

Person's Original

MIDDLE RIO GRANDE CHAPTER OF THE NEW MEXICO VINE & WINE SOCIETY
Box 26751
Albuquerque, NM 87125

August 13, 1986

Mr. Ed Reisman, ATF Specialist
Bureau of Alcohol, Tobacco, and Firearms
1200 Pennsylvania Avenue N.W.
Washington, D.C. 20226

Dear Mr. Reisman:

In accordance with 27 CFR 4.25a regarding the labeling of wine with an appellation of origin, the Middle Rio Grande Chapter of the New Mexico Vine and Wine Society is submitting this petition to establish a viticultural area in Sandoval, Bernalillo, Valencia, and Socorro counties. The proposed viticultural area would be called the "Middle Rio Grande Valley."

Enclosed please find the following:

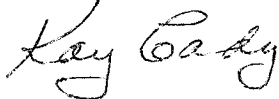
- 1) A description of the proposed boundary for the Middle Rio Grande Valley viticultural area.
- 2) A brief history of the name and of the grape industry in the Middle Rio Grande Valley.
- 3) Copies of articles using the "Middle Rio Grande Valley" name.
- 4) A description of the soil in the Middle Rio Grande Valley.
- 5) A description of the climate in the Middle Rio Grande Valley.
- 6) A photocopy of Index to U.S.G.S. Quadrangle Maps.
- 7) Twenty-five U.S.G.S. quadrangle maps showing the proposed boundary of the Middle Rio Grande viticultural area, and the approximate locations of the wineries and grape growers in the area.
- 8) List of bonded wineries and planned wineries located within the viticultural area.
- 9) List of wine grape growers located within the viticultural area.
- 10) Map of major land resource and subresource area, New Mexico, June 1980.
- 11) Descriptions of subresource areas SD-1 and SD-2, 1982.

Mr. Ed Reisman, ATF Specialist
Page 2
August 13, 1986

- 12) Map of New Mexico showing zones of average number of days without killing frost.
- 13) Map of New Mexico showing average dates of first and last killing frosts in zones, 1976.
- 14) Map of New Mexico showing major land resource areas and mean monthly temperatures and precipitation at selected stations, 1972.
- 15) Photocopy of Monthly Averages of Temperature and Precipitation for State Climatic Divisions 1941-70 for New Mexico including: mean temperatures, temperature normals, precipitation normal, cooling degree day normals, heating degree day normals.
- 16) Soils of New Mexico, Research Report 285, Agricultural Experiment Station, New Mexico State University, November 1978.

The Middle Rio Grande Chapter of the New Mexico Vine and Wine Society would appreciate your considerations of the Middle Rio Grande Valley as a viticultural area. If you have any questions, please feel free to contact me.

Sincerely yours,



Kay Cady
President

Enclosures

Resolution of the Middle Rio Grande Chapter
of the New Mexico Vine & Wine Society

The Middle Rio Grande Chapter of the New Mexico Vine & Wine Society unanimously passed a resolution on 24 August 1986 to recommend that the Bureau of Alcohol, Tobacco and Firearms accept the petition as submitted by the Middle Rio Grande Chapter of the New Mexico Vine & Wine Society establishing the Sandoval, Bernalillo, Valencia, and Socorro counties as a unique viticultural area.

Kay Cady
President

Kay Cady

Secretary

Ruth Rods

Date

24 August 1986

We, the undersigned, the only commercial and bonded wineries in the Middle Rio Grande Valley, support the petition for the proposed Middle Rio Grande Valley appellation, submitted by the Middle Rio Grande Chapter of the New Mexico Vine & Wine Society.

- 1) Don J. Spies (signature) Aug 22, 1986 (date)
Rio Valley Cellars (name of winery)
- 2) Richard Chivario (signature) Aug. 19, 1986 (date)
CHIVARIO VINEYARDS (name of winery)
- 3) Lyle H. Talbot (signature) Aug. 22, 1986 (date)
SANDIA SHADOWS VINEYARD AND WINERY (name of winery)
- 4) James J. Albrecht (signature) 19 Aug 86 (date)
Westwind Winery (name of winery)
- 5) Mary Anderson (signature) 8-23-86 (date)
Los Nutrias Vineyards & Winery (name of winery)
- 6) _____ (signature) _____ (date)
_____ (name of winery)

Proposed Boundary for the Middle Rio Grande Valley

The proposed viticultural area follows the Rio Grande River and surrounding irrigated land for the length of 106 miles. Elevations within the proposed area range from approximately 4,800 feet to 5,200 feet above sea level. The proposed viticultural area is approximately 435 square miles and at most 19 miles wide.

Attached are 25 U.S.G.S. quadrangle maps indicating the proposed boundary for the Middle Rio Grande Valley appellation which begins at a point near Algodones Dam in Sandoval County and proceeds south along the east side of the Rio Grande River to N.M. 380 west to the town of San Antonio, west on NM 85 and then north on the west side of the Rio Grande River and east to the point of origin. The 7.5 minute maps are entitled as follows:

Santa Ana Pueblo	Los Lunas
San Felipe Pueblo	Belen
Loma Machete	Tome
Bernalillo	Vegueta
Placitas	Turn
Los Griegos	Abeytas
Alameda	San Acacia
Albuquerque West	La Joya
Albuquerque East	Lemitar
Wind Mesa	Mesa del Yeso
Isleta	Socorro
Dalies	Loma de las Canas

Finally, one 15-minute map entitled "San Antonio" is attached.

The proposed boundary of the Middle Rio Grande Valley viticultural area is specifically as follows:

The beginning point is located along a pipeline on the U.S.G.S. "Santa Ana Pueblo Quadrangle" in the southeast corner of Section 34. The eastern boundary runs directly east along this pipeline for 2.5 miles until it converges with Interstate 25. It follows Interstate 25 south for 1.2 miles and turns east at section 11 of the "Placitas Quadrangle" on an unimproved road and follows it southeast for 5.5 miles to Tecolote and runs south from here for .7 miles until it converges with N.M. Highway 44. It follows Highway 44 south for .7 of a mile and runs onto the 6,100 foot contour line going west for approximately 2 miles. Then the boundary follows an unmarked road north for .6 of a mile until it again hits N.M. Highway 44. Here the boundary runs west on Highway 44 for 5 miles and meets with Interstate 25 going south for 10 miles and turns east on N.M. 556 for 4.5 miles. From here it runs south on the "Alameda Quadrangle" boundary for 4.3 miles and turns west on Montgomery Boulevard for 6 miles and converges again with Interstate 25 south for 13.3 miles. Here Interstate 25 turns onto Highway 47 for 3.2 miles, then turns east on the 4,900 contour line for approximately 25 miles. Here the contour line hits and follows the railroad north for .6 miles and from the railroad it runs south on Highway 47 for 2.4 miles. Now it follows the eastern boundary of the "Veguita Quadrangle" for 5.6 miles and converges back with Highway 47 for 12 miles. The boundary then follows an unimproved road for 7 miles until it reaches the "Mesa del Yeso Quadrangle" boundary. It follows this quadrangle boundary for 4.2 miles and turns east onto a section line for 1.5 miles. It then follows this section line south for 15.3 miles and converges with an unimproved road until it reaches Highway 380.

The southern boundary runs for 3 miles on Highway 380 and Highway 85.

The western boundary runs north on Highway 85 for 4.5 miles. From here it runs west along the boundary of the "Socorro Quadrangle" and merges with the 4,800 contour line running north. It follows this 4,800 contour line for

approximately 9 miles. The 4,800 contour line converges with Interstate 25 and the boundary follows the Interstate for 27.8 miles. The boundary continues north on the Belen Highline Canal for approximately 9.4 miles. It crosses and follows Interstate 25 for 16 miles. Then it runs west for 1 mile on the outer boundary of the "Isleta Quadrangle" and runs north on this boundary for 8 miles. It continues onto the outer boundary of the "Albuquerque West Quadrangle" for 18 miles. From here it runs east and merges with a pipeline and follows it north for 24.4 miles until it reaches the point of origin on the "Santa Ana Pueblo Quadrangle."

HISTORY

Winemaking, from grapes of the Mission variety, began in the Middle Rio Grande Valley of New Mexico with the establishment of Franciscan missions in the seventeenth century.¹ Grapes were first planted near Socorro (Socorro County) around 1630 by Fray Garcia de Zuniga.² General Stephen Kearny found established vineyards in 1846 and W.H. Davis' book of 1857, El Gringo, described a favorable claret from Bernalillo (Sandoval County). A U.S. Department of Agriculture census of viticulture in the U.S. in 1880 listed New Mexico as fifth in the nation in wine production, with 3150 acres of vineyards producing 908,500 gallons of wine. Governor William G. Ritch wrote in 1885 in The History, Resources and Attractions of New Mexico of the grape growing belt along the Rio Grande, of ditch irrigation methods, of congenial climate and soils, and that, "If the lands bordering upon the Rio Grande excel in any one specialty, it is as a grape growing district."

Winemaking continued in the Middle Rio Grande valley until Prohibition in 1920 when most vineyards were replaced by other crops. After repeal in 1933, viticulture was revived on a smaller scale. Louis Gross of Albuquerque replanted his father's vineyard in 1939 and resumed winemaking. Brother Nazaire of the Christian Brothers' St. Michaels High School in Albuquerque managed a small vineyard and winery in Bernalillo County. The La Salle Ranch label was used on their wines. The winery, established in the late 1930's, never produced

¹ Adams, Leon D. The Wines of America. Houghton Mifflin Co., Boston, 1973. pp. 21-346.

² Reiche, Phyllis. The Days of Wine and Vintners. University of Oklahoma Press, Norman, 1979. p. 157.

more than 2000 gallons of wine per year, was considered unprofitable, and was closed in the early 1950's. The site was destroyed by fire in the late 1950's.³

Currently, there are six bonded wineries within the proposed boundaries of the Middle Rio Grande Valley viticultural area with a total capacity in excess of 216,500 gallons of wine. At least two more wineries are in the planning or construction phases. There are twenty growers with more than one acre of wine grapes in the proposed area, with a total acreage of approximately 458 acres. Please see attached lists of names and addresses of vintners and growers.

The middle Rio Grande name has been in use for many years as a reference to this area of New Mexico. Proceedings of the annual New Mexico Grape Growers and Wine Makers Conferences have data presented by regions and the Middle Rio Grande region has only data from growers in this proposed viticultural area.

In New Mexico, the Rio Grande River basin is divided into three sections known as the upper, middle and lower valleys.⁴ The middle valley extends from Otowi Bridge at the head of White Rock Canyon (northeast Sandoval county) to Elephant Butte Reservoir (Sierra County).

Grape varieties grown in the Middle Rio Grande area, in descending order of acreage, include Vidal Blanc, Chancellor, Seyval Blanc, Villard Blanc, Chelois, Leon Millot, Pinot Chardonnay, De Chaunac, Baco Noir, Steuben and others. Most of the acreage is under drip irrigation and the most common training method is bilateral cordon.

³ Conversation with Brother Gregory Wright, College of Santa Fe, Albuquerque, April 1985.

⁴ Sorensen, Earl F. and Linford, Dee, "Settlement, Development and Water Use," Rio Grande Basin. New Mexico State Engineers office. Water Resources of New Mexico. Santa Fe, 1967.

SECTION I

CHRONOLOGICAL DEVELOPMENT OF THE
RIO GRANDE BASIN

The Middle Valley

The Middle Valley Prior to Spanish Exploration.

1. The middle Rio Grande valley in New Mexico is probably one of the oldest irrigated areas in the United States. Long before the first explorations of the Spaniards in 1539, the Indians in this valley were irrigating their lands, and traces of ancient canals are found in many localities.

2. These prehistoric Indians left no written records from which to determine the time when they first settled in the Rio Grande valley. Their own traditions and the studies of archaeologists seem to indicate that it was about the beginning of the Christian era, though some scholars place the date still earlier.

3. Antonio de Espejo, writing of the Rio Grande valley as seen by him about 1582, says in his "relaciones", "They (the Indians) have fields of maize, beans, gourds, and piciete in large quantities which they cultivate like the Mexicans. Some of the fields are under irrigation, possessing very good diverting ditches, while others are dependent upon the weather."

4. Archaeologists and historians differ widely in their estimates of the number of these earlier inhabitants. Benavidez says that the Rio Grande valley was quite densely populated, one "city" alone having 3000 inhabitants. Other investigators think his estimates exaggerated, but there is positive proof of the existence of a number of towns or "pueblos", and it is thought that a very conservative estimate of their population would be something like 25,000 people.

5. If they cultivated one acre of land per inhabitant (which is about the present area cultivated per capita on some of the pueblo grants), there must have been about 25,000 acres of cultivated land in the valley prior to the coming of the Spaniards.

The Middle Valley from 1539 to Date.

6. The first Spaniards to visit New Mexico were treasure seekers under Coronado. They accomplished little in the way of developing

the country and, disappointed in their quest for the fabulous wealth of "Cibola", returned to Mexico in 1542.

7. It was not until 1598 that a real colonizing expedition under Don Juan de Onate came into the valley and founded a settlement near the mouth of the Rio Chama at the Indian pueblo of Yugewinge. This settlement was christened San Juan de los Caballeros and was the first capital of the new empire. Here, with the assistance of 1500 Indians, Onate built a canal or "acequia" which was probably the first Spanish ditch in the country.

8. A few years later (probably 1609) this settlement was abandoned and a new capital was established at the Ciudad Real de la Santa Fe de San Francisco de Assisi, where it remains today under the shorter name of Santa Fe.

9. Exploration and colonization was carried on from Santa Fe for a period of about 75 years, but in 1680 the Indians rose in revolt and drove the Spaniards out of the country. They retired to Paso del Norte (the El Paso of today) and remained there for 12 years. In 1692, under Don Diego de Vargas, they put down the Indian rebellion and returned to Santa Fe and the Rio Grande valley.

10. At this time many vast Spanish land grants were made, in recognition of services rendered during the pueblo rebellion, and the real development of the country began. Perhaps because of the location of Santa Fe, which was the capital and headquarters for the entire country, this development took place generally from north to south, the country near Santa Fe being settled first.

11. In almost regular progression down the river to the south, settlement and development followed. Bernalillo was founded about 1700 on a land grant from the Spanish Crown.

12. The Villa de San Felipe de Alburquerque, named for King Philip of Spain and his Viceroy the Duke of Alburquerque, was settled in 1706 on the site of the old "hacienda" of Don Luis Carbajal, which had been destroyed by the Indians during the uprising of 1680.

13. In 1739 certain residents of Albuquerque, dissatisfied with conditions there, moved a few miles to the southward and established the settlement known as Nuestra Senora de la Concepcion de Tome Dominquez. This settlement still exists under the shorter name of Tome, and it is interesting to note that one of the reasons for the dissatisfaction of the original settlers with Albuquerque was the shortage of water for their fields.

14. In 1716 a grant of land known as the San Clemente Grant was made to Ana Sandoval y Manzanares, daughter of Mateo Sandoval y Manzanares, one of the original colonists driven out by the pueblo

rebellion of 1680. of Albuquerque, is

15. The Pueblo of Bernalillo was founded about 1642 and the

16. The Spaniards were Indian pueblos and fields established since 1680 these few years the hostile Apaches did not until the building of 200 years later that

17. The abandonment of the settlement of Tome each community was since all of these settlements upon irrigation, with Today there are near duplication of effort

18. From the time in 1539, the middle ruled by Spanish government of Mexico independence.

19. When the country became Mexican to the United States in 1848. This treaty anteed to the inhabitants to which they the Spanish colonies New Mexico, and irrigation canals and

The Valle

Brief Historical Sta

20. In the Spanish rule, there Paso del Norte (the river gave access to

21. Otermin Paso in 1680 and re scale was attempted

rebellion of 1680. The present town of Los Lunas, some 20 miles south of Albuquerque, is located on this grant.

