



FOR IMMEDIATE RELEASE

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Drought Update

SALT LAKE CITY (Dec. 16, 2021) – Early season storms gave a glimmer of hope for the new water year, which started Oct. 1, but a dry November didn’t do much to help our snowpack. With 95% of Utah’s water supply coming from snowpack, we need above-average snowstorms to help refill reservoirs.

“This past week the snow water equivalent – or how much water is in the snow – was lower than any time in the past 30 years, but this last storm system brought us closer to average,” said Brian Steed, executive director of the Department of Natural Resources. “We still have a long way to go and need many snowstorms to reach an average, or preferably above-average, snowpack.”

At-a-glance highlights:

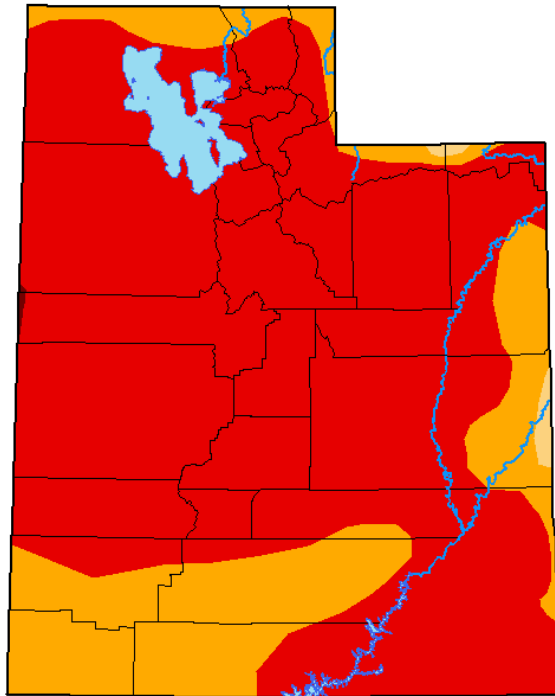
- Nearly all of the state has been downgraded from exceptional drought; 78.71% remains in extreme drought.
- Statewide snow water equivalent (SWE), or how much water would be in the snowpack if it melted, is 2.8 inches. This is 74% of median for this time of year and 18% of median peak, which usually occurs around the first of April.
- Thirty-nine of Utah’s largest 45 reservoirs are below 55% of available capacity. Overall statewide storage is 50% of capacity. This time last year, reservoirs were about 62% of capacity.
- Soil moisture is 7.6% above median for this time of year. Wet soils are critical as the state begins to accumulate its winter snowpack.
- Of the 84 measured streams, 43 are flowing below normal. (This number went down because many streams and gauges ice up in the winter.)

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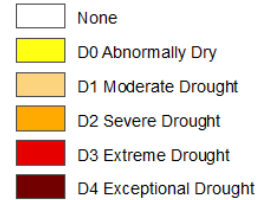


U.S. Drought Monitor
Utah

December 14, 2021
(Released Thursday, Dec. 16, 2021)
Valid 7 a.m. EST



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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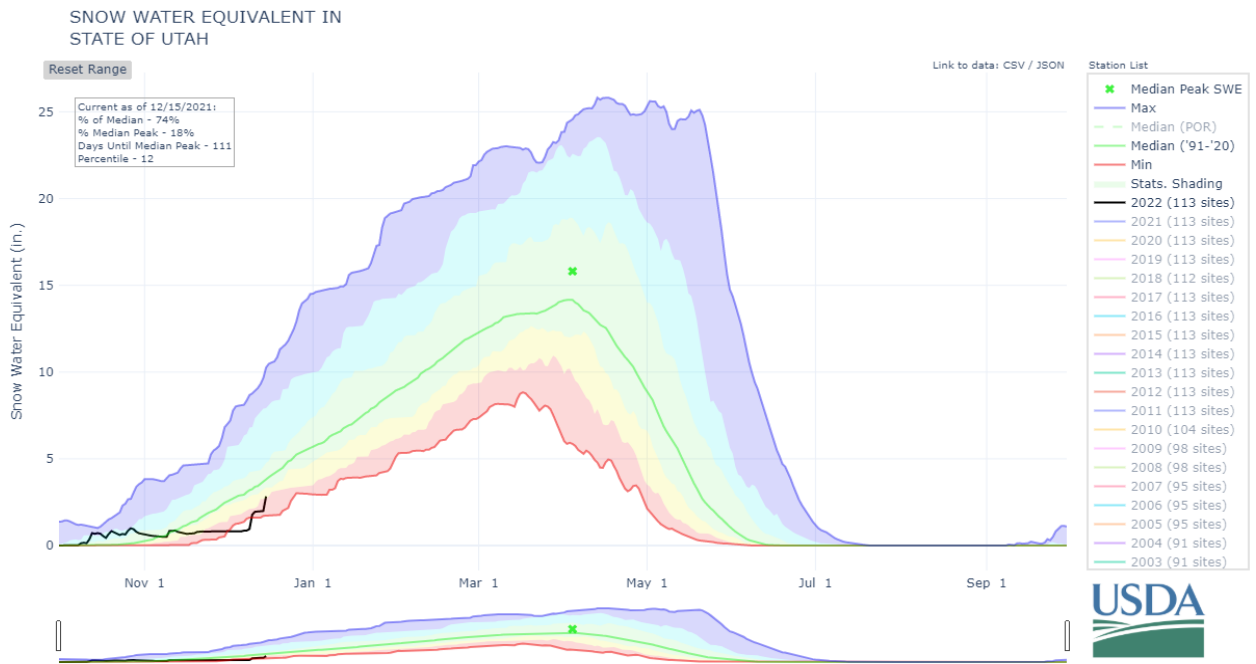


