

Spring Flood Outlook

Key Messages

- → The overall spring flood threat is **Below-Normal**
- → Due to limited snowpack and ongoing drought there is a below normal threat for flooding along the Missouri River.

Important Information

- → The region lost its snowpack the first and second weeks of February.
- → Area rivers lost their ice the first week of February.
- → This is the final update.

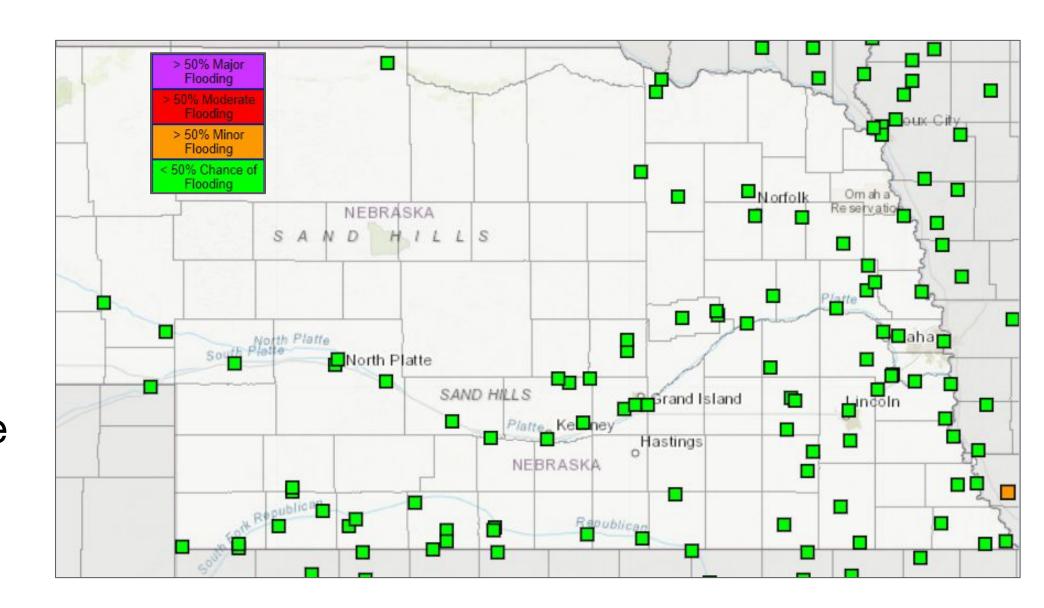




Spring Flood Outlook (Nebraska)

Key Messages

- → The overall spring flood threat for Nebraska is Below-Normal
- → Based on current conditions, there are no areas of concern in Nebraska.



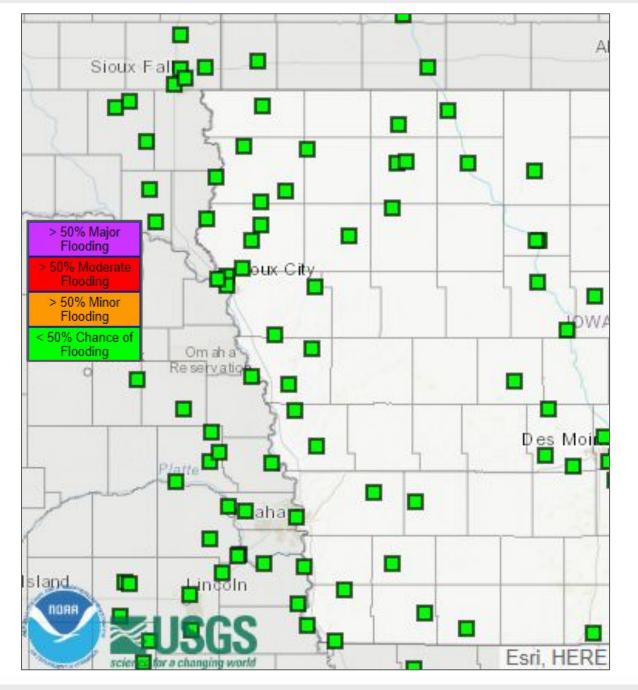


Spring Flood Outlook (Iowa)

Key Messages

→ The overall spring flood threat for western lowa is Below-Normal

→ Based on current conditions, there are no areas of concern in western lowa.





