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WATER SUPPLY OUTLOOK FOR ARIZONA

U.S. DEPT. OF AGRICULTURE
SOIL CONSERVATION SERVICE

JAN 30 '75

PRODUCTION SECTION
CURRENT SERIAL RECORDS



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA WATER COMMISSION

AS OF
JAN. 15, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Cabins near Sacajawea Snow Course
in Bridger Mountains, Montana.*

SCS PHOTO 11-P480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

| STATE | ADDRESS |
|--------------------|---|
| Alaska | 204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501 |
| Arizona | 6029 Federal Building, Phoenix, Arizona 85025 |
| Colorado (N. Mex.) | P. O. Box 17107, Denver, Colorado 80217 |
| Idaho | Room 345, 304 N. 8th. St., Boise, Idaho 83702 |
| Montana | P. O. Box 98, Bozeman, Montana 59715 |
| Nevada | P. O. Box 4850, Reno Nevada 89505 |
| Oregon | 1218 S. W. Washington St., Portland, Oregon 97205 |
| Utah | 4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138 |
| Washington | 360 U.S. Court House, Spokane, Washington 99201 |
| Wyoming | P. O. Box 2440, Casper, Wyoming 82601 |

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D. C.



Released by

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STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
PHOENIX, ARIZONA

In Cooperation with

WESLEY E. STEINER
EXECUTIVE DIRECTOR
ARIZONA WATER COMMISSION

KARL F. ABEL
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SALT RIVER VALLEY WATER
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Report prepared by

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SOIL CONSERVATION SERVICE
ROOM 6029 FEDERAL BUILDING
PHOENIX, ARIZONA 85025



Looking east toward Escudilla Mountain from Mt. Ord

ARIZONA SUMMARY
as of
JANUARY 15, 1975

BELOW AVERAGE WATER SUPPLIES ARE ANTICIPATED FOR THE 1975 SEASON. BOTH RESERVOIR STORAGE AND EXPECTED SPRING RUNOFF ARE BELOW NORMAL. SNOW COVER IS ALSO BELOW AVERAGE, ALTHOUGH SOIL MOISTURE CONDITIONS ARE VERY GOOD.

SNOW COVER

Several light storms the last thirty days, accompanied by cold temperatures, have left most of the watersheds above 5,500 feet snow-covered. Moderate snow depths were reported, but the water contents are low. Snow cover varies from 60% of average on the Salt and Gila Watersheds to 87% on the Verde. The Flagstaff-Mormon Lake area is the only portion of the state with above average snow cover. The deepest snow measured was in the White Mountains at an elevation of 11,000 feet, where there was 6½ feet of snow.

PRECIPITATION

Accumulated precipitation since November 1 has been about half of normal on all watersheds. Considering the heavy storm during the last few days of October, winter moisture is not as bad as it first appears.

SOIL MOISTURE

Soil moisture has been very good since the heavy October storms. Water runoff yields can be expected to be good if precipitation is near normal the next three months.

RESERVOIR STORAGE

Salt River Project reservoirs collectively are about half full. This is slightly below average for this date, although much below last year. Most other reservoirs in the state are also slightly below average except San Carlos Reservoir, which contains 70% above average.

STREAMFLOW

December and January streamflow has been very low due to light precipitation and the extended cold weather. With the recent warming, however, river flows will pick up somewhat.

The January through May runoff is expected to be much below average, ranging from one-third of average on the Gila and Little Colorado to two-thirds of average on the Verde.

STREAMFLOW FORECASTS, JANUARY THROUGH MAY

| | | | |
|-----------------|--------------|-----|--------------------|
| Salt | 161,000 a.f. | 50% | of 1958-72 average |
| Verde | 128,000 a.f. | 67% | " |
| Tonto | 19,000 a.f. | 41% | " |
| Gila | 50,000 a.f. | 32% | " |
| Little Colorado | 4,000 a.f. | 35% | " |

WATER SUPPLY

Water supplies will be adequate for all areas of Arizona served by the major reservoirs. Sections depending on direct diversion may expect another year of below average water supply.

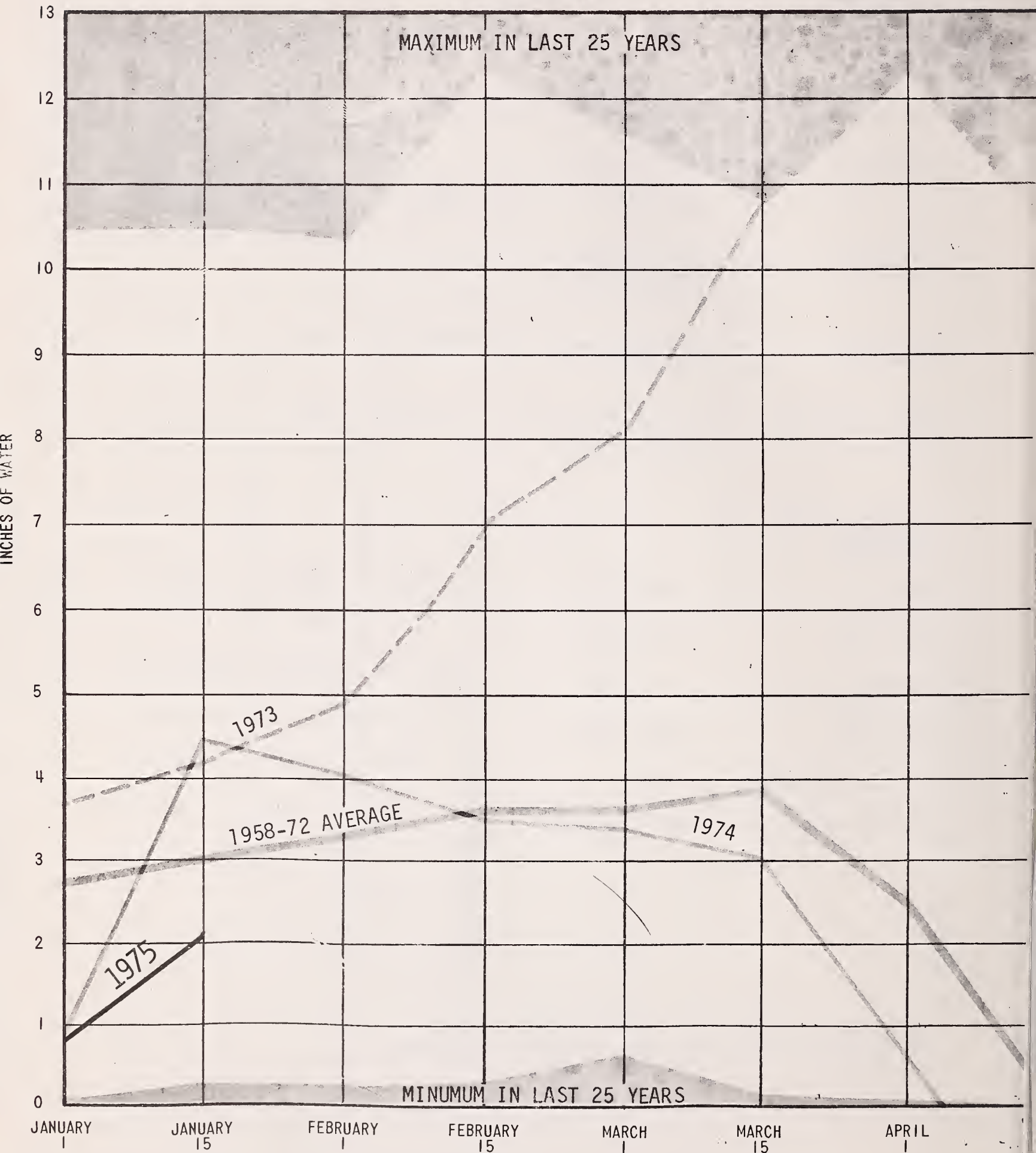
RESERVOIR STORAGE (Thousand Acre Feet) MID-MONTHLY READING

ABOUT JANUARY 15, 1975

| BASIN or STREAM | RESERVOIR | Usable Capacity | Usable Storage | | |
|---|-------------------------------------|-----------------|----------------|-----------|----------|
| | | | This Year | Last Year | Average† |
| <u>GILA RIVER DRAINAGE</u> | | | | | |
| Agua Fria | Lake Pleasant | 157.6 | 56.7 | 106.2 | 58.5 |
| Granite | Watson Lake | 4.7 | 1.2 | 1.3 | 2.3* |
| Granite | Willow Creek | 6.1 | 1.0 | 3.2 | 2.1* |
| Gila | San Carlos | 948.6 | 267.7 | 615.9 | 157.7 |
| Salt (4) | Roosevelt, Apache, Canyon & Saguaro | 1,755 | 1007.9 | 1412.0 | 1043.0 |
| Verde (2) | Bartlett and Horseshoe | 317.7 | 46.5 | 115.3 | 111.7 |
| Salt and Verde | 6 Salt River Project Reservoirs | 2,073 | 1054.4 | 1527.0 | 1155.0 |
| <u>COLORADO RIVER DRAINAGE</u> | | | | | |
| Colorado | Lake Havasu | 619.4 | 537.3 | 557.9 | 540.5 |
| Colorado | Lake Mohave | 1,810 | 1625.6 | 1700.0 | 1636.0 |
| Colorado | Lake Mead | 26,159 | 19,899.0 | 19,934.0 | 17,386.0 |
| Colorado | Lake Powell | 25,002 | 17,286.0 | 17,429.0 | 7,294.0* |
| Little Colorado | Lyman | 30.6 | 11.2 | 23.6 | 12.4 |
| Little Colorado | Show Low Lake | 5.1 | 0.4 | 0.5 | 1.4 |
| † Based on 15-year period, 1958-72 * Average is for less than 15 years of record | | | | | |

+ 1958-1972 period.