15. The Belen area developed from another land grant made in about 1642 and the La Joya grant to the south followed.

16. The Socorro area was developed many years later. There were Indian pueblos in this locality in pre-Spanish time and the Spaniards established several missions at these pueblos, but after the rebellion of 1680 these few small settlements were exposed to continual attack by the hostile Apaches who murdered or drove off the settlers, and it was not until the building of the railway down the Rio Grande valley some 200 years later that the real development of this country took place.

17. The above historical sketch outlines roughly the history of the settlement of the middle Rio Grande valley in New Mexico. As each community was settled it built its own irrigating ditch or "acequia", since all of these settlements were agricultural communities, dependent upon irrigation, without which no crops could be grown in this country. Today there are nearly 70 ditches in the middle valley resulting in much duplication of effort and waste of water (see paragraph 66).

18. From the date of discovery by the Spanish Conquistadores in 1539, the middle Rio Grande valley was claimed by Spain and was ruled by Spanish governors under the jurisdiction of the colonial government of Mexico until 1821, when Mexico established her independence.

19. When Mexico revolted and became independent, this upper country became Mexican territory and so remained until it was ceded to the United States of America under the treaty of Guadalupe Hidalgo in 1848. This treaty, which marked the end of the Mexican war, guaranteed to the inhabitants of the ceded area the same rights and privileges to which they had been accustomed. Consequently the customs of the Spanish colonies have been preserved to a considerable extent in New Mexico, and this becomes important in any consideration of the irrigation canals and of the use of water.

The Valley from San Marcial to Fort Quitman

Brief Historical Statement.

20. In the southern Rio Grande valley, in the early days of Spanish rule, there was only one important settlement. This was at Paso del Norte (the present El Paso) where a ford or pass across the river gave access to the northern country.

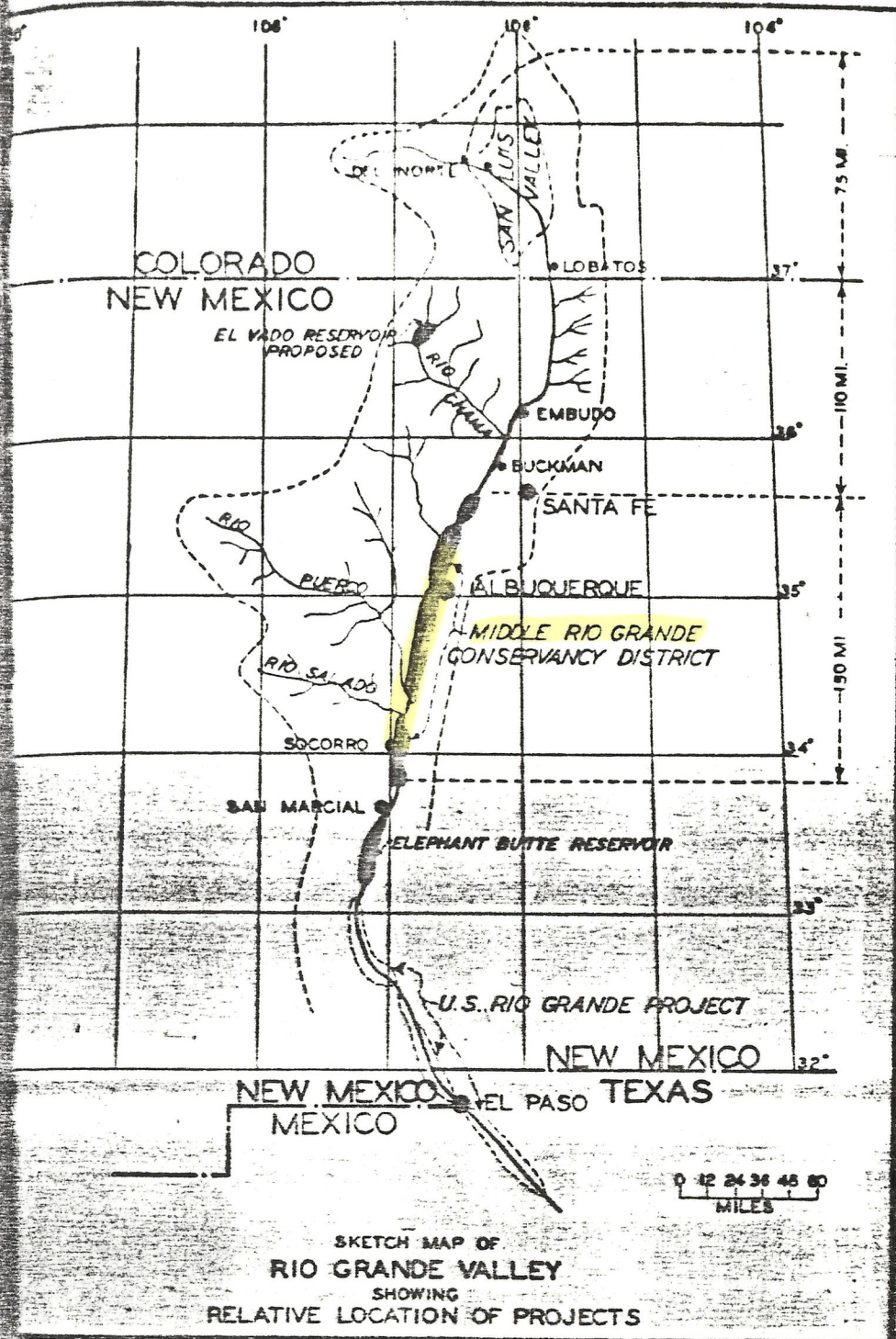
21. Otermin and his fugitives from Santa Fe stopped in El Paso in 1680 and remained until 1692, but no colonization on any large scale was attempted on account of the constant raids of the hostile

BY DISTRICT

of the El Vado Dam Site

of New Mexico, has collected conditions in the titled "Report on Ground" volume of maps and one

rendered several reports to of the exhibits. A sum 118 to 122.

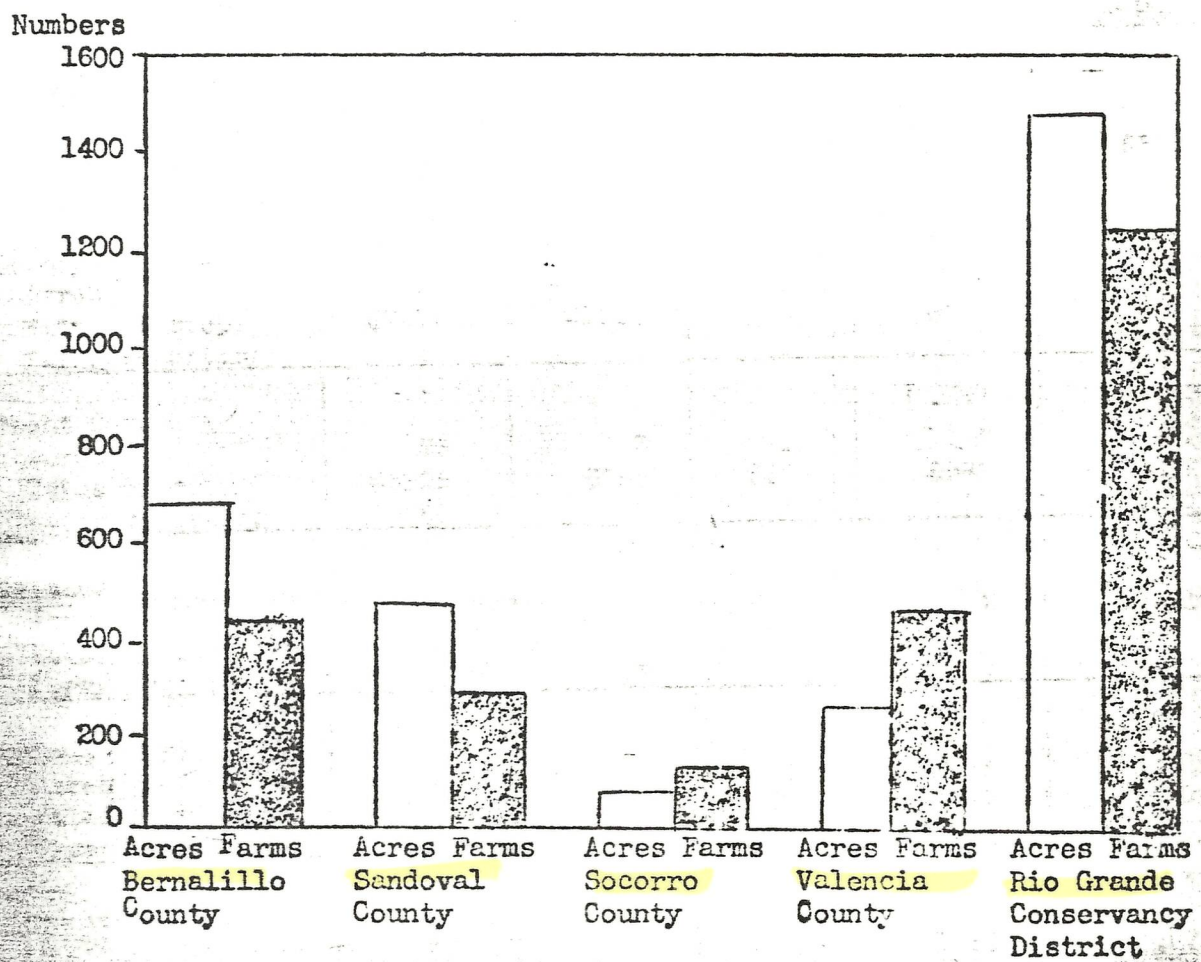


SKETCH MAP OF RIO GRANDE VALLEY SHOWING RELATIVE LOCATION OF PROJECTS

Vegetables and Fruits
Figure 1.

Graph showing Acres of Land in Orchard Fruits and Vineyards in the Middle Rio Grande Conservancy District of New Mexico, and number of farms reporting in 1930.

(Data taken from "Agricultural Program for the Middle Rio Grande Conservancy District" Vegetables and Fruits, Table 10.)



SOILS

The Middle Rio Grande viticultural area is located in a Basin province of the Warm Desertic Region of New Mexico. The Rio Grande River is the principle drainage for the Rio Grande Valley. Soils within the viticultural area are on the nearly level floodplain adjacent to the river and are deep, highly stratified and typically non-gravelly. The Typic Torrifluvent association is developed in alluvium of mixed origin. Most are medium, moderately fine or fine textured and a high percentage are well suited to irrigation for a wide variety of crops. Subsurface layers are similar but may range in texture from sand to clay. Representative soil series are of Gila, Glendale or Vinton series.

By contrast, soils adjacent to the viticultural area that occur on the strongly sloping uplands above the Rio Grande plain have soils of the Typic Torriothents which have gravelly, sandy surface layers and coarse textured subsurface layers. Soil series in this area are Bluepoint and Caliza. Higher soils are Rough Broken Land of Nickel and Canutio series and include a layer of gravel with subsurface caliche and clay layers. Steep side slopes cut with streambeds often show exposed areas of bedrock in the eroded hilly areas.

Attached are bulletins from the Agricultural Extension Service, New Mexico State University, containing supporting soils information.

CLIMATE

The Middle Rio Grande Valley viticultural area is located between latitudes of 34 degrees and 36 degrees North in central New Mexico. The climate is characterized by low rainfall, warm summers, and mild winters and is classified as arid continental type. Most precipitation occurs during summer months as brief thundershowers. Snow occurs occasionally in the winter but amounts are

light and shortlived. Winds are light to moderate and usually stronger during Spring months. The average number of days without killing frost ranges between 180 to 200 days in this belt. Temperatures fluctuate 30 to 35 degrees between night minimums and day maximums.

Four sites which are located from the northern to the southern boundary are listed in Table 1. Four sites which lie outside the boundary are listed in Table 2. Comparison of internal factors of temperature, precipitation, altitude and degree days to external climatic factors illustrates that the characteristics common to the sites within the boundary are different from those outside the boundary. The entire proposed viticultural area lies adjacent to the Rio Grande River which has a mediating affect on temperatures. Attached are photocopies of relevant data from Publication 81 for New Mexico from the Environmental Data Service of the National Oceanic and Atmospheric Administration.

Table 1. Climatic conditions at four sites within Middle Rio Grande Valley
Viticultural area, New Mexico

Site	Elevation	Area	Temperature (F)			Ave. (In.) Rainfall	Degree Days ^a	
			Max	Mean	Min		Heating	Cooling
Bernalillo	5045	N	71.9	54.6	37.2	9.20	4726	934
Albuquerque	5311	+	70.3	56.8	42.1	8.12	4292	1316
Socorro	4585	+	73.2	57.8	40.5	8.63	3915	1325
Bosque	4520	S	75.7	57.7	39.3	8.28	3931	1289

Source: Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1941-70, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, Publication No. 81 (by state), August 1973, Asheville, N.C.

^aBase 65 degree F.

Table 2. Climatic conditions at four sites outside the Middle Rio Grande Valley
Viticultural area, New Mexico

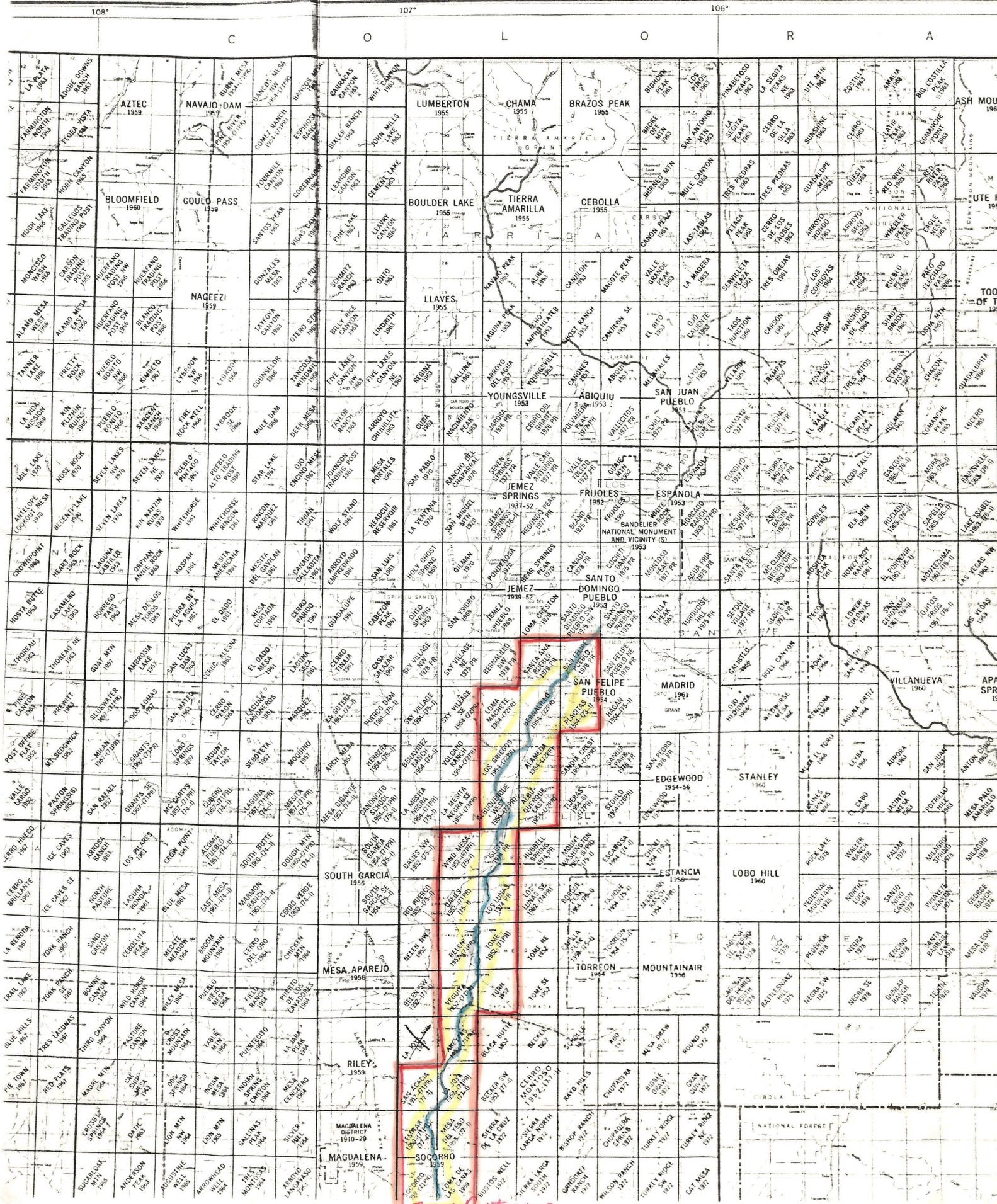
Site	Elevation	Area	Temperature (F)			Ave. (In.) Fainfall	Degree Days ^a	
			Max	Mean	Min		Heating	Cooling
Jemez Dam	6250	N	66.7	52.0	37.3	16.37	5330	526
Magdalena	6540	W	71.7	52.4	33.6	10.41	5112	550
Truth or Con.	4820	E	73.8	58.9	45.7	8.33	3392	1558
Caballo	4190	S	76.4	60.4	44.2	8.23	3188	1690

Source: Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1941-70, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, Publication No. 81 (by state), August 1973, Asheville, N.C.

