WY Conditions & Outlooks:

Precipitation, Temperatures, Drought, Floods, & Everything In-between

October 16, 2025

The University of Wyoming is an equal opportunity/affirmative action institution.

Presentation Outline

- **Current Conditions:** Overview
  - Drought, Temperature, Precipitation, Soil Moisture, and Snow Water Equivalent
- **Water Year Recap:**
  - Current reservoir inflows and water year recap
- **Outlooks:**
  - Temperature & Precipitation
- **Highlight of the Month:**
  - Harmful Cyanobacterial Blooms presented by Wyoming Department of Health
- **Questions**

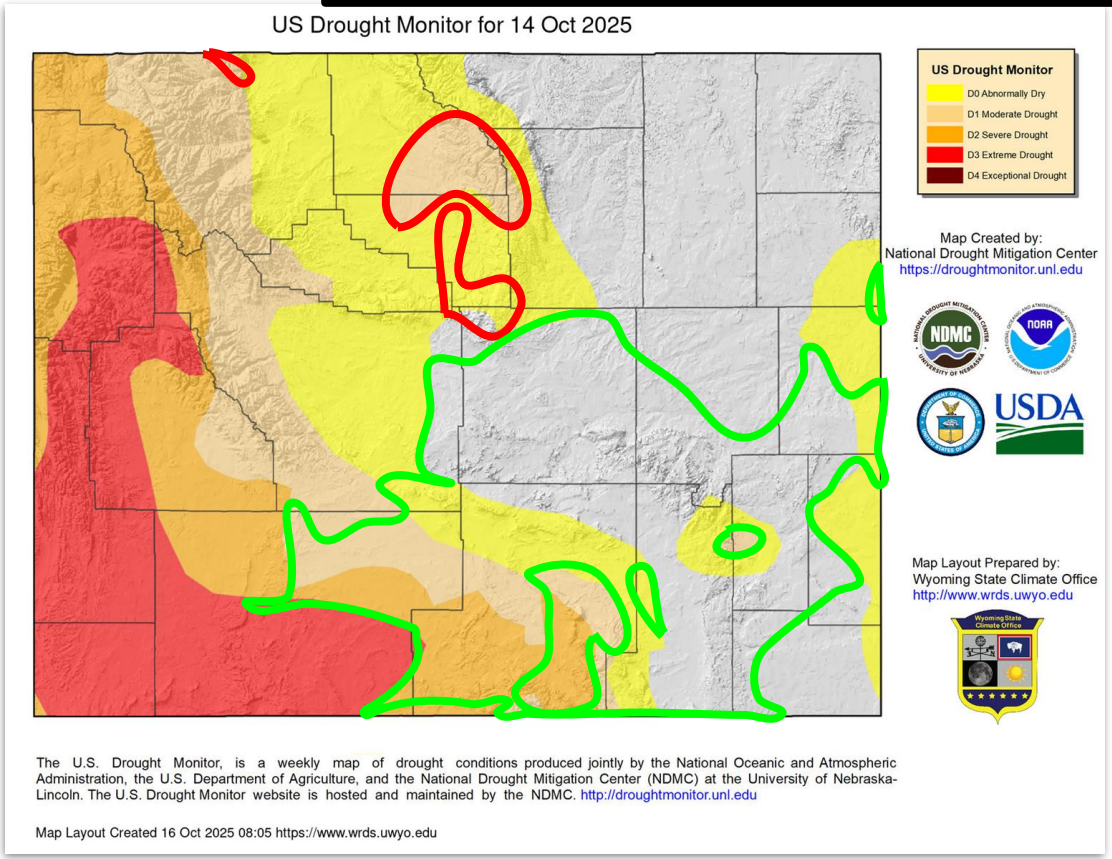
Current Conditions

US Drought Monitor for October 14th, 2025

(Released Thursday, October 16th, 2025)

Valid 8 a.m. EDT

Drought Level	Percentile
None	>30.01
D0 (Abnormally Dry)	20.01 to 30
D1 (Moderate Drought)	10.01 to 20
D2 (Severe Drought)	5.01 to 10
D3 (Extreme Drought)	2.01 to 5
D4 (Exceptional Drought)	0 to 2



How are Drought categories assigned?
https://youtu.be/45MQ1GB-uTc

Improvements and with some Degradations in a few scattered areas.

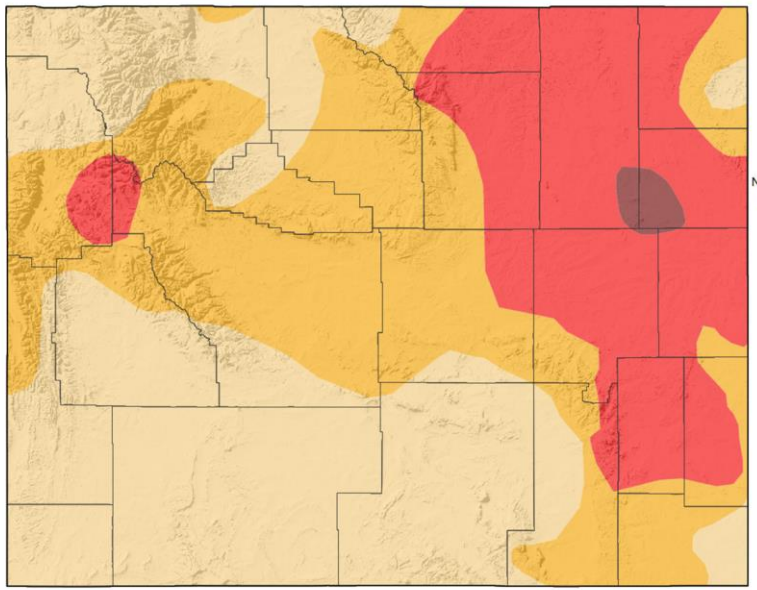
https://droughtmonitor.unl.edu

droughtmonitor.unl.edu

WRDS
Water Resources Data System

One Year Ago

US Drought Monitor for 15 Oct 2024



US Drought Monitor
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

Map Created by:
National Drought Mitigation Center
https://droughtmonitor.unl.edu

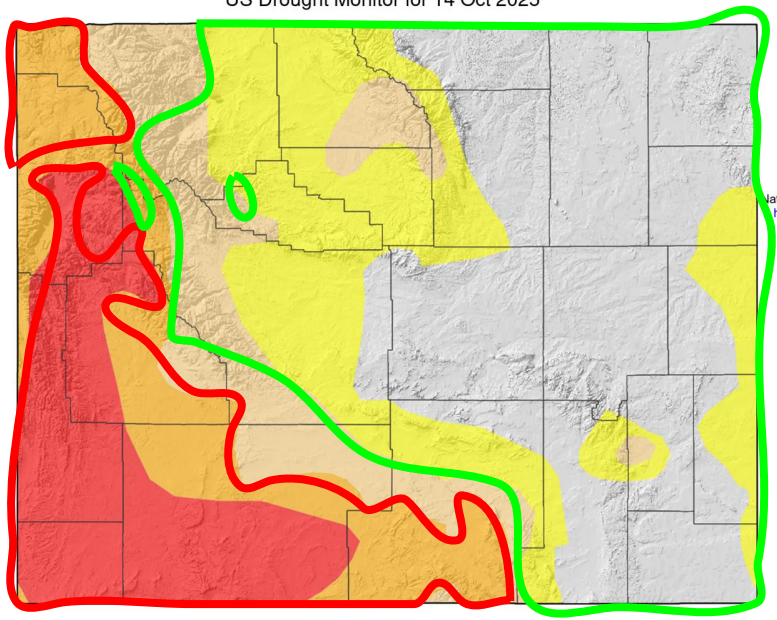
Map Layout Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

The U.S. Drought Monitor, is a weekly map of drought conditions produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln. The U.S. Drought Monitor website is hosted and maintained by the NDMC. http://droughtmonitor.unl.edu

Map Layout Created 17 Oct 2024 https://www.wrds.uwyo.edu

Today

US Drought Monitor for 14 Oct 2025



US Drought Monitor
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

Map Created by:
National Drought Mitigation Center
https://droughtmonitor.unl.edu

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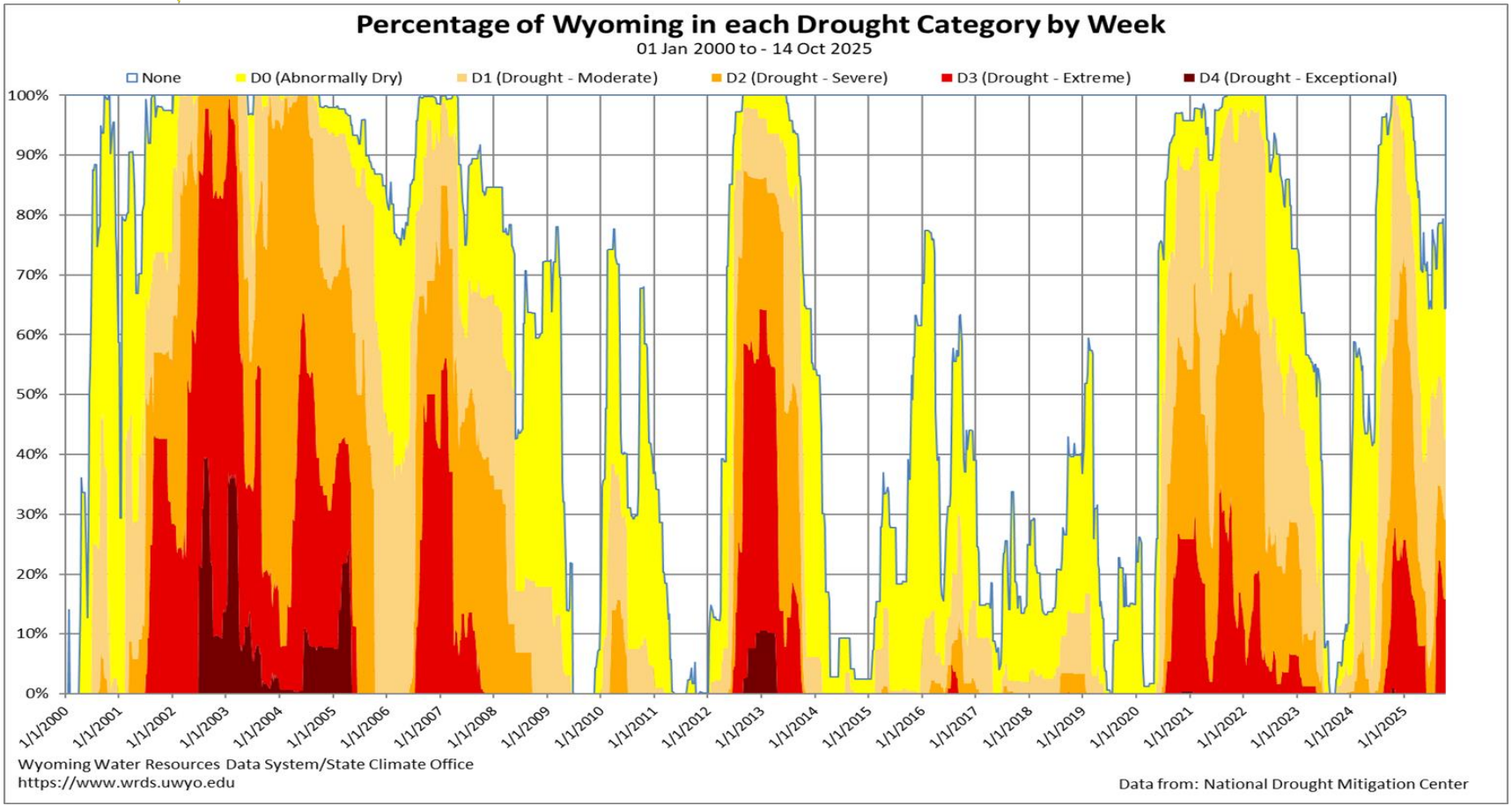
Map Layout Created 16 Oct 2025 08:05 https://www.wrds.uwyo.edu

