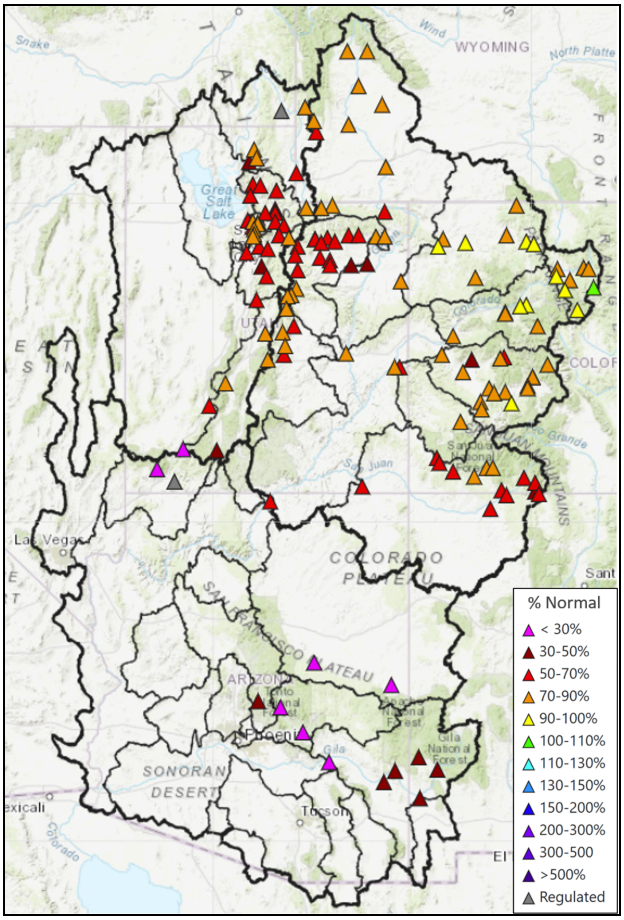
Colorado Basin
River Forecast Center
National Weather Service

# Water Supply Forecast Discussion
# February 1, 2025

The Colorado Basin River Forecast Center (CBRFC) geographic forecast area includes the Upper Colorado River Basin (UCRB), Lower Colorado River Basin (LCRB), and Eastern Great Basin (GB).

### Water Supply Forecasts

February 1 water supply forecasts across the CRB and GB are generally below to well below normal and summarized in the figure and table below. Snowpack, soil moisture, and future weather are the primary hydrologic conditions that impact the water supply outlook.




**Colorado Basin River Forecast Center Water Supply Forecasts**
**February 1, 2025**

| Basin | Volume (KAF) | %Normal (1991-2020) | Period |
|---|---|---|---|
| **UPPER COLORADO RIVER BASIN** | | | |
| Lake Powell | 4300 | 67 | Apr-Jul |
| **Green River Basin** | | | |
| Green-Flaming Gorge Reservoir | 665 | 69 | Apr-Jul |
| Yampa-Deerlodge | 1100 | 92 | Apr-Jul |
| Duchesne-Tabiona | 68 | 66 | Apr-Jul |
| **Colorado River Headwaters** | | | |
| Colorado-Kremmling | 800 | 92 | Apr-Jul |
| Eagle-Gypsum | 305 | 91 | Apr-Jul |
| Roaring Fork-Glenwood Springs | 550 | 84 | Apr-Jul |
| Colorado-Cameo | 1960 | 86 | Apr-Jul |
| **Southwest Colorado** | | | |
| Gunnison-Blue Mesa Reservoir | 520 | 82 | Apr-Jul |
| Dolores-McPhee Reservoir | 155 | 61 | Apr-Jul |
| San Juan-Navajo Reservoir | 355 | 56 | Apr-Jul |
| Animas-Durango | 295 | 77 | Apr-Jul |
| **LOWER COLORADO RIVER BASIN** | | | |
| Virgin-Virgin (*Regulated) | 21 | 38 | Apr-Jul |
| Little Colorado-Chevelon Creek | 1.0 | 7 | Jan-May |
| Verde-Above Horseshoe Dam | 54 | 35 | Jan-May |
| Salt-Roosevelt | 55 | 22 | Jan-May |
| Upper Gila-San Carlos Reservoir | 18.8 | 26 | Jan-May |
| **GREAT BASIN** | | | |
| Bear-UT/WY State Line | 84 | 77 | Apr-Jul |
| Weber-Oakley | 74 | 67 | Apr-Jul |
| Big Cottonwood Creek | 27 | 79 | Apr-Jul |
| Provo-Woodland | 70 | 73 | Apr-Jul |
| Sevier-Hatch | 18.0 | 34 | Apr-Jul |

Apr-Jul runoff volumes as a percent of the 1991-2020 average.
Jan-May runoff volumes as a percent of the 1991-2020 median.

