

NATURAL RESOURCES

Water Shortage This Year

State-by-state summary of water conditions in Southwest shows that supply is perilously low. Recent heavy rains have come too late.

► THE WATER supply in southwestern United States is perilously low this year. City dwellers and farmers, industries and power plants will be forced to ration their water use. There is no hope for an improved situation during 1955.

The heavy rains that have drenched areas of the drought-stricken Southwest will not materially lessen the serious water supply shortage. It is too late, officials of the Soil Conservation Service report.

Unless the Southwest receives persistent and continuous rain throughout the rest of May and all of June, the water situation will remain bad. The U. S. Weather Bureau in its 30-day forecast for mid-May to mid-June has predicted above normal rains for the drought-stricken area.

If above normal rains do fall, they will help replenish stock water and increase the stream flow in some area, but it will have little effect on the reservoir supply.

Many farmers have tried to adjust their cropping to take advantage of the early rain and runoff, but late maturing crops such as sugar beets require water principally from reservoirs.

The soil conservationists estimate that even persistent rains through June will not change the reservoir levels more than five percent. They state that although the present heavy rains will offer temporary relief and help some crops like sorghum and other important feed and cover crops, it is too late to bring the water supply in reservoirs up to normal.

Lake Mead, the largest artificial lake by volume in the world, made by the Hoover Dam on the Colorado River in northwestern Arizona and southeastern Nevada, is at its lowest point since the time of its original filling in 1938. Denver's four reservoirs are down 64,000 acre feet of water since 1954, or more than half of what they held last year.

The Northwest was saved from a similar thirst only by unusually heavy snowfalls in Oregon, Washington and Montana during April.

The current low water supply is an extension of the plight southwesterners have faced for the past three years. What makes it particularly bleak is that carry-over of water supply from year to year has been decreasing. The less water refilling the streams, rivers and reservoirs each year, the less saved for a time when it is needed. Coupled with the drought, the Southwest faces a major disaster from no water.

Each year, the water supply outlook for the western states is determined to a large degree by snow surveys made each month from December through April. Streamflow

from snowmelt gives water surveyors a good picture of how much water will be available for irrigation, power generation and municipal and industrial use.

This is the state-by-state situation given by the Soil Conservation Service from reports from Homer J. Stockwell, snow survey leader, Colorado Experiment station, Fort Collins, Colo., and Gregory E. Pearson, hydraulic engineer of the Soil Conservation Service, Salt Lake City, Utah:

Arizona—Snowmelt runoff may prove the least since 1904, and possibly the least since records began. Practically all of the snow water was absorbed by the dry mountain soils. Snow has already melted without perceptible increases in the minimum flows of the rivers. Salt River Valley is near a record low and the San Carlos project has no storage.

California—Water conditions as of April 1 are generally unsatisfactory and indicate that the water supply for 1955 will be below normal. Critical conditions are expected only in localized areas. From the standpoint of precipitation, this year appears to be the driest since 1947. If the near drought conditions should continue through another season, as has happened in the past, water conditions would become acute.

Colorado—Because of the low carry-over in small irrigation reservoirs, the statewide water supply outlook for 1955 is not much better than in 1954, which was near the lowest on record. The lack of storage will cancel expected increase in streamflow over 1954. Users should be prepared to reduce their demands for water.

Idaho—The water supply outlook for streams in northern Idaho is near normal. The southern half of the state has a poor prospect. Critical water shortages are developing in irrigated areas in the south. Carry-over storage next fall will not be adequate for 1956.

Kansas—Only rainfall of high proportion in the Arkansas Valley can improve the situation in eastern Kansas. No water is stored in the John Martin and Great Plains reservoirs.

Nebraska—Shortages of irrigation water seem virtually certain. Adequate water supply will be available only if rainfall during the summer months is well above average.

Nevada—Snow-stored water ranges from near normal in a small part of eastern Nevada to poor in the remainder of the State. Water supply will be below normal in all parts of the State.

New Mexico—The water supply outlook along the Rio Grande in New Mexico is the poorest in recent years. Streamflow is ex-

pected to be less than a year ago.

North Dakota—The water supply to irrigated areas along the Missouri River is good.

Oklahoma—Storage in the W. C. Austin Reservoir is about 12% of capacity and near one-half of average. The water supply outlook is poor.

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Orchid growers in Los Angeles and San Francisco have reported losses as high as one-third of their crop due to air pollution damage.

One method now used to empty coal cars quickly is to lift up the car and turn it over.

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