



Spring Flood Outlook 2026

Northeast and Mid-Atlantic Regions

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Atmospheric Administration
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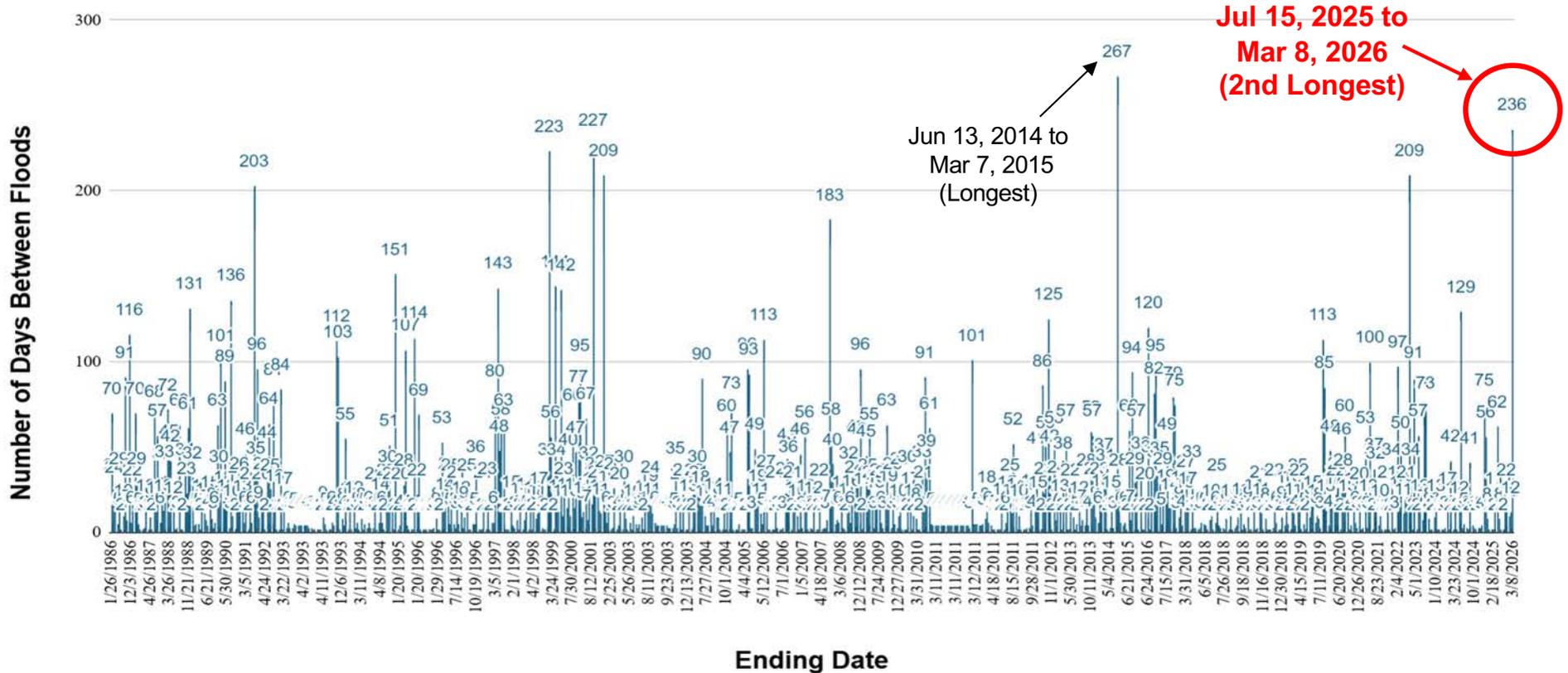
National Weather Service