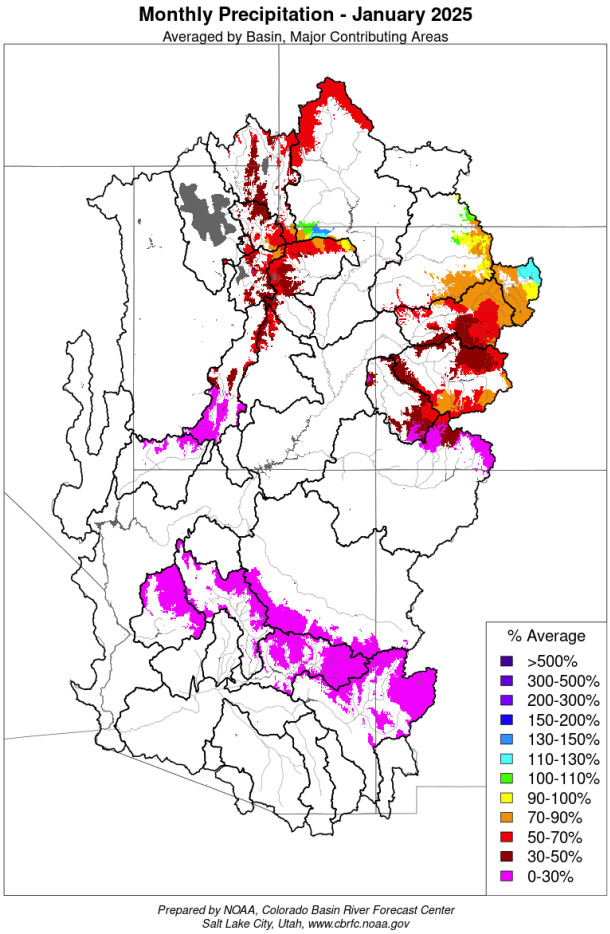
February 1, 2025 seasonal water supply forecast summary. Map | List

**January Weather**

Most of January 2025 featured a continuation of the relatively dry, northerly storm track that has dominated the winter season thus far. This pattern continued to favor northern portions of the GB and UCRB, although only limited areas received near to above normal January precipitation. The majority of the CBRFC area was very dry. Many locations in the LCRB have experienced their driest winter to-date on record. Adjacent basins in southern portions of the GB (Sevier) and UCRB (Dolores, San Juan) received near record or record low December–January precipitation amounts.

The large-scale weather pattern changed significantly at the end of January with the development of troughing over the West Coast. This funneled anomalously warm, moist, Pacific air into the Rockies, giving way to heavy precipitation in the northern reaches of the GB and UCRB into early February. Precipitation fell mostly as snow over the critical runoff areas, but given the oceanic origins of the air mass, snow levels became quite high (over 8,000 feet at times). At one point, an NWS employee observed rainfall in the Wasatch at elevations as high as 10,000 feet.

While this welcome pattern change has delivered beneficial precipitation to northern areas, southern portions of the GB, UCRB, and the entirety of the LCRB have yet to pick up any eye-catching precipitation this season. Precipitation is summarized in the figure and table below.

