

NWS Houston/Galveston Monthly Hydrologic Report January 2024

Produced by: Cameron Batiste

Date: 02/08/2024

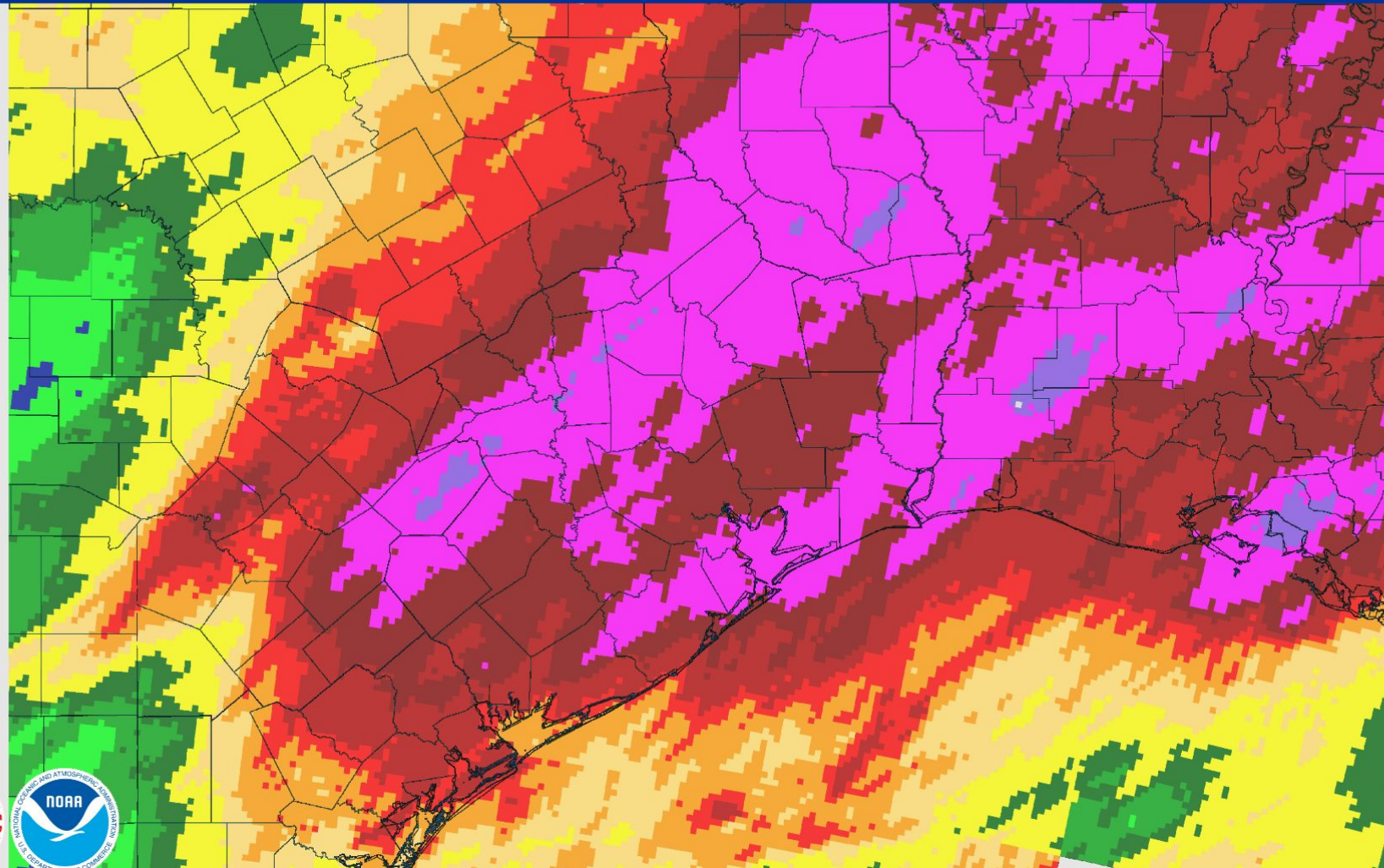
January was highlighted by a significant rainfall event towards the end of the month in which 8-12" of widespread rainfall fell across Southeast Texas, and especially for areas in and around the Brazos Valley. This led to multiple days of river flooding and road inundations and even some water rescues as well. This excessive rainfall event effectively ended the drought for Southeast Texas.

