FINAL REPORT
BASELINE METEOROLOGY AND AIR QUALITY IN THE RIVERSIDE DISTRICT

APPENDICES

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FINAL REPORT
BASELINE METEOROLOGY AND AIR QUALITY IN THE RIVERSIDE DISTRICT

APPENDICES

Submitted to:

Bureau of Land Management
Sacramento, California

Prepared by:

W. P. Lynott
B. Garelick
D. Rykaczewski
H. Frentz
D. Cover

December 10, 1979

SCIENCE APPLICATIONS, LA JOLLA, CALIFORNIA
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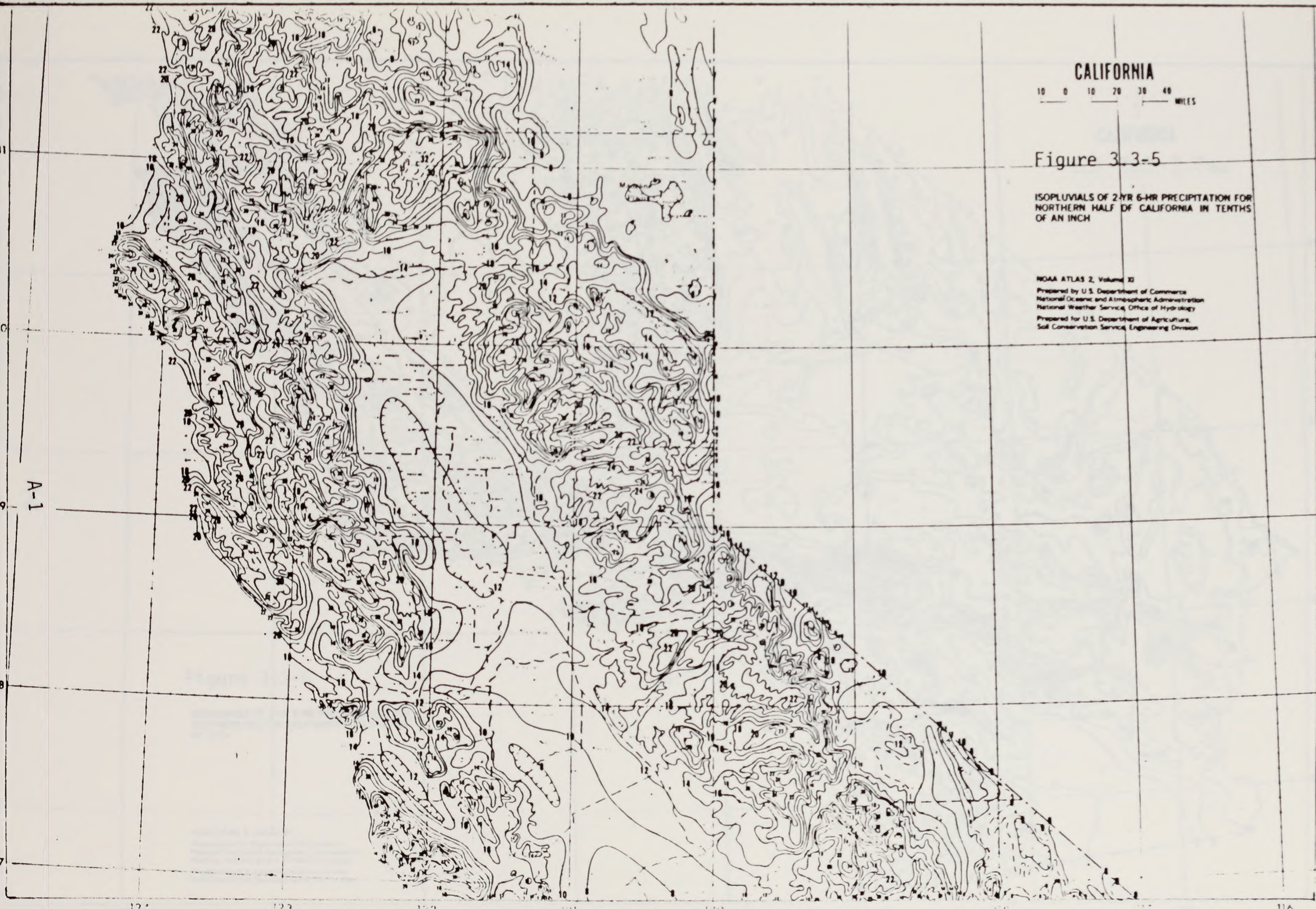
P.O. Box 2351, 1200 Prospect Street, La Jolla, California 92037

APPENDIX A
ISOPLUVIAL OR RAINFALL INTENSITY ANALYSES
FOR CALIFORNIA


CALIFORNIA
10 0 10 20 30 40 MILES
Figure 3.3-5
ISOPLUVIALS OF 2-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH
NOAA ATLAS 2, Volume XI
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Prepared for U.S. Department of Agriculture,
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41
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120
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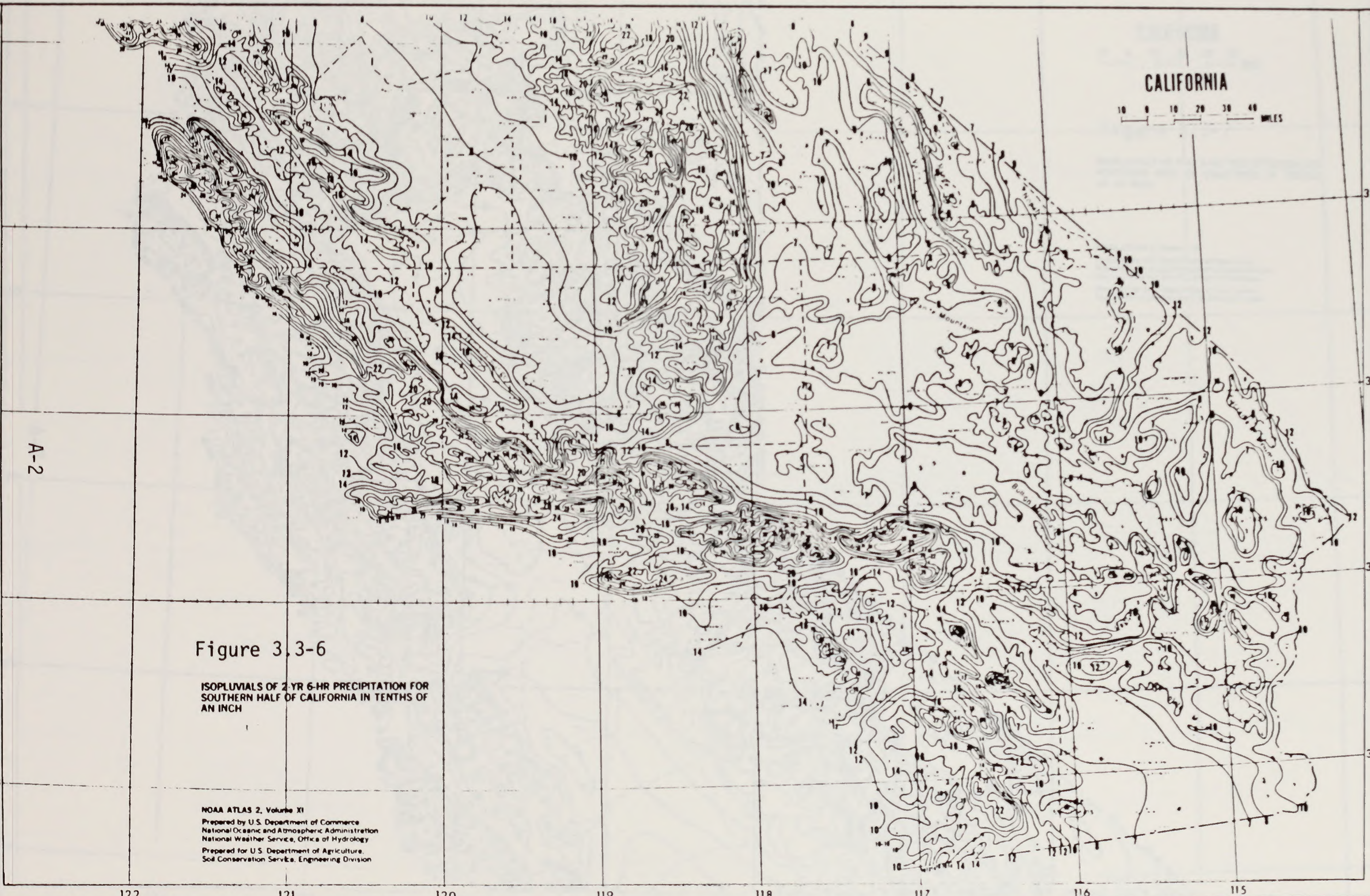

Figure 3.3-6

ISOPLUVIALS OF 2-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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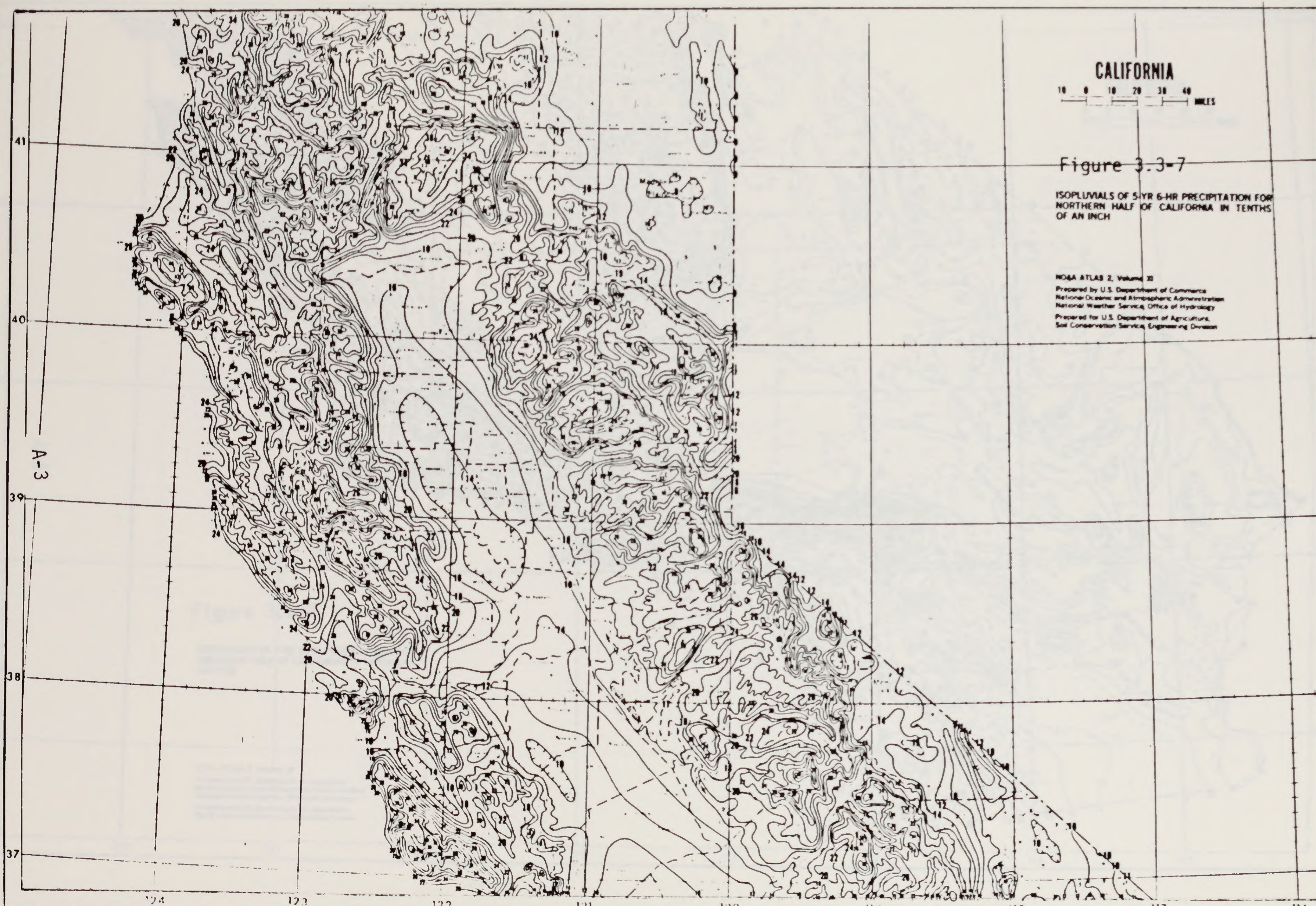

Figure 3.3-7

ISOPLUVIALS OF 5-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

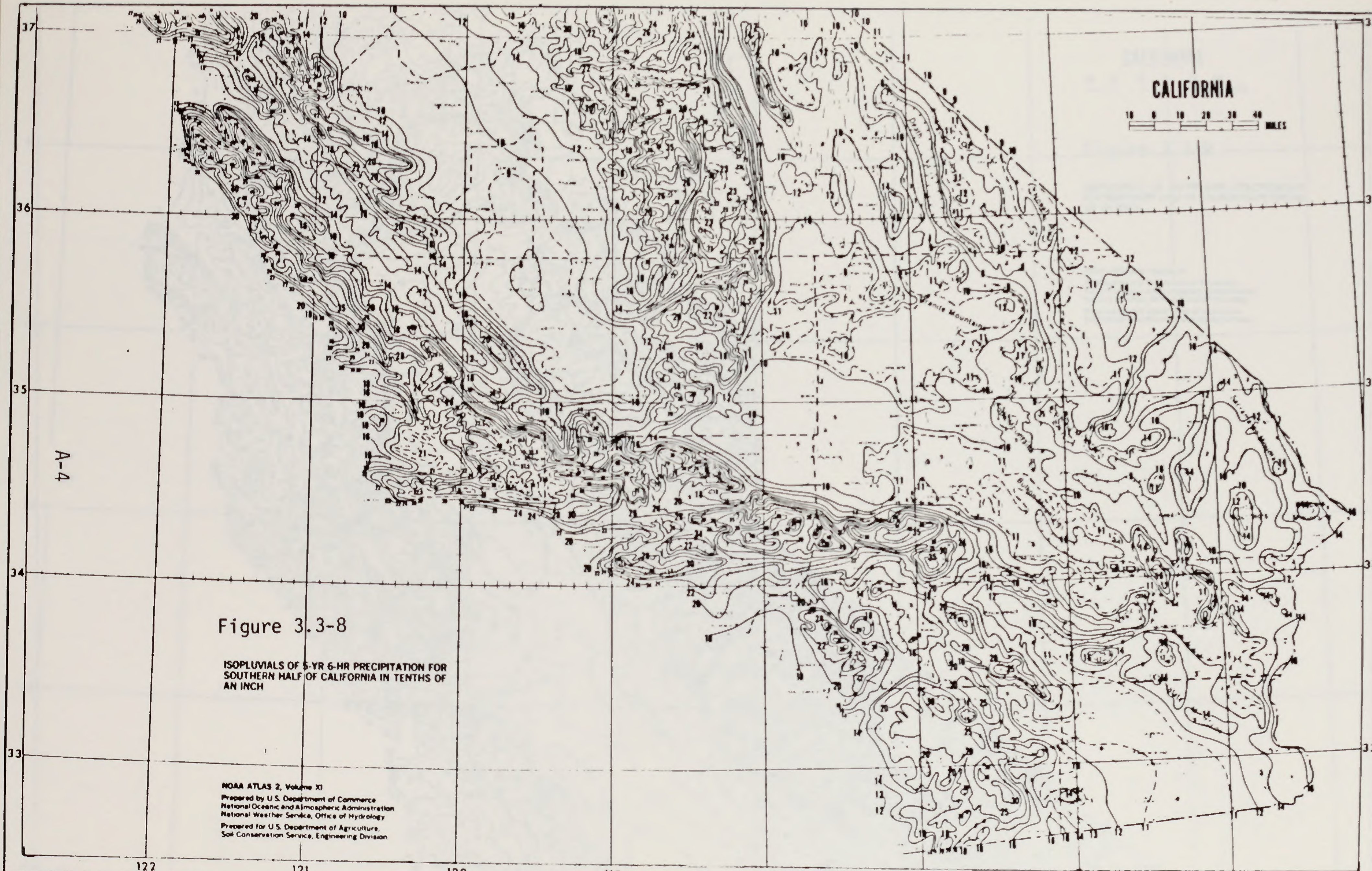

Figure 3.3-8

ISOPLUVIALS OF 5-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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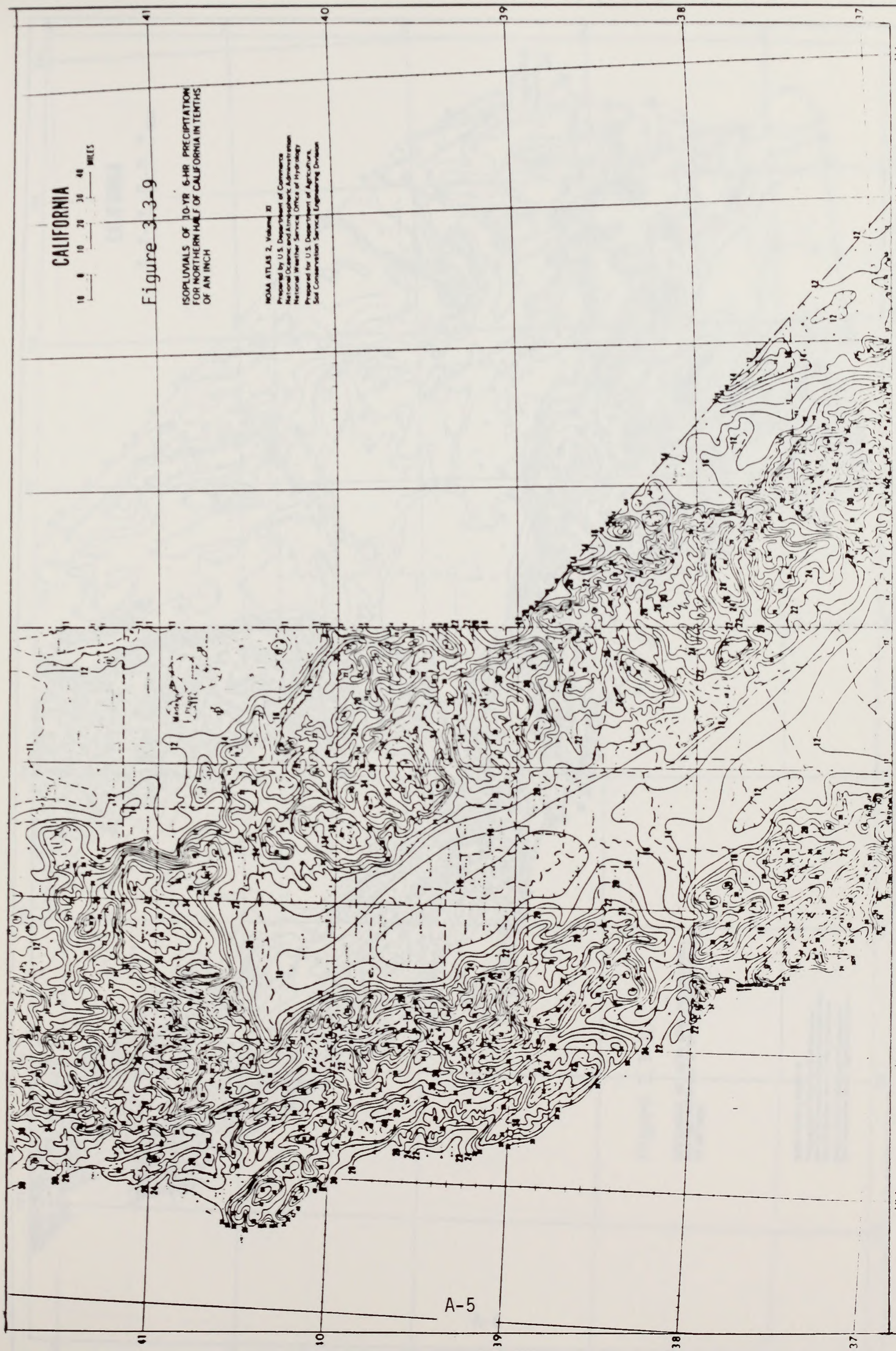
CALIFORNIA
10 0 10 20 30 40 MILES
ISOPLUVIALS OF 10-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH
NOAA ATLAS 2, Volume XI
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Figure 3.3-9

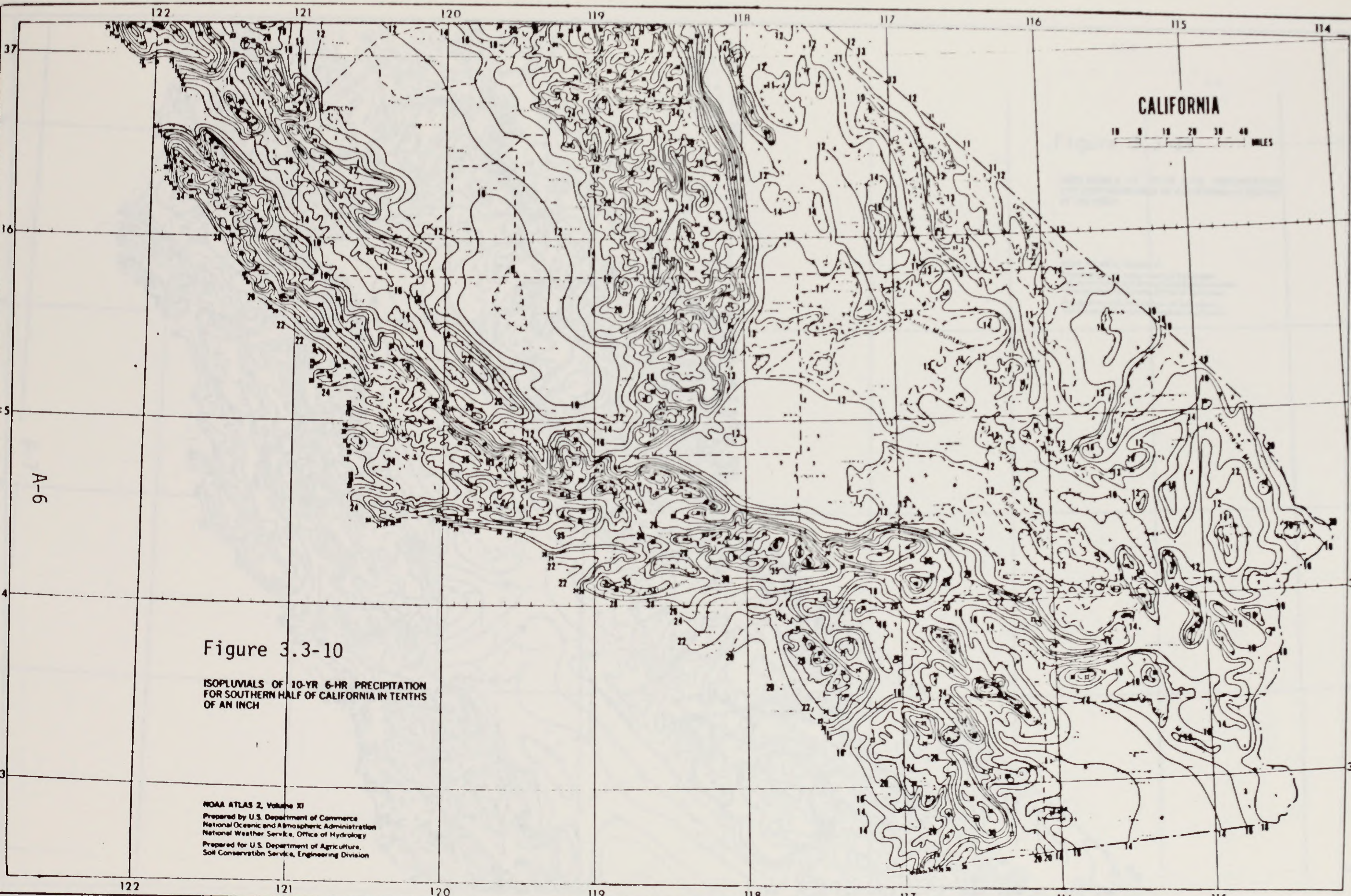

Figure 3.3-10

ISOPLUVIALS OF 10-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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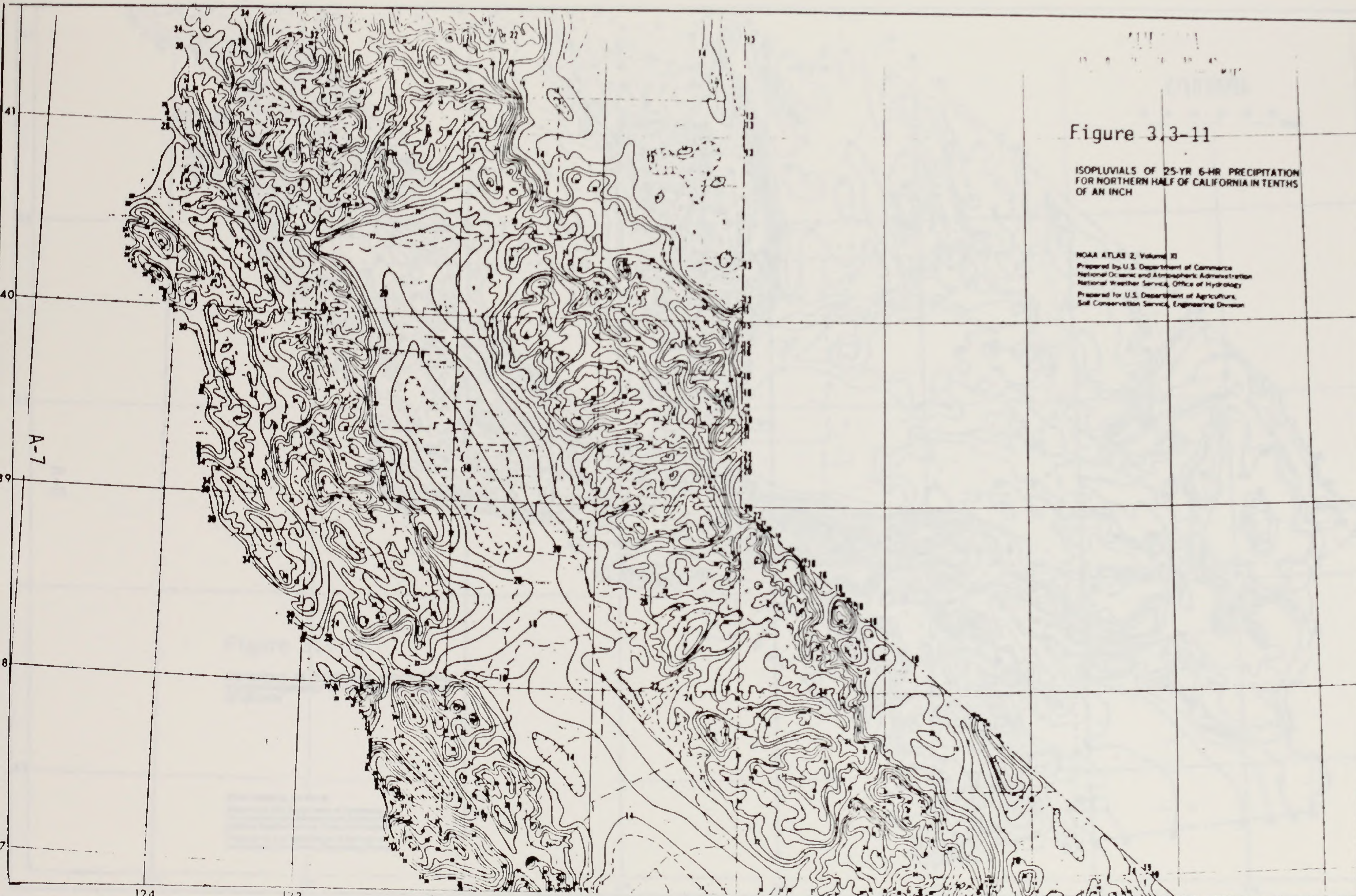

Figure 3.3-11

ISOPLUVIALS OF 25-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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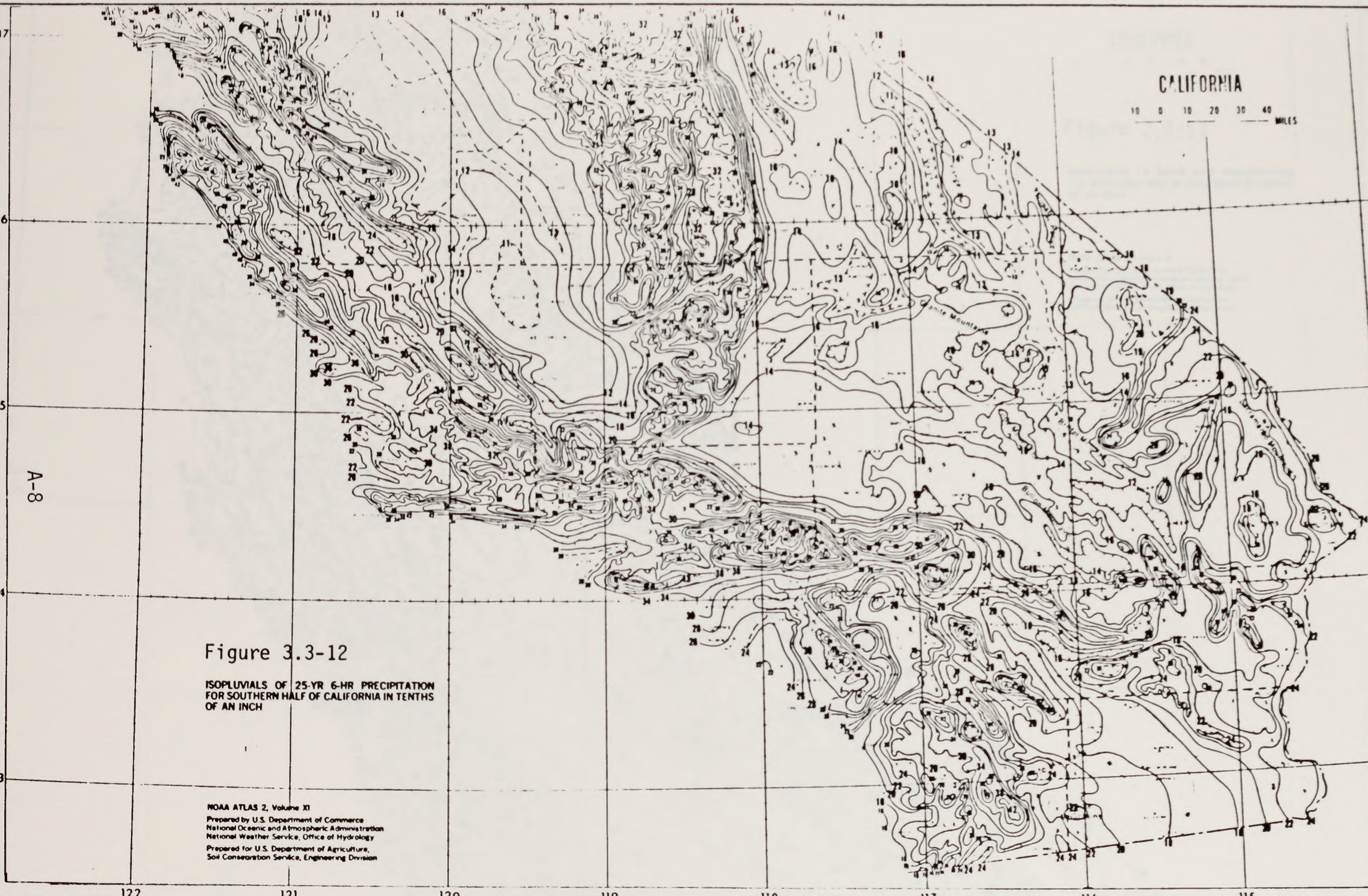

Figure 3.3-12

ISOPLUVIALS OF 25-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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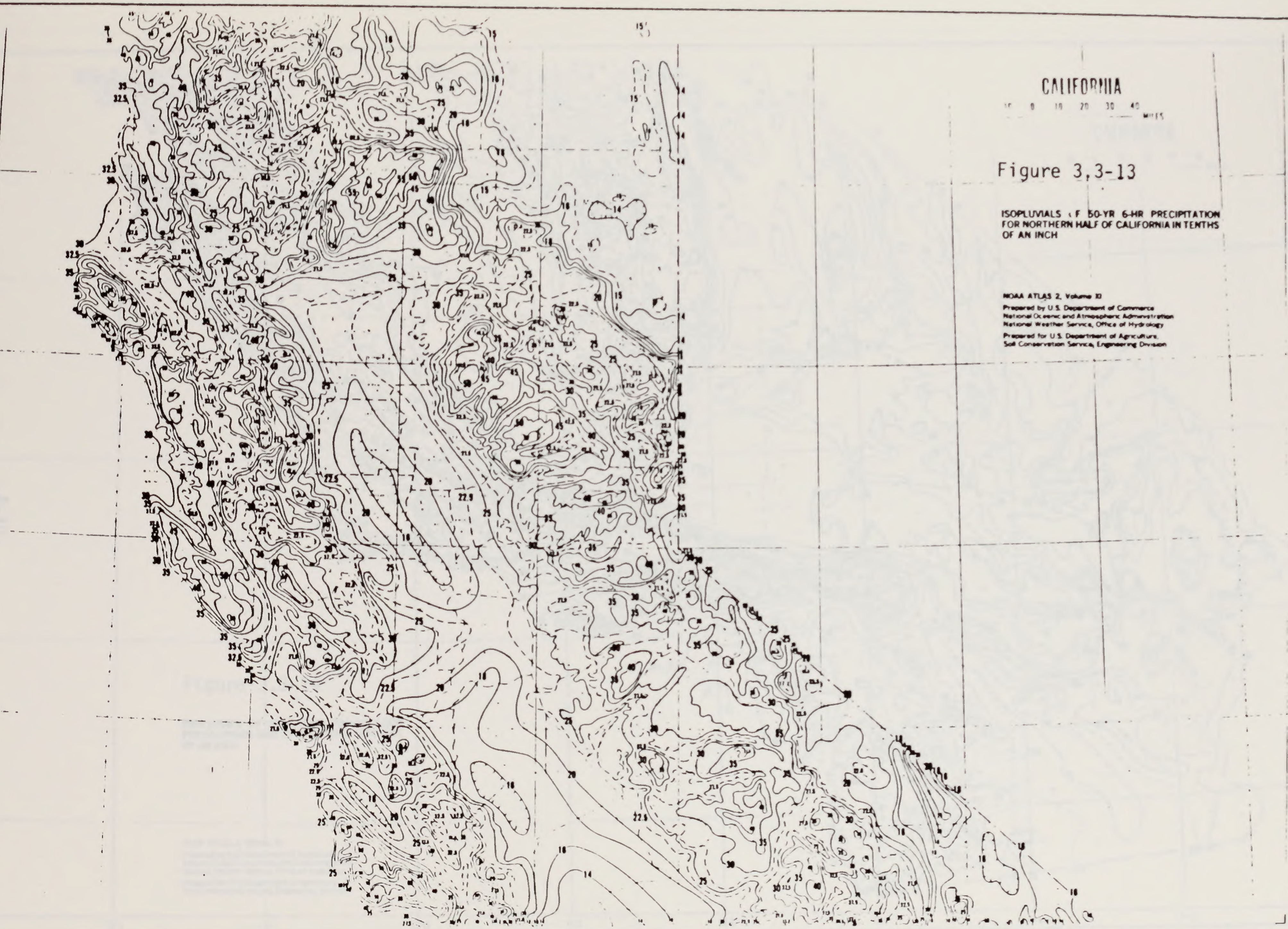