^aBase 65 degree F.

INDEX TO TOPOGRAPHIC MAPS OF NEW MEXICO
 ORDER MAPS BY NAMES PRINTED IN BLACK AND BY SERIES DESIGNATION
 ALL MAPS SHOWN ON THIS INDEX
 ARE DISTRIBUTED BY THE GEOLOGICAL SURVEY

155



Wineries in Middle Rio Grande Valley, New Mexico

A. Bonded Wineries

1. Anderson Valley Vineyards
Patty Anderson
Kris Anderson
4920 Rio Grande Blvd. N.W.
Albuquerque, NM 87107
(505) 345-8151 and (505) 345-7744
36,000 gallons capacity
2. Chiavario's Vineyards & Winery
Richard Chiavario
4521 San Andres, N.E.
Albuquerque, NM 87110
(505) 881-6260
In excess of 5,000 gallons capacity
3. Sandia Shadows
Vineyard and Winery
Lyle Tabbot
11704 Coronado N.E.
Albuquerque, NM 87122
(505) 298-8826
4,500 gallons capacity
4. Westwind Winery
Jim Winchell
West NM Highway 44
Box 786
Bernalillo, NM 87004
(505) 867-3000 or (505) 883-0000
108,000 gallons capacity
5. Ron Spiers
Rio Valley Cellars of New Mexico, Ltd.
P.O. Box 100
Bosque, NM 87006
(505) 864-4561
60,000 gallons capacity
6. Ken Kendzierski
Las Nutrias Vineyard & Winery
P.O. Box 1156
Corrales, NM 87048
(505) 898-5690
3,000 gallons capacity
Have under construction a several hundred thousand gallon winery in the Belen area.

B. New Wineries to be built (or already in building process)

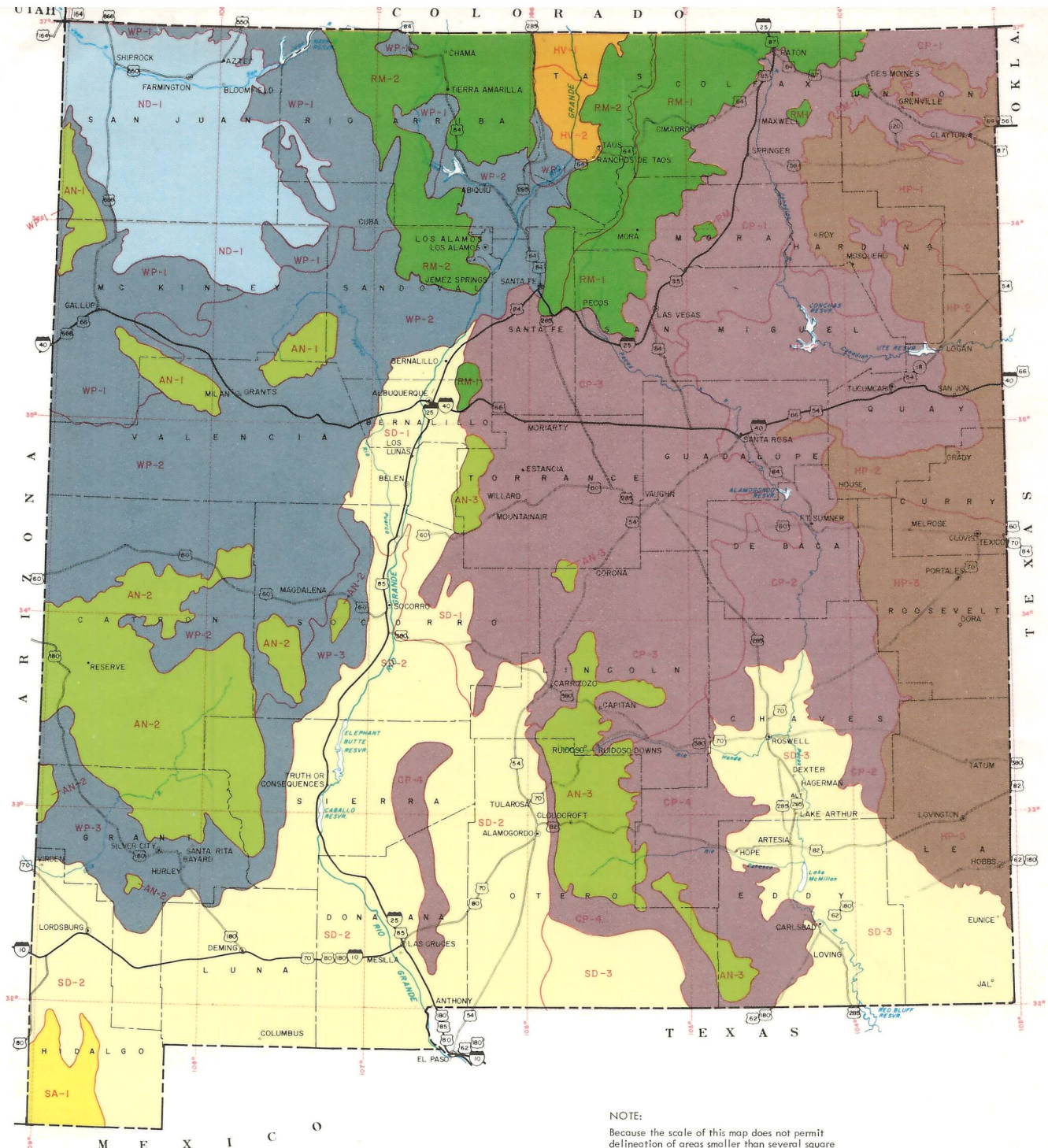
1. Anna Gailard, Gary Miller
New Mexico Wine Growers Cooperative
1325 Foothill Dr. S.W.
Albuquerque, NM 87105
(505) 877-1627, 873-2324
10,000 gallons capacity

2. Kay and Bob Cady
BoKay Winery
Box 13, TSR
Placitas, NM 87043
(505) 867-2100

Middle Rio Grande Wine Grape Grower with > 1 acre

	<u>Grape acreage</u>
Kris Anderson Anderson Valley Vineyards 4920 Rio Grande Blvd. N.W. Albuquerque, NM 87107	15 acres
Robert Benavidez P.O. Box 12 Bosque, NM 87006	5 acres
Baron Brumley 6421 Palacio S.W. Albuquerque, NM 87105	3 acres
Kay and Bob Cady Box 13, TSR Placitas, NM 87043	± 1 acre
Richard A. Chiavario Chiavario Vineyard & Winery 4521 San Andres N.E. Albuquerque, NM 87110	11.5 acres
Mrs. Clarence Gailard 1325 Foothill S.W. Albuquerque, NM 87105	3.5 acres
Nicolas Gonzales, Sr. 6734 Isleta Blvd. S.W. Albuquerque, NM	± 2 acres
Sharon and Tony Hurst Route 7, Box 303 Bosque, NM 87006	4 acres
Larry Jackshaw P.O. Box 922 Socorro, NM 87801	1 acre
Henry Jaramillo 1231 Playa Verde Belen, NM 87002	3 acres
Ken Kendzierski Las Nutrias Vineyard P.O. Box 1156 Corrales, NM 87048	110 acres

Alan Marks Vegueta Vineyards 240 Valley High S.W. Albuquerque, NM 87102	119 acres
Gary Miller Valle Grande Vineyard 2707 Chapulin S.W. Albuquerque, NM 87105	4 acres
Carl Popp 1213 Vista Dr. Socorro, NM 87801	± 1 acre
Edward Shaffer P.O. Box 754 Placitas, NM 87043	3 acres
Don Spiers Rio Valley Cellars of N.M., Ltd. P.O. Box 100 Bosque, NM 87006	145 acres
Greg Steiner 1700 Camino del Llano Belen, NM 87002	2 acres
Lyle Talbot Sandia Shadows Winery 11704 Coronado N.E. Albuquerque, NM 87122	14 acres
Pete Taraddai P.O. Box 817 Placitas, NM 87043	3 acres
Felix Torres, Jr. P.O. Box 473 Socorro, NM 87801	8 acres



LEGEND (see other side for detail descriptions)

- | | |
|---|--|
| ■ New Mexico and Arizona Plateaus and Mesas (36) | ■ Southern Rocky Mountains (48) |
| WP - 1 | RM - 1 |
| WP - 2 | RM - 2 |
| WP - 3 | ■ High Intermountain Valleys (51) |
| ■ San Juan River Valley, Mesas and Plateaus (37) | HV - 1 |
| ND - 1 | HV - 2 |
| ■ Arizona and New Mexico Mountains (39) | ■ Pecos - Canadian Plains and Valleys (70) |
| AN - 1 | CP - 1 |
| AN - 2 | CP - 2 |
| AN - 3 | CP - 3 |
| ■ Southeastern Arizona Basin and Range (41) | CP - 4* San Andres and Organ Mountains |
| SA - 1 | ■ Southern High Plains (77) |
| ■ Southern Desertic Basins, Plains and Mountains (42) | HP - 1 |
| SD - 1 | HP - 2 |
| SD - 2 | HP - 3 |
| SD - 3 | |

Do not have sufficient data to describe different resource areas.

NOTE:

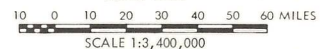
Because the scale of this map does not permit delineation of areas smaller than several square miles, contrasting areas up to this size may occur in any of the delineations.

Detailed descriptions are available from:
 PLANT SCIENCE
 SCS, BOX 2007
 ALBUQUERQUE, N.M. 87103



MAJOR LAND RESOURCE AND SUBRESOURCE AREAS NEW MEXICO

JUNE 1980



DESCRIPTION*

MLRA 42 - Southern Desert Subresource Area SD-2
Southern Desertic Basins, Plains and Mountains

ELEVATION AND TOPOGRAPHY: 3,800 to 5,200 feet.
Characterized by gently sloping plains, broken by mountains and the Rio Grande.
Rugged desert mountains rise abruptly from the flood plain.

CLIMATE: Warm desertic region
Average annual precipitation: 8 to 10 inches. Mostly summer precipitation.
Average annual temperature: 60° F, with extremes of 5° below zero and 110° F.
Average frost-free season: ranges from 200 to 215 days.

SOIL: Temperature regime: Thermic
Moisture regime: Aridic
Great Groups: Haplargids, Paleargids, Calciorthids, Gypsiorthids, Paleorthids, Torripsamments, Torrifluvents, and Torriorthents.

POTENTIAL NATURAL VEGETATION:
The soils in this area will support both grassland and mixed grass-shrubland vegetation. The grasslands are characterized by such plants as black grama, bush muhly, giant dropseed, mesa dropseed, tobosa, and soaptree yucca. On gravelly calcareous soils occurring mostly as footslopes of both small and large mountains, shrubs such as creosotebush and tarbush are components of the plant communities, along with black grama, bush muhly, soaptree yucca, and torrey yucca. Draws are dominated by tobosa and major bottomlands by giant sacaton or alkali sacaton.

*These are general descriptions for large areas. Significant deviations do occur. If more detail is needed, please refer to the more specific range site descriptions for each subresource area.

DESCRIPTION*

MLRA 42 - Southern Desert Subresource Area SD-1
Southern Desertic Basins, Plains and Mountains

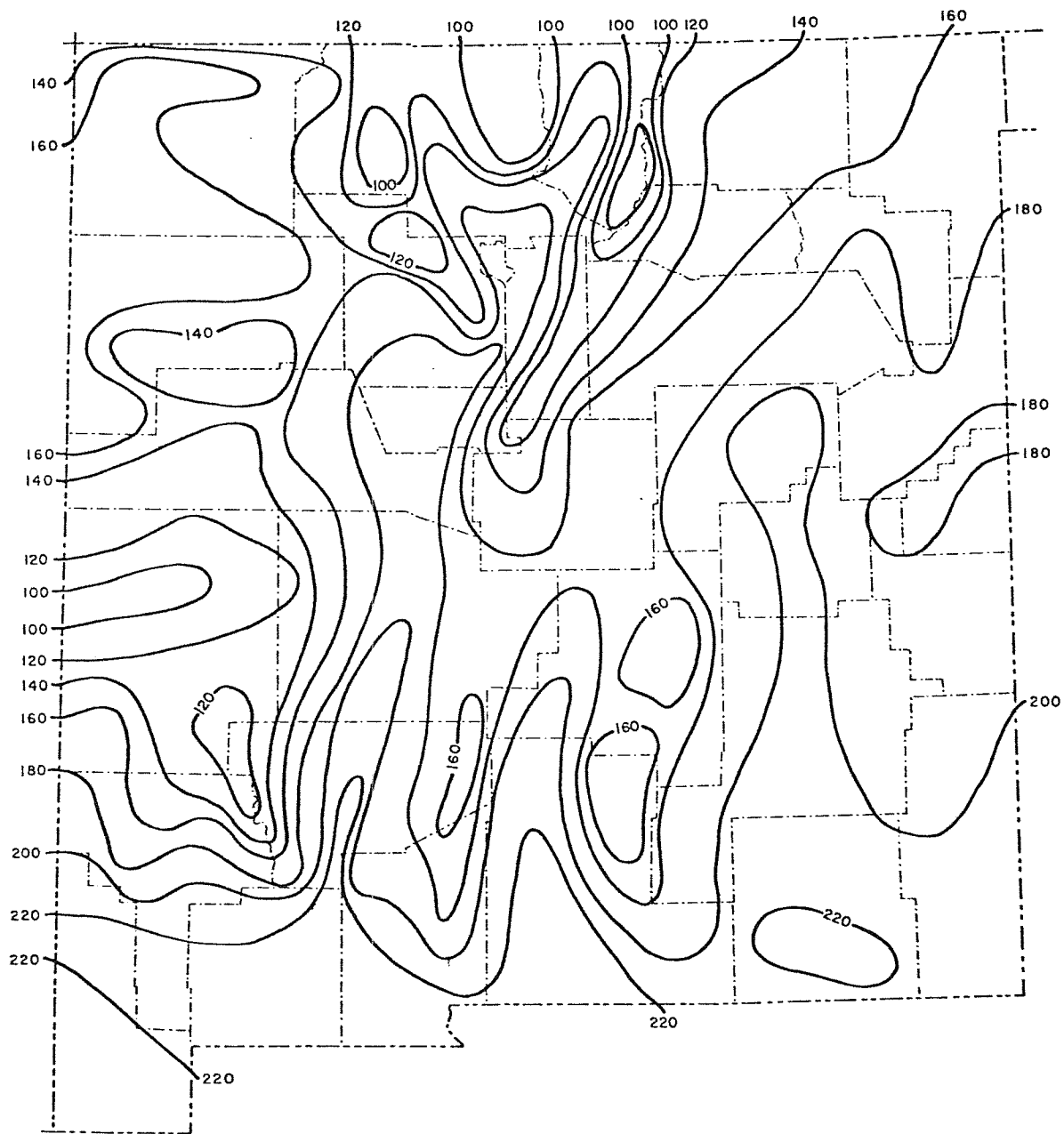
ELEVATION AND TOPOGRAPHY: 4,500 to 5,500 feet.
Primarily broad desert basins and valleys bordered by gently to strongly sloping fans and terraces. Small mesas may dot the landscape.