droughtmonitor.unl.edu

https://droughtmonitor.unl.edu

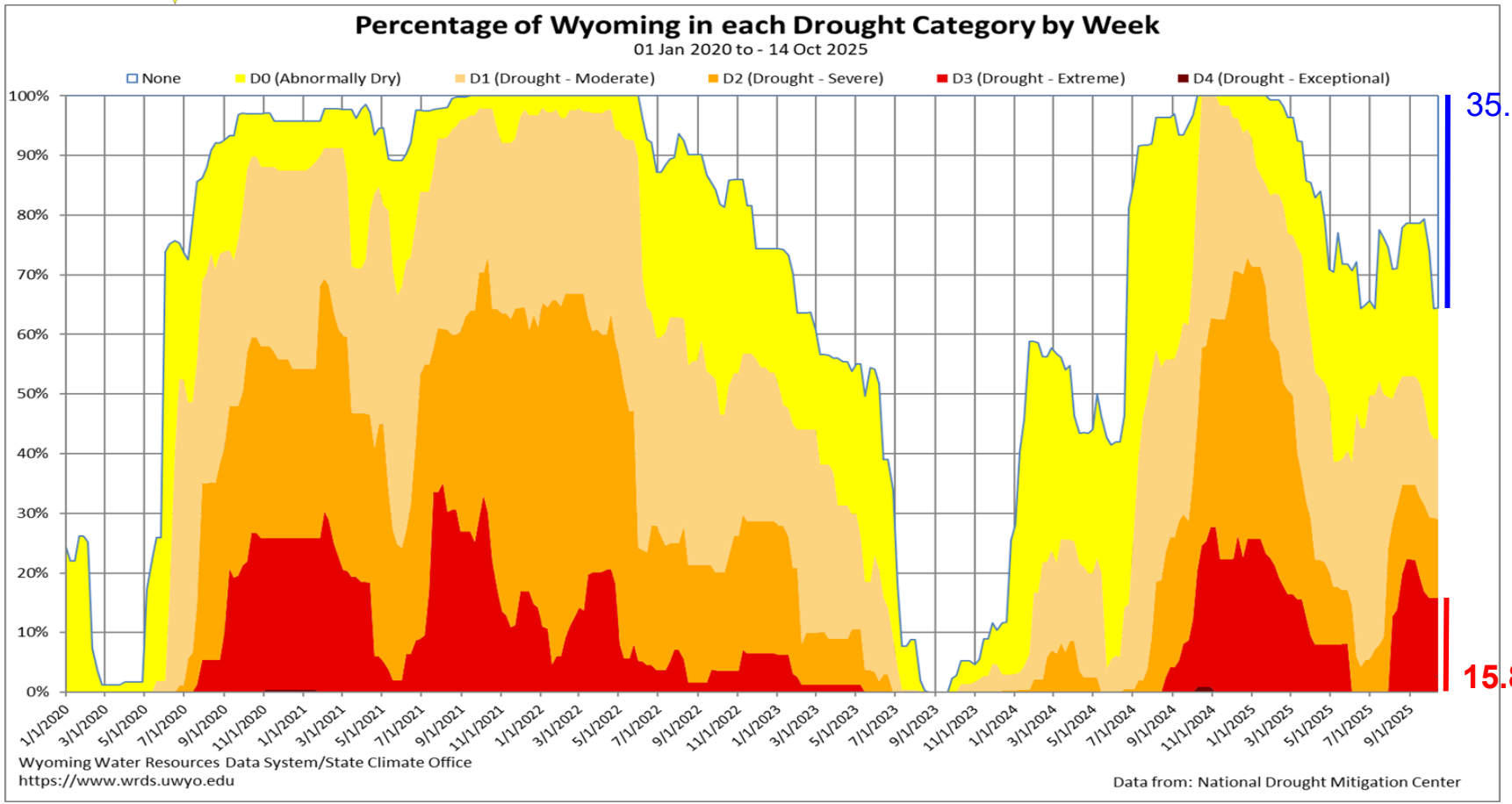
WRDS Water Resources Data System

Wyoming Area Affected: 64.47% D0-D4 ; 42.48% D1-D4



https://www.wrds.uwyo.edu/drought/droughttimeline.html

WRDS
Water Resources Data System



https://www.wrds.uwyo.edu/drought/droughttimeline.html

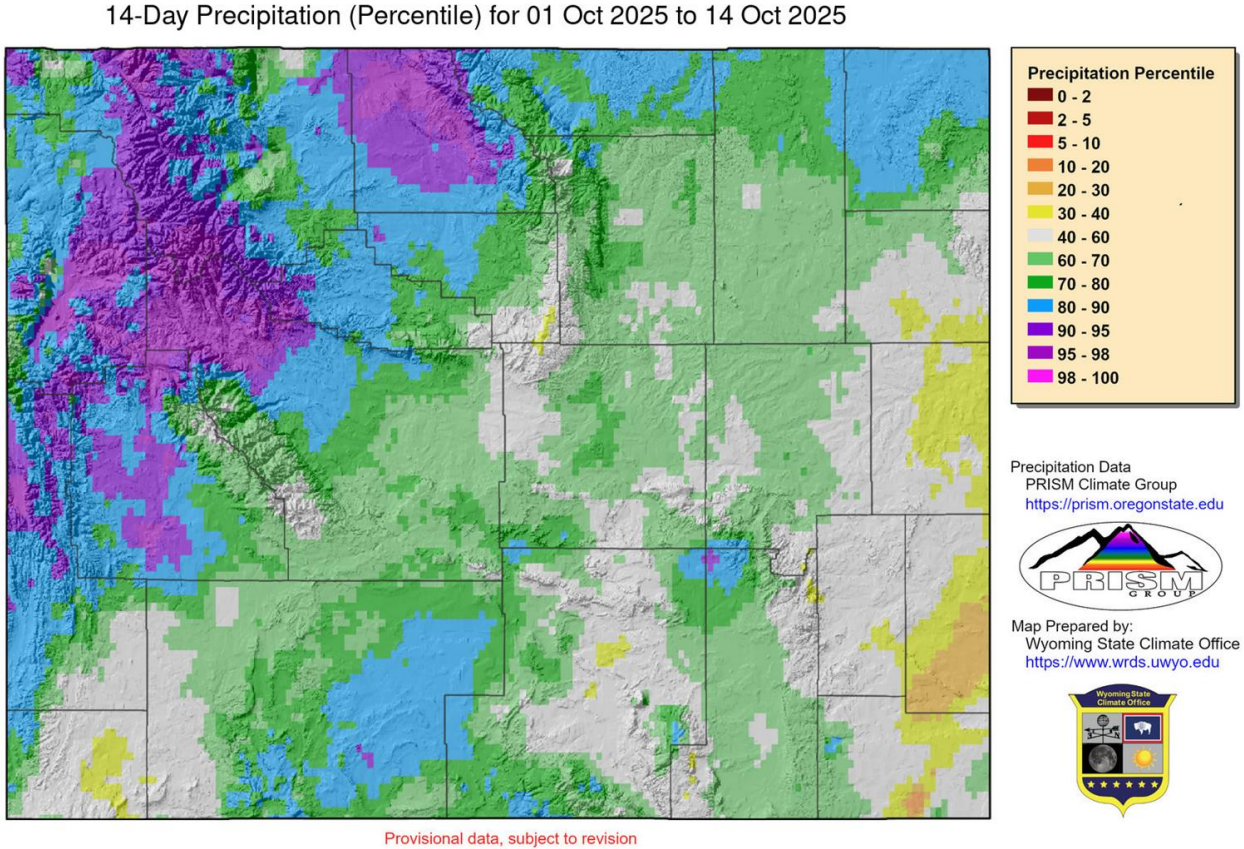
14-Day Precipitation Percentile (04 Sep 2025 to 17 Sep 2025)

Above Median:

- Most of Wyoming

Below Median (*Areas of Concern*):

- Far east central WY
- Far southwest WY (very minor)



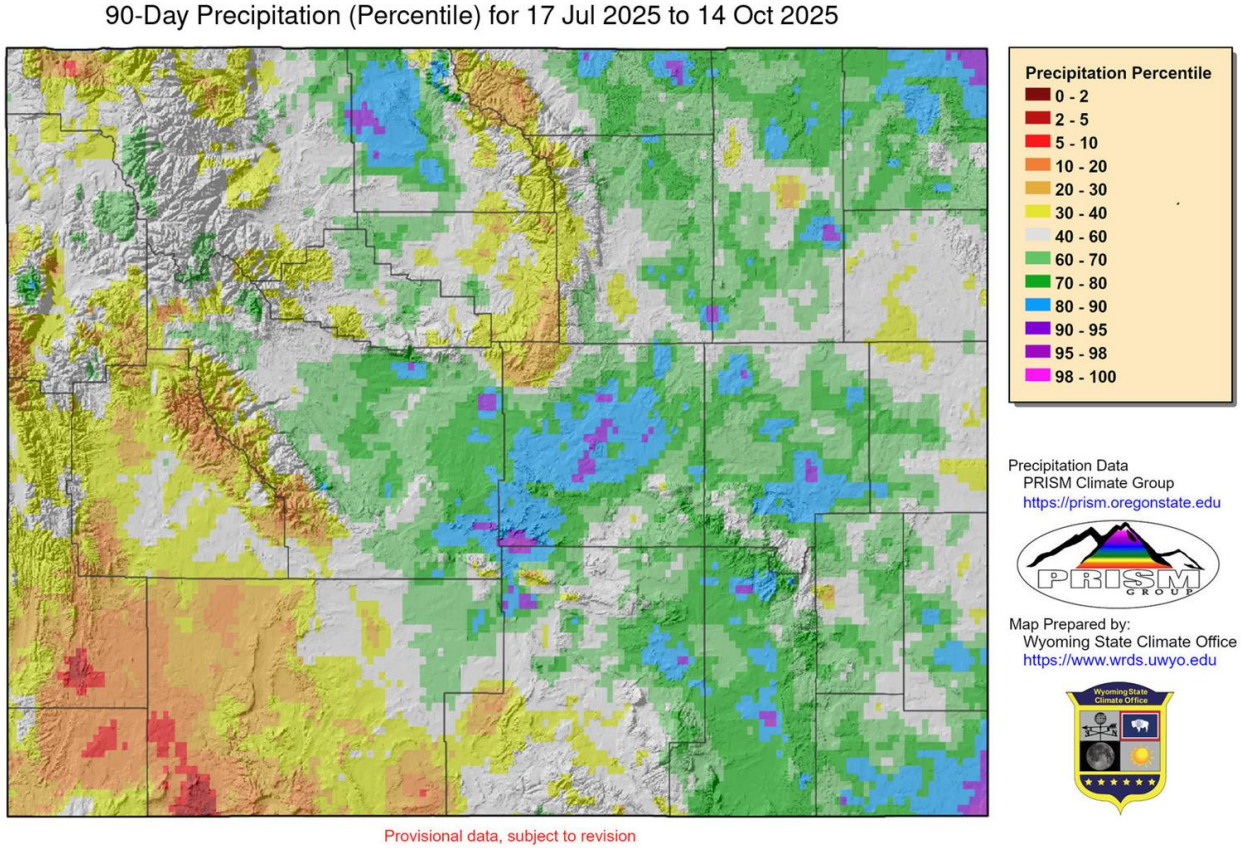
90-Day Precipitation Percentile (17 Jul 2025 to 14 Oct 2025)

Above Median:

- Wind/Bighorn Basins
- Eastern Wyoming

Below Median (*Areas of Concern*):

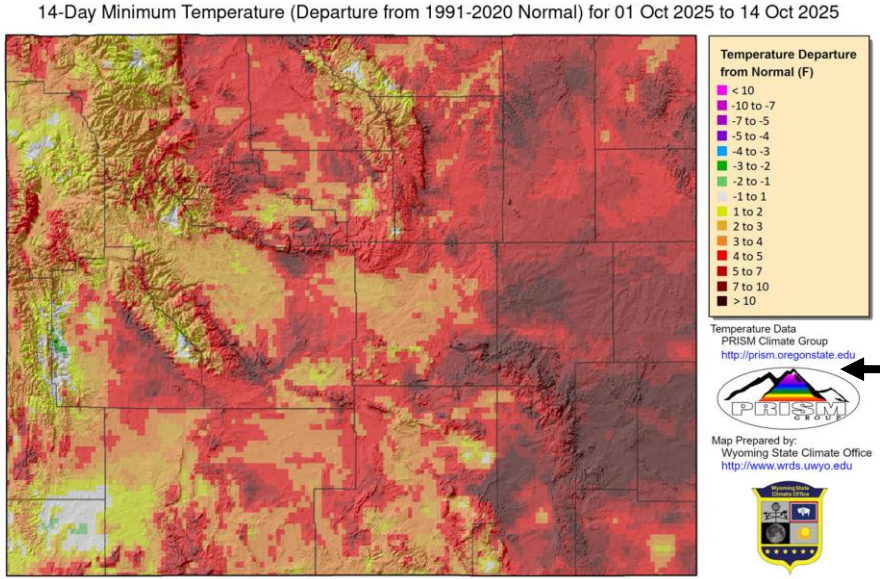
- Southwest Wyoming
- Bighorns

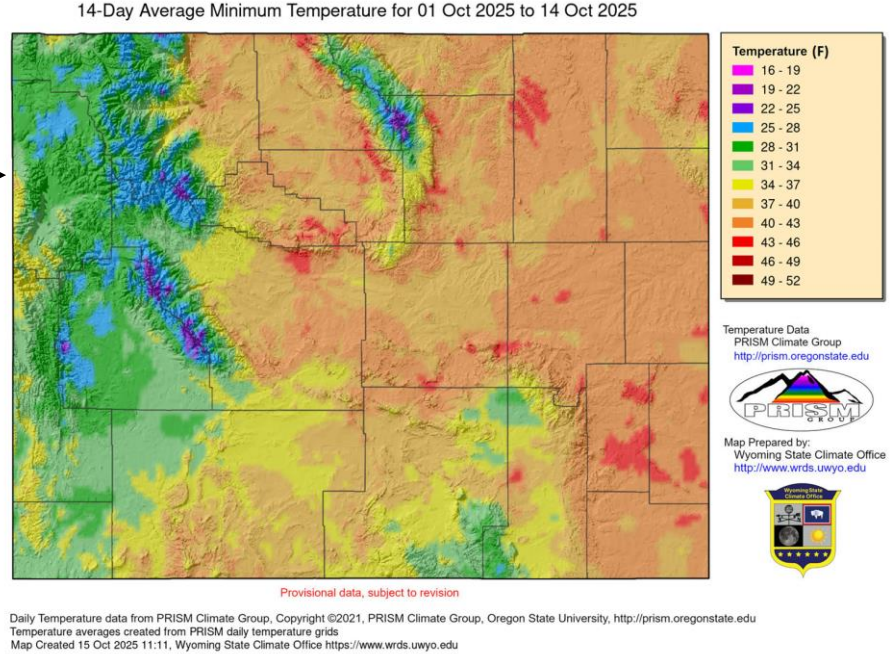


WRDS Water Resources Data System

14-Day Average Minimum Temperature (04 Sep to 17 Sep)

