February 09, 2021

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

Monthly Drought Update

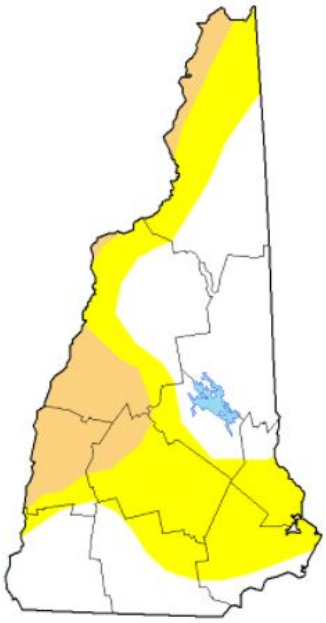
Hot Topics!

- See the new NHDES Drought Management webpage.
- Applications are still being accepted by the Low-Income Residential Drought Assistance Program.
- "Declining Snow Cover in U.S. Northeast Will Have Major Impacts, Study Finds"

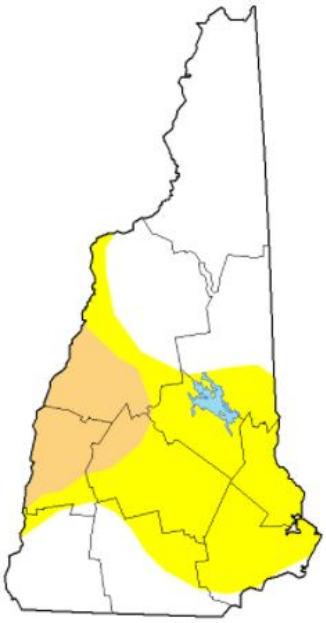
Highlights

- In January, the state experienced above normal temperatures, below normal precipitation and below normal snowfall.
- Drought improvement declined. While abnormally dry conditions rescinded in the central Lakes Region, abnormally dry and moderate drought conditions expanded along the state's western border.
- Stream flows are normal or above normal.
- With the exception of the Connecticut River Valley, where monitoring well levels were below average and had dropped since the previous month, levels across the state suggest a steady recovery since the low conditions experienced during the summer and fall of 2020.
- The Monthly Drought Outlook predicts moderate drought conditions will remain through February, but those areas of the state experiencing abnormally dry conditions will return to normal.

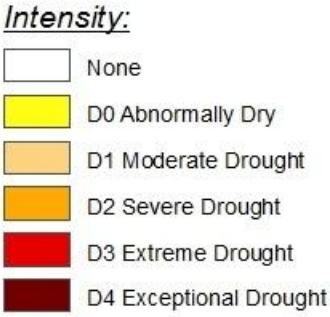
U.S. Drought Monitor



February 2, 2021



December 29, 2020



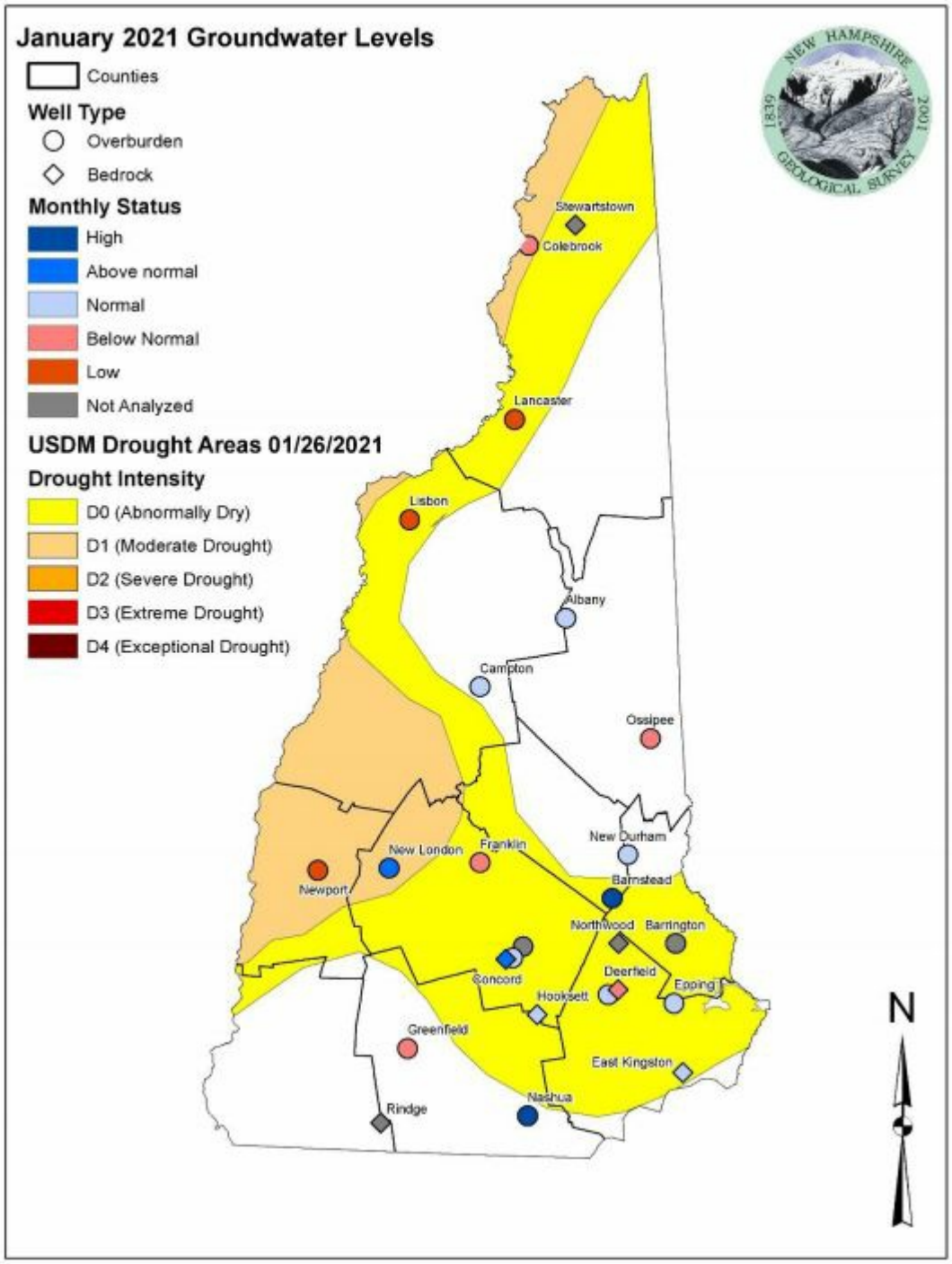
- Currently 14.93% of NH is experiencing moderate drought (D1) conditions. At the end of December, moderate drought affected 12.2% of the state.
- Currently 37.5% of NH is experiencing abnormally dry conditions. At the end of December, abnormally dry conditions affected 36.16% of the state.