Spring Flood Outlook

| Flood Risk Contribution Factor | Contribution to Flood Risk | | | |
|--------------------------------------|----------------------------|--|--|--|
| Snowpack (North and South Dakota) | None | | | |
| Snowpack (Nebraska and Iowa) | None | | | |
| Snowpack (Missouri River headwaters) | Low | | | |
| Snowpack (Platte River headwaters) | Normal | | | |
| Soil Moisture | Low | | | |
| Frost Depth | None | | | |
| River Ice Thickness | None | | | |
| Precipitation Outlook | Elevated | | | |

Most flood indicators point to a below normal risk for Spring flooding.





Spring Flood Outlook

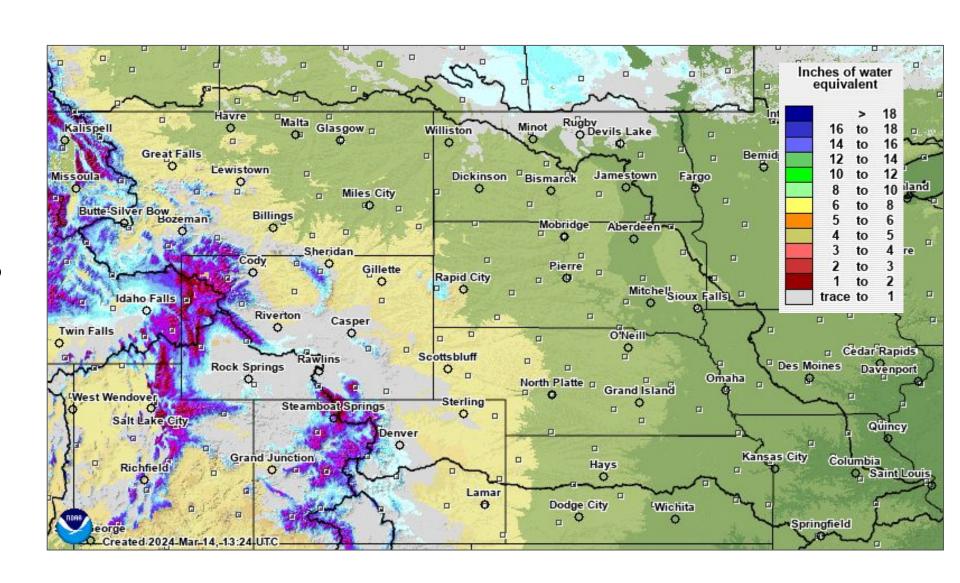
| River Basin | Flood Risk |
|---|--------------|
| Niobrara River | Below-Normal |
| Missouri River (below Sioux City to Platte River) | Below-Normal |
| Missouri River (below the Platte River) | Below-Normal |
| Platte River | Below-Normal |
| Elkhorn River | Below-Normal |
| Big Blue River | Below-Normal |
| Salt Creek | Below-Normal |
| Wahoo Creek | Below-Normal |
| Nishnabotna River | Below-Normal |



Basin-wide Snowpack

Key Messages

- → Almost no snow to speak of away from the mountains.
- → The Plains snowpack is minimal.