- Nighttime lows now below freezing in the west and other higher elevations.
- A few areas in mind 40s





14-Day *Departure from* Normal Average Minimum Temperature

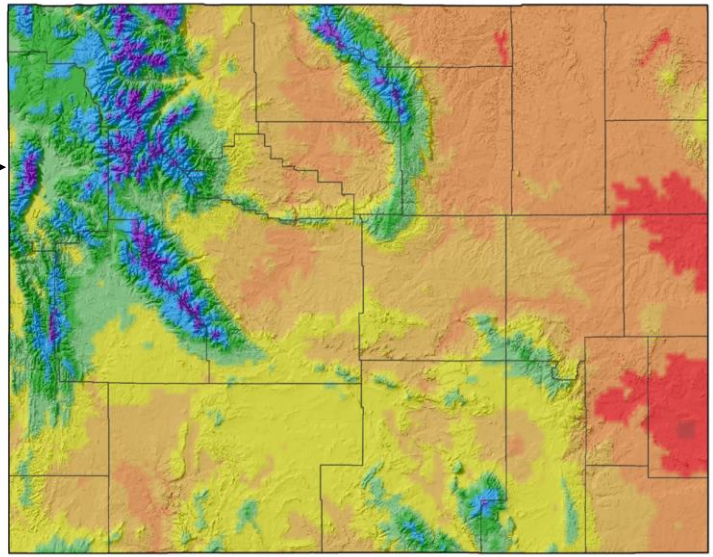
- Most of the state above normal
- Eastern quarter seeing +10F above normal
- Less, but still positive, departures to the west.

WRDS Water Resources Data System

14-Day Average Maximum Temperature (04 Sep to 17 Sep)

- Max Temps lower 50s or less in west and high elevs
- 60s in higher elevation plains
- 70s in eastern plains

14-Day Average Maxmimum Temperature for 01 Oct 2025 to 14 Oct 2025



Temperature Data
PRISM Climate Group
http://prism.oregonstate.edu

Map Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

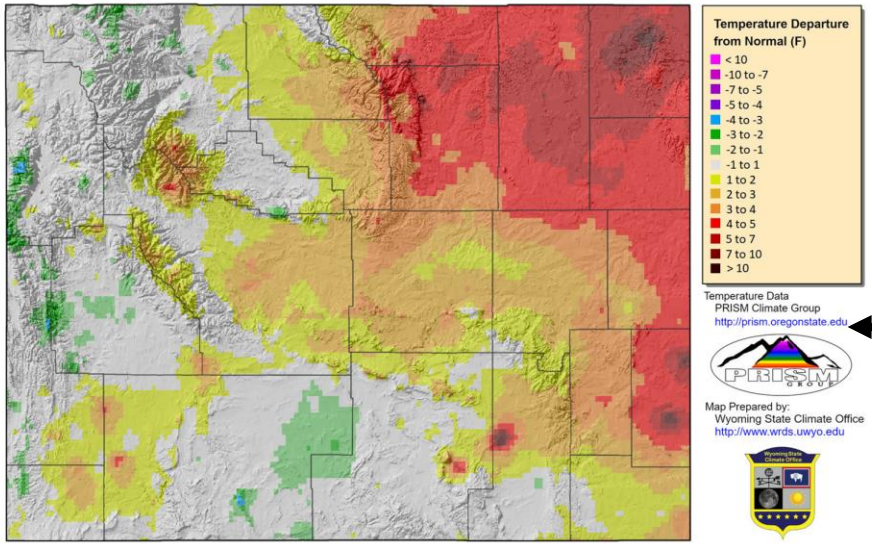
Provisional data, subject to revision

Daily Temperature data from PRISM Climate Group, Copyright ©2021, PRISM Climate Group, Oregon State University, http://prism.oregonstate.edu
Temperature averages created from PRISM daily temperature grids
Map Created 15 Oct 2025 11:12, Wyoming State Climate Office https://www.wrds.uwyo.edu

14- Day *Departure from* Normal Average Maximum Temperature

- Warmest in northeast, more toward normal going to southwest
- Northeast up to 10F above average

14-Day Maximum Temperature (Departure from 1991-2020 Normal) for 01 Oct 2025 to 14 Oct 2025



Temperature Data
PRISM Climate Group
http://prism.oregonstate.edu

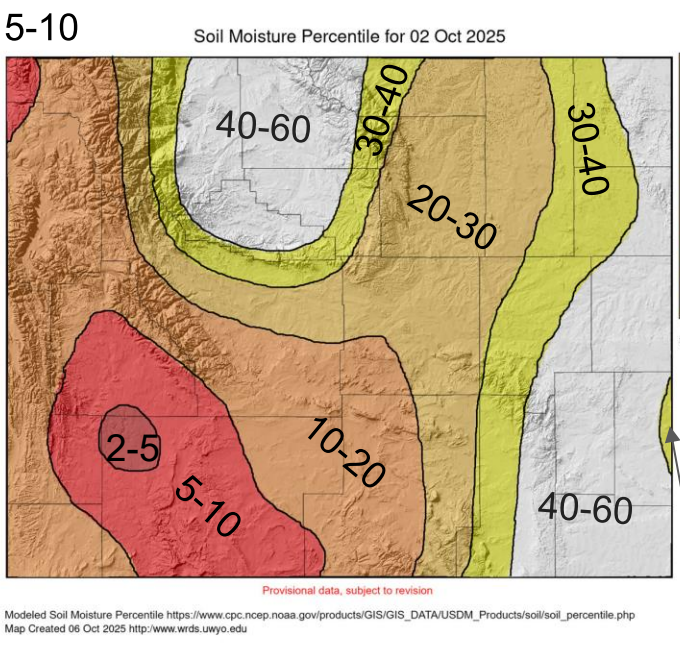
Map Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

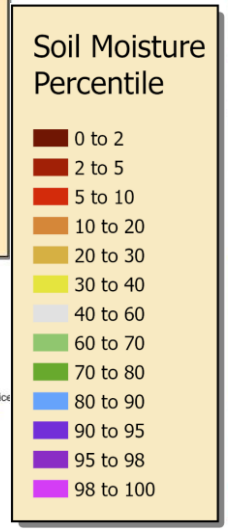
Provisional data, subject to revision

Daily Temperature data from PRISM Climate Group, Copyright ©2021, PRISM Climate Group, Oregon State University, http://prism.oregonstate.edu
Map Created 15 Oct 2025 10:57 Wyoming State Climate Office https://www.wrds.uwyo.edu
Daily departures created from PRISM daily temperature grids

Soil Moisture Percentile

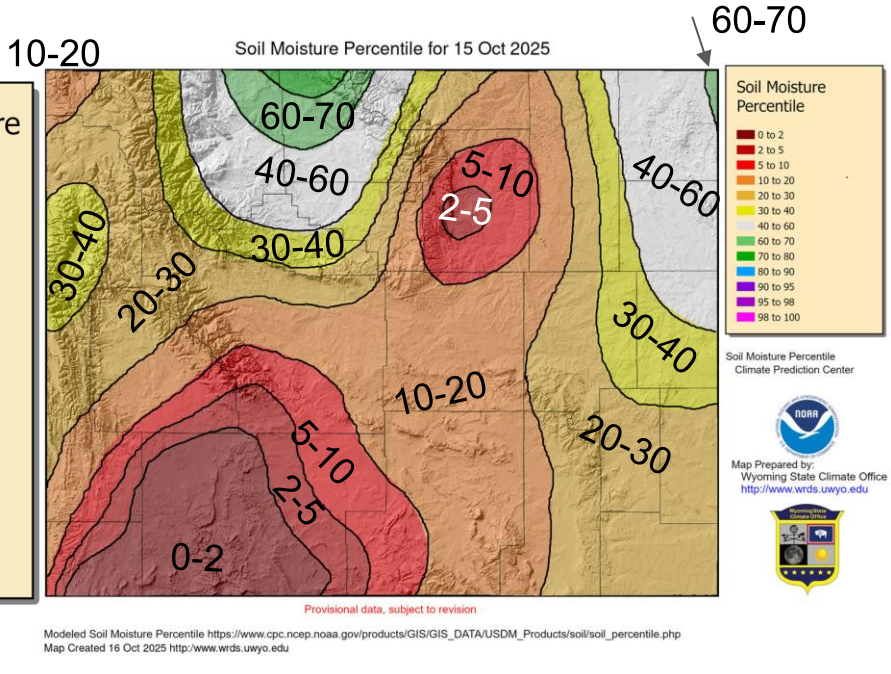
~Two Weeks Ago





30-40

15 Oct 2025



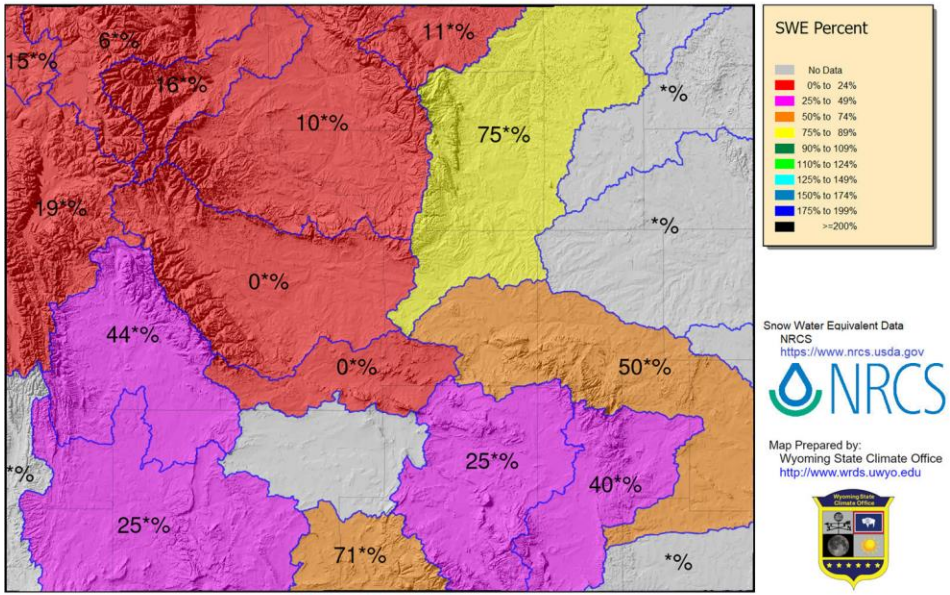
https://www.wrds.uwyo.edu/Soil/Current_SoilMoisture_Ptile.html

Status Quo or Degradations across Wyoming except some Improvements in the Bighorn Basin.

Snow Water Equivalent by Basin

One Year Ago

Snow Water Equivalent Percent of Median (1991-2020) 16 Oct 2024



Snow Water Equivalent Data
NRCS
https://www.nrcs.usda.gov

Map Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

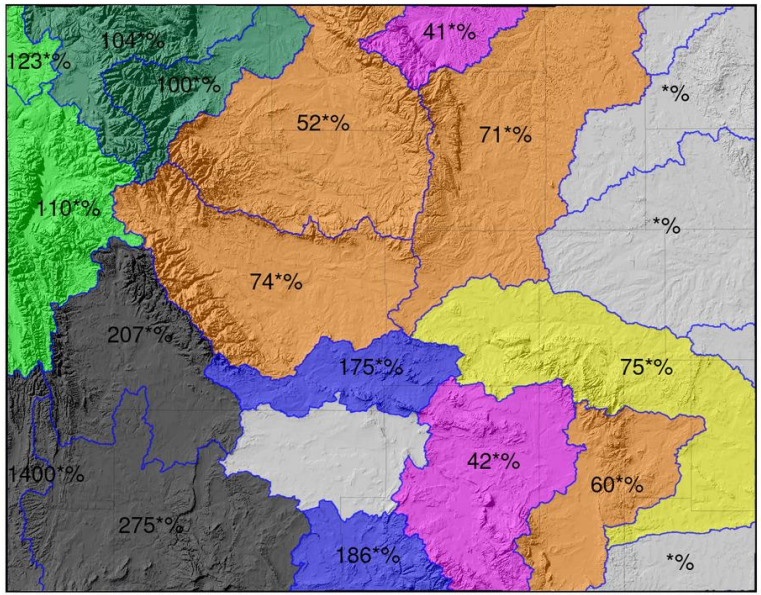
Provisional data, subject to revision

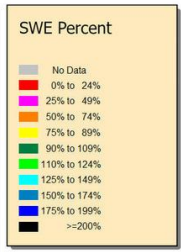
Basin Snow Water Equivalent Data from Natural Resources Conservation Service Water and Climate Center https://www.nrcs.usda.gov
Map created by Wyoming State Climate Office 16 Oct 2024

* Percentages denoted by an asterisk represent data that may not provide a valid measure of conditions. This is most usually seen near the end of the snow season where normal values may be very low or the melt out curve is so steep that a slight variation in days may result in abnormally high or low percentages.

