60	6.00	8.80	2.90	8.80	2.20	3.00	14.00
29	13.00		38.00	42.00	3.40	4.20	6.90	2.70	2.50	2.20	3.50	11.00
30	103.00		30.00	28.00	3.40	3.10	40.00	2.40	2.00	2.30	3.30	8.00
31	64.00		295.00		3.40		183.00	2.10		4.00		9.20
MEAN	28.935	81.107	41.168	65.387	11.839	9.250	34.510	8.171	2.067	5.148	8.010	13.281
INCHES	1.390	3.519	1.978	3.040	0.569	0.430	1.658	0.393	0.096	0.247	0.372	0.638
STA AV	1.589	2.252	2.280	1.092	0.907	0.942	1.150	0.984	0.224	0.535	0.198	0.805

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0015496. Runoff data furnished by U.S. Geological Survey. Records are good. STA AV based on 6 yr (1965-70) record period.

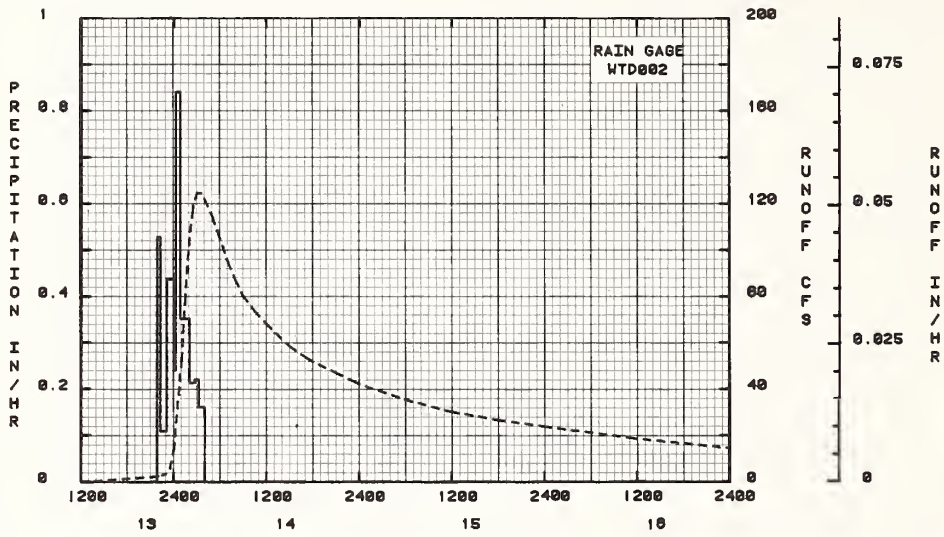
1970 SELECTED RUNOFF EVENT AHOSKIE, NORTH CAROLINA WATERSHED W-A2												
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF					
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.		
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)		
EVENT OF APRIL 13 - 18, 1970												
4-13	BG WTD005 0.0	0.0	4-13	BG WTD005 2135	0.0	0.0	4-13	1200	0.0	0.0		
				2140	0.4800	0.04		2130	11.600	0.0036		
				2215	0.2743	0.20		2200	12.000	0.0040		
				2230	0.0800	0.22		2300	14.200	0.0048		
				2235	0.2400	0.24		2400	26.000	0.0061		
WATERSHED CONDITIONS: Approximate land use 75% in woodland; 22% in row crops; 2% in pasture; 1% misc. (roads and homesites).												
				2300	0.1440	0.30	4-14	30	57.000	0.0074		
				2310	0.3600	0.36		100	125.200	0.0103		
				2330	0.6900	0.59		133	223.400	0.0159		
				2355	0.4560	0.78		200	335.000	0.0249		
				2400	0.3600	0.81		230	378.000	0.0364		
			4-14	5	0.3600	0.84		300	503.898	0.0506		
				15	0.4200	0.91		330	550.698	0.0676		
				50	0.5829	1.25		400	579.300	0.0858		
				115	0.5520	1.48		430	598.803	0.1048		
				140	0.3360	1.62		500	617.000	0.1244		
				200	0.2400	1.70		530	629.600	0.1445		
				220	0.2100	1.77		600	639.398	0.1650		
				300	0.2850	1.96		700	652.500	0.2067		
				400	0.2000	2.16		730	655.500	0.2278		
								800	655.500	0.2490		
								830	653.000	0.2701		
								930	643.600	0.3120		
								1030	631.000	0.3531		
								1130	614.398	0.3933		
								1200	606.600	0.4130		
								1330	576.700	0.4703		
								1500	542.898	0.5245		
								1630	507.800	0.5754		
								1800	472.600	0.6229		
								2100	407.000	0.7081		
								2400	348.000	0.7812		
								300	299.199	0.8439		
								600	251.500	0.8972		
								900	205.000	0.9414		
								1200	171.100	0.9778		

NOTES: To convert CFS to IN/HR, multiply by 0.00006457. Precipitation is Thiessen average of 2 rain gages.