CLIMATE: Warm Desertic Region
Average annual precipitation: 8 to 11 inches, mostly received in summer.
Average annual temperature: 57° F, with extremes of 10° below zero to 103° F.
Average frost-free season: ranges from 160 to 185 days.

SOILS: Temperature regime: Thermic-Mesic
Moisture regime: Ustic-Aridic, Aridic
Great Groups: Torrifuvents, Calciorthids, Torriorthents, Haplargids, Torripsamments.

POTENTIAL NATURAL VEGETATION:
The cooler portions are characterized by grasses such as Indian ricegrass, New Mexico feathergrass, galleta, bottlebrush squirreltail, and blue grama. The warmer portions support grasses such as black grama and tobosa. Alkali sacaton, dropseeds, threeawns, and shrubs, such as fourwing saltbush, winterfat, Mormon-tea, and broom dalea, grow on both the warmer and cooler areas. Riparian vegetation along the Rio Grande includes cottonwood, salt cedar, inland saltgrass, and sacatons.

*These are general descriptions for large areas. Significant deviations do occur. If more detail is needed, please refer to the more specific range site descriptions for each subresource area.



AVERAGE NUMBER OF DAYS WITHOUT KILLING FROST

Figure 38

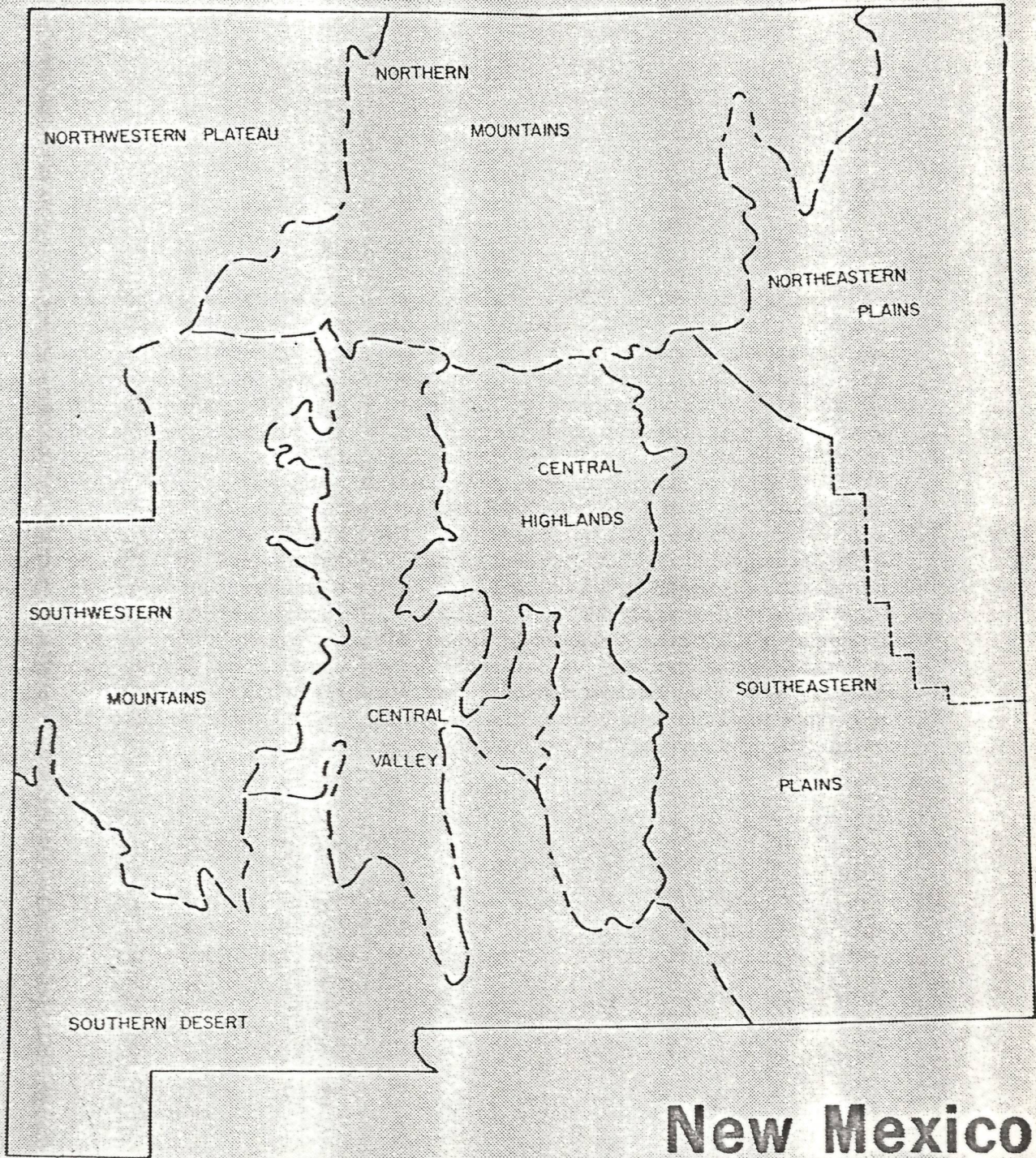
Monthly Averages of Temperature and Precipitation for State Climatic Divisions 1941-70

*EVIDENCE
MIDDLE RIO GRANDE
VALLEY, NM 15*

UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service



New Mexico

National
Climatic Center
Asheville, N.C.
July 1973

29 - NEW MEXICO

LEGEND
 11 = TEMPERATURE ONLY
 12 = PRECIPITATION ONLY
 13 = TEMP. & PRECIP.

STATE-STATION NUMBER	STN TYP	NAME	LATITUDE DEG-MIN	LONGITUDE DEG-MIN	ELEVATION (FT)
29-0125	12	AFTON 5 ESE	N 3203	W 10652	4200
29-0199	13	ALAMOGORDO	N 3253	W 10557	4350
29-0234	13	ALBUQUERQUE WSO //R	N 3503	W 10637	5311
29-0268	12	ALEMAN RANCH	N 3255	W 10656	4527
29-0377	13	AMISTAD 1 SSW	N 3554	W 10310	4500
29-0417	12	ANIMAS	N 3157	W 10849	4415
29-0600	13	ARTESIA 6 S	N 3246	W 10423	3320
29-0640	12	AUGUSTINE	N 3405	W 10741	7020
29-0692	13	AZTEC RUINS NAT MON	N 3650	W 10800	5640
29-0818	12	BEAVERHEAD RANGER STA	N 3325	W 10807	6670
29-0858	13	BELL RANCH	N 3532	W 10406	4500
29-0903	13	BERNALILLO	N 3519	W 10633	5045
29-0992	13	BITTER LAKES WL REF	N 3329	W 10424	3670
29-1000	12	BLACK LAKE	N 3618	W 10517	8358
29-1063	13	BLOOMFIELD 3 SE	N 3640	W 10758	5794
29-1138	13	BOSQUE DEL APACHE	N 3346	W 10654	4520
29-1252	12	BUCKHORN	N 3302	W 10843	4800
29-1286	13	CABALLO DAM	N 3254	W 10718	4190
29-1332	13	CAMERON	N 3454	W 10323	4600
29-1389	12	CANJILON RANGER STA	N 3629	W 10627	7828
29-1423	12	CANTON	N 3417	W 10410	4056
29-1469	12	CARLSBAD	N 3225	W 10414	3120
29-1475	13	CARLSBAD FAA AIRPORT	N 3220	W 10416	3232
29-1480	13	CARLSBAD CAVERNS	N 3211	W 10427	4435
29-1515	13	CARRIZOZO	N 3339	W 10553	5438
29-1630	13	CERRO 4 NE	N 3649	W 10535	7685
29-1647	13	CHACO CANYON NAT MON	N 3602	W 10754	6175
29-1653	12	CHACON	N 3610	W 10523	8500
29-1664	13	CHAMA	N 3655	W 10635	7850
29-1813	13	CIMARRON	N 3631	W 10455	6427
29-1887	13	CLAYTON WSO R	N 3627	W 10309	4970
29-1910	13	CLIFF 10 SE	N 3252	W 10831	4800
29-1939	13	CLOVIS	N 3426	W 10312	4280
29-1963	13	CLOVIS 13 N	N 3436	W 10313	4435
29-2024	13	COLUMBUS	N 3150	W 10739	4010
29-2030	13	CONCHAS DAM	N 3524	W 10411	4244
29-2207	12	CROSSROADS 2 NE	N 3332	W 10319	4120
29-2241	13	CUBA	N 3602	W 10658	7045
29-2324	12	CURETON RANCH	N 3232	W 10834	5200
29-2453	13	DES MOINES	N 3645	W 10350	6632
29-2510	12	DILIA	N 3511	W 10504	5200
29-2608	12	DULCE	N 3657	W 10700	6950
29-2700	13	EAGLE NEST	N 3633	W 10516	8275
29-2785	13	EL MORRO NAT MON	N 3503	W 10821	7225
29-2820	12	EL RITO	N 3620	W 10611	6870
29-2837	13	EL VADO DAM	N 3636	W 10644	6750
29-2848	13	ELEPHANT BUTTE DAM	N 3309	W 10711	4576
29-2854	13	ELIDA	N 3357	W 10339	4345
29-2865	13	ELK 3 E	N 3256	W 10517	5700
29-3031	12	ESPANOLA	N 3601	W 10603	5685

29 - NEW MEXICO

LEGEND
 11 = TEMPERATURE ONLY
 12 = PRECIPITATION ONLY
 13 = TEMP. & PRECIP.

STATE-STATION NUMBER	STN TYP	NAME	LATITUDE DEG-MIN	LONGITUDE DEG-MIN	ELEVATION (FT)
29-6687	12	PEDERNAL 4 E	N 3438	W 10534	6200
29-7008	13	PORTALES	N 3411	W 10321	4010
29-7026	12	PORTER	N 3513	W 10317	4100
29-7094	12	PROGRESSO	N 3425	W 10551	6300
29-7180	13	QUEMADO RANGER STATION	N 3421	W 10830	6879
29-7226	12	RAGLAND	N 3449	W 10344	5110
29-7323	13	RED RIVER	N 3642	W 10524	8676
29-7340	12	REDROCK 1 NE	N 3242	W 10844	4150
29-7386	12	RESERVE RANGER STATION	N 3343	W 10847	5847
29-7423	12	RIENHARDT RANCH	N 3345	W 10713	5450
29-7610	13	ROSWELL WSO	N 3318	W 10432	3649
29-7638	13	ROY	N 3557	W 10412	5890
29-7649	13	RUIDOSO 2 NNE	N 3322	W 10540	6838
29-7867	13	SAN JON	N 3507	W 10320	4230
29-8015	12	SANDIA PARK	N 3510	W 10622	7106
29-8107	13	SANTA ROSA	N 3457	W 10441	4620
29-8284	12	SHIPROCK	N 3647	W 10842	4870
29-8352	12	SKARDA	N 3646	W 10558	8280
29-8387	13	SOCORRO	N 3405	W 10653	4585
29-8501	13	SPRINGER	N 3623	W 10436	5857
29-8524	12	STAR LAKE	N 3556	W 10728	7100
29-8535	13	STATE UNIVERSITY	N 3217	W 10645	3881
29-8648	13	TAJIQUE	N 3445	W 10617	6698
29-8668	12	TAOS	N 3622	W 10537	6945
29-8713	12	TATUM	N 3316	W 10319	4100
29-8845	12	TIERRA AMARILLA 4 NNW	N 3645	W 10634	7425
29-8919	13	TOHATCHI 1 ESE	N 3551	W 10844	6420
29-9085	12	TRES PIEDRAS	N 3640	W 10559	8110
29-9129	13	TRUTH OR CONSEQUENCES	N 3314	W 10716	4820
29-9153	13	TUCUMCARI FAA AP	N 3511	W 10336	4050
29-9156	13	TUCUMCARI 3 NE	N 3512	W 10341	4096
29-9165	12	TULAROSA	N 3305	W 10600	4535
29-9330	13	VALMORA	N 3549	W 10456	6300
29-9496	12	VILLANUEVA	N 3516	W 10522	5790
29-9686	13	WHITE SANDS NAT MON	N 3247	W 10611	3995
29-9691	12	WHITE SIGNAL	N 3233	W 10822	6070
29-9720	12	WHITewater	N 3233	W 10808	5150
29-9806	13	WINSTON	N 3321	W 10739	6200
29-9820	13	WOLF CANYON	N 3558	W 10646	8135
29-9851	12	YESO 2 S	N 3424	W 10437	4850
29-9897	12	ZUNI FAA AIRPORT	N 3506	W 10847	6440