16 Oct 2025

Snow Water Equivalent Percent of Median (1991-2020) 16 Oct 2025





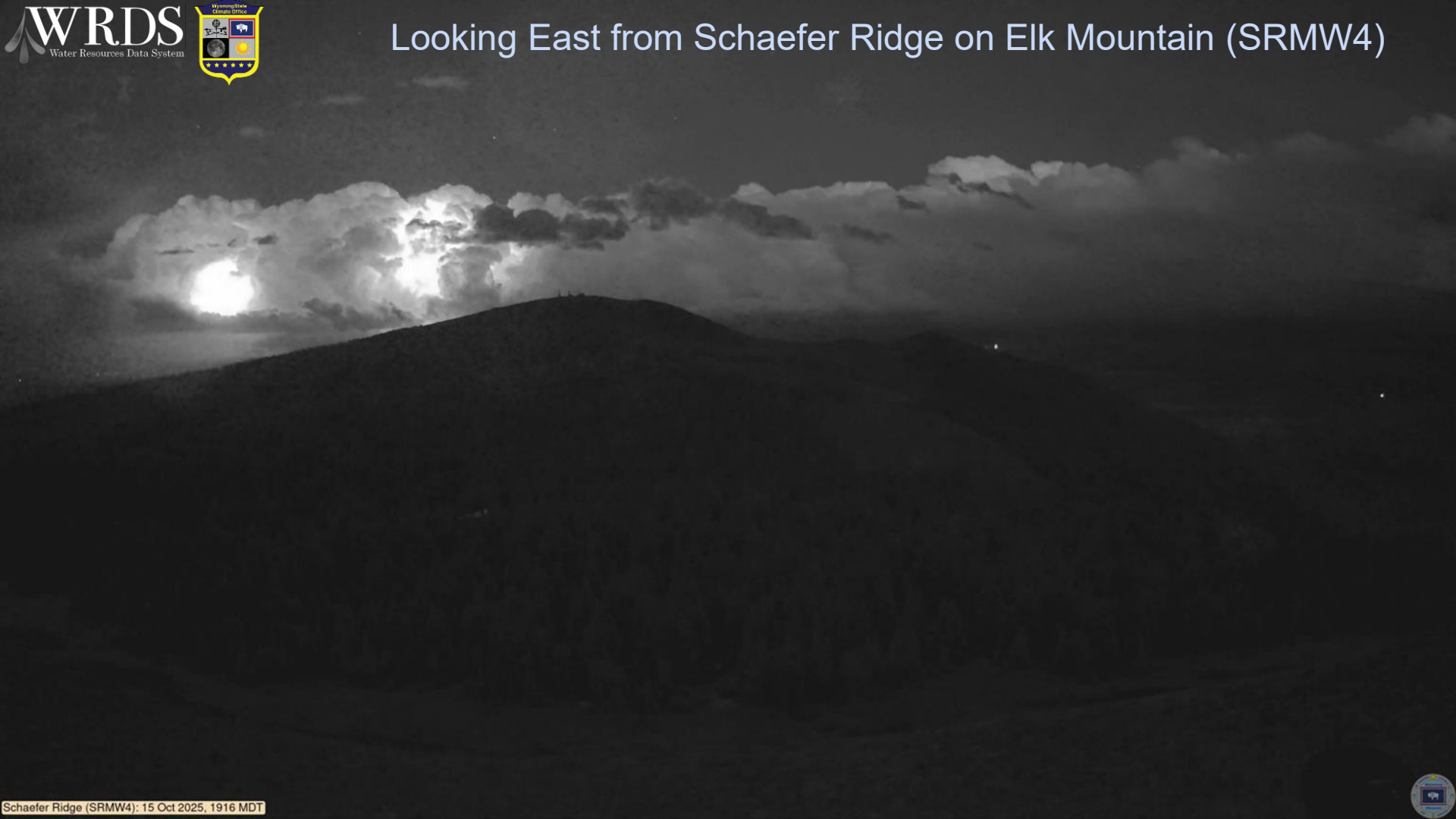
Snow Water Equivalent Data
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Map Prepared by:
Wyoming State Climate Office
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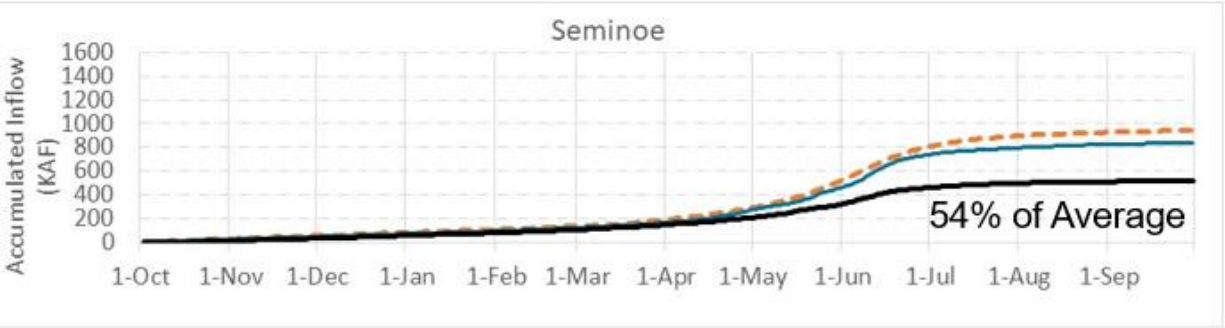
Basin Snow Water Equivalent Data from Natural Resources Conservation Service Water and Climate Center https://www.nrcs.usda.gov
Map created by Wyoming State Climate Office 16 Oct 2025

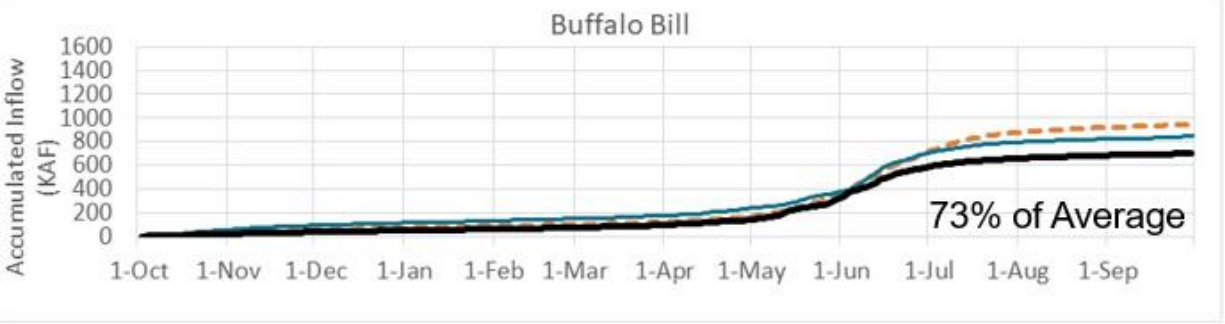
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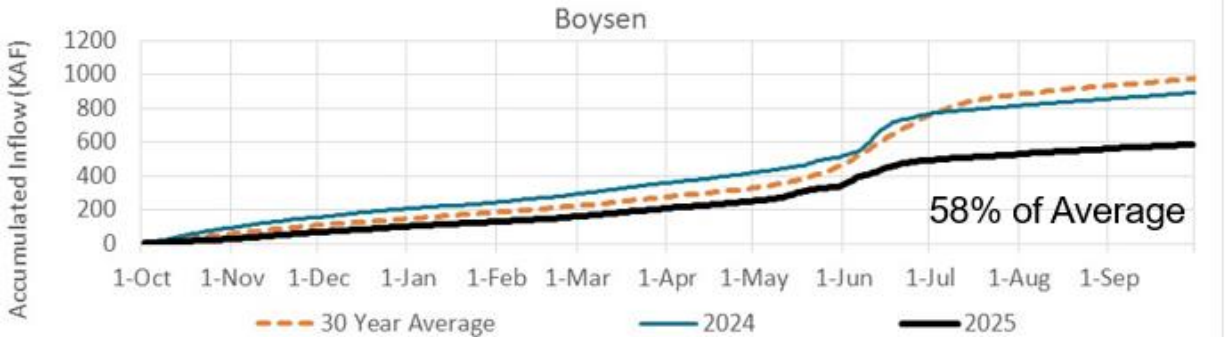

WRDS
Water Resources Data System
Wyoming State Climate Office
Looking East from Schaefer Ridge on Elk Mountain (SRMW4)
Schaefer Ridge (SRMW4): 15 Oct 2025, 1916 MDT


WRDS
Water Resources Data System
Wyoming State Climate Office
Looking East from Schaefer Ridge on Elk Mountain (SRMW4)
Schaefer Ridge (SRMW4): 16 Oct 2025, 0719 MDT