Monthly Precipitation

January 01, 2024 Monthly Observed Precipitation

Created on: February 08, 2024 - 15:41 UTC

Valid on: February 01, 2024 12:00 UTC

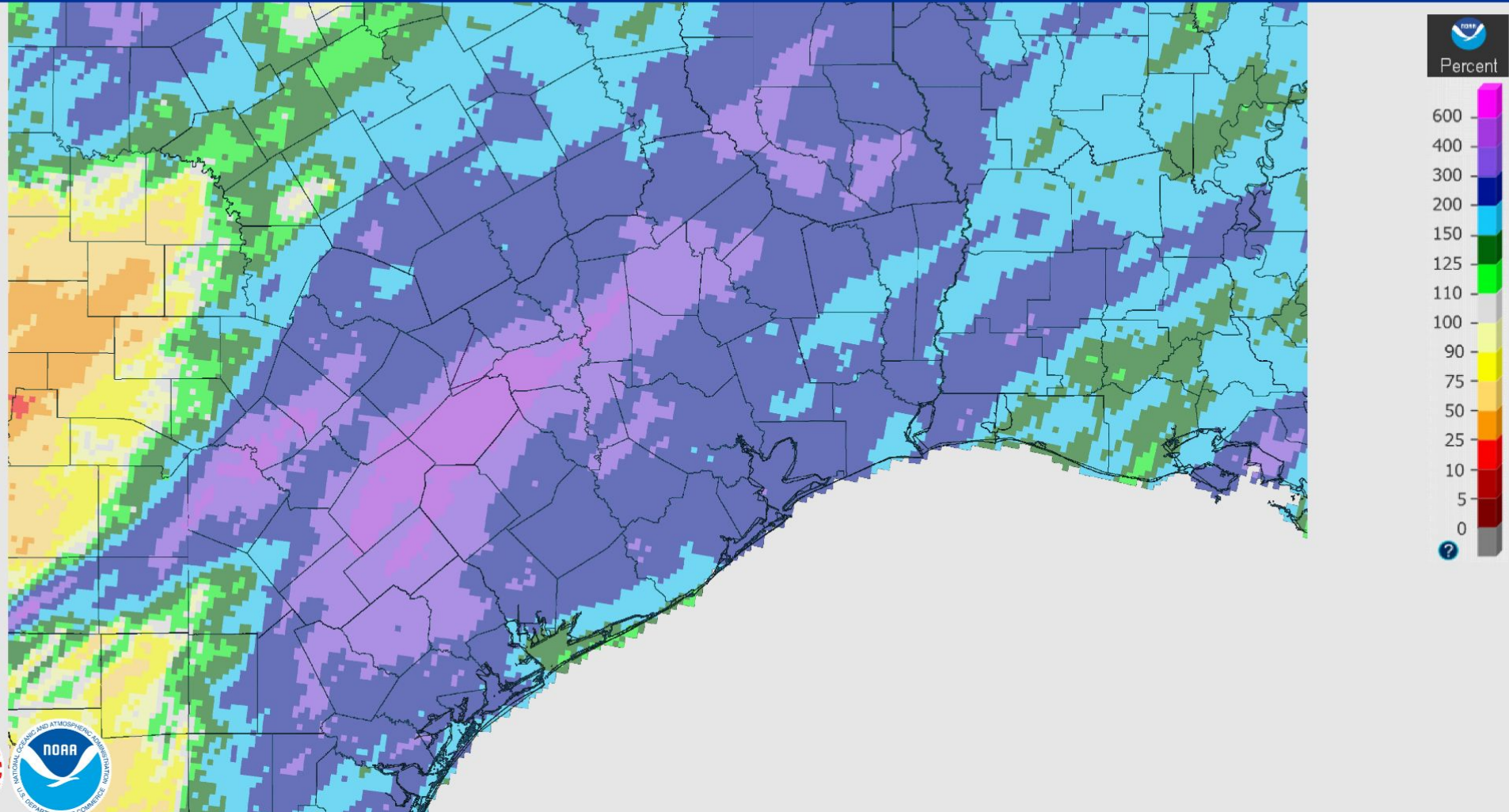


Monthly Percent of Normal Precipitation

January 01, 2024 Monthly Percent Precipitation

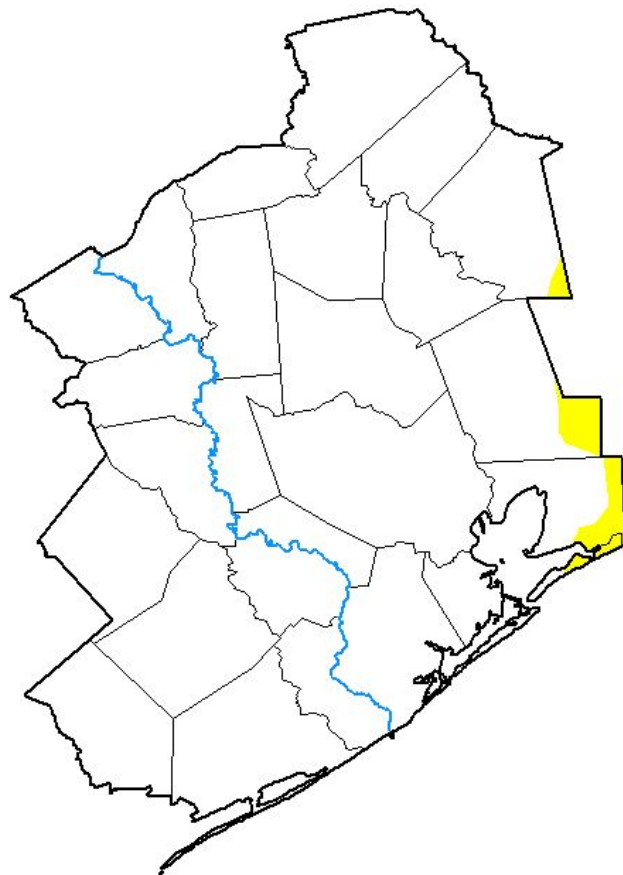
Created on: February 08, 2024 - 15:43 UTC

