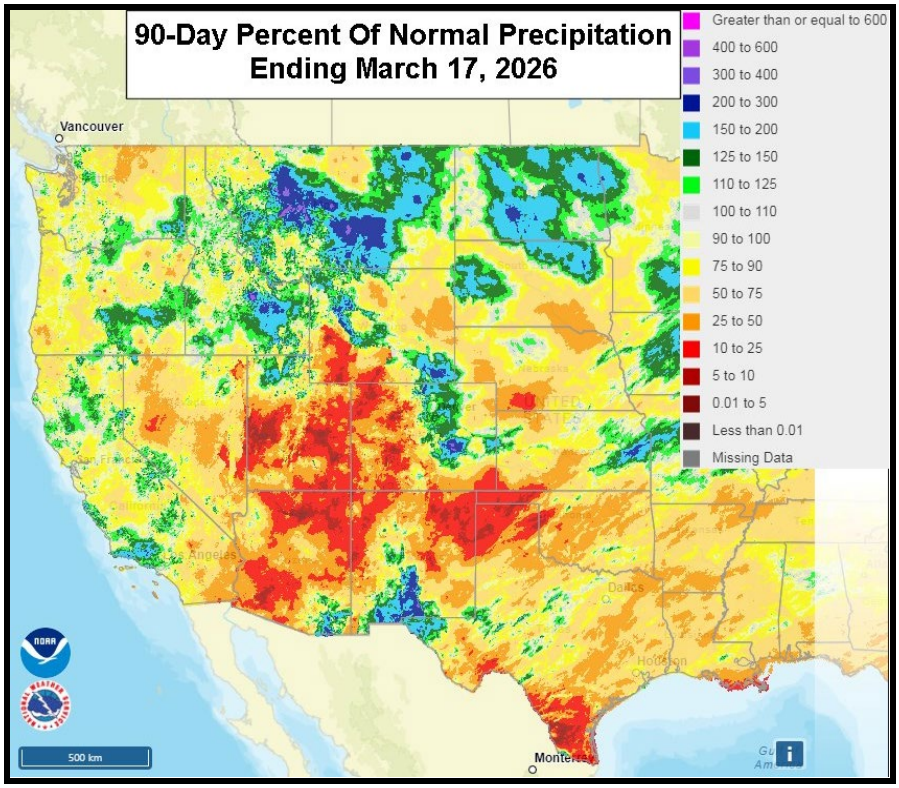
Western U.S. Snowpack Below To Well Below Normal

By Andrew Owen

Kansas City, March 18 (World Weather Inc.) – The outlook for the upcoming season across the western United States is variable. ***While mountain snowpack in the Sierra Nevada is lower or much lower than usual for this time of year, reservoir levels are near or above historical levels across California. The state should have ample moisture for the upcoming season despite the lack of mountain snowpack.*** **The Pacific Northwest and much of the Rocky Mountains also have below normal snowpack** in part due to a significant warming trend in recent days. The moisture situation will be a greater concern for the upcoming season as drought or abnormally dry conditions are already in place. The Pacific Northwest will receive much-needed precipitation through the middle of next week with significant snowfall slated for the Washington portion of the Cascade Mountains. The Rocky Mountains region and California will receive little to no precipitation outside northern Idaho. Snowpack will further decrease and concerns for significant moisture shortages later this year will increase.

Precipitation was highly variable across the western United States in recent months. The central Rocky Mountains region was much drier than usual with exceptions for the front range, only receiving 10-75% of normal precipitation for the 90-day period ending March 17. Idaho, southeastern Oregon, a few locations in southeastern Washington, and portions of northern California, southern California, and the southern Sierra Nevada region received near to slightly above normal precipitation, though pockets were slightly drier than usual. Most other areas in California, Washington, and Oregon received near to below normal precipitation.