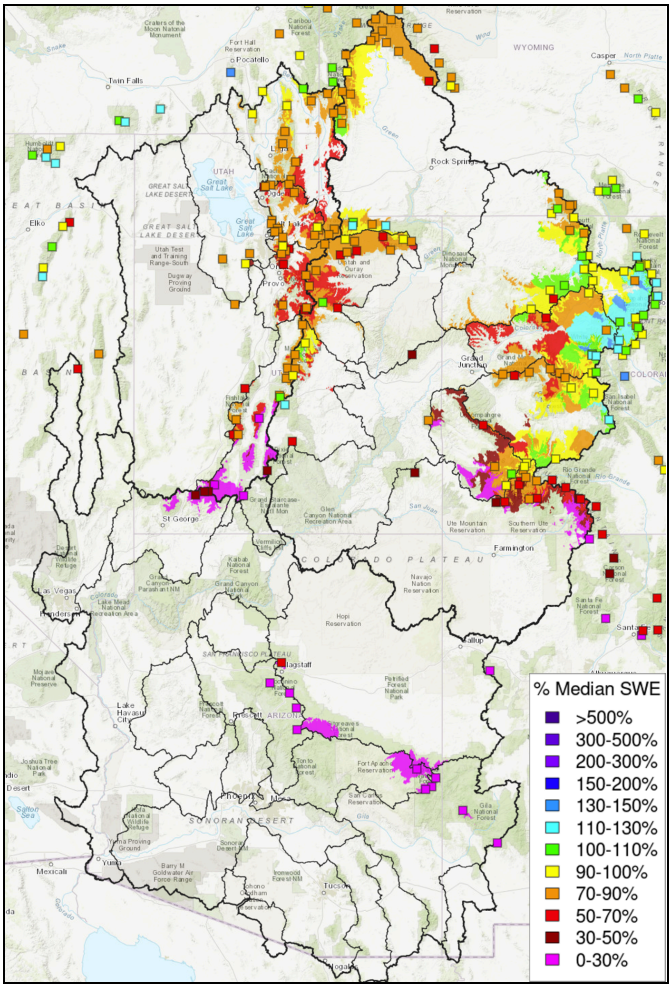



| Water Year 2025<br>CBRFC Precipitation (Major Contributing Areas)<br>Percent of 1991-2020 Average | | |
|---|---|---|
| **UPPER COLORADO RIVER BASIN** | | |
| | Jan | Oct-Jan |
| Above Lake Powell | 61 | 87 |
| **Green River Basin** | | |
| Above Fontenelle | 60 | 78 |
| Above Flaming Gorge | 69 | 84 |
| Yampa/White | 88 | 95 |
| Duchesne | 60 | 79 |
| Price/San Rafael/Dirty Devil | 50 | 95 |
| **Colorado River Headwaters** | | |
| Above Kremmling | 95 | 96 |
| Eagle | 76 | 100 |
| Roaring Fork | 53 | 85 |
| Above Cameo | 74 | 92 |
| **Southwest Colorado** | | |
| Gunnison | 57 | 90 |
| Dolores | 39 | 85 |
| San Juan | 28 | 73 |
| **LOWER COLORADO RIVER BASIN** | | |
| Virgin | 6 | 49 |
| Little Colorado | 12 | 31 |
| Verde | 14 | 23 |
| Salt | 5 | 19 |
| Upper Gila | 13 | 20 |
| **GREAT BASIN** | | |
| Bear | 50 | 76 |
| Weber | 52 | 76 |
| Six Creeks | 64 | 76 |
| Provo/Utah Lake | 53 | 76 |
| Sevier | 28 | 71 |

**Snowpack Conditions**

UCRB February 1 snow water equivalent (SWE) conditions range between 55-110% of normal and are most favorable across west-central CO areas including the White/Yampa, Colorado River headwaters, and Gunnison. SWE is below to well below normal elsewhere across the UCRB, with the least favorable conditions in the San Juan River Basin. UCRB February 1 snow covered area is around 65% of the 2001-2024 median.[1] LCRB February 1 SWE conditions are at or near record low across southwest UT, central AZ, and west-central NM as a result of near record dry winter weather.

GB February 1 SWE conditions range between 50-85% of normal and generally improve from south to north. February 1 snow covered area across UT is around 45% of the 2001-2024 median.[1] SWE conditions are summarized in the figure and table below.