NEW MEXICO

MEAN TEMPERATURE

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
ALAMOGORDO DAM	39.0	42.8	48.4	58.0	66.8	75.8	78.7	77.3	70.4	59.8	47.8	40.6	58.8
ALBUQUERQUE WSO	35.2	40.0	45.8	55.8	65.3	74.6	78.7	76.6	70.1	58.2	44.5	36.2	56.8
AMISTAD 1 SSW	35.8	39.4	44.5	54.9	63.9	73.0	77.1	75.7	68.2	57.9	45.3	37.7	56.1
ARTESIA 6 S	40.8	45.3	51.5	61.6	70.0	78.4	80.7	79.6	72.5	62.1	48.7	42.1	61.2
AZTEC RUINS NAT MON	29.1	35.3	41.0	50.1	59.1	67.3	74.4	72.1	64.7	53.7	40.0	30.9	51.5
BANDELIER NAT MON	28.7	34.3	40.4	49.6	58.1	66.8	71.7	69.5	62.9	51.9	38.7	30.2	50.2
BELL RANCH	36.4	40.8	46.1	56.3	65.1	74.2	78.1	76.7	69.8	58.3	45.5	37.9	57.1
BERNALILLO	34.0	38.6	44.7	54.1	62.3	70.5	76.5	74.2	66.6	55.5	42.7	34.7	54.5
BINGHAM	35.7	39.5	45.0	54.6	63.4	72.6	76.2	74.3	67.9	57.1	44.3	36.9	55.6
BLOOMFIELD 3 SE	29.3	35.4	41.7	51.4	61.2	70.6	76.3	73.8	66.4	54.4	40.7	30.9	52.7
BOSQUE DEL APACHE	37.5	42.2	48.3	57.9	65.8	74.3	78.4	76.4	69.4	58.4	45.8	37.8	57.7
CABALLO DAM	41.1	45.8	51.2	60.3	68.2	77.3	80.9	78.9	72.7	61.8	49.7	41.9	60.8
CARLSBAD	42.7	47.4	53.4	63.3	71.5	79.5	81.3	80.2	73.5	63.2	51.1	44.2	62.6
CARLSBAD CAVERNS	45.5	48.9	53.7	63.1	70.8	77.9	79.1	78.5	72.7	64.3	53.7	47.4	63.0
CARRIZOZO	36.2	40.2	45.8	55.2	63.9	72.8	75.9	73.9	67.8	56.8	44.3	37.3	55.8
CERRO 4 NE	21.9	27.3	33.9	43.8	52.3	60.6	65.8	64.1	58.1	47.7	34.4	25.0	44.6
CHACO CANYON NAT MON	28.0	33.7	39.0	48.5	57.1	66.2	73.2	70.8	63.1	51.5	37.9	29.1	49.8
CHAMA	22.6	25.9	30.7	41.0	49.7	58.1	64.5	62.8	56.3	46.4	33.8	25.1	43.1
CIMARRON	32.2	35.2	39.5	48.8	57.2	65.5	69.2	67.5	61.5	52.0	40.5	34.2	50.3
CLAYTON WSO	33.1	36.1	40.4	50.8	60.0	69.2	73.6	72.4	65.0	54.8	42.3	35.1	52.7
CLOUDCROFT LODGE	30.0	31.6	35.2	43.8	51.3	58.7	59.9	58.9	54.8	46.7	37.3	31.6	45.0
CLOVIS	37.2	41.1	46.5	56.8	65.4	74.2	77.6	76.3	69.1	58.6	46.4	39.3	57.4
CONCHAS DAM	38.9	42.9	47.7	57.7	66.6	75.7	79.5	78.0	71.5	60.9	48.5	40.6	59.0
CORONA	33.2	36.7	41.1	49.8	58.1	66.5	69.7	68.0	62.4	52.8	41.4	34.4	51.2
CUBA	25.5	29.8	34.9	44.4	53.3	62.4	68.8	66.4	59.3	48.4	35.6	27.3	46.3
DEMING	40.9	45.3	50.4	59.2	67.8	77.1	80.7	78.8	72.6	61.8	49.6	41.9	60.5
DES MOINES	30.0	32.5	36.7	46.8	56.0	65.0	69.6	68.1	61.4	50.8	39.0	32.0	49.0
EAGLE NEST	19.1	23.6	29.1	39.0	47.0	54.7	59.3	58.3	51.3	42.1	30.4	21.8	39.6
EL MORRO NAT MON	27.9	31.5	36.7	45.4	53.7	62.5	68.6	66.1	60.1	49.6	37.4	29.5	47.4
EL VADO DAM	21.9	27.0	33.8	43.8	52.5	60.5	67.4	65.5	57.7	47.3	34.6	25.1	44.8
ELEPHANT BUTTE DAM	41.2	46.1	51.5	60.5	68.9	77.7	80.3	78.5	72.7	62.5	50.0	42.0	61.0
ELIDA	37.5	41.5	46.7	56.9	65.5	74.4	77.2	76.3	69.5	59.3	47.0	39.6	57.6
ELK 3 E	38.0	40.5	44.9	52.6	60.2	67.6	69.6	68.5	63.1	54.8	45.1	39.7	53.7
ESTANCIA	30.9	35.2	40.5	49.4	57.9	66.4	71.0	68.9	62.1	51.4	39.5	31.8	50.4
FARMINGTON 4 NE	28.6	35.0	40.6	49.7	59.5	67.9	75.0	72.6	64.6	52.9	39.2	30.1	51.3
FORT BAYARD	37.1	40.3	44.2	52.5	60.4	69.3	72.4	70.3	65.5	56.1	45.1	38.9	54.3
FORT SUMNER	38.5	42.6	48.5	58.1	66.9	75.9	78.8	77.3	70.1	59.1	47.4	40.3	58.6
FRUITLAND 2 E	29.0	35.6	41.9	51.5	60.6	69.3	75.9	73.9	65.8	54.6	40.2	30.6	52.4
GAGE 4 ESE	40.1	44.2	49.2	57.8	66.5	76.1	79.6	77.3	71.3	60.7	48.2	41.0	59.3
GRAN QUIVIRA NAT MON	34.2	37.6	42.2	51.4	59.9	68.9	71.8	69.9	64.3	54.4	42.7	35.5	52.7
GRENVILLE	31.2	33.9	37.5	48.0	57.0	65.7	70.6	69.5	62.6	52.5	40.5	33.7	50.2
HACHITA 1 N	41.0	45.0	50.3	58.6	66.6	75.8	78.9	76.8	71.5	60.8	49.0	41.8	59.7
HATCH 2 W	40.5	45.0	51.0	60.0	67.8	76.3	79.6	77.5	71.1	60.5	48.9	41.2	60.0
HOBBS	42.2	46.0	51.7	62.0	70.0	78.1	80.1	79.3	72.8	63.1	51.3	44.3	61.7
JEMEZ SPRINGS	32.9	36.4	41.1	50.1	58.4	66.7	71.5	69.6	63.9	53.8	42.0	34.4	51.7
JORNADA EXP RANGE	39.2	43.4	49.0	57.8	65.8	75.4	79.3	77.2	70.6	59.6	47.0	39.6	58.7
LAS VEGAS FAA AIRPORT	31.2	33.9	37.8	47.1	56.0	64.6	68.3	66.8	60.8	51.0	39.8	33.1	49.2
LOS ALAMOS	28.1	32.6	37.4	46.5	55.7	65.0	68.5	66.5	61.2	50.9	38.6	31.2	48.6
LUNA RANGER STATION	28.7	32.2	36.2	43.2	50.4	59.0	64.9	62.8	57.2	47.5	36.6	30.3	45.8
MAGDALENA	33.6	37.4	42.1	51.3	59.9	68.8	71.7	69.3	64.0	53.7	41.9	35.3	52.4
MAYHILL RANGER STATION	37.2	39.3	43.0	50.8	58.6	66.1	68.1	66.9	61.9	53.7	44.1	38.8	52.4
MC INTOSH 4 NW	30.7	34.6	39.9	48.9	57.7	66.4	70.5	68.5	62.1	51.7	40.0	32.3	50.3
MELROSE	37.3	41.3	46.9	56.7	65.5	74.1	77.2	76.0	69.2	58.7	46.4	39.3	57.4
MOSQUERO	33.0	36.5	41.1	51.0	59.7	68.6	73.1	71.5	64.5	54.5	42.7	34.7	52.6
MOUNTAIN PARK	36.8	39.2	43.3	51.8	59.5	67.8	68.6	67.1	62.7	54.8	44.7	38.6	52.9
OROGRADE	42.0	46.8	52.8	61.7	70.2	79.0	81.5	79.5	73.5	63.0	49.9	42.8	61.9
PASAMONTE	31.8	34.7	39.2	49.9	58.6	67.1	72.2	70.3	63.6	53.0	40.8	33.8	51.3
PEARL	41.7	45.6	51.3	61.1	69.2	77.1	79.1	78.2	71.9	62.3	50.3	43.5	60.9
PORTALES	37.8	42.2	48.1	57.7	66.6	74.7	77.6	76.5	69.5	58.8	46.8	39.6	58.0
RED RIVER	19.3	21.8	26.9	37.0	44.9	52.6	57.8	56.5	50.7	41.7	29.2	21.1	38.3
ROSWELL WSO	38.1	42.9	49.3	59.7	68.5	77.0	79.2	77.9	70.4	59.6	46.9	39.3	59.1
RUIDOSO 2 NNE	32.9	35.3	39.5	47.2	54.3	62.0	65.0	63.4	58.2	49.5	39.9	34.3	48.5
SAN JON	37.7	41.8	47.5	57.6	66.6	75.8	79.2	77.8	70.9	59.7	46.9	39.3	58.4
SANDIA RANGER STATION	29.9	34.2	39.5	48.4	56.9	65.6	70.9	68.9	62.1	50.6	38.1	30.5	49.6
SANTA FE	29.8	33.5	38.3	47.9	56.8	65.9	70.4	68.0	62.3	51.8	39.2	31.4	49.6
SANTA ROSA	38.8	42.4	47.1	56.7	65.4	73.9	77.4	75.7	68.8	58.4	47.0	40.1	57.6
SOCORRO	37.3	42.4	48.5	58.1	66.2	74.7	78.4	76.4	69.7	58.8	45.7	37.6	57.8
SPRINGER	29.1	34.5	40.1	50.0	59.1	67.8	72.2	70.5	63.5	52.8	39.7	30.9	50.9
STATE UNIVERSITY	41.7	46.0	51.3	60.0	68.0	76.9	80.0	78.1	71.7	61.2	48.9	42.4	60.5
TAJIQUE 4 N	30.4	33.2	38.0	47.0	55.9	64.3	67.9	66.0	60.3	50.1	38.7	31.8	48.6
TIERRA AMARILLA 4 NNW	22.1	26.5	32.7	42.9	51.6	60.1	65.9	64.5	57.1	46.8	34.0	24.7	44.1
TRUTH OR CONNS FAA AP	40.0	44.9	50.2	59.5	68.2	76.9	79.3	77.4	71.6	61.3	48.7	40.8	59.9
TUCUMCARI FAA AP	37.0	41.1	46.7	56.9	65.6	75.0	78.4	76.7	69.6	58.7	46.2	38.6	57.6
TUCUMCARI 3 NE	38.4	41.8	47.3	57.6	66.2	75.3	78.7	77.2	70.4	60.0	47.5	39.7	58.3
VALMORA	30.7	33.9	37.9	47.1	55.5	63.9	68.6	67.0	60.8	50.9	39.5	32.8	49.1

NEW MEXICO

TEMPERATURE NORMALS (DEG F)

STATION		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALAMOGORDO	MAX	57.0	61.4	67.8	77.7	86.4	95.9	95.2	92.7	87.6	77.9	65.6	57.7	76.9
	MIN	27.9	31.0	36.7	44.1	52.3	61.8	65.3	63.7	57.5	46.1	34.1	28.1	45.7
	MEAN	42.5	46.2	52.3	60.9	69.4	79.9	80.3	78.2	72.6	62.1	49.9	42.9	61.4
ALBUQUERQUE WSO	//R MAX	47.2	52.9	60.7	70.6	79.9	90.6	92.8	89.4	83.0	71.7	57.2	48.0	70.3
	MIN	22.3	25.9	31.7	39.5	48.6	58.4	64.7	62.8	54.9	43.1	30.7	23.2	42.1
	MEAN	34.8	39.4	46.2	55.1	64.3	74.5	78.8	76.1	69.0	57.4	44.0	35.6	56.2
AMISTAD 1 SSW	MAX	50.7	55.2	62.2	71.9	80.0	89.5	92.4	90.1	83.4	73.8	59.8	52.8	71.8
	MIN	19.5	23.2	28.1	37.6	47.4	56.9	62.2	60.3	52.5	41.2	28.8	22.4	40.0
	MEAN	35.1	39.2	45.2	54.8	63.8	73.2	77.3	75.2	68.0	57.5	44.3	37.6	55.9
ARTESIA 6 S	MAX	57.1	61.7	68.7	78.1	86.0	94.4	95.1	93.3	87.0	78.0	65.4	58.7	77.0
	MIN	23.7	27.5	34.1	43.3	52.2	61.4	65.5	63.6	56.5	44.3	32.2	24.4	44.1
	MEAN	40.4	44.6	51.4	60.7	69.1	77.9	80.3	78.5	71.7	61.2	48.8	41.6	60.5
AZTEC RUINS NAT MON	MAX	42.3	49.7	57.9	67.8	77.5	87.9	92.6	89.5	82.9	71.0	55.1	43.7	68.2
	MIN	14.7	19.9	24.4	31.0	39.6	48.2	56.7	54.9	46.2	35.7	24.0	15.7	34.2
	MEAN	28.5	34.8	41.1	49.4	58.6	68.1	74.7	72.2	64.6	53.4	39.6	29.7	51.2
BELL RANCH	MAX	53.4	58.2	64.6	73.5	81.5	90.8	92.5	90.3	84.2	75.2	62.5	55.2	73.5
	MIN	18.0	22.4	27.6	37.9	48.0	57.6	63.8	61.9	53.6	40.5	27.8	19.7	39.9
	MEAN	35.7	40.4	46.2	55.7	64.8	74.2	78.2	76.1	68.9	57.9	45.2	37.5	56.7
BERNALILLO	MAX	49.2	54.9	62.6	72.1	81.2	91.2	94.0	90.8	84.6	73.8	59.1	49.8	71.9
	MIN	18.7	22.5	28.0	34.8	42.9	51.3	59.5	57.2	48.5	37.2	26.2	19.2	37.2
	MEAN	34.0	38.7	45.3	53.5	62.0	71.3	76.8	74.0	66.6	55.5	42.7	34.5	54.6
BITTER LAKES WL REF	MAX	57.7	62.6	70.3	79.5	87.4	95.8	96.0	93.9	87.4	78.7	65.6	59.1	77.8
	MIN	20.5	24.8	30.9	40.2	48.8	58.5	63.2	60.9	53.5	40.4	28.2	21.0	40.9
	MEAN	39.2	43.7	50.6	59.9	68.2	77.2	79.6	77.4	70.4	59.6	46.9	40.1	59.4
BLOOMFIELD 3 SE	MAX	40.7	48.1	56.3	66.6	77.0	88.5	92.7	89.3	82.3	70.0	53.8	42.7	67.3
	MIN	17.8	23.0	28.4	35.5	44.5	53.5	60.1	58.3	50.6	39.3	27.5	18.8	38.1
	MEAN	29.3	35.6	42.4	51.1	60.8	71.0	76.4	73.8	66.5	54.6	40.7	30.8	52.8
BOSQUE DEL APACHE	MAX	54.4	60.4	67.4	76.6	85.1	94.1	95.2	92.4	86.8	77.5	64.3	54.2	75.7
	MIN	20.7	24.2	30.3	37.4	45.5	54.2	61.3	59.3	50.9	39.1	27.1	21.0	39.3
	MEAN	37.6	42.3	48.9	57.0	65.3	74.2	78.3	75.9	68.9	58.3	45.7	37.6	57.5
CABALLO DAM	MAX	56.5	61.4	67.6	76.6	85.0	94.7	95.4	92.8	87.2	77.9	65.6	56.5	76.4
	MIN	25.7	29.0	34.6	41.9	49.8	59.5	65.9	63.7	56.7	44.5	33.2	26.3	44.2
	MEAN	41.1	45.2	51.1	59.3	67.4	77.1	80.7	78.3	72.0	61.2	49.4	41.4	60.4
CAMERON	MAX	50.6	54.6	62.1	71.2	79.5	88.6	90.5	88.5	82.0	72.4	58.9	52.0	70.9
	MIN	20.8	24.2	29.2	37.9	47.3	56.7	61.3	59.6	53.1	41.5	29.8	23.3	40.4
	MEAN	35.7	39.4	45.6	54.6	63.5	72.6	75.9	74.0	67.6	57.0	44.4	37.7	55.7
CARLSBAD FAA AIRPORT	MAX	57.1	61.9	69.4	79.1	87.4	95.5	95.6	93.6	86.9	77.5	64.8	58.3	77.3
	MIN	29.2	32.8	39.1	48.2	57.0	65.6	69.3	67.6	60.9	48.8	36.7	30.3	48.8
	MEAN	43.2	47.4	54.3	63.7	72.2	80.6	82.5	80.6	73.9	63.2	50.8	44.3	63.1
CARLSBAD CAVERNS	MAX	57.0	60.5	66.7	75.7	83.2	90.8	90.8	89.1	83.2	74.9	64.0	58.6	74.5
	MIN	33.7	35.9	41.8	49.8	57.4	64.6	66.6	65.9	60.8	52.6	41.6	36.0	50.6
	MEAN	45.4	48.3	54.3	62.8	70.3	77.7	78.7	77.5	72.1	63.8	52.8	47.3	62.6
CARRIZOZO	MAX	51.0	55.1	61.8	71.3	80.2	90.1	91.1	88.1	82.4	72.8	60.0	52.2	71.3
	MIN	22.0	24.8	30.9	38.3	46.5	55.8	60.9	58.6	51.9	40.3	28.7	22.2	40.1
	MEAN	36.6	40.0	46.4	54.8	63.4	73.0	76.0	73.4	67.2	56.6	44.4	37.2	55.8
CERRO 4 NE	MAX	36.4	40.9	48.5	58.9	68.5	78.8	82.8	80.1	74.6	64.3	48.8	38.8	60.1
	MIN	7.9	13.0	20.7	27.4	35.1	43.5	49.5	47.7	41.1	30.9	19.1	9.6	28.8
	MEAN	22.2	27.0	34.7	43.2	51.8	61.2	66.2	63.9	57.9	47.6	34.0	24.3	44.5
CHACO CANYON NAT MON	MAX	42.5	48.4	56.0	66.0	75.7	86.7	90.9	87.7	80.9	69.5	54.2	43.6	66.8
	MIN	12.3	17.0	21.6	27.9	36.6	45.9	54.4	52.6	43.6	31.5	20.4	11.8	31.3
	MEAN	27.4	32.7	38.8	47.0	56.2	66.3	72.7	70.2	62.3	50.6	37.4	27.8	49.1