Figure 3.3-13

ISOPLUVIALS OF 50-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

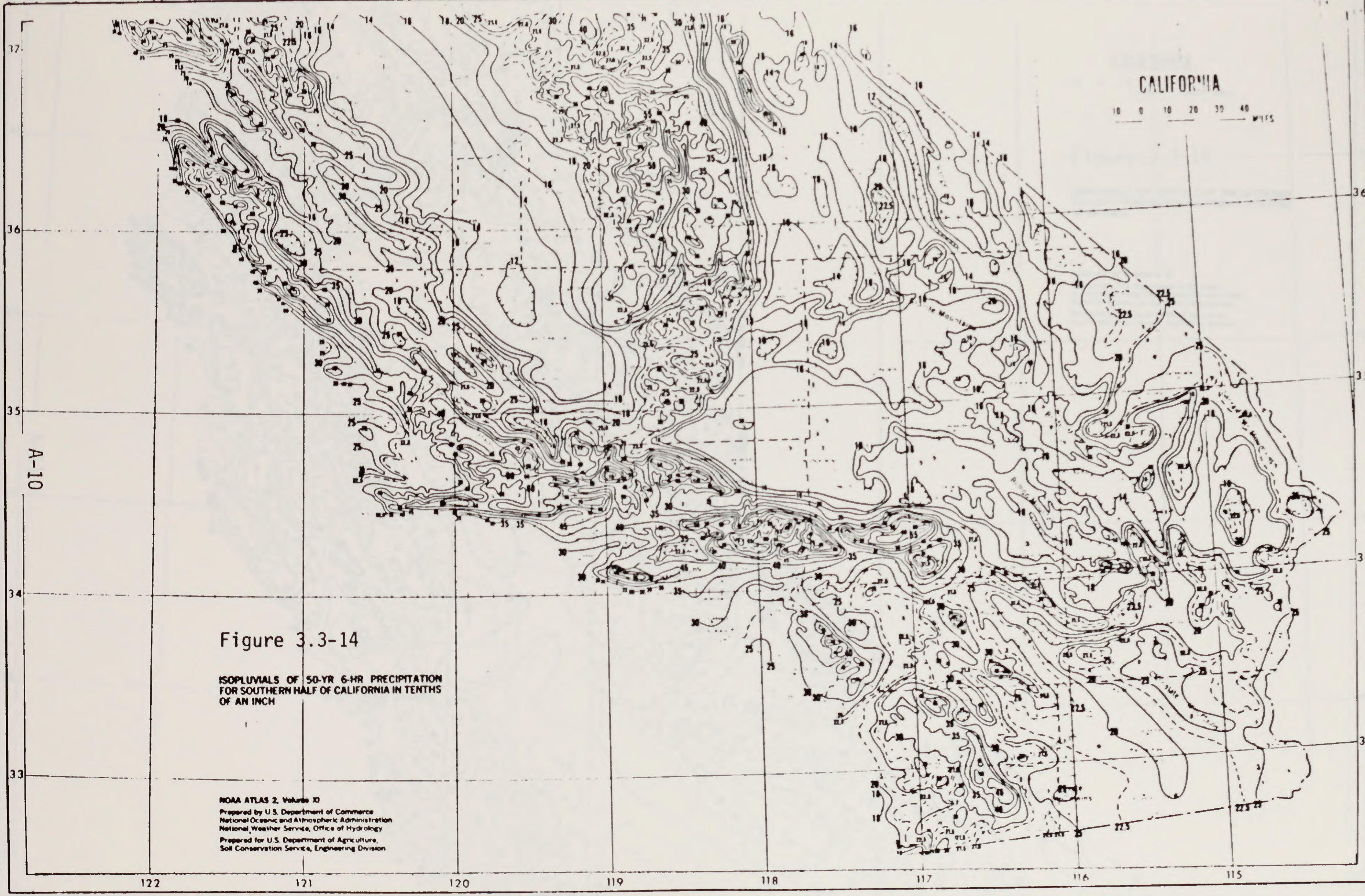

Figure 3.3-14

ISOPLUVIALS OF 50-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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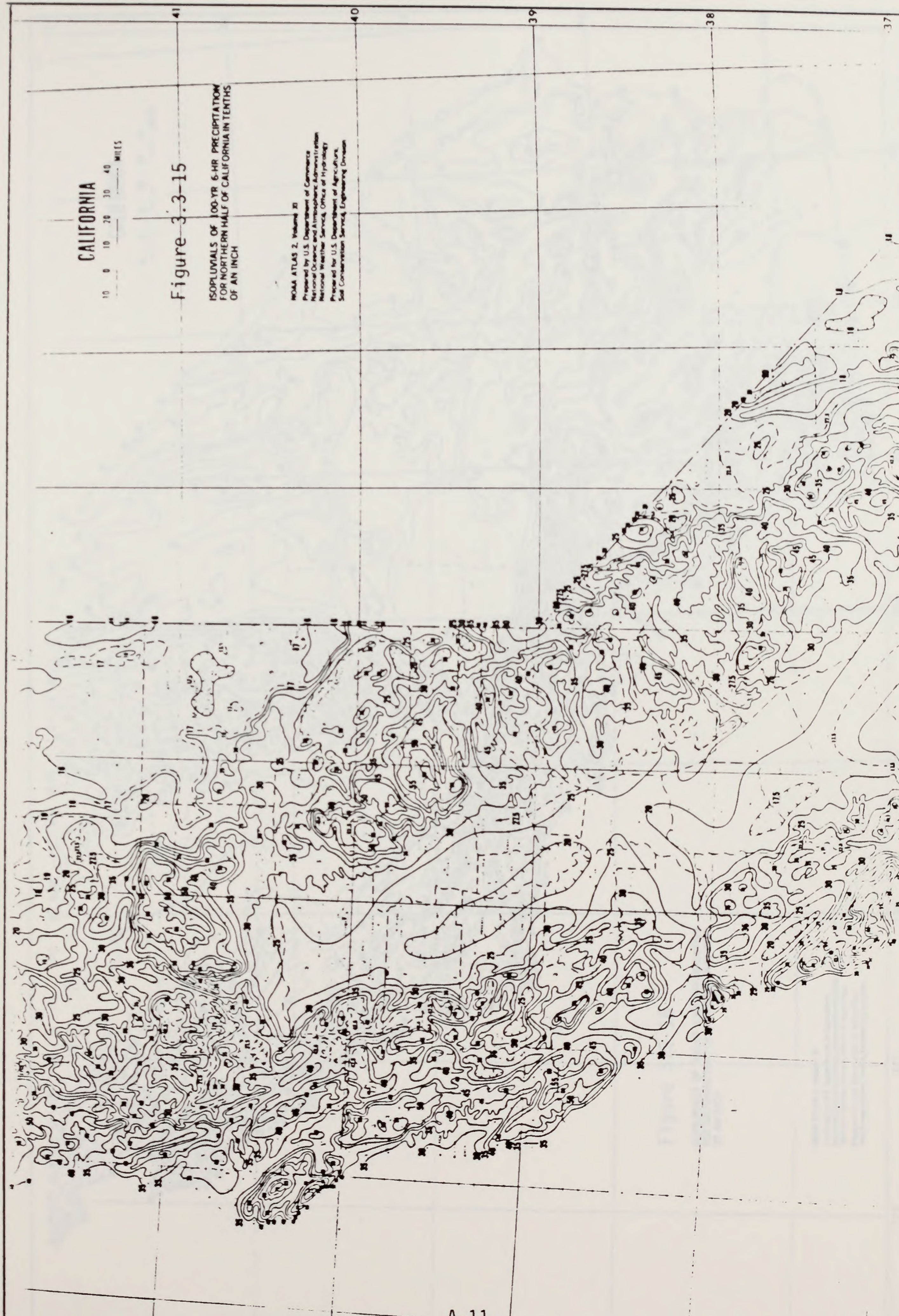

Figure 3.3-15

ISOPLUVIALS OF 100-YR 6-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

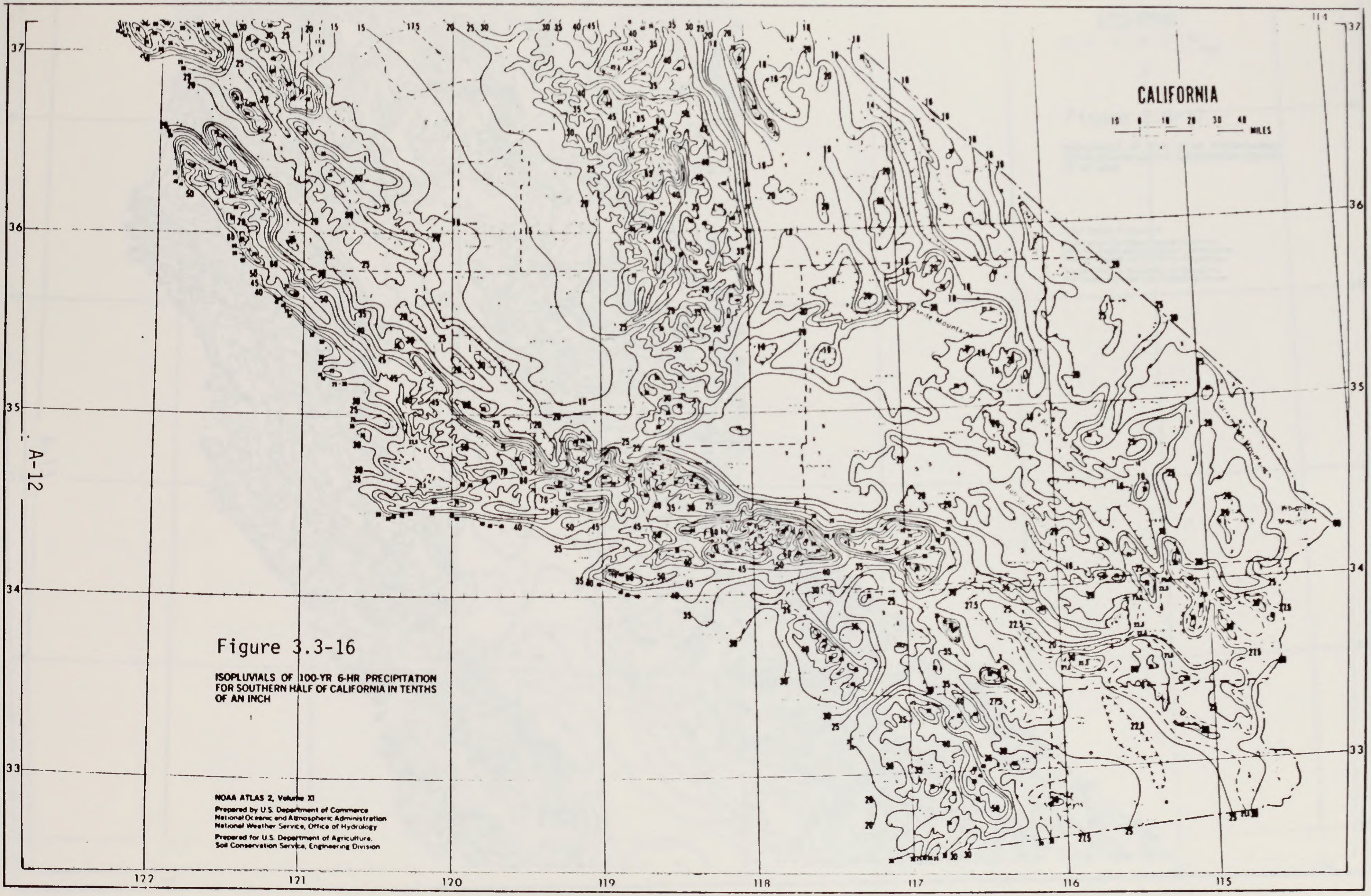

Figure 3.3-16

ISOPLUVIALS OF 100-YR 6-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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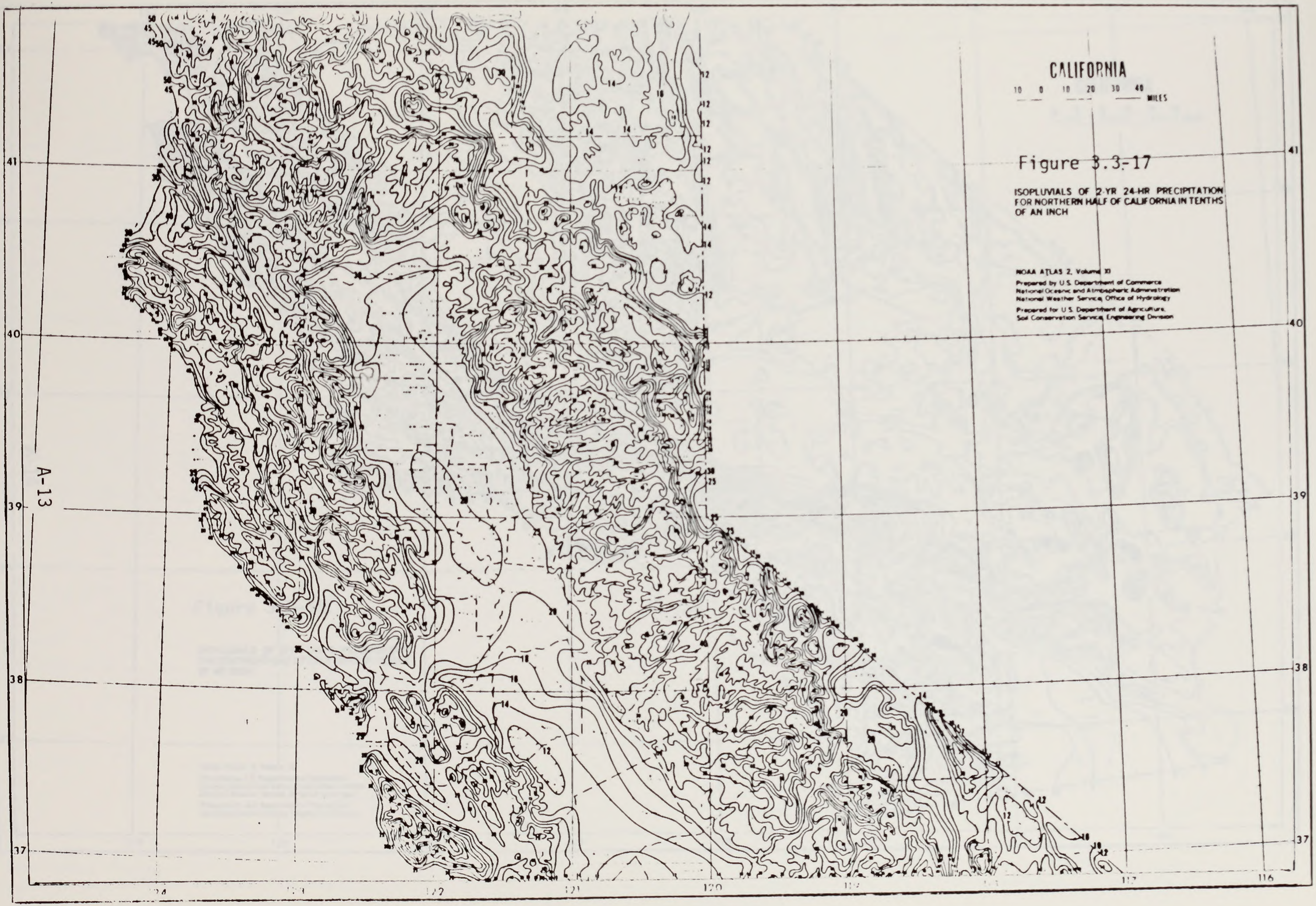

Figure 3.3-17

ISOPLUVIALS OF 2-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

Figure 3.3-18

ISOPLUVIALS OF 2-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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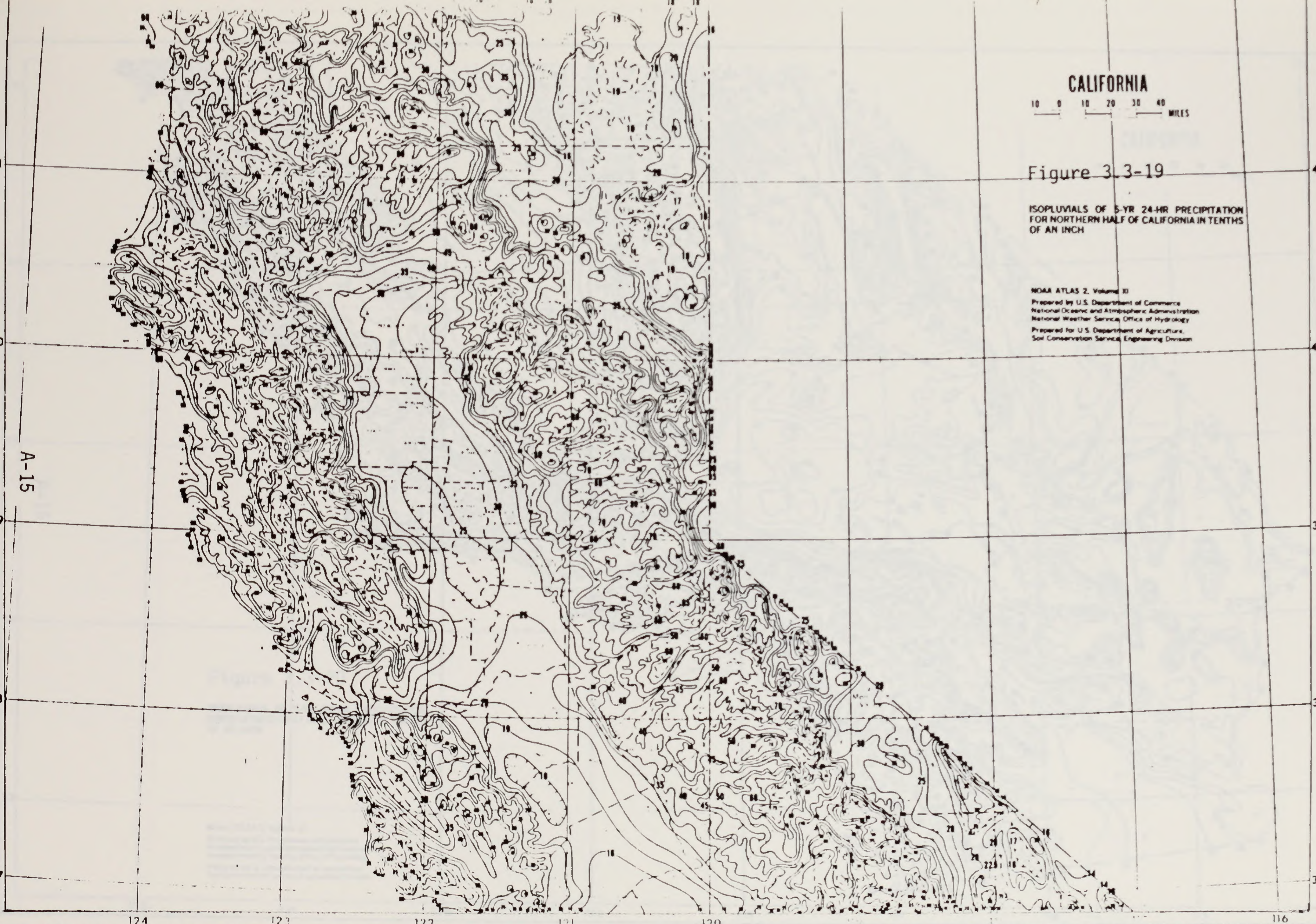

Figure 3.3-19

ISOPLUVIALS OF 5-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

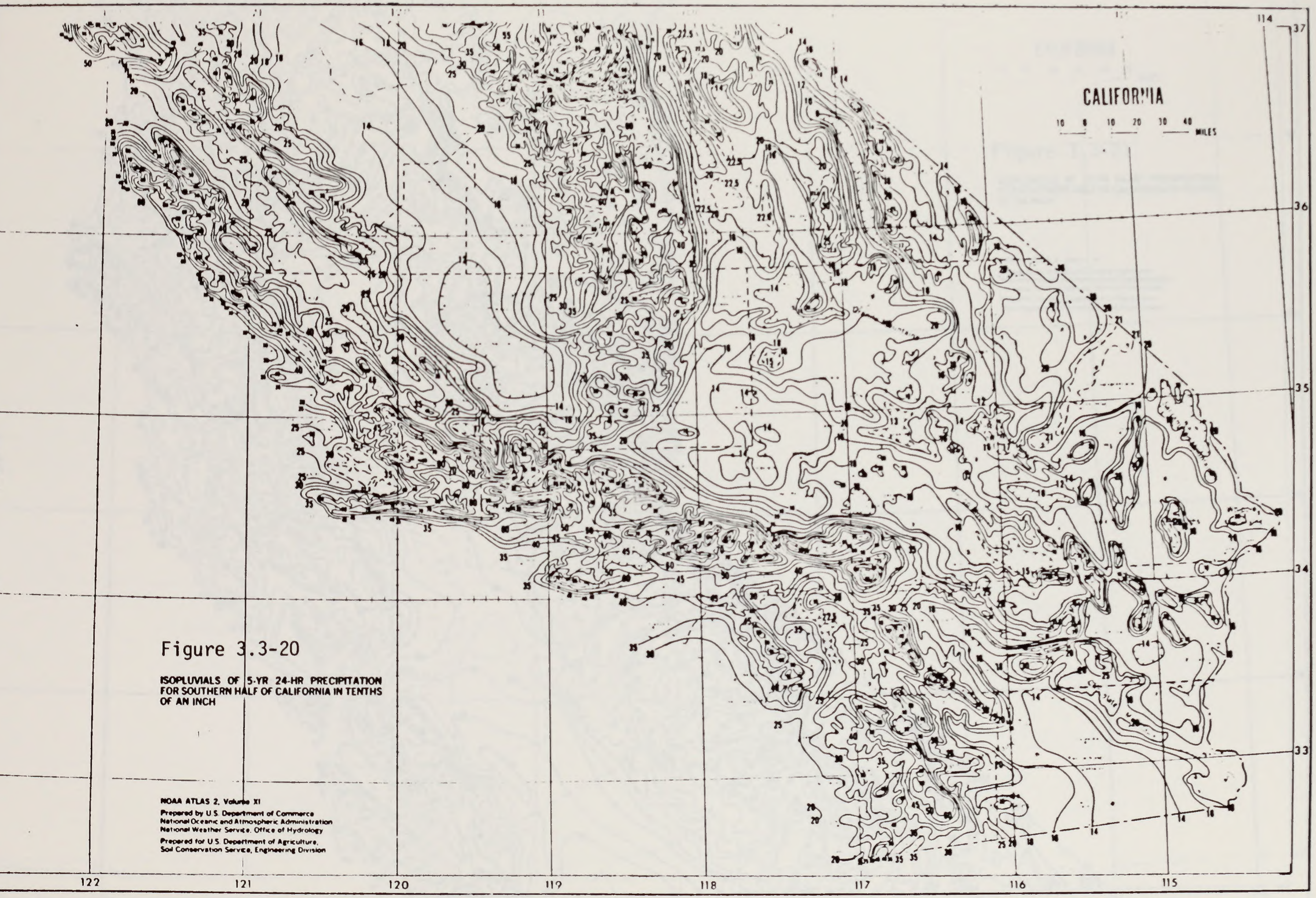

Figure 3.3-20

ISOPLUVIALS OF 5-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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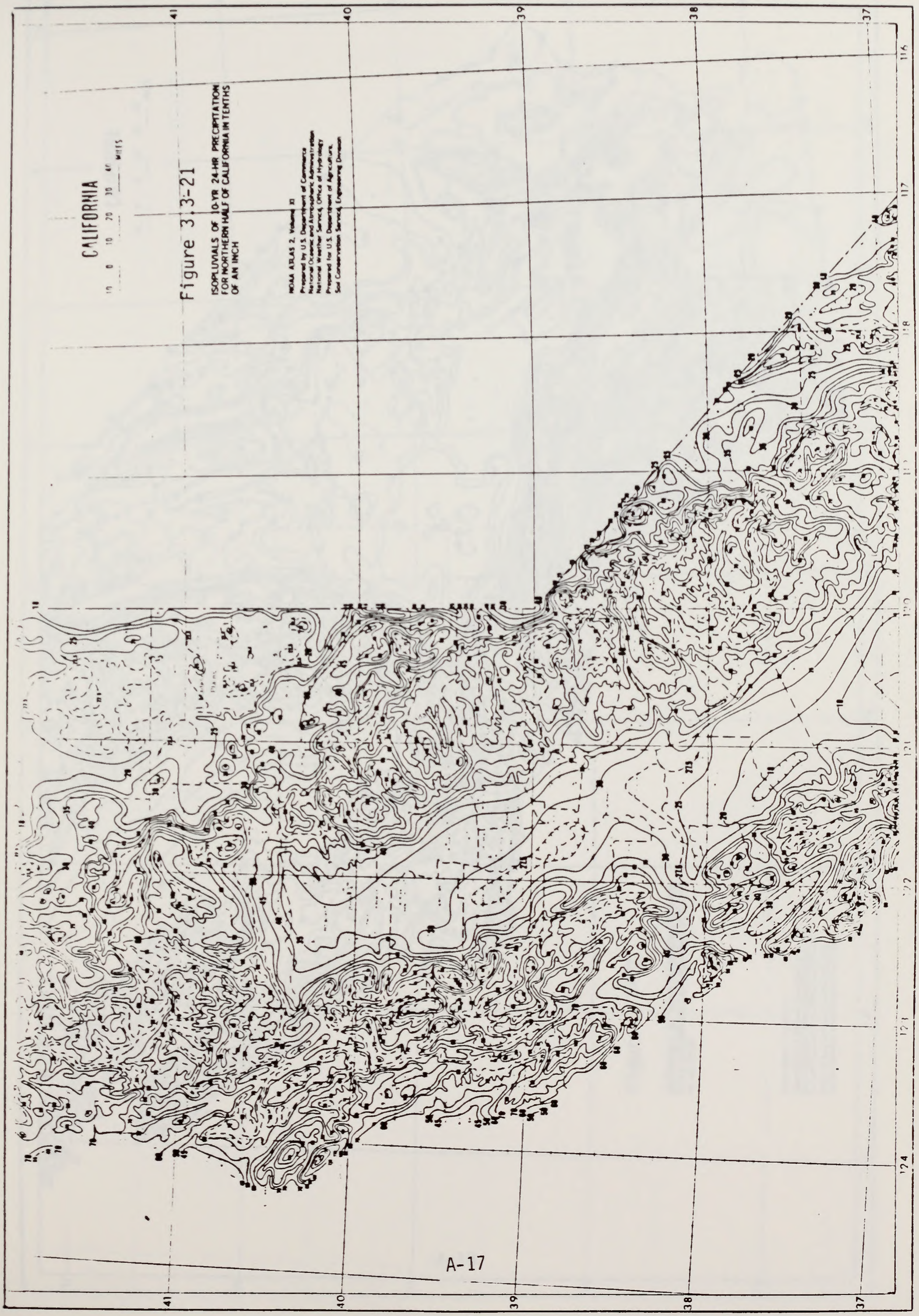

Figure 3.3-21

ISOPLUVIALS OF 10-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

Figure 3.3-22

ISOPLUVIALS OF 10-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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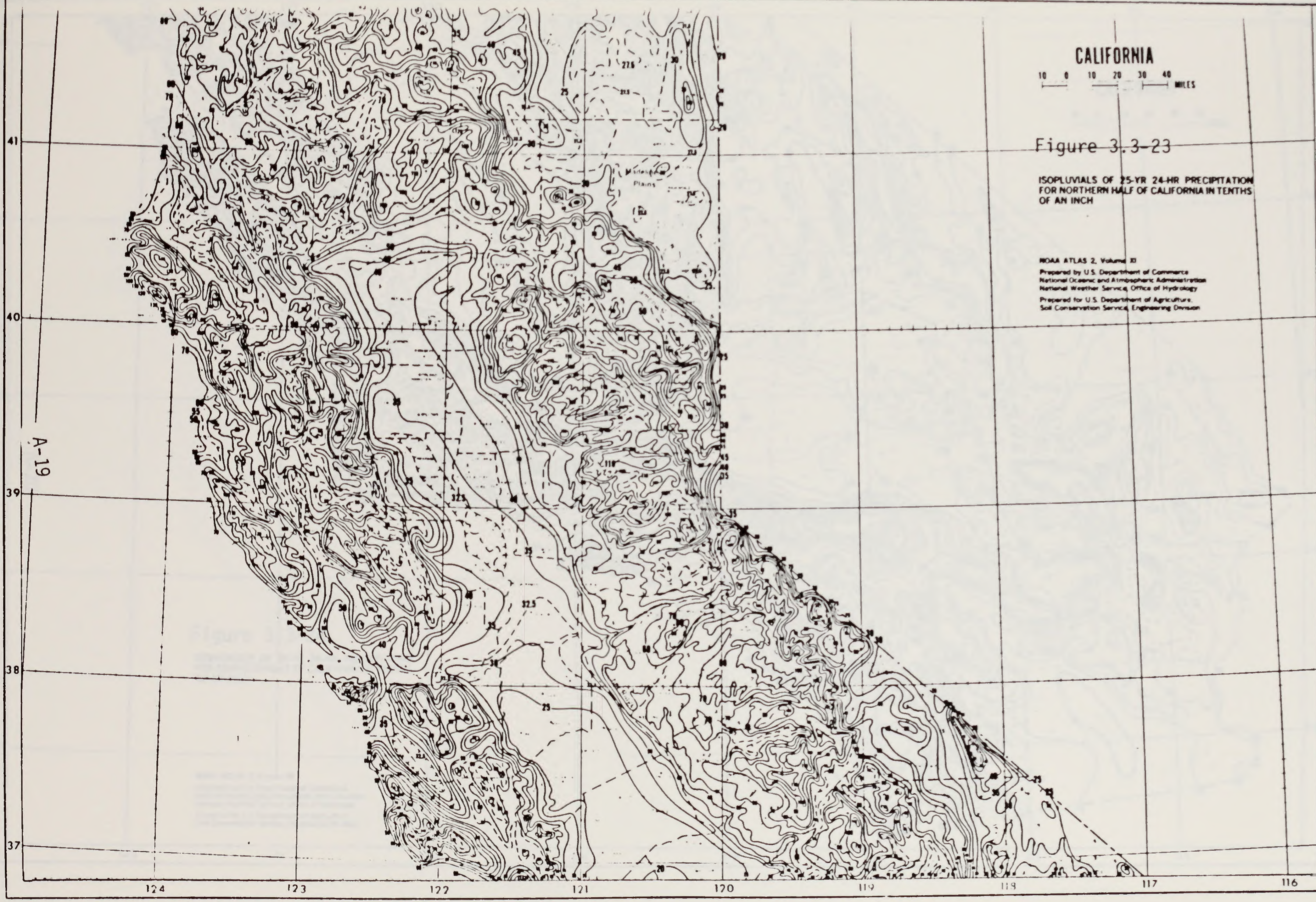

Figure 3.3-23

ISOPLUVIALS OF 25-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

Figure 3.3-24

ISOPLUVIALS OF 25-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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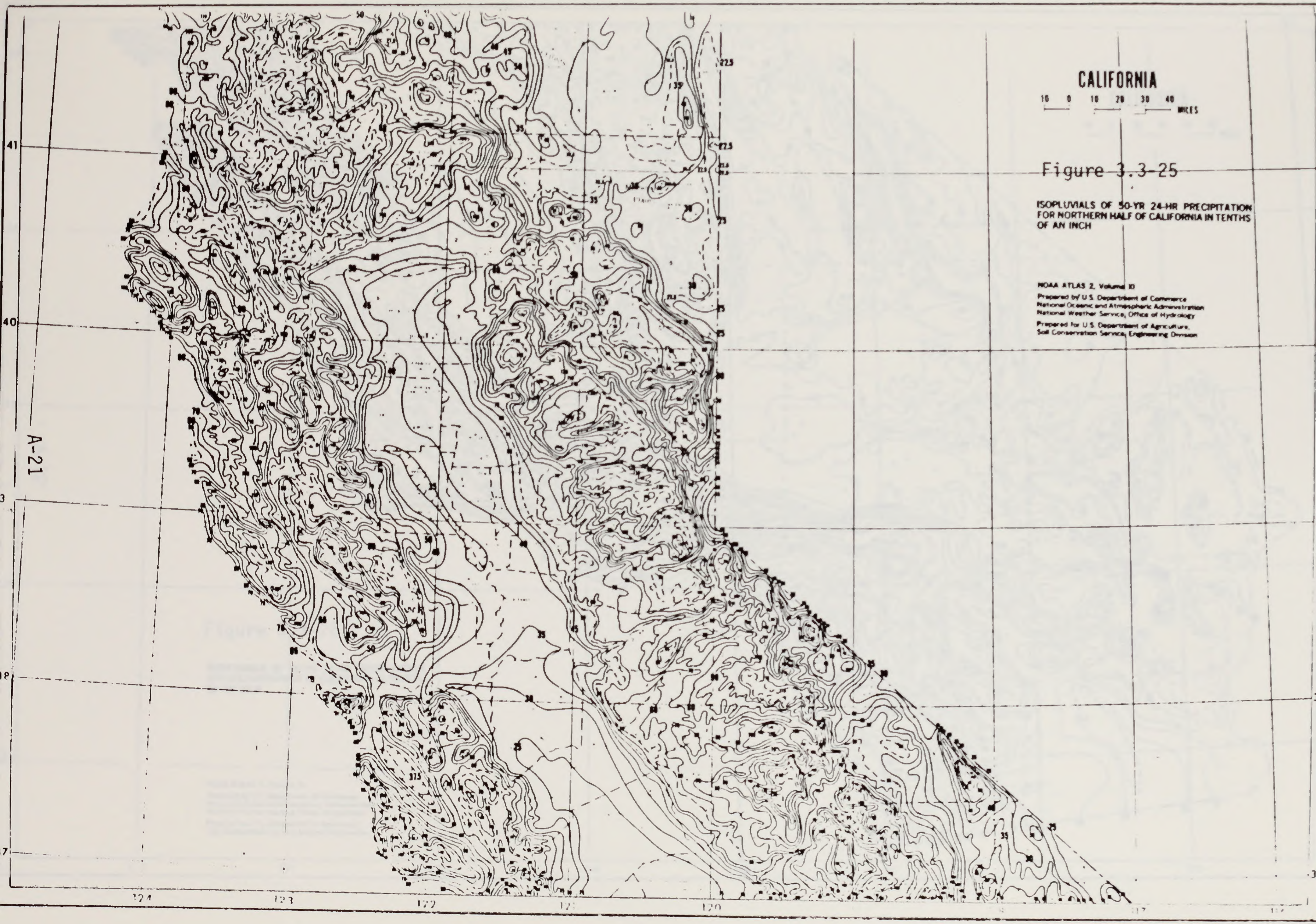