Water Year 2025 Inflow Conditions

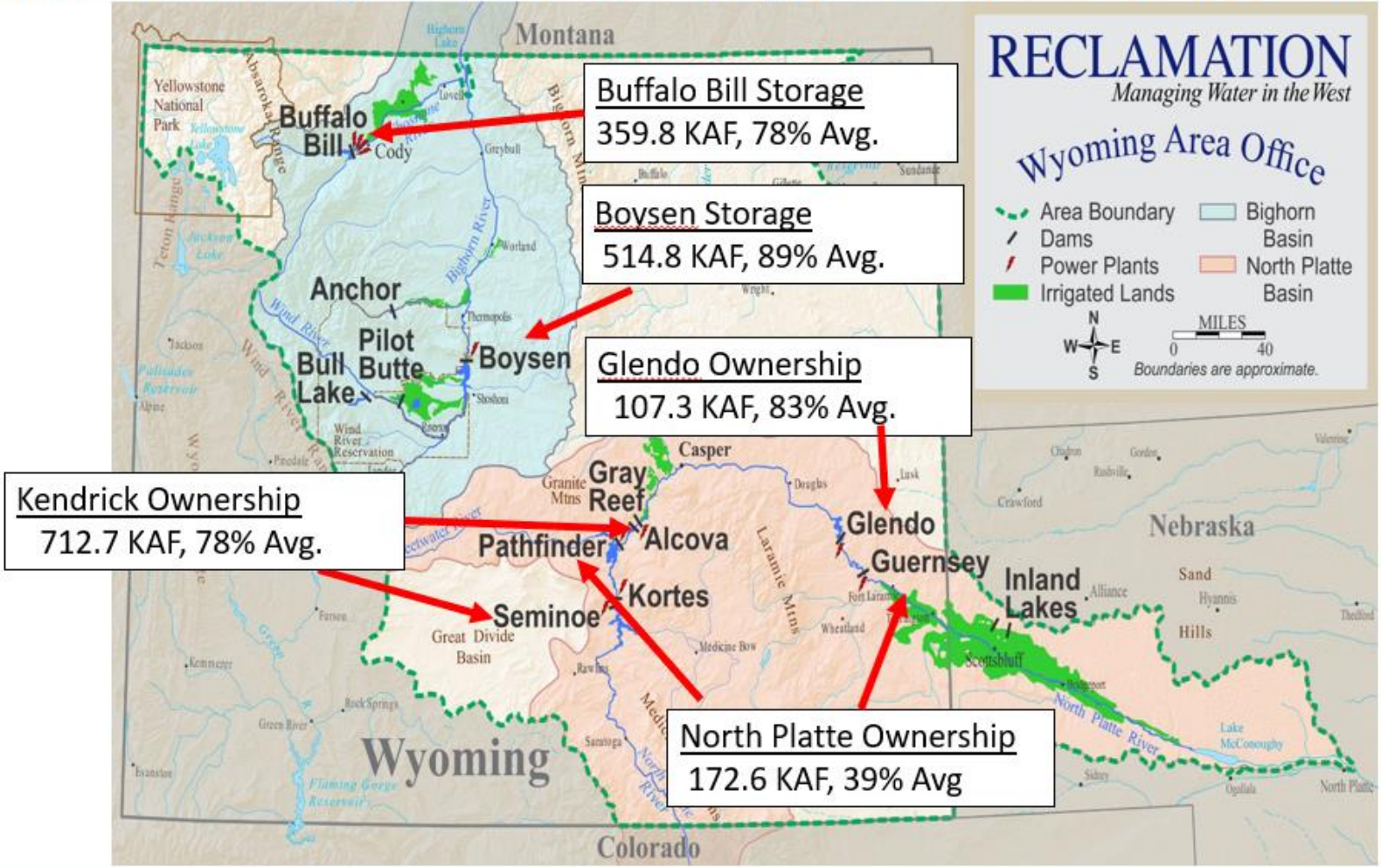




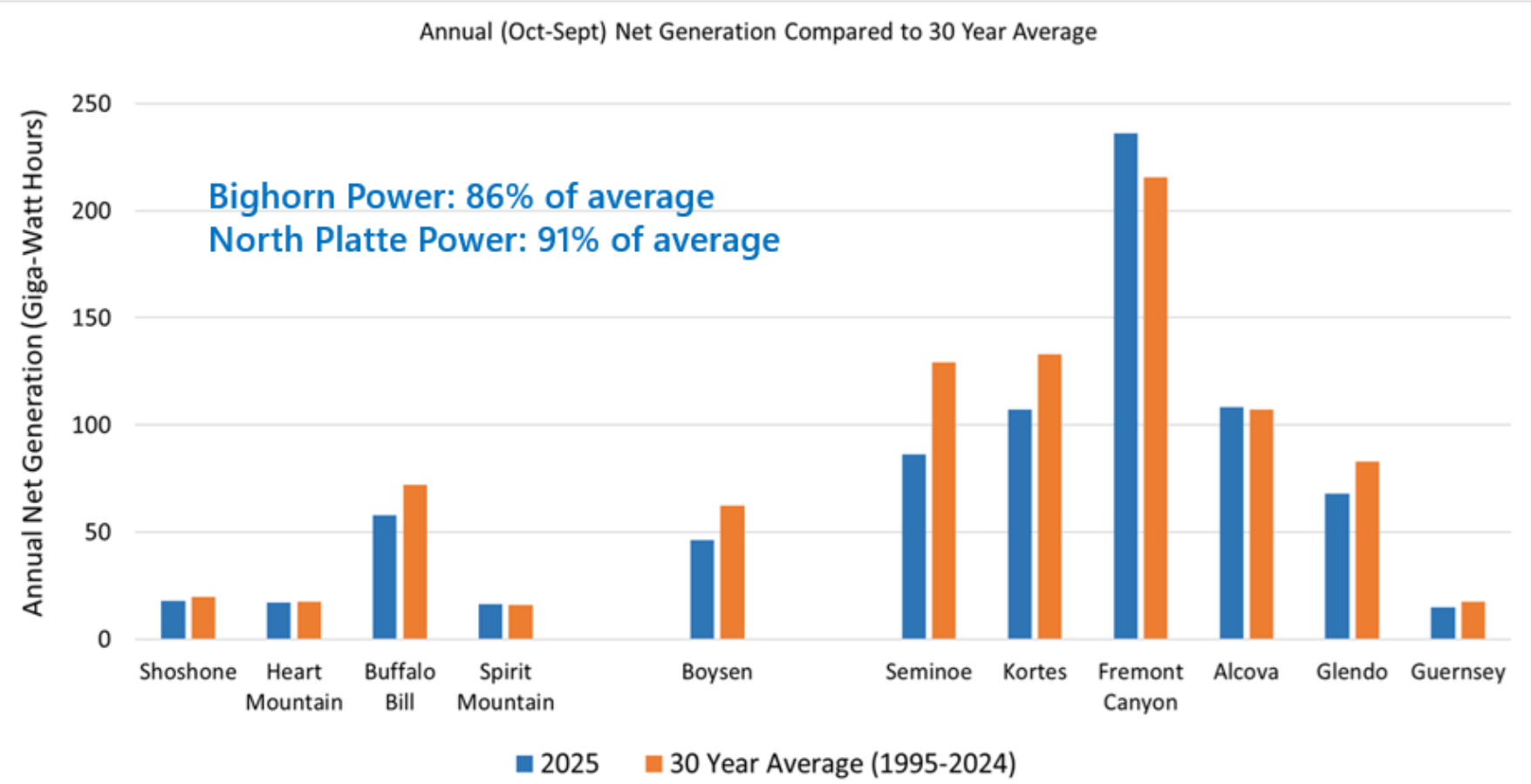




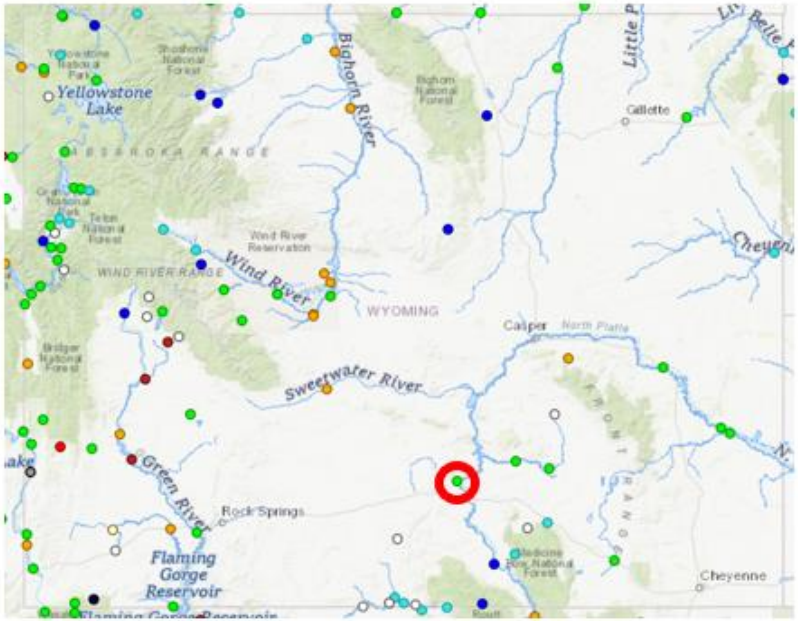
Reservoir Storage and Ownerships End of Water Year 2025

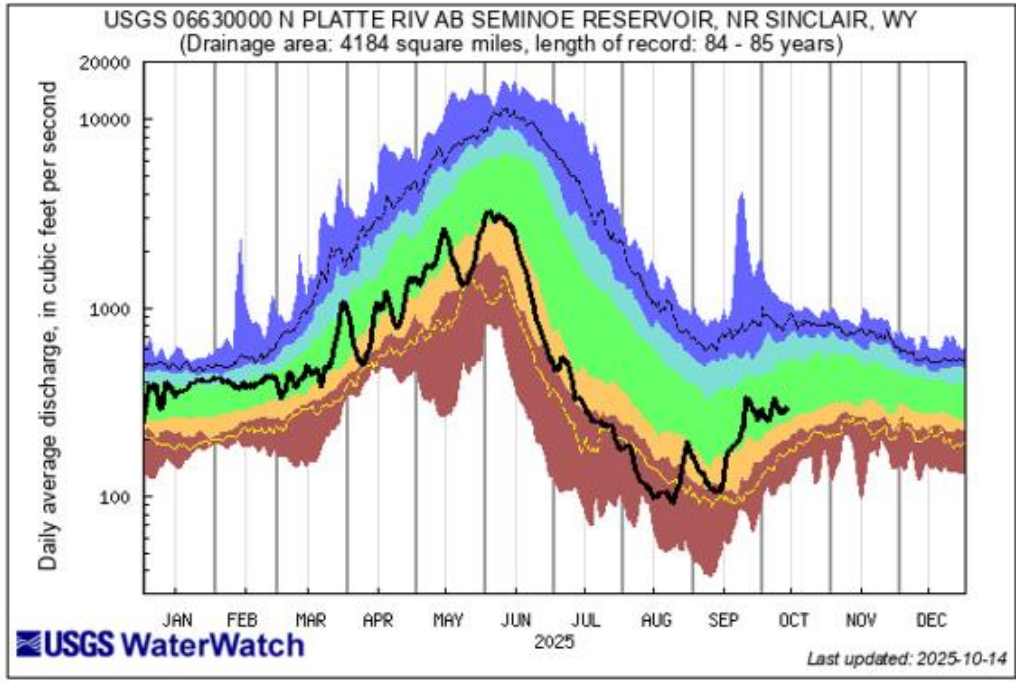


Power Generation Water Year 2025



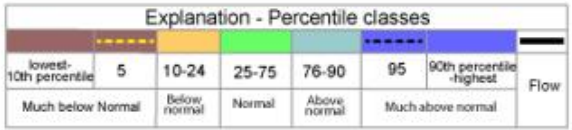
North Platte River above Seminoe Reservoir