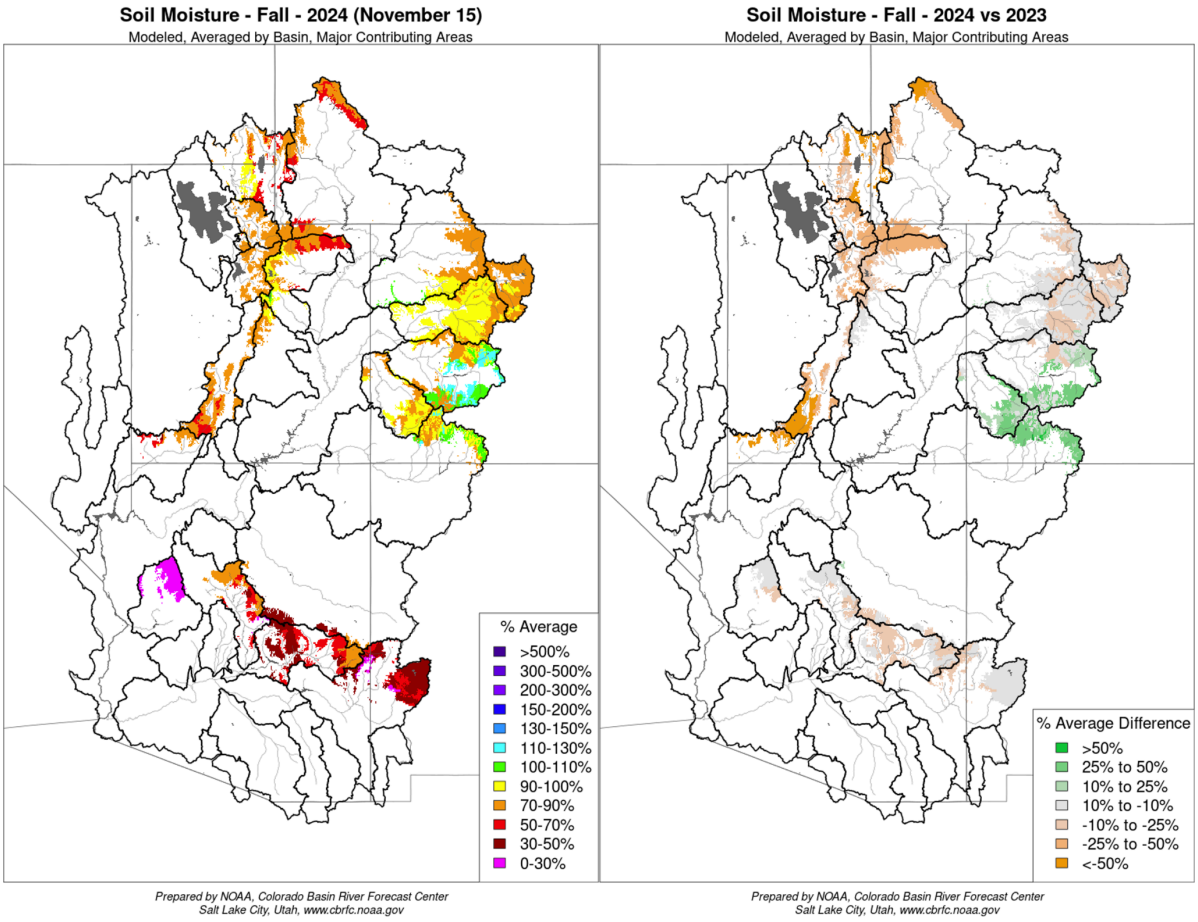

| Water Year 2025<br>CBRFC Model SWE (Major Contributing Areas)<br>Percent of 1991-2020 Median | | | |
|---|---|---|---|
| **UPPER COLORADO RIVER BASIN** | | | |
| | **Jan1** | **Feb1** | **Change** |
| Above Lake Powell | 94 | 86 | -8 |
| **Green River Basin** | | | |
| Above Fontenelle | 81 | 78 | -3 |
| Above Flaming Gorge | 84 | 83 | -1 |
| Yampa/White | 101 | 96 | -5 |
| Duchesne | 86 | 77 | -9 |
| Price/San Rafael/Dirty Devil | 89 | 82 | -7 |
| **Colorado River Headwaters** | | | |
| Above Kremmling | 110 | 111 | 1 |
| Eagle | 117 | 110 | -7 |
| Roaring Fork | 103 | 92 | -11 |
| Above Cameo | 108 | 102 | -6 |
| **Southwest Colorado** | | | |
| Gunnison | 104 | 92 | -12 |
| Dolores | 85 | 69 | -16 |
| San Juan | 69 | 55 | -14 |
| **LOWER COLORADO RIVER BASIN** | | | |
| Virgin | 11 | 6 | -5 |
| Little Colorado | 0 | 3 | 3 |
| Verde | 0 | 0 | 0 |
| Salt | 1 | 6 | 5 |
| Upper Gila | 0 | 2 | 2 |
| **GREAT BASIN** | | | |
| Bear | 103 | 84 | -19 |
| Weber | 88 | 73 | -15 |
| Six Creeks | 86 | 72 | -14 |
| Provo/Utah Lake | 76 | 67 | -9 |
| Sevier | 68 | 51 | -17 |