Figure 3.3-25

ISOPLUVIALS OF 50-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

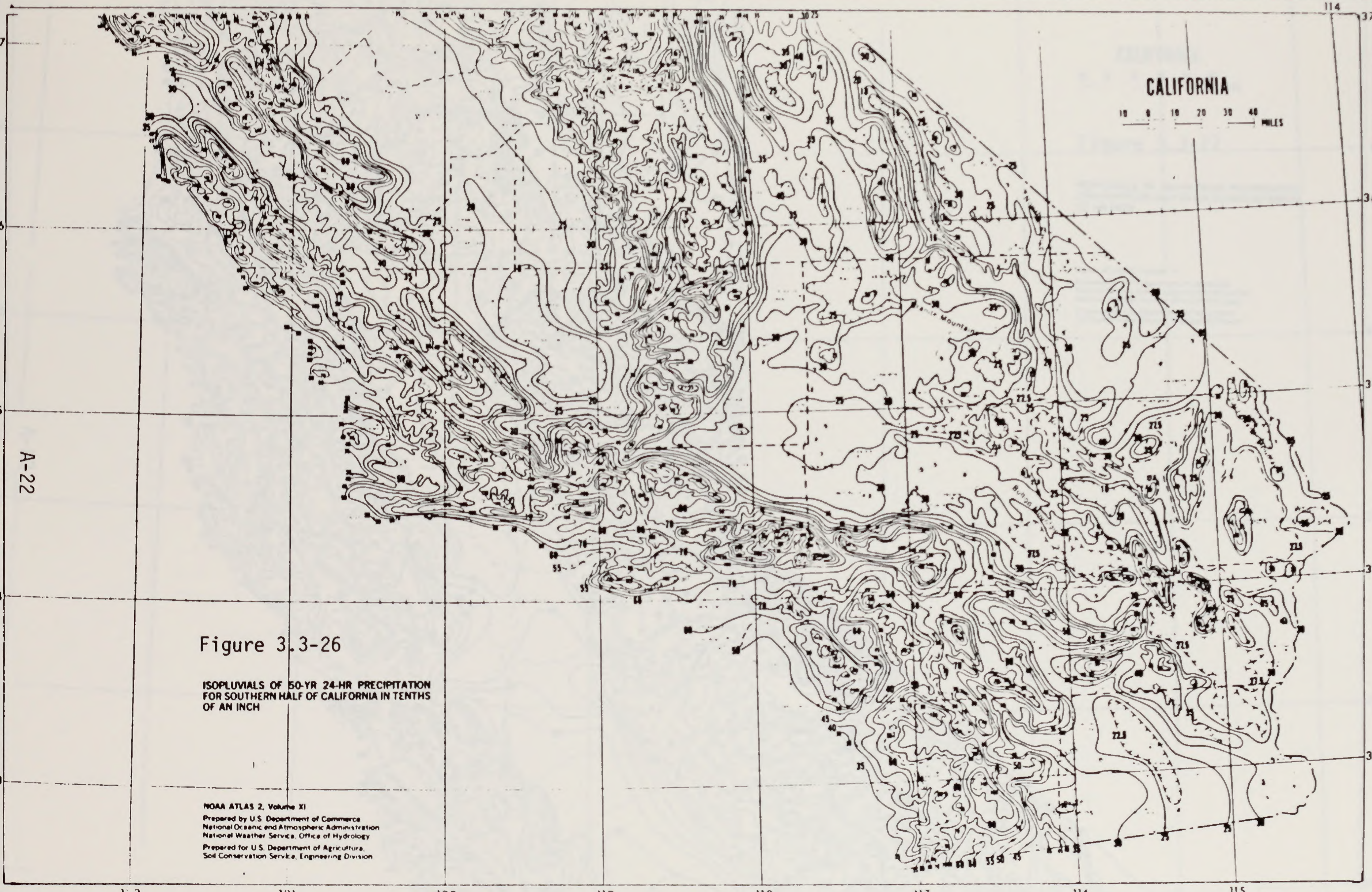

Figure 3.3-26

ISOPLUVIALS OF 50-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

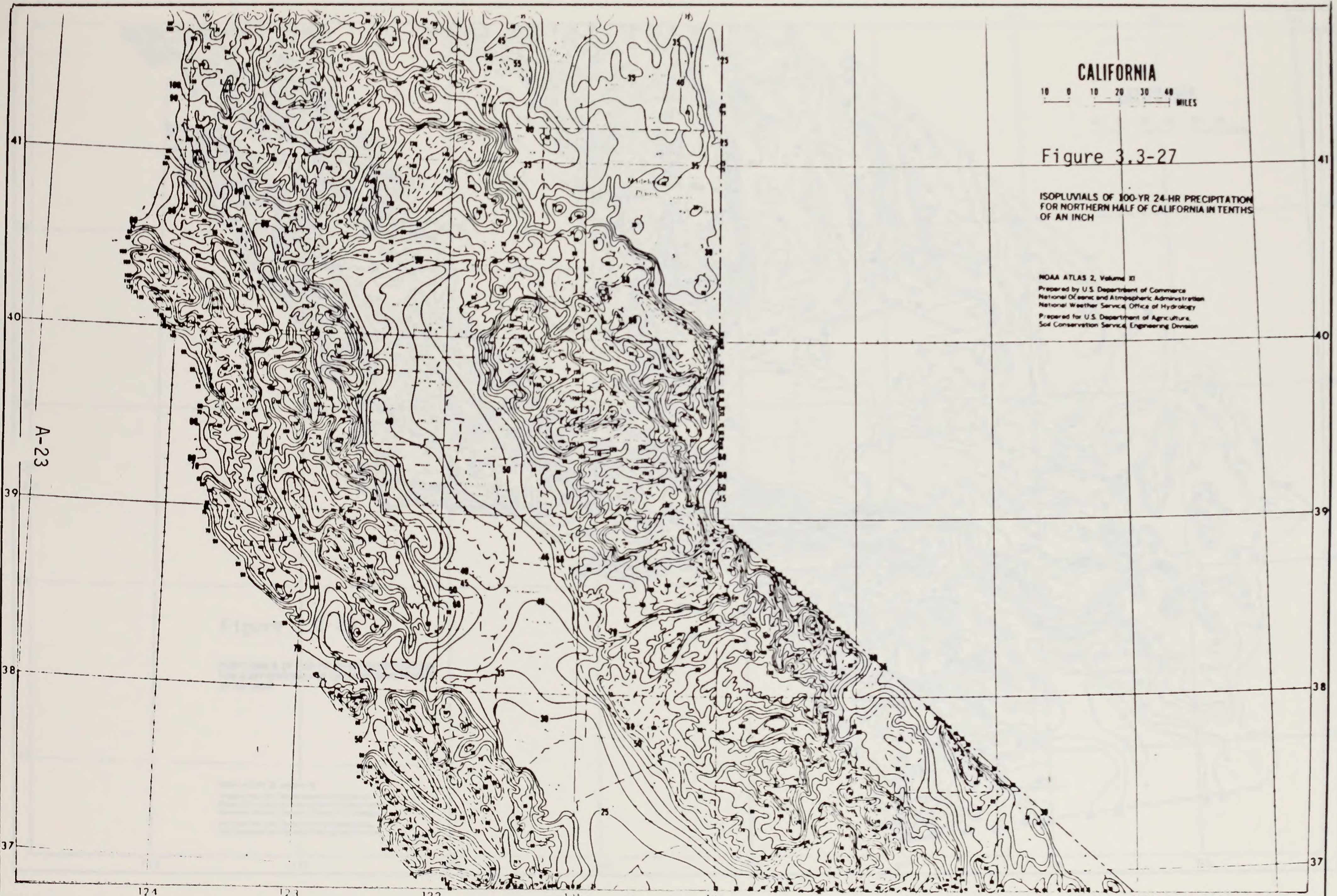

Figure 3.3-27

ISOPLUVIALS OF 100-YR 24-HR PRECIPITATION FOR NORTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

Figure 3.3-28

ISOPLUVIALS OF 100-YR 24-HR PRECIPITATION FOR SOUTHERN HALF OF CALIFORNIA IN TENTHS OF AN INCH

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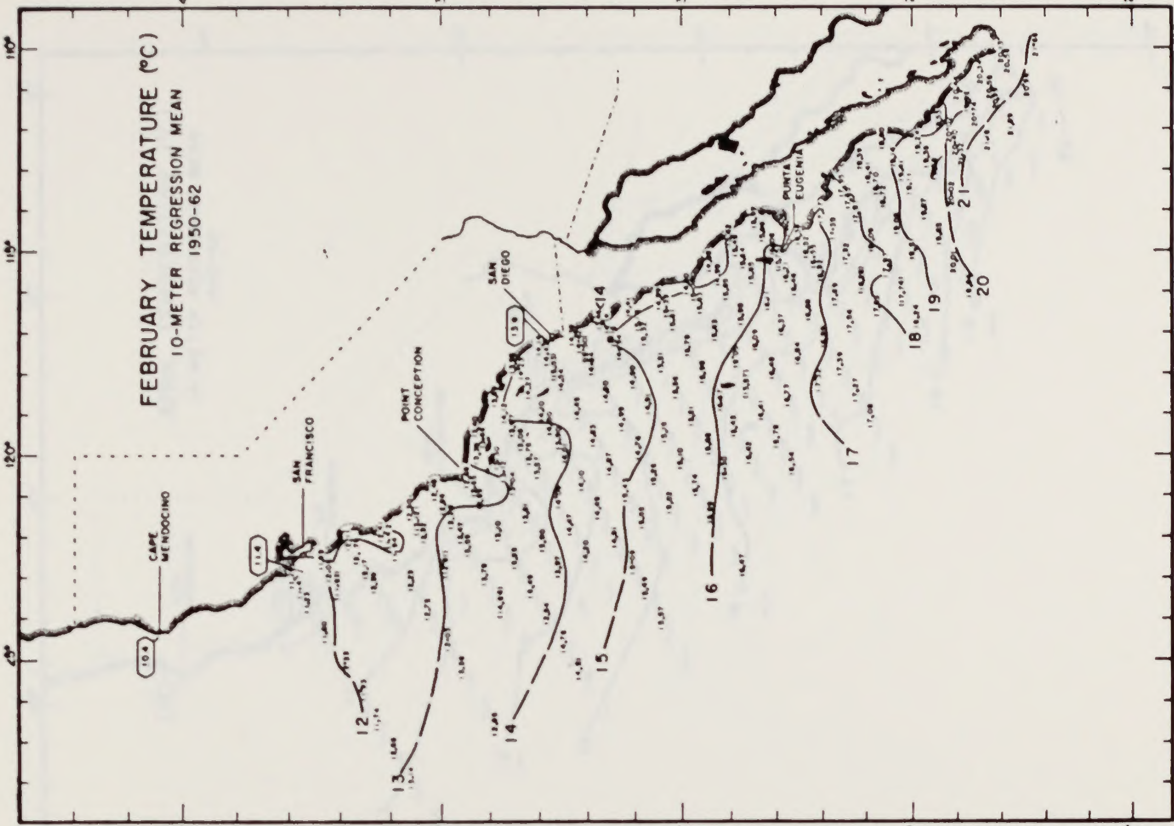
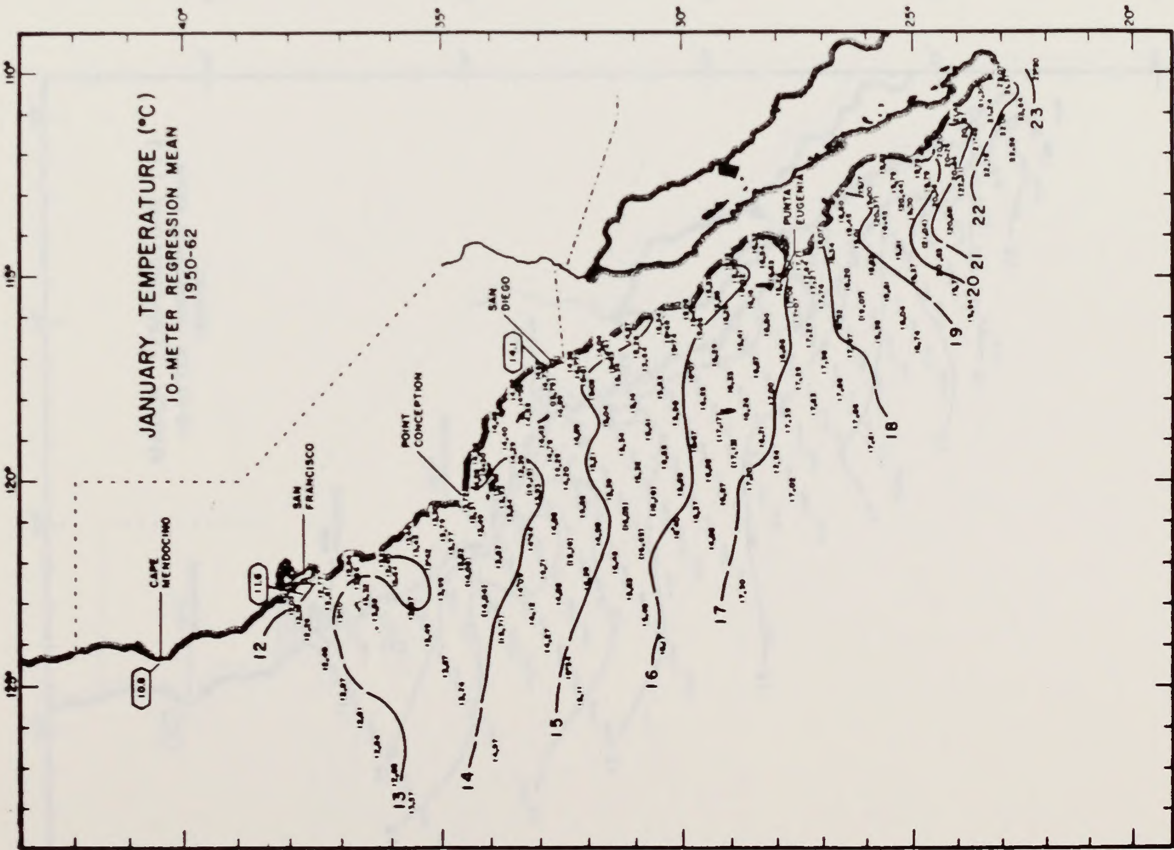
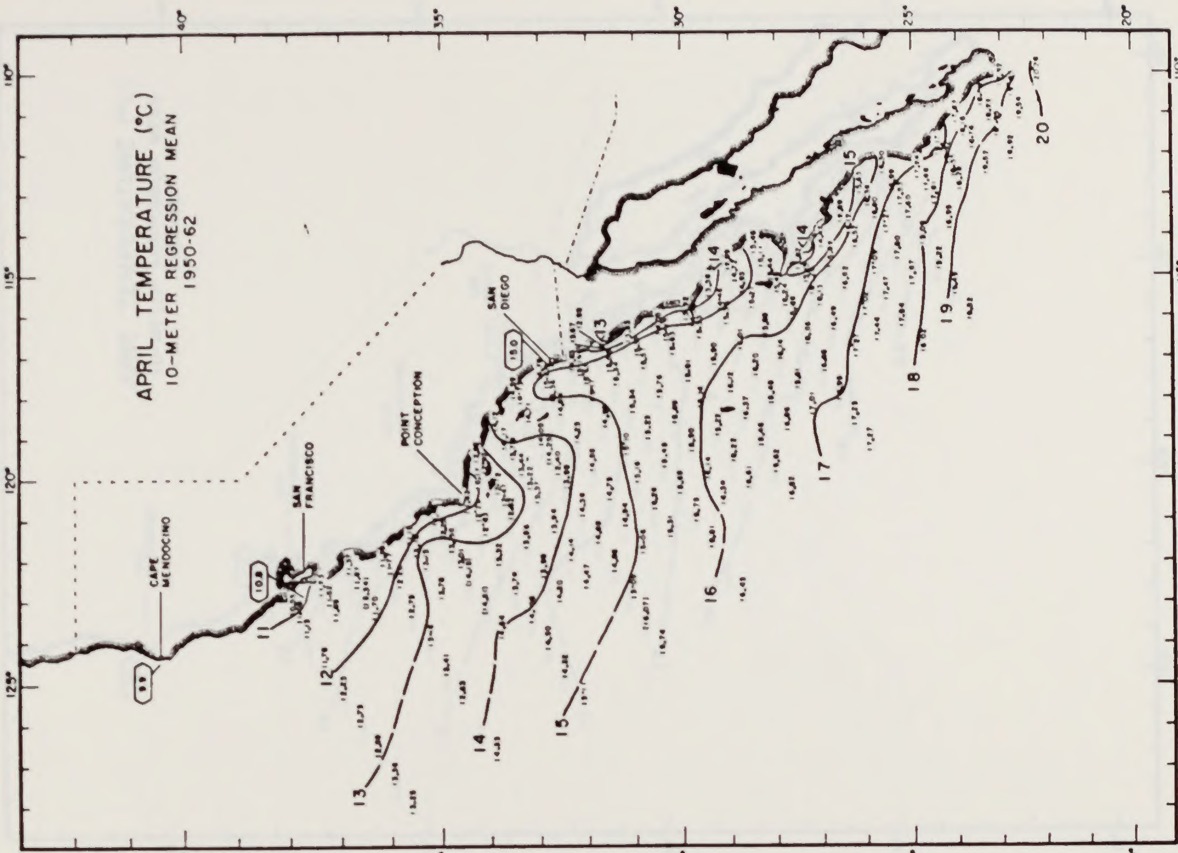
APPENDIX B

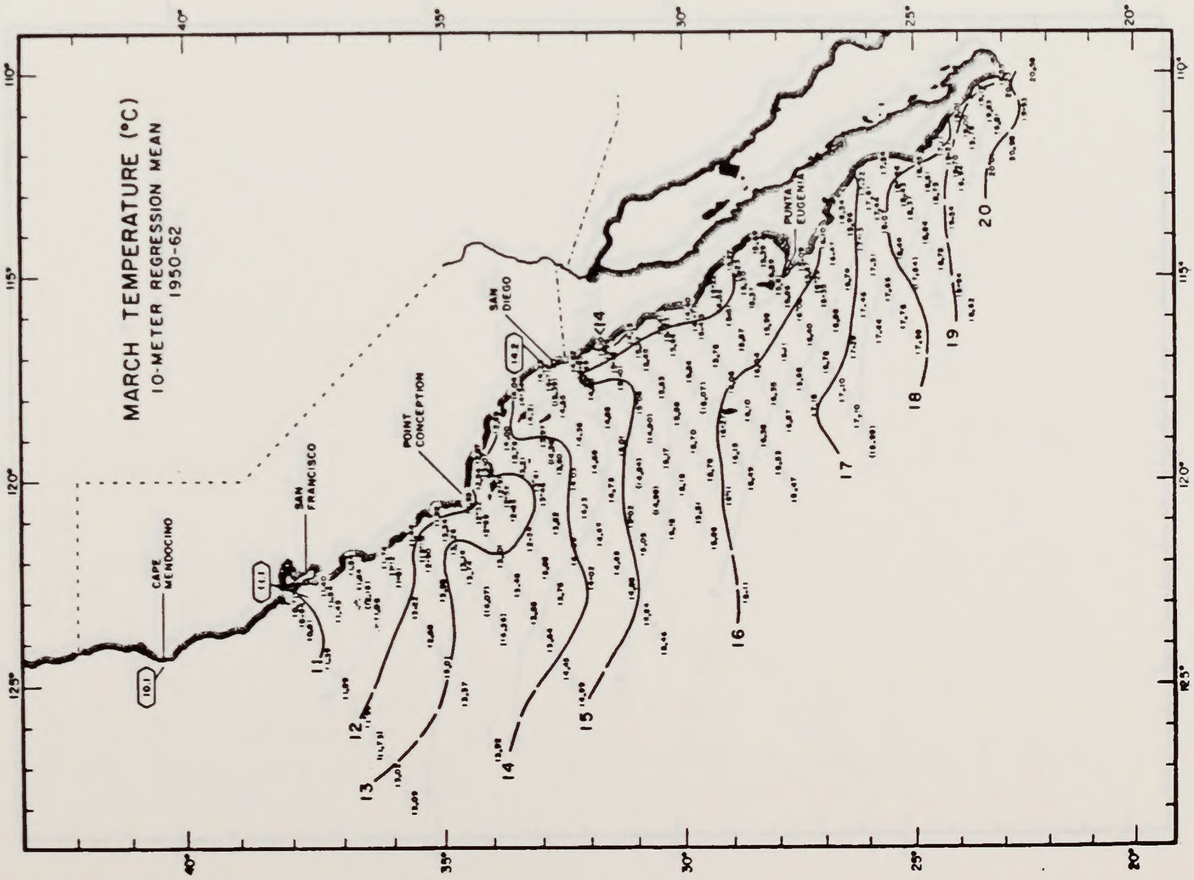
MONTHLY SEA SURFACE TEMPERATURES OFF COASTAL CALIFORNIA


FEBRUARY TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

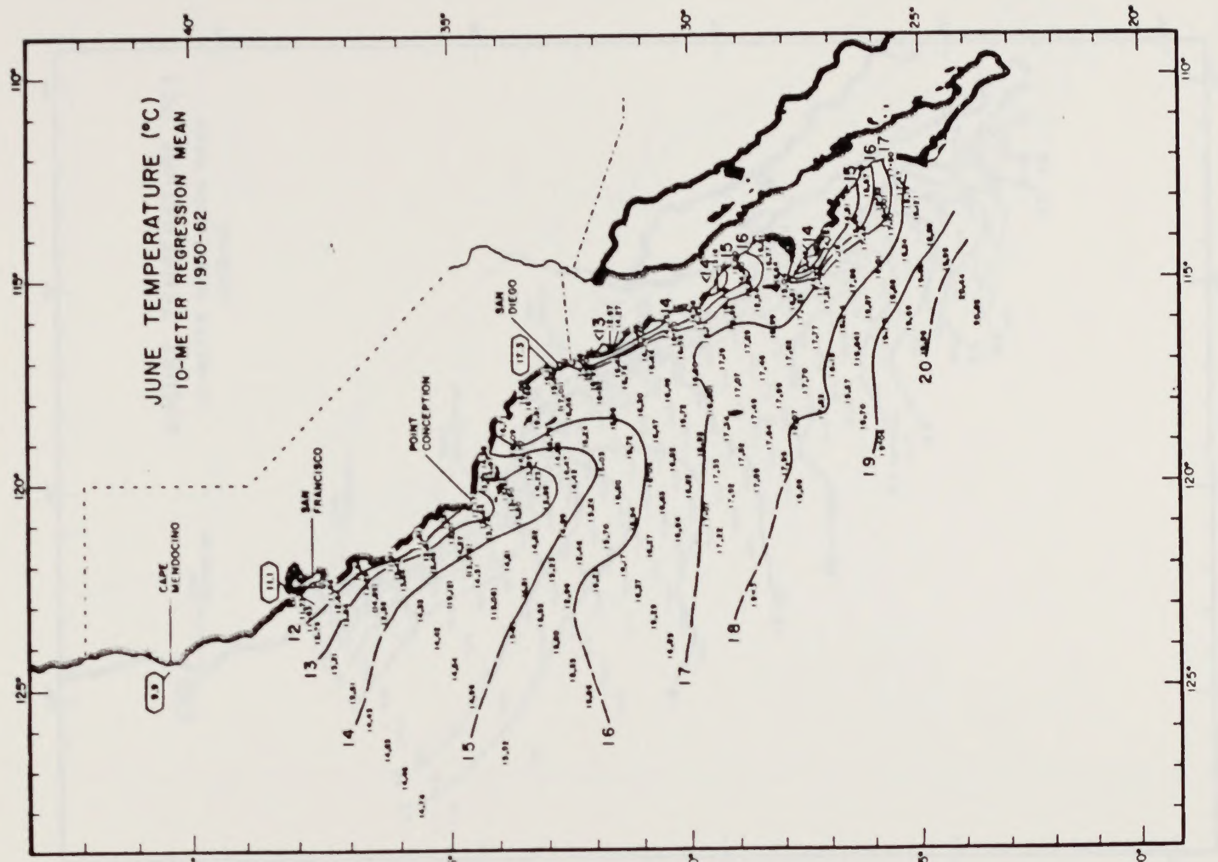

JANUARY TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

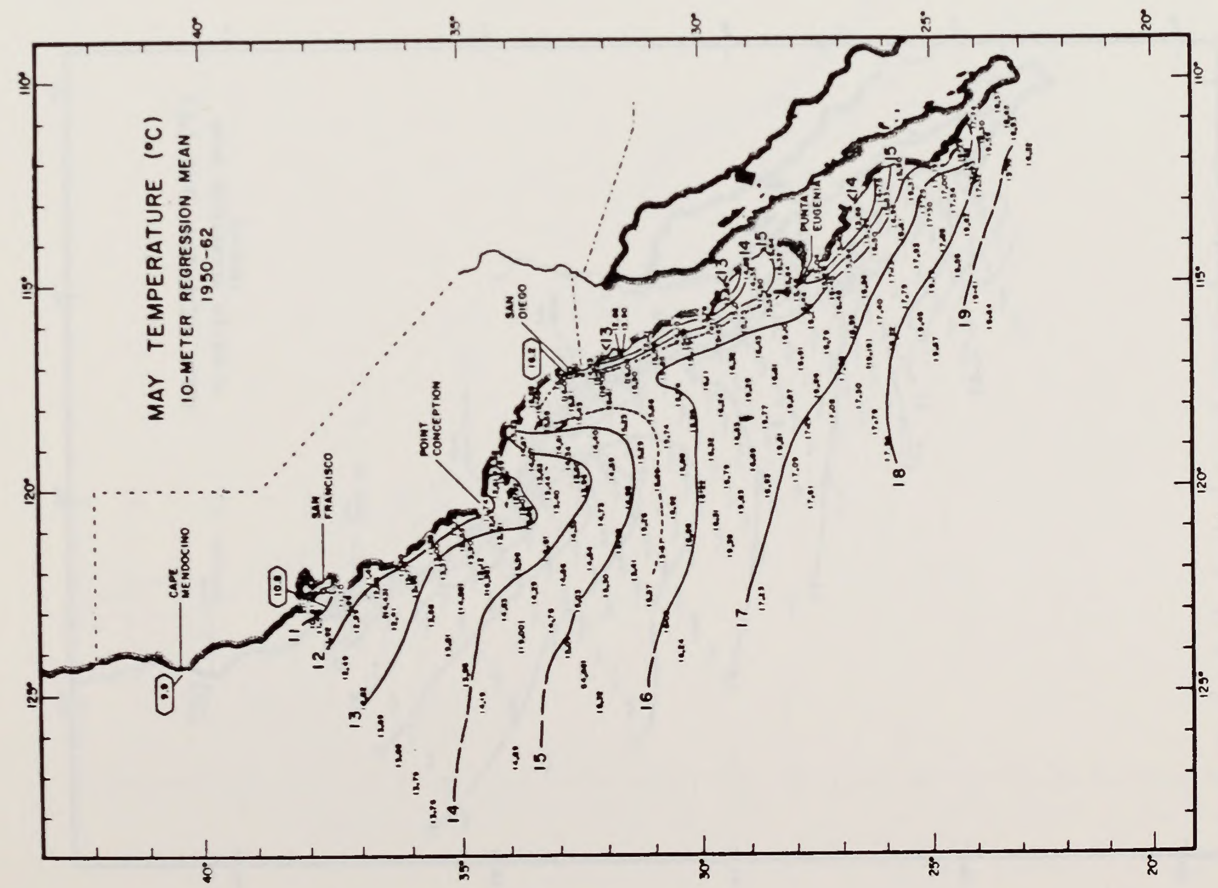


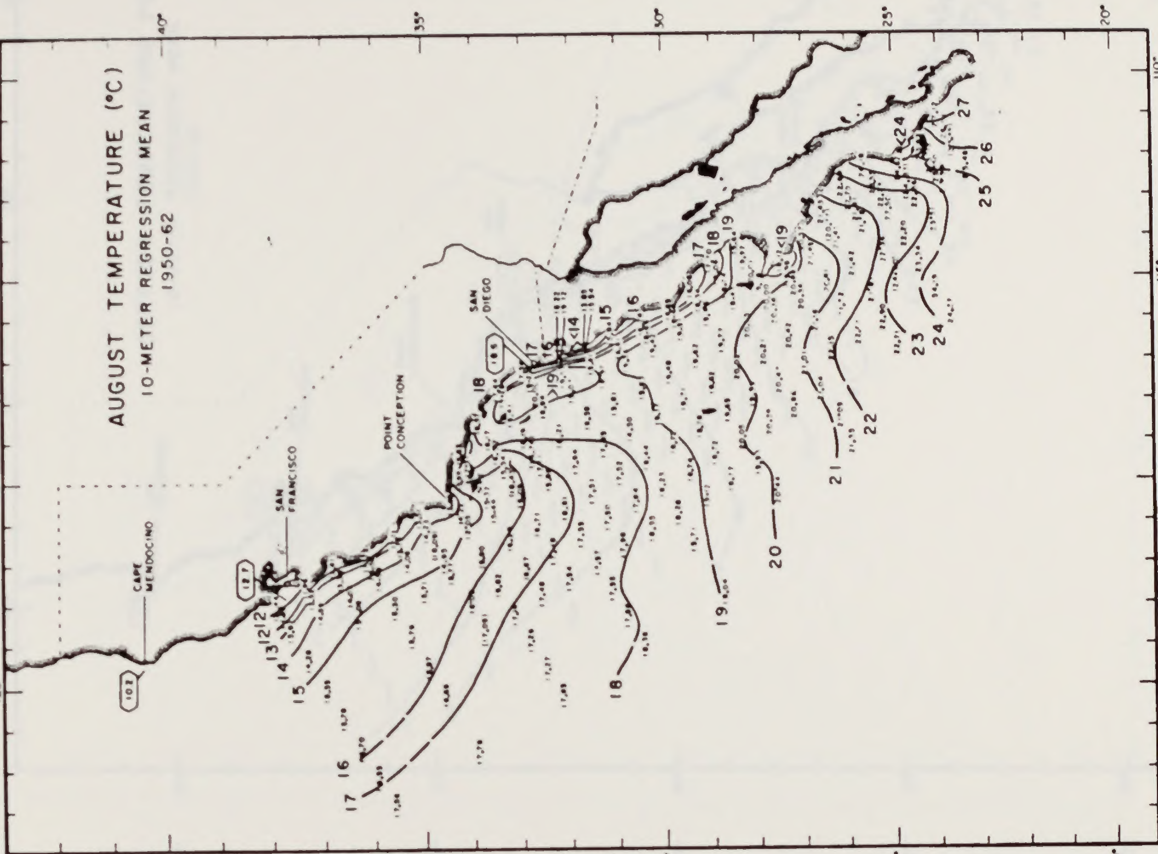
APRIL TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO

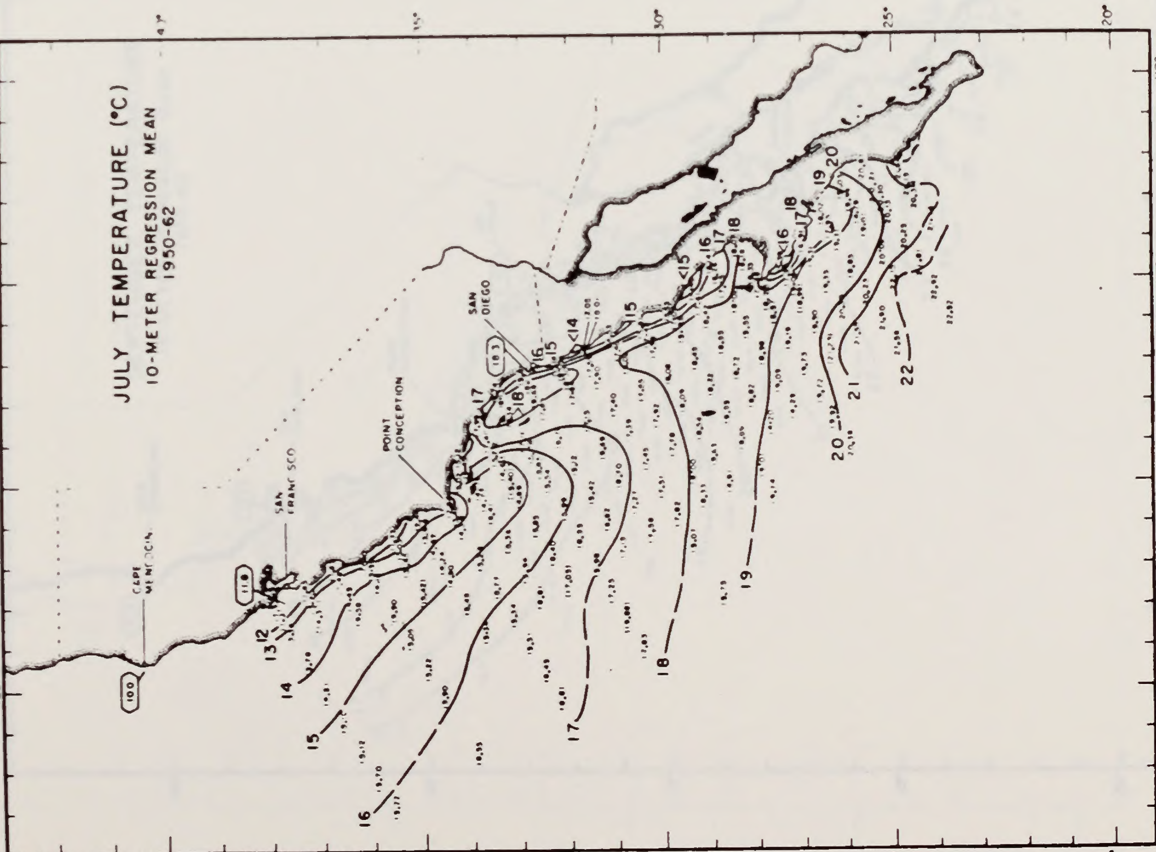


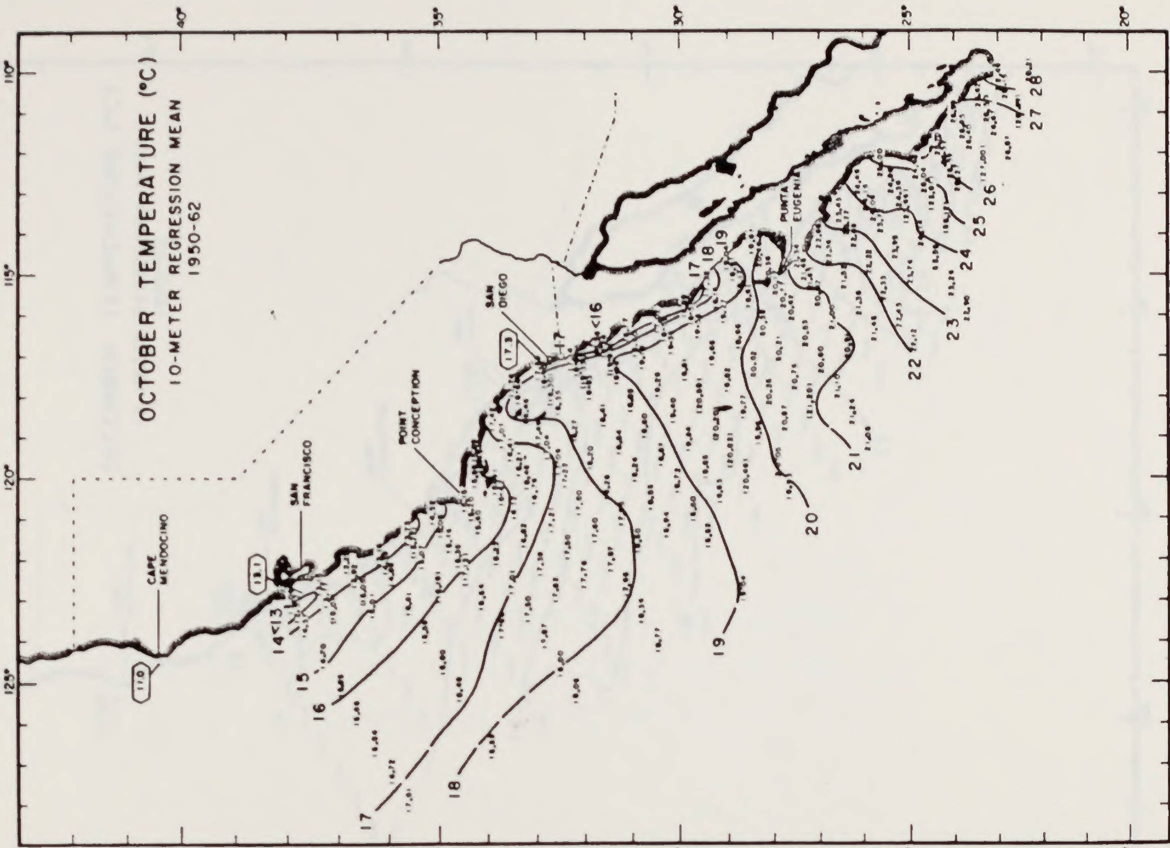
MARCH TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