Flood "Drought" in Mid-Atlantic

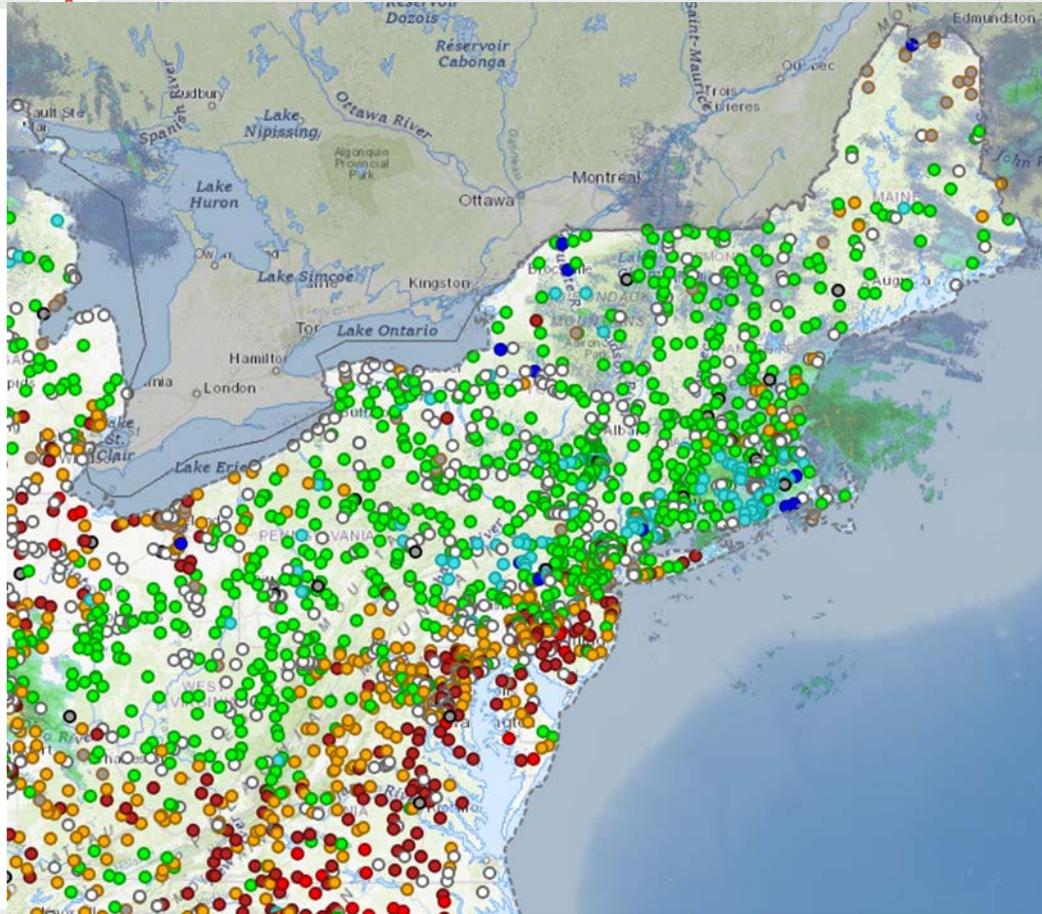
236 Days between Flood Events; 2nd Longest Flood "Drought" in last 40 years

Number of Days Between Observed MARFC River Floods (Past 40 Years)





Current USGS Streamflows



- Overall, current USGS streamflows are near to below average for this time of year across Northeast/Mid-Atlantic