U.S. Drought Monitor

Water Resource Updates

January NH Geological Survey Monthly Groundwater Level Report

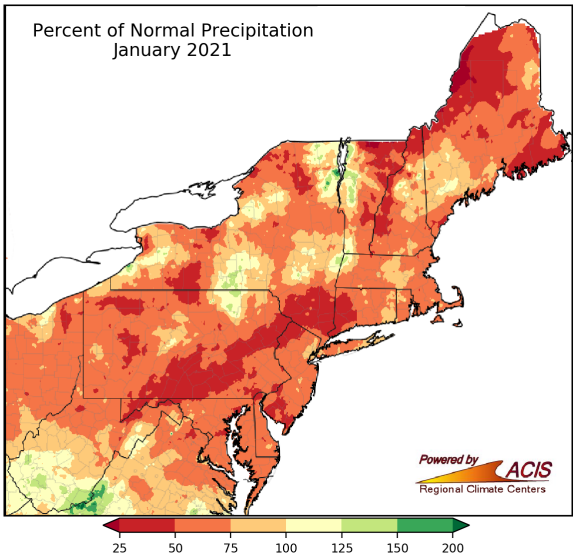
- Analysis of groundwater levels at 24 monitoring wells across the state indicated that at the end of January, 9 wells were below average, 11 wells were at normal levels, and 4 wells were above average.
- While groundwater levels declined in in some locations, mainly in western New Hampshire, groundwater levels for January are still higher than they were at the end of November, when the drought peaked.
- Levels in southeast New Hampshire were generally steady and are at higher than normal levels for January.
- Groundwater levels along the western border of the state declined, resulting in wells that had previously rebounded to normal or higher to drop below average levels.

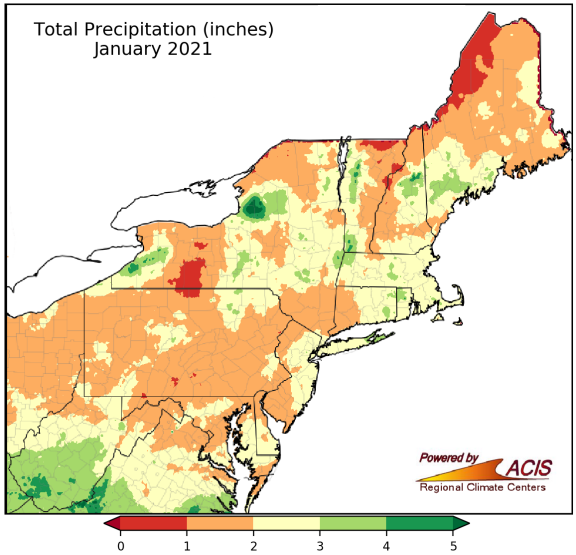


NH USGS WaterWatch Stream Flows - Stream gauges across the state indicate 28-day average stream flows are normal, with the exception of a gauge on the Diamond River and two gauges on the Androscoggin River in Coos County and one gauge on the Merrimack River in Hillsborough County, which are "above normal" or "much above normal".