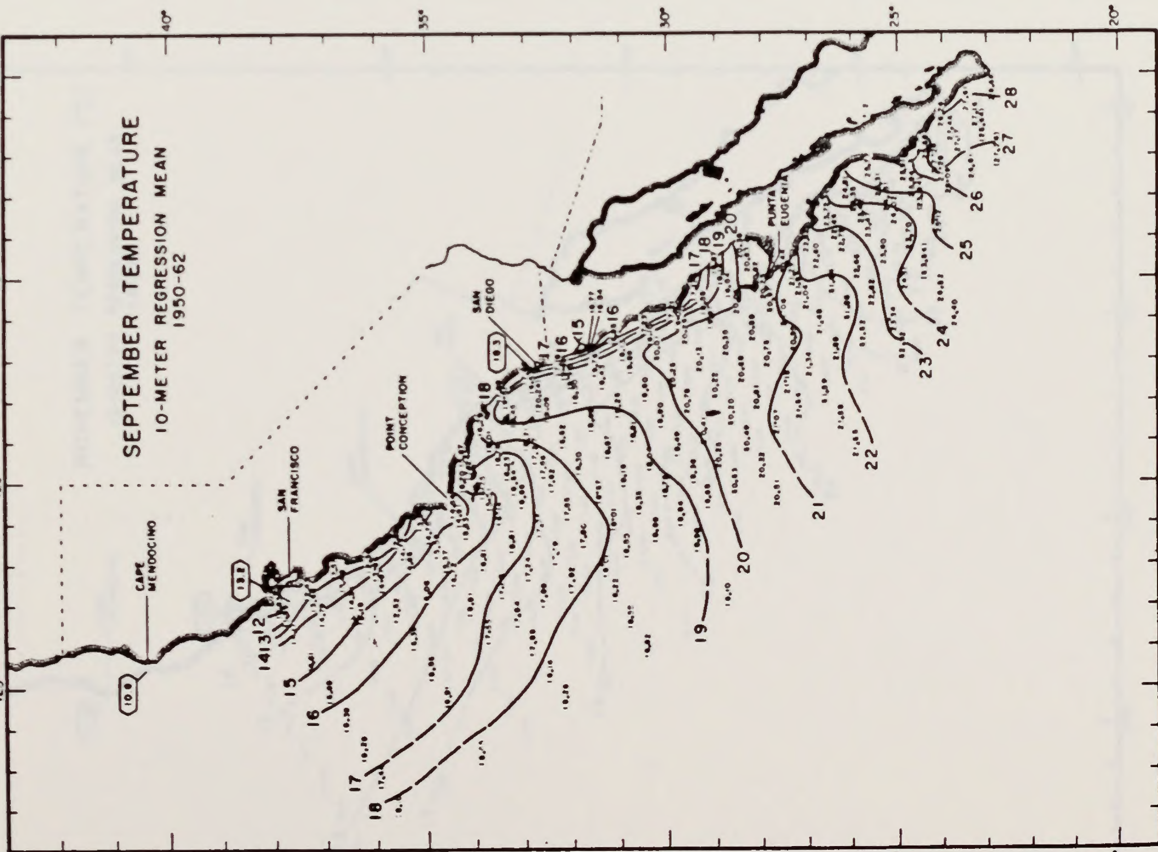

JUNE TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO

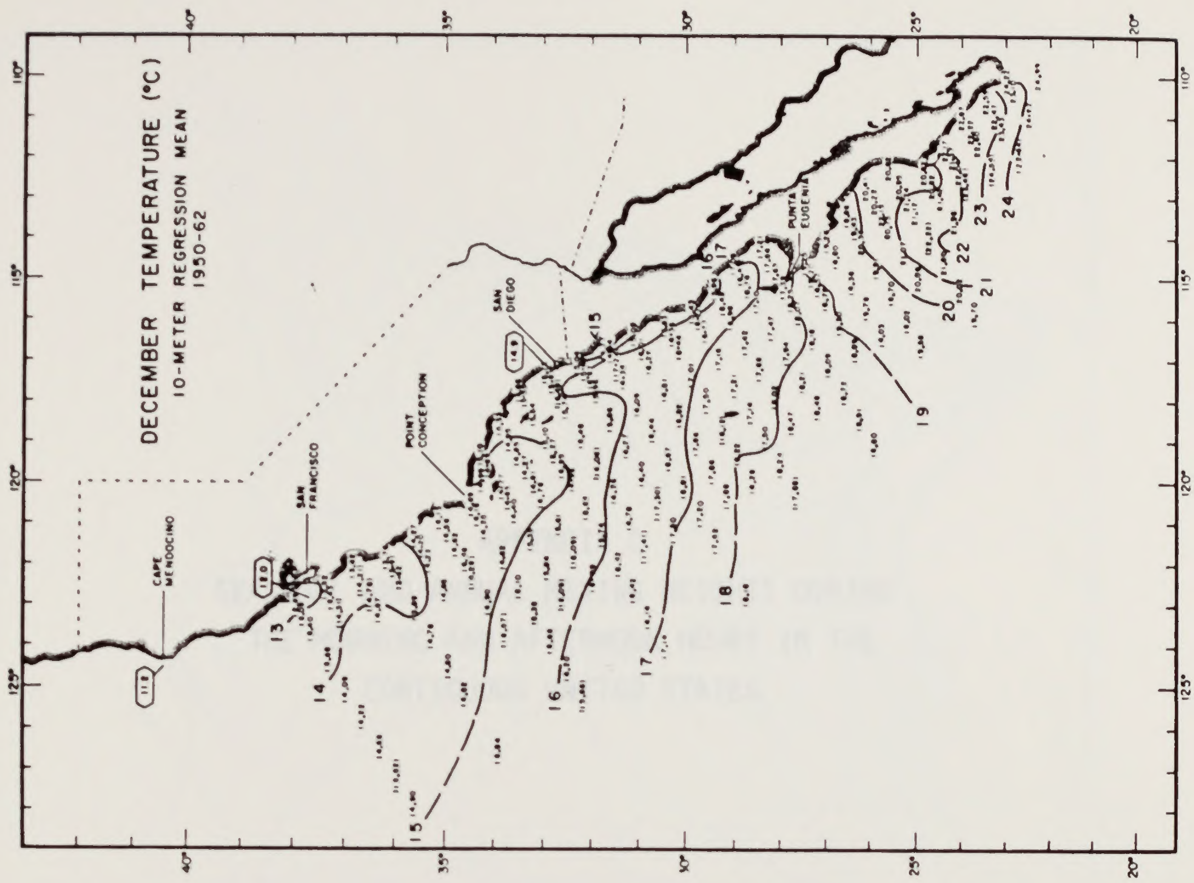

MAY TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

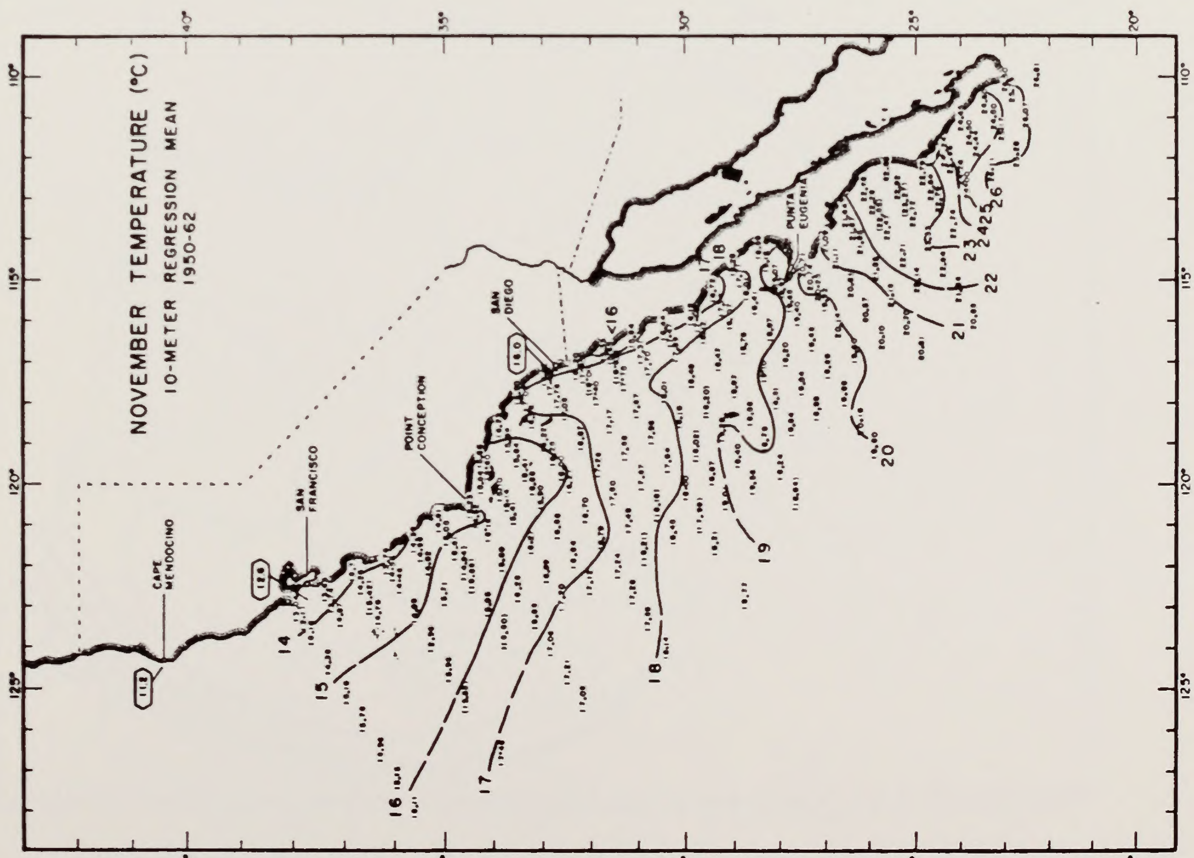

AUGUST TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO


JULY TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO


OCTOBER TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

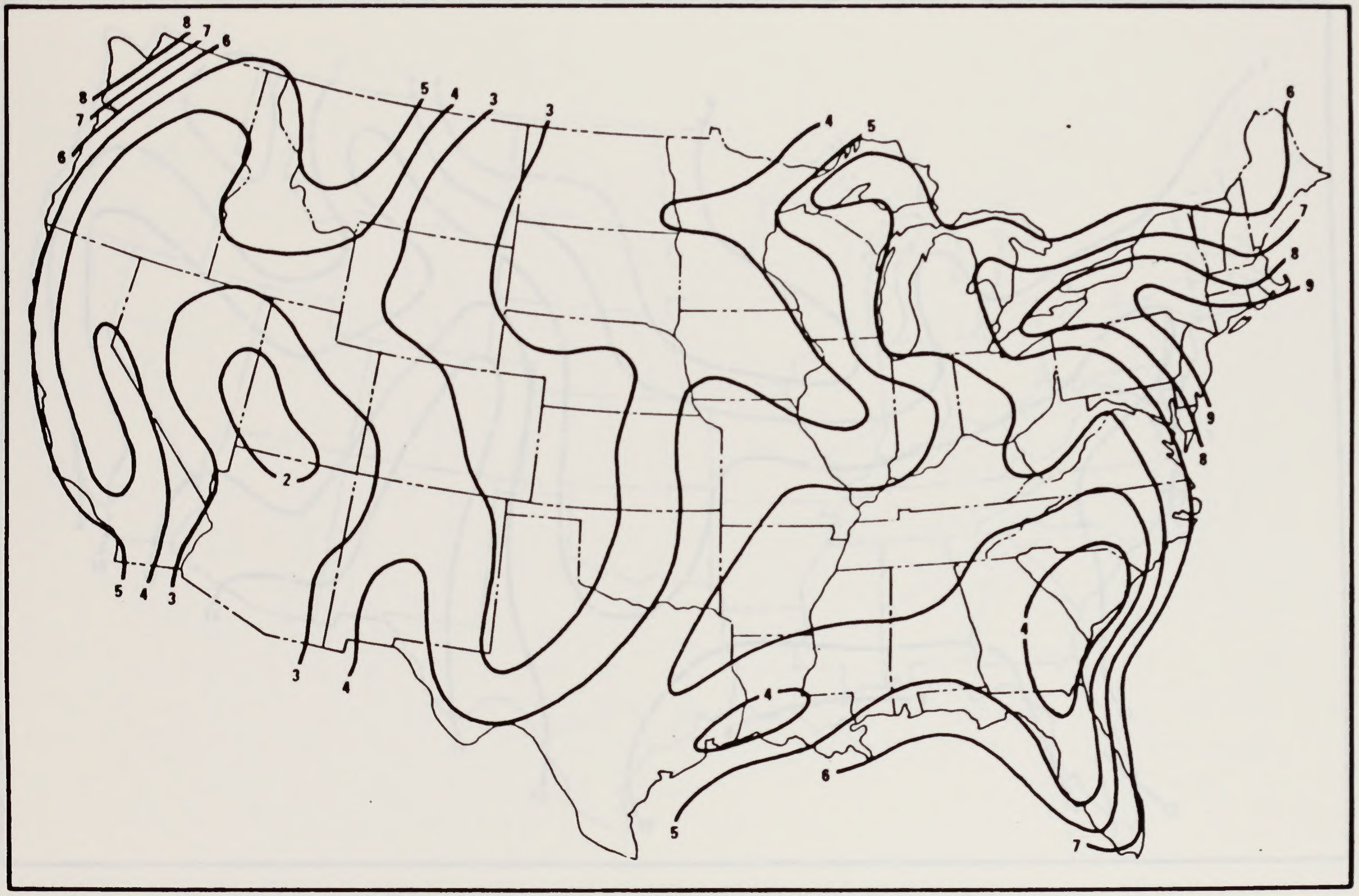

SEPTEMBER TEMPERATURE
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA


DECEMBER TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

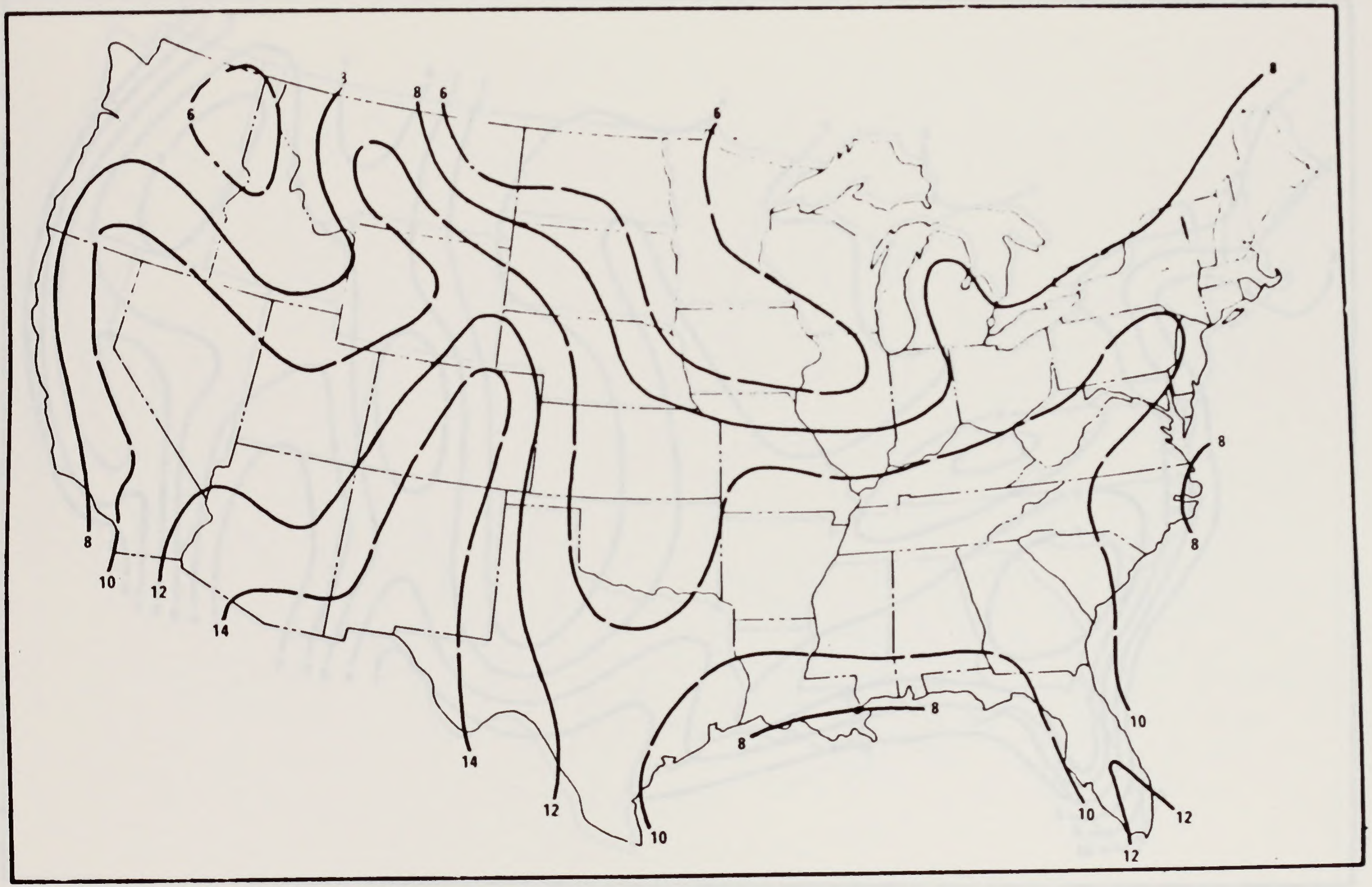

NOVEMBER TEMPERATURE (°C)
10-METER REGRESSION MEAN
1950-62
CAPE MENDOCINO
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA

APPENDIX C

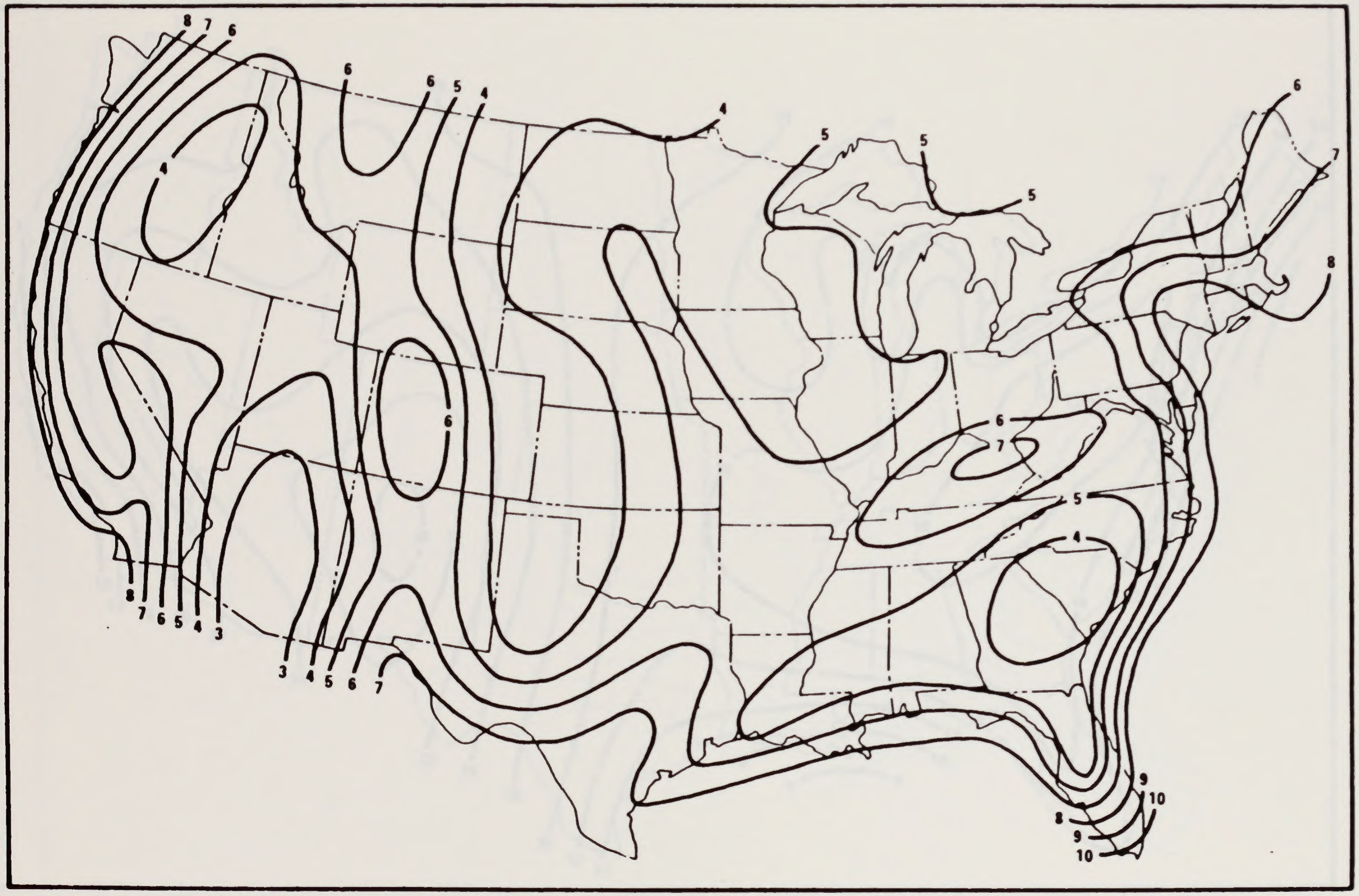
SEASONAL AND ANNUAL MIXING HEIGHTS DURING THE MORNING AND AFTERNOON HOURS IN THE CONTIGUOUS UNITED STATES



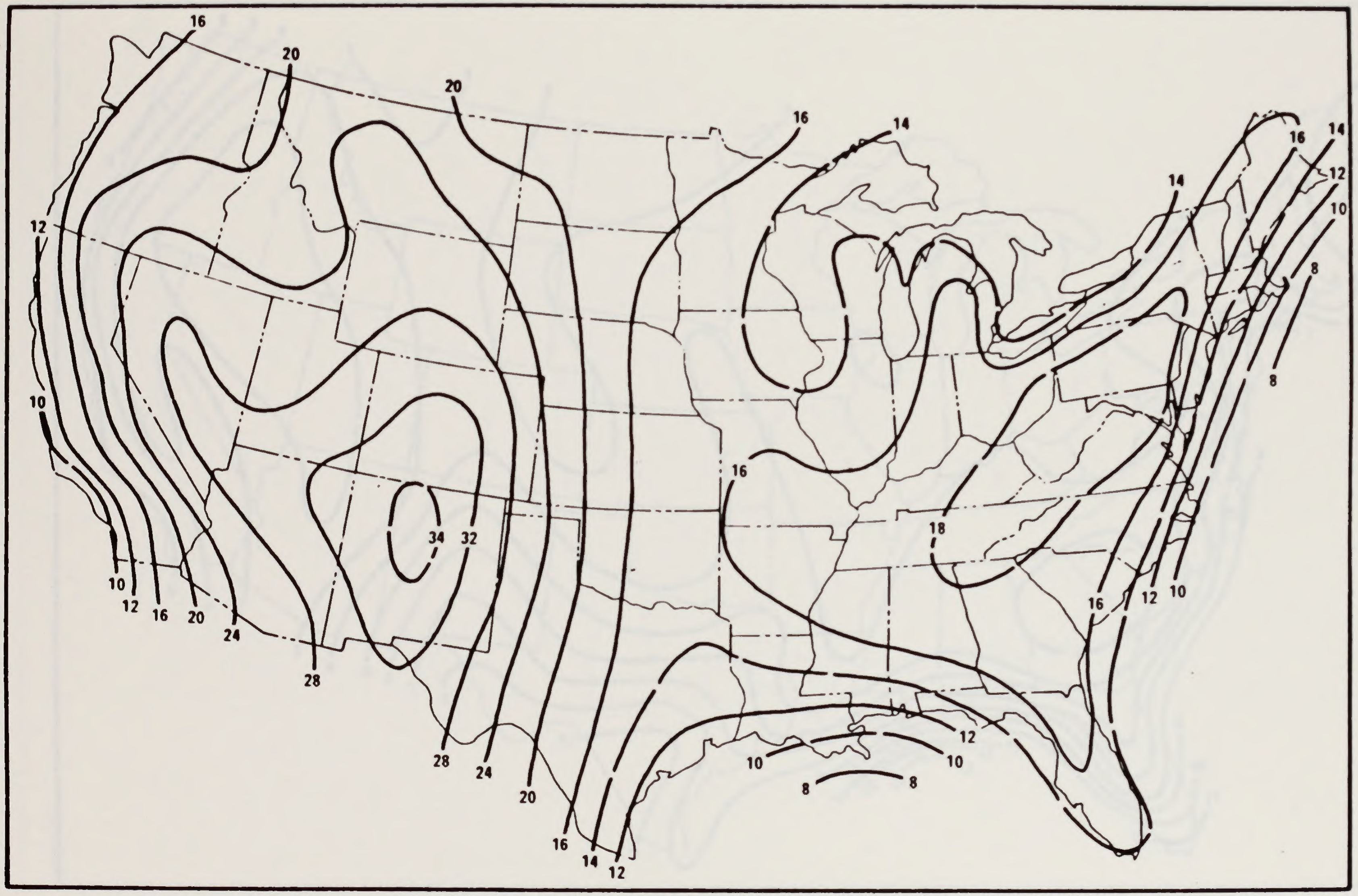
Isopleths (m x 10^2) of Mean Winter Morning Mixing Heights



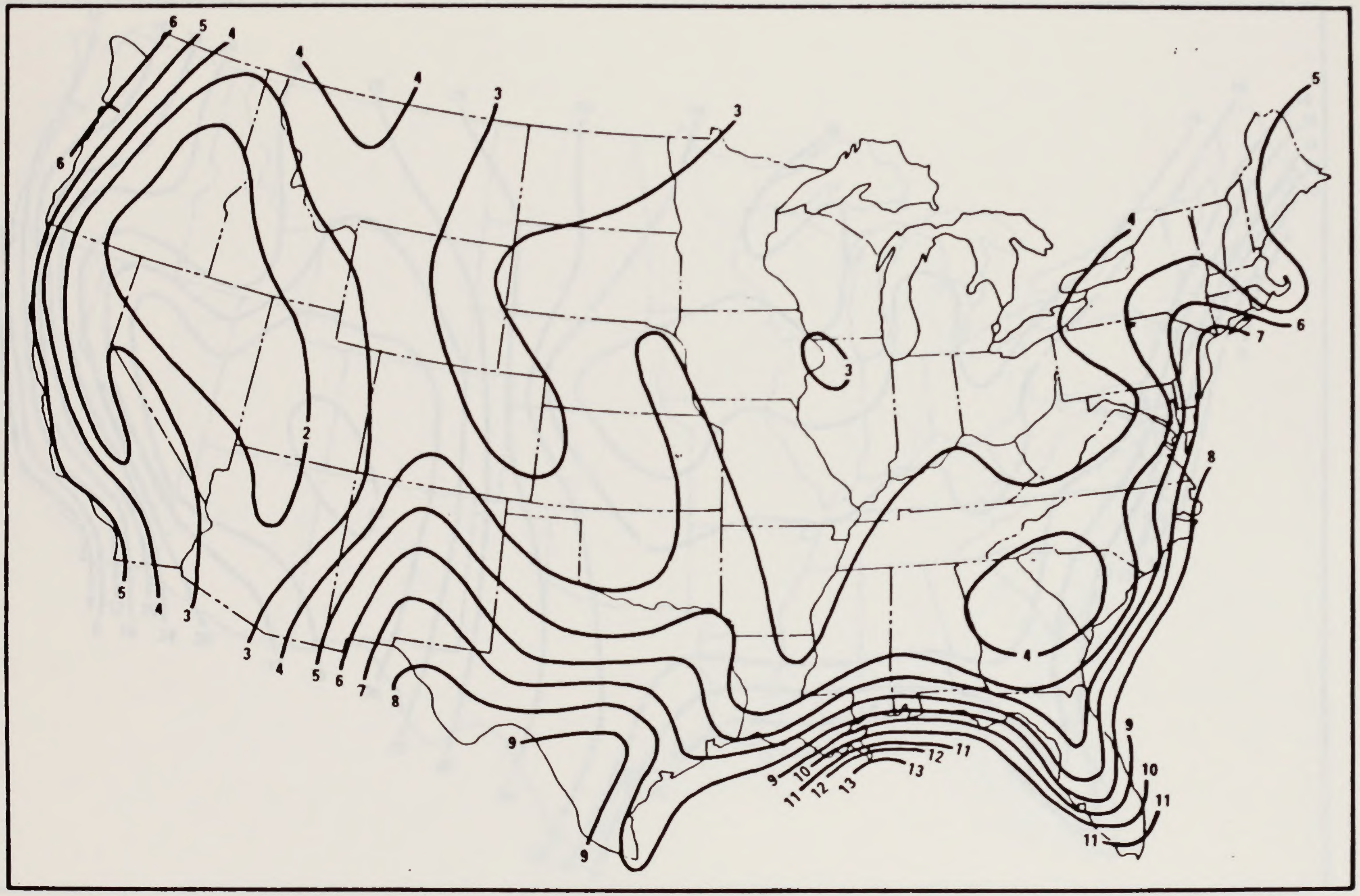
Isopleths (m x 10^2) of Mean Winter Afternoon Mixing Heights



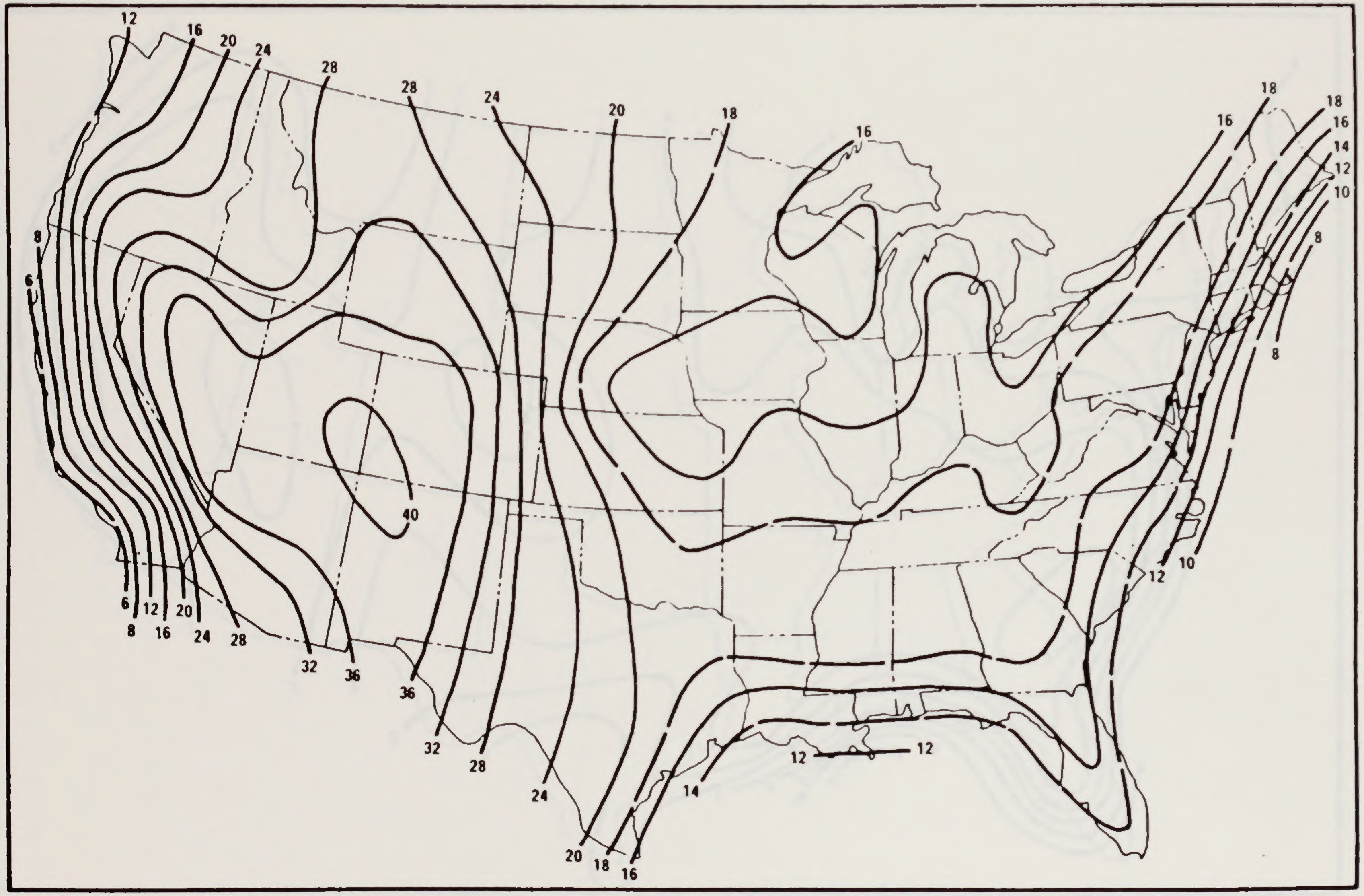
Isopleths (m x 10^2) of Mean Spring Morning Mixing Heights



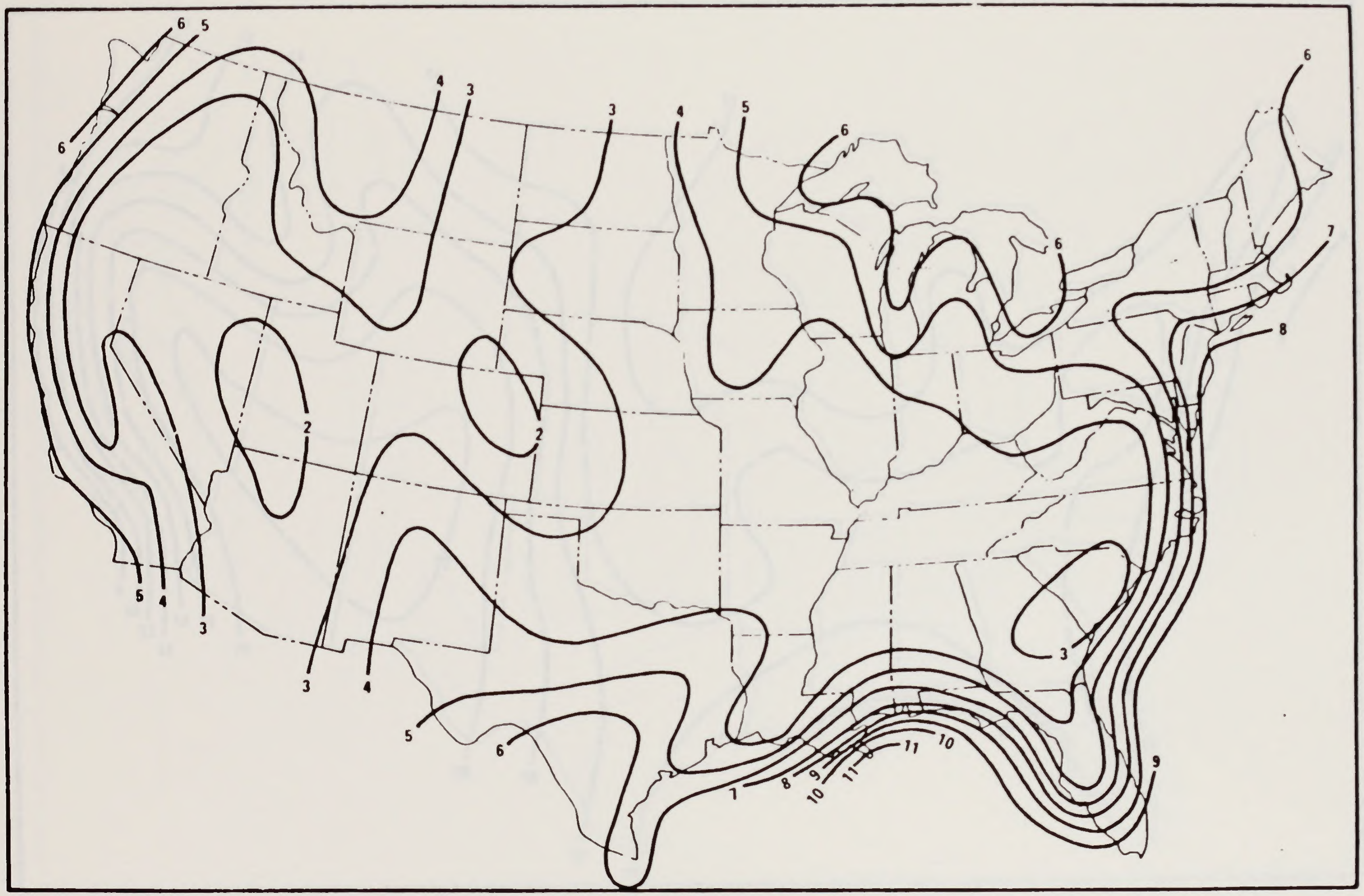
Isopleths (m x 10^2) of Mean Spring Afternoon Mixing Heights



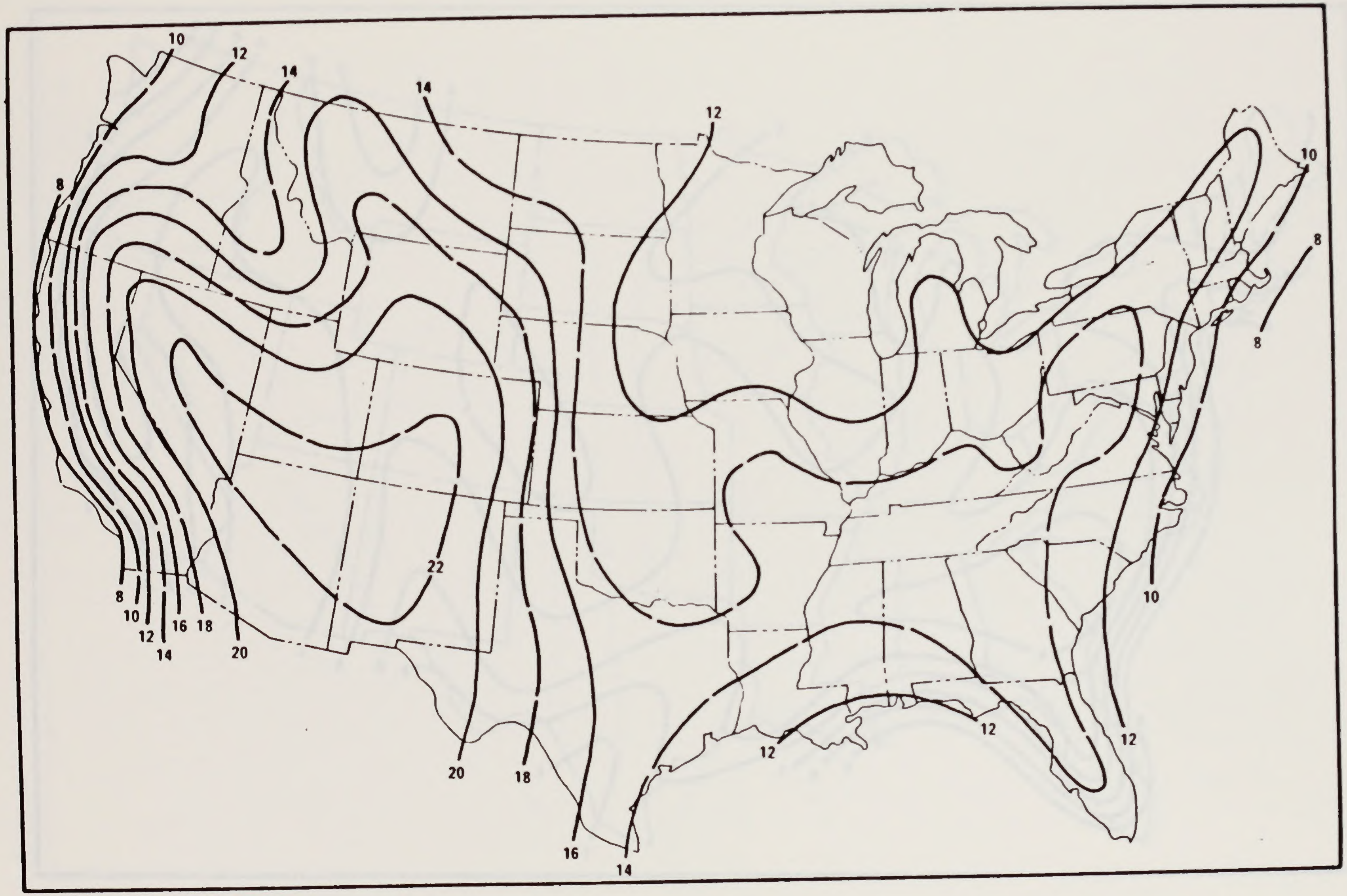
Isopleths (m x 10^2) of Mean Summer Morning Mixing Heights



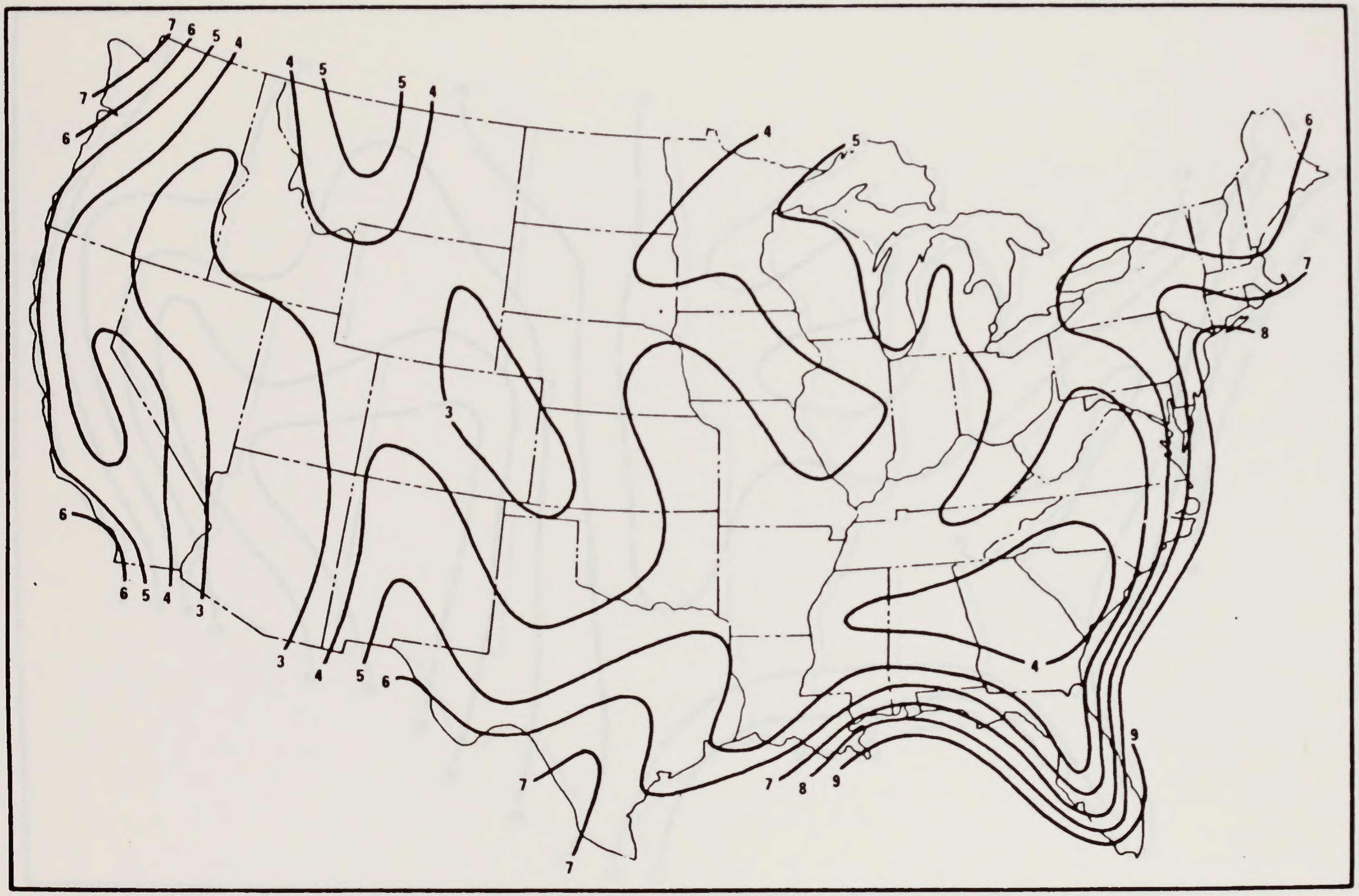
Isopleths (m x 10^2) of Mean Summer Afternoon Mixing Heights



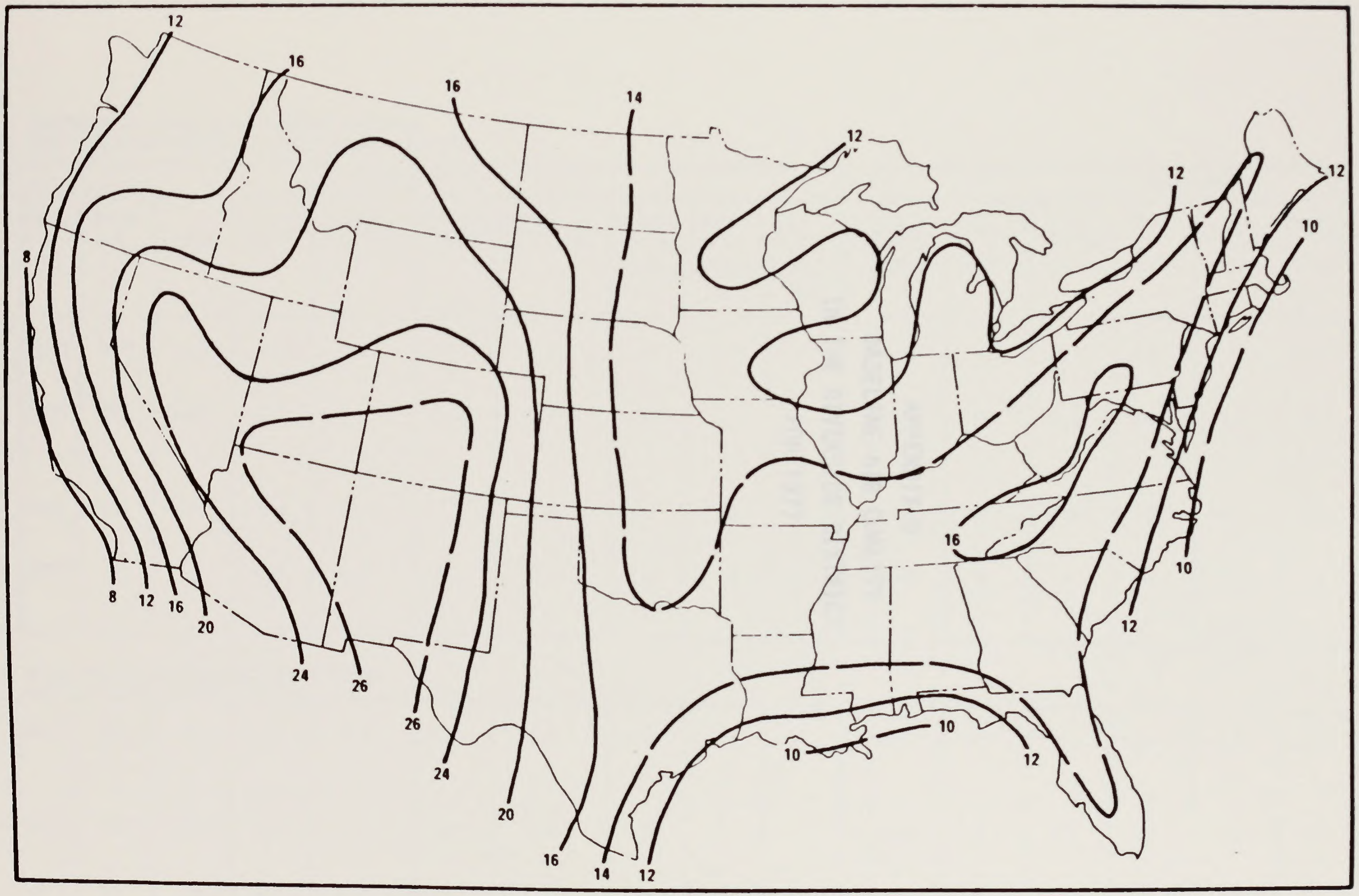
Isopleths (m x 10^2) of Mean Autumn Morning Mixing Heights