1970 MEAN DAILY DISCHARGE (cfs)												AROSKIE, NORTH CAROLINA WATERSHED W-A3													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	5.500	9.400	3.000	26.000	3.200	0.040	0.020	44.000	0.020	0.020	0.300	0.030	1	5.500	9.400	3.000	26.000	3.200	0.040	0.020	44.000	0.020	0.020	0.300	0.030
2	4.800	12.000	3.000	25.000	2.500	0.040	0.020	18.000	0.020	0.020	0.150	0.030	2	4.800	12.000	3.000	25.000	2.500	0.040	0.020	18.000	0.020	0.020	0.150	0.030
3	3.900	55.000	3.000	19.000	2.000	0.030	0.020	4.200	0.020	0.020	0.090	0.030	3	3.900	55.000	3.000	19.000	2.000	0.030	0.020	4.200	0.020	0.020	0.090	0.030
4	3.000	40.000	3.100	12.000	3.400	0.030	0.100	1.600	0.010	0.020	0.070	0.030	4	3.000	40.000	3.100	12.000	3.400	0.030	0.100	1.600	0.010	0.020	0.070	0.030
5	2.500	22.000	4.000	7.700	12.000	0.040	0.500	0.110	0.020	0.020	0.050	0.030	5	2.500	22.000	4.000	7.700	12.000	0.040	0.500	0.110	0.020	0.020	0.050	0.030
6	3.000	16.000	3.700	6.100	5.900	0.110	0.250	0.070	0.030	0.020	0.040	0.030	6	3.000	16.000	3.700	6.100	5.900	0.110	0.250	0.070	0.030	0.020	0.040	0.030
7	9.400	11.000	3.000	7.000	3.100	0.040	0.100	0.060	0.020	0.020	0.040	0.030	7	9.400	11.000	3.000	7.000	3.100	0.040	0.100	0.060	0.020	0.020	0.040	0.030
8	7.700	8.300	2.600	5.400	2.300	0.040	0.030	0.050	0.010	0.030	0.040	0.030	8	7.700	8.300	2.600	5.400	2.300	0.040	0.030	0.050	0.010	0.030	0.040	0.030
9	3.700	7.300	2.300	4.200	1.800	0.030	0.040	0.060	0.010	0.030	0.040	0.030	9	3.700	7.300	2.300	4.200	1.800	0.030	0.040	0.060	0.010	0.030	0.040	0.030
10	2.500	7.500	2.000	3.100	1.400	0.030	5.000	1.100	0.010	0.030	0.060	0.030	10	2.500	7.500	2.000	3.100	1.400	0.030	5.000	1.100	0.010	0.030	0.060	0.030
11	2.000	6.300	1.900	2.700	0.990	0.030	4.500	4.200	0.020	0.030	0.340	0.030	11	2.000	6.300	1.900	2.700	0.990	0.030	4.500	4.200	0.020	0.030	0.340	0.030
12	2.200	5.000	2.000	2.300	0.600	0.030	1.000	0.990	0.030	0.030	0.200	0.030	12	2.200	5.000	2.000	2.300	0.600	0.030	1.000	0.990	0.030	0.030	0.200	0.030
13	2.500	4.000	2.200	2.300	0.340	0.030	0.120	0.060	0.020	0.030	0.160	0.030	13	2.500	4.000	2.200	2.300	0.340	0.030	0.120	0.060	0.020	0.030	0.160	0.030
14	2.400	3.300	1.900	67.000	0.240	0.020	0.300	0.040	0.020	0.030	0.120	0.030	14	2.400	3.300	1.900	67.000	0.240	0.020	0.300	0.040	0.020	0.030	0.120	0.030
15	2.300	3.000	1.500	31.000	0.110	0.020	0.150	0.040	0.010	0.030	0.100	0.030	15	2.300	3.000	1.500	31.000	0.110	0.020	0.150	0.040	0.010	0.030	0.100	0.030
16	2.100	3.100	1.300	18.000	0.090	0.020	0.080	0.040	0.010	0.100	0.080	0.130	16	2.100	3.100	1.300	18.000	0.090	0.020	0.080	0.040	0.010	0.100	0.080	0.130
17	2.290	20.000	1.100	11.000	0.080	0.020	0.040	0.040	0.010	0.050	0.060	0.700	17	2.290	20.000	1.100	11.000	0.080	0.020	0.040	0.040	0.010	0.050	0.060	0.700
18	5.400	18.000	1.600	7.700	0.080	0.030	0.150	0.060	0.010	0.040	0.060	0.160	18	5.400	18.000	1.600	7.700	0.080	0.030	0.150	0.060	0.010	0.040	0.060	0.160
19	5.400	12.000	2.700	5.500	0.070	0.030	0.500	0.040	0.010	0.040	0.060	0.100	19	5.400	12.000	2.700	5.500	0.070	0.030	0.500	0.040	0.010	0.040	0.060	0.100
20	4.200	8.100	3.300	4.400	0.060	0.020	5.500	0.040	0.010	0.040	0.060	0.090	20	4.200	8.100	3.300	4.400	0.060	0.020	5.500	0.040	0.010	0.040	0.060	0.090
21	3.000	5.900	6.100	3.200	0.060	0.040	16.000	0.040	0.010	0.040	0.060	0.120	21	3.000	5.900	6.100	3.200	0.060	0.040	16.000	0.040	0.010	0.040	0.060	0.120
22	2.000	4.700	19.000	2.500	0.050	0.110	40.000	0.030	0.010	0.120	0.060	0.220	22	2.000	4.700	19.000	2.500	0.050	0.110	40.000	0.030	0.010	0.120	0.060	0.220
23	1.500	3.900	15.000	2.200	0.050	0.040	70.000	0.030	0.010	2.400	0.060	0.490	23	1.500	3.900	15.000	2.200	0.050	0.040	70.000	0.030	0.010	2.400	0.060	0.490
24	1.400	3.700	8.800	2.000	0.040	0.030	60.000	0.040	0.010	0.240	0.040	0.630	24	1.400	3.700	8.800	2.000	0.040	0.030	60.000	0.040	0.010	0.240	0.040	0.630
25	1.500	3.300	6.100	1.500	0.040	0.020	25.000	0.040	0.010	0.100	0.030	0.240	25	1.500	3.300	6.100	1.500	0.040	0.020	25.000	0.040	0.010	0.100	0.030	0.240
26	2.500	5.500	5.700	1.900	0.240	3.400	13.000	0.030	0.010	0.070	0.030	0.180	26	2.500	5.500	5.700	1.900	0.240	3.400	13.000	0.030	0.010	0.070	0.030	0.180
27	2.800	4.400	10.000	7.200	0.110	0.080	9.000	0.030	0.050	0.060	0.030	0.130	27	2.800	4.400	10.000	7.200	0.110	0.080	9.000	0.030	0.050	0.060	0.030	0.130
28	2.500	3.600	6.800	7.200	0.050	0.030	6.000	0.020	0.700	0.060	0.030	0.100	28	2.500	3.600	6.800	7.200	0.050	0.030	6.000	0.020	0.700	0.060	0.030	0.100
29	2.700	18.000	5.200	8.100	0.080	0.020	4.000	0.020	0.040	0.050	0.030	0.090	29	2.700	18.000	5.200	8.100	0.080	0.020	4.000	0.020	0.040	0.050	0.030	0.090
30	14.000	4.200	5.200	0.040	0.020	3.000	0.020	0.020	0.020	0.050	0.030	0.070	30	14.000	4.200	5.200	0.040	0.020	3.000	0.020	0.020	0.020	0.050	0.030	0.070
31	14.000	34.000	0.040	0.040	0.040	46.000	0.020	0.120	0.120	0.120	0.070	0.070	31	14.000	34.000	0.040	0.040	0.040	46.000	0.020	0.120	0.120	0.120	0.070	0.070
MEAN	4.019	10.929	5.487	10.280	1.323	0.149	10.014	2.423	0.040	0.128	0.084	0.128	MEAN	4.019	10.929	5.487	10.280	1.323	0.149	10.014	2.423	0.040	0.128	0.084	0.128
INCRS	1.252	3.076	1.710	3.100	0.412	0.045	3.120	0.755	0.012	0.040	0.025	0.040	INCRS	1.252	3.076	1.710	3.100	0.412	0.045	3.120	0.755	0.012	0.040	0.025	0.040
STA AV	1.100	1.748	1.730	0.955	0.790	0.438	0.923	0.723	0.183	0.302	0.030	0.588	STA AV	1.100	1.748	1.730	0.955	0.790	0.438	0.923	0.723	0.183	0.302	0.030	0.588