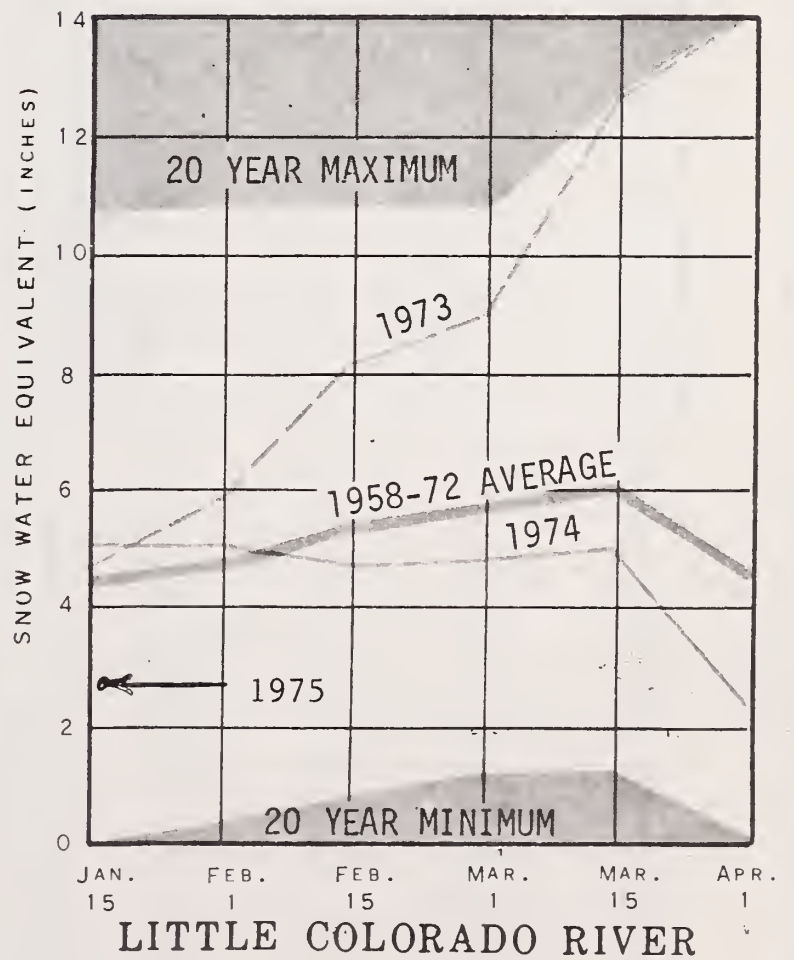
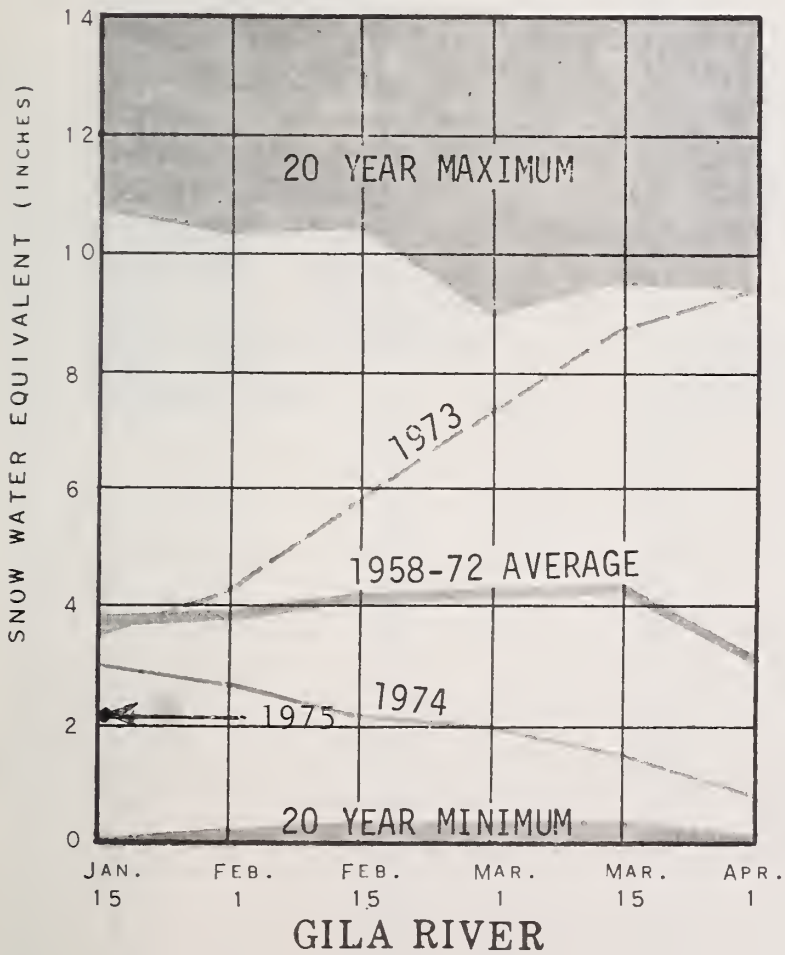
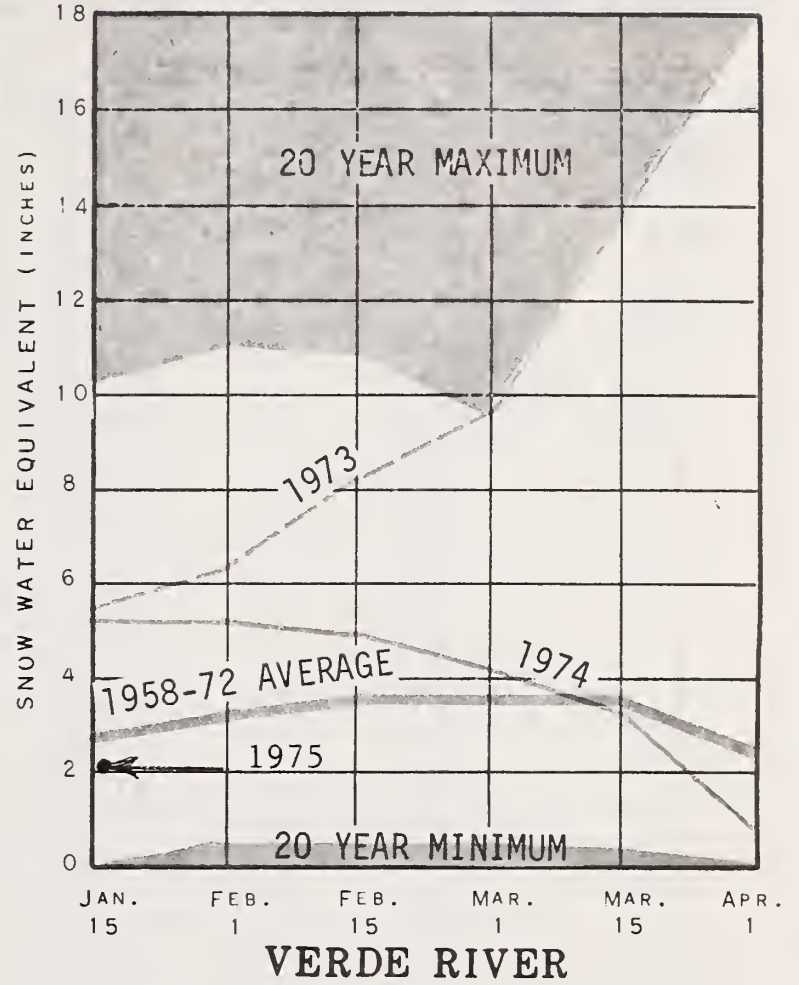
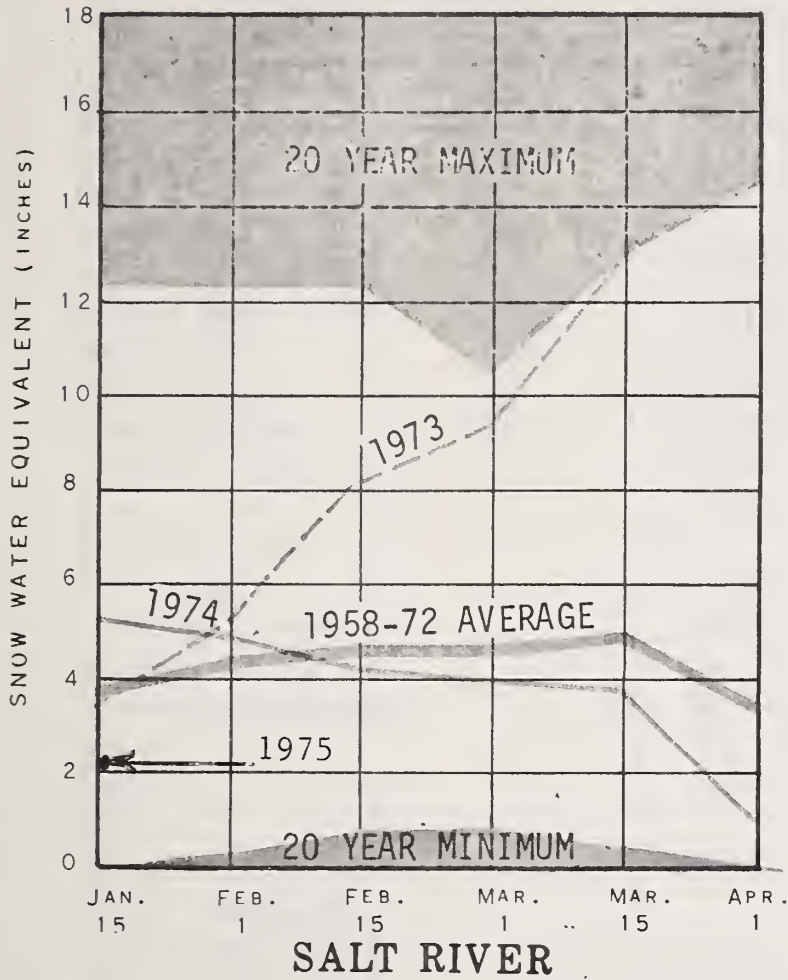
AVERAGE SNOW COVER ARIZONA 1975