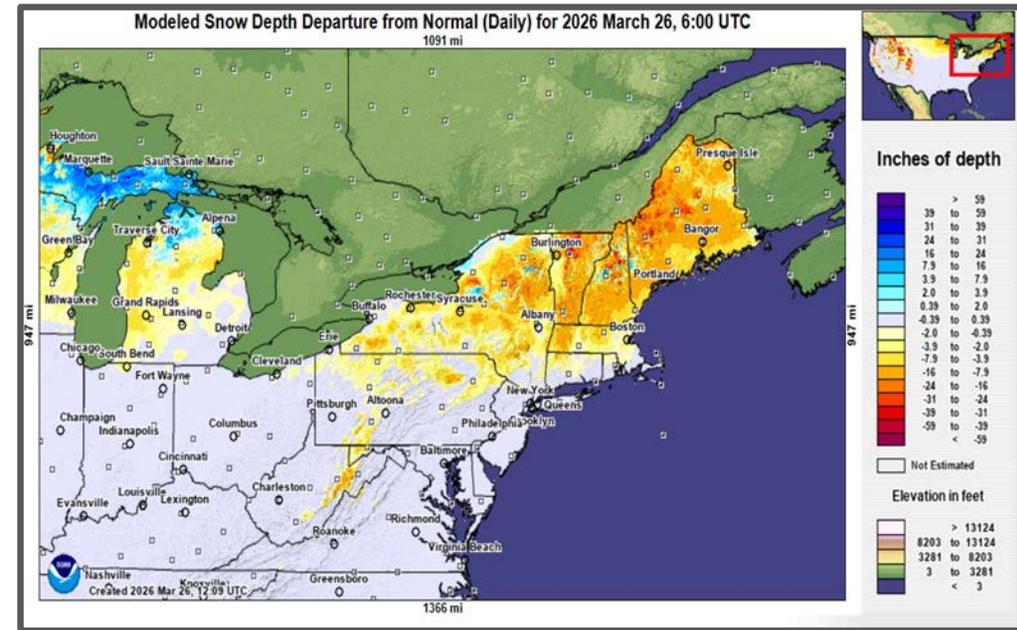
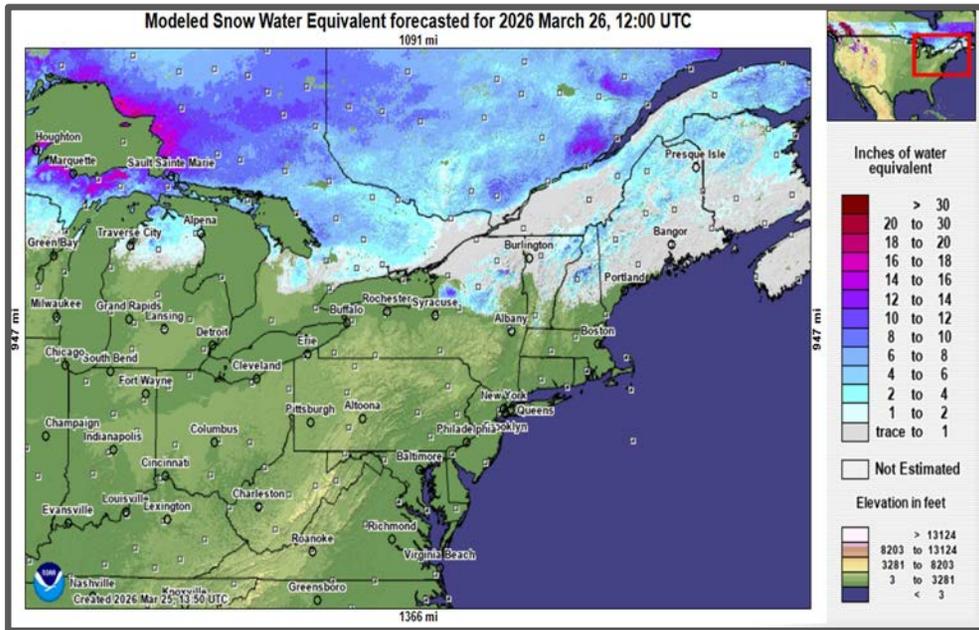
Streamflow: Status

- Above flood stage
- All-time high for this day (100th percentile (maximum))
- Much above normal (>90th percentile)
- Above normal (76th - 90th percentile)
- Normal (25th - 75th percentile)
- Below normal (10th - 24th percentile)
- Much below normal (<10th percentile)
- All-time low for this day (0th percentile (minimum))
- Not flowing
- Not ranked
- Measurement flag
- Recent measurement unavailable





Current Snow Status



→ Generally below normal Snow Water Equivalent (SWE) and Snow Depths across the Mid Atlantic and Northeast.