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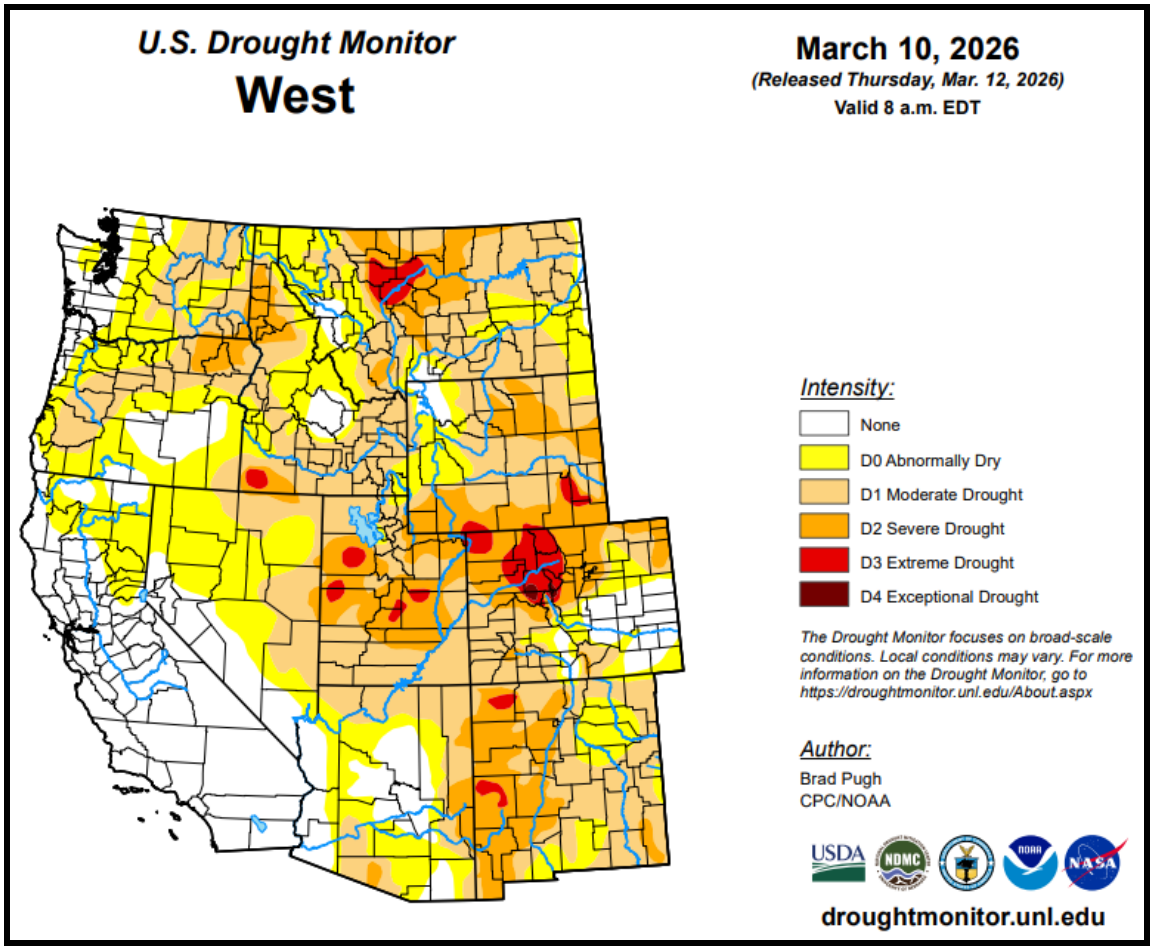
Mountain snowpack in California's Sierra Nevada remains below or well below normal due to a lack of precipitation in recent weeks and periods of much warmer than usual weather. As of March 17, mountain snowpack was only 21-64% of normal for the date. Mountain snowpack is generally below to well below normal for the Pacific Northwest and Rocky Mountains as well.

Reservoir levels remain near or above historical levels in California despite many areas trending drier than usual in recent weeks. The state remains drought-free, though portions of northern California become abnormally dry in recent weeks. Overall, the moisture situation for the upcoming season is relatively good despite the lack of mountain snowpack.



The Pacific Northwest saw reservoir levels increase in recent weeks as periods of warm weather melted mountain snowpack. There are still many areas in Washington, Oregon, and Idaho that have less than 50% of capacity water in storage in part due to a lack of precipitation over the winter. Moisture shortages may be a concern later this year. Much of Washington, Oregon, and Idaho are abnormally dry or in a moderate to severe drought and the need for timely precipitation is high.

The central Rocky Mountain region is facing severe moisture deficits for the upcoming season. The region is already in a moderate to extreme drought with below or