Valid on: February 01, 2024 12:00 UTC



U.S. Drought Monitor

U.S. Drought Monitor Houston/Galveston, TX WFO



January 30, 2024
(Released Thursday, Feb. 1, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--|-------|--------|--------|--------|-------|-------|
| Current | 98.19 | 1.81 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week <small>01-23-2024</small> | 68.49 | 31.51 | 1.81 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago <small>10-31-2023</small> | 2.44 | 97.56 | 89.31 | 58.41 | 11.61 | 0.00 |
| Start of Calendar Year <small>01-02-2024</small> | 26.21 | 73.79 | 57.44 | 11.02 | 0.00 | 0.00 |
| Start of Water Year <small>09-26-2023</small> | 0.00 | 100.00 | 100.00 | 100.00 | 99.98 | 55.82 |
| One Year Ago <small>01-31-2023</small> | 85.69 | 14.31 | 0.00 | 0.00 | 0.00 | 0.00 |

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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>

Author:

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National Drought Mitigation Center



droughtmonitor.unl.edu

River Flooding

| River and Station | Flood Stage (feet) | Crest Stage (feet) | Crest Date |
|---|--------------------|--------------------|--------------|
| Brazos River at Rosharon (ROST2) | 43.0 | 45.16 | 01/28 04:00Z |
| Brazos River at Sugar Land (SLNT2) | 65.5 | 66.12 | 01/27 17:05Z |
| Brazos River at West Columbia (WCBT2) | 23.0 | 24.33 | 01/28 11:15Z |
| Colorado River at Columbus (CBST2) | 34.0 | 38.27 | 01/25 12:45Z |
| Lavaca River at Edna (EDNT2) | 21.0 | 25.06 | 01/27 07:15Z |
| Navidad River at Strane Park (LSNT2) | 24.0 | 28.04 | 01/27 10:45Z |
| Navidad River at Morales (MRAT2) | 29.0 | 32.05 | 01/27 00:15Z |
| Navidad River at Sublime (SBMT2) | 24.0 | 31.57 | 01/25 10:00Z |
| Navidad River at Speaks (SPAT2) | 24.0 | 28.33 | 01/26 01:30Z |
| San Bernard River at Boling (BOLT2) | 18.0 | 24.24 | 01/28 16:00Z |
| San Bernard River at East Bernard (EBBT2) | 17.0 | 19.38 | 01/26 17:00Z |
| San Bernard River at Old Ocean (OCNT2) | 7.0 | 11.16 | 01/25 19:30Z |