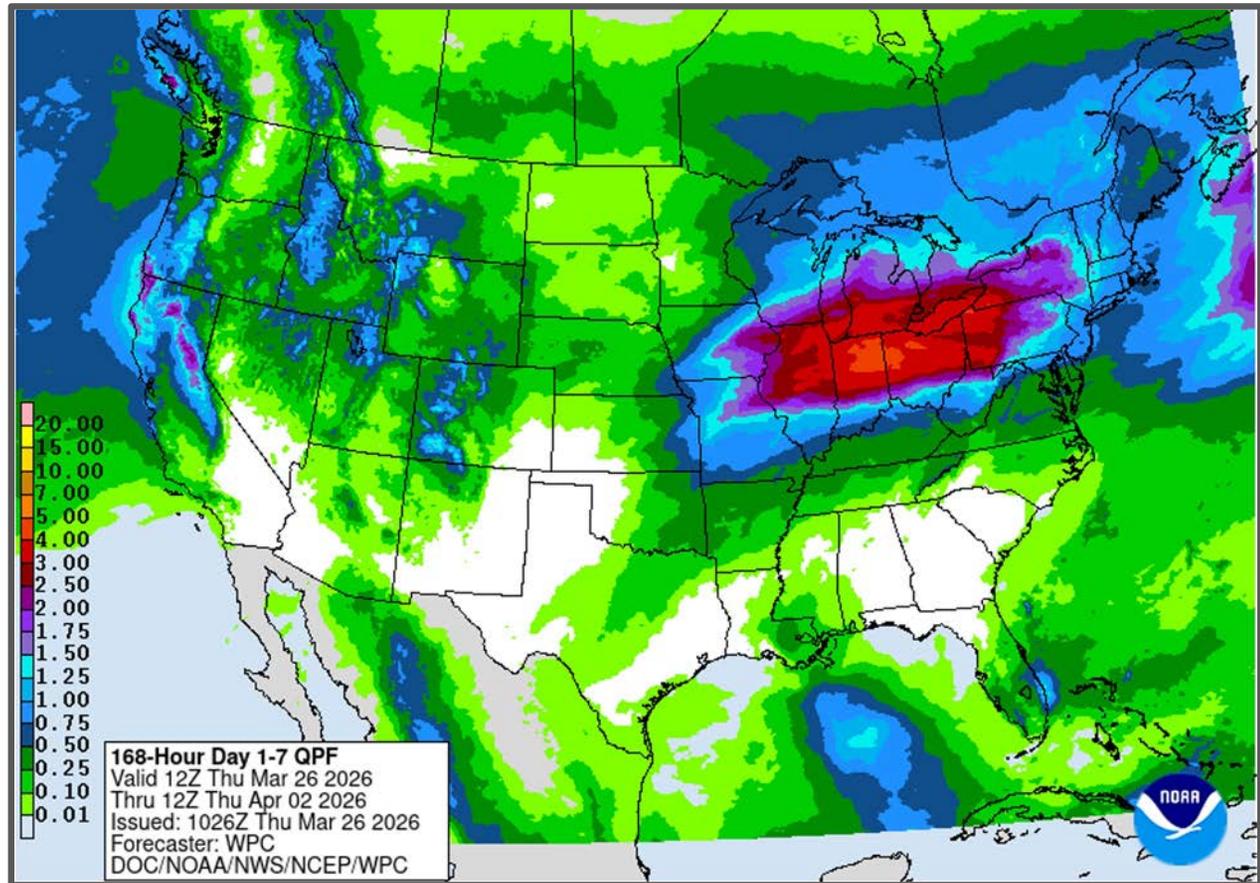


Precipitation Forecast

Valid March 26 to April 2, 2026

Forecast Precipitation (Next 7 Days)

- Next round of rain moves through the area on today through Friday
- Additional rain/snow possible by early to mid next week
- 7-day total precipitation could exceed 3", particularly in western PA and western NY