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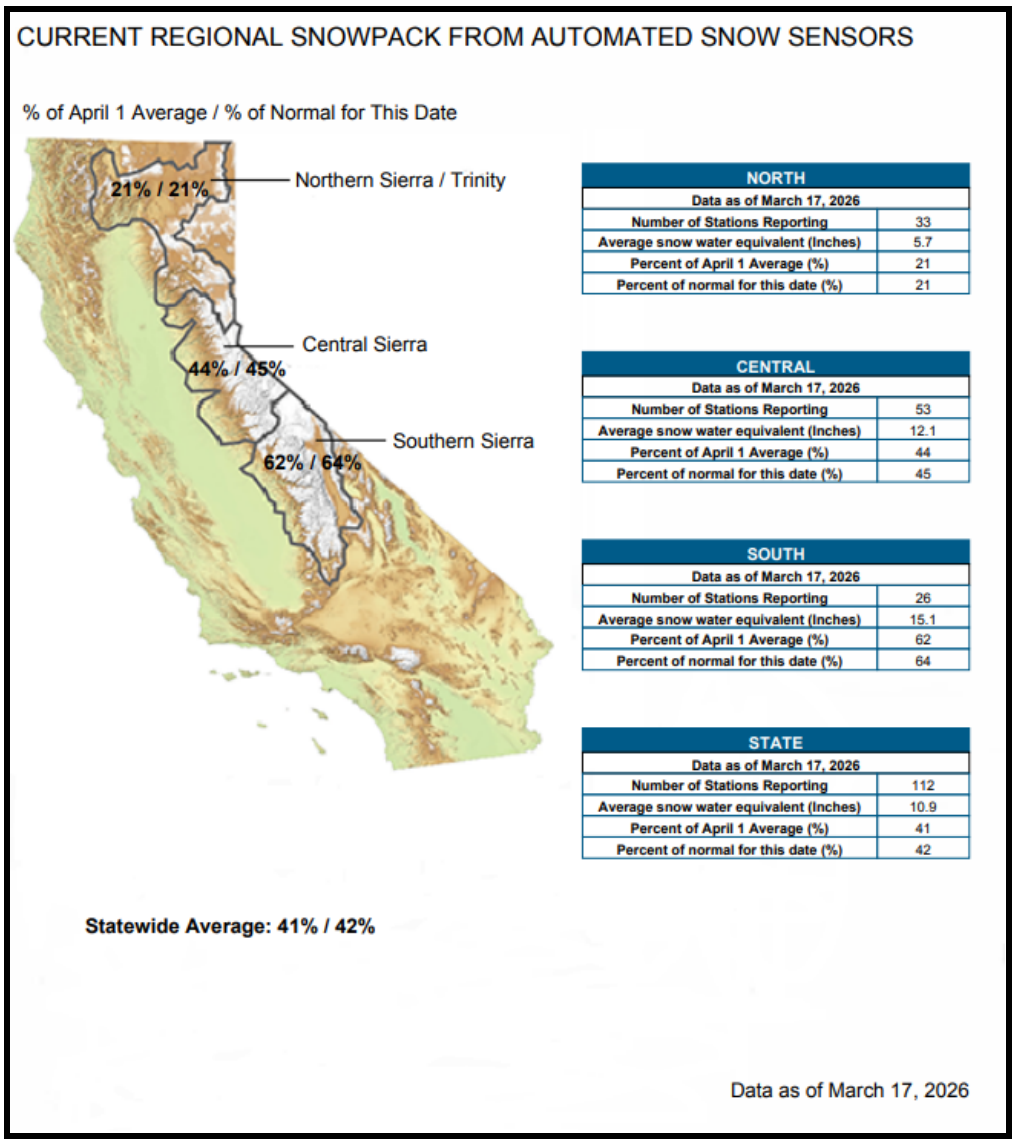
well below normal mountain snowpack. Severe moisture shortages will be a concern for the upcoming season.



Weather in the western United States will be influenced by a strong high-pressure ridge during the next several days. Disturbances tracking over the ridge will promote waves of precipitation for the Pacific Northwest while California and the central Rocky Mountains region is mostly dry. Western Washington will receive the greatest amount of precipitation with totals ranging anywhere from 2.00 to 8.00 inches and local amounts of 12.00 inches or more. Mountain snowpack in the Cascade Mountains will increase significantly. Western Oregon and northern Idaho will receive 0.40 to 2.00 inches of moisture with locally greater amounts. Several inches of snow will accumulate in the higher elevated areas, though not enough snow is expected to lift snowpack to normal levels for this time of year. Other areas in Washington, Oregon, and Idaho will receive trace amounts to 0.50 inch of moisture.

The high-pressure ridge will also promote warmer or much warmer than usual conditions for the western United States during the next several days. The unusually warm

weather will significantly reduce mountain snowpack outside portions of Washington and northern Idaho.

A shift in the upper-air pattern is slated for North America March 26 – April 1. The ridge will weaken and slowly shift into eastern North America. Another ridge will likely build over the northern Pacific Ocean near Alaska's Aleutian Islands. This upper-air pattern could again promote waves of precipitation for the Pacific Northwest. Northern California and the central Rocky Mountains could see periods of precipitation as well.

The lack of precipitation and warmer or much warmer than normal weather will melt a significant amount of snow in California and the central Rocky Mountains in the coming weeks. Reservoir levels will remain near or above historical capacity across California and the outlook for the upcoming season will be mostly unchanged. The lack of snowpack will lead to much lower water reservoir levels next year if conditions do not change. Meanwhile, critical moisture shortages will be likely for the central Rocky Mountains this year. Precipitation in the Pacific Northwest will otherwise help ease concerns for moisture shortages later this year. However, the driest areas will not receive enough rain to reverse the drought and there will still be a need for timely precipitation later this spring.