Isopleths (m x 10^2) of Mean Autumn Afternoon Mixing Heights



Isopleths ($m \times 10^2$) of Mean Annual Morning Mixing Heights



Isopleths (m x 10^2) of Mean Annual Afternoon Mixing Heights

APPENDIX D

BASELINE AIR QUALITY

IN THE RIVERSIDE DISTRICT

FOR 1977

BLM DISTRICT 1

POLLUTANT: **Oxidants in Parts per Hundred Million**
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC ARITH. MEAN	OCT. - DEC HIG
El Cajon	1975	168	12	4.8	2.1	4.4	1.5	8	4	3	4.0	8	5.7	12	-	-	-	-
Indio - Oasis St.	1975	365	20	6.7	3.7	5.8	1.7	12	6	4	4.0	8	8.9	17	9.6	20	4.2	11
La Habra	1975	339	28	6.4	5.3	4.6	2.4	13	5	3	3.8	13	5.9	22	10.9	28	4.7	28
Palm Springs Fire Stn.	1975	20	3	2.8	0.4	2.8	1.2	3	3	3	2.8	3	-	-	-	-	-	-

POLLUTANT: Ozone in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC ARITH. MEAN	OCT. - DEC HIG
*Banning Allesandro	1975	358	27	7.4	5.5	5.6	2.2	16	6	3	3.7	12	9.7	23	11.7	27	4.4	17
**Barstow	1975	332	12	3.9	2.1	3.3	2.0	7	4	2	2.6	6	5.1	12	5.4	9	2.5	8
*El Centro	1975	344	10	4.6	1.9	4.2	1.6	7	4	3	3.7	10	6.0	10	5.2	9	3.5	10

*UV Photometric Method
**Chemiluminescent Method
Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Ozone in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
*Indio Oasis St.	1975	236	17	6.8	3.7	5.7	1.9	11	6	4	-	-	9.2	16	8.2	17	3.4	10
*La Habra	1975	7	24	13.6	6.9	11.9	1.8	24	13	6	-	-	-	-	13.6	24	-	-
*Palm Springs Fire Stn.	1975	342	21	7.0	3.8	6.1	1.7	13	6	4	4.6	10	8.2	21	10.0	21	4.7	12
**Victorville	1975	355	16	5.0	3.5	3.8	2.3	10	4	2	2.7	10	5.9	16	8.5	15	3.1	8

*UV Photometric Method
**Chemiluminescent Method

POLLUTANT: Carbon Monoxide - NDIR - in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	117	6	2.3	1.2	2.0	1.8	4	2	1	-	-	-	-	2.2	5	2.3	6
Barstow	1975	363	7	1.1	1.3	0.7	2.7	3	1	0	1.5	7	0.4	2	0.6	3	1.7	7

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: **Carbon Monoxide - NDIR - in Parts per Million**
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO.OF OBS.	ANNUAL HIGH	ARITHMETIC MEAN	ARITHMETIC STD.DEV.	GEOMETRIC MEAN	GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Chula Vista	1975	356	9	2.0	1.3	1.6	2.0	4	2	1	2.4	7	1.4	4	1.2	5	2.8	9
El Cajon	1975	359	16	4.4	3.2	3.4	2.1	9	3	2	5.7	13	2.1	7	2.7	10	6.9	16
Escondido	1975	341	19	3.9	3.6	2.5	2.8	9	2	1	6.4	19	1.5	7	1.9	10	6.1	15
Fontana - Foothill	1975	345	11	3.2	1.9	2.7	2.0	6	3	2	2.2	11	2.8	6	4.2	8	3.5	9
Indio - Oasis St.	1975	314	16	3.6	2.7	2.8	2.1	8	3	2	3.8	10	1.5	4	2.6	4	6.0	16
La Habra	1975	183	38	8.1	6.5	6.0	2.2	18	6	3	11.1	38	3.8	11	8.9	21	8.5	19
Palm Springs Fire Stn.	1975	265	5	1.4	0.9	1.2	1.8	3	1	1	0.0	0	1.2	2	1.1	2	2.0	5
Victorville	1975	353	13	1.8	2.0	1.1	3.0	4	1	0	1.8	6	0.6	5	1.6	7	3.1	13
POLLUTANT: Sulfur Dioxide in Parts per Hundred Million, Daily Maximum Hourly Average Concentrations																		
Chula Vista	1975	331	7	0.2	0.8	0.3	1.9	1	0	0	0.2	6	0.1	5	0.3	3	0.5	7
El Cajon	1975	343	5	1.2	0.7	1.1	1.9	2	1	1	1.1	3	1.0	5	1.4	3	1.3	3

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Sulfur Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
El Centro	1975	312	4	1.0	0.7	0.9	2.0	2	1	1	0.9	3	0.9	2	1.2	3	1.1	4
Fontana - Foothill	1975	334	15	4.1	2.9	3.1	2.3	8	4	2	3.6	13	4.8	15	3.5	8	4.5	14
Five Points	1975	337	6	1.1	0.8	0.9	2.2	2	1	1	1.1	6	1.2	3	1.3	3	0.8	3
La Habra	1975	347	13	2.9	2.5	2.0	2.7	7	2	1	2.7	13	2.4	7	4.7	13	2.3	9
POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million Daily Maximum Hourly Average Concentrations																		
Barstow	1975	361	23	4.8	3.8	3.6	2.3	10	4	2	8.9	23	2.7	12	3.6	11	4.1	13
Chula Vista	1975	355	24	6.6	4.0	5.7	1.7	12	5	4	7.9	24	4.1	9	5.6	17	8.9	21

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO.OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
El Cajon	1975	302	32	7.3	4.2	6.3	1.7	13	6	4	7.9	21	5.2	12	7.1	32	8.9	24
Escondido - Valley Parkway	1975	347	36	7.0	3.8	6.1	1.7	12	6	4	8.4	36	5.0	10	5.7	17	8.6	20
Indio - Oasis St.	1975	354	9	3.5	1.7	3.0	1.8	5	3	2	4.2	9	2.9	8	2.6	7	4.2	9
La Habra	1975	348	46	10.9	6.5	9.4	1.7	20	9	7	11.9	46	6.8	12	10.8	29	13.5	41
Palm Springs Fire Stn.	1975	20	5	3.7	0.9	3.6	1.3	5	3	3	3.7	5	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL								QUARTERLY						
			HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT.
				MEAN	STD.DEV.	MEAN	STD.DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN
Victorville	1975	363	30	7.7	5.2	6.0	2.2	15	7	4	7.7	21	8.4	30	11.1	29	3.5
POLLUTANT: Nitric Oxide in Parts Per Hundred Million Daily Maximum Hourly Average Concentrations																	
Barstow	1975	357	56	10.3	8.9	7.0	2.7	23	8	4	16.1	56	8.9	30	12.2	49	4.4
Chula Vista	1975	355	53	7.8	8.4	4.4	3.0	19	5	2	9.2	38	2.6	10	4.6	15	14.3
El Cajon	1975	287	65	14.6	13.9	9.1	2.9	36	9	4	22.7	65	5.7	18	7.6	26	21.9

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Nitric Oxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	ANNUAL										QUARTERLY							
	YEAR	NO. OF OBS.	HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD. DEV.	MEAN	STD. DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
Escondido Valley Parkway	1975	342	75	14.3	14.9	7.2	3.7	37	7	3	20.7	75	4.0	20	5.5	3.2	25.0	66
Indio - Oasis St.	1975	354	49	6.2	8.2	2.2	5.0	18	2	1	11.1	37	1.1	12	1.2	9	11.2	49
La Habra	1975	296	80	16.6	16.7	8.1	4.4	43	11	4	30.2	80	4.9	20	8.4	52	24.7	73
Palm Springs Fire Stn.	1975	20	16	7.3	4.7	5.7	2.3	14	7	4	7.3	16	-	-	-	-	-	-
Victorville	1975	358	61	7.9	7.4	5.7	2.2	16	5	4	11.8	61	4.2	12	6.7	28	9.1	26

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million - Colorimetric Method
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Barstow	1975	357	66	14.2	10.8	10.6	2.3	30	11	7	23.1	66	11.0	34	15.0	57	7.8	30
Chula Vista	1975	355	60	13.0	10.2	9.9	2.1	28	9	6	15.5	60	6.0	16	9.1	27	21.3	60
El Cajon	1975	302	78	19.6	15.0	14.8	2.2	43	14	8	27.7	78	9.3	24	12.6	43	29.2	
Escondido Valley Pkwy	1975	344	86	19.4	16.4	13.6	2.4	45	12	7	26.6	86	8.1	24	9.9	45	31.0	7
Fontana - Foorhill	1975	326	29	10.0	5.2	8.5	1.9	17	10	6	6.8	20	10.0	24	11.7	21	11.6	29
Indio - Oasis St.	1975	365	56	9.4	9.2	5.8	2.8	23	5	3	15.2	44	3.7	15	3.6	13	15.3	56

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
La Habra	1975	296	90	24.4	18.6	18.5	2.1	54	17	10	39.2	90	10.4	26	16.0	57	33.7	86
Palm Springs Fire Stn.	1975	20	20	10.8	5.3	9.5	1.7	18	10	7	10.8	20	-	-	-	-	-	-
Victorville	1975	358	61	13.7	8.8	11.2	2.0	24	12	8	17.4	61	10.3	31	15.2	49	12.1	31

POLLUTANT: Hydrocarbons in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	71	7	3.0	0.9	2.9	1.3	4	3	2	-	-	-	-	-	-	-	-
Chula Vista	1975	357	5	2.5	0.7	2.4	1.3	3	2	2	2.7	4	2.1	3	2.2	4	2.9	5
El Cajon	1975	363	13	3.4	1.7	3.1	1.5	6	3	2	4.4	13	2.2	4	2.5	6	4.5	9

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Hydrocarbons in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
El Toro	1975	188	8	1.7	0.9	1.5	1.6	3	2	1	1.9	8	1.6	3	1.2	2	-	-
Escondido	1975	333	8	3.1	1.3	2.8	1.5	5	3	2	3.7	8	2.2	4	2.3	5	4.3	7
Indio	1975	303	7	2.9	1.1	2.7	1.4	4	3	2	3.7	7	2.6	5	2.2	5	3.2	6
La Habra	1975	28	7	3.8	1.9	3.3	1.8	6	4	2	-	-	4.3	7	3.5	6	-	-
Palm Springs	1975	347	12	3.9	2.0	3.2	2.0	6	4	2	2.0	5	2.9	7	5.0	12	5.3	8
Perris	1975	156	9	4.9	1.9	4.5	1.5	8	4	3	6.2	9	3.3	5	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Suspended Particulates by the AISI Method
Daily Maximum 2 HR COH Index (COH Values x 10)

STATION	ANNUAL										QUARTERLY							
	YEAR	NO.OF OBS.	HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD.DEV.	MEAN	STD.DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
Banning - Allesandro	1975	315	15	5.7	2.1	5.3	1.5	8	5	4	6.3	15	5.6	8	4.7	11	5.9	15
Barstow	1975	328	34	5.7	3.1	5.1	1.6	9	5	4	7.0	19	5.1	14	4.8	11	5.5	34
El Centro	1975	253	34	5.2	4.5	3.8	2.2	12	4	2	11.3	34	4.8	12	3.2	14	3.7	22
Hemet State St.	1975	322	36	6.9	3.5	6.3	1.5	11	6	5	8.0	36	5.4	14	5.9	16	8.7	17
Indio - Oasis St.	1975	365	40	7.8	4.5	7.0	1.6	12	7	5	10.1	37	6.3	20	5.9	14	8.9	40
La Habra	1975	340	33	8.7	6.2	6.8	2.0	17	7	4	13.9	33	4.4	11	5.7	17	11.0	28

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Suspended Particulates by the AISI Method
Daily Maximum 2 HR COH Index (COH Values x 10)

STATION	YEAR	NO.OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Palm Springs Fire Stn.	1975	50	16	5.6	2.6	5.2	1.5	8	5	4	-	-	-	-	-	-	5.6	16
Perris	1975	224	20	6.8	2.4	6.4	1.4	10	7	5	-	-	6.3	10	7.0	20	7.0	15
Victorville	1975	365	27	5.7	2.9	5.2	1.6	9	5	4	6.9	27	4.6	12	5.6	14	5.7	10

Some data prior to July 1, 1975 reflect an 0.8 factor app'ied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: **Suspended Particulates by the HI-VOL Method**
Micrograms per Cubic Meter

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	48	148	63.4	32.3	54.7	1.8	110	60	31	-	-	-	-	-	-	-	-
Calexico - Fire Stn.	1975	51	535	237.8	89.2	220.4	1.5	352	229	166	-	-	-	-	-	-	-	-
Chula Vista	1975	59	122	69.4	23.5	65.1	1.5	105	71	49	-	-	-	-	-	-	-	-
El Centro	1975	59	1358	171.5	169.3	145.0	1.6	273	139	103	-	-	-	-	-	-	-	-
El Cajon	1975	57	199	90.9	32.1	85.4	1.4	143	86	64	-	-	-	-	-	-	-	-
El Toro	1975	35	124	64.9	28.3	58.3	1.6	114	61	44	-	-	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Suspended Particulates by the HI-VOL Method
Micrograms per Cubic

STATION	ANNUAL										QUARTERLY							
	YEAR	NO. OF OBS.	HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD.DEV.	MEAN	STD.DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
Escondido Valley Parkway	1975	60	176	85.2	40.5	70.8	2.1	137	82	54	-	-	-	-	-	-	-	-
Indio - Oasis St.	1975	59	659	150.5	88.6	135.2	1.5	236	129	91	-	-	-	-	-	-	-	-
La Habra	1975	60	220	120.3	45.0	111.0	1.5	186	121	79	-	-	-	-	-	-	-	-
Palm Springs Fire Stn.	1975	60	386	65.5	49.8	56.2	1.7	97	58	40	-	-	-	-	-	-	-	-
Santa Paula	1975	59	137	91.7	21.1	88.9	1.3	117	91	74	-	-	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

APPENDIX E
LONG-TERM BASELINE AIR QUALITY IN THE RIVERSIDE DISTRICT

BLM DISTRICT 1
POLLUTANT: Oxidant in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	[OCT. - DEC.] ARITH. MEAN	[OCT. - DEC.] HIGH
Banning	1972	352	32	8.4	5.9	6.6	2.1	17	7	4	6.5	18	10.6	28	12.6	32	3.6	9
	1971	306	24	6.7	4.1	5.5	1.9	13	6	3	6.8	18	7.7	20	8.7	16	3.0	24
	1970	230	46	9.8	7.0	7.8	2.0	20	8	5	5.6	13	9.4	37	17.2	46	7.4	29
Barstow	1972	127	8	2.6	1.5	2.2	1.8	5	2	2	1.8	4	4.2	8	-	-	-	-
	1971	56	7	3.1	1.5	2.7	1.6	6	3	2	-	-	2.4	5	3.8	7	-	-
	1970	152	14	5.3	3.2	4.3	2.0	10	4	3	3.0	7	7.6	14	9.8	14	-	-
	1969	203	12	4.9	2.7	4.0	1.9	9	5	2	-	-	5.8	10	7.5	12	2.5	6
Chula Vista	1974	31	8	3.8	1.3	3.6	1.3	5	3	3	3.8	8	-	-	-	-	-	-
	1973	356	24	5.9	2.7	5.4	1.5	9	5	4	5.2	10	7.5	24	5.8	14	5.1	17
	1972	326	29	7.0	3.3	6.3	1.6	11	6	5	7.5	15	6.1	13	7.7	29	6.8	17
Fontana-Cypress	1972	320	42	9.9	6.8	7.5	2.3	19	9	5	6.7	28	11.5	36	14.2	42	5.1	14

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

[illegible]: Oxidant in Parts per Hundred Million

Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - [illegible] ARITH. MEAN	OCT. - [illegible] HI[illegible]
El Cajon	1975	168	12	4.8	2.1	4.4	1.5	8	4	3	4.0	8	5.7	12	-	-	-	-
	1974	357	17	5.9	2.7	5.3	1.6	10	5	4	5.4	16	7.0	17	6.7	15	4.4	10
	1973	349	21	5.9	2.7	5.4	1.5	9	5	4	4.3	9	6.7	17	7.3	13	5.3	21
	1972	344	22	6.6	3.4	5.8	1.8	11	6	6	7.1	14	8.1	18	7.2	22	4.2	11
	1971	333	30	8.9	4.6	7.8	1.7	15	8	8	8.1	18	7.9	14	10.3	27	9.2	30
	1970	234	26	9.5	4.2	8.6	1.6	15	9	9	12.3	25	10.8	26	10.1	25	7.6	21
	1969	299	24	9.4	4.4	8.4	1.6	15	9	9	8.6	21	9.5	23	12.3	24	8.6	22
	1968	314	23	10.8	4.0	10.0	1.5	16	10	10	9.0	22	12.9	21	11.8	23	8.9	16
	1967	307	28	8.6	3.9	7.7	1.6	13	8	8	8.4	28	7.6	20	9.7	23	8.9	19
	1966	92	31	12.1	6.6	10.4	1.8	21	11	11	-	-	-	-	18.1	31	9.7	21
	1965	280	31	9.3	5.6	7.9	1.8	17	8	8	8.6	27	9.0	31	9.3	18	10.3	31
El Toro	1974	15	4	1.9	1.1	1.6	2.3	3	2	1	1.9	4	-	-	-	-	-	-
	1973	357	19	4.6	2.8	3.9	1.8	8	4	3	3.1	6	5.5	14	5.8	19	3.7	18
Escondido	1974	16	9	4.1	2.3	3.6	1.7	8	3	3	4.1	9	-	-	-	-	-	-
Valley Parkway	1973	355	27	5.3	3.3	4.6	1.7	9	4	3	4.2	8	4.9	14	5.0	14	7.1	27
	1972	224	32	7.6	3.8	7.0	1.5	12	7	6	-	-	8.2	25	8.5	32	6.5	15

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
LOCATION: Oxidant in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

			ANNUAL								QUARTERLY							
STATION	YEAR	NO. OF OBS.	HIGH	ARITHMETIC MEAN	ARITHMETIC STD.DEV.	GEOMETRIC MEAN	GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Fontana -	1973	89	18	3.9	3.2	3.1	1.9	7	3	2	2.7	7	6.1	18	-	-	-	-
Indio -	1975	365	20	6.7	3.7	5.8	1.7	12	6	4	4.0	8	8.9	17	9.6	20	4.2	11
Oasis St.	1974	364	18	6.1	3.5	5.2	1.8	11	5	3	3.1	6	8.3	17	8.6	18	4.5	11
	1973	365	17	6.4	3.7	5.4	1.8	12	5	4	4.0	8	7.7	17	10.2	17	3.6	7
	1972	354	25	8.8	4.8	7.5	1.8	16	8	5	7.6	18	11.3	23	11.9	25	4.5	17
	1971	303	32	10.6	5.7	9.1	1.8	19	9	6	7.8	15	12.1	32	14.2	30	6.3	13
La Habra	1975	339	28	6.4	5.3	4.6	2.4	13	5	3	3.8	13	5.9	22	10.9	28	4.7	28
	1974	356	44	8.2	6.7	5.9	2.4	18	6	3	5.4	20	10.4	44	12.8	38	4.2	20
	1973	362	30	6.7	5.8	4.6	2.5	15	5	3	2.2	7	8.8	30	9.9	24	5.9	23
	1972	356	40	8.7	7.1	6.1	2.5	19	7	4	6.7	26	11.1	31	13.3	40	3.4	15
	1971	344	42	9.1	7.3	6.7	2.3	18	7	4	6.9	25	7.3	24	15.2	42	6.8	39
	1970	331	37	7.4	5.0	6.0	2.0	14	6	4	5.1	24	8.1	28	9.9	37	6.7	20
	1969	256	54	9.6	8.0	7.0	2.2	20	7	4	5.0	15	7.8	25	17.3	54	5.9	20
	1968	340	33	8.0	5.4	6.4	2.0	15	6	4	5.8	20	7.9	23	11.0	28	7.4	33
	1967	228	29	8.1	5.6	6.3	2.1	17	6	4	6.9	26	8.1	23	9.8	20	9.4	29
	1966	340	32	9.4	6.3	7.5	2.0	20	7	5	7.1	29	9.8	29	13.2	28	7.3	32
	1965	311	37	11.9	8.0	9.4	2.1	24	10	6	8.0	21	11.5	36	15.6	33	10.4	37

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxidant in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Palm Springs	1975	20	3	2.8	0.4	2.8	1.2	3	3	3	2.8	3	-	-	-	-	-	-
Fire Stn.	1974	363	24	6.6	3.9	5.6	1.8	12	6	3	4.1	9	9.7	24	8.4	20	4.3	13
	1973	361	25	8.1	5.3	6.5	2.0	16	6	4	4.3	11	11.2	23	13.0	25	4.2	15
	1972	356	31	9.5	5.5	8.0	1.8	17	8	5	7.1	17	12.7	31	12.9	28	5.1	11
	1971	286	38	9.9	5.4	8.6	1.7	17	8	6	12.8	23	11.4	28	12.0	38	5.7	13
Victorville	1973	354	19	5.1	3.3	4.2	2.0	10	4	3	2.7	8	6.1	16	8.5	19	3.1	8
	1972	363	15	4.2	2.8	3.3	2.2	8	3	2	1.7	8	4.6	15	7.5	14	3.1	6
	1971	338	14	5.2	2.9	4.4	1.8	10	4	3	3.8	9	4.9	14	8.3	13	3.6	9
	1970	156	22	7.5	3.8	6.5	1.8	13	7	4	4.5	11	9.3	22	10.4	18	-	-
	1969	345	17	5.1	2.4	4.6	1.6	8	5	3	4.4	10	6.2	17	6.4	14	3.4	9
	1968	202	11	3.9	1.9	3.5	1.6	7	4	2	-	-	4.2	11	4.3	11	3.5	9

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: Ozone in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
*Banning Allesandro	1975	358	27	7.4	5.5	5.6	2.2	16	6	3	3.7	12	9.7	23	11.7	27	4.4	17
	1974	357	24	7.7	5.5	5.8	2.1	16	6	3	4.6	18	9.7	24	11.9	23	4.5	19
	1973	245	32	10.2	6.9	7.6	2.3	20	10	4	-	-	13.4	32	14.1	29	4.2	16
**Barstow	1975	332	12	3.9	2.1	3.3	2.0	7	4	2	2.6	6	5.1	12	5.4	9	2.5	8
	1974	346	12	4.7	2.5	3.8	2.1	9	4	3	3.6	7	5.0	12	6.9	11	3.1	9
	1973	79	8	4.4	1.4	4.1	1.5	6	4	3	-	-	-	-	-	-	4.4	8
*El Centro	1975	344	10	4.6	1.9	4.2	1.6	7	4	3	3.7	10	6.0	10	5.2	9	3.5	10
	1974	334	13	4.9	1.9	4.5	1.5	7	4	3	4.9	11	6.2	11	4.9	13	3.3	7
*El Toro	1975	365	19	5.6	3.5	4.6	1.9	11	5	3	3.9	13	5.9	18	7.8	19	4.9	18
	1974	302	38	7.5	5.0	6.2	1.9	13	6	4	6.7	26	8.4	38	9.2	28	5.3	16
**Fontana - Cypress	1973	29	20	11.8	4.5	10.7	1.6	17	12	6	-	-	11.8	20	-	-	-	-

* UV Photometric Method
** Chemiluminescent Method

Data prior to July 1, 1975 reflect and 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: Ozone in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL								QUARTERLY							
			HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD. DEV.	MEAN	STD. DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
*Indio Oasis St.	1975	236	17	6.8	3.7	5.7	1.9	11	6	4	-	-	9.2	16	8.2	17	3.4	10
*La Habra	1975	7	24	13.6	6.9	11.9	1.8	24	13	6	-	-	-	-	13.6	24	-	-
*Palm Springs Fire Stn.	1975	342	21	7.0	3.8	6.1	1.7	13	6	4	4.6	10	8.2	21	10.0	21	4.7	12
**Victorville	1975	355	16	5.0	3.5	3.8	2.3	10	4	2	2.7	10	5.9	16	8.5	15	3.1	8
	1974	352	16	5.3	3.6	4.1	2.3	10	5	2	3.9	16	6.2	14	8.7	16	2.3	11
	1973	90	10	3.5	2.0	3.1	1.7	7	3	2	-	-	-	-	-	-	3.5	10

* UV Photometric Method

** Chemiluminescent Method

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Carbon Monoxide - NDIR - in Parts per Million

Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	117	6	2.3	1.2	2.0	1.8	4	2	1	-	-	-	-	2.2	5	2.3	6
Barstow	1975	363	7	1.1	1.3	0.7	2.7	1	1	0	1.5	7	0.4	2	0.6	3	1.7	7
	1974	358	9	1.7	1.7	1.1	2.8	4	1	0	2.2	9	0.8	4	0.8	4	3.0	8
	1973	91	9	3.1	2.0	2.5	2.0	6	3	1	-	-	-	-	-	-	3.1	9
Chula Vista	1975	356	9	2.0	1.3	1.6	2.0	4	2	1	2.4	7	1.4	4	1.2	5	2.8	9
	1974	87	6	2.7	1.5	2.2	1.9	5	3	1	-	-	-	-	-	-	2.7	6
El Cajon	1975	359	16	4.4	3.2	3.4	2.1	9	3	2	5.7	13	2.1	7	2.7	10	6.9	16
	1974	347	16	4.0	3.0	3.1	2.0	8	3	2	5.6	16	2.3	6	2.3	5	5.9	13
	1973	304	15	3.5	2.6	2.8	2.0	8	3	2	2.6	4	2.5	6	2.1	9	6.1	15
	1972	153	12	4.6	2.3	4.0	1.8	8	5	3	-	-	-	-	3.7	9	5.9	12
El Toro	1974	15	8	3.4	2.5	2.6	2.2	7	3	1	3.4	8	-	-	-	-	-	-
	1973	352	12	3.4	1.6	3.1	1.6	6	3	2	3.8	11	2.7	6	3.0	6	4.2	12
Escondido	1975	341	19	3.9	3.6	2.5	2.8	9	2	1	6.4	19	1.5	7	1.9	10	6.1	15
	1974	63	13	6.2	3.8	4.4	2.9	11	6	2	-	-	-	-	-	-	6.2	13

Data prior to July 1, 1975 reflect an 0.8 factor applied to hourly concentrations.

BLA DISTRICT 1

POLLUTANT: Carbon Monoxide - NDIR - in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Fontana - Foothill	1975	345	11	3.2	1.9	2.7	2.0	6	3	2	2.2	11	2.8	6	4.2	8	3.5	9
	1974	334	15	4.3	2.0	3.8	1.7	7	4	3	5.1	10	3.6	13	4.9	10	3.7	15
	1973	176	15	5.7	2.3	5.3	1.5	8	6	4	-	-	-	-	6.2	14	5.3	15
Indio - Casis St.	1975	314	16	3.6	2.7	2.8	2.1	8	3	2	3.8	10	1.5	4	2.6	4	6.0	16
	1974	363	17	4.0	2.7	3.3	1.8	8	3	2	5.8	17	2.6	9	2.8	7	4.7	14
	1973	361	22	5.0	3.1	4.4	1.7	10	4	3	5.8	20	3.7	14	3.7	8	6.9	22
La Habra (No data 1970)	1975	183	38	8.1	6.5	6.0	2.2	18	6	3	11.1	38	3.8	11	8.9	21	8.5	19
	1974	360	33	9.1	6.5	7.2	2.0	19	6	4	13.1	33	5.7	16	5.0	14	12.7	28
	1973	356	30	9.5	5.5	8.1	1.8	18	8	5	11.8	28	6.6	14	6.1	16	13.5	3[illegible]
	1972	352	32	10.4	5.4	9.2	1.7	18	9	7	11.8	30	7.4	15	8.2	21	14.6	32
	1971	53	22	10.6	4.2	9.7	1.5	17	10	8	-	-	-	-	-	-	10.6	22
	1969	201	28	11.7	4.3	10.9	1.4	16	11	9	13.8	28	9.7	15	11.3	16	-	-
	1968	358	27	12.8	4.2	12.1	1.4	18	12	10	14.4	27	9.3	15	12.1	23	15.4	27
	1967	348	26	12.3	3.8	11.7	1.4	17	12	9	12.8	20	10.4	16	10.3	17	15.2	29
	1966	330	30	11.2	3.9	10.6	1.4	17	10	8	11.4	19	8.5	12	9.9	16	15.2	3[illegible]
	1965	336	30	11.6	4.2	11.0	1.4	17	10	9	12.4	23	8.5	14	11.0	17	14.7	3[illegible]

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: Carbon Monoxide - NDIR - in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL								QUARTERLY							
			HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD. DEV.	MEAN	STD. DEV.	10%	50%	75%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
Palm Springs Fire Stn.	1975	265	5	1.4	0.9	1.2	1.8	3	1	1	0.0	0	1.2	2	1.1	2	2.0	5
	1974	165	6	1.3	1.1	0.9	2.5	3	1	0	0.8	4	2.9	5	1.7	6	1.6	3
	1973	221	6	2.3	1.2	2.0	1.8	4	2	2	2.7	6	3.2	6	1.8	3	1.7	4
	1972	72	10	3.5	1.6	3.1	1.7	5	3	2	-	-	-	-	-	-	3.5	10
Victorville	1975	353	13	1.8	2.0	1.1	3.0	4	1	0	1.8	6	0.6	5	1.6	7	3.1	13
	1974	316	9	2.5	1.7	1.9	2.3	5	2	1	3.6	9	2.2	5	1.8	5	2.7	9
	1973	67	12	4.0	2.3	3.4	1.8	8	4	2	-	-	-	-	-	-	4.0	12
POLLUTANT: Sulfur Dioxide in Parts per Hundred Million, Daily Maximum HOurly Average Concentrations																		
Banning - Allesandro	1974	50	3	1.5	0.8	1.3	1.9	2	2	1	1.5	3	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: Sulfur Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Chula Vista	1975	331	7	0.2	0.8	0.3	1.9	1	0	0	0.2	6	0.1	5	0.3	3	0.5	7
	1974	92	3	0.2	0.6	0.3	1.9	1	0	0	-	-	-	-	-	-	0.2	3
El Cajon	1975	343	5	1.2	0.7	1.1	1.9	2	1	1	1.1	3	1.0	5	1.4	3	1.3	3
	1974	136	4	1.1	0.7	1.0	1.9	2	1	1	-	-	-	-	0.9	2	1.2	4
	1973	286	7	1.3	0.8	1.1	1.8	2	1	1	1.0	2	1.3	5	1.3	7	1.5	6
	1972	234	4	1.2	0.7	1.0	1.8	2	1	1	-	-	1.1	3	1.3	4	1.1	3
El Centro	1975	312	4	1.0	0.7	0.9	2.0	2	1	1	0.9	3	0.9	2	1.2	3	1.1	4
	1974	303	4	0.9	0.7	0.8	2.1	2	1	0	0.9	4	1.2	2	1.0	2	0.6	2
El Toro	1974	22	5	1.1	1.4	0.7	2.9	3	1	0	1.3	5	0.7	2	-	-	-	-
	1973	210	12	2.2	2.2	1.4	2.7	5	2	1	-	-	2.5	10	2.1	10	2.2	12
Fontana - Foothill	1975	334	15	4.1	2.9	3.1	2.3	8	4	2	3.6	13	4.8	15	3.5	8	4.5	14
	1974	47	12	2.9	2.6	1.9	2.9	6	2	1	-	-	-	-	-	-	2.9	12
	1973	7	11	4.0	3.2	3.4	1.8	11	3	2	-	-	-	-	-	-	4.0	11
Indio - Oasis St.	1972	196	4	1.4	0.7	1.3	1.5	2	1	1	-	-	1.5	4	1.2	3	1.7	3

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: Sulfur Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
La Habra	1975	347	13	2.9	2.5	2.0	2.7	7	2	1	2.7	13	2.4	7	4.7	13	2.3	9
	1974	355	15	3.1	2.4	2.3	2.5	6	3	1	3.0	12	3.0	15	4.1	13	2.6	10
	1973	363	15	4.0	3.1	2.8	2.6	8	3	2	2.8	10	4.5	12	4.8	15	3.8	14
	1972	357	23	3.6	2.8	2.6	2.6	7	3	2	4.1	10	2.9	10	3.9	11	3.5	23
	1971	362	11	2.8	2.3	1.9	2.7	6	2	1	2.4	10	2.3	10	3.4	11	2.9	11
	1970	327	16	3.1	2.7	1.9	3.3	6	3	1	2.8	8	2.6	10	5.1	16	2.2	12
	1969	307	14	2.8	2.5	1.7	3.3	6	2	1	2.6	14	1.7	7	4.7	11	1.9	7
	1968	338	27	3.9	3.6	2.0	4.3	8	4	0	4.7	22	2.3	9	4.5	10	4.3	27
	1967	302	40	3.3	5.5	1.0	5.1	8	0	0	6.0	40	2.0	20	2.3	9	2.2	18
	1966	327	19	3.4	3.5	1.6	4.5	8	3	0	5.6	19	1.9	8	2.6	8	3.7	15
	1965	270	16	4.0	2.4	3.3	2.0	6	4	3	4.4	16	3.7	13	3.9	8	3.9	15

POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning	1971	244	20	4.8	2.9	4.1	1.7	8	4	3	5.0	13	4.6	10	4.2	16	6.1	20
Barstow	1975	361	23	4.8	3.8	3.6	2.3	10	4	2	8.9	23	2.7	12	3.6	11	4.1	13
	1974	355	45	8.6	4.5	7.5	1.8	14	8	6	7.1	17	7.6	45	8.6	27	10.8	25
	1973	92	17	7.3	3.2	6.6	1.6	11	7	5	-	-	-	-	-	-	7.3	17
Chula Vista	1975	355	24	6.6	4.0	5.7	1.7	12	5	4	7.9	24	4.1	9	5.6	17	8.9	21
	1974	85	23	7.8	4.1	6.8	1.7	14	7	5	-	-	-	-	-	-	7.8	23

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

ELM DISTRICT 1

POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
El Cajon	1975	302	32	7.3	4.2	6.3	1.7	13	6	4	7.9	21	5.2	12	7.1	32	8.9	24
	1974	353	20	5.2	3.3	4.3	1.9	10	4	3	5.0	15	3.8	9	4.2	13	8.0	20
	1973	360	19	5.2	3.3	4.3	1.9	10	4	3	3.5	11	5.2	16	4.9	15	7.3	19
	1972	361	24	6.3	3.7	5.3	1.8	11	6	4	8.0	24	6.4	14	4.6	13	6.3	20
El Toro	1974	15	22	6.7	6.2	4.6	2.4	18	4	2	6.7	22	-	-	-	-	-	-
	1973	355	30	6.7	4.6	5.6	1.8	12	5	4	4.7	20	6.1	16	6.4	19	9.7	30
Escondido	1975	347	36	7.0	3.8	6.1	1.7	12	6	4	8.4	36	5.0	10	5.7	17	8.6	20
Valley Parkway	1974	90	25	8.8	4.7	7.7	1.7	16	7	5	-	-	-	-	-	-	8.8	25
Fontana - Foothill	1974	266	24	7.4	3.7	6.5	1.7	13	7	5	7.3	17	6.7	18	8.2	24	7.8	13
	1973	31	13	5.1	2.0	4.8	1.4	7	5	4	-	-	5.1	13	-	-	-	-
Indio - Oasis St.	1975	354	9	3.5	1.7	3.0	1.8	5	3	2	4.2	9	2.9	8	2.6	7	4.2	9
	1974	362	9	3.3	1.6	2.8	1.8	5	3	2	4.0	9	2.5	7	2.8	6	3.8	7
	1973	363	10	3.9	1.6	3.5	1.6	6	4	3	3.6	5	3.8	8	3.3	10	4.7	10
	1972	357	14	3.6	1.8	3.2	1.7	6	3	2	3.1	11	3.2	14	4.3	10	3.9	8
	1971	241	6	2.4	1.2	2.0	1.8	4	2	1	-	-	1.9	7	2.7	6	2.4	5

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1
POLLUTANT: Nitrogen Dioxide in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
La Habra	1975	348	46	10.9	6.5	9.4	1.7	20	9	7	11.9	46	6.8	12	10.8	29	13.5	41
	1974	350	32	9.9	5.4	8.7	1.7	17	9	6	10.6	32	7.5	17	9.0	21	12.5	33
	1973	356	51	10.3	6.2	8.9	1.7	18	9	6	7.9	35	9.2	30	10.8	33	13.4	51
	1972	359	43	9.5	5.4	8.3	1.6	17	8	6	11.0	43	8.3	23	8.5	20	10.0	42
	1971	343	34	9.4	5.4	8.1	1.7	17	8	6	9.5	34	7.6	20	9.7	22	11.0	33
	1970	349	22	5.9	3.5	5.1	1.8	11	5	3	6.1	17	5.2	11	6.5	22	6.0	22
	1969	263	41	8.1	5.7	6.6	1.9	14	7	4	8.8	41	5.6	14	10.3	31	7.9	[illegible]
	1968	200	47	10.1	5.9	8.6	1.8	17	9	6	10.1	33	8.5	21	10.0	30	12.0	[illegible]
	1967	196	27	7.4	5.3	5.9	2.0	14	6	4	9.6	27	4.8	16	6.8	13	9.8	[illegible]
	1966	296	42	8.7	5.0	7.5	1.8	15	8	6	9.8	42	7.7	16	8.4	16	8.8	[illegible]
	1965	265	37	7.7	5.0	6.4	1.9	14	7	4	10.5	22	6.7	21	6.1	14	8.8	[illegible]
Palm Springs Fire Stn.	1975	20	5	3.7	0.9	3.6	1.3	5	3	3	3.7	5	-	-	-	-	-	-
	1974	363	7	2.5	1.2	2.2	1.7	4	2	1	3.1	6	2.0	5	1.9	4	2.8	7
	1973	362	9	3.3	1.5	2.9	1.7	5	3	2	3.3	6	2.7	8	2.8	6	4.3	9
	1972	354	10	3.1	1.5	2.8	1.7	5	3	2	2.5	6	2.7	8	2.9	7	4.4	10
	1971	216	4	1.9	0.8	1.8	1.6	3	2	1	-	-	2.0	4	1.4	3	2.3	4

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: **Nitrogen Dioxide in Parts per Hundred Million**
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Victorville	1975	363	30	7.7	5.2	6.0	2.2	15	7	4	7.7	21	8.4	30	11.1	29	3.5	8
	1974	353	22	8.9	4.3	7.8	1.8	14	8	6	10.5	22	10.1	22	9.5	22	5.7	18
	1973	[illegible]	13	5.2	2.5	4.6	1.6	9	5	3	-	-	-	-	-	-	5.2	3

POLLUTANT: Nitric Oxide in Parts Per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning	1971	104	7	2.3	1.4	1.9	2.1	4	2	2	3.5	7	2.1	5	2.1	5	-	-
Barstow	1975	357	56	10.3	8.9	7.0	2.7	23	8	4	16.1	56	8.9	30	12.2	49	4.4	25
	1974	343	63	13.7	11.6	8.9	2.9	31	10	4	15.1	63	8.2	41	9.3	30	22.9	50
	1973	92	55	15.9	11.3	11.5	2.5	32	13	7	-	-	-	-	-	-	15.9	55
Chula Vista	1975	355	53	7.8	8.4	4.4	3.0	19	5	2	9.2	38	2.6	10	4.6	15	14.3	53
	1974	85	31	10.4	7.2	8.0	2.2	20	9	4	-	-	-	-	-	-	10.4	31
El Cajon	1975	287	65	14.6	13.9	9.1	2.9	36	9	4	22.7	65	5.7	18	7.6	26	21.9	65
	1974	351	60	10.5	11.3	6.2	2.9	28	6	3	13.3	41	4.3	13	4.1	10	20.5	60
	1973	341	49	8.4	8.6	5.2	2.7	21	4	2	11.1	48	3.3	13	3.4	17	14.9	49
	1972	361	64	10.5	10.4	6.4	2.9	27	7	3	14.5	50	4.8	19	4.0	13	18.6	64

Some data prior to July 1, 1975 reflect an 0.8 factor applied to hourly average concentrations.