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0100514. Runoff data furnished by U.S. Geological Survey. Records are good to fair. STA AV based on 6 yr (1965-70) record period.

1970 SELECTED RUNOFF EVENT									AROSKIE, NORTH CAROLINA WATERSHED W-A3												
ANTECEDENT CONDITIONS			RAINFALL			RUNOFF			ANTECEDENT CONDITIONS			RAINFALL			RUNOFF						
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)
EVENT OF APRIL 13 - 16, 1970																					
RG WTD002			RG WTD002																		
4-13	0.0	0.0	4-13	2150	0.0	0.0	4-13	1200	0.0	0.0											
				2215	0.5280	0.22		2100	2.000	0.0038											
				2305	0.1080	0.31		2200	2.400	0.0047											
				2400	0.4364	0.71		2230	2.900	0.0053											
			4-14	15	0.2400	0.77		2300	3.400	0.0060											
WATERSHED CONDITIONS:																					
Approximate land use, 88% in			50			1.26			2330			5.900			0.0070						
woodland; 10% in row crops;			209			1.67			2400			13.700			0.0091						
2% misc. (homesites, pasture,			245			1.83			4-14			100			52.500			0.0230			
and roads).			315			1.94						130			81.000			0.0370			
			400			2.06						200			105.000			0.0565			
												230			119.000			0.0800			
												300			124.500			0.1055			
												330			124.500			0.1316			
												409			121.500			0.1574			
												500			114.000			0.2067			
												600			104.500			0.2525			
												700			94.500			0.2942			
												800			87.000			0.3322			
												900			80.000			0.3672			
												1030			73.500			0.4154			
												1200			68.000			0.4598			
												1500			58.300			0.5391			
												1800			51.700			0.6082			
												2									