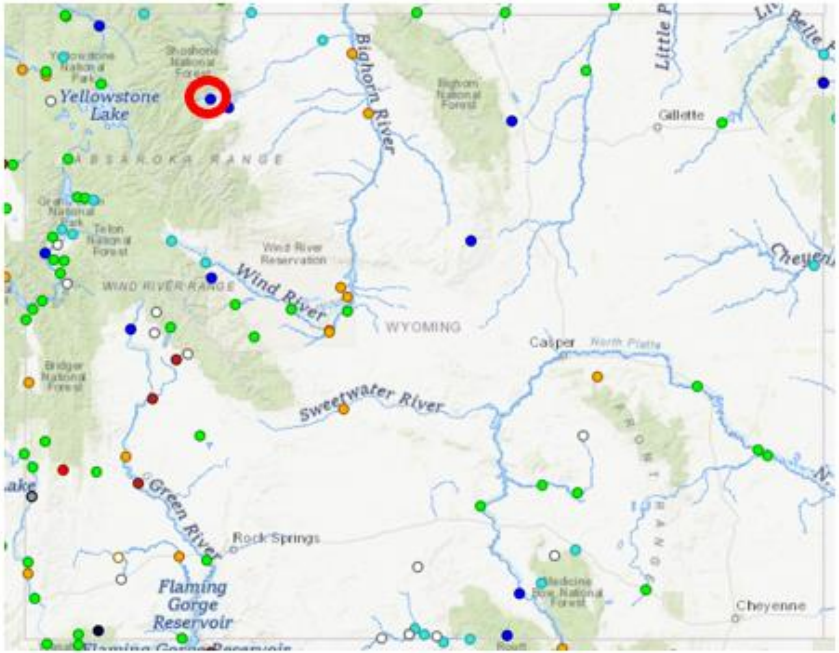


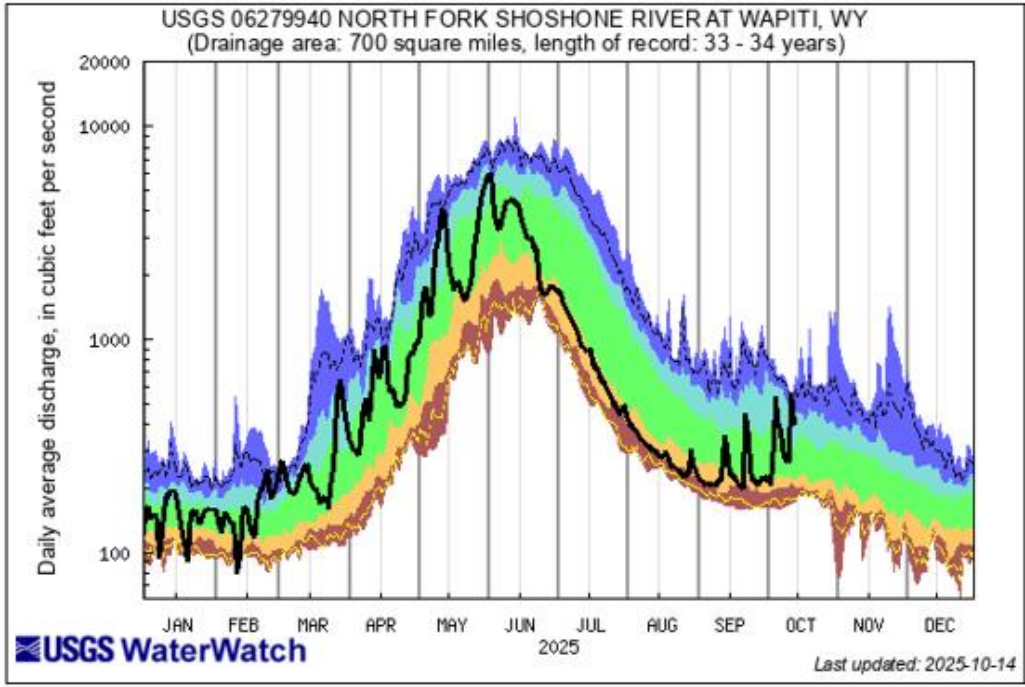
https://dashboard.waterdata.usgs.gov/

https://waterwatch.usgs.gov/



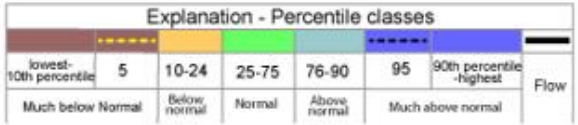
North Fork Shoshone River



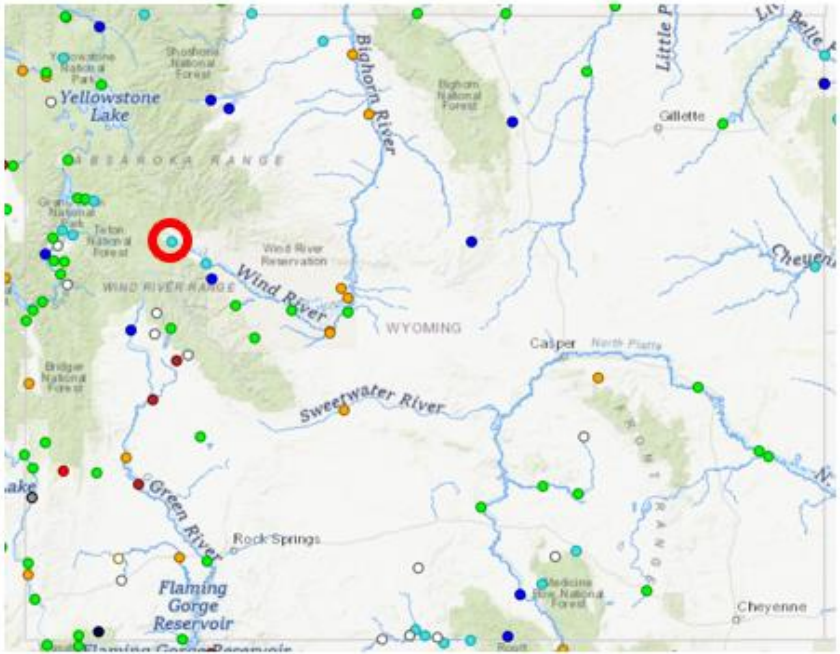


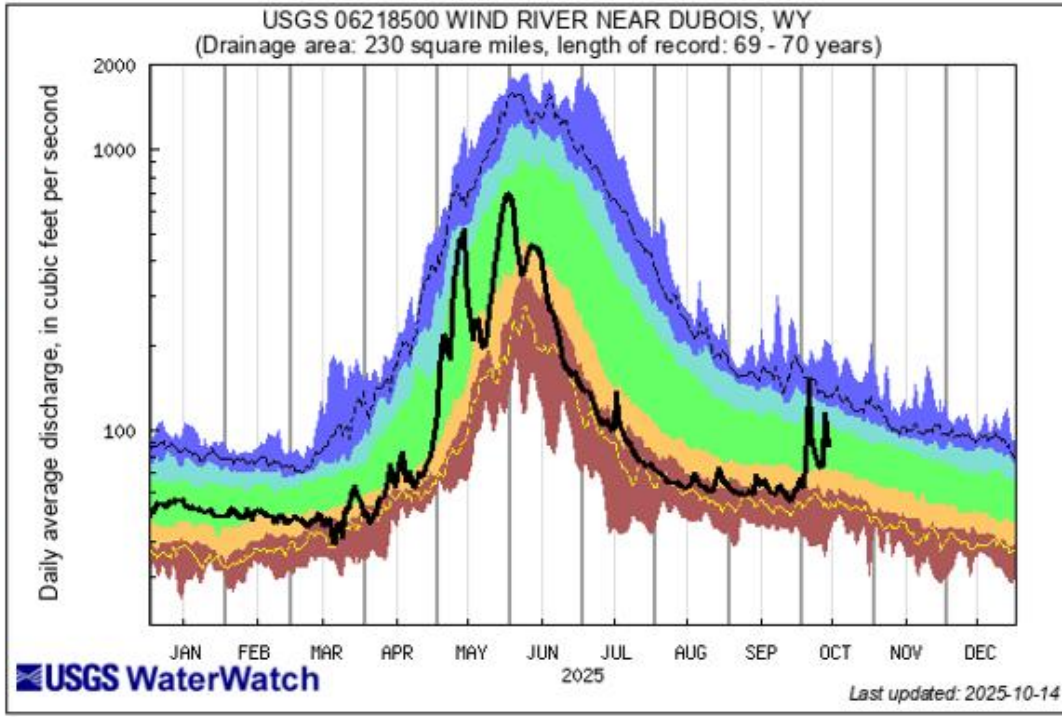
https://dashboard.waterdata.usgs.gov/

https://waterwatch.usgs.gov/



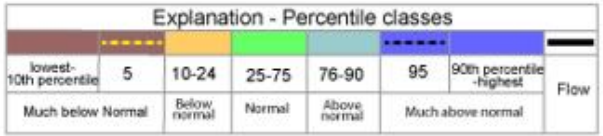
Wind River near Dubois





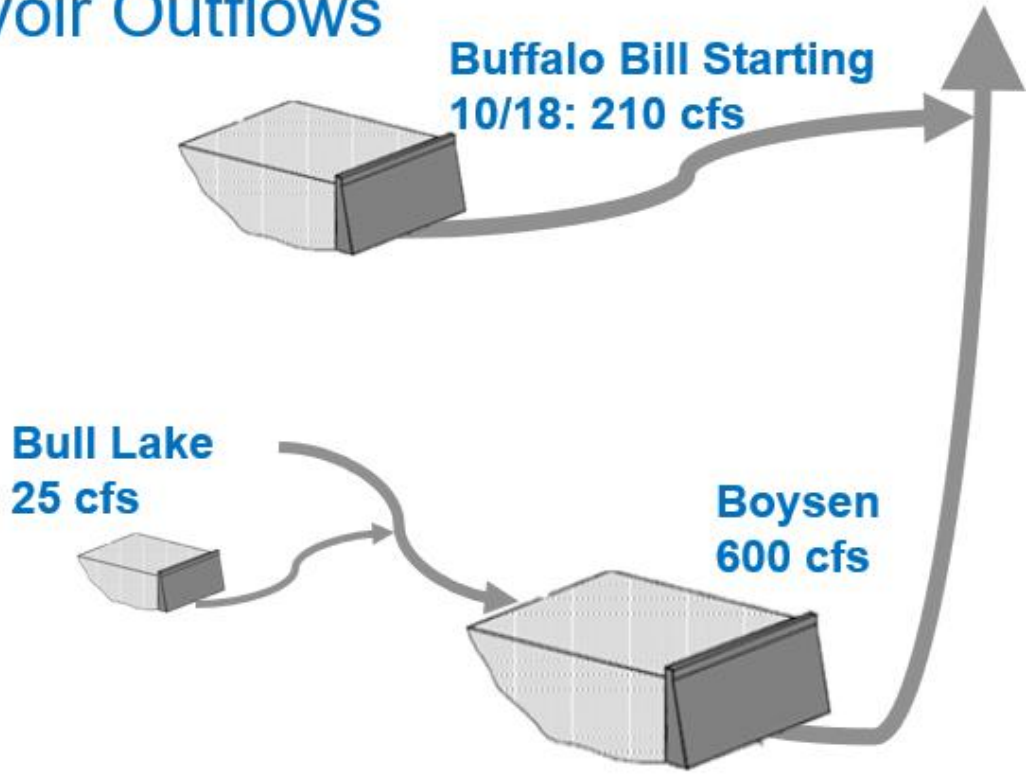
https://dashboard.waterdata.usgs.gov/

https://waterwatch.usgs.gov/

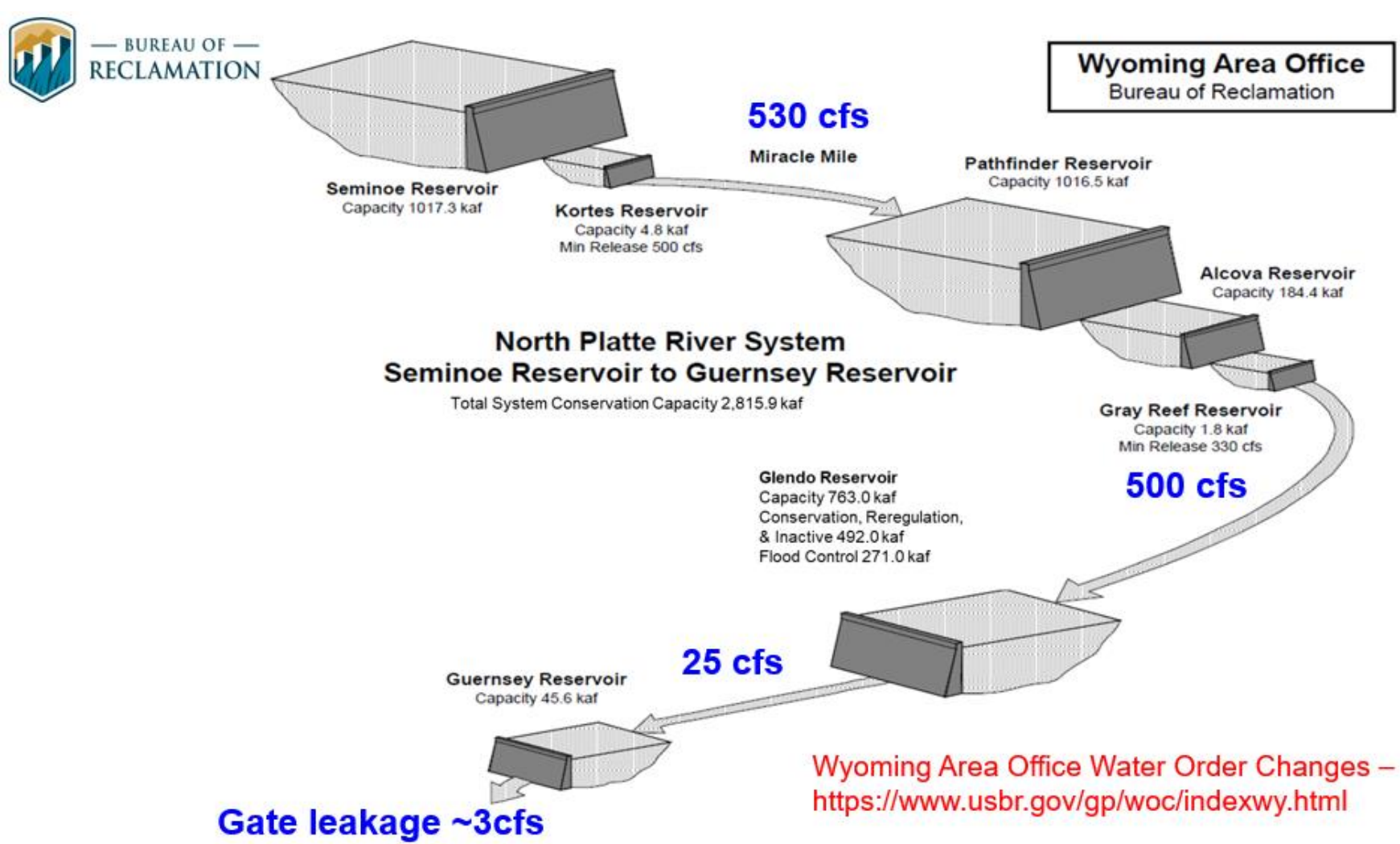


Current Reservoir Outflows


Boysen

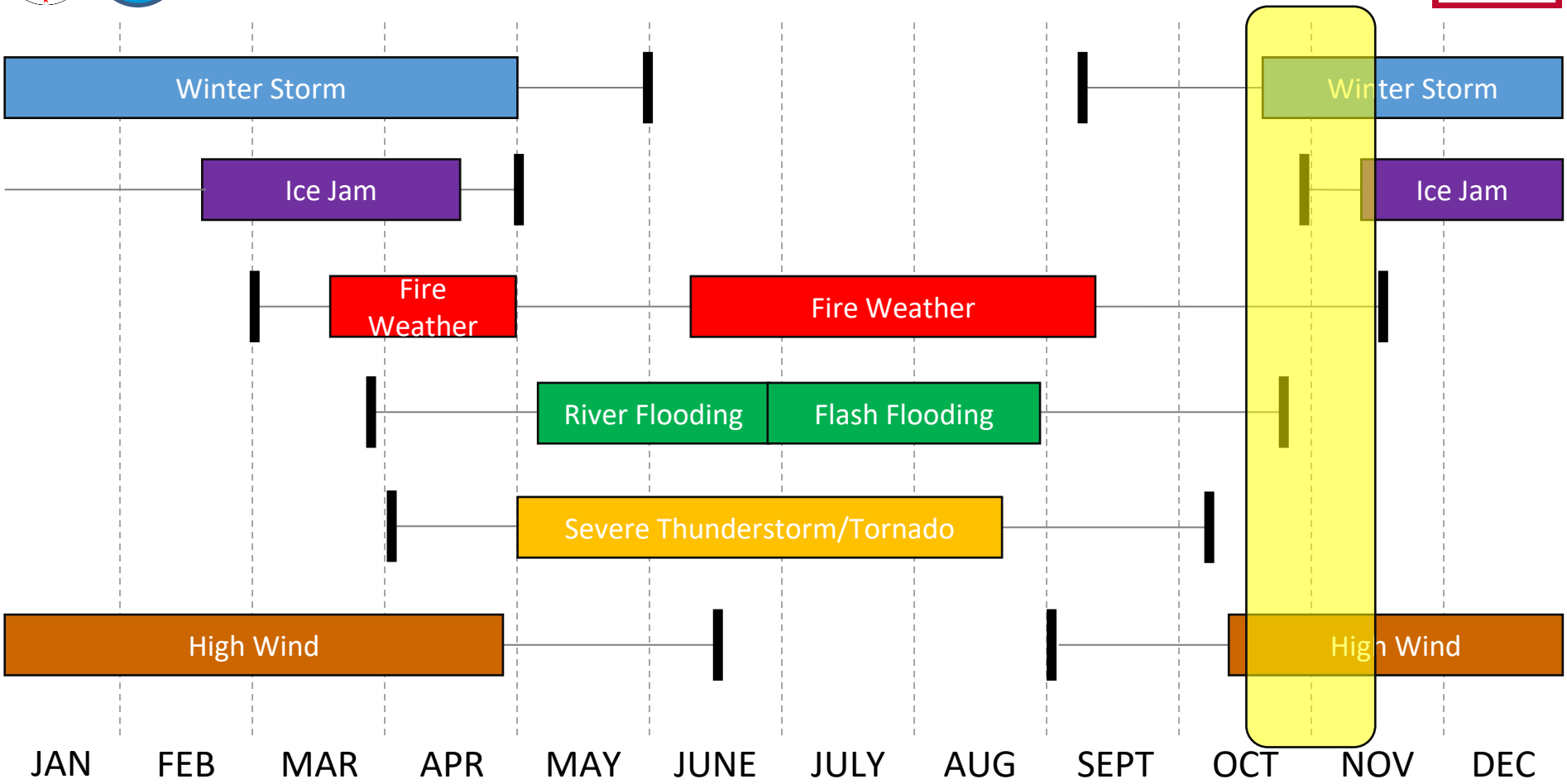


Wyoming Area Office Water Order Changes – https://www.usbr.gov/gp/woc/indexwy.html