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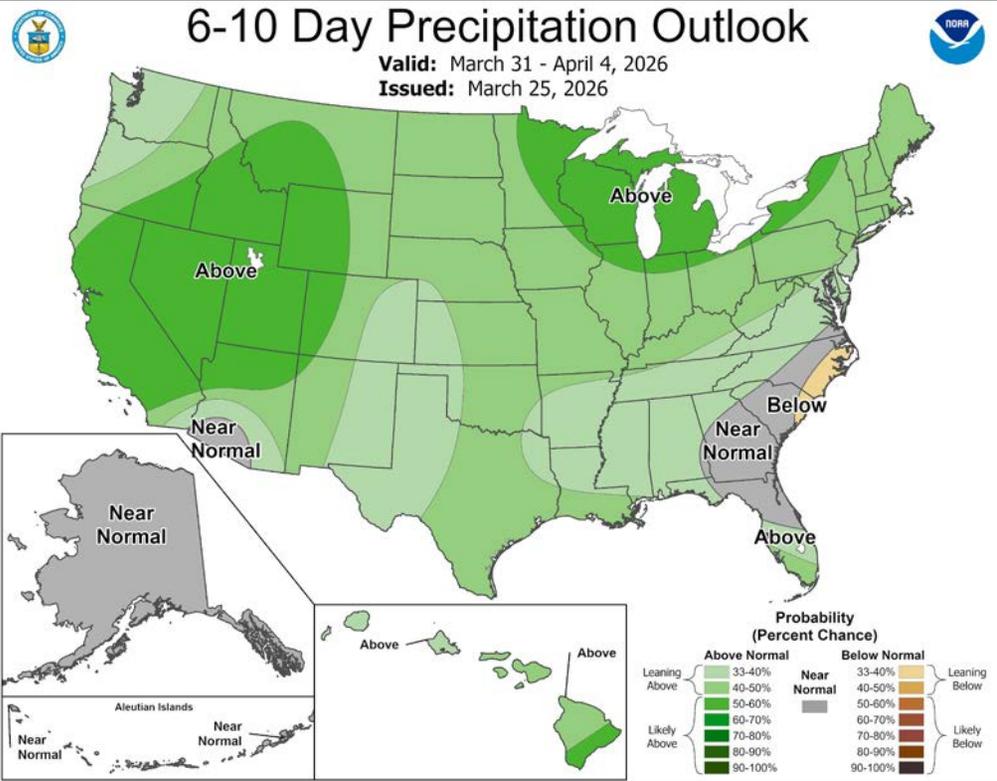


Short-Term Outlooks (6-10 Day)