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

1975

WATERSHED SNOW COVER



BASED ON SELECTED SNOW SURVEY COURSES

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

ABOUT JANUARY 15, 1975

| RIVER BASIN and/or SUB-WATERSHED | Number of Courses Averaged | THIS YEAR'S SNOW WATER AS PERCENT OF: | |
|----------------------------------|----------------------------|---------------------------------------|---------|
| | | Last Year | Average |
| Gila | 10 | 77 | 60 |
| Salt | 10 | 46 | 62 |
| Verde | 10 | 40 | 87 |
| Little Colorado | 5 | 58 | 67 |

SNOW

EARLY WINTER - 1974-1975

| DRAINAGE BASIN and/or SNOW COURSE | | THIS YEAR | | | PAST RECORD | |
|-----------------------------------|-----------|----------------|---------------------|------------------------|--|-----------|
| | | Date of Survey | Snow Depth (Inches) | Water Content (Inches) | Water Content (inches) | |
| NAME | Elevation | | | | Last Year | Average † |
| Agassiz | 11200 | 12/3 | 18 | 5.8 | NO RECORD FOR THIS PERIOD ↓ | |
| Agassiz | " | 1/3 | 40 | 8.8 | | |
| Baker Butte #1 | 7300 | 12/12 | 6 | 1.2 | | |
| Baker Butte #1 | " | 12/29 | 13 | 2.1 | | |
| Baker Butte #2 | 7700 | 12/12 | 12 | 3.3 | | |
| Baker Butte #2 | " | 12/29 | 19 | 4.2 | | |
| Baldy | 9125 | 12/31 | 8 | 1.1 | | |
| Beaver Head | 8000 | 12/31 | 5 | 0.6 | | |
| Canyon Creek | 7500 | 12/12 | 3 | 0.4 | | |
| Canyon Creek | 7500 | 12/31 | 5 | 0.5 | | |
| Canyon Point | 7600 | 12/12 | 3 | 0.4 | | |
| Canyon Point | " | 12/31 | 6 | 0.5 | | |
| Chalender | 7100 | 12/29 | 5 | 0.8 | | |
| Coronado Trail | 8000 | 12/31 | 4 | 0.5 | | |
| Forest Dale | 6430 | 12/30 | 4 | 0.5 | | |
| Hannagan Meadows | 9090 | 12/31 | 9 | 1.5 | | |
| Happy Jack | 7630 | 12/29 | 6 | 1.1 | | |
| Heber | 7600 | 12/12 | 2 | 0.3 | | |
| Heber | " | 12/31 | 5 | 0.5 | | |
| Inner Basin #1 | 10100 | 11/1 | 19 | 3.5 | | |
| Inner Basin #1 | " | 12/3 | 15 | 4.8 | | |
| Inner Basin #1 | " | 1/3 | 30 | 7.1 | | |
| Inner Basin #2 | 9750 | 11/1 | 16 | 3.3 | | |
| Inner Basin #2 | " | 12/3 | 13 | 4.0 | | |
| Inner Basin #2 | " | 1/3 | 26 | 5.8 | | |
| Lake Mary | | 12/30 | 6 | 1.0 | | |
| Maverick Fork | 9050 | 12/31 | 10 | 1.6 | | |
| McNary | 7200 | 12/31 | 5 | 0.8 | | |
| Milk Ranch | 7000 | 12/31 | 3 | 0.4 | | |
| Mormon Mountain | 7500 | 12/11 | 4 | 0.9 | | |
| Mormon Mountain | 7500 | 12/29 | 8 | 1.3 | | |
| Mormon Mt. Summit #1 | | 12/12 | 7 | 1.9 | | |
| Mormon Mt. Summit #2 | | 12/12 | 14 | 4.0 | | |
| White Horse Lake Jct. | 7150 | 12/29 | 6 | 0.8 | | |
| Wilson Lake | 9000 | 12/31 | 14 | 2.6 | | |

SNOW ABOUT JANUARY 15, 1975

| DRAINAGE BASIN and/or SNOW COURSE | | THIS YEAR | | | PAST RECORD | |
|-----------------------------------|-----------|-----------------|---------------------|------------------------|------------------------|-----------|
| | | Date of Survey | Snow Depth (Inches) | Water Content (Inches) | Water Content (inches) | |
| NAME | Elevation | | | | Last Year | Average † |
| <u>GILA RIVER</u> | | | | | | |
| Bear Wallow | 8100 | 1/14 | 6 | 1.5 | 4.8 | 4.0 |
| Beaver Head | 8000 | 1/14 | 9 | 1.8 | 2.9 | 3.0 |
| Coronado Trail | 8000 | 1/14 | 10 | 1.3 | 1.7 | 3.0 |
| Emory Pass #1 * | 7800 | 1/14 | 6 | 1.4 | 1.3 | 0.9** |
| Emory Pass #2 * | 7800 | 1/14 | 8 | 1.9 | 1.2 | 2.0** |
| Frisco Divide | 8000 | 1/14 | 10 | 1.6 | 2.3 | 2.5 |
| Hannagan Meadows * | 9090 | 1/14 | 15 | 3.2 | 5.8 | 6.5** |
| Hummingbird (A) | 10550 | 1/14 | 30 | 6.9 | 9.0 | 9.1** |
| McKnight Cabin * (A) | 9300 | 1/14 | 12 | 2.2 | 3.0 | 3.4** |
| Mogollon | 7000 | 1/14 | 5 | 1.4 | 1.0 | 1.7 |
| Nutrioso | 8500 | 1/14 | 12 | 1.6 | 1.6 | 2.1 |
| Redstone Trail | 8600 | 1/14 | 14 | 4.0 | 4.8 | 6.1** |
| Rose Canyon | 7300 | 1/14 | 1 | 0.2 | 3.4 | 2.6 |
| Silver Creek Divide | 9000 | 1/14 | 20 | 4.5 | 5.3 | 8.8** |
| State Line | 8000 | 1/14 | 10 | 1.8 | 3.4 | 2.7 |
| Whitewater (A) | 10750 | 1/14 | 39 | 8.6 | 10.9 | 10.9** |
| <u>VERDE RIVER</u> | | | | | | |
| Baker Butte | 7300 | 1/14 | 13 | 3.1 | 8.3 | 3.8** |
| Baker Butte #2 | 7700 | 1/14 | 19 | 4.9 | 11.3 | --- |
| Camp Wood | 5700 | 1/14 | 0 | 0.0 | 2.8 | 0.7 |
| Chalender * | 7100 | 1/14 | 5 | 1.5 | 3.9 | 1.8 |
| Copper Basin Divide | 6720 | 1/14 | 1 | 0.2 | 4.6 | 2.0** |
| Fort Valley | 7350 | 1/14 | 4 | 1.0 | 3.3 | 1.2 |
| Gaddes Canyon | 7600 | 1/15 | 8 | 1.7 | 6.3 | 3.0 |
| Happy Jack | 7630 | 1/14 | 7 | 1.6 | 6.1 | 2.1 |
| Iron Springs * | 6200 | 1/14 | 1 | 0.1 | 1.6 | 0.9 |
| Mingus Mountain | 7100 | 1/15 | 0 | 0.0 | 1.8 | 1.0 |
| Mormon Lake * | 7350 | 1/14 | 14 | 3.4 | 5.8 | 2.4 |
| Mormon Mountain | 7500 | 1/14 | 13 | 3.4 | 7.3 | 2.9 |
| Newman Park | 6750 | 1/14 | 12 | 2.4 | 4.8 | 1.6** |
| Snow Bowl #1 | 10260 | 1/14 | 22 | 6.2 | 7.6 | 5.3** |
| Snow Bowl #2 | 11000 | 1/14 | 30 | 8.2 | 8.2 | 10.0** |
| White Horse Lake Jct. | 7150 | 1/14 | 8 | 2.1 | 4.0 | 2.0** |
| White Spar | 6000 | 1/14 | 0 | 0.0 | 2.5 | 1.0** |
| <u>LOWER COLORADO RIVER</u> | | | | | | |
| Bill Williams Int. | 8550 | 1/14 | 14 | 4.0 | 7.7 | 4.1** |
| Bill Williams Summit | 8950 | 1/14 | 21 | 6.1 | 8.3 | 5.2** |
| Bright Angel | 8400 | N O S U R V E Y | | | 5.3 | --- |
| Chalender * | 7100 | 1/14 | 5 | 1.5 | 3.9 | 1.8 |
| Fort Valley | 7350 | 1/14 | 4 | 1.0 | 3.3 | 1.2 |
| Grand Canyon | 7500 | 1/14 | 9 | 1.6 | 3.2 | 1.5 |
| Williams Ski Run | 7720 | 1/14 | 13 | 4.0 | 7.3 | 3.5** |