— BUREAU OF —
RECLAMATION
Wyoming Area Office
Bureau of Reclamation
530 cfs
Miracle Mile
Seminoe Reservoir
Capacity 1017.3 kaf
Kortes Reservoir
Capacity 4.8 kaf
Min Release 500 cfs
Pathfinder Reservoir
Capacity 1016.5 kaf
Alcova Reservoir
Capacity 184.4 kaf
North Platte River System
Seminoe Reservoir to Guernsey Reservoir
Total System Conservation Capacity 2,815.9 kaf
Gray Reef Reservoir
Capacity 1.8 kaf
Min Release 330 cfs
500 cfs
Glendo Reservoir
Capacity 763.0 kaf
Conservation, Reregulation,
& Inactive 492.0 kaf
Flood Control 271.0 kaf
25 cfs
Guernsey Reservoir
Capacity 45.6 kaf
Wyoming Area Office Water Order Changes –
https://www.usbr.gov/gp/woc/indexwy.html
Gate leakage ~3cfs

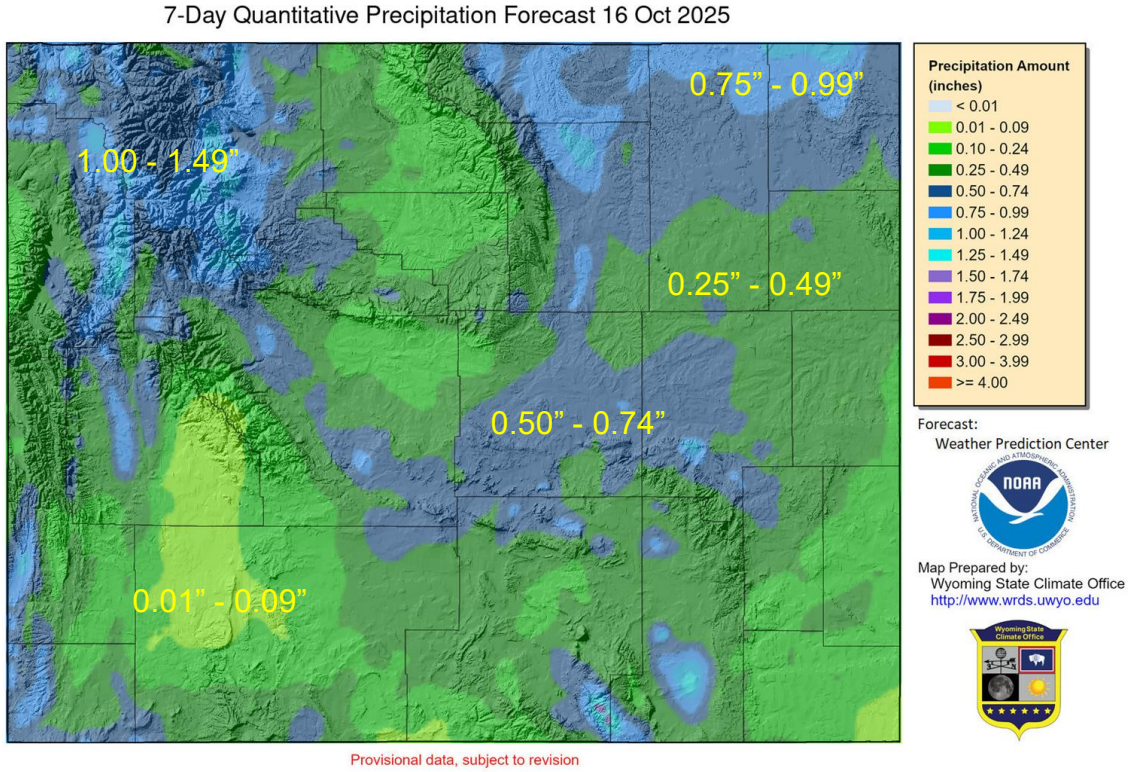
Weather Info & Forecasts

NWS Wyoming - Typical Hazard Calendar



7-Day Total Precipitation Forecast

(Oct 16 - Oct 23)



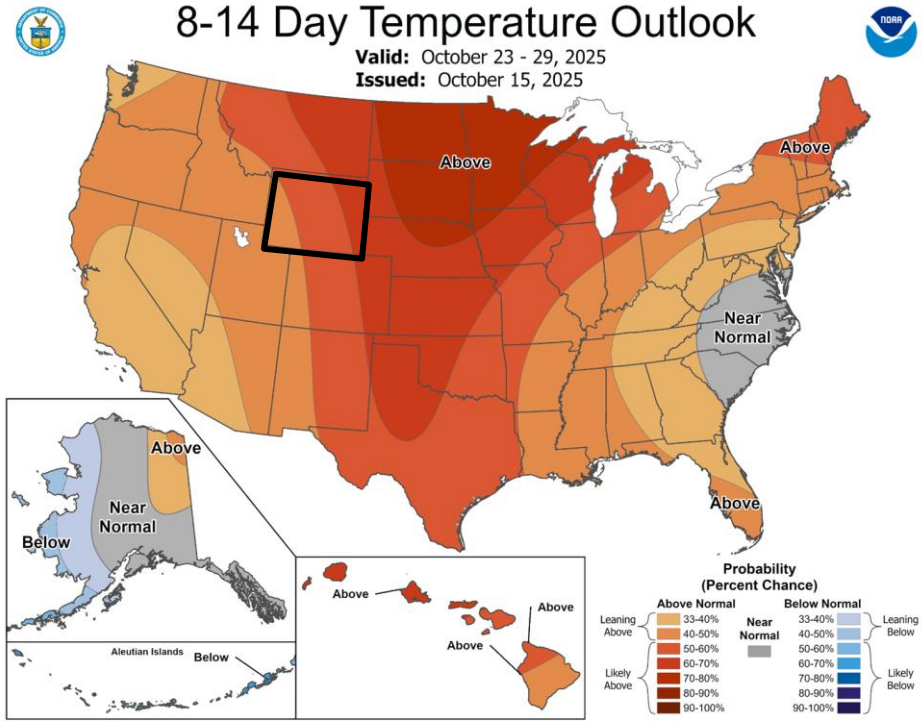
The Quantitative Precipitation Forecast shows the liquid amount of forecasted precipitation over the next 7 days
The Forecast is created by the National Weather Service Weather Prediction Center
Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, National Centers for Environmental Prediction, and Weather Prediction Center - https://www.wpc.ncep.noaa.gov
Map Layout Created 16 Oct 2025 https://www.wrds.uwyo.edu

- Rain and high elevation snow (above 7,000 feet) today and tonight
- Friday night/Saturday weather system brings more rain and snow along and east of the Divide
- Sunday night/Monday shows another system to bring rain and snow (as low as 6,000 feet)

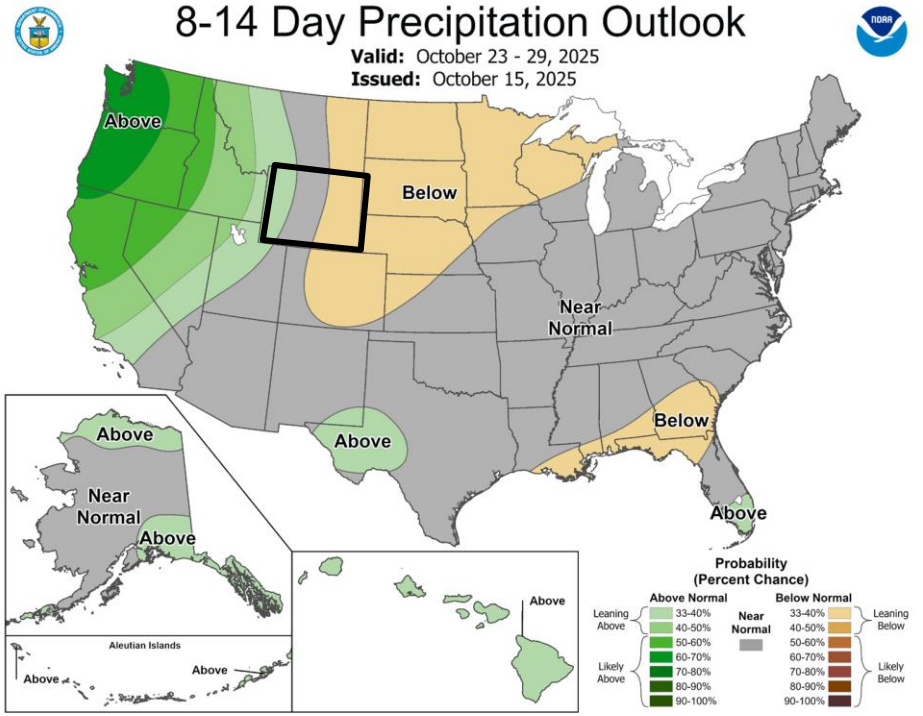
https://bit.ly/7_dayQPForecast

8-14 Day Outlooks
(Oct 23 - Oct 29)

https://bit.ly/CPC8_14Day



- Likely above average especially in the east
- Interactive Version: cpc.ncep.noaa.gov/products/predictions/814day/interactive/index.php

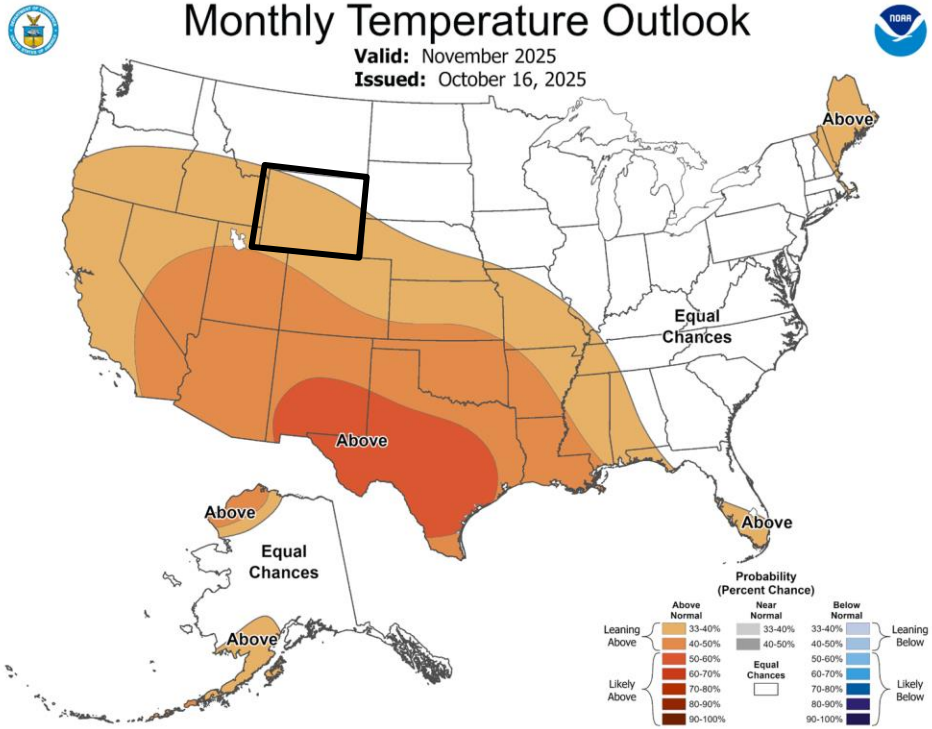


- Leaning towards wetter than normal in the far west
- Leaning towards drier than normal in the east
- Central area show equal chances

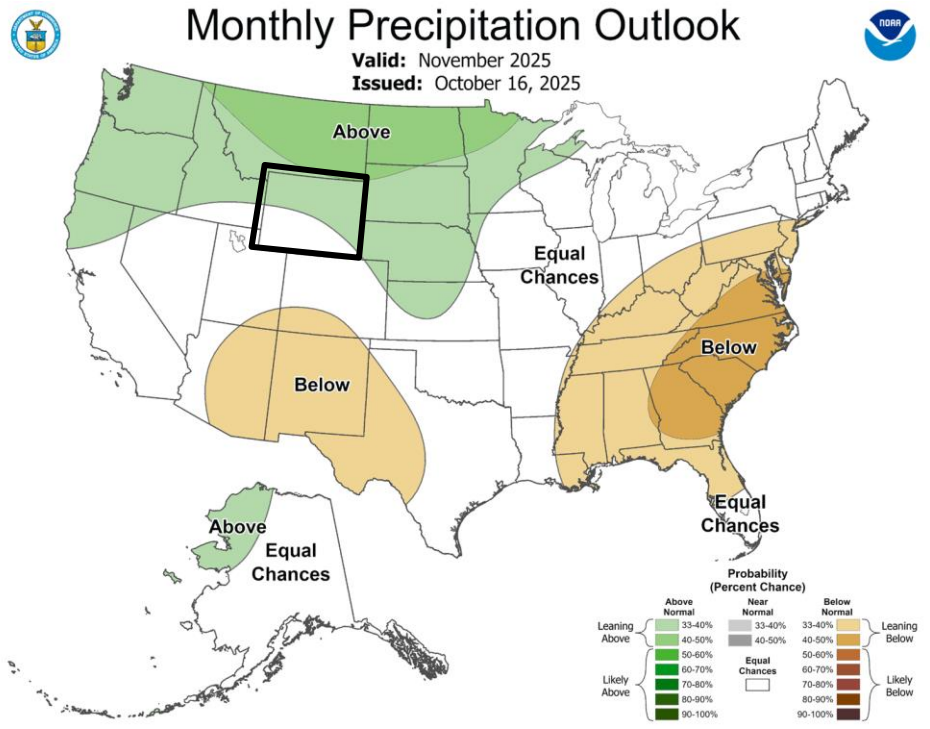
1-Month Outlooks

(November)

cpc.ncep.noaa.gov/products/predictions/30day/



- Lean toward above normal for most of WY
- Equal chances for the extreme northeast with climatology as the best forecast