River Flooding

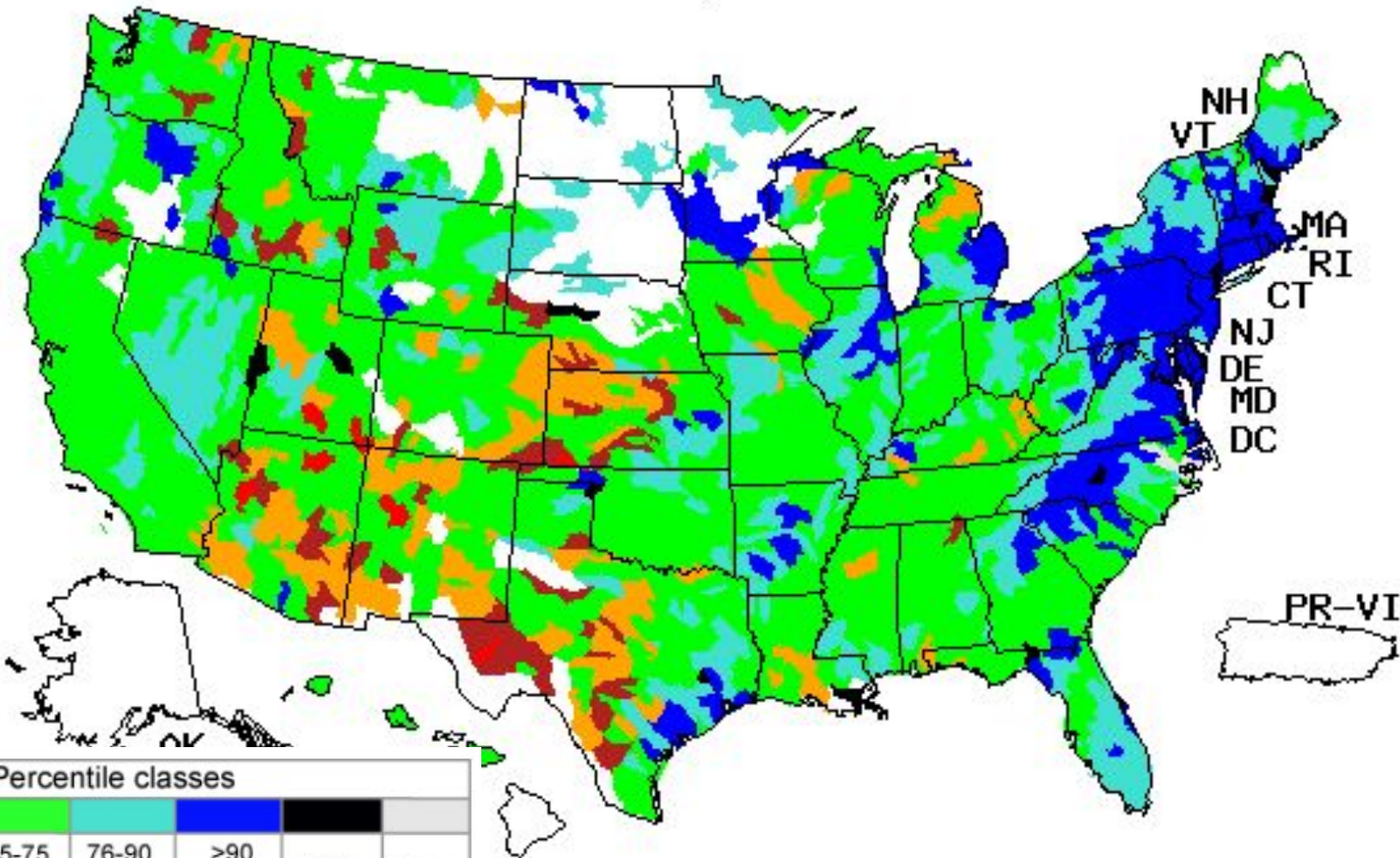
| River and Station | Flood Stage (feet) | Crest Stage (feet) | Crest Date |
|---|--------------------|--------------------|--------------|
| San Jacinto River at New Caney (NCET2) | 58.0 | 68.44 | 01/26 18:30Z |
| San Jacinto River at The Woodlands [Lake Creek] (FCWT2) | 138.0 | 144.46 | 01/25 13:45Z |
| San Jacinto River at Sheldon (SHLT2) | 10.0 | 13.45 | 01/27 18:00Z |
| San Jacinto River at Conroe (CFKT2) | 115.8 | 118.59 | 01/26 00:30Z |
| San Jacinto River at Humble (HMMT2) | 49.3 | 53.71 | 01/27 11:45Z |
| San Jacinto River at Porter (POET2) | 81.0 | 82.01 | 01/26 19:20Z |
| Tres Palacios River at Midfield (MTPT2) | 24.0 | 26.32 | 01/25 17:45Z |
| Trinity River at Madisonville [Bedias Creek] (MDST2) | 19.0 | 19.81 | 01/25 17:45Z |
| Trinity River at Livingston [Long King Creek] (LIVT2) | 19.0 | 22.19 | 01/24 19:00Z |
| Trinity River at Rye [Menard Creek] (RYET2) | 20.0 | 20.70 | 01/26 21:30Z |
| Trinity River at Goodrich (GRIT2) | 36.0 | 39.36 | 01/25 22:45Z |
| Trinity River at Liberty (LBYT2) | 26.0 | 29.88 | 01/28 23:15Z |

River Flooding

| River and Station | Flood Stage (feet) | Crest Stage (feet) | Crest Date |
|-------------------------------------|--------------------|--------------------|--------------|
| Trinity River at Moss Bluff (MBFT2) | 12.2 | 15.25 | 01/31 04:30Z |
| Trinity River at Riverside (RVRT2) | 133.5 | 136.34 | 01/26 01:00Z |
| | | | |