† 1958-72 15 year period. (*) Adjacent drainage. (**) 1958-72 Adjusted Average. (A) Aerial observation: water content estimated.

SNOW

ABOUT JANUARY 15, 1975

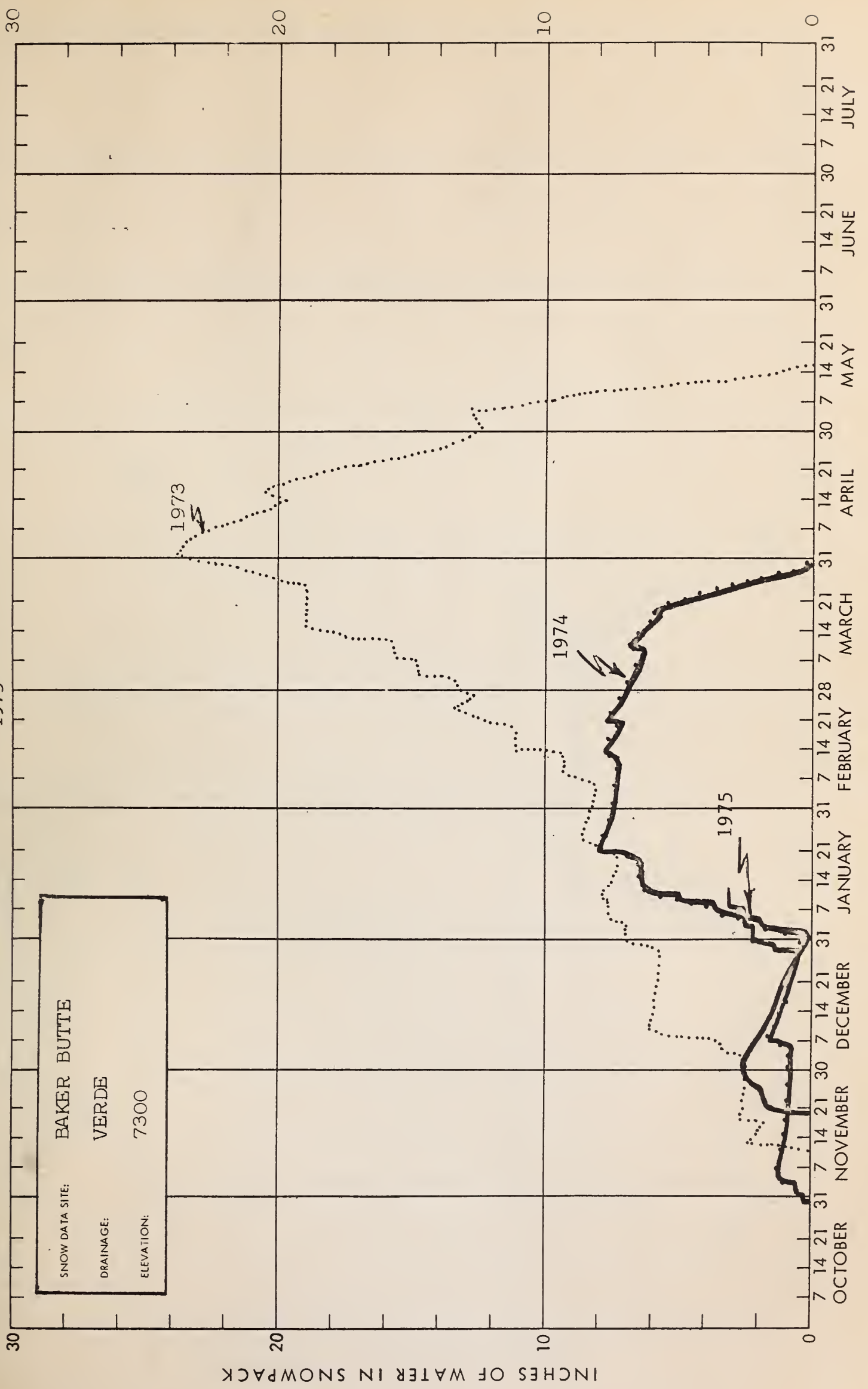
| DRAINAGE BASIN and/or SNOW COURSE | | THIS YEAR | | | PAST RECORD | |
|-----------------------------------|-----------|----------------|---------------------|------------------------|------------------------|-----------|
| | | Date of Survey | Snow Depth (Inches) | Water Content (Inches) | Water Content (inches) | |
| NAME | Elevation | | | | Last Year | Average † |
| <u>SALT RIVER</u> | | | | | | |
| Baldy * | 9125 | 1/14 | 17 | 3.3 | 5.1 | 4.9 |
| Beaver Head | 8000 | 1/14 | 9 | 1.8 | 2.9 | 3.0 |
| Canyon Creek | 7500 | 1/14 | 9 | 1.9 | 6.6 | 2.8 |
| Canyon Point | 7600 | 1/13 | 11 | 2.1 | 6.8 | 3.0** |
| Coronado Trail | 8000 | 1/14 | 10 | 1.3 | 1.7 | 3.0 |
| Forest Dale | 6430 | 1/14 | 6 | 1.3 | 3.1 | 1.4 |
| Ft. Apache | 9160 | 1/14 | 21 | 3.9 | 5.2 | 5.2 |
| Hannagan Meadows | 9090 | 1/14 | 15 | 3.2 | 5.8 | 6.5** |
| Hawley Lake | 8300 | 1/14 | 13 | 2.8 | 7.4 | 4.3** |
| Heber | 7600 | 1/14 | 8 | 1.9 | 6.2 | 2.9 |
| Maverick Fork | 9050 | 1/14 | 18 | 3.7 | 6.1 | 5.8 |
| McNary | 7200 | 1/14 | 9 | 1.4 | 5.8 | 2.1 |
| Milk Ranch | 7000 | 1/14 | 6 | 1.2 | 4.8 | 1.5 |
| Mt. Ord (A) | 11000 | 1/15 | 67 | 12.1 | 13.1 | 14.5 |
| Nutrioso * | 8500 | 1/14 | 12 | 1.6 | 1.6 | 2.1 |
| Smith Cienega (A) | 9850 | 1/15 | 37 | 8.1 | 8.3 | --- |
| Sunrise Summit | 10600 | 1/13 | 30 | 6.6 | 9.3 | --- |
| Wilson Lake | 9000 | 1/13 | 22 | 4.3 | 7.1 | 7.3** |
| Workman Creek | 6900 | 1/14 | 12 | 2.6 | 8.7 | 4.3 |
| Promontory Butte | 7930 | 1/14 | 15 | 4.6 | 11.8 | --- |
| <u>LITTLE COLORADO RIVER</u> | | | | | | |
| Baldy | 9125 | 1/14 | 17 | 3.3 | 5.1 | 4.9 |
| Canyon Creek | 7500 | 1/14 | 9 | 1.9 | 6.6 | 2.8 |
| Canyon Point | 7600 | 1/13 | 11 | 2.1 | 6.8 | 3.0** |
| Cheese Springs | 8600 | 1/13 | 17 | 2.8 | 4.1 | 4.8** |
| Forest Dale | 6430 | 1/14 | 6 | 1.3 | 3.1 | 1.4 |
| Ft. Apache | 9160 | 1/14 | 21 | 3.9 | 5.2 | 5.2 |
| Fort Valley | 7350 | 1/14 | 4 | 1.0 | 3.3 | 1.2 |
| Happy Jack * | 7630 | 1/14 | 7 | 1.6 | 6.1 | 2.1 |
| Heber | 7600 | 1/14 | 8 | 1.9 | 6.2 | 2.9 |
| Inner Basin #1 | 10100 | 1/3 | 30 | 7.1 | 4.4 | --- |
| Inner Basin #2 | 9750 | 1/3 | 26 | 5.8 | 2.5 | --- |
| McNary | 7200 | 1/14 | 9 | 1.4 | 5.8 | 2.1 |
| Mormon Lake | 7350 | 1/14 | 14 | 3.4 | 5.8 | 2.4 |
| Mormon Mountain | 7500 | 1/14 | 13 | 3.4 | 7.3 | 2.9 |
| Nutrioso * | 8500 | 1/14 | 12 | 1.6 | 1.6 | 2.1 |
| Snow Bowl #1 | 10260 | 1/14 | 22 | 6.2 | 7.6 | 5.3** |
| Snow Bowl #2 | 11000 | 1/14 | 30 | 8.2 | 8.2 | 10.0** |
| Wilson Lake | 9000 | 1/13 | 22 | 4.3 | 7.1 | 7.3** |
| Promontory Butte | 7930 | 1/14 | 15 | 4.6 | 11.8 | --- |

† 1958-72 15-year period. (*) Adjacent drainage. (**) 1958-72 Adjusted Average. (A) Aerial observation: water content estimated.