droughtmonitor.unl.edu

FULL REPORT

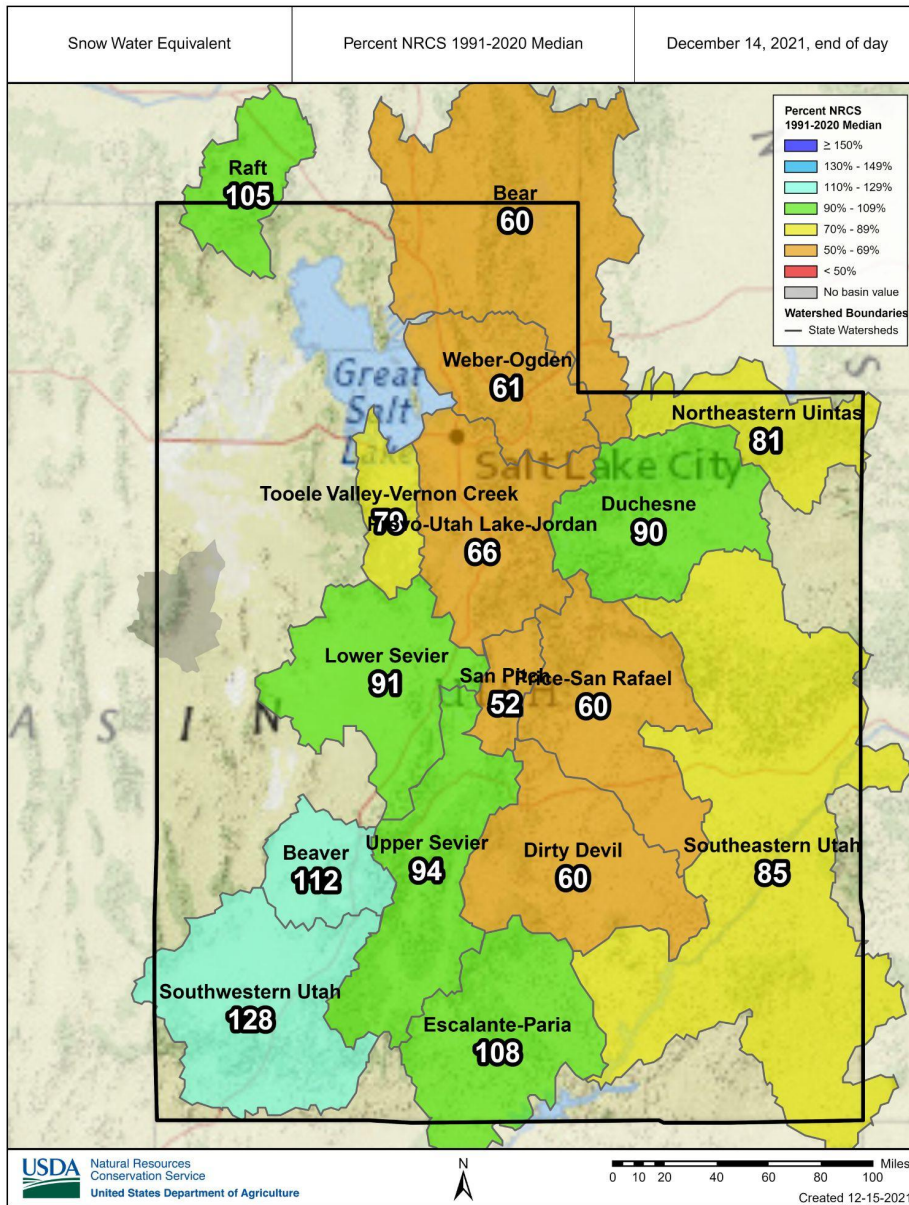
Precipitation and soil moisture

- Snow water equivalent (as measured at [NRCS SNOTEL](#) sites) total on Dec. 15 was 2.8 inches. Last week the snow water equivalent (SWE) was lower than recorded in the last 30 years. The storms this past week increased SWE by 1.8 inches and put this year back in the range of previous years. However, we still need 13 inches to reach the median, or typical, peak of 15.8 inches in a year. Since we started the year essentially in debt water-wise, a better-than-average water year is needed.