Left: February 1, 2025 SWE - NRCS SNOTEL observed (squares) and CBRFC hydrologic model.
Right: CBRFC hydrologic model SWE conditions summary.

**Soil Moisture**

CBRFC hydrologic model fall (antecedent) soil moisture conditions impact water supply forecasts and the efficiency of spring runoff. Basins with above average soil moisture conditions can be expected to experience more efficient runoff from rainfall or snowmelt while basins with below average soil moisture conditions can be expected to have lower runoff efficiency until soil moisture deficits are fulfilled. The timing and magnitude of spring runoff is impacted by snowpack conditions, spring weather, and soil moisture conditions.

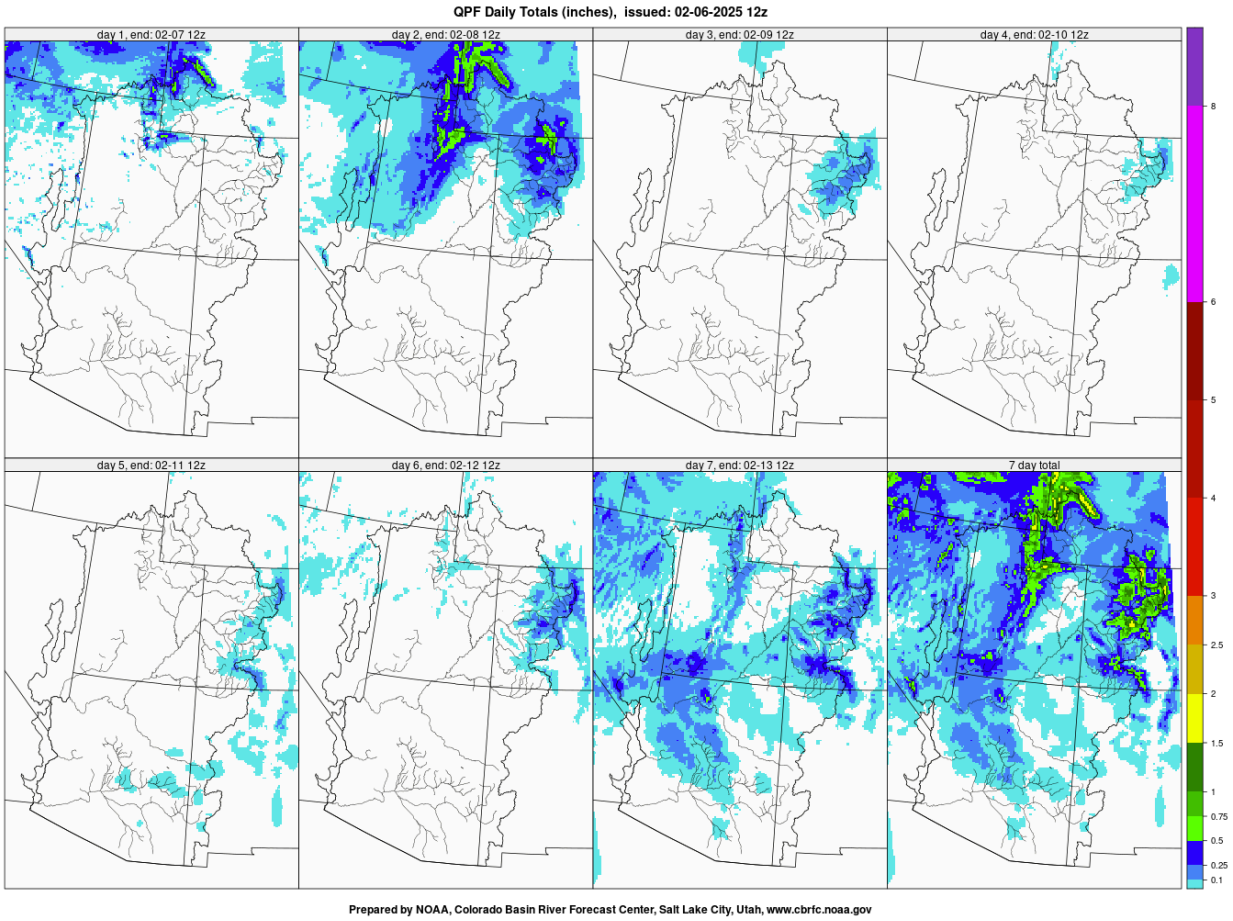
A very dry June-October 2024 across southwest WY and UT resulted in soil moisture conditions that are below normal and worse compared to a year ago. NW CO soil moisture conditions are near to below normal and similar compared to a year ago. SW CO soil moisture conditions are closer to average and improved from a year ago due to a wetter than normal monsoon (mid-June through September). Monsoon precipitation was near/below normal across the LCRB, where soil moisture conditions are below average and similar compared to last year. CBRFC hydrologic model soil moisture conditions are shown in the figures below.