SNOW PILLOW DATA
1975

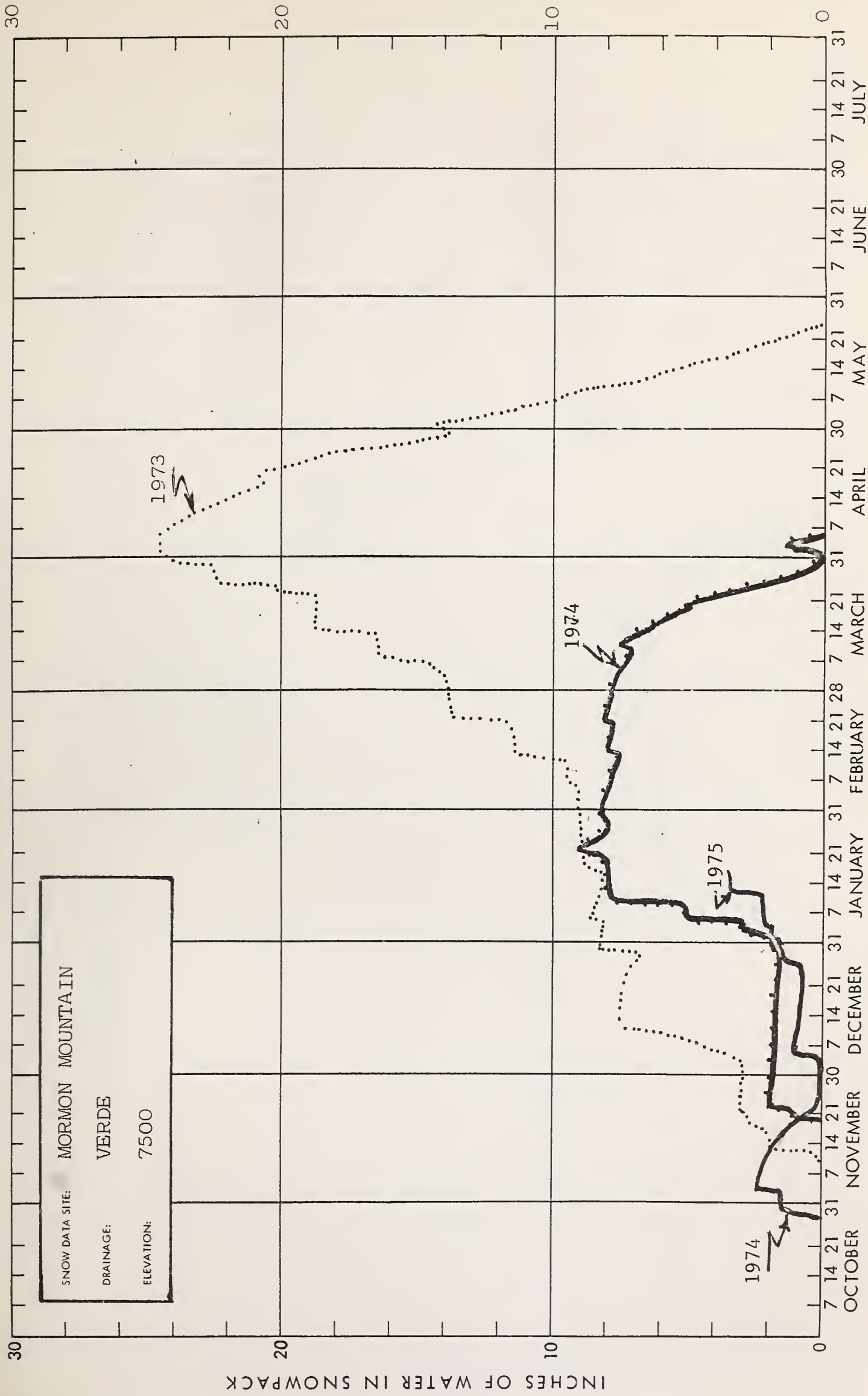
| | |
|-----------------|-------------|
| SNOW DATA SITE: | BAKER BUTTE |
| DRAINAGE: | VERDE |
| ELEVATION: | 7300 |





SNOW PILLOW DATA
1975

| | |
|-----------------|-----------------|
| SNOW DATA SITE: | MORMON MOUNTAIN |
| DRAINAGE: | VERDE |
| ELEVATION: | 7500 |