EVENT OF APRIL 13 - 16, 1970  
 AROSIE, NORTH CAROLINA WATERSHED W-13

## SONORA, TEXAS WATERSHED W-7

LOCATION: Sutton County, Texas; 10 mi. NE of Sonora; Lowrey Draw, East Fork Devils River, Devils River, Rio Grande River Basin.

AREA: 12.20 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)													SONORA, TEXAS WATERSHED W-7	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	0.24	1.84	1.26	1.54	3.92	2.85	0.0	2.09	2.77	0.82	0.0	0.0	17.33
	Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STA AV	P	0.69	1.32	1.13	2.43	3.10	1.94	1.44	1.12	2.72	1.72	1.39	0.89	19.88
	Q	0.0	0.0	0.0	0.025	0.100	0.125	0.0	0.0	0.010	0.0	0.0	0.002	0.262

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS															
	Maximum Discharge Date	Maximum Volume for Selected Time Interval													
		1 Hour Date	1 Hour Vol.	2 Hours Date	2 Hours Vol.	6 Hours Date	6 Hours Vol.	12 Hours Date	12 Hours Vol.	1 Day Date	1 Day Vol.	2 Days Date	2 Days Vol.	8 Days Date	8 Days Vol.
1970	0- 0	0.0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0	0- 0	0.0

MAXIMUMS FOR PERIOD OF RECORD															
6- 2	0.910	6- 2	0.570	6- 2	0.660	6- 2	0.660	6- 2	0.660	6- 2	0.730	6- 2	0.730	6- 2	0.730
1967		1967		1967		1967		1967		1967		1967		1967	

NOTES: Watershed conditions: Rangeland - 100%; range condition - high fair. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1967, USDA Misc. Pnb. 1262, p. 70.13-6. Precipitation data from rain gage 1. Precipitation and runoff records began January 1965. No runoff occurred during 1970. For long-time precipitation records, see National Weather Service records at the Texas Agricultural Experiment Station, Substation No. 14, 18 miles south of Sonora, Texas.

1970 DAILY PRECIPITATION (inches)													SONORA, TEXAS WATERSHED W-7	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.0	0.24	0.0	0.0	0.0	0.12E	0.0	0.0	0.0	0.0	0.0	0.0		
2	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.09E	0.0	0.0		
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11E	0.0	0.0	0.0	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17E	0.0	0.0		
6	0.0	0.11E	0.28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.0	0.0	0.08E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.05E	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.0	0.0	0.10E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
11	0.0	0.0	0.09E	0.0	0.0	0.0	0.0	0.0	0.0	0.04E	0.0	0.0		
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10E	0.0	0.0	0.0		
13	0.09E	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.37	0.0	0.0	0.0		
14	0.0	0.0	0.0	0.0	2.12	0.0	0.0	0.0	0.16	0.0	0.0	0.0		
15	0.05E	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	0.0	0.0	0.16E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.0 S	0.0	0.0	0.32	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.0	0.0	0.0	0.0		
20	0.0	0.0	0.48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
21	0.0	0.0	0.07E	0.0	0.0	1.39	0.0	0.0	0.0	0.0	0.0	0.0		
22	0.05E	0.50	0.0	0.0	0.0	1.26	0.0	1.23	0.40	0.0	0.0	0.0		
23	0.0	0.17	0.0	0.0	0.71	0.0	0.0	0.0	0.0	0.06E	0.0	0.0		
24	0.0	0.74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	0.0	0.0	0.0		
26	0.0	0.0	0.0	0.06E	0.19E	0.0	0.0	0.0	1.34	0.0	0.0	0.0		
27	0.0	0.08E	0.0	0.0	0.13E	0.0	0.0	0.0	0.11E	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.0	0.04E	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
29	0.0	0.0	0.0	0.0	0.0	0.03E	0.0	0.03E	0.0	0.0	0.0	0.0		
30	0.0	0.0	0.0	1.06	0.07E	0.0	0.0	0.24E	0.0	0.0	0.0	0.0		
31	0.05		0.0		0.0		0.0	0.04E		0.0		0.0		
TOTAL	0.24	1.84	1.26	1.54	3.92	2.85	0.0	2.09	2.77	0.82	0.0	0.0		
STA AV	0.69	1.32	1.13	2.43	3.10	1.94	1.44	1.12	2.72	1.72	1.39	0.89		

NOTES: For daily air temperatures, in the vicinity, see table for Watershed W-14, p. 70.001. Precipitation data obtained from rain gage 1. Records began January 1965. STA AV based on 6 yr record period. Estimate codes may indicate that non-significant event totals are included.