Monthly Average Streamflow

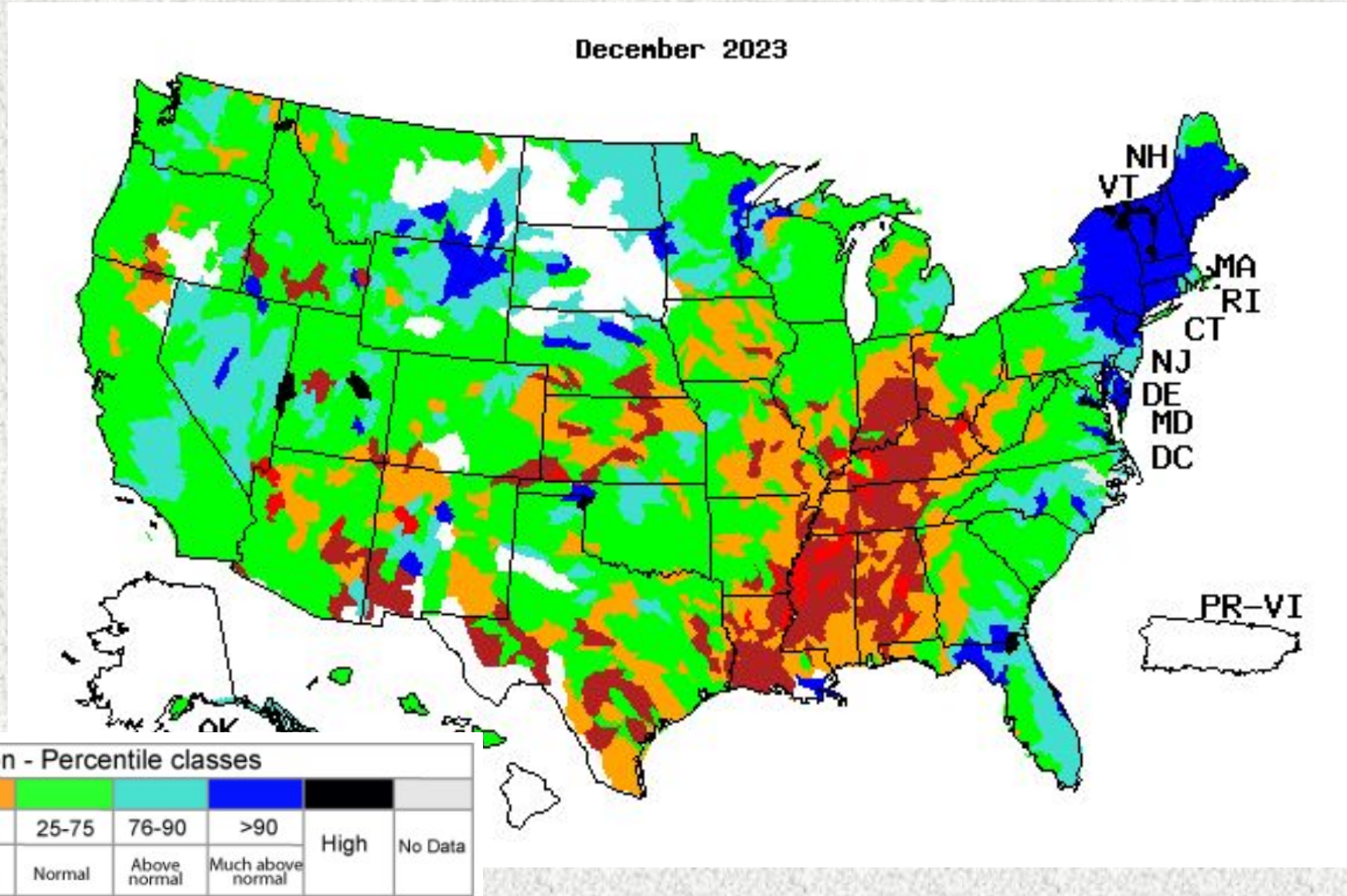
January 2024



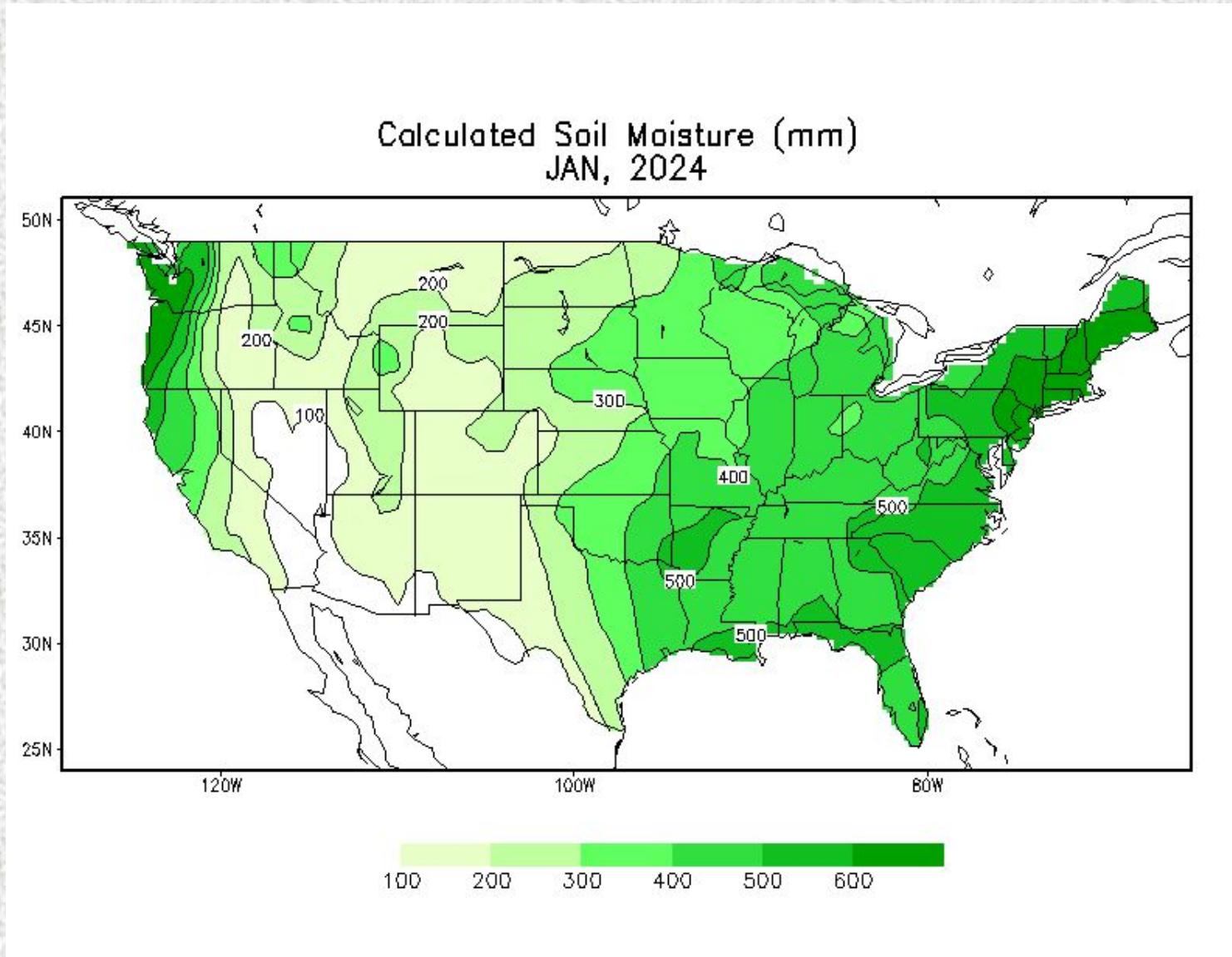
Explanation - Percentile classes

| | | | | | | | | |
|-----|-------------------|--------------|--------|--------------|-------------------|------|---------|--|
| | | | | | | | | |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data | |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | | |

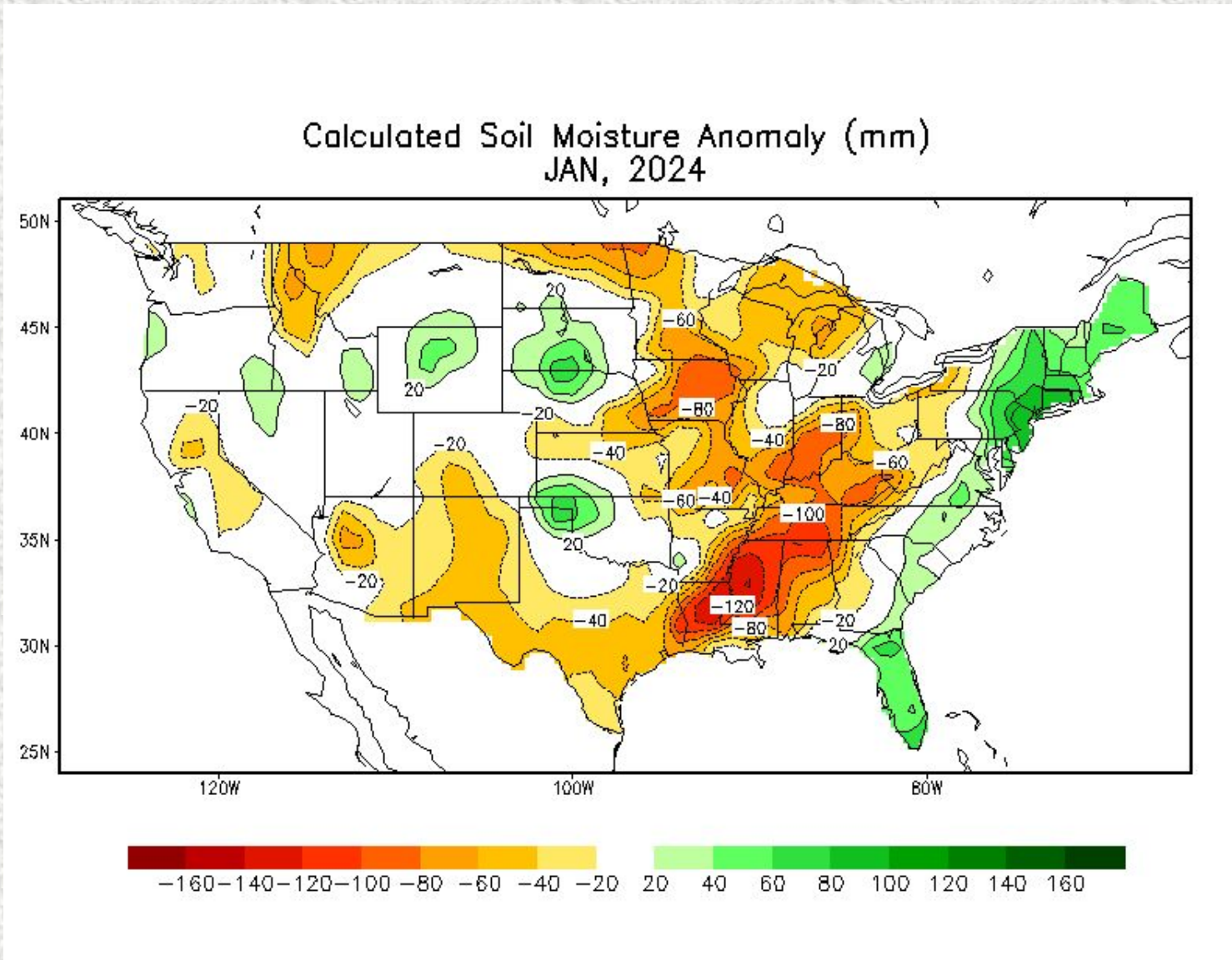
Previous Monthly Average Streamflow



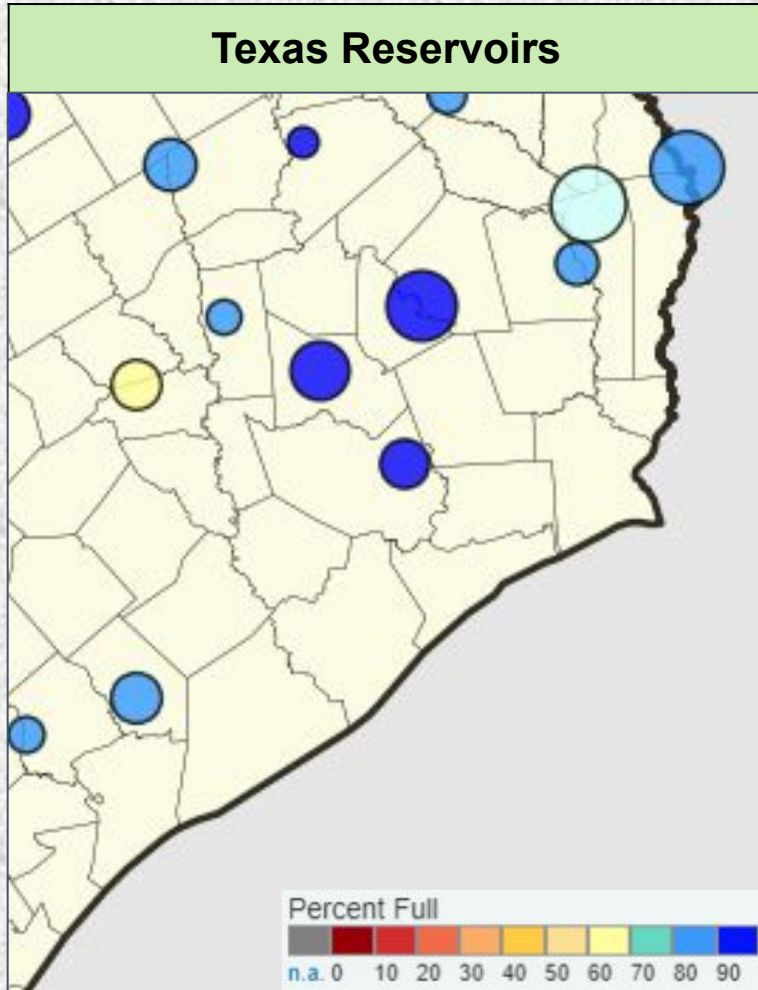
Soil Moisture



Soil Moisture Anomaly



Reservoir Status



| Reservoir | Percent Full Conservation Storage |
|-------------------------|-----------------------------------|
| Houston County Lake | 100.0% |
| Lake Livingston | 100.0% |
| Lake Conroe | 100.0% |
| Lake Houston | 100.0% |
| Gibbons Creek Reservoir | 92.4% |
| Lake Somerville | 97.7% |
| Lake Texana | 100.0% |