BLM DISTRICT 1

POLLUTANT: **Nitric Oxide in Parts per Hundred Million**
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - D ARITH. MEAN	OCT. - D HIGH
Palm Springs	1975	20	16	7.3	4.7	5.7	2.3	14	7	4	7.3	16	-	-	-	-	-	-
Fire Stn.	1974	355	19	2.0	3.2	0.8	3.9	7	0	0	2.9	13	0.2	5	0.3	4	4.4	19
	1973	361	16	1.9	2.9	0.8	3.8	6	0	0	2.8	12	0.4	6	0.2	6	4.0	16
	1972	350	17	1.7	2.8	0.8	3.5	6	1	0	2.6	9	0.4	5	0.3	4	3.6	17
	1971	167	18	1.7	2.3	1.0	2.9	4	1	0	-	-	1.8	18	0.4	3	2.6	9
Victorville	1975	358	61	7.9	7.4	5.7	2.2	16	5	4	11.8	61	4.2	12	6.7	28	9.1	26
	1974	344	56	11.0	9.7	7.4	2.7	25	8	4	13.8	56	8.4	37	5.7	21	16.3	53
	1973	79	38	6.6	5.0	5.3	2.0	11	5	4	-	-	-	-	-	-	6.6	38

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million - Colorimetric Method
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - D ARITH. MEAN	OCT. - D HIGH
Banning	1971	129	12	5.1	2.3	4.6	1.6	9	5	3	6.4	10	5.6	12	5.3	10	2.6	7
Barstow	1975	357	66	14.2	10.8	10.6	2.3	30	11	7	23.1	66	11.0	34	15.0	57	7.8	30
	1974	343	80	20.9	13.6	16.3	2.2	40	18	10	21.5	80	14.7	65	16.7	39	31.1	61
	1973	92	70	22.4	13.5	18.4	2.0	40	19	12	-	-	-	-	-	-	22.4	70

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	HIGH	ANNUAL ARITHMETIC MEAN	ARITHMETIC STD. DEV.	GEOMETRIC MEAN	GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - ARITH MEAN
Chula Vista	1975	355	60	13.C	10.2	9.9	2.1	28	9	6	15.5	60	6.0	16	9.1	27	21.3
	1974	85	46	16.9	9.3	14.3	1.8	29	16	9	-	-	-	-	-	-	16.9
El Cajon	1975	302	78	19.6	15.0	14.8	2.2	43	14	8	27.7	78	9.3	24	12.6	43	29.2
	1974	354	66	14.4	13.0	10.2	2.3	37	9	6	17.3	47	7.0	18	6.9	16	26.4
	1973	341	54	12.1	9.3	9.2	2.1	27	9	5	13.4	51	7.6	21	7.1	24	19.6
	1972	360	71	15.3	11.4	11.8	2.1	33	12	7	20.6	60	10.2	25	7.7	20	22.5
El Toro	1974	15	34	12.7	9.0	9.8	2.2	24	11	5	12.7	34	-	-	-	-	-
	1973	353	41	12.4	7.3	10.4	1.9	22	11	8	12.6	32	9.9	21	9.3	20	17.6
Escondido	1975	344	86	19.4	16.4	13.6	2.4	45	12	7	26.6	86	8.1	24	9.9	45	31.0
Valley Parkway	1974	90	85	28.7	18.6	21.9	2.2	55	29	11	-	-	-	-	-	-	28.7
Fontana -	1975	326	29	10.0	5.2	8.5	1.9	17	10	6	6.8	20	10.0	24	11.7	21	11.6
Foothill	1974	72	26	10.6	5.6	8.8	2.0	17	10	7	-	-	-	-	-	-	10.6
Indio -	1975	365	56	9.4	9.2	5.8	2.8	23	5	3	15.2	44	3.7	15	3.6	13	15.3
Oasis St.	1974	364	46	8.6	9.1	5.0	2.9	22	4	2	12.3	35	3.0	21	3.9	15	15.2
	1973	362	70	9.7	10.5	6.1	2.6	26	5	3	10.0	36	4.9	34	4.1	23	19.7
	1972	353	43	7.4	6.6	5.3	2.3	-6	5	3	9.9	43	4.0	15	5.4	16	10.4
	1971	175	37	8.1	8.7	4.8	2.9	21	4	2	3.0	6	2.5	9	4.2	14	12.4

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
La Habra	1975	296	90	24.4	18.6	18.5	2.1	54	17	10	39.2	90	10.4	26	16.0	57	33.7	86
	1974	346	106	26.4	22.1	19.0	2.3	60	17	10	41.1	106	12.8	52	12.9	34	37.3	79
	1973	356	92	25.3	17.9	20.1	2.0	53	19	12	30.3	82	14.6	35	16.0	65	41.1	92
	1972	354	105	24.1	17.3	19.2	2.0	49	20	11	27.4	63	14.8	32	14.5	42	41.1	105
	1971	341	65	22.0	11.3	19.1	1.8	37	20	13	25.3	64	17.8	45	17.0	31	28.2	65
	1970	327	60	14.4	10.2	11.5	2.0	28	11	7	18.7	60	9.0	23	9.1	25	20.1	53
	1969	237	52	16.1	10.2	13.6	1.8	30	13	9	20.2	52	10.3	23	14.5	41	22.4	52
	1968	281	96	22.2	14.0	18.6	1.8	41	19	12	30.8	96	16.6	33	13.5	30	28.4	58
	1967	186	60	16.4	11.9	12.9	2.0	34	12	8	25.0	60	9.5	28	12.6	37	18.3	43
	1966	317	58	17.2	11.4	14.2	1.9	34	13	9	21.5	56	9.8	19	11.6	30	26.3	58
	1965	264	74	17.9	15.1	12.9	2.3	45	12	7	40.5	62	9.8	46	8.8	27	24.8	74
Palm Springs Fire Stn.	1975	20	20	10.8	5.3	9.5	1.7	18	10	7	10.8	20	-	-	-	-	-	-
	1974	355	22	4.3	3.9	3.0	2.4	10	3	2	5.7	16	2.1	8	2.2	8	7.0	22
	1973	361	21	5.0	3.8	3.8	2.1	11	4	2	5.8	16	2.9	10	3.0	11	8.1	21
	1972	350	21	4.6	3.5	3.6	2.0	9	3	2	4.6	11	2.9	8	3.0	7	7.6	21
	1971	168	19	3.3	2.7	2.5	2.1	7	2	2	-	-	3.4	19	1.5	5	4.4	12

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Oxides of Nitrogen in Parts per Hundred Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Victorville	1975	358	61	13.7	8.8	11.2	2.0	24	12	8	17.4	61	10.3	31	15.2	49	12.1	31
	1974	350	65	17.8	10.6	15.1	1.8	33	15	10	22.6	65	16.5	49	12.7	42	20.4	58
	1973	83	47	10.7	6.0	9.3	1.6	15	9	7	-	-	-	-	-	-	10.4	47

POLLUTANT: Hydrocarbons in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	71	7	3.0	0.9	2.9	1.3	4	3	2	-	-	-	-	-	-	3.0	7
Chula Vista	1975	357	5	2.5	0.7	2.4	1.3	3	2	2	2.7	4	2.1	3	2.2	4	2.9	5
	1974	89	4	2.7	0.6	2.6	1.3	4	3	2	-	-	-	-	-	-	2.7	4
El Cajon	1975	363	13	3.4	1.7	3.1	1.5	6	3	2	4.4	13	2.2	4	2.5	6	4.5	9
	1974	348	12	3.4	1.8	3.1	1.6	6	3	2	4.2	12	2.3	6	2.4	5	4.6	12
	1973	363	22	4.2	2.3	3.7	1.6	7	4	3	5.7	22	3.6	10	2.4	6	5.2	13
	1972	178	21	5.5	2.5	5.0	1.5	9	5	4	-	-	-	-	4.3	11	6.5	21

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1

POLLUTANT: Hydrocarbons in Parts per Million
Daily Maximum Hourly Average Concentrations

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
El Toro	1975	188	8	1.7	0.9	1.5	1.6	3	2	1	1.9	8	1.6	3	1.2	2	-	-
	1974	244	5	2.1	0.7	1.9	1.5	3	2	2	-	-	1.5	3	2.2	3	2.5	5
Escondido	1975	333	8	3.1	1.3	2.8	1.5	5	3	2	3.7	8	2.2	4	2.3	5	4.3	7
	1974	69	6	3.6	1.3	3.4	1.5	5	4	2	-	-	-	-	-	-	3.6	6
Indio	1975	303	7	2.9	1.1	2.7	1.4	4	3	2	3.7	7	2.6	5	2.2	5	3.2	6
	1974	279	11	4.1	1.2	4.0	1.3	6	4	3	4.9	11	3.9	7	3.9	6	3.4	6
	1973	353	12	3.7	1.7	3.4	1.5	6	3	3	3.2	12	2.9	7	3.2	11	5.3	12
	1972	342	10	3.2	1.5	2.9	1.5	5	3	2	4.0	10	3.0	7	3.0	9	3.0	6
	1971	88	9	3.9	1.5	3.6	1.5	6	4	3	-	-	-	-	-	-	3.9	9
La Habra	1975	28	7	3.8	1.9	3.3	1.8	6	4	2	-	-	4.3	7	3.5	6	-	-
Palm Springs	1975	347	12	3.9	2.0	3.2	2.0	6	4	2	2.0	5	2.9	7	5.0	12	5.3	8
	1974	193	7	3.0	1.1	2.8	1.4	4	3	2	4.0	6	2.6	5	3.1	7	3.1	5
Perris	1975	156	9	4.9	1.9	4.5	1.5	8	4	3	6.2	9	3.3	5	-	-	-	-
	1974	81	11	3.3	1.8	2.8	1.9	6	3	2	2.6	5	2.5	3	5.6	11	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: Suspended Particulates by the AISI Method
Daily Maximum 2HR COH Index (COH Values x 10)

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Banning - Allesandro	1975	315	15	5.7	2.1	5.3	1.5	8	5	4	6.3	15	5.6	8	4.7	11	5.9	15
	1974	139	20	6.4	2.9	5.8	1.5	10	6	4	6.3	16	-	-	5.7	12	6.8	20
Barstow	1975	328	34	5.7	3.1	5.1	1.6	9	5	4	7.0	19	5.1	14	4.8	11	5.5	34
	1974	315	28	6.5	3.3	5.9	1.6	10	6	4	6.6	25	5.9	20	7.3	28	6.1	14
	1973	348	42	5.7	3.6	5.0	1.6	10	5	4	5.4	18	5.3	11	7.4	42	4.8	14
	1972	202	23	3.3	2.8	2.3	2.8	6	3	2	2.6	10	3.4	14	1.8	4	5.3	23
	1971	83	14	4.1	2.8	3.3	1.9	8	3	2	-	-	-	-	4.5	13	3.9	14
	1970	118	27	4.9	3.2	4.1	1.8	8	4	3	5.3	27	3.8	10	-	-	-	-
El Centro	1975	253	34	5.2	4.5	3.8	2.2	12	4	2	11.3	34	4.8	12	3.2	14	3.7	22
	1974	239	37	4.4	5.3	2.6	2.9	12	2	1	0.9	3	4.5	18	3.8	17	12.6	37
Hemet State St.	1975	322	36	6.9	3.5	6.3	1.5	11	6	5	8.0	36	5.4	14	5.9	16	8.7	17
	1974	60	17	6.5	2.3	6.2	1.4	9	6	5	-	-	-	-	5.9	17	7.1	12
Indio - Oasis St.	1975	365	40	7.8	4.5	7.0	1.6	12	7	5	10.1	37	6.3	20	5.9	14	8.9	40
	1974	364	21	6.5	2.9	6.0	1.5	10	6	4	8.1	21	5.2	9	5.2	12	7.7	17
	1973	338	17	6.6	2.8	6.0	1.6	10	6	5	5.6	17	6.9	17	6.0	13	7.3	16
La Habra	1975	340	33	8.7	6.2	6.8	2.0	17	7	4	13.9	33	4.4	11	5.7	17	11.0	28
	1974	182	28	5.8	6.0	3.8	2.5	15	4	2	-	-	-	-	2.7	11	8.9	28

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: Suspended Particulates by the AISI Method
Daily Maximum 2 HR COH Index (COH Values x 10)

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD.DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD.DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	75%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Needles -	1973	152	16	3.3	2.1	2.8	1.8	6	3	2	2.8	16	4.1	10	-	-	-	-
High School	1972	190	14	2.1	1.8	1.6	2.1	4	2	1	1.2	2	1.1	2	-	-	3.3	14
Palm Springs Fire Stn.	1975	50	16	5.6	2.6	5.2	1.5	8	5	4	-	-	-	-	-	-	5.6	16
Perris	1975	224	20	6.8	2.4	6.4	1.4	10	7	5	-	-	6.3	10	7.0	20	7.0	15
Victorville	1975	365	27	5.7	2.9	5.2	1.6	9	5	4	6.9	27	4.6	12	5.6	14	5.7	10
	1974	342	24	6.3	2.8	5.7	1.5	10	6	4	5.4	24	5.0	12	6.5	16	8.6	16
	1973	296	34	6.1	3.5	5.4	1.6	9	6	4	6.5	34	5.3	14	6.7	23	5.5	15
	1972	340	25	6.1	3.0	5.4	1.7	10	6	4	6.7	25	4.6	10	6.5	13	6.7	12
	1971	190	18	6.0	3.2	5.2	1.7	10	5	4	-	-	5.6	9	4.9	12	7.3	18
	1970	112	31	6.4	4.8	5.1	1.9	14	5	4	6.6	31	5.3	9	-	-	-	-
	1969	109	12	5.3	2.2	4.9	1.6	8	5	4	-	-	5.3	12	5.4	12	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: Suspended Particulates by the HI-VOL Method
Micrograms per Cubic Meter

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	80%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - ARITH. MEAN
Banning - Allesandro	1975	48	148	63.4	32.3	54.7	1.8	110	60	31	-	-	-	-	-	-	-
	1974	37	238	90.6	51.6	76.4	1.8	164	83	44	-	-	-	-	-	-	-
Calexico - Fire Stn.	1975	51	535	237.8	89.2	220.4	1.5	352	229	166	-	-	-	-	-	-	-
	1974	56	380	216.4	74.4	204.5	1.4	322	196	145	-	-	-	-	-	-	-
	1973	21	700	231.6	147.3	196.7	1.8	380	224	134	-	-	-	-	-	-	-
Chula Vista	1975	59	122	69.4	23.5	65.1	1.5	105	71	49	-	-	-	-	-	-	-
	1974	21	140	82.0	28.4	76.6	1.5	113	81	59	-	-	-	-	-	-	-
El Centro	1975	59	1358	171.5	169.3	145.0	1.6	273	139	103	-	-	-	-	-	-	-
	1974	54	322	136.0	48.7	127.6	1.5	180	130	100	-	-	-	-	-	-	-
	1973	22	215	119.1	44.5	110.8	1.5	177	125	79	-	-	-	-	-	-	-
El Cajon (No data 1972)	1975	57	199	90.9	32.1	85.4	1.4	143	86	64	-	-	-	-	-	-	-
	1974	48	190	91.4	34.7	85.1	1.5	140	80	63	-	-	-	-	-	-	-
	1973	59	208	110.7	38.0	104.3	1.4	165	107	79	-	-	-	-	-	-	-
	1971	45	210	96.0	39.9	88.6	1.5	155	90	64	-	-	-	-	-	-	-
	1970	27	233	93.6	43.2	99.4	1.5	155	84	66	-	-	-	-	-	-	-
	1969	23	147	92.3	31.0	84.8	1.5	139	92	72	-	-	-	-	-	-	-
	1968	24	155	86.0	27.9	94.6	1.4	122	76	68	-	-	-	-	-	-	-
	1967	25	162	93.7	28.8	89.3	1.4	124	89	73	-	-	-	-	-	-	-
	1966	23	148	96.8	21.3	82.1	1.2	125	92	76	-	-	-	-	-	-	-
	1965	24	165	92.1	37.1	86.1	1.5	156	89	62	-	-	-	-	-	-	-
	1964	22	220	106.3	40.4	85.6	1.5	164	107	79	-	-	-	-	-	-	-
	1963	21	148	93.1	29.3	88.7	1.4	142	90	69	-	-	-	-	-	-	-

BLM DISTRICT 1

POLLUTANT: Suspended Particulates by the HI-VOL Method
Micrograms per Cubic Meter

STATION	YEAR	NO. OF OBS.	ANNUAL								QUARTERLY							
			HIGH	ARITHMETIC		GEOMETRIC		CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS			JAN. - MAR.		APR. - JUN.		JUL. - SEPT.		OCT. - DEC.	
				MEAN	STD.DEV.	MEAN	STD.DEV.	10%	50%	80%	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH	ARITH. MEAN	HIGH
El Toro	1975	35	124	64.9	28.3	58.3	1.6	114	61	44	-	-	-	-	-	-	-	-
	1974	75	188	77.7	36.1	69.2	1.7	140	70	51	-	-	-	-	-	-	-	-
	1973	75	217	83.9	38.4	75.0	1.7	124	84	50	-	-	-	-	-	-	-	-
Escondido Valley Parkway	1975	60	176	85.2	40.5	70.8	2.1	137	82	54	-	-	-	-	-	-	-	-
	1974	31	208	97.6	34.2	92.1	1.4	140	90	78	-	-	-	-	-	-	-	-
Indio - Casis St.	1975	59	659	150.5	88.6	135.2	1.5	236	129	91	-	-	-	-	-	-	-	-
	1974	51	450	134.6	70.0	120.0	1.6	216	128	81	-	-	-	-	-	-	-	-
	1973	58	1173	148.5	162.2	114.9	2.0	227	112	77	-	-	-	-	-	-	-	-
	1972	70	488	150.7	95.8	129.3	1.7	262	129	87	-	-	-	-	-	-	-	-
	1971	53	588	187.6	116.5	156.1	1.9	326	165	96	-	-	-	-	-	-	-	-
	1970	45	386	151.6	82.4	127.6	1.9	280	142	85	-	-	-	-	-	-	-	-
La Habra	1975	60	220	120.3	45.0	111.0	1.5	186	121	79	-	-	-	-	-	-	-	-
	1974	82	273	127.5	53.7	116.2	1.6	220	117	81	-	-	-	-	-	-	-	-
	1973	88	270	125.1	47.4	116.6	1.5	189	122	80	-	-	-	-	-	-	-	-
	1972	88	352	132.4	61.5	120.2	1.6	213	121	83	-	-	-	-	-	-	-	-
	1971	82	365	126.2	63.3	113.7	1.6	178	112	82	-	-	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

BLM DISTRICT 1
POLLUTANT: Suspended Particulates by the HI-VOL Method
Micrograms per Cubic Meter

STATION	YEAR	NO. OF OBS.	ANNUAL HIGH	ANNUAL ARITHMETIC MEAN	ANNUAL ARITHMETIC STD. DEV.	ANNUAL GEOMETRIC MEAN	ANNUAL GEOMETRIC STD. DEV.	CONC. EQUALED OR EXCEEDED BY STATED % OF OBSERVATIONS 10%	50%	80%	QUARTERLY JAN. - MAR. ARITH. MEAN	JAN. - MAR. HIGH	APR. - JUN. ARITH. MEAN	APR. - JUN. HIGH	JUL. - SEPT. ARITH. MEAN	JUL. - SEPT. HIGH	OCT. - DEC. ARITH. MEAN	OCT. - DEC. HIGH
Palm Springs	1975	60	386	65.5	49.8	56.2	1.7	97	58	40	-	-	-	-	-	-	-	-
Fire Stn.	1974	44	301	67.4	47.3	55.8	1.9	98	60	35	-	-	-	-	-	-	-	-
(No data 1973, 1972)	1971	29	271	106.1	71.4	84.2	2.1	236	89	51	-	-	-	-	-	-	-	-
Santa Barbara State St.	1975	56	125	66.7	22.9	62.6	1.5	95	63	51	-	-	-	-	-	-	-	-
	1974	55	132	69.5	18.6	67.1	1.3	91	68	56	-	-	-	-	-	-	-	-
	1973	39	117	59.6	20.9	55.9	1.5	93	59	42	-	-	-	-	-	-	-	-
	1972	50	126	73.2	21.3	70.0	1.4	102	72	55	-	-	-	-	-	-	-	-

Some data prior to July 1, 1975 reflect an 0.8 factor applied to average hourly concentrations.

APPENDIX F

1976 - EMISSIONS DATA FOR

THE RIVERSIDE DISTRICT POINT SOURCES

COUNTY: IMPERIAL CO.

AQCR: SOUTHEAST DESERT (033)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
BATLEY-JANSS BRAWLEY		80	12.0	250	-	-	786	0	41	1	0
		-	-	77	-	-					
FRESNO PAVING CO. FRESNO		-	-	-	-	-	131	0	0	0	0
HOLLY SUGAR CO. BRAWLEY	01	59	10.0	-	-	-					
	02	59	9.0	-	-	-					
	03	59	4.8	-	-	-					
	04	59	4.0	-	-	-					
	05	-	-	-	-	-					
	06	-	-	77	-	-	100	9	149	5	1
HOLTVILLE ALFALFA MILLS HOLTVILLE	01	20	3.5	236	-	16800					
	02	20	2.5	121	-	8420	249	0	20	1	0
IMPERIAL IRRIGATION DISTRICT, EL CENTRO	01	99	9.0	121	-	106000					
	02	99	9.0	335	-	126000					
	03	99	9.8	321	-	182800					
	04	107	9.0	269	-	237000	51	423	2807	66	6
UNITED ALFALFA EL CENTRO	01	24	3.0	212	-	40,000					
	02	24	3.0	212	-	40,000					
	03	24	3.0	212	-	40,000					
	04	24	3.0	212	-	40,000					
	05	24	-	77	-	-	1697	1	40	1	0
U. S. GYPSUM PLASTER CITY		-	-	-	-	-	1050	1	131	5	1
VALLEY NITROGEN EL CENTRO	01	165	5.0	130	-	360000					
	02	75	6.0	320	-	70000					
	03	75	6.0	320	-	70000	29	1	411	17	19
	04	35	4.2	340	-	34000					
CALEXICO CITY DUMP CALEXICO		-	-	-	-	-	44	3	16	115	233
BRAWLEY OPEN BURNING DUMP		-	-	-	-	-	73	5	27	192	388
IMPERIAL IRRIGATION DISTRICT, BRAWLEY		-	-	-	-	-	1220	62	703	74	55

COUNTY: ORANGE

AQCR: METRO LA (024)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
S. CAL. EDISON HUNTINGTON BEACH	01	203	17.3	275	-	601500					
	02	203	17.3	275	-	601500					
	03	203	17.3	250	-	603500					
	04	203	17.3	250	-	603500	656	4680	4000	600	4
STD. PRESSED STEEL SANTA ANNA		-	-	50	-	-	0	0	0	240	0
AERO CHEM., INC. ORANGE		-	-	-	-	-	0	0	0	154	0
STEELCASE INC. TUSTIN		-	-	-	-	-	0	0	0	126	0
VALLEY INDUSTRIAL LAUNDRY, ANAHEIM		-	-	-	-	-	0	0	0	148	0
XEROX CORPORATION IRVINE		-	-	-	-	-	2	0	0	489	0
CERTRON CORP. ANAHEIM	01	-	-	200	-	-					
	02	-	-	200	-	-					
	03	-	-	200	-	-					
	04	-	-	200	-	-	0	0	0	340	0
COLLIER CHEMICAL BREA		-	-	50	-	-	79	0	113	0	0
CRESTLITE AGGREGATES SAN CLEMENTE		-	-	-	-	-	62	342	43	8	0
CROWN CORK & SEAL FULLERTON		-	-	-	-	-	0	0	0	228	0
GENERAL CRUDE NEWPORT BEACH	01	-	-	200	-	-					
	02	-	-	200	-	-					
	03	-	-	200	-	-					
	04	-	-	200	-	-	0	1460	0	0	0
KERR GLASS SANTA ANNA		-	-	500	-	-	43	0	160	6	0

COUNTY: RIVERSIDE

AQCR: METRO L.A. (024)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
AMAX ALUMINUM RIVERSIDE	01	35	2.7	1500	-	5718					
	02	60	3.2	1500	-	8476					
	03	35	2.5	1500	-	8476					
	04	35	2.5	1500	-	8476					
	05	35	2.8	1500	-	7928					
	06	40	2.8	1500	-	6987					
	07	45	2.1	500	-	13542					
	08	40	1.5	500	-	1548					
	09	40	2.5	1100	-	9820					
	10	40	2.5	1100	-	9820					
	11	35	2.5	1500	-	7270					
	12	35	2.0	1500	-	4333					
	13	40	3.2	1000	-	1448					
	14	40	3.2	1000	-	1447	116	0	0	0	0
EVANS PRODUCTS CORONA		-	-	-	-	-	0	0	0	305	0
CELANESE COATINGS RIVERSIDE		-	-	-	-	-	0	0	0	1032	0
E. L. YEAGER CORONA		26	6.0	-	-	-	120	0	0	0	0
LISTON BRICK CORONA		-	-	-	-	-	122	0	0	0	0
MINNESOTA MINING AND MANUFACTURING, CORONA	01	300	2.5	70	-	6000					
	02	100	4.5	130	-	33400					
	03	85	2.0	165	-	2186					
	04	100	4.0	200	-	25210					
	05	100	3.2	315	-	15900					
	06	85	2.0	120	-	3255					
	07	60	2.6	210	-	28400					
	08	70	3.0	360	-	13600					
	09	70	1.5	120	-	6000					
	10	100	4.2	70	-	32733					
	11	130	3.0	120	-	16700					
	12	80	2.0	70	-	6300					
	13	60	2.3	70	-	8400	196	0	0	0	0

COUNTY: RIVERSIDE

AQCR: METRO L.A. (024)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
RIVERSIDE	01	17	1.7	430	-	-					
CEMENT	02	-	-	550	-	296000					
RIVERSIDE	03	-	-	550	-	296000					
	04	-	-	550	-	56000					
	05	-	-	550	-	56000					
	06	-	-	180	-	35000					
	07	-	-	180	-	35000					
	08	-	-	400	-	14000					
	09	-	-	400	-	14000					
	10	-	-	70	-	29300					
	11	-	-	180	-	51000					
	12	-	-	180	-	51000					
	13	-	-	180	-	32000					
	14	-	-	180	-	26000					
	15	-	-	180	-	12000	2079	4710	1079	0	0
INTERPACE CORP.	01	-	-	77	-	-					
CORONA	02	-	-	77	-	-					
	03	32	2.3	-	-	-					
	04	32	4.5	-	-	-					
	05	20	4.5	-	-	-					
	06	18	0.6	-	-	-	11550	0	0	0	0
LEMON PRODUCTS-SUNKIST CORONA		90	4.0	-	-	-	9	0	114	1	8
ALCAN	01	49	4.5	80	-	20000					
WESTERN	02	34	2.0	1100	-	6000					
RIVERSIDE	03	32	2.3	1100	-	10000					
	04	24	2.5	-	-	-					
	05	30	3.5	80	-	11500					
	06	60	3.0	-	-	-					
	07	60	2.5	-	-	-					
	08	49	4.0	100	-	60000					
	09	27	1.5	-	-	-					
	10	60	2.5	-	-	-					
	11	27	1.5	100	-	8800					
	12	40	2.0	-	-	8000					
	13	30	1.5	-	-	3000					
	14	30	1.0	80	-	20000					
	15	48	2.5	-	-	2200	107	1	17	104	3
KAISER STEEL	01	-	-	77	-	-					
CORP.	02	-	-	77	-	-					
EAGLE MTN.	03	-	-	77	-	-					
(AQCR: (033)	04	-	-	77	-	-					
SOUTHEAST	05	-	-	77	-	-					
	06	-	-	77	-	-					
DESERT)	07	1201	3.0	350	-	712200	518	15900	2580	0	0

COUNTY: SAN BERNARDINO

AQCR: METRO L.A. (024)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
NATIONAL CAN	01	25	4.0	870	-	23130					
ETIWANDA	02	25	4.0	800	-	17875					
	03	25	3.7	675	-	17290					
	04	25	2.7	750	-	8790					
	05	25	3.0	750	-	8255					
	06	25	1.7	675	-	2741					
	07	25	1.7	900	-	5209					
	08	25	4.0	510	-	7716					
	09	25	3.2	790	-	18335	39	0	25	236	233
S. PACIFIC	01	-	-	77	-	-					
PIPELINES	02	-	-	77	-	-					
BLOOMINGTON	03	-	-	77	-	-					
	04	-	-	77	-	-					
	05	-	-	77	-	-					
	06	-	-	77	-	-					
	07	-	-	77	-	-					
	08	-	-	77	-	-					
	09	-	-	77	-	-					
	10	-	-	77	-	-					
	11	-	-	77	-	-					
	12	-	-	77	-	-	0	0	0	177	0
KAISER STEEL,	01	225	16.0	260	-	83000					
FONTANA	02	225	16.0	260	-	83000					
	03	225	16.0	260	-	83000					
	04	225	16.0	260	-	83000					
	05	225	16.0	260	-	83000					
	06	250	-	260	-	166000					
	07	300	13.8	250	-	291000					
	08	-	-	-	-	59000					
	09	-	-	-	-	59000					
	10	-	-	-	-	59000					
	11	-	-	-	-	59000					
	12	175	-	500	-	50000					
	13	175	-	500	-	50000					
	14	175	-	500	-	50000					
	15	175	-	500	-	50000					
	16	175	-	500	-	50000					
	17	175	-	500	-	50000					
	18	175	-	500	-	50000					
	19	175	-	500	-	50000					
	20	150	9.0	285	-	191000					
	21	150	9.0	285	-	191000					
	22	150	9.0	285	-	191000					
	23	50	17.5	180	-	360000					
	24	50	17.5	180	-	360000					
	25	50	17.5	180	-	300000					
	26	-	-	-	-	85000					
	27	-	-	-	-	85000					
	28	-	-	-	-	85000					

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
KAISER STEEL,	29	-	-	-	-	87000					
FONTANA	30	-	-	-	-	87000					
(CONT.)	31	-	-	-	-	30400					
	32	-	-	-	-	51300					
	33	-	-	-	-	51300					
	34	-	-	-	-	51300					
	35	-	-	-	-	51300	1190	7658	4516	103	0
MINERAL WOOL											
INSULATIONS		24	4.3	155	-	-	63	150	25	13	2900
S. CAL.	01	70	8.3	334	-	10800					
EDISON	02	70	8.3	334	-	10800					
HIGROVE	03	99	10.0	312	-	150000					
COLTON	04	99	10.0	312	-	150000	4	24	110	4	0
S. CAL.	01	176	12.0	265	-	384000					
EDISON	02	176	12.0	265	-	384000					
ETIWANDA	03	199	14.0	260	-	861000					
	04	199	14.0	260	-	861000	788	2831	13736	652	8
GRIFFIN WHEEL	01	-	-	-	-	65000					
COLTON							14	0	0	0	312
	02	-	-	-	-	65000					
WHITEMAN STEEL MILLS FONTANA		-	-	-	-	5222	15	0	11	0	124
AMERON STEEL	01	-	-	150	-	36715					
PRODUCTS	02	-	-	140	-	63057					
ETIWANDA	03	-	-	145	-	64880	31	7	76	4	369
FREIGHTLINER	01	-	4.0	77	-	76626					
CO.	02	-	1.3	125	-	1345					
CHINO	03	-	4.0	77	-	21719					
	04	-	4.0	77	-	25600					
	05	-	1.3	190	-	2956	0	0	0	171	0
CAL. PORTLAND	01	90	11.5	395	-	275000					
CEMENT	02	90	11.5	360	-	336000					
COLTON	03	50	4.7	310	-	36100					
	04	30	4.6	325	-	55543					
	05	30	4.6	278	-	44140					
	06	30	4.6	210	-	50693	97	236	11317	37	172

COUNTY: SAN BERNARDINO

AQCR: SOUTHEAST DESERT (033)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
KAISER CEMENT	01	200	9.0	290	-	92563					
LUCERNE VALLEY	02	200	9.0	313	-	81352					
	03	200	11.0	343	-	150904					
	04	30	5.5	170	-	15836					
	05	30	5.5	194	-	16387					
	06	30	7.0	244	-	15570					
							181	1740	5122	0	91
KERR MCGEE CORP. TRONA	01	-	-	-	-	6000					
	02	-	-	-	-	9000					
	03	-	-	-	-	30000					
	04	-	-	-	-	26500					
	05	-	-	75	-	2760					
	06	-	-	80	-	9200					
	07	-	1.6	80	-	9203					
	08	40	4.0	264	-	40000					
	09	18	2.6	130	-	15650					
	10	-	-	-	-	10000					
	11	-	2.5	80	-	10000					
	12	-	2.5	53	-	30000					
	13	-	-	150	-	7650					
	14	25	5.0	228	-	70000					
	15	-	3.0	150	-	24330					
	16	-	2.0	77	-	11370					
	17	-	-	-	-	20000					
	18	-	-	-	-	24000					
	19	7	1.8	79	-	4000					
	20	-	2.8	70	-	10800					
	21	-	7.6	80	-	16000					
	22	5	2.2	95	-	16000					
	23	-	3.1	110	-	16650					
	24	3	1.6	95	-	7200					
	25	-	-	77	-	11000					
	26	-	5.0	228	-	36400					
	27	-	-	70	-	25000					
							945	433	397	0	454
RIVERSIDE DIV. AMERICAN CEMENT ORO GRANDE	01	65	-	-	-	-					
	02	-	-	415	-	450000					
	03	-	-	415	-	450000					
	04	-	-	415	-	450000					
	05	-	-	415	-	450000					
	06	65	-	-	-	-					
	07	40	3.0	211	-	23740					
	08	40	3.0	299	-	21743					
	09	40	3.0	197	-	21904					
	10	40	3.0	381	-	22470					
	11	40	3.0	189	-	24107					
	12	40	-	200	-	26935					
							793	0	612	0	0

COUNTY: SAN BERNARDINO

AQCR: SOUTHEAST DESERT (033)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
S. CAL. EDISON DAGGETT	01	134	10.0	260	-	149200	77	53	196[illegible]	195	2
	02	-	-	-	-	-					
SOUTHWESTERN PORTLAND CEMENT, BLK. MTN.	01	-	-	77	-	27619	103	0	301	0	0
	02	25	-	-	-	-					
SOUTHEASTERN PORTLAND CEMENT, VICTORVILLE	01	-	-	200	-	12224	617	0	5404	0	64
	02	-	-	180	-	19442					
	03	-	-	265	-	12954					
	04	-	-	345	-	13780					
STAUFFER CHEMICAL WEST END	01	-	-	-	-	9900	162	28	917	91	3
	02	-	-	-	-	4700					
	03	-	-	-	-	4600					
	04	-	-	-	-	6700					
	05	-	-	-	-	7400					
	06	-	-	-	-	7200					
	07	-	-	-	-	9800					
	08	-	-	-	-	17000					
	09	-	-	-	-	5000					
	10	-	-	-	-	21800					
	11	-	-	-	-	8700					
	12	-	-	-	-	11400					
	13	-	-	-	-	-					
	14	-	-	-	-	-					
	15	-	-	-	-	-					
	16	-	-	-	-	-					
	17	-	-	-	-	-					
	18	-	-	-	-	-					
SOUTH. CAL. EDISON LOMA LINDA	01	130	10.0	285	-	10810	94	464	308	14	28
	02	-	-	-	-	-					
JPL GOLDSTONE TRACKING STATION, BARSTOW		-	-	-	-	-	4	14	444	4	11
PFIZER MINERALS, PIGMENTS AND METALS, LUCERNE VALLEY	01	-	-	-	-	11000	322	0	0	0	0
	02	-	-	-	-	-					
	03	-	-	-	-	15750					
	04	-	-	-	-	17000					
	05	-	-	-	-	5000					
	06	-	-	-	-	3000					
	07	-	-	-	-	4000					
	08	-	-	-	-	2500					
	09	-	-	-	-	2500					
	10	-	-	-	-	2500					
	11	-	-	-	-	12000					

COUNTY: SAN BERNARDINO

AQCR: SOUTHEAST DESERT (033)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	PPS	ACFM	TSP	SO_x	NO_x	HC	CO
MOLYBDENNUM CO. OF AMERICAN NIPTON	01	-	-	-	-	60000	187	43	68	4	2
	02	-	-	-	-	3000					
GEORGE AFB, VICTORVILLE	01	-	-	-	-	-					
	02	-	-	-	-	-					
	03	-	-	-	-	-					
	04	-	-	-	-	-					
	05	-	-	-	-	-					
	06	-	-	-	-	-					
	07	-	-	-	-	-					
	08	-	-	-	-	-					
	09	-	-	60	-	-					
	10	-	-	60	-	-					
	11	-	-	60	-	-	3	1	8	131	2

COUNTY: SAN DIEGO

AQCR: SAN DIEGO (029)

SOURCE	Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	TSP	SO_x	NO_x	HC	CO
U. S. NAVAL PETROLEUM STG. SAN DIEGO (POINT LOMA)	-	-	77	-	-	0	0	0	1900	0
SAN DEIGO GAS & ELEC., NAVAL TR. CENTER, SAN DIEGO	-	-	77	-	-	8	23	137	20	0
UNION OIL MURPHY CANYON RD. SAN DIEGO	-	-	77	-	-	0	0	0	281	0
SUPPLY CENTER SAN DIEGO	-	-	-	-	-	0	0	0	209	0
STANDARD OIL SAN DIEGO	-	-	77	-	-	0	0	0	1058	0
U. S. NAVAL AIR STATION MIRAMAR	-	-	77	-	-	0	0	0	900	0
U. S. NAVAL AIR STATION NORTH ISLAND, SAN DIEGO	-	-	77	-	-	0	0	0	960	0