NEW MEXICO

TEMPERATURE NORMALS (DEG F)

STATION		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
MALJAMAR 4 SE	MAX	55.9	60.8	67.5	77.4	84.8	92.4	93.2	91.5	85.4	76.6	64.1	57.6	75.6
	MIN	25.9	28.9	35.0	43.1	51.8	60.2	63.9	62.5	55.9	45.0	33.2	27.2	44.4
	MEAN	40.9	44.9	51.3	60.1	68.3	76.3	78.6	77.0	70.7	60.8	48.7	42.4	60.0
MC GAFFEY 4 SE	MAX	39.2	42.0	46.9	55.8	66.2	77.7	81.3	78.1	73.1	63.2	49.7	41.9	59.6
	MIN	9.5	12.0	17.9	24.3	31.4	39.0	46.6	45.0	37.8	28.2	18.2	11.1	26.8
	MEAN	24.3	27.0	32.4	40.1	48.8	58.4	63.9	61.6	55.5	45.7	34.0	26.5	43.2
MELROSE	MAX	52.4	56.6	63.6	73.2	81.6	90.1	91.5	89.5	83.2	73.6	60.5	53.8	72.5
	MIN	21.7	24.9	30.6	39.2	48.5	57.9	62.6	60.8	53.6	42.3	30.7	24.1	41.4
	MEAN	37.1	40.8	47.1	56.2	65.1	74.0	77.1	75.2	68.4	58.0	45.6	39.0	57.0
MOUNTAIN PARK	MAX	49.3	51.7	57.5	65.8	73.7	82.5	81.4	78.4	75.0	68.0	57.5	51.2	66.0
	MIN	25.0	26.3	30.0	36.9	44.1	53.7	56.1	54.8	50.0	41.1	30.7	26.2	39.6
	MEAN	37.2	39.0	43.8	51.4	58.9	68.2	68.9	66.7	62.5	54.6	44.1	38.8	52.8
MOUNTAINAIR	MAX	45.9	50.5	57.3	66.5	75.4	85.5	87.5	84.4	79.0	69.5	55.6	47.0	67.0
	MIN	18.9	22.0	26.1	32.9	40.8	49.7	55.0	53.1	46.6	36.1	25.4	19.5	35.5
	MEAN	32.4	36.3	41.7	49.4	58.1	67.6	71.3	68.8	62.9	52.8	40.5	33.2	51.2
PASAMONTE	MAX	46.8	50.1	56.1	66.1	74.7	84.6	88.8	86.3	79.4	69.7	55.7	48.9	67.3
	MIN	15.4	18.7	23.5	32.3	42.1	51.8	56.8	54.8	47.1	35.9	24.2	17.6	35.0
	MEAN	31.1	34.4	39.8	49.2	58.5	68.2	72.8	70.6	63.3	52.8	40.0	33.3	51.2
PEARL	MAX	56.8	60.9	67.7	76.7	83.7	91.2	92.3	90.5	84.5	76.6	64.3	58.0	75.3
	MIN	26.1	29.5	35.7	44.9	53.7	61.9	65.4	63.9	57.4	46.9	34.6	28.0	45.7
	MEAN	41.5	45.2	51.8	60.8	68.7	76.6	78.9	77.2	71.0	61.8	49.5	43.0	60.5
PORTALES	MAX	55.0	59.3	66.7	75.6	83.6	91.3	92.7	91.1	85.1	75.8	62.9	56.2	74.6
	MIN	21.7	25.4	31.5	40.1	50.3	59.3	63.5	61.5	54.4	42.1	30.6	23.5	42.0
	MEAN	38.4	42.4	49.1	57.9	67.0	75.3	78.1	76.3	69.8	59.0	46.8	39.9	58.3
QUEMADO RANGER STATION	MAX	47.7	51.9	57.5	66.5	75.2	85.0	86.2	83.7	79.5	70.7	57.8	49.9	67.6
	MIN	12.5	15.8	20.2	25.0	32.4	40.6	50.6	48.5	40.5	28.8	18.4	12.5	28.8
	MEAN	30.2	33.9	38.9	45.7	53.8	62.8	68.4	66.1	60.0	49.8	38.1	31.2	48.2
RED RIVER	MAX	35.8	38.1	43.2	52.6	62.3	72.6	76.1	73.5	68.6	59.0	44.9	37.5	55.4
	MIN	3.7	5.9	13.4	20.7	28.2	34.3	40.6	39.6	33.1	24.4	13.2	5.5	21.9
	MEAN	19.8	22.0	28.4	36.7	45.2	53.5	58.4	56.6	50.8	41.7	29.1	21.5	38.6
ROSWELL WSO	MAX	55.4	60.4	67.7	76.9	85.0	93.1	93.7	91.3	84.9	75.8	63.1	56.7	75.3
	MIN	27.4	31.4	37.9	46.8	55.6	64.8	69.0	67.0	59.6	47.5	35.0	28.2	47.5
	MEAN	41.4	45.9	52.8	61.9	70.3	79.0	81.4	79.2	72.3	61.7	49.1	42.5	61.4
ROY	MAX	47.3	51.2	56.9	65.7	74.4	84.3	86.7	84.8	78.4	69.2	56.1	48.7	67.0
	MIN	18.1	20.9	25.1	33.7	43.8	52.8	57.7	56.1	48.9	37.9	26.3	19.9	36.8
	MEAN	32.8	36.1	41.0	49.7	59.1	68.6	72.2	70.5	63.6	53.6	41.2	34.3	51.9
RUIDOSO 2 NNE	MAX	49.5	51.6	56.8	65.2	73.3	82.0	81.3	79.3	75.3	67.5	57.2	50.7	65.8
	MIN	17.2	18.6	22.5	27.5	33.4	41.3	47.8	46.8	40.4	30.6	21.9	17.7	30.5
	MEAN	33.4	35.1	39.7	46.4	53.4	61.7	64.6	63.1	57.9	49.1	39.6	34.2	48.2
SAN JON	MAX	53.5	57.5	64.9	74.0	82.7	92.1	94.0	92.0	85.4	75.7	61.9	54.9	74.1
	MIN	22.2	25.9	32.0	41.4	51.2	61.1	65.5	63.8	56.1	44.2	31.6	24.6	43.3
	MEAN	37.8	41.7	48.5	57.7	67.0	76.6	79.8	78.0	70.7	59.9	46.8	39.8	58.7
SANTA ROSA	MAX	54.6	59.0	65.0	73.9	82.4	91.6	93.3	91.1	85.0	76.1	63.1	55.9	74.3
	MIN	24.2	26.7	31.8	39.8	48.8	57.9	63.0	60.8	53.5	41.9	31.5	25.7	42.1
	MEAN	39.4	42.9	48.5	56.9	65.7	74.8	78.2	76.0	69.3	59.0	47.3	40.9	58.2
SOCORRO	MAX	52.0	58.1	65.7	74.6	82.4	91.3	92.6	90.0	84.4	74.7	61.2	51.7	73.2
	MIN	21.9	25.4	31.5	39.0	47.0	55.8	62.2	60.0	52.4	40.5	28.5	22.2	40.5
	MEAN	37.0	41.8	48.6	56.8	64.7	73.6	77.4	75.0	68.4	57.7	44.8	37.0	56.9
SPRINGER	MAX	46.9	53.2	59.4	68.0	77.2	87.3	90.0	87.4	81.6	72.2	57.0	48.5	69.1
	MIN	12.2	16.5	22.6	30.6	40.0	48.5	54.3	52.7	44.6	32.8	21.4	13.7	32.5
	MEAN	29.6	34.9	41.1	49.3	58.6	68.0	72.2	70.1	63.1	52.6	39.2	31.1	50.8

NEW MEXICO

PRECIPITATION NORMALS (INCHES)

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
AFTON 5 ESE	.35	.35	.27	.14	.27	.45	1.56	1.88	1.48	.86	.42	.44	8.47
ALAMOGORDO	.62	.53	.52	.24	.41	.78	2.18	2.15	1.63	1.13	.43	.56	11.18
✓ ALBUQUERQUE WSO //R	.41	.40	.52	.40	.46	.51	1.30	1.51	.85	.86	.38	.52	8.12
ALEMAN RANCH	.35	.33	.26	.21	.29	.61	1.77	1.87	1.30	.90	.42	.53	8.84
AMISTAD 1 SSW	.29	.29	.66	.89	2.21	1.84	3.13	2.55	1.52	.95	.60	.40	15.33
ANIMAS	.60	.51	.54	.18	.13	.41	2.19	2.47	1.36	.98	.44	.80	10.61
ARTESIA 6 S	.34	.40	.38	.36	.92	1.18	1.54	1.78	1.80	1.26	.39	.32	10.67
AUGUSTINE	.31	.33	.33	.25	.29	.45	2.07	2.36	1.40	1.07	.33	.45	9.64
AZTEC RUINS NAT MON	.95	.63	.69	.64	.50	.29	.90	1.11	.84	1.28	.65	.83	9.31
BEAVERHEAD RANGER STA	.77	.72	.69	.39	.48	.59	2.57	2.84	1.84	1.43	.54	.95	13.81
BELL RANCH	.29	.21	.48	.70	1.31	1.37	2.89	2.58	1.33	1.01	.51	.40	13.08
✓ BERNALILLO	.47	.46	.59	.43	.60	.58	1.52	1.66	.82	1.00	.50	.57	9.20
BITTER LAKES WL REF	.41	.43	.37	.41	.77	1.07	2.07	2.08	1.77	1.16	.39	.37	11.30
BLACK LAKE	.72	.73	1.16	1.14	1.86	1.61	3.50	3.50	1.37	1.22	.90	.67	18.38
BLOOMFIELD 3 SE	.59	.44	.66	.55	.41	.28	.93	1.27	.83	1.16	.64	.61	8.37
✓ BOSQUE DEL APACHE	.25	.28	.34	.28	.46	.65	1.31	1.63	1.32	.99	.32	.45	8.28
BUCKHORN	1.06	.77	.70	.32	.21	.38	2.35	2.43	1.70	1.19	.52	1.07	12.70
CABALLO DAM	.30	.31	.25	.19	.28	.51	1.77	1.94	1.44	.89	.33	.50	8.71
CAMERON	.46	.70	.75	1.00	1.81	2.26	3.19	2.50	1.58	1.27	.65	.57	16.74
CANJILON RANGER STA	1.24	.81	1.05	.97	1.01	.75	2.27	2.46	1.17	1.20	.96	.89	14.78
CANTON	.34	.35	.40	.61	1.20	1.67	2.76	2.22	1.68	1.38	.36	.29	13.26
CARLSBAD	.34	.42	.41	.46	1.22	1.13	1.69	1.87	2.32	1.25	.51	.32	11.94
CARLSBAD FAA AIRPORT	.34	.35	.33	.40	.93	.71	1.70	1.88	2.16	1.16	.44	.26	10.66
CARLSBAD CAVERNS	.45	.41	.39	.65	1.19	1.18	1.94	2.43	2.94	1.43	.44	.41	13.86
CARRIZOZO	.60	.53	.64	.37	.63	.83	2.26	2.57	1.86	1.03	.62	.67	12.61
CERRO 4 NE	.62	.41	.59	.68	.96	.85	1.92	1.90	1.08	1.07	.75	.61	11.44
CHACO CANYON NAT MON	.42	.43	.48	.36	.57	.39	1.10	1.35	1.05	1.12	.58	.58	8.43
CHACON	.97	.79	1.18	1.11	1.67	1.36	3.18	3.85	1.35	1.21	1.02	.88	18.57
CHAMA	1.98	1.34	1.59	1.24	1.10	.79	2.02	2.62	1.70	1.66	1.37	1.60	19.01
CIMARRON	.33	.40	.69	.96	2.05	1.62	2.89	2.68	1.48	1.07	.67	.42	15.26
CLAYTON WSO R	.27	.28	.59	1.05	2.23	1.74	2.53	2.43	1.48	.75	.48	.29	14.12
CLIFF 10 SE	.98	.76	.86	.32	.19	.50	2.67	2.95	1.49	1.21	.56	1.00	13.49
CLOVIS	.44	.49	.59	.83	1.81	2.47	2.79	2.69	1.87	1.45	.58	.47	16.48
CLOVIS 13 N	.34	.42	.55	.75	1.77	2.28	2.94	2.53	1.77	1.30	.50	.42	15.57
COLUMBUS	.41	.44	.32	.14	.24	.25	2.17	1.75	1.47	.79	.48	.50	8.96
CONCHAS DAM	.31	.30	.56	.77	1.10	1.43	2.56	2.26	1.33	1.03	.41	.40	12.46
CROSSROADS 2 NE	.31	.41	.47	.73	1.55	2.02	2.62	2.42	1.98	1.58	.40	.26	14.75
CUBA	.91	.69	.87	.65	.80	.63	2.19	2.32	1.32	1.19	.75	.74	13.06
CURETON RANCH	1.05	.72	.79	.23	.24	.39	2.37	2.68	1.60	1.02	.58	.97	12.64
DES MOINES	.35	.44	.79	1.03	2.40	1.68	3.54	2.78	1.83	1.01	.59	.39	16.83
DILIA	.47	.48	.70	.78	1.15	1.03	2.59	2.72	1.64	1.12	.51	.54	13.73
DULCE	1.56	1.09	1.37	.98	.96	.67	1.72	2.65	1.42	1.49	1.13	1.51	16.55
EAGLE NEST	.72	.50	.77	.75	1.31	1.09	2.90	2.77	1.10	.80	.77	.68	14.16
EL MORRO NAT MON	1.02	.78	.95	.69	.55	.47	1.86	2.56	1.21	1.13	.73	.93	12.88
EL RITO	.75	.51	.74	.63	.96	.63	1.61	2.23	.99	1.07	.77	.56	11.45
EL VADO DAM	1.09	.79	.99	.78	1.00	.62	1.81	2.26	1.42	1.14	.91	.92	13.73
ELEPHANT BUTTE DAM	.31	.30	.27	.21	.33	.54	1.36	1.89	1.28	.92	.39	.49	8.29
ELIDA	.39	.37	.45	.65	1.32	1.59	2.33	2.31	1.89	1.18	.47	.28	13.23
ELK 3 E	.50	.55	.41	.57	.95	1.31	2.67	3.53	2.60	1.32	.57	.60	15.58
ESPANOLA	.48	.36	.48	.48	.83	.66	1.45	1.91	.91	.93	.51	.42	9.42
ESTANCIA	.46	.51	.56	.52	.84	.72	1.95	2.40	1.27	1.16	.50	.65	11.54
FARNSWORTH RANCH	.27	.47	.41	.36	.80	1.47	2.02	2.53	1.77	1.03	.35	.38	11.86
FAYWOOD	.63	.41	.40	.17	.17	.60	2.15	2.38	1.65	1.01	.42	.75	10.74
FLORIDA	.50	.48	.32	.21	.21	.41	2.16	2.12	1.53	.95	.39	.57	9.85
FLYING H	.44	.43	.36	.43	.94	1.17	2.28	2.69	2.47	1.32	.52	.49	13.54