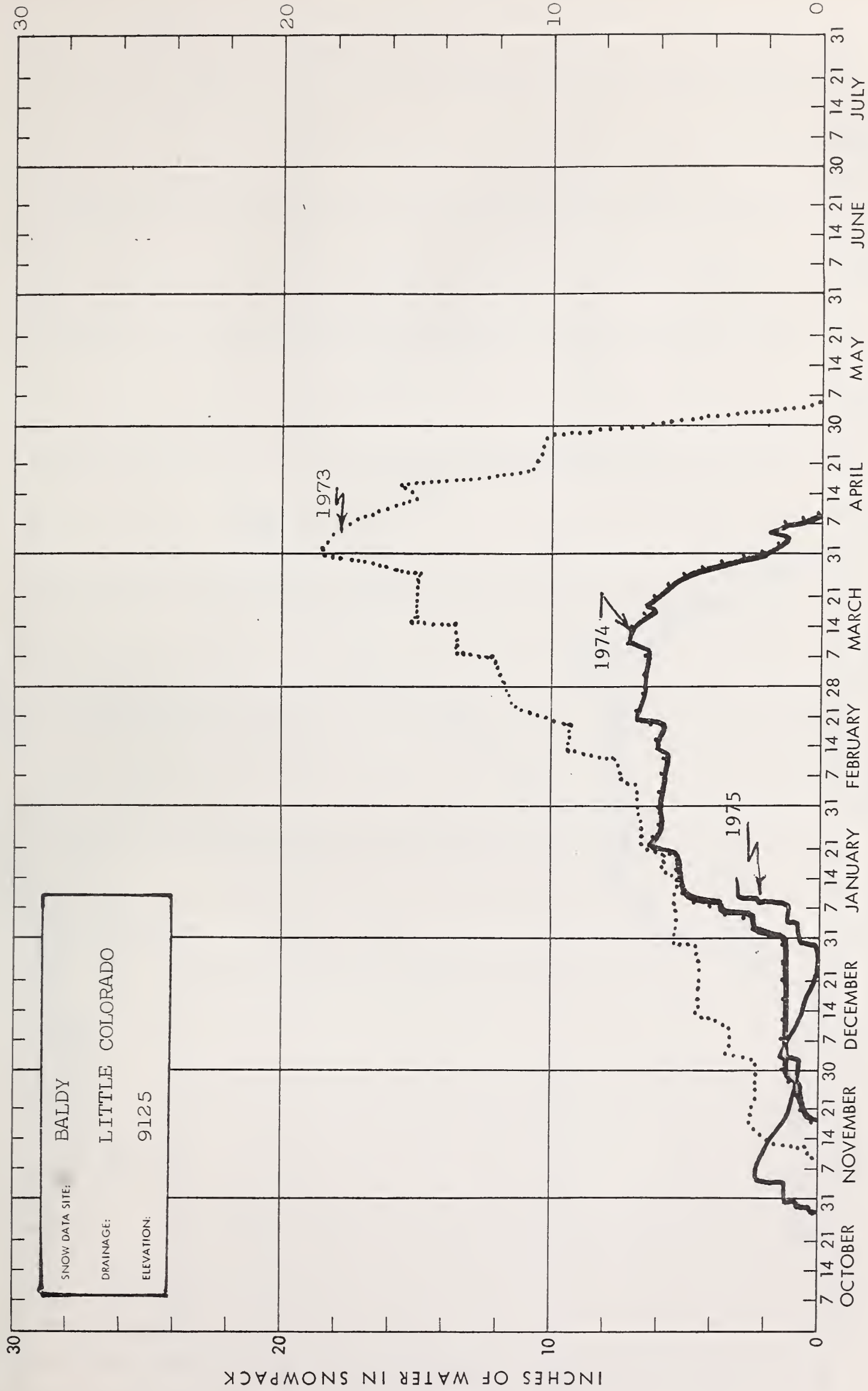


INCHES OF WATER IN SNOWPACK



SNOW PILLOW DATA
1975

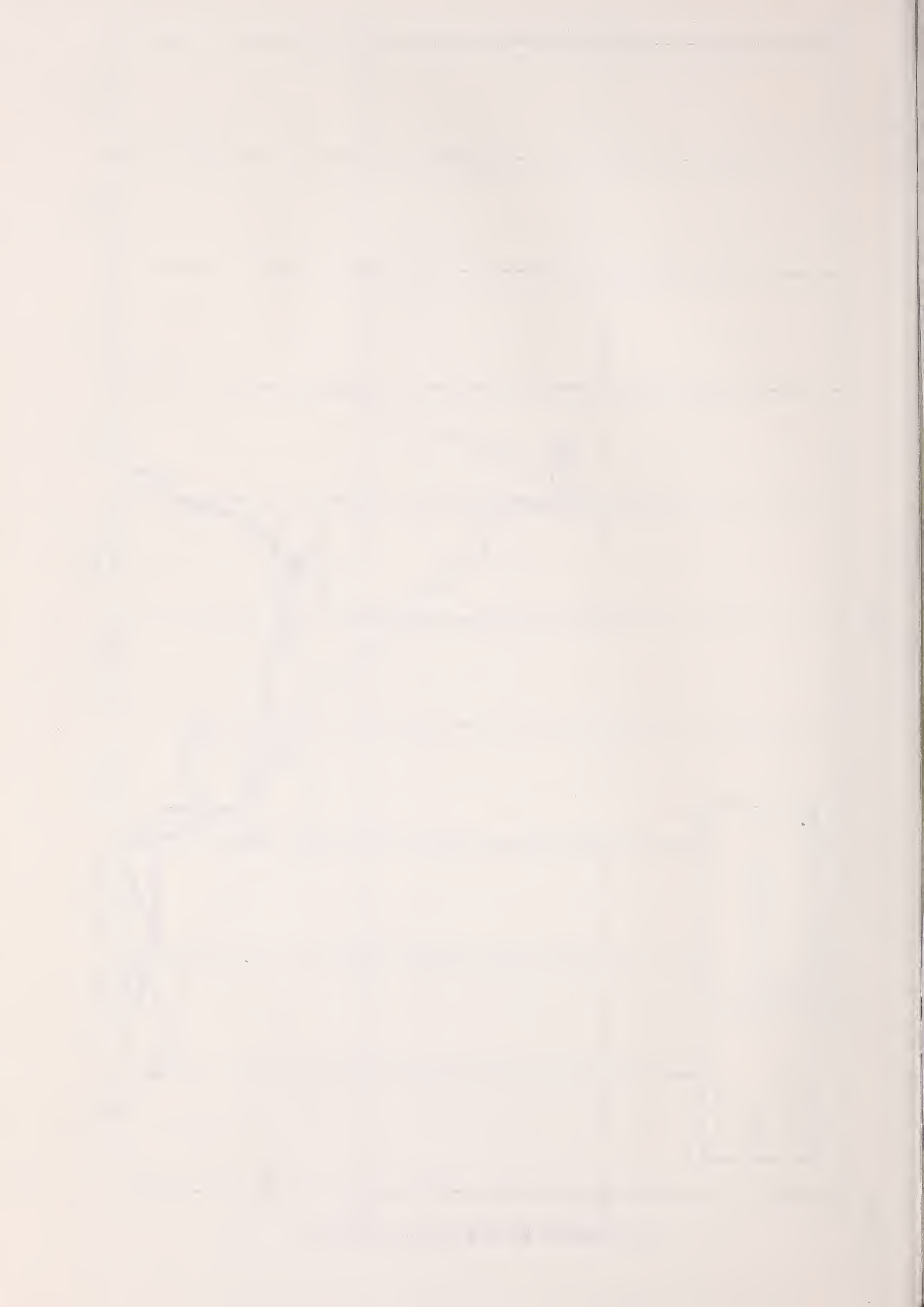
WSFB-X138



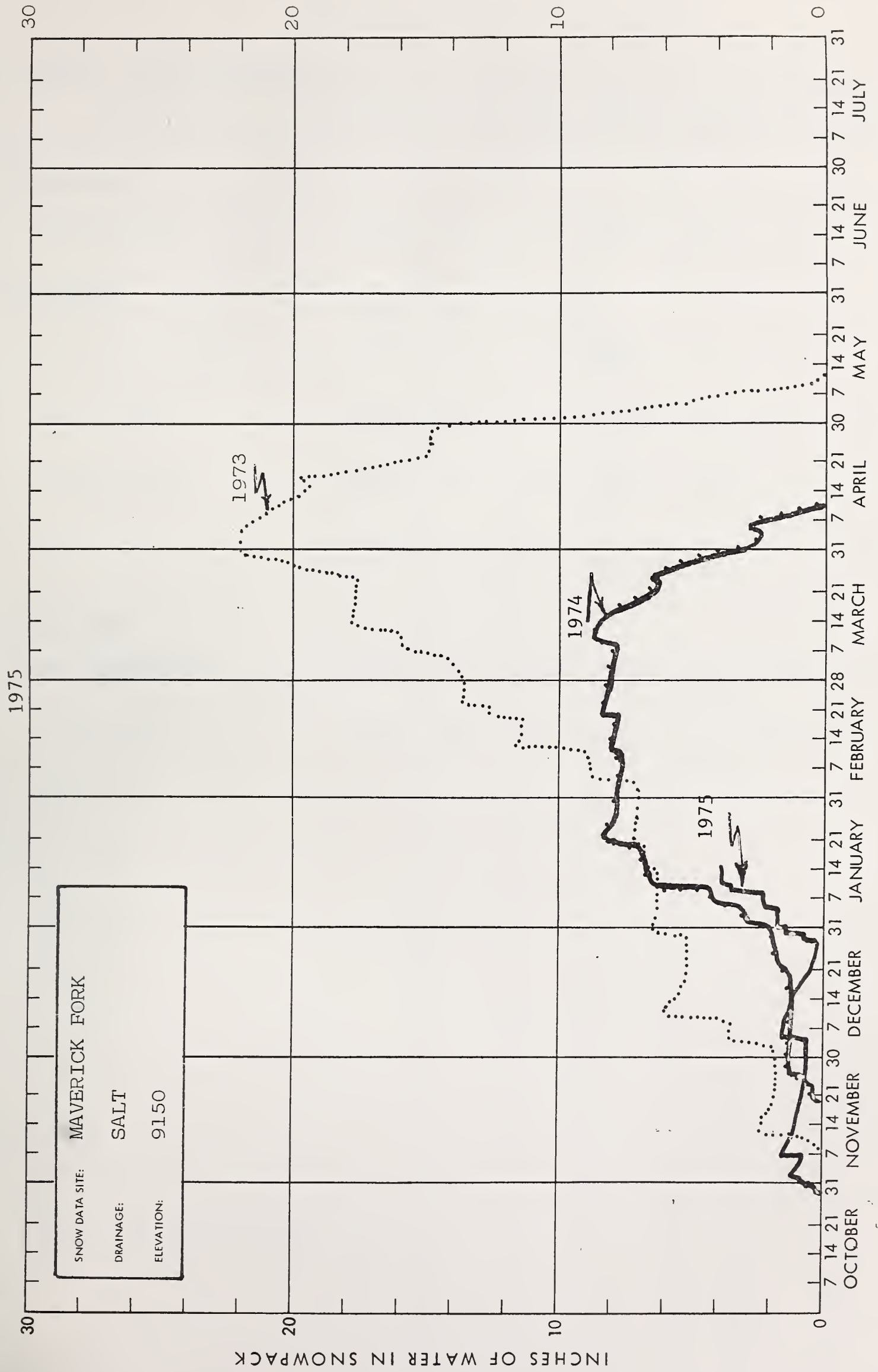
SNOW DATA SITE: BALDY
DRAINAGE: LITTLE COLORADO
ELEVATION: 9125

INCHES OF WATER IN SNOWPACK

x



SNOW PILLOW DATA



SNOW DATA SITE: MAVERICK FORK
DRAINAGE: SALT
ELEVATION: 9150

+

x



SOIL MOISTURE ABOUT JANUARY 15, 1975

| DRAINAGE BASIN and/or STATION | | Profile (Inches) | | Date of Survey | Soil Moisture (Inches) | | |
|-------------------------------|-----------|------------------|----------|----------------|------------------------|-----------|-----------|
| Name | Elevation | Depth | Capacity | | This Year | Last Year | Average † |
| <u>GILA RIVER</u> | | | | | | | |
| Frisco Divide | 8000 | 48 | 13.3 | 10/31 1/14 | 12.4 12.5 | 6.0 | 9.1 |
| <u>SALT RIVER</u> | | | | | | | |
| Black River Divide | 9100 | 48 | 16.8 | 10/30 1/14 | 17.4 17.7 | 14.1 | 16.1 |
| Canyon Creek | 7500 | 48 | 18.3 | 10/30 1/14 | 14.3 16.3 | 13.7 | 15.3 |
| Corduroy Creek | 6000 | 36 | 13.5 | 10/30 1/13 | 8.8 7.9 | 6.6 | 8.8 |
| McNary | 7200 | 48 | 16.3 | 10/30 1/14 | 17.9 17.9 | 13.6 | 14.8 |
| <u>VERDE RIVER</u> | | | | | | | |
| Mormon Mountain | 7500 | 48 | 16.1 | 10/29 1/14 | 13.7 14.3 | 13.3 | 15.0 |
| Newman Park | 6750 | 48 | 17.7 | 10/29 1/14 | 15.1 15.9 | 12.5 | 15.7 |
| † 1958-72 15-year average | | | | | | | |