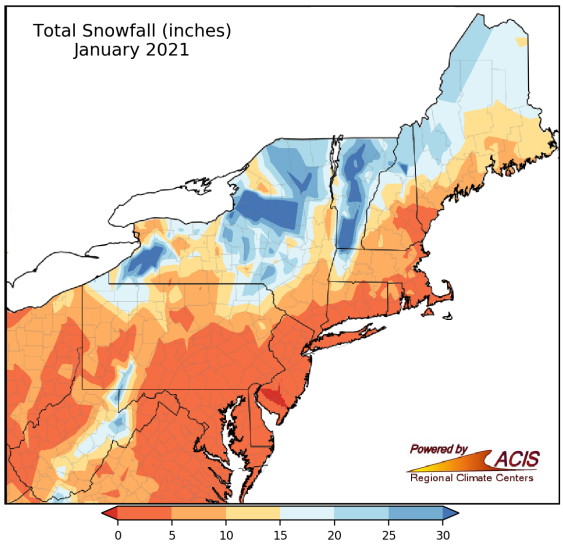
Precipitation and Snow Departures

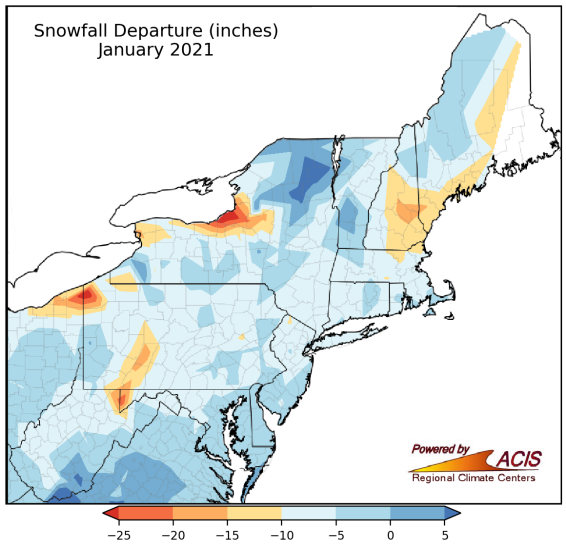
Northeast Regional Climate Center Precipitation Departures and Totals
In January, the majority of the state received between 1" to 3", which is below normal. For much of this area, the departure is equivalent to 25% to 75% of normal.





Generally, snowfalls ranged from above zero to 15" in the southern two thirds of the state, and from 15" to above 30" further north. These amounts were all below normal for January.

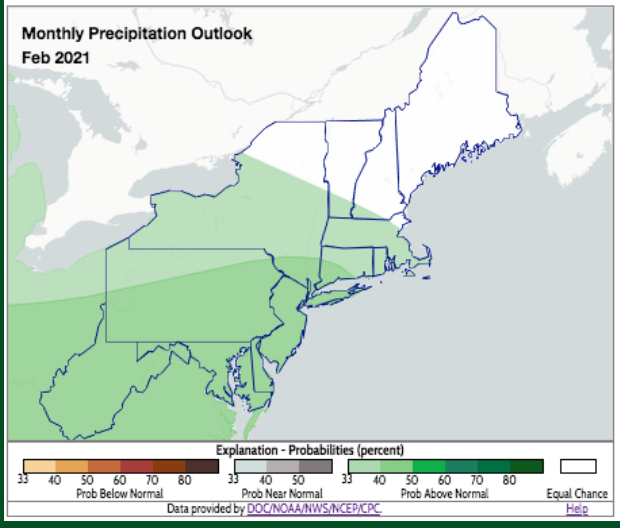


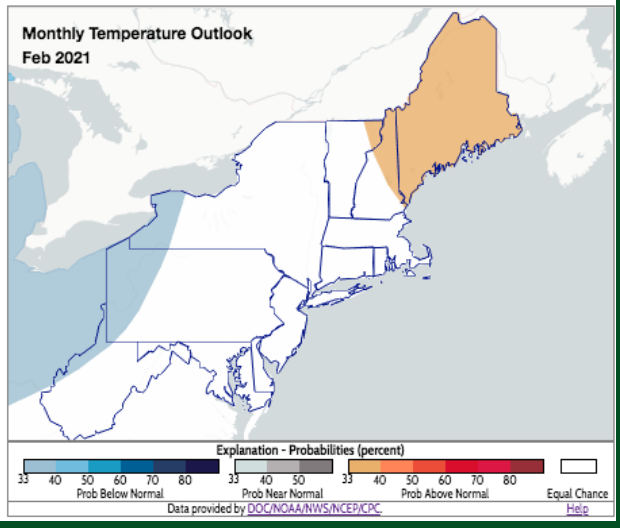


Precipitation and Temperature Forecasts and Outlooks

The monthly precipitation outlook predicts equal chances for above normal, normal, or below normal precipitation in the majority of the state, except for a small sliver in the southwest corner of the state where above normal precipitation is favored.

The monthly temperature outlook is split across the state. Above normal temperatures are favored in the north and in east central New Hampshire. Equal chances of above normal, normal, and below normal temperatures are forecast for the remainder of the state.





Additional Resources

Monthly and Seasonal Drought Outlook - National Weather Service
Regional Forecast - National Weather Service Forecast Discussion
Groundwater Level Reports - NH Geological Survey
Long Term Precipitation Deficits - Northeast River Forecast Center

Visit the NHDES Drought Management Webpage