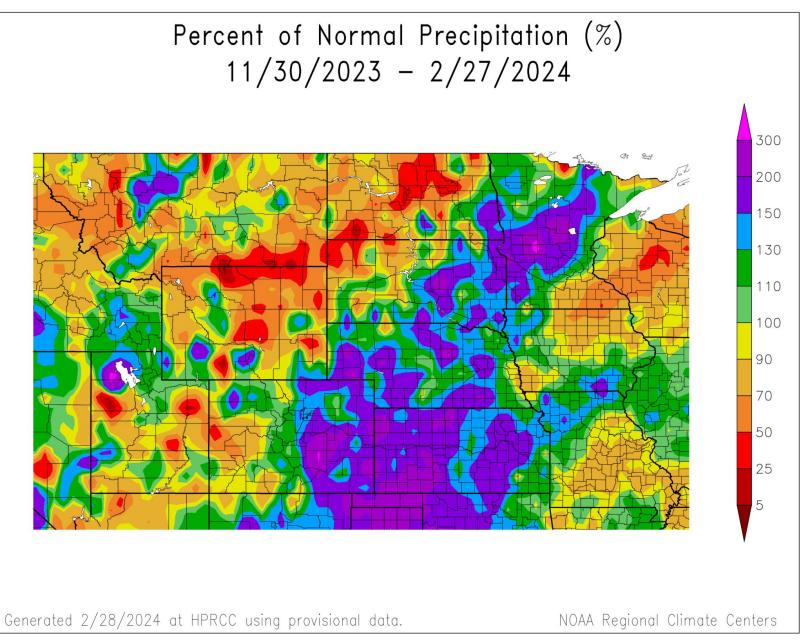




Winter Precipitation

Key Messages

- → Precipitation this winter has been above normal for much of the mid-to-lower Missouri River basin.
- → This winter precipitation helped improve soil moisture conditions.
- → Mountain precipitation has been well below-normal.



Source: High Plains Regional Climate Center



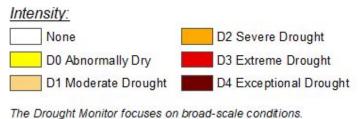


Drought Status Today

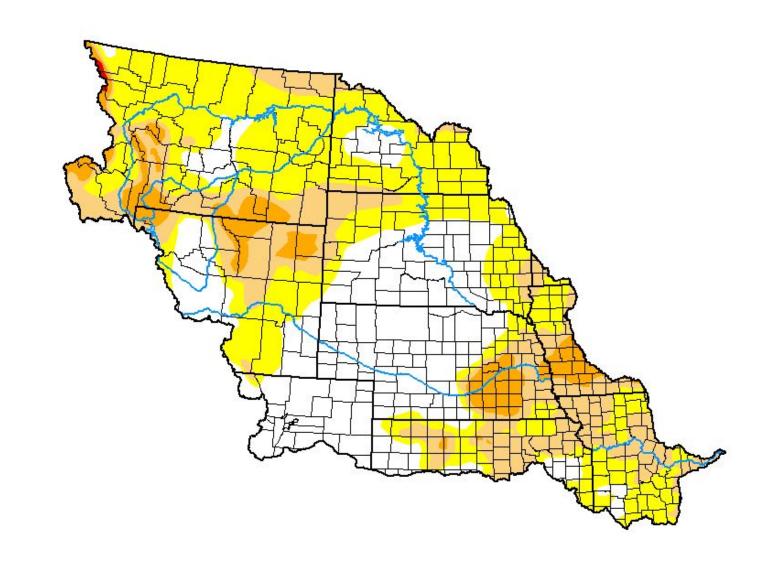
Key Messages

- → The primary drought areas are southwest Montana and into eastern Nebraska and western Iowa.
- → But overall, the status has improved in recent weeks.