Valid March 31 - April 4, 2026
Issued March 25, 2026

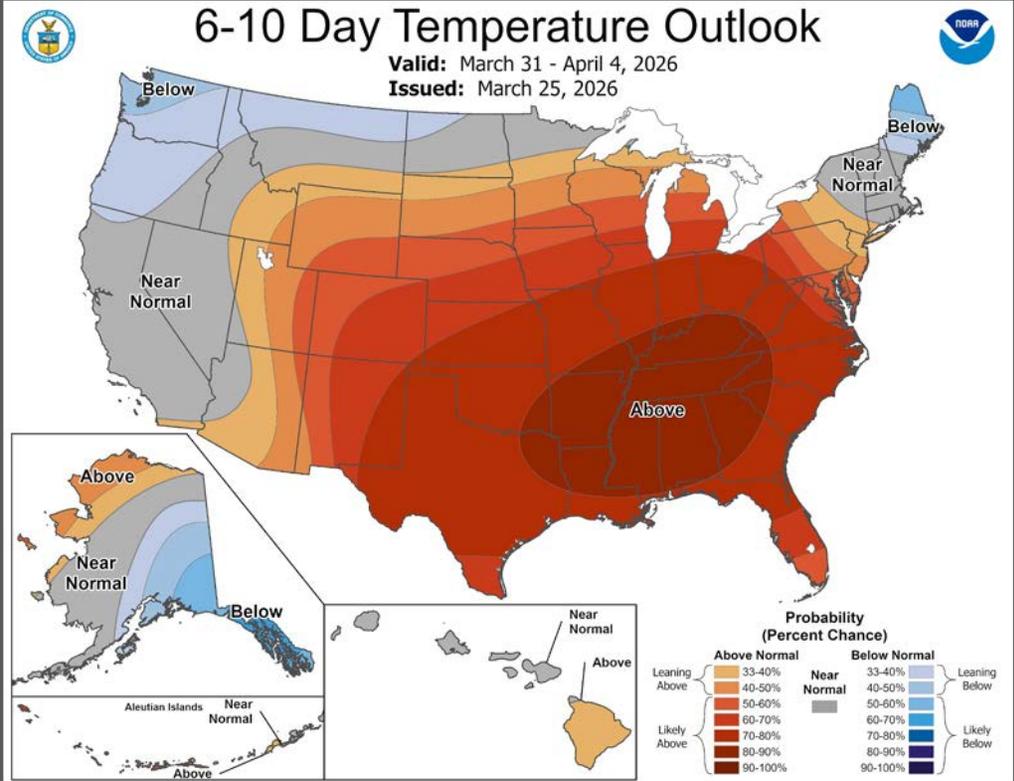
6-10 Day Precipitation Outlook

Valid: March 31 - April 4, 2026
Issued: March 25, 2026



6-10 Day Temperature Outlook

Valid: March 31 - April 4, 2026
Issued: March 25, 2026



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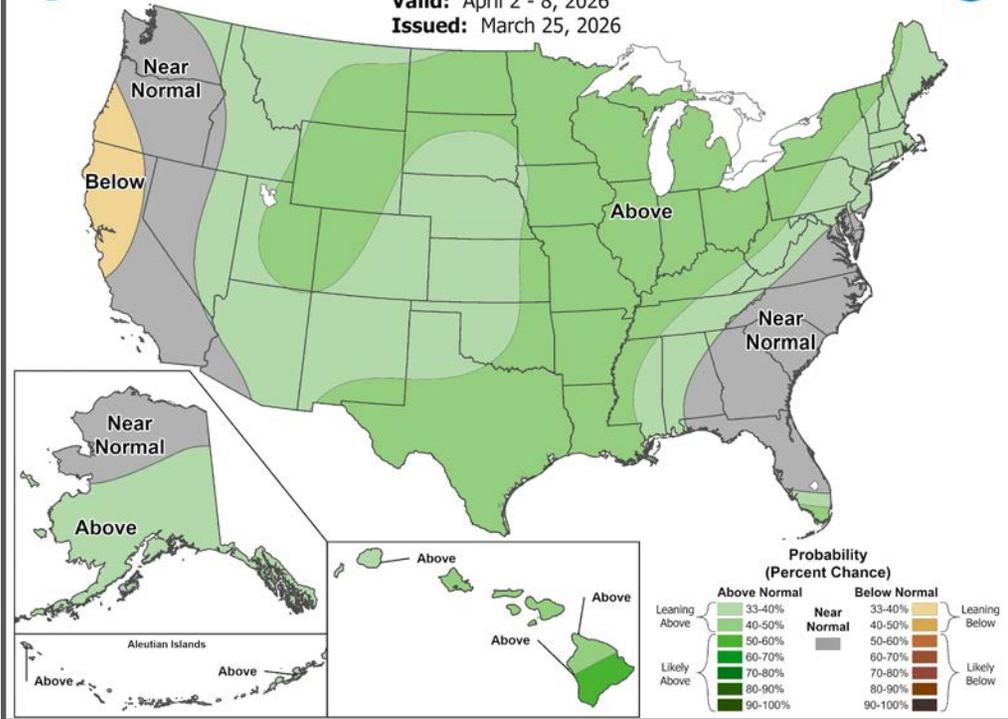


Short-Term Outlooks (8-14 Day)