## TREYNOR, IOWA WATERSHED 1

LOCATION: Pottawattamie County, Iowa; approximately 6 miles southwest of Treynor; Silver Creek, West Misbaotna River, Missonri River Basin.

AREA: 74.50 acres

MONTHLY PRECIPITATION AND RUNOFF (inches)														TREYNOR, IOWA WATERSHED 1																	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual																	
1970	P	0.02	0.21	0.32	3.54	3.18	2.36	5.44	5.12	4.52	4.37	1.39	0.53	31.50																	
	Q	0.554	0.252	0.214	0.239	0.796	0.197	0.204	1.153	0.141	0.214	0.239	0.173	4.374																	
STA AV	P	0.50	0.51	0.92	3.38	4.04	7.04	4.02	4.06	4.55	2.85	0.79	0.86	33.51																	
	Q	0.327	0.546	0.541	0.362	0.666	2.535	0.387	0.497	0.594	0.313	0.236	0.225	7.230																	
ANNUAL MAXIMUM DISCHARGE (in/cr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS																															
		Maximum Discharge		1 Hour		2 Hours		6 Hours		12 Hours		1 Day		2 Days		8 Days															
		Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.														
1970		8-2	5.209	8-2	0.894	8-2	0.900	8-3	0.904	8-2	0.908	8-2	0.996	8-1	1.007	7-26	1.073														
		MAXIMUMS FOR PERIOD OF RECORD																													
		6-20	5.835	6-20	3.150	6-20	4.160	6-20	4.224	6-20	4.232	6-20	4.246	6-20	4.264	6-4	5.979														
		1967		1967		1967		1967		1967		1967		1967		1967															

NOTES: Watershed conditions: 95% contoured corn; 5% gullies and grassed waterways. Precipitation from rain gage 117 before April 1 and after November 3; Thiessen average of gages 116, 117, 118 for remainder of year. Precipitation records began January 1, 1964. Runoff records began February 10, 1964. January 1 to February 10, 1964 runoff estimated and included in average. For daily air temperature, in the vicinity, see table for Watershed 3 (71.003). For topographic map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1964, USDA Misc. Pub. 1194, p. 71.1-5. For long-time precipitation records, see National Weather Service records at Omaha, Nebraska.

1970 DAILY PRECIPITATION (inches)														TREYNOR, IOWA WATERSHED 1													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec															
1	0.0	0.0	0.06	0.0	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.0														
2	0.0	0.0	0.17	0.0	0.0	0.0	0.0	3.65	0.42	0.0	0.05	0.0	0.0														
3	0.0	0.0	0.16	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.0	0.0														
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
5	0.0	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0														
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.62	0.0	0.0	0.0														
8	0.0	0.0	0.0	0.0	0.15	0.0	0.0	0.0	0.0	1.27	0.72	0.0	0.0														
9	0.0	0.0	0.04	0.0	0.12	0.0	0.0	0.0	0.18	1.03	0.16	0.0	0.0														
10	0.0	0.0	0.0	0.0	0.0	0.12	0.10	0.0	0.0	0.0	0.0	0.0	0.48														
11	0.0	0.0	0.0	1.79	0.42	0.72	0.0	0.0	0.0	0.0	0.11	0.0	0.0														
12	0.0	0.0	0.0	0.0	1.99	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
13	0.0	0.01	0.0	0.14	0.28	0.0	1.27	0.0	0.24	0.0	0.03	0.0	0.0														
14	0.0	0.01	0.0	0.0	0.03	0.0	0.99	0.0	2.16	0.0	0.0	0.0	0.0														
15	0.0	0.0	0.0	0.05	0.0	0.54	0.0	0.0	0.41	0.0	0.0	0.0	0.0														
16	0.0	0.0	0.0	0.0	0.0	0.47	0.0	0.0	0.21	0.0	0.0	0.0	0.05														
17	0.01	0.0	0.0	0.0	0.0	0.33	0.0	0.63	0.25	0.0	0.0	0.0	0.0														
18	0.01	0.0	0.05	0.77	0.0	0.0	0.66	0.0	0.0	0.0	0.0	0.0	0.0														
19	0.0	0.0	0.30	0.26	0.0	0.03	0.0	0.0	0.0	0.0	0.26	0.0	0.0														
20	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	0.0	0.05	0.0	0.0	0.0														
22	0.0	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	0.81	0.0	0.0	0.0														
24	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
25	0.0	0.0	0.04	0.0	0.0	0.05	0.0	0.0	0.10	0.0	0.0	0.0	0.0														
26	0.0	0.0	0.0	0.0	0.0	0.0	0.76	0.0	0.0	0.48	0.0	0.0	0.0														
27	0.0	0.0	0.0	0.0	0.0	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.0														
28	0.0	0.19	0.0	0.0	0.33	0.0	1.20	0.0	0.0	0.0	0.0	0.0	0.0														
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
30	0.0	0.0	0.0	0.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
31	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
TOTAL	0.02	0.21	0.82	3.54	3.18	2.36	5.44	5.12	4.52	4.37	1.39	0.53															
STA AV	0.50	0.51	0.92	3.38	4.04	7.04	4.02	4.06	4.55	2.85	0.79	0.86															

NOTES: Daily precipitation amounts are from rain gage 117 before April 1 and after November 3; Thiessen weighted average values from stations 116, 117, and 118 for remainder of year. STA AV based on 7 yr record period.