Snow storms (as measured at mountain [SnoTel sites](#)) over the last week have brought the Snow Water Equivalent from lower than ever recorded in the last 30 years to 74% of median. Many more storms of this magnitude are needed to increase the snowpack so we have a strong spring runoff and refill reservoirs.

- Storms are not distributed evenly across the state. Small subbasin snow water equivalent (as measured at [NRCS SNOTEL](#) sites) varies from 32% to 300% of median. However, it's important to note that this is the median for this time of year. We still have 111 days until snowpack typically peaks.
- As we fully enter winter, soil moisture essentially locks into place with freezing temperatures. It will remain unchanged until temperatures warm and melt begins.



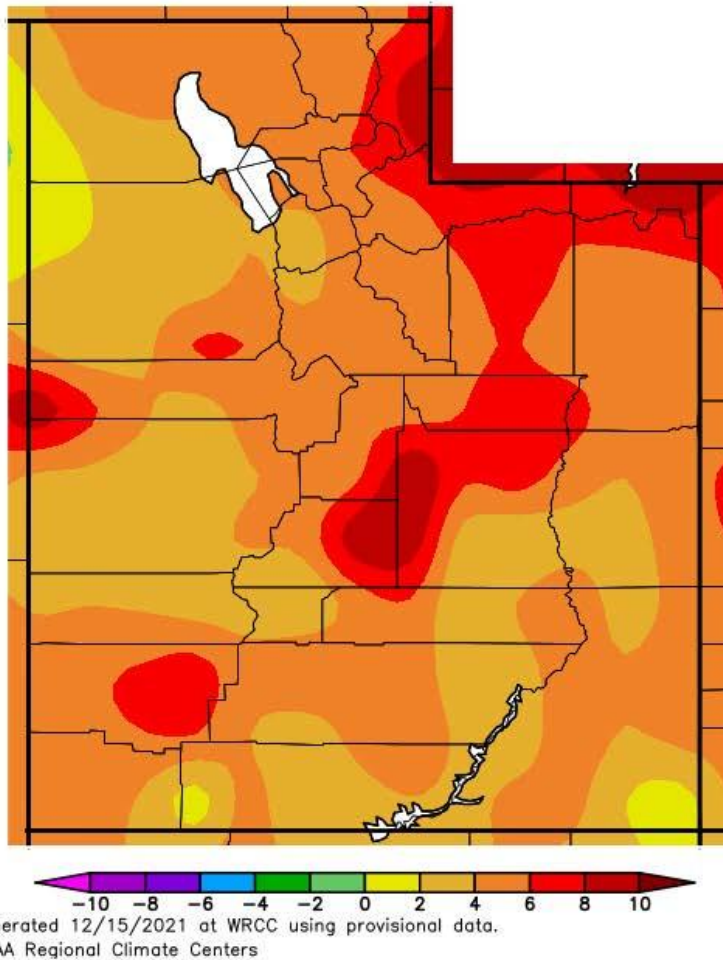
Graphic shows snow water equivalent based on regions. After recent storms, some regions accumulated more snow than others.

Temperature and Evaporation

- Temperature has been 4.8 degrees above average for the last 30 days. Above average temperatures can melt snow and increase the demand of the air and land for water.
- Evaporative demand has been slightly above average for this time of year. Evaporative demand was higher, compared to average, in the southern part of the state than in the northwestern areas. Evaporative demand is basically how thirsty the air is for water. Higher evaporative demand means more water is lost to the air.

Average Temperature Departure from Average (degrees F)

11/15/2021 – 12/14/2021



Graphic shows the average daily temperatures as related to averages over the last 30 years. Temperatures over the last 30 days have been about 4.8 degrees higher than average.