COUNTY: SAN DIEGO

AQCR: SAN DIEGO (029)

SOURCE	Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
	Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
SAN DIEGO PORT 10th AVE. MARINE TERMINAL	-	-	77	-	-	469	0	0	0	0
SAN DIEGO GAS & ELEC. SAN DIEGO	-	-	-	-	-	26	57	316	0	0
ESCONDIDO POULTRY ESCONDIDO	-	-	77	-	-	253	0	0	0	0
SAN DIEGO BULK TERMINAL SAN DIEGO	-	-	77	-	-	450	0	0	0	0
ASPHALT INC. LAKESIDE	-	-	77	-	-	147	0	0	0	0
DALEY CORP. MURPHY CYN. PLANT	-	-	77	-	-	410	0	0	0	0
MCCOYS READY MIX SAN DIEGO	-	-	80	-	-	3993	2	10	4	2
FENTON METALS OTAY	-	-	77	-	-	120	0	0	0	0
FENTON METALS SAN DIEGO	-	-	77	-	-	592	0	0	0	0
FENTON METALS CARROL CANYON, S.D.	-	-	77	-	-	325	0	0	0	0
FENTON METALS FRIARS RD. SAN DIEGO	-	-	77	-	-	245	0	0	0	0
SAN DIEGO GAS & ELEC. BAY BLVD. CHULA VISTA	-	-	-	-	-	0	0	0	121	0
MISSION VALLEY BRICK SAN DIEGO	-	-	77	-	-	204	0	4	0	0

COUNTY: SAN DIEGO

AQCR: SAN DIEGO (029)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F^{O}	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
NELSON AND SLOAN SAN DIEGO		-	-	70	-	-	3270	0	0	0	0
NELSON AND SLOAN OTAY		-	-	70	-	-	536	0	0	0	0
CONROCK CARROL CANYON, S.D.		-	-	77	-	-	226	0	0	0	0
CONROCK MISSION VALLEY		-	-	77	-	-	1460	0	0	0	0
CONROCK PALA INDIAN RES. PALA		-	-	77	-	-	253	0	0	0	0
SOUTH COAST ASPHALT CARLSBAD		-	-	77	-	-	429	0	0	0	0
TRI-WAY MATERIALS LAKESIDE		-	-	77	-	-	112	0	0	0	0
OIL CO. STORAGE, SAN DIEGO		-	-	-	-	-	0	0	0	2220	0
SAN DIEGO GAS & ELECTRIC, SOUTH BAY (BAY BLVD.) CHULA VISTA		-	-	-	-	-	643	3064	13100	127	374
SAN DIEGO GAS & ELECTRIC; CARLSBAD (ENCINA PLANT)		173	12.0	324	-	325,200	114	553	2050	24	58
MONARCH SMELTING IMPERIAL BEACH		-	-	-	-	-	560	18	3510	1170	12
AIR STATION NORTH ISLAND	01	48	3.7	600	-	-					
	02	48	3.7	600	-	-					
	03	48	3.7	600	-	-					
	04	48	3.7	600	-	-					
	05	48	3.7	600	-	-					
	06	48	3.7	600	-	-					
	07	48	3.7	600	-	-	90	528	225	126	18

COUNTY: SAN DIEGO

AQCR: SAN DIEGO (029)

SOURCE		Stack Height	Inside Stack Diameter	Exit Temp.	Exit Velocity	Vol. Flow Rate	Annual Tonnage Emission				
		Ft.	Ft.	F°	FPS	ACFM	TSP	SO_x	NO_x	HC	CO
SAN DIEGO GAS	01	175	7.1	305	-	28,600					
& ELECTRIC	02	175	7.1	305	-	28,600					
STATION B.,	03	175	7.1	305	-	28,600					
SAN DIEGO	04	175	7.1	305	-	28,600					
	05	175	7.1	305	-	28,600					
	06	175	7.1	305	-	28,600					
	07	175	7.1	305	-	28,600					
	08	175	9.0	370	-	51,800					
	09	175	9.0	370	-	51,800					
	10	175	9.0	370	-	51,800					
	11	-	-	77	-	-	190	442	796	95	0
J. HARRIS SIM CO. SAN CLEMENTE		-	-	-	-	-	127	0	0	0	0
SAN DIEGO GAS	01	124	8.5	386	-	50700					
AND ELECTRIC	02	124	8.5	386	-	50700					
SILVER GATE ST.	03	116	13.5	395	-	79000					
SAN DIEGO	04	116	13.5	395	-	79000					
	05	116	13.5	338	-	108000					
	06	116	13.5	338	-	138000					
	07	-	-	77	-	-	719	1878	2538	243	6
CANYON ROCK SAN DIEGO		-	-	77	-	-	562	0	0	0	0
ATLANTIC RICHFIELD CO. SAN DIEGO		-	-	77	-	-	0	0	0	889	0
SAN DIEGO GAS & ELECTRIC NATIONAL CITY		-	-	77	-	-	0	0	0	476	0
SAN DIEGO PIPELINE TANKERFARM SAN DIEGO		-	-	77	-	-	0	0	0	2653	0

APPENDIX G

1976 - EMISSIONS DATA FOR

THE RIVERSIDE DISTRICT AREA SOURCES

COUNTY: IMPERIAL COUNTY

SOURCE:	TSP	SO_x	NO_x	HC	CO
FUEL COMBUSTION (EXTERNAL) - TOTAL	40	42	252	16	36
Residential Fuel - Total	12	2	54	9	17
Distillate Oil	0	1	0	0	0
Natural Gas	6	0	52	5	13
Wood	5	0	2	4	4
Industrial Fuel - Total	16	21	141	3	13
Residual Oil	10	21	26	1	2
Natural Gas	6	0	115	2	11
Comm-Institutional Fuel - Total	12	20	56	3	6
Residual Oil	6	13	16	1	1
Distillate Oil	3	6	13	1	1
Natural Gas	2	0	26	2	4
SOLID WASTE DISPOSAL - TOTAL	174	7	29	423	1248
Residential - Total	164	5	25	406	1201
On Site Incineration	106	2	3	298	895
Open Burning	58	4	22	108	306
Commercial-Institutional - Total	6	1	2	10	28
On Site Incineration	2	1	1	1	2
Open Burning	5	0	2	9	26
Industrial - Total	4	1	2	7	19
On Site Incineration	1	0	0	1	2
Open Burning	3	0	1	6	17
TRANSPORTATION - TOTAL	1174	401	5934	11091	57340
Land Vehicles					
Gasoline - Total	477	139	4312	6805	48280
Light Vehicles	425	119	3732	5614	37600
Heavy Vehicles	40	13	441	798	6228
Off Highway	12	6	139	393	4452
Diesel - Total	105	131	1237	182	590
Heavy Vehicles	34	44	384	51	331
Off Highway	54	48	594	65	167
Rail	18	40	259	66	91

COUNTY: IMPERIAL COUNTY

SOURCE:	TSP	SO_x	NO_x	HC	CO
Aircraft - Total	591	116	322	1433	1742
Military	581	111	279	1352	1451
Civil	8	2	7	34	194
Commercial	3	4	36	47	97
Vessels - Total	0	14	62	2116	6728
Gasoline	0	14	62	2116	6728
Gas Handling Evap. Loss	0	0	0	555	0
MISCELLANEOUS - TOTAL	0	0	0	1739	0
Solvent Evaporation Loss	0	0	0	1739	0
GRAND TOTAL FOR IMPERIAL COUNTY	1389	450	6214	13269	58624

COUNTY: ORANGE

SOURCE:	TSP	SO_x	NO_x	HC	CO
FUEL COMBUSTION (EXTERNAL) - TOTAL					
Residential Fuel - Total	246	21	1848	196	474
Bituminous Coal	0	2	0	0	2
Distillate Oil	1	4	2	0	1
Natural Gas	230	14	1841	184	460
Wood	14	1	6	11	11
Industrial Fuel - Total	438	682	2866	76	247
Residual Oil	326	676	850	42	57
Natural Gas	112	7	2016	34	190
Comm-Institutional - Total	326	500	1733	103	213
Residual Oil	160	333	418	21	28
Distillate Oil	85	162	338	17	23
Natural Gas	81	5	976	65	163
SOLID WASTE DISPOSAL - TOTAL	3378	132	572	8151	24022
Residential - Total	3124	100	476	7752	22912
On Site Incineration	2022	32	63	5687	17060
Open Burning	1102	69	413	2066	5852
Comm-Institutional - Total	124	15	46	196	547
On Site Incineration	28	9	11	18	41
Open Burning	95	6	36	179	506
Industrial - Total	131	17	49	203	564
On Site Incineration	34	11	13	22	49
Open Burning	97	6	36	182	514
TRANSPORTATION - TOTAL	8784	4245	69680	103143	671497
Land Vehicles					
Gasoline - Total	5604	1604	47867	86251	647489
Light Vehicles	5077	1421	42369	74108	543623
Heavy Vehicles	483	159	4989	10709	87617
Off Highway	45	23	508	1433	16249
Diesel - Total	1777	2325	20587	3371	12280
Heavy Vehicles	653	831	6820	1110	8037
Off Highway	772	691	8553	936	2411
Rail	352	803	5213	1324	1832
Aircraft - Total	1403	311	1202	4200	9087
Military	1176	225	565	2736	2937
Civil	193	38	175	857	4897
Commercial	33	48	462	607	1253

COUNTY: ORANGE

SOURCE:	TSP	SO_x	NO_x	HC	CO
Vessels - Total	0	6	24	831	2642
Gasoline	0	6	24	831	2642
Gas Handling Evap. Loss	0	0	0	8490	0
MISCELLANEOUS - TOTAL	131	0	31	88251	1082
Forest Fires	131	0	31	186	1082
Solvent Evaporation Loss	0	0	0	88065	0
GRAND TOTAL FOR ORANGE COUNTY	13303	5580	76729	199920	697536

COUNTY: RIVERSIDE

SOURCE:	TSP	SO_x	NO_x	HC	CO
FUEL COMBUSTION (EXTERNAL) - TOTAL	618	606	3838	288	665
Residential Fuel - Total	238	32	1527	188	419
Bituminous Coal	1	5	0	1	6
Distillate Oil	4	13	5	1	2
Natural Gas	188	11	1504	150	376
Wood	44	3	18	35	35
Industrial Fuel - Total	149	220	1078	27	94
Residual Oil	105	217	273	14	18
Natural Gas	45	3	805	13	76
Comm-Industrial Fuel - Total	231	354	1233	73	152
Residual Oil	114	235	296	15	20
Distillate Oil	60	115	239	12	16
Natural Gas	58	3	697	46	116
SOLID WASTE DISPOSAL - TOTAL	1083	42	182	2622	7728
Residential - Total	1009	32	154	2505	7405
On Site Incineration	653	10	20	1838	5513
Open Burning	356	22	133	668	1891
Comm-Institutional - Total	40	5	15	64	179
On Site Incineration	9	3	3	6	13
Open Burning	31	2	12	59	166
Industrial - Total	34	4	13	52	144
On Site Incineration	9	3	3	6	13
Open Burning	25	2	9	47	132
TRANSPORTATION - TOTAL	7794	3361	60980	76208	417231
Land Vehicles					
Gasoline	4833	1395	45358	62359	402222
Light Vehicles	4332	1213	39650	52190	315694
Heavy Vehicles	412	136	4692	7302	54030
Off Highway	89	47	1017	2867	32499
Diesel - Total	1170	1588	14376	2088	6123
Heavy Vehicles	502	638	6023	632	3508
Off Highway	416	372	4605	504	1298
Rail	253	577	3748	952	1317

COUNTY: RIVERSIDE

SOURCE:	TSP	SO_x	NO_x	HC	CO
Aircraft - Total	1790	374	1228	4717	6989
Military	1693	323	814	3940	4229
Civil	72	14	65	317	1810
Commercial	25	36	350	460	949
Vessels - Total	0	4	18	597	1897
Gasoline	0	4	18	597	1897
Gas Handling Evap. Loss	0	0	0	6447	0
MISCELLANEOUS - TOTAL	45	0	11	34016	368
Forest Fires	45	0	11	63	368
Solvent Evaporation Loss	0	0	0	33953	0
GRAND TOTAL FOR RIVERSIDE COUNTY	9540	4008	65011	113134	425992

COUNTY: SAN BERNARDINO

SOURCE:	TSP	SO_x	NO_x	HC	CO
FUEL COMBUSTION (EXTERNAL) - TOTAL	1199	1356	7304	486	1137
Residential Fuel - Total	361	60	2323	282	628
Bituminous Coal	0	1	0	0	1
Distillate Oil	13	38	16	4	7
Natural Gas	285	17	2282	228	571
Wood	63	4	25	50	50
Industrial Fuel	420	650	2783	73	240
Residual Oil	310	643	808	40	54
Natural Gas	110	7	1975	33	186
Comm-Institutional Fuel - Total	419	647	2198	130	268
Residual Oil	208	431	541	27	36
Distillate Oil	109	210	438	22	29
Natural Gas	102	6	1219	81	203
SOLID WASTE DISPOSAL - TOTAL	1621	63	273	3916	11543
Residential - Total	1504	48	229	3733	11034
On Site Incineration	974	15	30	2739	8216
Open Burning	530	33	199	995	2818
Comm-Institutional - Total	59	7	22	94	262
On Site Incineration	14	4	5	9	20
Open Burning	46	3	17	86	242
Industrial - Total	58	7	22	89	247
On Site Incineration	15	5	6	10	22
Open Burning	42	3	16	80	225

COUNTY: SAN BERNARDINO

SOURCE:	TSP	SO_x	NO_x	HC	CO
TRANSPORTATION - TOTAL	14379	5971	104156	132642	690218
Land Vehicles					
Gasoline - Total	8237	2363	77496	103979	653553
Light Vehicles	7441	2083	68386	88724	529970
Heavy Vehicles	707	233	8094	12389	91084
Off Highway	89	47	1017	2867	32499
Diesel - Total	1893	2702	23661	3522	10305
Heavy Vehicles	939	1195	11342	1165	6348
Off Highway	482	431	5341	585	1505
Rail	472	1075	6978	1773	2452
Aircraft - Total	4250	765	1923	9316	16956
Military	4004	37	169	829	10000
Civil	187	84	819	1075	4738
Commercial	58	886	2911	11220	2219
Vessels - Total	0	20	87	2958	9404
Gasoline	0	20	87	2958	9404
Gas Handling Evap. Loss	0	0	0	10963	0
MISCELLANEOUS - TOTAL	689	0	161	80056	5623
Forest Fires	678	0	160	957	5583
Slash Burning	11	0	1	13	40
Solvent Evaporation Loss	0	0	0	79086	0
GRAND TOTAL FOR SAN BERNARDINO COUNTY	17889	7390	111894	217101	708521

COUNTY: SAN DIEGO					
SOURCE:	TSP	SO_x	NO_x	HC	CO
FUEL COMBUSTION (EXTERNAL) - TOTAL	1722	2346	8383	619	1304
Residential Fuel - Total	450	80	2810	352	774
Bituminous Coal	2	7	0	2	7
Distillate Oil	17	48	20	5	8
Natural Gas	344	21	2754	275	689
Wood	88	5	35	70	70
Industrial Fuel	358	620	1888	61	154
Residual Oil	236	489	615	31	41
Distillate Oil	66	127	265	13	18
Natural Gas	56	3	1007	17	95
Comm-Institutional Fuel - Total	914	1645	3686	206	377
Residual Oil	605	1256	1579	79	105
Distillate Oil	200	383	798	40	53
Natural Gas	109	7	1309	87	218
SOLID WASTE DISPOSAL - TOTAL	3223	125	544	7781	22934
Residential - Total	2986	96	455	7410	21902
On Site Incineration	1933	30	60	5436	16309
Open Burning	1053	66	395	1974	5593
Comm-Institutional - Total	118	14	44	188	524
On Site Incineration	27	9	10	17	39
Open Burning	91	6	34	171	485
Industrial - Total	118	15	44	183	508
On Site Incineration	31	10	12	20	45
Open Burning	87	5	33	164	463
TRANSPORTATION - TOTAL	10624	5811	87759	115789	699669
Land Vehicles					
Gasoline	6530	1870	57835	94055	669350
Light Vehicles	5893	1650	50977	80362	555054
Heavy Vehicles	585	193	6274	12046	95628
Off Highway	51	27	584	1647	18667
Diesel - Total	2208	2958	26371	4080	13605
Heavy Vehicles	909	1157	10262	1330	8591
Off Highway	838	750	9290	1017	2618
Rail	461	1051	6819	1732	2396

COUNTY: SAN DIEGO					
SOURCE:	TSP	SO_x	NO_x	HC	CO
Aircraft - Total	1825	554	3135	7098	12775
Military	1555	297	747	3618	3884
Civil	106	21	96	469	2679
Commercial	164	236	2292	3010	6212
Vessels - Total	61	428	419	1292	3940
Diesel Fuel	35	44	328	86	115
Residual Oil	25	376	55	4	2
Gasoline	0	8	35	1202	3823
Gas Handling Evap. Loss	0	0	0	9264	0
MISCELLANEOUS - TOTAL	0	0	0	55768	0
Solvent Evaporation Loss	0	0	0	55768	0
GRAND TOTAL FOR SAN DIEGO COUNTY	15568	8282	96686	179957	723908

APPENDIX H

SUMMARY ANALYSIS

UNITED STATES COURT OF APPEALS, D.C. CIRCUIT

JUNE 18, 1979 DECISION

ALABAMA POWER COMPANY, ET AL. V. USEPA ET AL.

I. INTRODUCTION

On June 18, 1979 the U. S. Court of Appeals for the District of Columbia Circuit issued an opinion. This opinion summarized the Court's rulings on a number of actions brought against EPA by both industry and environmental groups who were contesting specific sections of the final PSD regulations as promulgated by the EPA on June 19, 1978. The Court is expected to issue its detailed opinions before the end of the summer and indicated that the purpose of issuing the expedited judgement was "...to enable EPA to proceed as soon as possible to commence rulemaking or other proceedings necessary to promulgate those revisions in the PSD regulations required by our rulings, and to take other prudent action to effectuate congressional policies."

As discussed in the subsequent sections of this analysis, the Court s action will result in a number of substantive and significant changes to the PSD regulations. However, during the period between June 18 and the time the more detailed opinions are rendered by the Court, the EPA will continue to review and issue PSD permits consistent with the regulations as promulgated on June 19 1978. It is expected that EPA will include in each permit a caveat stating that the conditions of the permit would be subject to change based upon the mandates contained in the Courts detailed decision and the associated rulemaking actions implemented by EPA. This action by EPA has been taken to prevent an immediate "shutdown" of the PSD permit licensing process with the associated implications such a moratorium would have on existing applications and new construction plans.

It is not clear exactly what will happen after the detailed opinions are rendered. It is hoped, however, that the Court in its detailed opinion will provide EPA with the necessary latitude of authority to facilitate the continued issuance of PSD permits during the transitional period while the new regulations are

being developed and promulgated. An additional area of uncertainty which could result from this decision will be the impact of the decision on those PSD permits that have been issued between June 19, 1978 and June 18, 1979, as well as the impact the decision could have on other EPA regulations (e.g. non-attainment area regulations) which include certain definitions and policy interpretations taken directly from portions of the PSD regulations that were affected by this decision. The Court has indicated in the summary decision that it would "...entertain... narrowly focused petitions for reconsideration...."but would not "...look with favor on arguments that merely reiterate those made previously...." Therefore, a possibility does exist that certain portions of the opinion rendered in the summary decision could be modified in the forthcoming detailed decision. Furthermore, the decision or portions thereof could be appealed to the Supreme Court.

In the subsequent discussion, EAI will outline the potential implications of the summary decision to applicants currently attempting to obtain a PSD permit as well as to those who have obtained PSD permits prior to June 18, 1979. Final determinations respecting the impact that the Court decision will have on individual permit activities should be made after the detailed opinion is rendered and EPA concludes the pertinent rulemaking actions necessary to implement the decision.

Brief highlights of the major rulings and their implications to PSD permit applicants and the permitting process are presented following. The decision:

- o Remanded EPA's definition of "potential to emit". Requires the definition to include consideration of air pollution control equipment in calculation of emissions. Decision should decrease the number of sources subject to the PSD review process.

- o Remanded EPA's general exemption for stationary sources that have actual emission of less than 50 tons/year. In light of the Courts modification of the "potential to

emit" definition, it appears unlikely, EPA will repromulgate a regulation that provides a two-tier review process, as contemplated by this remanded regulation.

- Instructed EPA to utilize the definition of stationary source as specified in Section 111(a)(3) of the Clean Air Act. While the definition would be limited to the terms, "building, structure, facility, or installation", EPA could define these terms in a manner which would accomplish the overall intent of the remanded EPA definition of "stationary source".

- Upheld EPA's authority to regulate fugitive emissions under the PSD requirements. EPA will be required to incorporate sources of fugitive emissions in its revised regulations defining the components of a "stationary source". Furthermore, EPA will be required to promulgate specific rules, possibly by industry type, which specify how fugitive emissions should be incorporated into the calculation to determine if a source is a "major emitting facility" subject to PSD requirements.

- Remanded EPA's generalized exemption for fugitive dust emissions. The Court allowed that EPA could achieve the intent of this remanded regulation by creating a special category of air pollutant; termed "excluded particulates", which would be regulated under NSPS requirements, but not by NAAQS's. This action would require significant rulemaking activities by EPA, and will result in a period of uncertainty for permit applicants.

- Remanded EPA's definition of major modifications. The Court remand will require a more restrictive definition of modification (i.e., any increase in pollutant emissions) which would appear likely to subject a significantly greater number of modified sources to PSD requirements. However, the Court also ruled that a source which accomplishes a modification and internally offsets any increases in emissions should not be subject to any PSD review requirements.

- Ruled that EPA-PSD regulations are not applicable to a source located in a non-attainment area, whose emissions impact a clean air area within the same state that the source is located. Regulation of these source emissions is left to the discretion of the specific state. Ruled that if a source located in a non-attainment area in one state impacts upon a clean air area in another state, the source would be subject to appropriate EPA-PSD regulations.

- Remanded EPA's BACT regulations and expanded the scope of BACT requirements to each pollutant subject to regulation under the Act, not just those having emissions exceeding entity" definition, it appears unlikely, EPA will repromulgate a regulation that provides a two-tier review scheme, as contemplated by this remanded regulation.

- Instructed EPA to refine the definition of stationary source as applied in Section 111(a)(3) of the Clean Air Act. While the definition would be limited to the terms, "building, structure, facility, or installation", EPA could define these terms in a manner which would accomplish the overall intent of the remanded EPA definition of "stationary source".

- Upheld EPA's authority to regulate fugitive emissions under the PSD requirements. EPA will be required to incorporate sources of fugitive emissions in its revised regulations defining the components of a "stationary source". Furthermore, EPA will be required to promulgate specific rules, possibly by industry type, which specify how fugitive emissions should be incorporated into the calculation to determine if a source is a "major emitting facility" subject to PSD requirements.

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- Remanded EPA's BACT regulations and expanded the scope of BACT requirements to each pollutant subject to regulation under the Act, not just those having emissions exceeding the 100 or 250 ton/year threshold levels. Upheld EPA's authority to include consideration of visible emissions standards as part of the BACT determination.

- Expanded the scope of PSD-related monitoring requirements to include all pollutants regulated under the Act that are emitted by the source. Interpreted the Congressional intent to require the utilization of monitoring data as a primary determinant of ambient air quality and allowable increment status, as well as a mechanism for imposing a certain degree of discipline on modeling techniques.

- Remanded EPA's regulations pertinent to the guidelines for State granted exemptions to PSD-related monitoring programs. EPA will be required to repromulgate the regulations with more specific guidance and requirements stated therein.

- Ruled that a baseline concentration must be determined at the time of filing of the first application in an area, and not as of August 7, 1977, the date which was applied uniformly to all areas of the United States in the EPA regulations.

- Upheld EPA's regulations that required all sources with emissions of 250 tons/year or more to be subject to PSD review requirements.

- Upheld EPA's authority to correct or prevent a violation of PSD increments, but disallowed EPA's authority to dictate to the State, policy for management of the consumption of allowable increments.

- Upheld EPA's regulations pertinent to utilizing GEP stack height limitations in modeling analyses, regardless of whether the actual stack height constructed is taller.

- Upheld EPA's regulations pertinent to exempting certain voluntary fuel switches from PSD requirements. Found no statutory authority for EPA to exempt from PSD requirements sources subject to State ordered fuel switches.

- Upheld EPA's authority to issue a comprehensive permit that addresses phased construction activities.

II. SUMMARY ANALYSIS OF JUNE 18, 1979 COURT OF APPEALS DECISION

A. General

The following analyses have been developed based upon the information contained in the June 18, 1979 summary decision and EAI's understanding and experience with the PSD regulations and licensing process. These analyses have been structured to present (1) the issue/regulation that was contested; (2) the Court's summary decision regarding the issue/regulation; and (3) the probable implications of the specific decision to PSD permit applicants.

B. Major Emitting Facility/Potential to Emit Definition (40CFR 52.21(b)(3))

1. Issue/Regulation

EPA regulations specified that a "major emitting facility" was any stationary source specifically listed in Section 169(1) of the Clean Air Act (CAA) which would emit or have the "potential to emit" 100 tons/year or more of any air pollutant, or any other stationary source with the "potential to emit" 250 tons/year or more of any air pollutant. This definition is a critical aspect of the overall PSD process, since only "major emitting facilities" would be required to obtain a PSD permit. Furthermore, critical to this determination, was the fact that EPA had interpreted the phrase "potential to emit" to mean the uncontrolled emission from the source, assuming no benefits from any installed pollution control equipment. The Court reviewed the EPA definition, in particular, the EPA's interpretation of the term "potential to emit".

2. Appeals Court Decision

The Court ruled that the EPA regulation was remanded for appropriate revision to reflect the following: "...an emitting facility is major within the meaning of section 169 (1) only if it either (1) actually emits the specified annual tonnage of any air pollutant, or (2) has the potential, when operating at full design capacity, to emit the statutory amount...." Further, the Court indicated that "potential to emit" must be calculated "...on the assumption that air pollution control equipment incorporated into the design of the facility will function to control emissions in the manner reasonably anticipated when the calculation is made...."

3. Implications to PSD Permit Applicants

The Court decision will have positive consequences for certain PSD permit applicants who have been designated as major emitting sources based on the EPA interpretation of "potential to emit". In accord with the decision, a source will not be subject to the PSD permit review process unless its actual emissions, or its potential emissions at full design capacity, incorporating all applicable air pollution control system pollutant reductions, equals or exceeds the statutory limits (i.e., 100 tons/year for the 28 specific categories, or 250 tons/year for all other sources). In this regard it would be prudent for those sources which can question their designation as major emitting facilities to actually determine their status in light of the decision. In the event the source is no longer considered a major emitting facility, it would not be subject to the PSD review process, nor would it require a PSD permit.

C. General Exemption For Stationary Sources Emitting Less Than 50 Tons/Year (40CFR52.21(j)(2),(k) (l) (ii))

1. Issue/Regulation

The EPA has included in its June 19, 1978 regulations a partial exemption from the preconstruction review and permit requirements for all major emitting facilities that did not effect a Class I area and that emitted less than 50 tons/year, 1000 lbs/day or 100 lbs/hour. The EPA regulations would have exempted such sources from the case-by-case BACT determinations, the requirements to demonstrate compliance with NAAQS and allowable PSD increments, the requirements to assess the direct and indirect effects of the source on visibility, soils and vegetation, and the requirement to provide monitoring data. The Court reviewed this regulation in consideration of EPA's statutory authority to grant such exemptions.

2. Appeals Court Decision

The Court remanded the regulation for further consideration by EPA. This remand was consistent with the Courts remand of the EPA regulation pertinent to major emitting facility (see Section B above). The Court stated that EPA does have authority to provide exemptions for "...circumstances that in context fairly may be considered de minimis...." or, "...to provide exemptions when compelled by administrative necessity...." and that EPA may refashion rather than terminate its exemption.

3. Implications to PSD Permit Applicants

While the Court's summary decision does allow EPA to provide exemptions for de minimis situations or when compelled by administrative necessity, it appears reasonable to expect that once EPA modifies its regulation pertinent to the definition of "major emitting facility", to reflect actual and/or controlled

. General Exemption for Stationary Sources Emitting Less than 50 Tons/Year (40CFR52.21(i)(2),(4) (1979))

1. Issue/Regulation

The EPA has included in its June 19, 1978 regulations a ...rtial exemption from the preconstruction review and permit ...quirements for all major emitting facilities that did not ...ject a Class I area and that emitted less than 50 tons/year, ...000 lbs/day or 100 lbs/hour. The EPA regulations would have ...empted such sources from the case-by-case BACT determinations, ...e requirements to demonstrate compliance with NAAQS and allow...e PSD increments, the requirements to assess the direct and ...direct effects of the source on visibility, soils and vegeta...ion, and the requirement to provide monitoring data. The Court ...eviewed this regulation in consideration of EPA's statutory ...uthority to grant such exemptions.

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3. Implications to PSD Permit Applicants

While the Court's summary decision does allow EPA to ...provide exemptions for de minimis situations or when compelled by ...administrative necessity, it appears reasonable to expect that ...once EPA modifies its regulation pertinent to the definition of ..."major emitting facility", to reflect actual and/or controlled emissions, it would no longer recognize the necessity for a two-tier review process, or de minimis cutoff levels for the review process.

D. Source Definition (40CFR52.21(b)(4))

1. Issue/Regulation

EPA had defined the term "stationary source" to include, "...any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control)." The Court was asked to address the questions of whether the components (i.e., structure, building, etc.,) included by EPA in the definition of a "source", and the broad approach to combining sources as inferred by the definition were consistent with the Clean Air Act.

2. Appeals Court Decision

The Court indicated that the proper definition of a "stationary source" under the Clean Air Act was provided by the Congress in the "New Source Performance Standards" Section (i.e., 111(a)(3)) of the law. This definition restricts the term "stationary source" to the nouns "building, structure, facility, or installation". The law's definition does not include the terms equipment or operation. Therefore, the Court instructed EPA to modify its definition of "stationary source" to be consistent with the definition specified in the law. However, the Court acknowledged that EPA has discretion to interpret the four statutory components of the definition to include a wide range of other components (e.g. equipment, etc.). In addition, the Court acknowledged that in defining a stationary source in order to embrace a grouping of industrial activities, the EPA does have discretion to define a term (e.g., "facility") to encompass an emissions, it would no longer recognize the necessity for a two-tier review process, or an adequate cutoff levels for the review process.

D. Source Definition (40CFR52.21(b)(4))

1. Implementation

EPA had defined the term "stationary source" to include, "...any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control)." The Court was asked to address the questions of whether the components (i.e., structure, building, etc.) included by EPA in the definition of a "source", and the broad approach to combining sources as inferred by the definition were consistent with the Clean Air Act.

2. Appeals Court Decision

The Court indicated that the proper definition of a "stationary source" under the Clean Air Act was provided by the Congress in the "New Source Performance Standards" Section (i.e., 111(a)(3)) of the law. This definition restricts the term "stationary source" to the nouns "building, structure, facility, or installation". The law's definition does not include the terms equipment or operation. Therefore, the Court instructed EPA to modify its definition of "stationary source" to be consistent with the definition specified in the law. However, the Court acknowledged that EPA has discretion to interpret the four statutory components of the definition to include a wide range of other components (e.g. equipment, etc.). In addition, the Court acknowledged that in defining a stationary source in order to embrace a grouping of industrial activities, the EPA does have discretion to define a term (e.g., "facility") to encompass an entire plant or other "common sense industrial grouping". Resolution of the reasonableness of such EPA actions could only be decided on a case-by-case basis upon review of the specific application being questioned.

3. Implications to PSD Permit Applicants

The Courts decision would appear to allow EPA to modify the definition of "stationary source" so it will be consistent with the law and still accomplish the purpose intended by EPA. Therefore, it does not appear that this portion of the decision will impact any current or proposed PSD permit applicants.

In regard to EPA's approach to broadly including groupings of industrial activities as a common stationary source, the Court decision should facilitate challenges by industry respecting the "reasonableness" of such designations based upon the concept of a "common sense industrial grouping". The possibility of challenging the common grouping designation, coupled with the Courts redefinition of "potential to emit" could result in certain "groupings" of stationary sources no longer being subject to PSD requirements.

E. Fugitive Emissions

1. Issue/Regulation

The EPA-PSD regulations encompassed sources of "fugitive emissions" (including fugitive dust) as well as industrial point sources. Industry had challenged this regulation based upon the concept that the definition of stationary source (i.e., building, structure, facility or installation) could not be interpreted to encompass unconfined fugitive emission sources (e.g., mining operation). Furthermore, the EPA regulations treated both point source and fugitive emissions alike for purpose of determining whether the facility exceeded the annual tonnage threshold limits, and was, therefore, a "major emitting facility".

2. Appeals Court Decision

The Court ruled that EPA could "...define the term "facility" by the concept of "common sense industrial groupings" which would encompass application of the term to a source of fugitive emissions such as a major mining operation". The Court acknowledged that it was ruling on the "general question" (i.e., applicability of PSD requirements to fugitive emissions) and that specific situations in the future could still be assessed based upon the pertinent EPA regulations.

In regard to the inclusion of fugitive emissions in the calculation of the annual emissions from a facility for purposes of determining PSD applicability, the Court ruled that EPA is required to institute rulemaking before fugitive emissions, including fugitive dust, may be encompassed in the determination of whether an emitting facility qualified as "major". The Court further indicated that the rulemaking requirement gives EPA flexibility to provide industry-by-industry consideration and the appropriate tailoring of coverage.

3. Implications to PSD Permit Applicants

It appears likely that the EPA will revise the PSD regulations to incorporate sources of "fugitive emissions" in the definition of "facility". In addition, it could be expected that EPA will initiate rulemaking actions to promulgate regulations pertinent to the inclusion of fugitive emissions in the determination of whether a source is a "major emitting facility" subject to PSD requirements. The necessity for EPA to conduct the rulemaking activities will provide an opportunity for industry to substantively input to the actions. The Court decision on this issue will have its greatest impact on mining related activities, though it will also effect other facilities that have fugitive emissions (e.g., power plants).

F. Fugitive Dust Exemption (40CFR 52.21(k)(5))

1. Issue/Regulation

EPA had provided a partial exemption from the statutory permit requirements for major emitting facilities of fugitive dust. The regulations exempted such sources from the requirement to demonstrate compliance with national ambient air quality standards and maximum allowable non-deterioration increments for particulates. The Court reviewed the statutory basis for this exemption.

2. Appeals Court Decision

The Court remanded EPA's generalized exemption for fugitive dust. The Court also offered EPA an administrative strategy pertinent to achieving the intent of the remanded EPA regulation. The Court indicated that "...EPA has discretion to define the pollutant termed "particulate matter" to exclude particulates of a size or composition determined not to present substantial public health or welfare concerns...." Such "excluded particulates" would not be included on the listing of national ambient air quality standards (NAAQS) pollutants. Therefore, a source would not be required to demonstrate compliance for this pollutant with either NAAQS's or allowable PSD increments. However, the Administrator could include a source that emits the "excluded particulates" on the listing requiring the application of new source performance standards. Inclusion on this listing would make the "excluded particulates" a pollutant regulated under the Act and, as such, subject to applicable BACT requirements if the source were determined to be a "major emitting facility". The net result of the Courts' suggestions would be to subject fugitive emissions from a "major emitting facility" to BACT requirements while excluding the source from the necessity to demonstrate compliance with NAAQS's and non-deterioration increments for the "excluded particulates", yielding the exact same requirements that the source would have been subject to under the EPA regulations.

3. Implications to PSD Permit Applicants

If EPA implements the Court's suggestions, as described above, it will be necessary for EPA to modify the existing air quality criteria documents for particulate matter, and the associated NAAQS's. After these actions were completed, PSD permit applicants would basically be subject to the same PSD review process as was applicable under the remanded June 19, 1978 EPA regulation. However, if EPA does establish standards based upon pollutant categories designated as particulates and "excluded particulates" it would appear to create a significant amount of uncertainty regarding the exact definition of these pollutants and the impact this approach would have on determining "baseline", available increments and attainment/nonattainment area status for particulates. In addition, during the period that EPA is developing the revised standards, and initiating the rulemaking activities discussed previously in Section E herein, applicants that have "fugitive emissions" would not appear to be subject to specific PSD regulations.

It should be noted that EPA could also attempt to include all particulate matter in the NAAQS, thereby subjecting each major emitting facility to the full spectrum of PSD review requirements. In this case it would be incumbent on EPA to determine that all particulate matter presents substantial public health or welfare concerns.

G. Major Modification Definition (40CFR52.21(b)(2)(i)(j)(k))

1. Issue/Regulation

EPA regulations defined "major modification" to mean ...any physical change in, change in the method of operation of, or addition to a stationary source which increases the potential emission rate of any air pollutant regulated under the act...by either 100 tons per year or more for any source category identified in paragraph (b)(1) (i)...or by 250 tons per year or more for any stationary source".

EPA regulations also restricted an emitter from making changes in a major emitting facility without first receiving authorization for such changes, even though the changes would be planned to result in no net increase in the potential to emit any air pollutant.

2. Appeals Court Decision

The Court remanded EPA's definition for "major modification". Citing the definition of "modification" as contained in Section 111 (a)(4) of the Act, the Court ruled that "...a modification within the meaning of the PSD part is any physical change in or change in the method of operation of a stationary source that increases in any amount the quantity (when calculated for operation at full design capacity) of any air pollutant emitted by the source or that results in the emission of any air pollutant not previously emitted." The Court did indicate that EPA does have authority to exempt from scrutiny "de minimis" emission increases caused by a "modification" of a stationary source.

In regard to the question of EPA restricting the action of a major emitter which plans on modifying an existing source without incurring a net increase in emissions or the emission of a new pollutant, the Court ruled that the restrictions are beyond EPA's statutory authority. The Court allowed that EPA could define the components of the term "stationary source" narrow enough to effectively impose restrictions on such modification activities. However, EPA's latitude in this respect would be confined by the condition that EPA's definition of "stationary source" would govern not only the definition of "modification", but also the definition of major emitting facility. The Court further clarified that the "modification" of a stationary source has two components, "...(1) there must be a physical change in or a change in the method of operation of a stationary source; and (2) there must be a net increase in the potential to emit any air pollutant." Basically, the Court summarized its position on this

EPA regulations also restricted an emitter from making changes to a major emitting facility without first receiving authorization for such changes, even though the changes would be planned to result in no net increase in the potential to emit any air pollutant.

2. Alabama Court Decision

The Court endorsed EPA's definition for "major modification". Citing the definitions of "modification" as contained in Section 111 (a)(4) of the Act, the Court ruled that "...a modification within the meaning of the PSD part is any physical change in or change in the method of operation of a stationary source that increases in any amount the quantity (when calculated for operation at full design capacity) of any air pollutant emitted by the source or that results in the emission of any air pollutant not previously emitted." The Court did indicate that EPA does have authority to exempt from scrutiny "de minimis" emission increases caused by a "modification" of a stationary source.