## AHOSKIE, NORTH CAROLINA WATERSHED W-A4

LOCATION: Hertford County, North Carolina; approximately 2 miles southwest of Ahoskie; Chowan River Basin.

AREA: 1664.00 acres 2.69 sq. miles

MONTHLY PRECIPITATION AND RUNOFF (inches)													AHOSKIE, NORTH CAROLINA WATERSHED W-A4	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1970	P	3.18	4.61	4.70	5.59	2.82	2.56	11.37	1.73	2.78	3.53	1.49	2.45	46.81
	Q	0.793	2.412	1.383	2.085	0.418	0.100	0.895	0.122	0.066	0.081	0.078	0.125	8.557
STA AV	P	3.18	3.45	3.58	2.89	4.04	3.99	6.70	4.89	3.16	2.68	1.53	3.05	43.13
	Q	0.513	1.434	1.211	0.517	0.440	0.328	0.708	1.225	0.170	0.445	0.075	0.480	7.548

ANNUAL MAXIMUM DISCHARGE (in/hr) AND MAXIMUM VOLUMES OF RUNOFF (inches) FOR SELECTED TIME INTERVALS														
1970	Date	Maximum Discharge		Maximum Volume for Selected Time Interval										
		1 Hour	2 Hours	6 Hours	12 Hours	1 Day	2 Days	8 Days						
	Date	Rate	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.	Date	Vol.
1970	2-3	0.130	2-3	0.130	2-3	0.260	2-3	0.680	2-3	0.900	2-3	1.150	2-2	1.380
													2-1	1.770

MAXIMUMS FOR PERIOD OF RECORD															
1966	1966	1966	1966	1966	1966	1966	1968	1968	1968	1968	1968	1968	1967	1967	
5-30	0.160	5-30	0.160	5-30	0.320	5-29	0.820	1-13	1.200	1-13	1.660	1-13	2.010	8-21	3.480

NOTES: Watershed conditions: Woodland, 60%; row crops, 39%; homesites, pastures, and roads, 1%. For map of watershed, see Hydrologic Data for Experimental Agricultural Watersheds in the United States, 1965, USDA Misc. Pub. 1216, p. 75.1-8. Records of precipitation and runoff began in 1964. STA AV computed on 1965-70 data. Precipitation Thiessen weighted using 2 gages. For temperature information, see table of maximum and minimum values included for Watershed 75.001. For long-time precipitation records, see National Weather Service records at Scotland Neck, North Carolina.

1970 DAILY PRECIPITATION (inches)													AHOSKIE, NORTH CAROLINA WATERSHED W-A4	
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
1	0.22	0.0	0.0	0.27	0.0	0.0	0.0	0.11	0.0	0.0	0.05	0.0		
2	0.0	0.56	0.06	0.53	0.0	0.0	0.63	0.0	0.0	0.0	0.0	0.0		
3	0.0	1.90	0.0	0.0	0.0	0.0	0.12	0.0	3.28	0.0	0.02	0.0		
4	0.0	0.0	0.04	0.0	0.87	0.0	0.32	0.0	0.56	0.0	0.05	0.0		
5	0.0	0.0	0.0	0.0	0.0	0.32	2.02	0.0	0.23	0.0	0.05	0.0		
6	0.75	0.0	0.0	0.44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
7	0.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
9	0.0	0.14	0.0	0.0	0.0	0.0	0.54	0.0	0.0	0.0	0.0	0.0		
10	3.02	0.08	0.0	0.0	0.0	0.0	1.15	1.19	0.0	0.0	0.83	0.0		
11	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.19	0.0		
12	0.0	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0		
13	0.0	0.0	0.0	1.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
14	0.0	0.0	0.0	1.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
16	3.0	0.76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	0.0	1.58		
17	0.32	0.78	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
18	0.24	0.0	0.44	0.0	0.0	0.17	0.0	0.0	0.0	0.0	0.0	0.0		
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0		
20	0.0	0.0	0.53	0.11	0.0	0.0	1.55	0.0	0.0	0.0	0.27	0.0		
21	0.0	0.0	0.28	0.0	0.0	0.74	0.54	0.0	0.0	0.57	0.0	0.35		
22	0.0	0.0	0.90	0.0	0.0	0.02	1.93	0.0	0.0	1.51	0.0	0.0		
23	0.0	0.0	0.0	0.0	0.0	0.0	1.32	0.43	0.0	0.22	0.0	0.38		
24	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0		
25	0.0	0.39	0.0	0.0	0.28	0.29	0.0	0.0	0.0	0.0	0.0	0.0		
26	0.10	0.0	0.49	1.62	1.48	1.00	0.0	0.0	0.0	0.0	0.0	0.0		
27	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	1.33	0.0	0.0	0.0		
28	0.0	0.0	0.0	0.04	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.0		
29	0.58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
30	0.64	0.09	0.0	0.0	0.0	0.0	1.11	0.0	0.0	0.15	0.0	0.0		
31	0.0	1.69	0.0	0.0	0.0	0.0	0.12	0.0	0.0	0.25	0.0	0.14		
TOTAL	3.18	4.61	4.70	5.59	2.82	2.56	11.37	1.73	2.78	3.53	1.49	2.45		
STA AV	3.18	3.45	3.58	2.89	4.04	3.99	6.70	4.89	3.16	2.68	1.53	3.05		