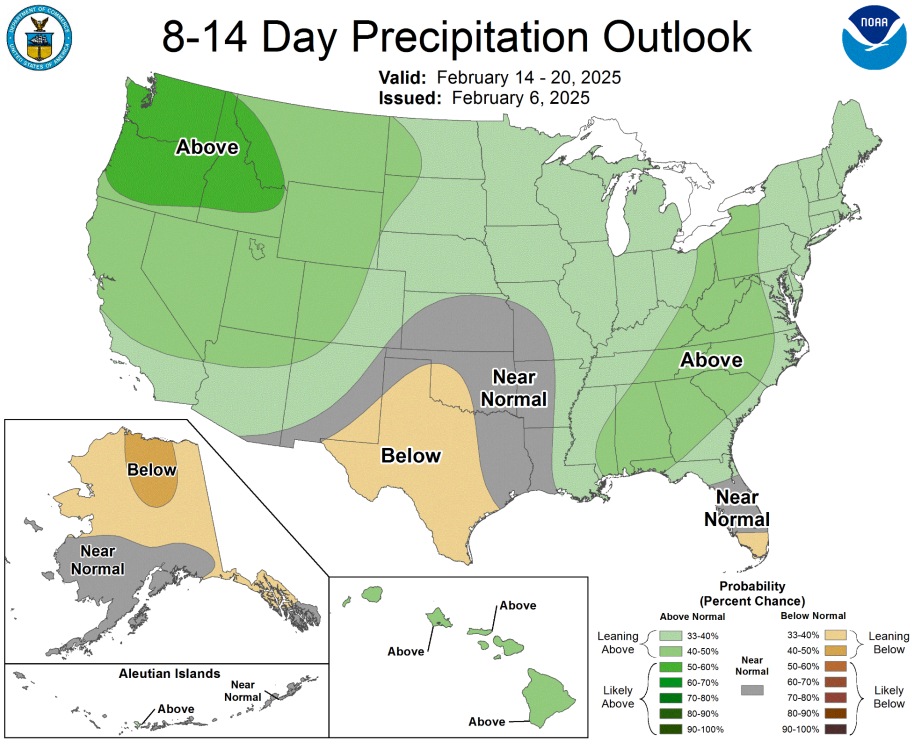

November 2024 CBRFC hydrologic model soil moisture conditions -
as a percent of the 1991-2020 average (left) and compared to November 2023 (right).