March 14, 2024



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

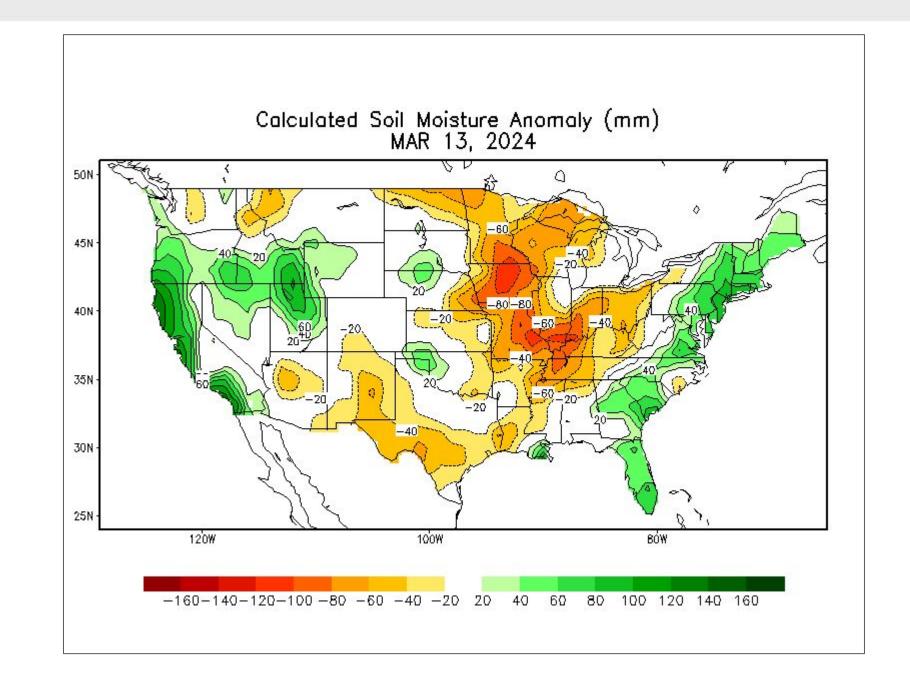




Soil Moisture

Key Messages

- → Soil moisture across the region is near-to-below normal.
- → The driest areas are in eastern Nebraska and western Iowa.

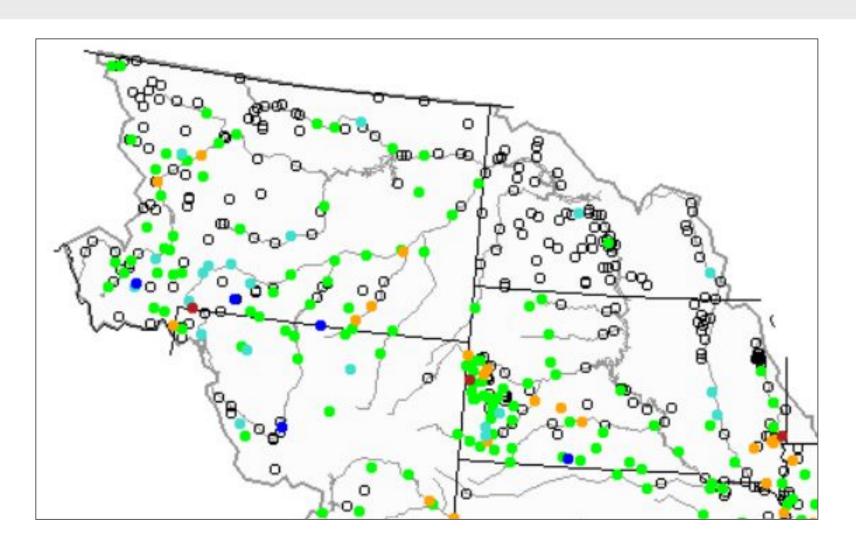




Current Streamflow (Upper Basin)

Key Messages

→ Most rivers are currently near-to-above normal in the upper basin, though many rivers remain ice affected (not ranked).



| | | Explar | ation - F | Percent | ile classe | s | |
|-----|----------------------|-----------------|-----------|-----------------|----------------------|------|------------|
| • | • | | | | | • | 0 |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | Not-ranked |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |

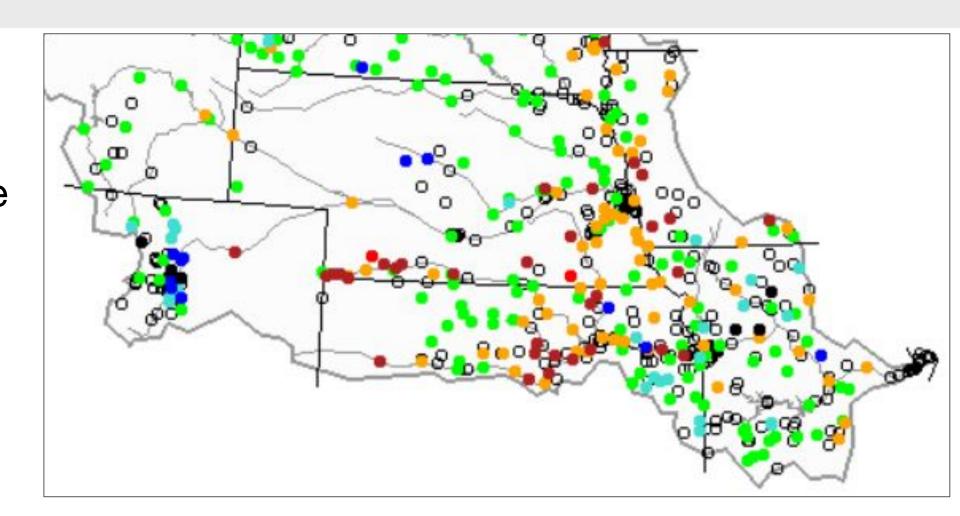




Current Streamflow (Lower Basin)

Key Messages

→ Most rivers are currently near-to-below normal in the lower basin.



| | | Explar | ation - F | Percent | ile classe | s | |
|-----|----------------------|-----------------|-----------|-----------------|----------------------|------|------------|
| • | • | 0 | • | | • | • | 0 |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | Not-ranked |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |

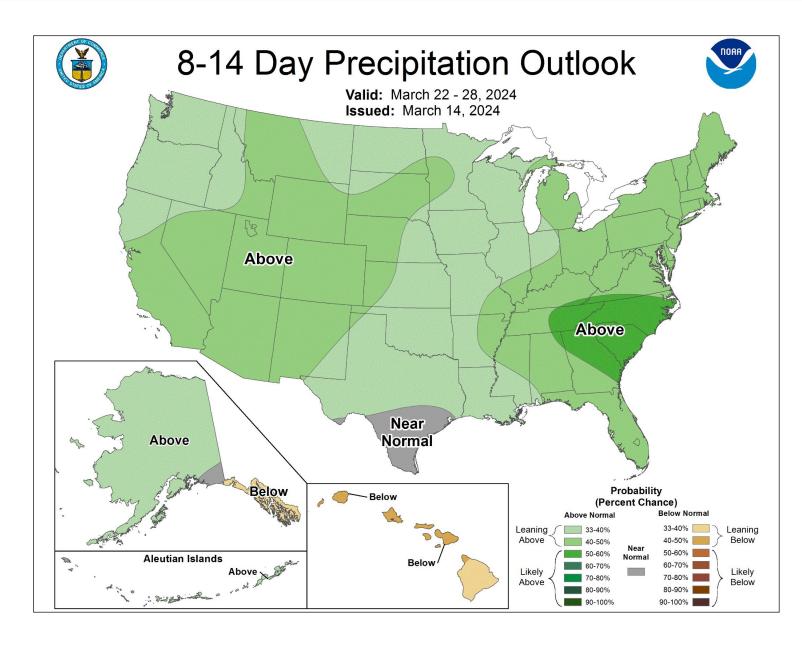




Precipitation Outlook (rest of March)

Key Messages

→ Above-normal precipitation is favored for the Missouri River basin.