Streamflows

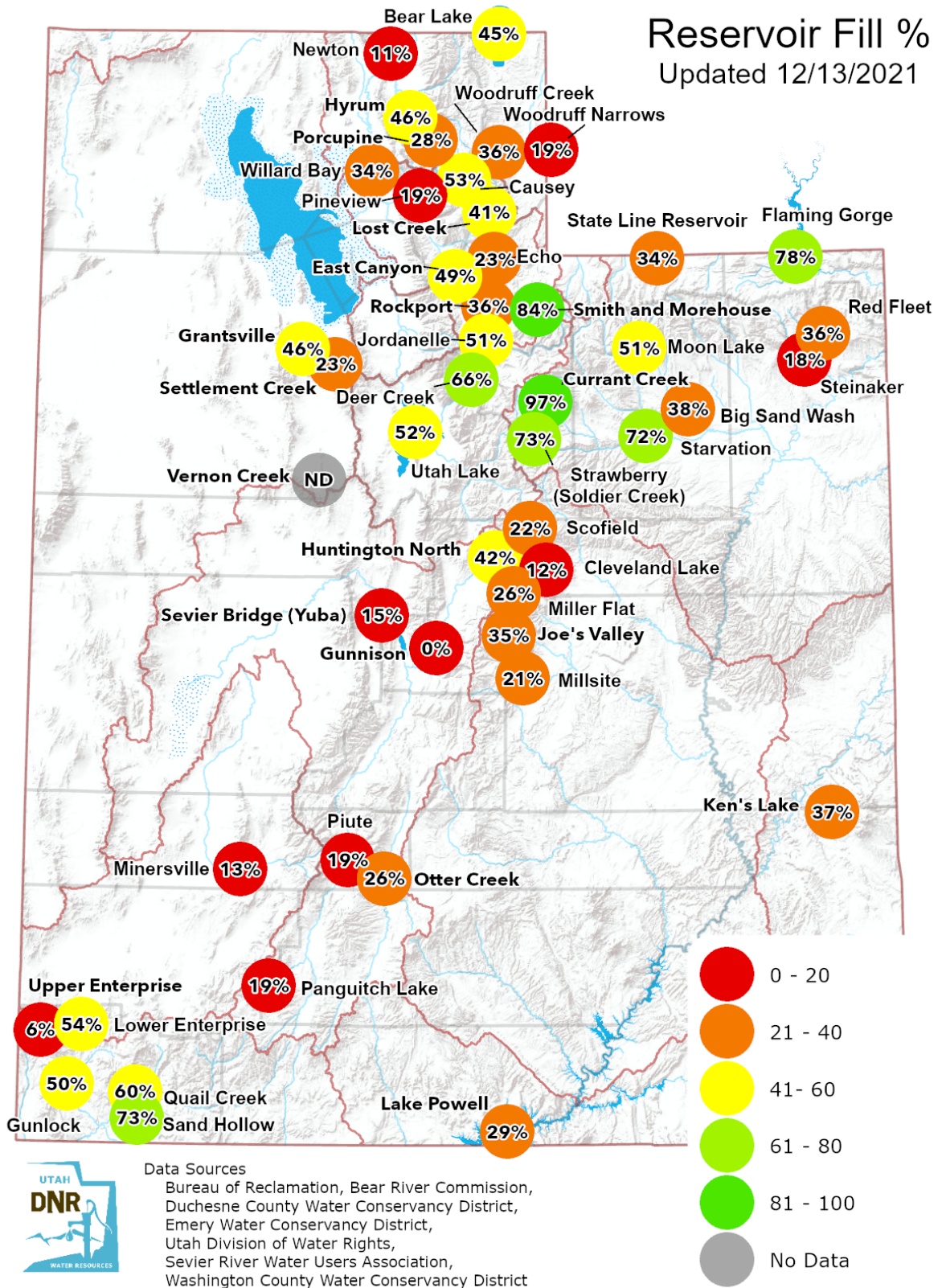
- Forty-three of Utah's 84 streams reporting data are flowing below normal. This is an indicator of the long-term nature of drought recovery. Streamflows are still low in much of the state even though we have had beneficial precipitation. It typically takes as long to recover from drought as it took to get into drought.
- For the first time since February 2021, no streams had their seven day average flow reach record low.
- Daily flow from 28 headwater streams has been flowing below the median for this time of year due to an unusually dry November.

Reservoir and Lake Levels

- The capacity of major reservoirs statewide is 50% of storage capacity. Withdrawals from reservoirs generally decrease over the fall and winter months. Snowpack is needed to refill the reservoirs in the spring prior to the higher use summer months.
- Thirty-nine out of Utah's 45 reservoirs that collect fill information on a regular basis are below 55% of available capacity.
- After dropping to 4190.2 on Oct. 18, Great Salt Lake's elevation is on the rise at 4190.6, about 9.6 inches below the historic record low of 4191.4. Levels are expected to continue to rise now that irrigation season has concluded and winter storms have moved in.

Reservoir Fill %

Updated 12/13/2021



Data Sources
 Bureau of Reclamation, Bear River Commission,
 Duchesne County Water Conservancy District,
 Emery Water Conservancy District,
 Utah Division of Water Rights,
 Sevier River Water Users Association,
 Washington County Water Conservancy District