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IRRIGATED LANDS OF NEVADA

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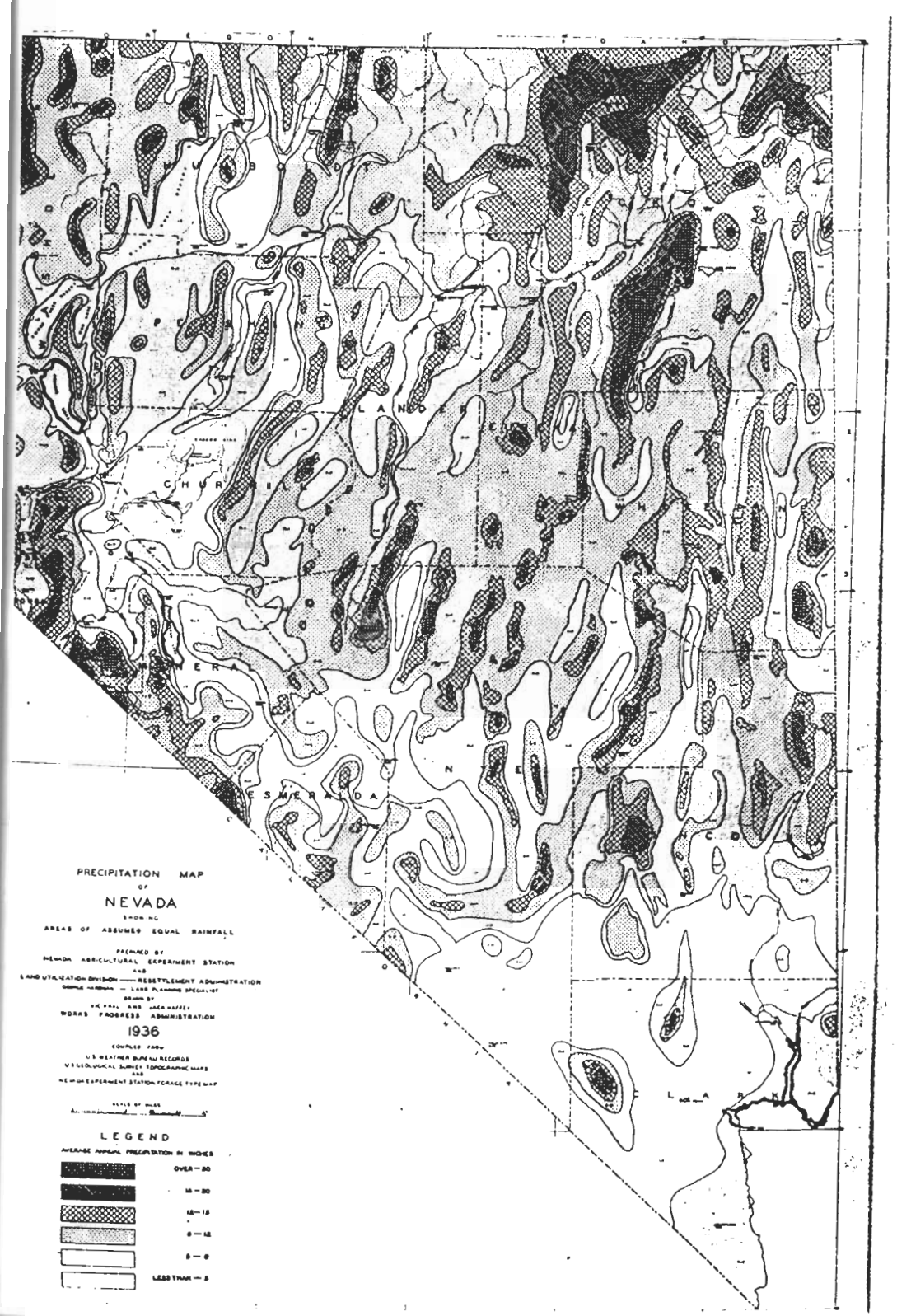

The most striking climatic features are the high percentage of sunshine, low rainfall in the valleys, and wide difference between daytime and nighttime temperatures. Evaporation is high, but wind movement is lower than in coastal or plains sections.

The climate is favorable for human effort and for the production of adapted crops under irrigation.

Precipitation.

The moisture for Nevada is derived mainly from general westerly storms. The center of the storm path for the majority of storms and the area where precipitation is heaviest is somewhat north of the middle of the State. In very general terms, average annual precipitation at the same elevation is one-third lower in southern Nevada than in the northern half of the State. Summer precipitation in southern Nevada is influenced by the southwest desert type of summer storms and this area receives proportionately more summer precipitation than does northern Nevada, but the total amount of summer and annual precipitation is small. Summer thunderstorms are of occasional local importance throughout the State and sometimes reach the intensity of "cloud bursts."

The westerly storms, in their passage over the mountain ranges of the State, tend to deposit moisture in increasing amounts as the elevation of the land surface rises. When average annual precipitation is plotted on a map by zones representing areas of equal precipitation, each major mountain range is surrounded by a number of such zones. The resulting banded pattern is shown on the accompanying precipitation map.

The acreage and percentage of the total area of land in the State in each precipitation zone as derived from the precipitation map are given in Table No. 1. The acreages also give a rough measure of the areas of native vegetation.[4]

TABLE NO. 1

Precipitation Zones

	Less than 5 inches	5–8 inches	8–12 inches	12–15 inches	15–20 inches	Over 20 inches
Area in thousands of acres	12,866	17,179	27,087	9,708	3,186	798
Percent of total area	18.1	24.3	38.3	13.7	4.5	1.1

The data in this table indicates very large acreages in the low rainfall zones. More than 90 percent of the total area of the State falls in the zones having an average annual rainfall below 15 inches. About three million acres receive from 15 to 20 inches of rainfall and less than one million acres receive more than 20 inches per year. The average annual precipitation, weighted from the data in the above table, is approximately nine inches.

The moisture on areas receiving less than 20 inches of average annual precipitation is very largely transpired by the plant cover, dissipated by evaporation, or lost in flash floods. Most of the water usable for irrigation and domestic purposes originates on areas which receive above 20 inches of precipitation. On these areas of high precipitation, the quantity of run-off water increases very rapidly as the precipitation rises above 20 inches.

For the State as a whole, therefore, the areas in the highest rainfall