Data added on: February 8, 2024 at 10:00 am CST

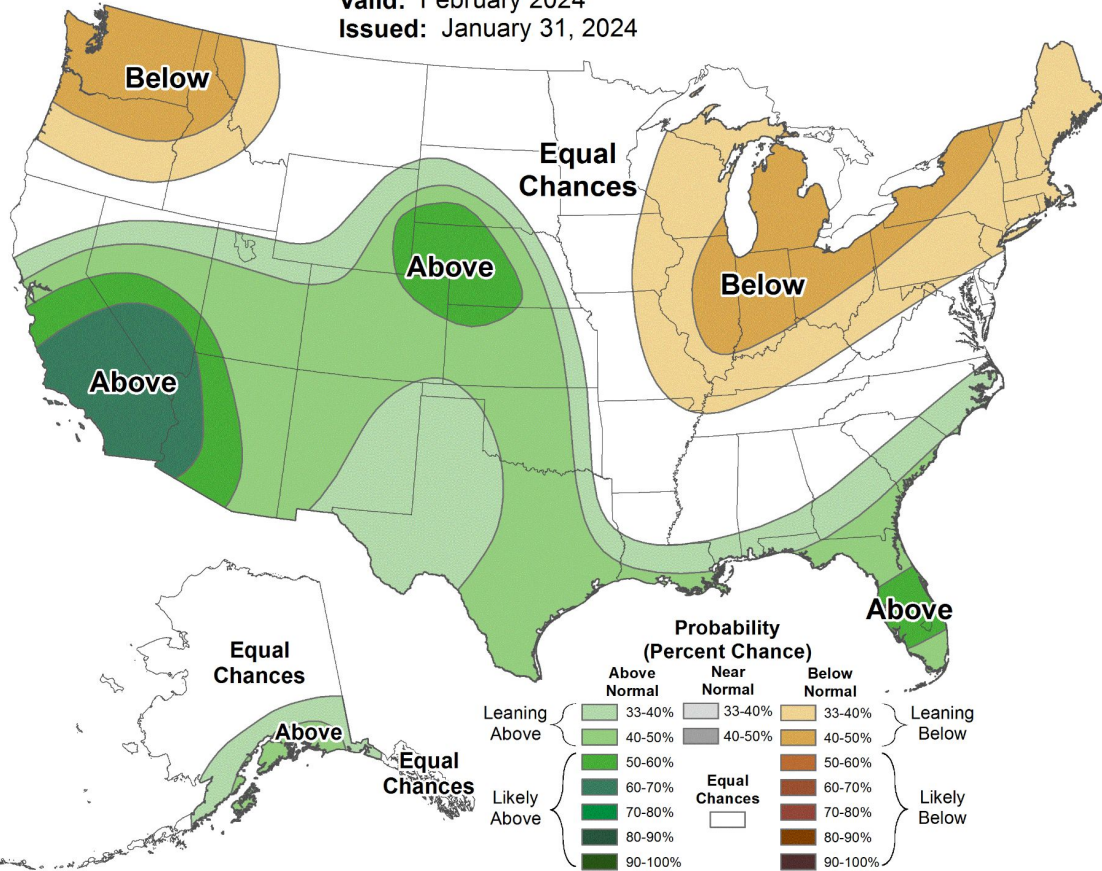
Precipitation Outlooks



Monthly Precipitation Outlook



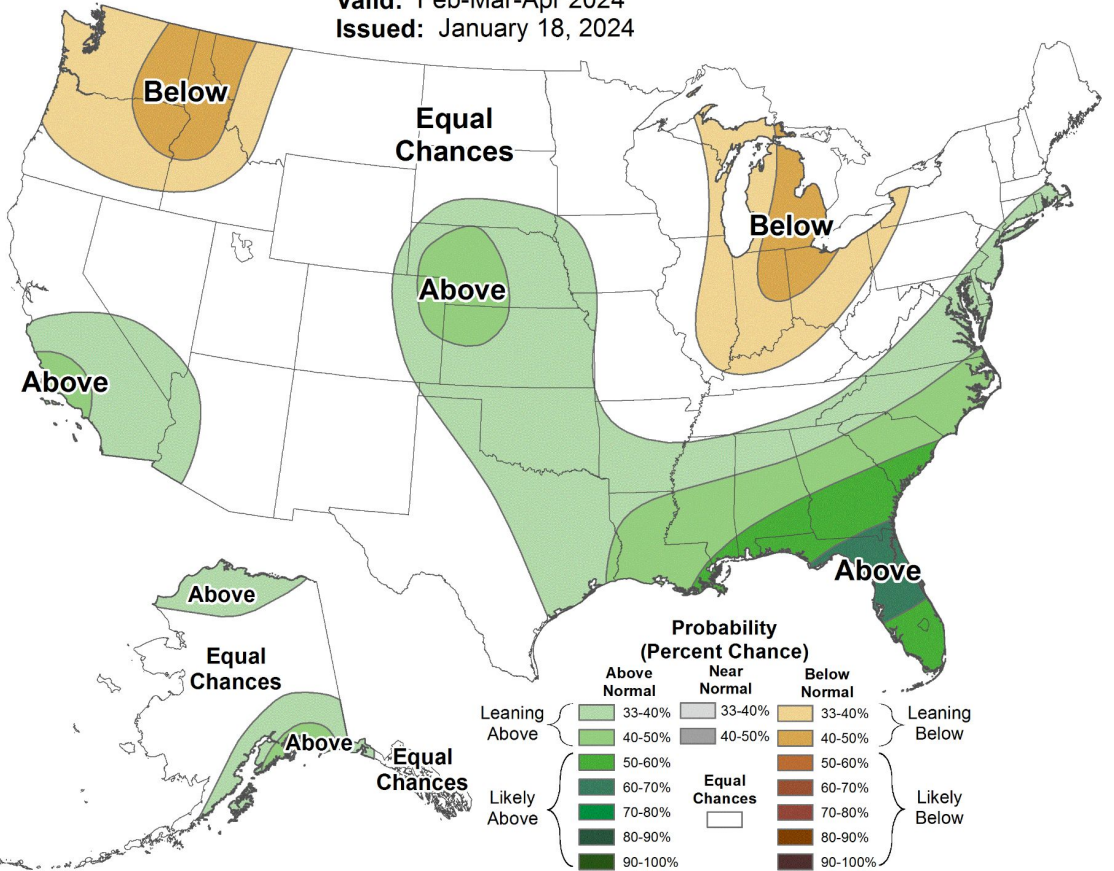
Valid: February 2024
Issued: January 31, 2024



Seasonal Precipitation Outlook



Valid: Feb-Mar-Apr 2024
Issued: January 18, 2024



Flood Products Issued

| Product | Number Issued |
|--|-------------------|
| Flash Flood Watch (FFA) | 1 (ETN: 001) |
| Flash Flood Warning (FFW) | 7 (ETN: 001-007) |
| Flash Flood Statement (FFS) | 4 |
| Areal Flood Warning | 8 (ETN: 001-008) |
| River Flood Warnings (FLW) | 33 (ETN: 001-033) |
| River Flood Statements | 125 |
| Flood Advisories (FLS) | 16 (ETN: 001-016) |
| Probabilistic Hydrologic Outlook (ESF) | 6 |