NEW MEXICO

PRECIPITATION NORMALS (INCHES)

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ROSWELL WSO	.24	.28	.27	.37	.77	.91	1.38	2.17	1.72	.99	.33	.27	9.70
ROY	.30	.35	.57	.87	2.01	1.71	3.10	2.63	1.41	1.13	.47	.51	15.06
RUIDOSO 2 NNE	1.12	1.16	1.33	.63	.87	1.86	4.02	4.04	2.50	1.31	.88	1.63	21.35
SAN JON	.36	.50	.58	.88	1.68	1.94	3.06	2.59	1.63	1.17	.58	.47	15.44
SANDIA PARK	1.10	1.14	1.30	.85	1.10	.96	2.84	3.02	1.62	1.42	1.16	1.21	17.72
SANTA ROSA	.33	.39	.57	.59	1.12	1.37	2.56	2.95	1.49	1.14	.50	.55	13.56
SHIPROCK	.59	.33	.43	.35	.47	.28	.60	.78	.72	1.05	.55	.53	6.68
SKARDA	.54	.53	.74	.75	1.04	.85	2.43	2.56	1.20	1.07	.86	.66	13.23
SOCORRO	.27	.35	.34	.38	.36	.59	1.46	1.65	1.27	1.09	.32	.55	8.63
SPRINGER	.31	.28	.56	.90	1.97	1.45	2.86	3.28	1.15	1.20	.56	.36	14.88
STAR LAKE	.39	.33	.38	.32	.56	.43	1.34	1.76	.92	.85	.48	.41	8.17
STATE UNIVERSITY	.39	.45	.30	.14	.24	.63	1.50	1.84	1.15	.83	.40	.44	8.31
TAJIQUE	.87	1.08	1.05	.84	.90	.94	2.67	3.07	1.70	1.55	.77	1.20	16.64
TAOS	.80	.56	.78	.73	1.08	.87	1.70	2.02	1.17	1.02	.83	.67	12.23
TATUM	.39	.53	.58	.65	1.69	2.23	2.50	2.61	2.23	1.60	.49	.33	15.83
TIERRA AMARILLA 4 NNW	1.33	.92	1.12	.93	1.02	.64	2.10	2.64	1.50	1.27	1.02	1.03	15.52
TOHATCHI 1 ESE	.81	.49	.64	.42	.48	.34	1.41	1.60	1.00	.97	.63	.64	9.43
TRES PIEDRAS	.60	.58	.74	.71	.94	.79	2.08	2.49	1.09	1.18	.81	.67	12.68
TRUTH OR CONSEQUENCES	.30	.28	.26	.21	.41	.77	1.47	1.66	1.59	.99	.37	.47	8.78
TUCUMCARI FAA AP	.29	.38	.48	.87	1.46	1.40	2.93	2.31	1.32	1.06	.51	.39	13.39
TUCUMCARI 3 NE	.37	.42	.60	.87	1.48	1.60	3.09	2.61	1.34	1.04	.57	.50	14.49
TULAROSA	.57	.50	.53	.28	.52	.61	1.83	1.86	1.50	1.03	.46	.57	10.26
VALMORA	.32	.37	.57	.76	1.69	1.74	3.03	3.10	1.83	1.02	.63	.47	15.53
VILLANUEVA	.35	.51	.67	.56	.79	1.00	2.20	2.27	1.01	.86	.34	.52	11.08
WHITE SANDS NAT MON	.40	.34	.32	.20	.26	.61	1.55	1.45	1.01	.88	.35	.45	7.82
WHITE SIGNAL	1.20	.92	.77	.29	.25	.46	2.61	2.23	1.68	1.09	.60	1.13	13.23
WHITWATER	.67	.44	.44	.16	.20	.37	2.00	1.89	1.42	.92	.32	.74	9.57
WINSTON	.44	.34	.33	.27	.50	.69	2.69	3.11	2.23	1.21	.34	.51	12.66
WOLF CANYON	1.63	1.55	1.68	1.17	1.22	1.01	3.41	3.47	1.60	1.72	1.33	1.37	21.16
YESO 2 S	.36	.38	.46	.56	1.02	1.33	2.42	2.56	1.74	1.16	.43	.47	12.89
ZUNI FAA AIRPORT	.93	.71	.87	.52	.42	.34	1.88	2.02	1.13	1.34	.71	.85	11.72

NEW MEXICO

COOLING DEGREE DAY NORMALS (BASE 65 DEG F)

STATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ALAMOGORDO	0	0	8	24	153	417	474	409	235	36	0	0	1756
ALBUQUERQUE WSO //R	0	0	0	0	59	285	428	344	132	6	0	0	1254
AMISTAD 1 SSW	0	0	0	7	72	257	381	316	120	13	0	0	1166
ARTESTA 6 S	0	0	5	40	162	387	474	419	226	50	0	0	1763
AZTEC RUINS NAT MON	0	0	0	0	17	128	301	226	66	0	0	0	738
BELL RANCH	0	0	0	8	72	281	409	344	138	8	0	0	1260
BERNALILLO	0	0	0	0	31	199	366	279	84	0	0	0	959
BITTER LAKES WL REF	0	0	5	24	126	366	453	384	180	18	0	0	1556
BLOOMFIELD 3 SE	0	0	0	0	34	191	353	273	84	0	0	0	935
BOSQUE DEL APACHE	0	0	0	11	78	276	412	338	134	8	0	0	1257
CABALLO DAM	0	0	0	14	102	363	487	412	213	27	0	0	1618
CAMERON	0	0	0	7	57	242	343	284	128	8	0	0	1069
CARLSBAD FAA AIRPORT	0	0	15	79	231	468	543	484	275	60	0	0	2155
CARLSBAD CAVERNS	0	0	19	57	182	381	425	388	241	93	10	0	1796
CARRIZOZO	0	0	0	0	44	243	341	260	93	0	0	0	981
CERRO 4 NE	0	0	0	0	0	13	76	42	0	0	0	0	131
CHACO CANYON NAT MON	0	0	0	0	6	101	239	172	29	0	0	0	547
CHAMA	0	0	0	0	0	9	39	23	0	0	0	0	71
CIMARRON	0	0	0	0	7	72	140	90	21	0	0	0	330
CLAYTON WSO R	0	0	0	0	25	172	288	230	74	8	0	0	797
CLIFF 10 SE	0	0	0	0	23	216	366	285	111	5	0	0	1006
CLOVIS	0	0	0	11	69	272	378	316	134	14	0	0	1194
CLOVIS 13 N	0	0	0	12	67	261	350	295	113	11	0	0	1109
COLUMBUS	0	0	0	31	157	423	496	425	240	40	0	0	1812
CONCHAS DAM	0	0	0	20	108	346	459	400	199	40	0	0	1572
CUBA	0	0	0	0	0	48	134	82	15	0	0	0	279
DES MOINES	0	0	0	0	10	98	176	117	31	0	0	0	432
EAGLE NEST	0	0	0	0	0	0	8	0	0	0	0	0	8
EL MORRO NAT MON	0	0	0	0	0	39	120	64	7	0	0	0	230
EL VADO DAM	0	0	0	0	0	15	90	58	0	0	0	0	163
ELEPHANT BUTTE DAM	0	0	6	21	128	390	481	406	229	36	0	0	1697
ELIDA	0	0	0	11	74	294	386	333	148	18	0	0	1264
ELK 3 E	0	0	0	0	10	114	170	115	33	0	0	0	442
ESTANCIA	0	0	0	0	0	89	204	128	13	0	0	0	434
FLORIDA	0	0	0	8	68	315	446	366	173	19	0	0	1395
FORT BAYARD	0	0	0	0	16	168	249	174	76	6	0	0	691
FORT SUMNER	0	0	0	16	86	314	412	347	146	15	0	0	1336
FRUITLAND 2 E	0	0	0	0	32	167	323	259	71	0	0	0	852
GALLUP 5 E	0	0	0	0	7	70	188	125	26	0	0	0	416
GRAN QUIVIRA NAT MON	0	0	0	0	13	146	228	160	51	0	0	0	598
GRENVILLE	0	0	0	0	13	107	196	148	42	0	0	0	506
HATCH 2 W	0	0	0	13	97	336	450	369	174	8	0	0	1447
HOBBS	0	0	16	53	179	396	468	428	242	51	5	0	1838
JAL	0	0	19	90	255	480	549	499	301	82	6	0	2281
JEMEZ SPRINGS	0	0	0	0	9	125	228	155	57	6	0	0	580
JORNADA EXP RANGE	0	0	0	11	71	309	437	357	163	16	0	0	1364
LAGUNA	0	0	0	0	16	174	301	220	61	0	0	0	772
LAKE MALOYA	0	0	0	0	0	9	29	14	0	0	0	0	52
LAS VEGAS FAA AIRPORT	0	0	0	0	0	67	128	79	13	0	0	0	287
LORDSBURG 4 SE	0	0	0	20	136	375	502	419	247	45	0	0	1744
LOS ALAMOS	0	0	0	0	6	78	116	72	25	0	0	0	297
MAL JAMAR 4 SE	0	0	10	24	133	339	422	372	184	33	0	0	1517
MC GAFFEY 4 SE	0	0	0	0	0	7	30	15	0	0	0	0	52
MELROSE	0	0	0	10	79	276	375	319	128	14	0	0	1201
MOUNTAIN PARK	0	0	0	0	15	140	148	93	24	5	0	0	425

NEW MEXICO

HEATING DEGREE DAY NORMALS (BASE 65 DEG F)

STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANN
ALAMOGORDO	0	0	7	125	453	685	698	526	401	147	17	0	3059
ALBUQUERQUE WSO //R	0	0	12	242	630	911	936	717	583	302	81	0	4414
AMISTAD 1 SSW	0	0	30	246	621	849	927	722	614	313	109	11	4442
ARTESIA 6 S	0	0	25	168	486	725	763	571	427	169	35	0	3369
AZTEC RUINS NAT MON	0	0	78	360	762	1094	1132	846	741	468	216	35	5732
BELL RANCH	0	0	21	228	594	853	908	689	583	287	79	5	4247
BERNALILLO	0	0	36	295	669	946	961	736	611	345	124	10	4733
BITTER LAKES WL REF	0	0	18	186	543	772	800	596	451	177	27	0	3570
BLOOMFIELD 3 SE	0	0	39	326	729	1060	1107	823	701	417	164	11	5377
BOSQUE DEL APACHE	0	0	17	216	579	849	849	636	499	251	69	0	3965
CABALLO DAM	0	0	0	144	468	732	741	554	431	185	28	0	3283
CAMERON	5	5	50	256	618	846	908	717	601	319	104	14	4443
CARLSBAD FAA AIRPORT	0	0	8	116	426	642	676	493	346	118	8	0	2833
CARLSBAD CAVERNS	0	0	28	130	376	549	608	468	351	123	18	0	2651
CARRIZOZO	0	0	27	264	618	862	880	700	577	306	93	0	4327
CERRO 4 NE	38	76	218	539	930	1262	1327	1064	939	654	409	127	7583
CHACO CANYON NAT MON	0	11	110	446	828	1153	1166	904	812	540	279	62	6311
CHAMA	70	125	291	592	966	1259	1336	1112	1057	753	499	216	8276
CIMARRON	19	35	141	403	756	961	1023	840	784	522	277	66	5827
CLAYTON WSO R	0	0	80	327	699	915	992	801	732	420	177	25	5168
CLIFF 10 SE	0	0	12	235	573	809	825	652	567	333	116	6	4128
CLOVIS	0	0	32	225	567	797	868	680	561	272	69	5	4076
CLOVIS 13 N	0	0	20	222	576	791	856	672	558	282	86	6	4069
COLUMBUS	0	0	0	121	441	679	676	504	368	142	18	0	2949
CONCHAS DAM	0	0	13	167	504	747	812	613	507	233	52	0	3648
CUBA	16	45	186	515	876	1175	1225	1002	918	639	378	120	7095
DES MOINES	11	14	127	425	786	1001	1066	885	834	540	282	71	6042
EAGLE NEST	184	229	420	722	1050	1349	1404	1162	1085	801	580	312	9298
EL MORRO NAT MON	0	39	163	484	831	1110	1153	941	859	600	363	99	6642
EL VADO DAM	24	64	243	564	924	1256	1361	1070	961	678	428	156	7729
ELEPHANT BUTTE DAM	0	0	0	120	450	716	719	529	405	168	26	0	3133
ELIDA	0	0	31	220	567	797	859	678	552	263	61	6	4034
ELK 3 E	8	6	93	322	609	784	825	689	608	372	159	21	4496
ESTANCIA	0	10	103	415	759	1017	1032	826	732	480	231	32	5637
FLORIDA	0	0	0	168	504	753	756	591	487	242	55	0	3558
FORT BAYARD	0	13	64	282	600	812	840	686	626	381	164	18	4488
FORT SUMNER	0	0	23	219	549	778	831	636	512	238	49	5	3840
FRUITLAND 2 E	0	8	68	341	741	1082	1125	823	704	438	197	32	5551
GALLUP 5 E	5	10	116	428	801	1079	1122	879	809	543	302	67	6161
GRAN QUIVIRA NAT MON	0	8	75	322	678	915	942	764	676	411	174	14	4971
GRENVILLE	10	12	120	398	741	967	1048	862	818	510	261	68	5811
HATCH 2 W	0	0	0	160	495	747	750	563	428	181	32	0	335
HOBBS	0	0	8	107	422	623	685	515	379	128	14	0	288
JAL	0	0	0	91	393	608	657	462	304	87	0	0	260
JEMEZ SPRINGS	0	9	87	338	684	952	995	795	710	456	214	41	528
JORNADA EXP RANGE	0	0	10	199	546	803	803	622	496	248	65	0	379
LAGUNA	0	0	52	326	687	961	980	773	679	414	162	12	504
LAKE MALOYA	73	107	267	561	900	1128	1209	1028	983	687	440	174	755
LAS VEGAS FAA AIRPORT	20	35	151	440	774	995	1048	868	818	552	295	67	606
LORDSBURG 4 SE	0	0	7	138	468	710	713	540	422	194	61	0	325
LOS ALAMOS	14	45	166	453	810	1060	1110	916	846	576	316	75	638
MAL JAMAR 4 SE	0	0	13	163	489	701	747	563	435	171	30	0	331
MC GAFFEY 4 SE	64	120	285	598	930	1194	1262	1064	1011	747	502	205	798
MELROSE	0	0	26	231	582	806	865	678	555	274	76	6	409
MOUNTAIN PARK	31	41	99	328	627	812	862	728	657	408	204	44	484