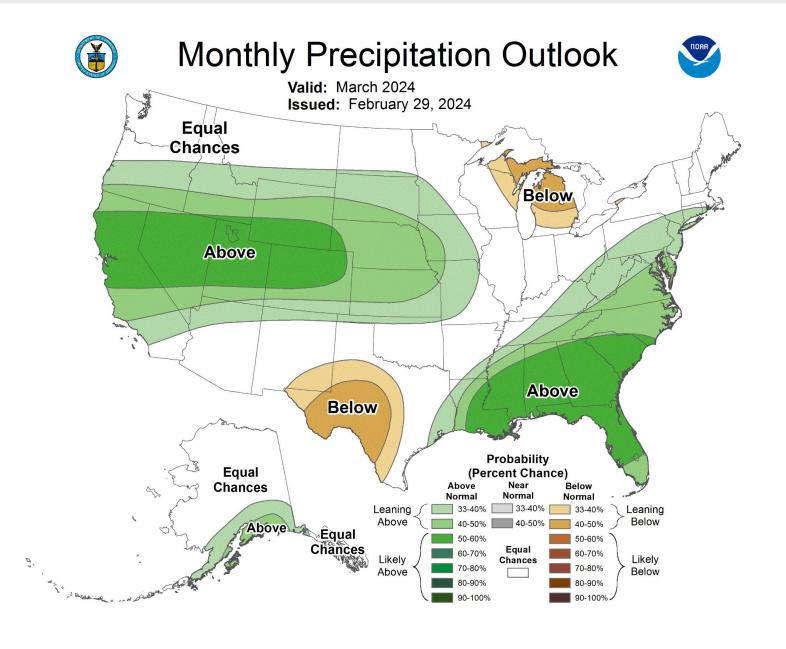




Precipitation Outlook (for March)

Key Messages

→ For March there is an increased probability of above-normal precipitation for much of central Plains.



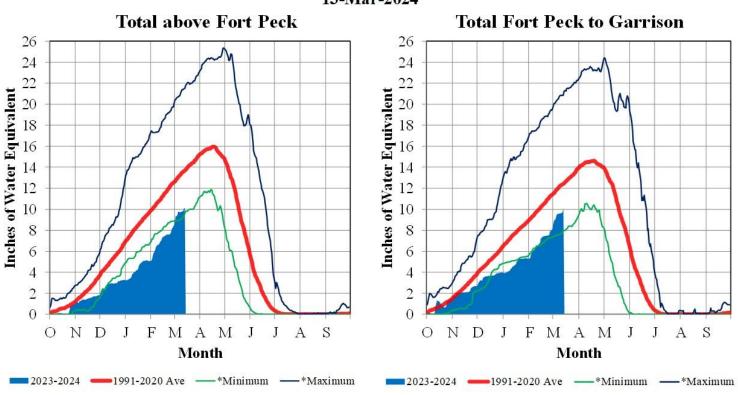


Mountain Snowpack (Missouri River)

Key Messages

- → For this time of year the snowpack in the Missouri River headwaters is below average.
- → Above Fort Peck, the water content is 10.1 inches, which is 74% of average.
- → Between Fort Peck and Garrison, the water content of the snow is 10.1, which is 81% of average.
- → The normal peak snowpack date is typically around April 15th.

Missouri River Basin – Mountain Snowpack Water Content 2023-2024 with comparison plots from recent high and low years 13-Mar-2024



On March 13, 2024 the mountain Snow Water Equivalent (SWE) in the "Total above Fort Peck" reach is 10.1" and 74% of the (1991-2020) average. The mountain SWE in the "Fort Peck to Garrison" reach is 10.1" and 81% of the (1991-2020) average. The normal peak for both reaches occurs near April 17.

Provisional data. Subject to revision.



^{*}Refers to the minimum or maximum SWE in the basin for that day in the historical years 1991-2020.