PRECIPITATION AT SELECTED ARIZONA STATIONS 1/

| STATION | Precipitation (Inches) | |
|-----------------------|------------------------|--------------------------------------|
| | MONTH: DECEMBER | PERIOD: NOVEMBER THROUGH DECEMBER |
| Alpine | .54 | 0.74 |
| Ash Fork | .12 | 0.12 |
| Clifton | .38 | 1.23 |
| Douglas | Trace | 0.69 |
| Flagstaff WSO* | 1.18 | 2.18 |
| Globe | .08 | 0.17 |
| Heber | .66+ | 1.08 |
| McNary | 1.08 | 1.64 |
| Payson Ranger Station | 1.29+ | 2.30 |
| Phoenix WSFO** | .59 | 1.03 |
| Pleasant Valley | .82 | 1.17 |
| Prescott (City) | .71 | 1.64 |
| Safford | .17 | 0.34 |
| Show Low | .73 | 0.73 |
| Sierra Ancha | 1.99 | 2.23 |
| Springerville | .04+ | 0.18 |
| Tonto Fish Hatchery | 2.12 | 3.81 |
| Tucson WSO* | .33 | 1.14 |
| Williams | .53 | 1.29 |
| Winslow WSO* | .27 | 0.39 |
| Yuma WSO* | .14 | 0.14 |

1/ Data furnished by the Laboratory of Climatology, ASU, Tempe, Arizona and National Weather Service, Phoenix, Arizona

WSO* Weather Service Office

WSFO** Weather Service Forecast Office

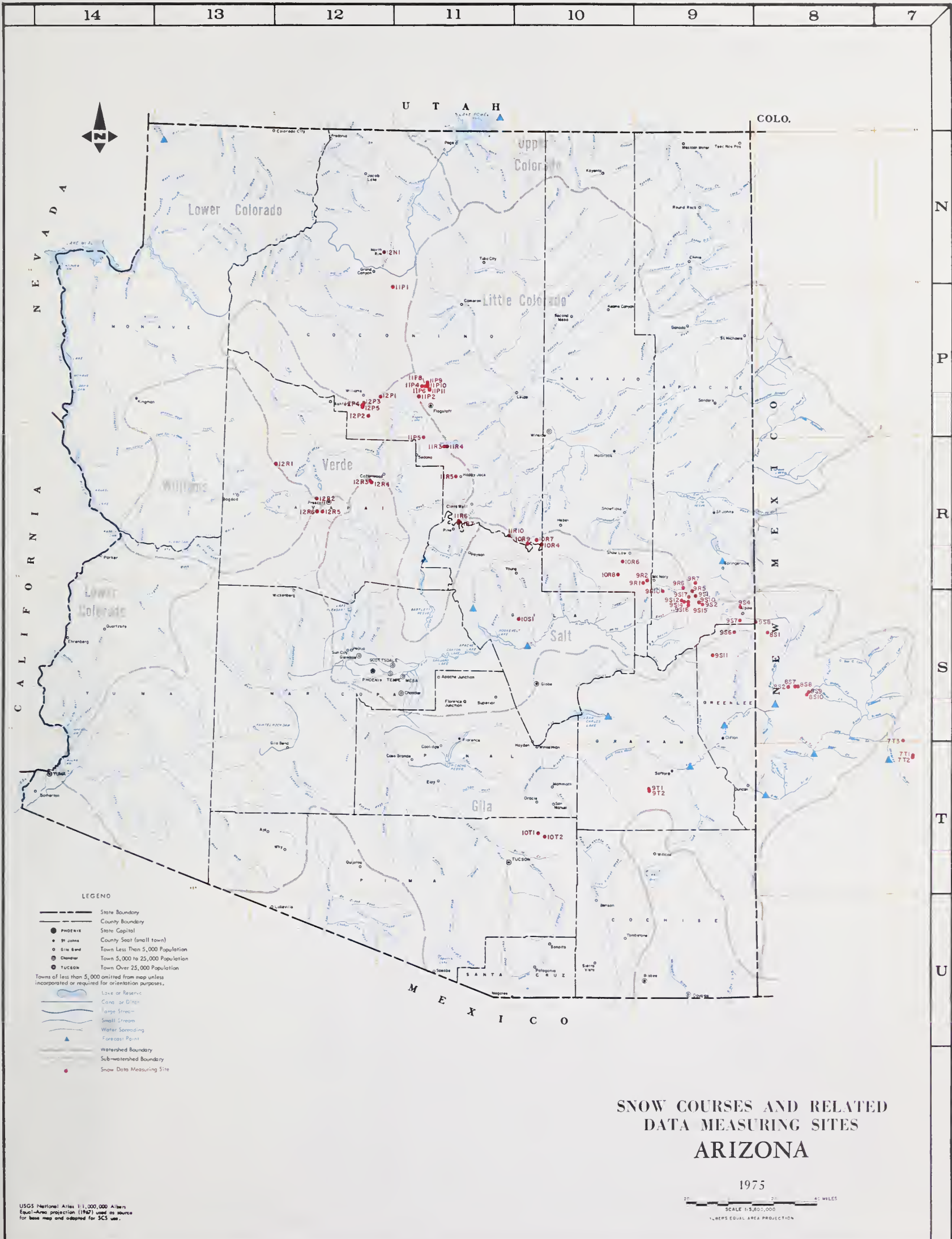
+ Data incomplete for the month. This is the total reported.

PRECIPITATION (Inches)

ABOUT JANUARY 15, 1975

| DRAINAGE BASIN and PRECIPITATION GAGE LOCATION | ELEVATION | CURRENT INFORMATION | | | FROM APPROX. NOV. 1 TO DATE | | |
|--|-----------|---------------------|--------------------------|-----------|-----------------------------|-----------|-----------------------|
| | | Date of Reading | Month's Precipitation | Average † | This Year | Average † | Percent of Average |
| <u>GILA RIVER</u> | | | | | | | |
| Silver Creek Divide | 9000 | 1/14 | 1.55 | .83* | 4.47 | 8.82* | 51 |
| Hannagan Meadows | 9030 | 1/14 | 1.26 | 1.06 | 3.00 | 7.43 | 40 |
| Frisco Divide ** | 8000 | 1/14 | 1.03 | --- | 2.13 | --- | -- |
| <u>SALT RIVER</u> | | | | | | | |
| Canyon Point | 7600 | 1/14 | 1.33 | 1.36* | 4.13 | 9.62* | 43 |
| Hannagan Meadows ** | 9030 | 1/14 | 1.26 | 1.06 | 3.00 | 7.43 | 40 |
| Little Wildcat (Heber Snow Course) | 7600 | 1/14 | 1.20 | 1.21 | 3.49 | 8.12 | 43 |
| Maverick Fork | 9050 | 1/14 | 1.47 | 1.01 | 4.33 | 6.93 | 62 |
| Workman Creek ** | 6970 | 1/14 | 1.60 | 1.67 | 4.51 | 9.79 | 46 |
| Wilson Lake | 9100 | 1/13 | 1.65 | 1.26* | 3.61 | 6.92* | 52 |
| <u>VERDE RIVER</u> | | | | | | | |
| Baker Butte | 7300 | 1/14 | 0.81 | 1.51* | 5.24 | 9.58* | 55 |
| Copper Basin Divide | 6720 | 1/14 | 0.10 | .75* | 2.66 | 6.03* | 44 |
| Fort Valley ** | 7350 | 1/14 | 0.54 | .70 | 1.92 | 4.72 | 41 |
| Happy Jack ** | 7480 | 1/14 | 0.57 | .95 | 2.95 | 5.93 | 50 |
| Mingus Mountain | 7660 | 1/14 | 0.33 | .70 | 2.50 | 4.86 | 51 |
| Mormon Mountain | 7500 | 1/14 | 1.87 | 1.11* | 4.45 | 9.05* | 49 |
| White Horse Lake Jct.** | 7150 | 1/14 | 1.28 | --- | 3.60 | --- | -- |
| <u>LITTLE COLORADO</u> | | | | | | | |
| Inner Basin #1 | 9830 | 1/3 | -- | 1.03 | 5.05 ^{1/} | 9.16 | 55 |
| Inner Basin #2 | 10050 | 1/3 | -- | 1.24* | 6.10 ^{1/} | 10.60* | 58 |
| Greer Lakes | 8500 | 1/14 | 0.85 | .49 | 1.95 | 3.82 | 51 |
| Little Wildcat (Heber Snow Course) | 7600 | 1/14 | 1.20 | 1.21 | 3.49 | 8.12 | 43 |
| Sheep Crossing (Baldy Snow Course) | 9125 | 1/14 | 1.78 | 1.14 | 3.93 | 6.60 | 60 |
| † 1958-72 Average * Adjusted Average ** Data Supplied by U.S. Forest Service ^{1/} Partially Estimated | | | | | | | |





INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

| NUMBER | NAME | SEC. | TWP. | RGE. | ELEV. | DRAINAGE | OBSERVER | RECORD BEGAN |
|-----------|----------------------------|------|------|-------|-------|--------------------|-----------|--------------|
| 11P10A | Agassiz | 32 | 23N | 7E | 11200 | Little Colorado | SCS-C.F.* | 1968 |
| 11R7 | Baker Butte #2 | 9 | 12N | 9E | 7700 | Verde | SCS | 1971 |
| 11R6PSP | Baker Butte | 4 | 12N | 9E | 7300 | Verde | SCS | 1966 |
| 9S1APSP | Baldy | 28 | 7N | 27E | 9125 | Little Colorado | SCS | 1950 |
| 9S15 | Baldy #2 | 12 | 6N | 26E | 9750 | Little Colorado | SCS | 1963 |
| 9S16 | Baldy #3 | 13 | 6N | 26E | 10950 | Little Colorado | SCS | 1963 |
| 10T1 | Bear Wallow | 6 | 12S | 16E | 8100 | Gila | FS | 1948 |
| 9S6 | Beaver Head | 13 | 4N | 30E | 8000 | San Francisco | FS | 1938 |
| 12P5 | Bill Williams Intermediate | 17 | 21N | 2E | 8550 | Cataract | FS | 1967 |
| 12P4 | Bill Williams Summit | 17 | 21N | 2E | 8950 | Verde | FS | 1967 |
| 9S10m | Black River Divide | 10 | 6N | 27E | 9400 | Salt | SCS | 1954 |
| 12N1 | Bright Angel | 34 | 33N | 3E | 8400 | Bright Angel Creek | NPS | 1947 |
| 12R1 | Camp Wood | 3 | 16N | 6W | 5700 | Verde | FS | 1946 |
| 10R7M | Canyon Creek #2 | 18 | 11N | 15E | 7500 | Little Colorado | SCS | 1958 |
| 10R9P | Canyon Point | 28 | 11N | 14E | 7600 | Salt | SCS | 1967 |
| 12P1M | Chalender | 27 | 22N | 3E | 7100 | Verde | FS | 1947 |
| 9R7 | Cheese Springs | 28 | 8N | 27E | 8600 | Little Colorado | SCS | 1969 |
| 12R6P | Copper Basin Divide | 23 | 13N | 3W | 6720 | Verde | SCS | 1963 |
| 10R8m | Corduroy Creek | 4 | 8N | 21E | 6000 | Salt | SCS | 1954 |
| 9S7 | Coronado Trail | 26 | 5N | 30E | 8000 | San Francisco | FS | 1938 |
| 9T2A | Crazy Horse | 34 | 8S | 24E | 10200 | Gila | FS | 1963 |
| 11P11a | Doyle Saddle | 4 | 22N | 7E | 10900 | Little Colorado | SCS | 1968 |
| 7T1 | Emory Pass #1 | 16 | 16S | 9W** | 7800 | Mimbres | SCS | 1967 |
| 7T2 | Emory Pass #2 | 16 | 16S | 9W** | 7800 | Mimbres | SCS | 1967 |
| 10R6 | Forest Dale | 2 | 9N | 21E | 6430 | Salt | BIA | 1939 |
| 9R5 | Ft. Apache | 18 | 7N | 27E | 9160 | Little Colorado | SCS | 1951 |
| 11P2P | Ft. Valley | 22 | 22N | 6E | 7350 | Little Colorado | FS | 1947 |
| 8S1MP | Frisco Divide | 31 | 6S | 20W** | 8000 | San Francisco | FS | 1938 |
| 12R4 | Gaddes Canyon | 11 | 15N | 2E | 7600 | Verde | SCS | 1954 |
| 11P1 | Grand Canyon | 21 | 30N | 4E | 7500 | Hance Creek | NPS | 1947 |
| 9S11P | Hannagan Meadows | 19 | 3N | 29E | 9090 | San Francisco | FS | 1964 |
| 11R5P | Happy Jack | 30 | 16N | 9E | 7630 | Verde | FS | 1951 |
| 9R10 | Hawley Lake | 13 | 7N | 24E | 8300 | Salt | BIA | 1966 |
| 10R4PSP | Heber | 28 | 11N | 15E | 7600 | Little Colorado | SCS | 1950 |
| 9T1A | High Peak | 34 | 8S | 24E | 10500 | Gila | FS | 1963 |
| 8S9A | Hummingbird | 19 | 11S | 17W** | 10550 | Gila | SCS | 1964 |
| 11P9P | Inner Basin #1 | 28 | 23N | 7E | 10000 | Little Colorado | C.F.* | 1967 |
| 11P8P | Inner Basin #2 | 28 | 23N | 7E | 9750 | Little Colorado | C.F.* | 1967 |
| 12R2 | Iron Springs | 22 | 14N | 3W | 6200 | Bill Williams | SCS | 1946 |
| 9S2APSP | Maverick Fork | 13 | 6N | 27E | 9150 | Salt | SCS | 1950 |
| 7S3A | McKnight Cabin | 10 | 15S | 10W** | 9300 | Mimbres | SCS | 1967 |
| 9R2M | McNary | 23 | 8N | 23E | 7200 | Salt | BIA | 1939 |
| 9R1 | Milk Ranch | 33 | 8N | 23E | 7000 | Salt | BIA | 1941 |
| 12R3 | Mingus Mountain | 3 | 15N | 2E | 7100 | Verde | SCS | 1947 |
| 8S2 | Mogollon | 2 | 11S | 19W** | 7000 | San Francisco | SCS | 1953 |
| 11R4 | Mormon Lake | 13 | 18N | 8E | 7350 | Little Colorado | SCS | 1947 |
| 11R3MAPSP | Mormon Mountain | 14 | 18N | 8E | 7500 | Verde | SCS | 1950 |
| 9S12A | Mt. Ord | 4 | 6N | 26E | 11200 | Salt | SRP-SCS | 1966 |
| 11P5M | Newman Park | 25 | 19N | 6E | 6750 | Verde | SCS | 1963 |
| 9S4 | Nutrioso | 23 | 6N | 30E | 8500 | San Francisco | FS | 1938 |
| 11R10 | Promontory Butte | 5 | 11N | 13E | 7930 | Little Colorado | SCS | 1973 |
| 8S7 | Redstone Trail | 5 | 11S | 18W** | 8600 | San Francisco | SCS | 1961 |
| 10T2 | Rose Canyon | 15 | 12S | 16E | 7300 | Gila | FS | 1948 |
| 8S8P | Silver Creek Divide | 4 | 11S | 18W** | 9000 | San Francisco | SCS | 1964 |
| 9S14A | Smith Cienega | 10 | 6N | 26E | 10050 | Salt | SRP-SCS | 1966 |
| 11P4 | Snow Bowl #1 | 36 | 23N | 6E | 10260 | Verde | FS | 1961 |
| 11P6 | Snow Bowl #2 | 31 | 23N | 7E | 11000 | Verde | FS | 1965 |
| 9S8 | State Line | 6 | 6S | 21W** | 8000 | San Francisco | FS | 1938 |
| 9S17 | Sunrise Summit | 36 | 7N | 26E | 10600 | Salt | SCS | 1972 |
| 12P2P | White Horse Lake Jct. | 2 | 20N | 2E | 7180 | Verde | FS | 1967 |
| 12R5 | White Spar | 19 | 13N | 2W | 6000 | Verde | SCS | 1963 |
| 8S10A | Whitewater | 19 | 11S | 17W** | 10750 | Gila | SCS | 1964 |
| 12P3 | Williams Ski Run | 9 | 21N | 2E | 7720 | Cataract | FS | 1967 |
| 9R6P | Wilson Lake | 4 | 7N | 26E | 9000 | Salt | SCS | 1966 |
| 10S1P | Workman Creek | 33 | 6N | 14E | 6900 | Salt | FS | 1952 |

A Aerial Snow Depth Marker

a Aerial Snow Depth Marker Only

M Soil Moisture Station

m Soil Moisture Station Only

P Precipitation Storage Gage

SP Snow Pressure Pillow

** NM Principal Meridian

* City of Flagstaff

The Following Organizations Cooperate in the Arizona Snow Survey Work

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Department of Agriculture
Soil Conservation Service
Forest Service
 Apache Forest
 Coconino Forest
 Coronado Forest
 Gila Forest
 Kaibab Forest
 Prescott Forest
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IRRIGATION PROJECTS

Salt River Valley Water User's Association
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 Coolidge, Arizona
Maricopa County Municipal Water Conservation District

PRIVATE

Southwest Forest Industries, Inc.
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Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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