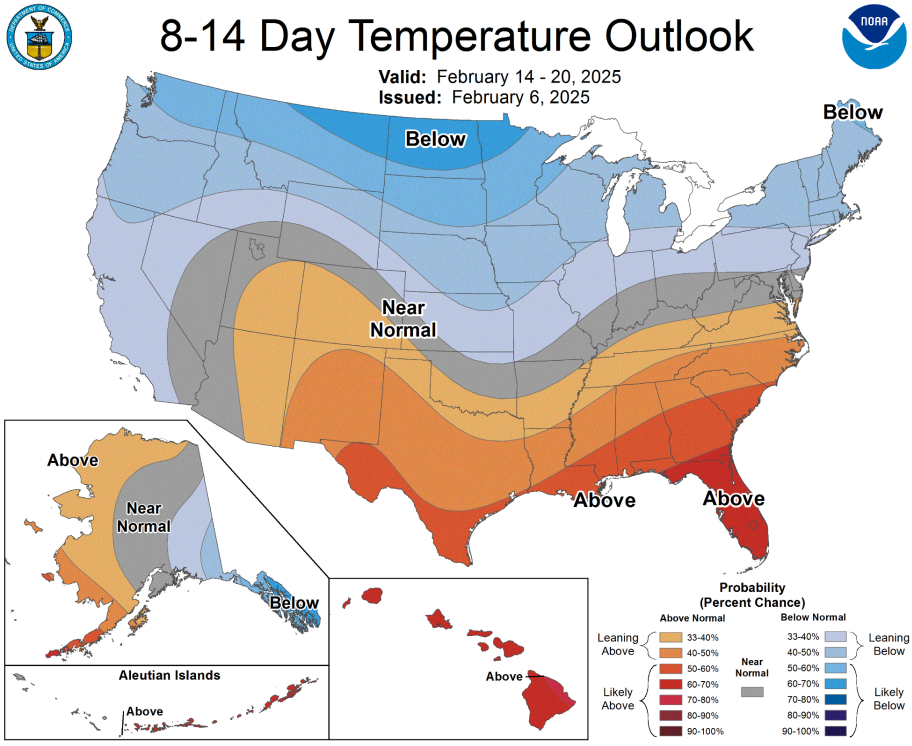
**Upcoming Weather**

The atmospheric river regime that arrived at the end of January is continuing into the first week of February. After a lull, confidence is growing in the return of a productive, southerly storm track around the middle of the month. The Climate Prediction Center's (CPC) 8–14 day precipitation outlook is favoring increased chances of above normal precipitation across the western US during the February 14–20 period. It remains unclear where the focus of moisture will land, but it will likely benefit at least some portions of the CBRFC area. The best hope for the LCRB is that a series of storms tracks far enough south to soften the seasonal deficits. If that does not occur, the LCRB is well on its way to a record, or near record, dry season.




7-day precipitation forecast for February 6–12, 2025.




Climate Prediction Center temperature and precipitation probability forecasts for February 14–20, 2025.

**CBRFC Web Links**
Official Water Supply Forecasts: Map | List
Latest Water Supply Model Guidance: Map | List
Snowpack Conditions: SNOTEL | CBRFC Model
Monthly Precipitation: Map | Image
Soil Moisture: Map | Image
7-Day Precipitation Forecast: Map | Image
Climate Forecasts: Image
Water Supply Briefing Webinars: Registration

**Acronyms & Abbreviations**
ASO - Airborne Snow Observatories, Inc.
CBRFC - Colorado Basin River Forecast Center
CODOS - Colorado Dust-on-Snow Program
CPC - Climate Prediction Center
CRB - Colorado River Basin
ENSO - El Niño-Southern Oscillation
ESP - Ensemble Streamflow Prediction
GB - Great Basin
KAF - Thousand Acre-Feet
LCRB - Lower Colorado River Basin
MAF - Million Acre-Feet
NOAA - National Oceanic and Atmospheric Administration
NRCS - Natural Resources Conservation Service
NSIDC - National Snow and Ice Data Center
NWS - National Weather Service
QPF - Quantitative Precipitation Forecast
SNOTEL - Snow Telemetry
SWE - Snow Water Equivalent
UCRB - Upper Colorado River Basin
USGS - United States Geological Survey
WPC - Weather Prediction Center

**References**
1. Rittger, K., Lenard, S.J.P., Palomaki, R.T. (2025). Snow Today. Boulder, Colorado USA. National Snow and Ice Data Center. Data source: MODIS/Terra/SPIRES.