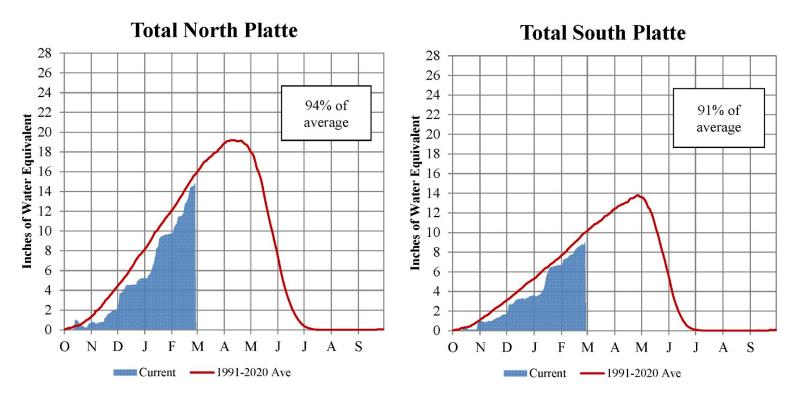
Mountain Snowpack (Platte River)

Key Messages

- → Snow conditions in the Platte River headwaters are near average.
- → In a typical winter, snow accumulates in the Platte River headwaters through mid to late April.

Platte River Basin - Mountain Snowpack Water Content Water Year 2023-2024

February 28, 2024



The North and South Platte River Basin mountain snowpacks normally peak near April 10 and the end of April, respectively. As of February 28, 2024, the mountain snowpack SWE in the "Total North Platte" reach is 14.8", 94% of the (1991-2020) average. The mountain snowpack SWE in the "Total South Platte" reach is 9.1", 91% of the (1991-2020) average.

Source: USDA, Natural Resource Conservation Service

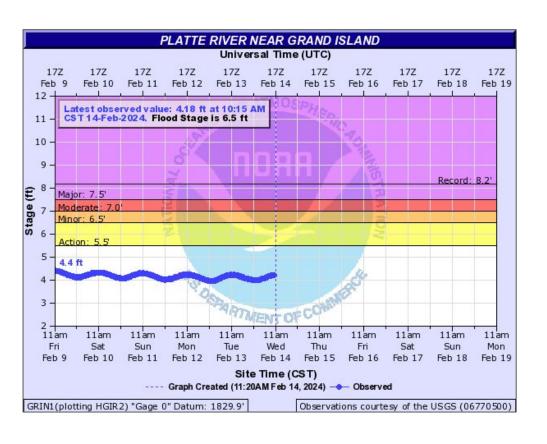
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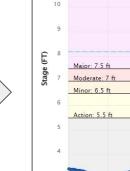


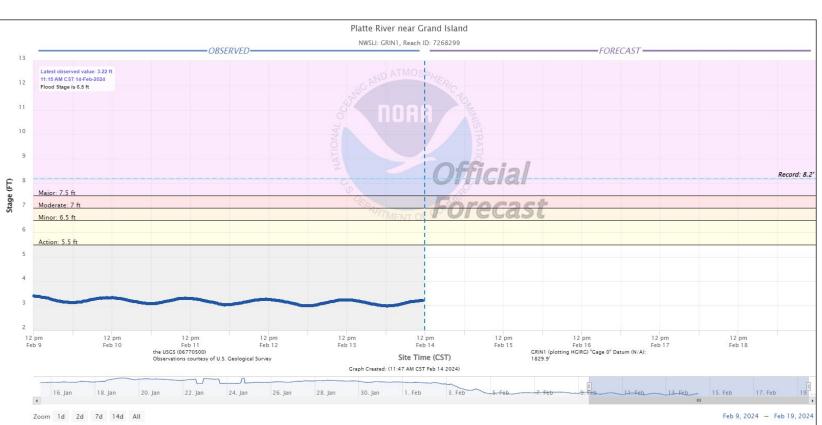


Our Website is Changing!

On March 27th, 2024 our river gage website will be upgraded.







Link to new website overview