In regard to the question of EPA restricting the action of a major emitter which plans on modifying an existing facility without incurring a net increase in emissions or the emission of a new pollutant, the Court ruled that the restrictions are beyond EPA's statutory authority. The Court allowed that EPA could define the components of the term "stationary source" narrowly enough to effectively impose restrictions on such modification activities. However, EPA's latitude in this respect would be confined by the condition that EPA's definition of "stationary source" would govern not only the definition of "modification", but also the definition of major emitting facility. The Court further clarified that the "modification" of a stationary source has two components, "...(1) there must be a physical change in or a change in the method of operation of a stationary source, and (2) there must be a net increase in the potential to emit any air pollutant;" Basically, the Court summarized its position on this issue by stating that "... a series of contemporaneous changes in the source does not qualify as a "modification" within the meaning of the PSD part if it does not result in a net increase in the source's potential to emit any air pollutant."

3. Implications to PSD Permit Applicants

In accord with the Court action, EPA will be required to modify its regulations to define "modification" in a much more stringent manner (i.e., any increase in emissions) then that contained in the June 19, 1978 regulations. The change in definition for modification would appear to increase the number of sources that will be subject to the PSD permit and review requirements. In addition, the change in definition could also impact the "baseline" determination and the allowable nondeterioration increment available for consumption by new or future "modified" sources. EAI wishes to note that Section 165(b) of the Act exempts from the PSD increment review, any modification of a major emitting facility in a Class II area which was in existence on August 7, 1977 and which will not incur an increase in emissions of 50 tons/year or more as a result of the modification. The source would still be required to employ BACT and undergo an air quality impact review to demonstrate compliance with secondary NAAQS's.

The Court action can also have positive implications for those existing sources that can accomplish a modification without increasing emissions of any regulated pollutants. In accord with the Court's opinion such sources would not be subject to any portion of the PSD permit or review requirements.

H. Sources Located in Nonattainment Areas (40CFR52.21(i)(1))

1. Issue/Regulation

EPA's regulations applied the PSD permit and review requirements to all major emitting facilities that significantly impacted a clear air area. The regulations were applicable to a major emitting facility that was located in a nonattainment area, if its emissions significantly affected nearby attainment (i.e., clean air) areas. The Court reviewed the applicability of PSD requirements to such sources.

2. Appeals Court Decision

The Court ruled that the PSD requirements are not triggered by sources located in nonattainment areas whose emissions effect a clean air area within the same state that the source is located. Basically, it is left to the discretion of the specific state to plan its internal growth to accomodate such developments in the manner that state deems best. However, sources located in a nonattainment area whose emission significantly impact a clean air area within a different state are subject to applicable PSD permit and review requirements.

The Court action will require EPA to modify its existing regulations to reflect the distinction in PSD applicability to a source located in a nonattainment area whose emissions effect clean air areas within the state as opposed to one whose emissions impact ajoining states.

3. Implications to PSD Permit Applicants

The Court decision could result in decreasing the time required for applicants locating facilities in nonattainment areas that impact a clean air area in the same state,since such sources may not be subject to the extensive PSD review and moni-

toring requirements. The actual benefits that will be incurred from this portion of the decision will depend upon the review process adopted by the individual states as they implement the requirements of the law and the Court decision. It would appear reasonable for existing PSD permit applicants that have been subjected to the PSD permit process as a result of EPA's regulations pertinent to nonattainment area located sources to formally request relief from PSD required activities as well as from the actual necessity to obtain a PSD permit. The appropriate SIP requirements should be reviewed to determine whether the source could commence construction at an earlier time than would be allowed by the PSD permit requirements. Sources located in a nonattainment area whose emissions impact an attainment area in an ajoining state will be subject to PSD requirements as promulgated by EPA in accord with the Court decision.

I. Best Available Control Technology (40CFR52.21(b)(10),(i)(1))

1. Issue/Regulation

EPA regulations provide that BACT "...means an emission limitation (including a visible emissions standard)..." The Court was asked to rule on the inclusion of the parenthetical statement in the EPA definition for BACT, since no similar statement was contained in the Clean Air Act BACT definition.

EPA regulations required BACT only for those pollutants emitted in amounts surpassing, as appropriate, the 100 or 250 ton/year (uncontrolled emissions) threshold levels. The Court also reviewed this portion of the regulations for it consistency with the statutory requirements.

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gated by EPA in accord with the Court decision.

E. Best Available Control Technology (40CFR52.21(b)(10),(j)(1))

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limitation (including a visible emissions standard)...." The
Court was asked to rule on the inclusion of the parenthetical
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ment was contained in the Clean Air Act BACT definition.

EPA regulations required BACT only for those pollutants
emitted in amounts surpassing, as appropriate, the 100 or 250
tons/year (uncontrolled emissions) threshold levels. The Court
also reviewed this portion of the regulations for it consistency
with the statutory requirements.

2. Appeals Court Decision

The Court upheld EPA's authority to include consideration of visible emission standards in BACT determinations. The Court indicated it did not "...construe the regulations as requiring inclusion of a visible emissions standard in every case..." and that the "...application of BACT requirements is subject to appropriate Court review on a case-by-case basis."

In regard to the EPA regulation limiting the applicability of BACT to only those pollutants for which the source would qualify as a major emitting facility, the Court ruled the regulation was incorrect and as such was remanded. The Court stated that the Clean Air Act contains "...an unambiguous statutory command - BACT for each pollutant subject to regulation under this Act emitted from, or which results from, such facility...." The Court allowed that EPA has authority to apply "de minimis" thresholds, but did not agree that the current regulation would satisfy these requirements.

3. Implications to PSD Permit Applicants

The Court action would appear to expand the regulatory review requirements that could be imposed on an applicant requesting a PSD permit. The explicit statements by the Court respecting appropriate BACT requirements will result in new EPA regulations which could require BACT determinations and application for significantly more pollutants than would have been required under the previous regulation. In addition, the decision clarified EPA's authority to address visible emission standards as part of the BACT review.

2. Appeals Court Decision

The Court upheld EPA's authority to include consideration of visible emission standards in BACT determinations. The Court stated it did not "...construe the regulations as requiring adoption of a visible emissions standard in every case..." and that the "...application of BACT requirements are subject to appropriate Court review on a case-by-case basis."

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The Court action would appear to expand the regulatory review requirements that could be imposed on an applicant requesting a PSD permit. The explicit statements by the Court regarding appropriate BACT requirements will result in new EPA regulations which could require BACT determinations and applications for significantly more pollutants than would have been required under the previous regulation. In addition, the decision clarified EPA's authority to address visible emission standards as part of the BACT review.

J. Monitoring (40CFR52.21(n))

1. Issue/Regulation

EPA regulations require monitoring only for National Ambient Air Quality Standard (NAAQS) designated pollutants. The Court reviewed EPA's monitoring regulations with specific regard to the limited spectrum of the monitoring requirements (i.e., NAAQS pollutants). In addition, the Court reviewed EPA's monitoring regulations from the perspective of how the Act required such data to be utilized.

The Court also addressed the question of whether the law required EPA to impose post-construction monitoring requirements on PSD permit recipients, and whether the EPA regulations were adequate to provide meaningful guidance to the States respecting their discretion to provide exemptions to the monitoring requirements.

2. Appeals Court Decision

The Court ruled that the law explicitly requires stationary sources that are subject to the PSD review process to monitor "...for each pollutant subject to regulation under the ACT which will be emitted from such facility." Therefore, the EPA regulations which limit the scope of monitoring programs to only NAAQS pollutants are not consistent with the statutory mandate. The Court did acknowledge EPA's administrative discretion to dispense with monitoring for "de minimis" situations.

In regard to the use of the monitoring data, the Court cited Section 165(e)(2) of the Act which states, in part, that continuous air quality monitoring data should be gathered for "...purposes of determining whether emissions from such facilities will exceed the maximum allowable increases or the maximum allowable concentration permitted under this part." The Court

Monitoring (40CFR52.21(m))

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2. Appeals Court Decision

The Court ruled that the Act explicitly requires stationary sources that are subject to the PSD review process to monitor "...for each pollutant subject to regulation under the Act which will be emitted from such facility." Therefore, the EPA regulations which limit the scope of monitoring programs to only NAAQS pollutants are not consistent with the statutory mandate. The Court did acknowledge EPA's administrative discretion to dispense with monitoring for "de minimis" situations.

In regard to the use of the monitoring data, the Court cited Section 165(e)(2) of the Act which states, in part, that continuous air quality monitoring data should be gathered for "...purposes of determining whether emissions from such facilities will exceed the maximum allowable increases or the maximum allowable concentration permitted under this part." The Court further indicated that it discerned "...from the statute a technology-forcing objective..." and that "...Congress intended that monitoring would impose a certain discipline on the use of modeling techniques, which would be the principal device relied upon for the projection of the impact on air quality of emissions from a regulated source." Basically, the Court concluded that EPA was required to utilize monitoring data to the greatest extent possible to determine compliance with PSD ambient air quality related requirements, and to use such data to provide a check on the result of modeling analyses.

The Court found that EPA is not mandated to impose post-construction monitoring requirements on PSD permit recipients, and that the EPA regulations in this regard were valid. The Court did acknowledge that EPA could impose such requirements at its discretion.

The Court remanded the EPA regulations that provided guidance to the States for granting monitoring program exemptions. The remand was based on a finding that the regulations "...failed to provide concrete guidance to the cognizant state authorities for the exercise of the partial exemption authority...."

3. <u>Implications to PSD Permit Applicants</u>

The actions taken by the Court could have a number of significant consequences for PSD permit applicants. EPA will be required to modify its regulations in order to expand the monitoring program requirements to include "any regulated pollutant" emitted by the source, with possible exceptions for "de minimis" emissions. It could be expected that permit applicants will be required to establish more extensive monitoring programs then would have been required under the previous regulations.

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The Court's interpretation of Congress's intended use for the monitoring data would appear to increase the likelihood that monitoring data will be required to support PSD permit applications. However, this interpretation could also act as an impetus to facilitate the utilization of monitoring data as a basis for calibrating and possibly reducing the conservatism generally inherent in modeling analyses. A question not addressed in the Court's summary opinion concerns the acceptability of available or limited monitoring data in lieu of a full year of applicant-obtained monitoring data. Currently, EPA does accept such data. If this policy were to change as a result of the Court action, the permit process would definitely become more expensive and time consuming.

Revision of the EPA regulations pertinent to the granting of limited exemptions by the States has the potential to result in a tightening of the PSD review process. Under the previous regulations, the States had broad discretion in making a determination on the necessity for, and scope of, a required monitoring program. The promulgation by EPA of more specific regulations providing "concrete guidance" would appear to limit State discretion and as such would tend to increase the likelihood that monitoring programs will be required.

K. Baseline Definition (40CFR52.21(b)(11))

1. Issue/Regulation

EPA regulations specify that "baseline" must be determined for each clean air area as of August 7, 1977. The Court reviewed this definition based upon the requirements specified in the Act. Furthermore, the Court also reviewed the approach taken by EPA to determine which sources should be designated as existing sources contributing to the baseline concentration and which sources should be considered to contribute towards using up the allowable non-deterioration increment.

The Court's interpretation of Congress's intended use for monitoring data would appear to increase the likelihood that monitoring data will be required to support PSD permit applications. However, this interpretation would also act as an impetus to facilitate the utilization of monitoring data as a basis for calibrating and possibly reducing the conservatism generally inherent in modeling analyses. A question not addressed in the Court's summary opinion concerns the acceptability of available limited monitoring data in lieu of a full year of applicant-collected monitoring data. Currently, EPA does accept such data; this policy may be change as a result of the Court action. The permit process would definitely become more expensive and time consuming.

Revision of the EPA regulations pertinent to the granting of limited exemptions by the States has the potential to result in a tightening of the PSD review process. Under the previous regulations, the States had broad discretion in making a determination on the necessity for, and scope of, a required monitoring program. The promulgation by EPA of more specific regulations including "concrete guidance" would appear to limit State discretion and as such would tend to increase the likelihood that monitoring programs will be required.

Baseline Definition (40CFR52.21(b)(11))

1. Issue/Regulation

EPA regulations specify that "baseline" must be determined for each clean air area as of August 7, 1977. The Court reviewed this definition based upon the requirements specified in the Act. Furthermore, the Court also reviewed the approach taken by EPA to determine which sources should be designated as existing sources contributing to the baseline concentration and which sources should be considered to contribute towards using up the allowable non-deterioration increment.

2. Appeals Court Decision

The Court ruled that EPA's definition of the term "baseline concentration" was not consistent with that specified in the Act. Specifically, the Act indicated that baseline should be determined "...at the time of the first application for a permit in an area...." This definition conflicts with the EPA regulation that established a uniform date (i.e., August 7, 1977) for the specification of baseline concentration applicable to all areas in the United States. The Court further indicated that "...the wording used by Congress reflects a choice to rely chiefly on the data base provided by the one year pre-application monitoring requirement...." EPA will be required to modify its regulation to reflect the Court's ruling.

In regard to the "accounting of emissions", the Court ruled that EPA has interpreted the Act correctly. Basically, the "baseline concentration" should be composed of the summation of two components: (1) the ambient concentrations measured at the time of the first filing of a PSD permit application in an area; and (2) the predicted ambient concentrations (based on full design capacity) for all major emitting sources affecting the area that commenced construction prior to January 6, 1975, but which have not begun operation by the date of the baseline concentration determination. All major emitting sources that commenced construction after January 6, 1975 would not contribute to the baseline concentration, but would be subtracted from the allowable non-deterioration increment.

3. Implications to PSD Permit Applicants

The effect of the Court decision would not appear to significantly alter either the requirements or substantive conditions confronting an applicant requesting a PSD permit. It would appear possible, however, that in certain areas, the delay in the date for determining baseline concentration from August 7,

2. Appeals Court Decision

The Court ruled that EPA's definition of the term "base-
line concentration" was not consistent with that specified in the
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area that commenced construction prior to January 6, 1975, but
which have not begun operation by the date of the baseline con-
centration determination. All major emitting sources that com-
menced construction after January 6, 1975 would not contribute to
the baseline concentration, but would be subtracted from the
allowable non-deterioration increment.

3. Implications to PSD Permit Applicants

The effect of the Court decision would not appear to
significantly alter either the requirements or substantive con-
ditions confronting an applicant requesting a PSD permit. It
would appear possible, however, that in certain areas, the delay
in the date for determining baseline concentration from August 7,

1977 to the time the first application is filed could decrease the available non-deterioration increment. For example, if a large number of small source (i.e., non-major emitting facilities) were to be located in an area after August 7, 1977, their contribution to the baseline condition (as measured by monitoring data) at the time of the first permit application filing could limit the available increment (i.e., between baseline and NAAQS) for development of new major emitting facilities or the modification of existing major emitting facilities.

L. Section 169(1) Special Minimum Size Limitations (40CFR52.21(b)(1)(ii))

1. Issue/Regulation

In Section 169(1) of the Clean Air Act, the Congress included minimum size limitations applicable to four of the twenty-eight specific categories of stationary sources which would be subject to PSD requirements if they had the potential to emit 100 tons/year or more of any pollutant. The four categories and minimum size limitations were: fossil fuel-fired steam electric plants of more than 250 million BTU/Hr heat input: municipal incinerators capable of charging more than 250 tons/day: fossil fuel boilers of more than 250 million BTU/Hr heat input: and, petroleum storage and transfer facilities with a total capacity exceeding 300,000 barrels.

The issue brought before the Court was whether the special conditions contained in the Act's definitions were applicable to these four categories of stationary sources when their potential emissions exceeded the general 250 ton/year threshold. EPA's regulations had disregarded the special size limitations and had made all sources with emissions or potential emissions of 250 tons/year or more subject to the PSD requirements.

prior to the time the first application is filed would decrease the available non-deterioration increment. For example, if a large number of small source (i.e., non-major emitting facilities) were to be located in an area after August 7, 1977, their contribution to the baseline condition (as measured by monitoring data) at the time of the first permit application filing would limit the available increment (i.e., between baseline and NAAQS) for development of new major emitting facilities or the modification of existing major emitting facilities.

C. Section 169(1): Special Minimum Size Limitations (40CFR52.21(b)(1)(i))

1. Issue/Regulation

In Section 169(1) of the *Clean Air Act*, the Congress included minimum size limitations applicable to four of the twenty-eight specific categories of stationary sources which would be subject to PSD requirements if they had the potential to emit 100 tons/year or more of any pollutant. The four categories with minimum size limitations were: fossil fuel-fired steam electric plants of more than 250 million BTU/hr heat input; municipal incinerators capable of charging more than 250 tons/day; fossil fuel boilers of more than 250 million BTU/hr heat input; and petroleum storage and transfer facilities with a total capacity exceeding 300,000 barrels.

The issue brought before the Court was whether the special conditions contained in the Act's definitions were applicable to these four categories of stationary sources when their potential emissions exceeded the general 250 ton/year threshold. EPA's regulations had disregarded the special size limitations and had made all sources with emissions or potential emissions of 250 tons/year or more subject to the PSD requirements.

2. Appeals Court Decision

The Court upheld the EPA regulation.

3. Implications to PSD Permit Applicants

The decision by the Court will not impact the existing EPA regulations or the existing PSD permit process.

M. Regulation of Pollutants Other Than Sulfur Dioxide and Particulate Matter (40 CFR52.21(i)(1))

1. Issue/Regulation

The EPA regulations extended the PSD preconstruction review and permit process to encompass pollutants other than sulfur dioxide and particulate matter. EPA basically required monitoring, NSPS review and BACT determinations for certain other pollutants if they were emitted from the source.

2. Appeals Court Decision

The Court upheld EPA's authority to review and regulate other pollutant emissions, in addition to sulfur dioxide and particulate matter, as part of the PSD preconstruction permit process.

3. Implications to PSD Permit Applicants

In its supporting arguments, the Court indicated that the PSD section of the law required "...a demonstration of compliance with any applicable emission standard or standard of performance...a requirement for application of BACT for each pollutant subject to regulation under the ACT... a requirement of monitoring also for each pollutant regulated under the Act...." The explicit citations offered by the Court could result in an even

greater expansion of the EPA-PSD review/ regulatory requirements as applicable to pollutants other than sulfur dioxide and particulate matter.

N. Protection of Increments (40CFR51.24(a)(3))

1. Issue/Regulation

The question addressed by the Court was whether EPA could dictate to the States a policy for management of the consumption of allowable increments when a SIP was found to be substantially inadequate to prevent significant deterioration.

2. Appeals Court Decision

The Court ruled that EPA "...has authority under the statute to correct or to prevent a violation of the increments, but not to dictate to the States their policy for management of the consumption of allowable increments." The Court did support EPA's authority to deny a preconstruction permit if the operation of the source would cause a violation of the allowable increments. In addition, the Court stated that once it is determined increments are being exceeded, EPA "...has authority to require a rollback of operations or the application of retrofit air pollution control technology so long as such requirements are reasonable."

3. Implications to PSD Permit Applicants

The Court decision would not appear to alter the general requirements and restrictions facing PSD permit applicants. It should be noted, however, that the Court did confirm the EPA's authority to require "...a rollback of operations or the application of retrofit air pollution control technology...." when reasonable, if it is determined that increments are being exceeded.

O. Modeling (40CFR52.21(m))

1. Issue/Regulation

The Court was requested to review the EPA modeling regulations based on the contentions that they failed to respond to comments regarding "...(1) the inhibitory effect of the guidelines on the adoption of newly proposed potentially more accurate air pollution dispersion models; (2) the conservative nature of the assumptions employed in formulating the modeling guidelines; and (3) the failure of the guidelines to adopt the type of modeling analysis employed in a 1975 EPA/FEA report to Congress."

2. Appeals Court Decision

The Court upheld the EPA modeling regulations. However, the Court stated that its ruling was a limited one and indicated that EPA should proceed in the area with the care and flexibility appropriate to such intricate and novel subject matter.

3. Implications to PSD Permit Applicants

It does not appear that the Court action will at this time alter, to any significant degree, the PSD regulatory process.

P. Stack Height

1. Issue/Regulation

The EPA "stack height" regulations require modeling of emissions based on the stack height that reflects "good engineering practice (GEP)." This regulation was challenged on the basis that if a source employed BACT and if the actual stack height was greater than the GEP stack height, the source should be given credit for the low concentrations resulting from the taller stack.

EPA regulations also require the analysis to apply theoretical GEP stack heights to existing sources when assessing a permit application for a new source. This regulation was also challenged based on the argument that the air quality impacts of sources previously granted permits should be calculated on the basis of their actual stack heights.

2. Appeals Court Decision

The Court upheld the EPA regulations and agreed with EPA's interpretation of the Act.

3. Implications to PSD Permit Applicants

The Court action will have no effect on the EPA regulations. Therefore, PSD permit applicants will continue to only receive credit for the "theoretical" GEP stack height in the performance of all modeling studies. Furthermore, when modeling is required to determine baseline and the available increments, all stacks which were not constructed by December 31, 1970 must be modeled based on their appropriate GEP stack height as opposed to the actual height of the stack.

Q. Fuel Switches (40CFR52.21(b)(2)(ii)(d),(b)(11))

1. Issue/Regulation

The EPA regulations exclude, from the definition of modification, voluntary fuel switches by facilities constructed prior to January 6, 1975 that had the design capacity as of that time to accommodate such fuel switch. In addition, the EPA regulations would count the increased emissions that resulted from such voluntary fuel switches against the allowable nondeterioration increments. The Court was requested to review these aspects of the PSD regulations.

EPA regulations also contain special exemptions for federally ordered fuel switches, which is consistent with explicit wording in the Clean Air Act. The Court was requested to review the applicability of providing similar exemptions in the regulations for "state" ordered fuel switches.

2. Appeals Court Decision

The Court upheld the EPA regulations pertinent to voluntary fuel switches, and found no statutory authority for EPA to grant exemptions for sources subject to "state" ordered fuel switches.

3. Implications to PSD Permit Applicants

The Court action should not alter the general situation that has been facing a PSD permit applicant since the promulgation of the final PSD regulations. A point to note, however, was the Court's explicit acknowledgement that "...a facility designed to burn, either natural gas or coal, has the design capacity to do either. A shift from one fuel to the other does not increase the potential to emit any air pollutant and thus does not constitute a modification for the purposes of the PSD provisions." This explicit interpretation could clarify the situation facing a number of existing sources which might be planning a shift in fuels. A question that still exists, but may be clarified in the detailed opinion, is whether a facility whose boiler is designed to fire both oil and coal, but which will require the installation of coal handling equipment to facilitate the fuel switch would be considered a "modification" subject to the full spectrum of PSD review requirements.

R. Phased Construction Projects (40CFR52.21(s)(2)(3))

1. Issue/Regulation

EPA's regulations recognize the need for a comprehensive permit pertinent to construction projects that are to be completed in phases. For such permits, EPA requires that the applicant agree to: satisfy an independent BACT determination for each phase; commence construction on each phase within 18 months of the target date specified in the original application; and to avoid any gaps in the course of construction which exceed 18 months in duration. The Court was asked to review this regulation.

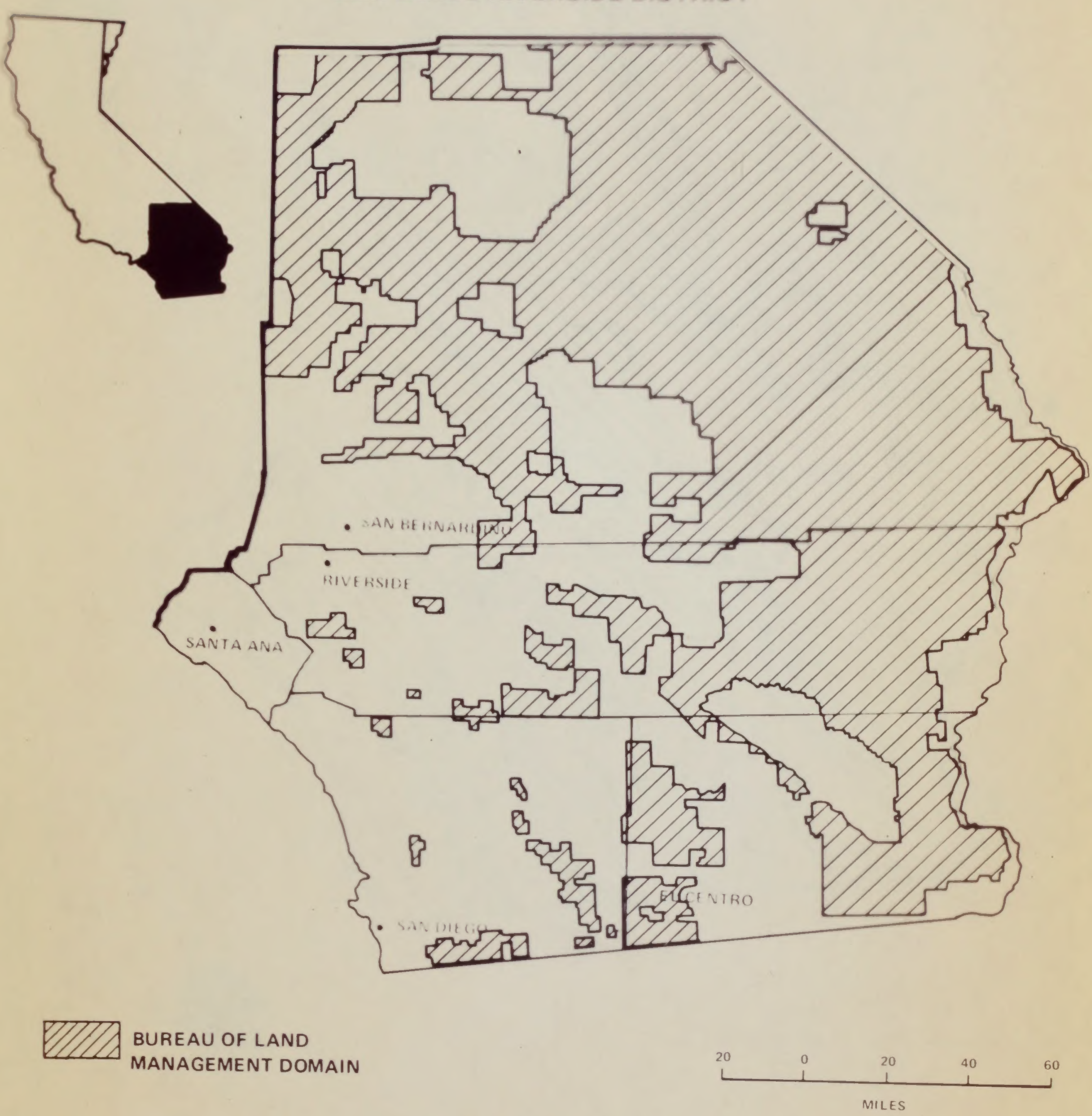
2. Appeals Court Action

The Court upheld EPA's statutory authority to issue conditional permits and found the specified conditions of the comprehensive permit reasonable.

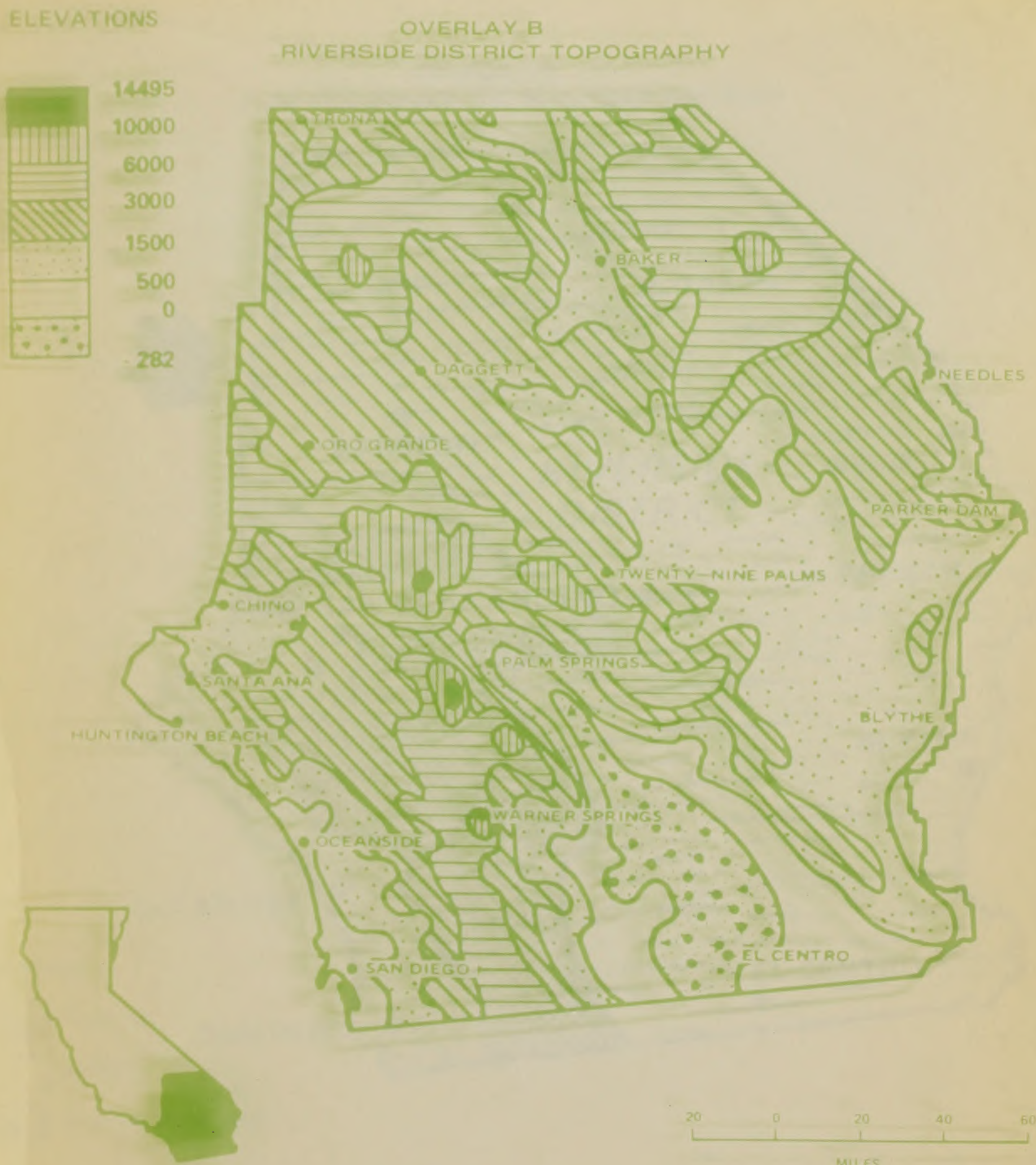
3. Implications to PSD Permit Applicants

The Court action will not result in any change to the EPA-PSD rules, and should not alter the existing regulatory process.

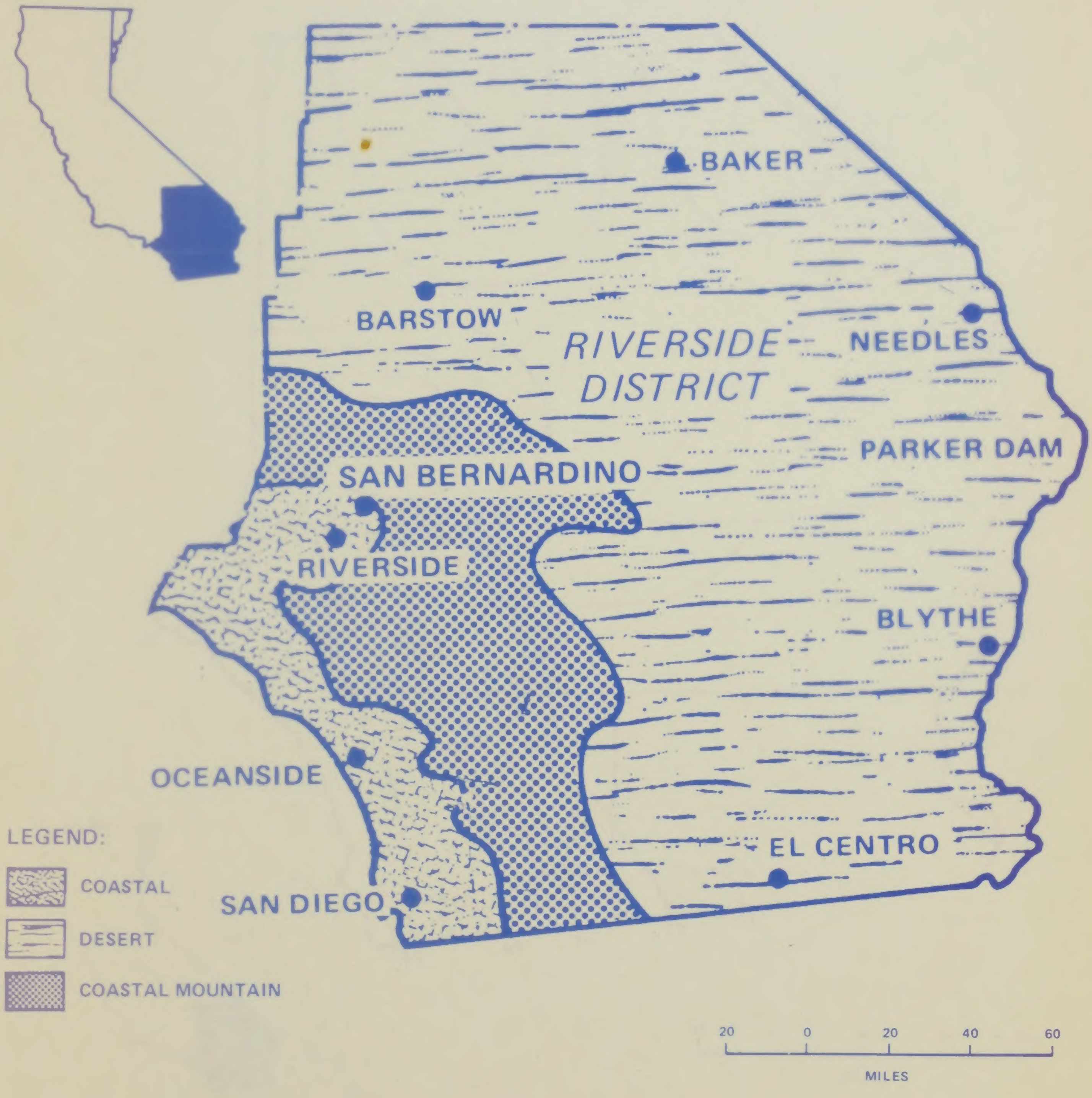
OVERLAY A
BLM LANDS RIVERSIDE DISTRICT



OVERLAY B
RIVERSIDE DISTRICT TOPOGRAPHY



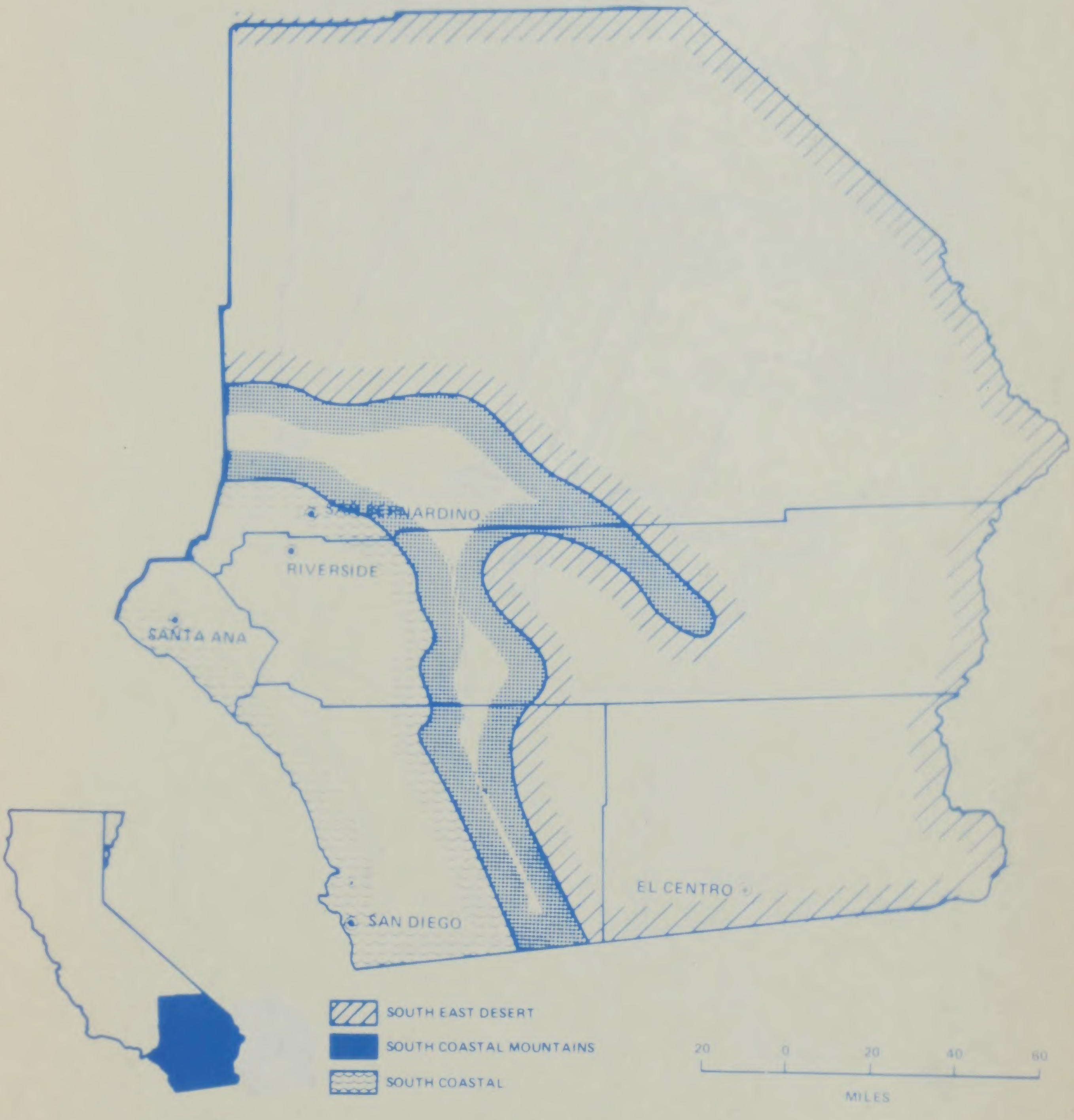
OVERLAY C
CLIMATIC ZONES FOR RIVERSIDE DISTRICT



OVERLAY D
MEAN ANNUAL TEMPERATURE CONTOURS (°F)

OVERLAY E
MEAN ANNUAL PRECIPITATION (INCHES)

OVERLAY F
CALIFORNIA AIR BASINS IN THE RIVERSIDE DISTRICT



OVERLAY G
MANDATORY CLASS I AREAS UNDER 1977 CLEAN AIR ACT AMENDMENTS