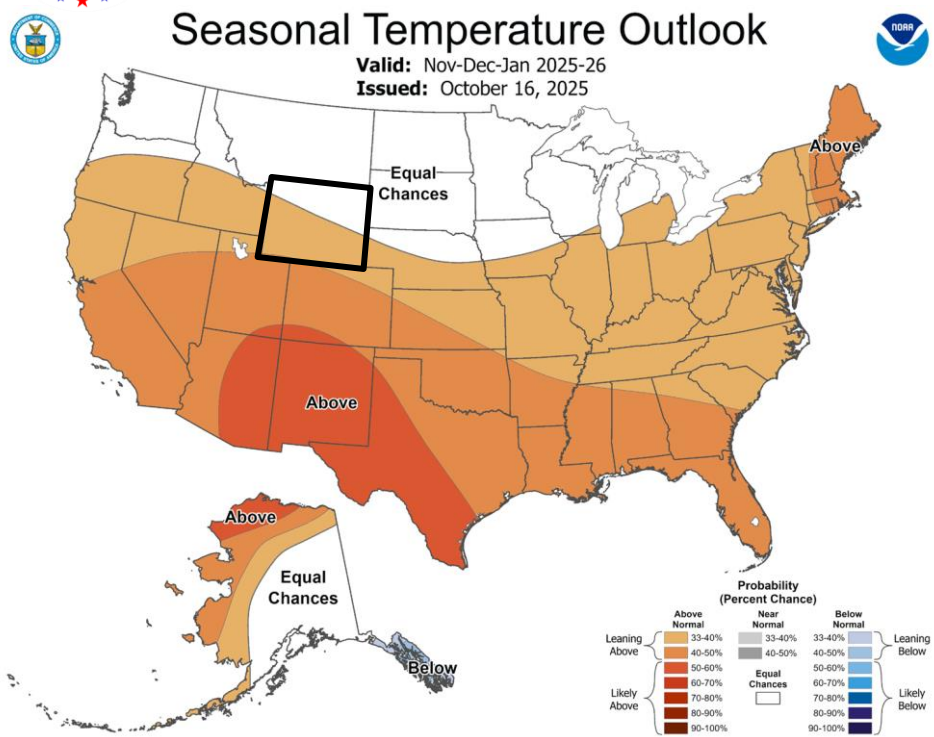


- Northern areas leaning towards above normal chances
- Climatology is the best forecast for the southwest portions of the state.

3 Month Outlook

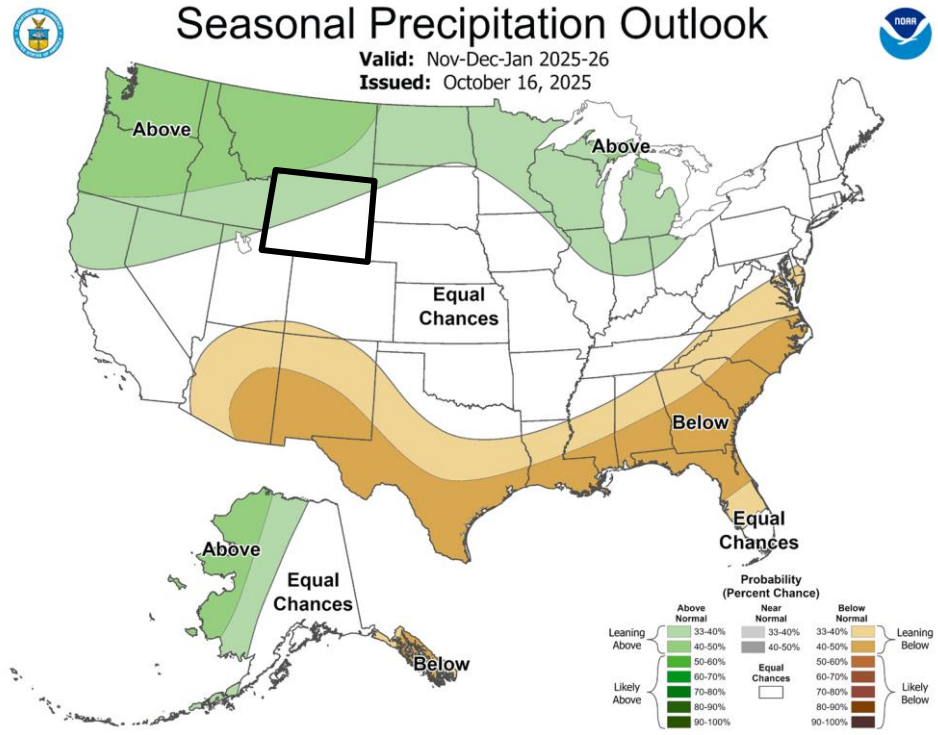
https://bit.ly/CPC_Seasonal

(Nov-Dec-Jan)



- Leaning toward above normal for the south
- Equal chances for the north with climatology the best forecast

(Nov-Dec-Jan)



- Climatology is the best forecast with equal chances across the southeast half
- Leaning toward above normal for the northwest half

Highlight of the Month:

Harmful Cyanobacterial Blooms
Wyoming Department of Health

Harmful Cyanobacterial Blooms

Courtney Tillman, MPH
Wyoming Department of Health

Wyoming Department of Health | PUBLIC HEALTH DIVISION

What are Harmful Cyanobacterial Blooms (HCBs)?

Dense concentrations of cyanobacteria or blue-green algae

Can be blue, green, brown, or tan in color

Appear as scum, mats, or spilled paint in water

Can produce toxins

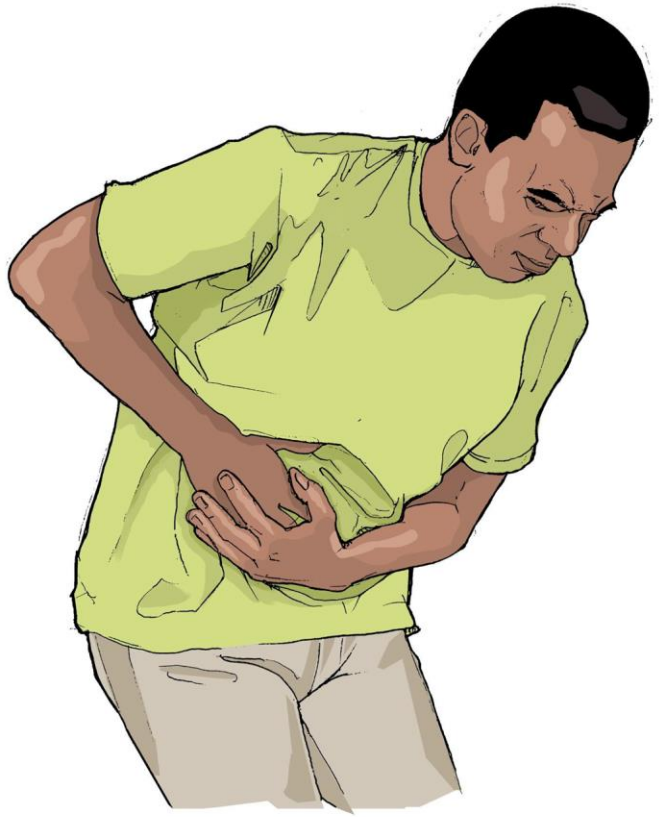
Can affect people, animals, and agriculture



Can HCBs make you sick?

People:

Stomach pain
Rash
Headache
Coughing
Nose irritation
Watery eyes
Sore throat
Liver damage
Seizures
Irregular heart beat



Can HCBs make animals sick?

Animals:

Excessive salivation
Vomiting
Fatigue
Staggered walking
Difficulty breathing
Convulsions
Liver failure
Death



What do we do about HCBs?

Monitor Human and Animal Illness Reports



Monitor & Test Recreational Water Bodies

Issue Health Advisories
-Be on the Lookout
-Bloom Advisory
-Toxin Advisory

2025 HCB Season

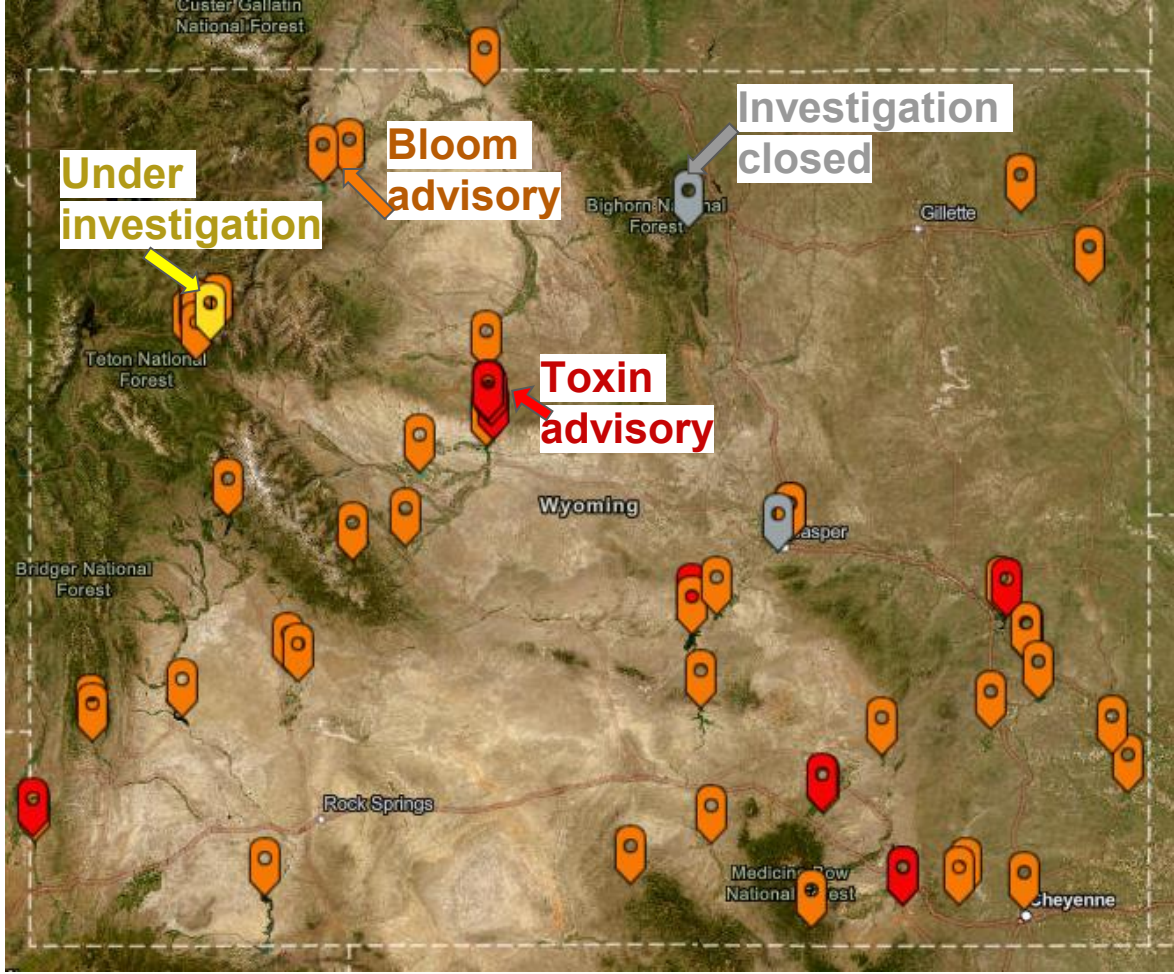
Toxin Advisories (12)

Bloom Advisories (44)

Under Investigation (1)

Investigation Closed (2)

1 Dog Death



What should you do if you see a bloom?



Do not swim



Do not ingest the water



Do not let pets or livestock enter or drink the water



Rinse fish with clean water and only eat the fillet



Avoid water spray

When in doubt, **stay out!**

Always check current signage and advisories.

Jar and stick test

Tests for purchase

Visual inspection

Questions?

WyoHCBs.org

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Wyoming Department of Health | PUBLIC HEALTH DIVISION

US Drought Monitor Workshop
November 13, 1-2 pm MST

go.unl.edu/usdm-workshop-nov-13-2025 or https://bit.ly/3VW1A8s

What is the Drought Monitor, its methodology and process, the input data involved and how you can contribute. During the second half of the workshop, participants can ask questions and provide feedback to USDM authors in a Q&A session.

Questions? Contact Curtis Riganti, NDMC climatologist, at criganti2@unl.edu

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Thank you!

The University of Wyoming is an equal opportunity/affirmative action institution.

The Wyoming Conditions Monitoring Team (WCMT) organized and hosted this webinar. The WCMT is a collaborative effort of state, federal, tribal, and university partners that monitor conditions & impacts throughout the state on a weekly basis – and communicate this information to the U.S. Drought Monitor among others.

Learn more at:
https://drought.wyo.gov