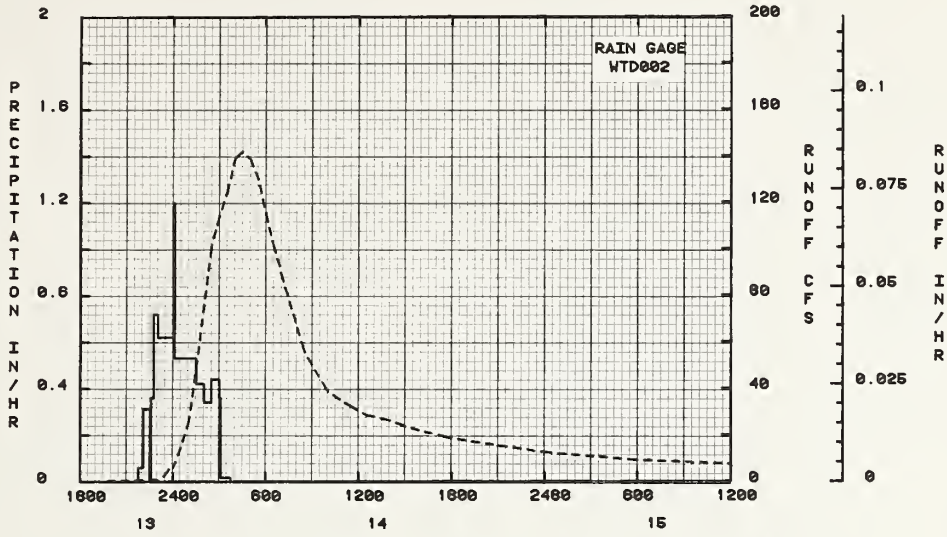
NOTES: Precipitation values are Thiessen weighted averages of 2 gages. STA AV based on 6 yr (1965-70) record period.