NEW MEXICO

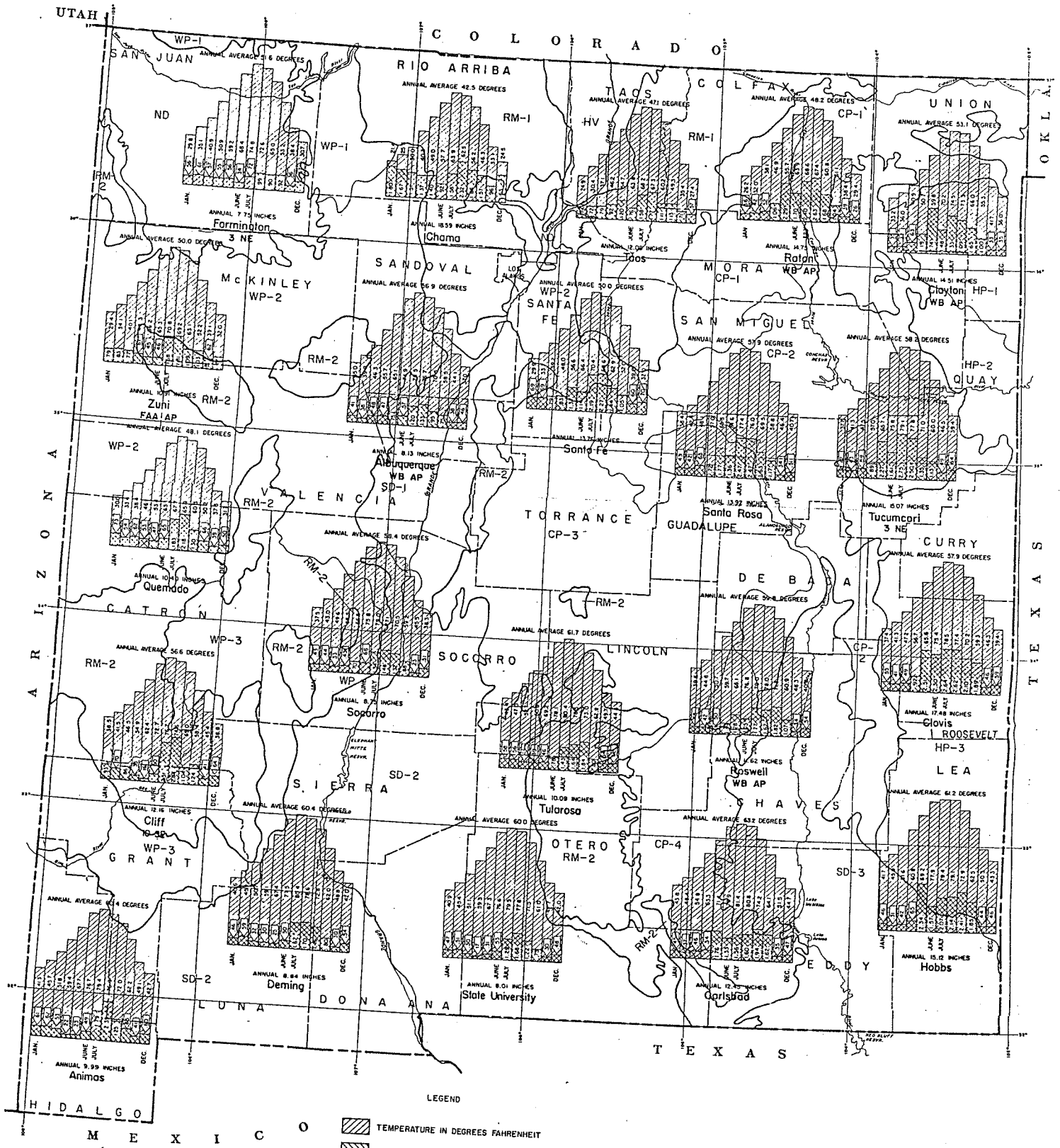
HEATING DEGREE DAY NORMALS (BASE 65 DEG F)

STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ANN
MOUNTAINAIR	0	14	107	378	735	986	1011	804	722	468	229	36	5490
PASAMONTE	6	9	101	378	750	983	1051	857	781	474	214	41	5645
PEARL	0	0	22	141	465	682	729	554	417	162	28	0	3200
PORTALES	0	0	11	196	546	778	825	633	493	228	38	0	3748
QUEMADO RANGER STATION	18	28	153	471	807	1048	1079	871	809	579	347	103	6313
RED RIVER	205	260	426	722	1077	1349	1401	1204	1135	849	614	345	9587
ROSWELL WSO	0	0	10	143	477	698	732	535	386	134	11	0	3126
ROY	9	7	91	353	714	952	998	809	744	459	200	38	5374
RUIDOSO 2 NNE	76	93	216	493	762	955	980	837	784	558	360	127	6241
SAN JON	0	0	12	186	546	781	843	652	516	237	58	6	3837
SANTA ROSA	0	0	10	199	531	747	794	619	512	253	56	0	3721
SOCORRO	0	0	28	232	606	868	868	650	508	254	84	6	4104
SPRINGER	0	6	86	384	774	1051	1097	843	741	471	208	33	5694
STATE UNIVERSITY	0	0	0	135	468	691	698	526	404	167	29	0	3118
TAJIQUE	11	37	145	446	771	1004	1042	865	794	534	279	67	5995
TOHATCHI 1 ESE	0	0	85	320	705	1001	1042	815	753	480	228	43	5472
TRUTH OR CONSEQUENCES	0	0	9	158	492	753	756	566	448	194	28	0	3404
TUCUMCARI FAA AP	0	0	12	199	555	797	865	666	536	245	55	0	3930
TUCUMCARI 3 NE	0	0	8	165	516	747	809	622	502	224	50	0	3643
VALMORA	19	35	154	446	771	995	1057	865	809	555	301	87	6094
WHITE SANDS NAT MON	0	0	0	169	540	794	781	594	446	186	29	0	3539
WINSTON	0	10	89	357	675	890	905	742	679	432	232	38	5049
WOLF CANYON	156	214	390	685	993	1234	1296	1112	1060	789	570	303	8802

Soils of New Mexico

*Mobile 300
2007
G. ...*

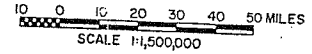




- LEGEND
- TEMPERATURE IN DEGREES FAHRENHEIT
 - PRECIPITATION IN INCHES
 - MAJOR LAND RESOURCE AREAS
 - HP SOUTHERN HIGH PLAINS
 - CP PECOS-CANADIAN PLAINS AND VALLEYS
 - SD SOUTHERN DESERTIC BASINS, PLAINS AND MOUNTAINS
 - HV HIGH INTERMOUNTAIN VALLEYS
 - WP NEW MEXICO AND ARIZONA PLATEAUS AND MESAS
 - ND SAN JUAN RIVER VALLEY, MESAS AND PLATEAUS
 - RM-1 SOUTHERN ROCKY MOUNTAINS
 - RM-2 ARIZONA AND NEW MEXICO MOUNTAINS

MAJOR LAND RESOURCE AREAS
MEAN MONTHLY TEMPERATURE
AND PRECIPITATION AT SELECTED STATIONS
NEW MEXICO

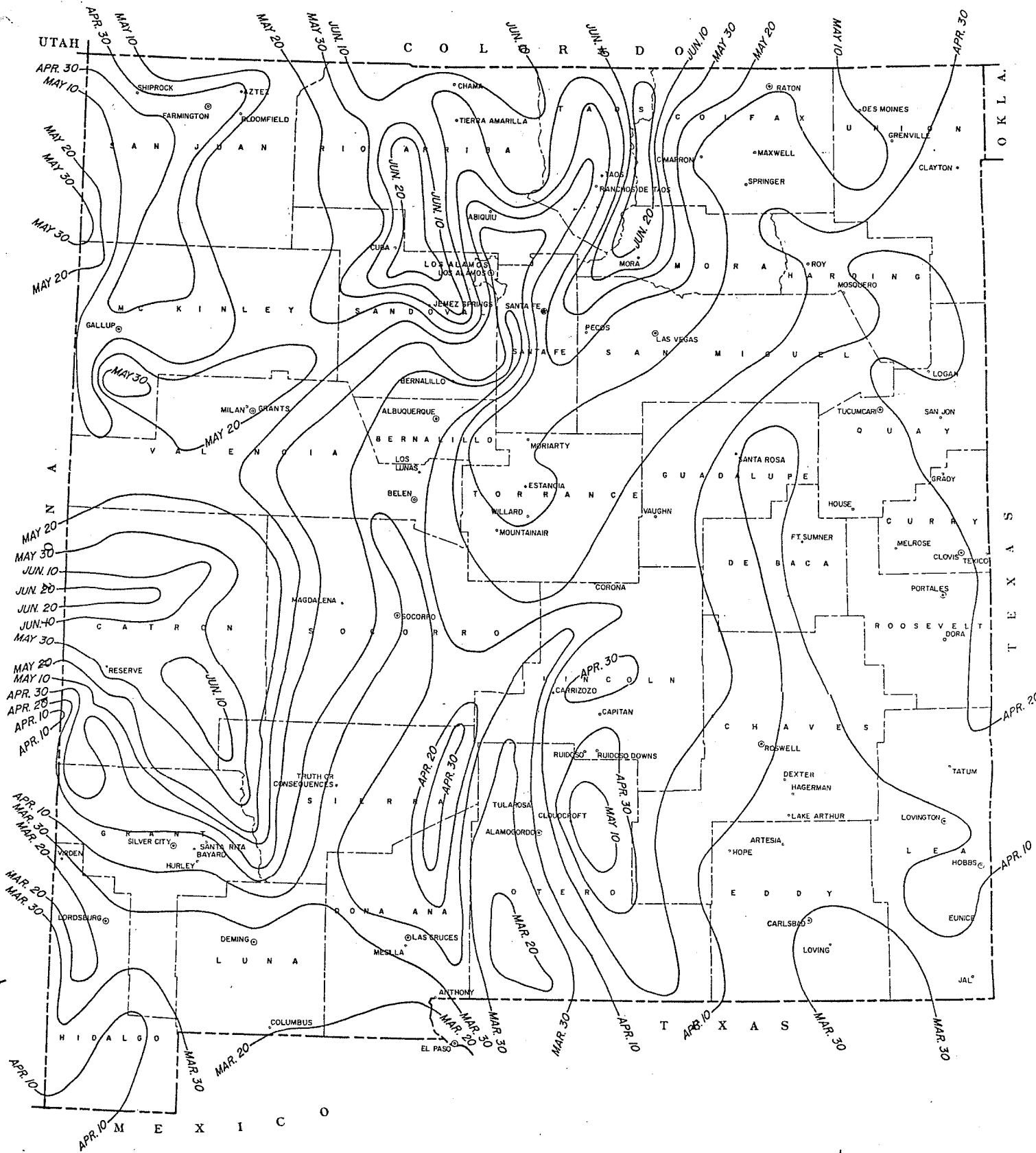
APRIL 1972



USGS National Atlas 1:1,000,000 Albers Equal-Area projection (1962) used as source for base map and adopted for SCS use.

NOTE: When a number appears after the resource area designation it denotes a subdivision of the resource area.

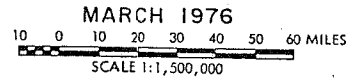
Weather data obtained from U.S. Weather Bureau Records, 1931-1960. Compiled by State Engineer, Office October 1964.

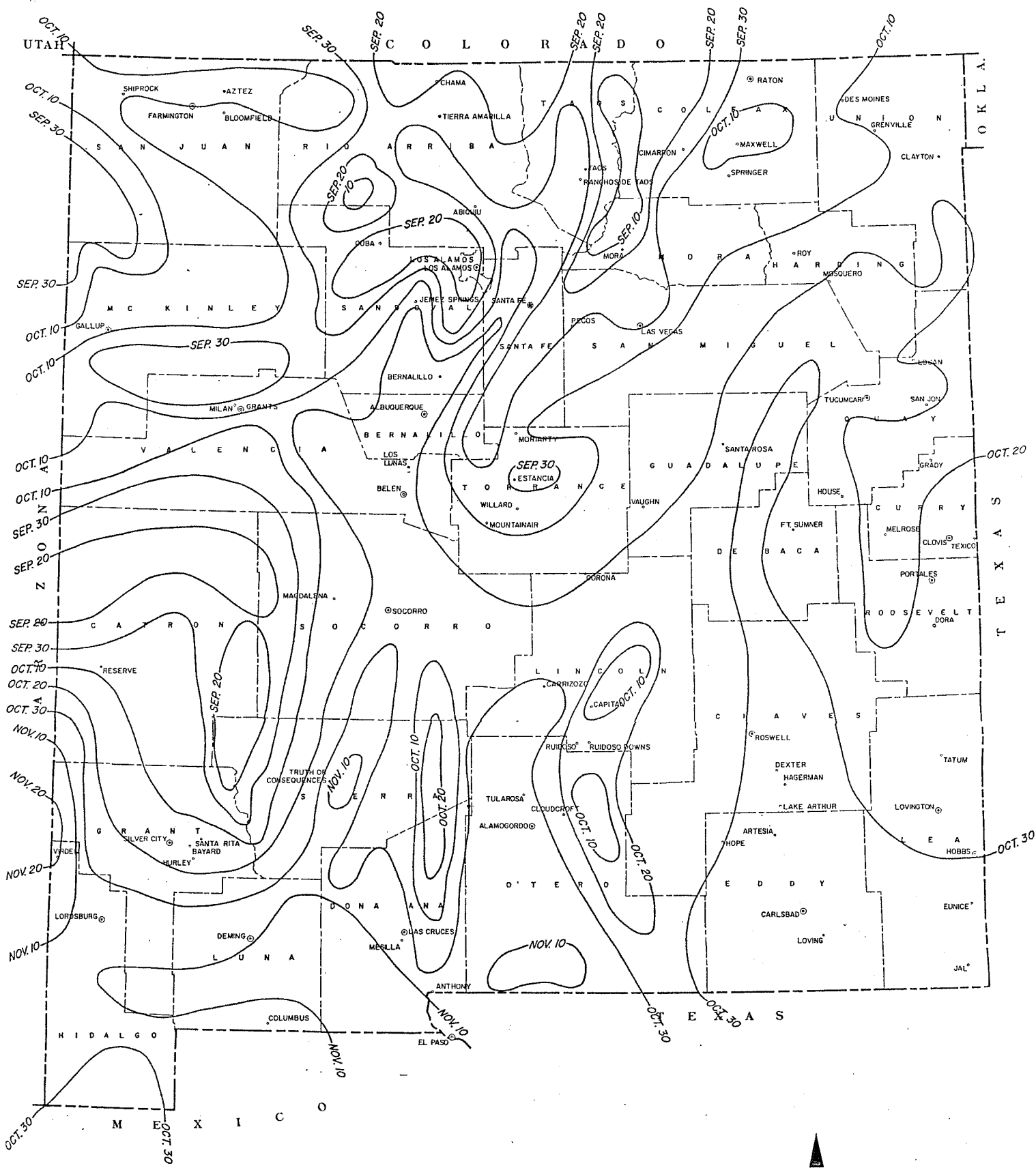


**AVERAGE DATES
OF LAST KILLING FROST IN SPRING
NEW MEXICO**

SOURCE: "The Climate of New Mexico", State Planning Agency, 1973

NOTE: Lines are drawn through points of approximately equal values. Caution must be exercised in interpolating on these maps, particularly in mountainous areas.





AVERAGE DATES
OF FIRST KILLING FROST IN FALL
NEW MEXICO

SOURCE: "The Climate of New Mexico", State Planning Agency, 1973

NOTE: Lines are drawn through points of approximately equal values. Caution must be exercised in interpolating on these maps, particularly in mountainous areas.

MARCH 1976