1970		MEAN DAILY DISCHARGE (cfs)					AHOSKIE, NORTH CAROLINA WATERSHED W-A4						
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	2.200	2.000	1.200	11.000	0.950	0.180	0.180	1.100	0.160	0.110	0.180	0.130	
2	2.000	5.100	1.500	18.000	0.690	0.180	0.280	0.440	0.160	0.160	0.160	0.130	
3	1.800	79.000	1.200	7.800	0.580	0.180	0.280	0.350	0.210	0.130	0.160	0.110	
4	1.400	15.000	1.000	3.500	5.800	0.180	0.240	0.280	0.280	0.130	0.160	0.110	
5	1.000	5.700	1.100	2.200	8.400	0.240	4.800	0.280	0.180	0.130	0.160	0.110	
6	2.900	3.600	0.880	2.100	2.600	0.180	0.950	0.240	0.180	0.130	0.160	0.110	
7	7.000	2.600	0.820	3.300	1.200	0.180	0.350	0.240	0.160	0.130	0.160	0.110	
8	3.500	2.000	0.760	1.900	0.880	0.180	0.280	0.240	0.160	0.130	0.160	0.130	
9	1.500	2.000	0.760	1.400	0.640	0.180	0.480	0.240	0.180	0.130	0.160	0.130	
10	1.200	2.100	0.760	1.200	0.530	0.180	1.100	0.580	0.180	0.130	0.240	0.130	
11	0.820	1.600	0.690	0.950	0.440	0.180	2.000	0.310	0.180	0.130	0.240	0.130	
12	0.880	1.200	0.690	0.880	0.350	0.180	0.480	0.240	0.180	0.130	0.210	0.110	
13	0.880	0.950	0.760	0.690	0.350	0.180	0.310	0.210	0.160	0.130	0.180	0.110	
14	0.760	0.760	0.760	48.000	0.310	0.180	0.240	0.240	0.160	0.130	0.180	0.110	
15	0.760	0.690	0.690	7.800	0.310	0.180	0.240	0.240	0.160	0.160	0.180	0.110	
16	0.640	1.100	0.580	3.600	0.350	0.180	0.210	0.240	0.160	0.240	0.180	1.000	
17	0.690	18.000	0.580	2.200	0.350	0.180	0.210	0.240	0.160	0.130	0.190	0.880	
18	3.500	6.600	0.880	1.700	0.350	0.180	0.210	0.240	0.160	0.130	0.240	0.390	
19	2.100	3.600	1.400	1.200	0.350	0.180	0.210	0.240	0.160	0.130	0.240	0.280	
20	1.500	2.400	2.100	1.400	0.310	0.180	1.400	0.240	0.160	0.130	0.240	0.280	
21	1.000	1.700	3.800	1.100	0.280	0.310	1.800	0.240	0.160	0.280	0.210	0.350	
22	0.640	1.400	15.000	0.760	0.310	0.210	16.000	0.210	0.160	0.640	0.180	0.350	
23	0.530	1.200	5.100	0.690	0.280	0.180	15.000	0.310	0.130	0.690	0.180	0.820	
24	0.530	1.060	2.600	0.580	0.280	0.180	4.900	0.210	0.130	0.210	0.160	0.820	
25	0.530	1.200	1.700	0.580	0.280	0.390	1.200	0.180	0.130	0.180	0.160	0.480	
26	1.000	2.700	2.600	3.300	0.880	1.200	0.580	0.160	0.110	0.160	0.130	0.350	
27	0.880	1.800	2.600	10.000	0.350	0.310	0.350	0.160	0.210	0.160	0.130	0.240	
28	0.690	1.400	1.600	3.900	0.240	0.210	0.310	0.160	0.090	0.130	0.160	0.210	
29	0.690		1.400	2.600	0.210	0.180	0.280	0.160	0.020	0.130	0.180	0.180	
30	8.400		1.200	1.400	0.180	0.180	2.600	0.160	0.010	0.160	0.160	0.160	
31	3.500		40.000		0.180		5.100	0.160		0.160		0.180	
MEAN	1.7880	6.0210	3.1200	4.8580	0.9420	0.2340	2.0180	0.2750	0.1550	0.1820	0.1810	0.2820	
INCHES	0.793	2.412	1.383	2.085	0.418	0.100	0.895	0.122	0.066	0.081	0.078	0.125	
STA AV	0.513	1.434	1.211	0.517	0.440	0.328	0.708	1.225	0.170	0.445	0.075	0.480	

NOTES: To convert mean daily discharge in CFS to IN/DAY, multiply by 0.0143039. Runoff data furnished by U.S. Geological Survey. Records are good. STA AV based on 6 yr (1965-70) record period.

1970		SELECTED RUNOFF EVENT			AHOSKIE, NORTH CAROLINA WATERSHED W-A4						
ANTECEDENT CONDITIONS			RAINFALL				RUNOFF				
Date	Rainfall	Runoff	Date	Time	Intensity	Acc.	Date	Time	Rate	Acc.	
Mo-Day	(inches)	(inches)	Mo-Day	of Day	(in/hr)	(inches)	Mo-Day	of Day	(cfs)	(inches)	
EVENT OF APRIL 13 - 15, 1970											
4-13	HG WTD002 0.0	0.0	4-13	HG WTD002 2145	0.0	0.0	4-13	1800	0.0	0.0	
				2205	0.0600	0.02		2230	0.700	0.0009	
				2230	0.3120	0.15		2300	0.800	0.0011	
				2235	0.0	0.15		2330	2.700	0.0016	
				2245	0.3600	0.21		2345	5.500	0.0022	
				2300	0.7200	0.39		2400	5.800	0.0030	
				2400	0.6200	1.01	4-14	30	14.500	0.0060	
			4-14	5	1.2000	1.11		100	25.000	0.0119	
				130	0.5294	1.86		130	49.100	0.0229	
				200	0.4200	2.07		200	76.000	0.0415	
				230	0.3400	2.24		230	102.000	0.0680	
				300	0.4400	2.46		300	114.400	0.1002	
				305	0.3600	2.49		330	124.800	0.1358	
				345	0.0150	2.50		400	139.200	0.1751	
								430	142.000	0.2170	
								500	138.400	0.2588	
								530	130.000	0.2988	
								600	114.800	0.3353	
								630	101.200	0.3675	
								700	88.800	0.3958	
								830	55.600	0.4603	
								1000	38.600	0.5024	
								1130	32.000	0.5340	
								1230	28.400	0.5520	
								1300	27.700	0.5604	
								1400	26.200	0.5765	
								1500	23.500	0.5913	
								1800	18.400	0.6288	
								2400	12.400	0.6839	
							4-15	600	9.000	0.7222	
								1200	7.400	0.7515	
								1800	6.000	0.7755	
								2400	5.000	0.7952	

NOTES: To convert CFS to IN/HR, multiply by 0.00059599. Precipitation is Thiessen average of 2 rain gages.



EVENT OF APRIL 13 - 15, 1970  
 AHOSKIE, NORTH CAROLINA WATERSHED W-A4