Valid April 2-8, 2026
Issued March 25, 2026

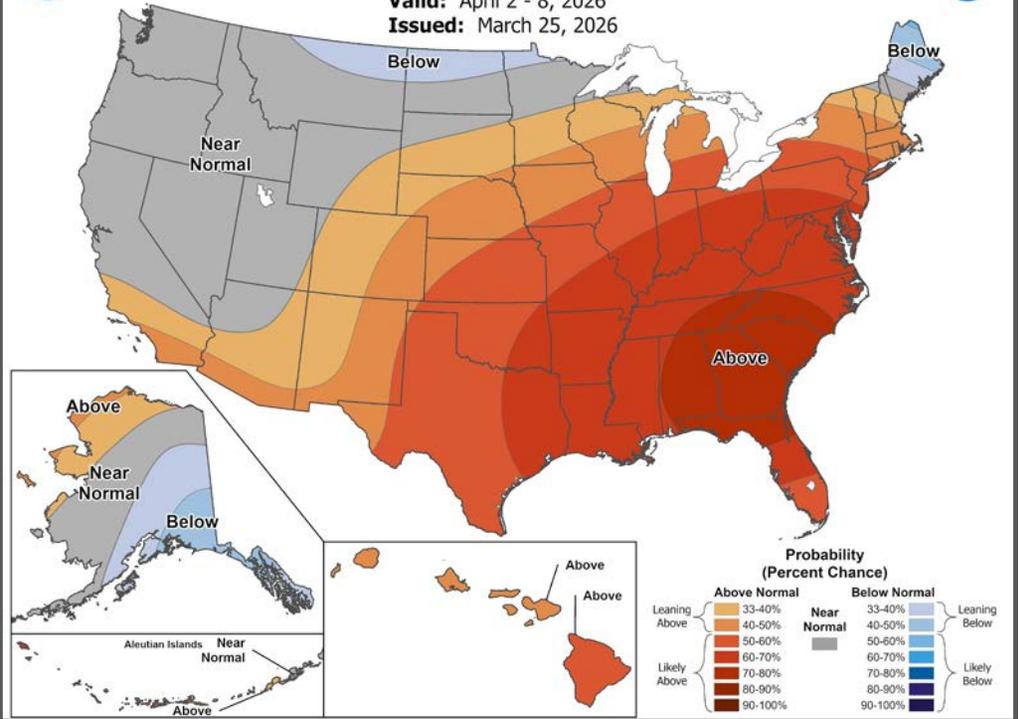
8-14 Day Precipitation Outlook

Valid: April 2 - 8, 2026
Issued: March 25, 2026



8-14 Day Temperature Outlook

Valid: April 2 - 8, 2026
Issued: March 25, 2026



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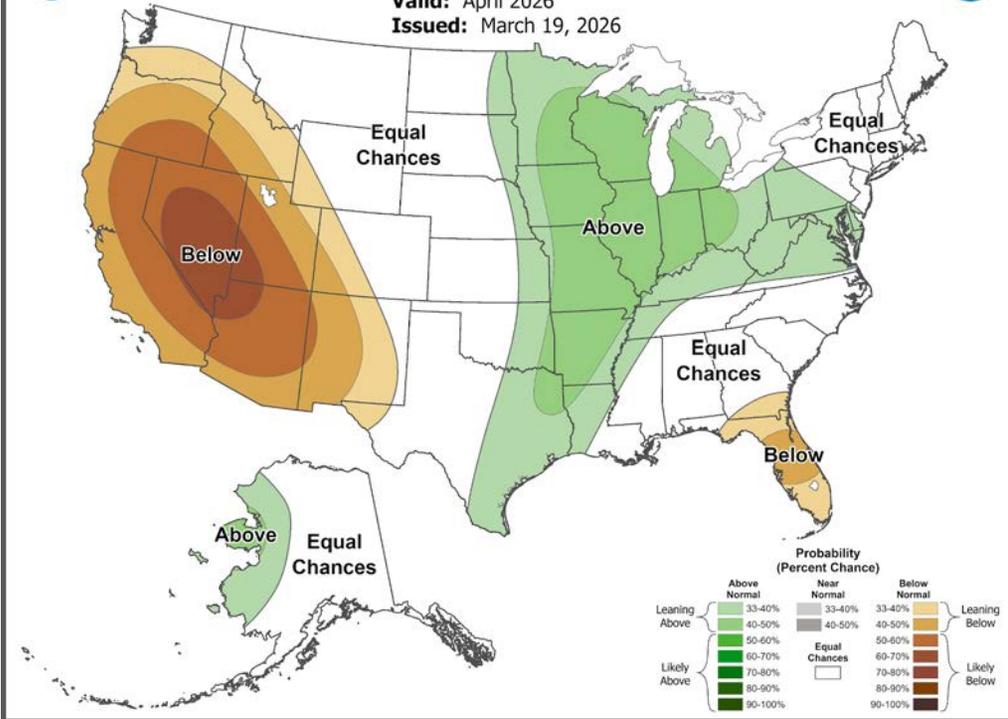


Monthly Outlooks

Valid April 2026
Issued: March 19, 2026

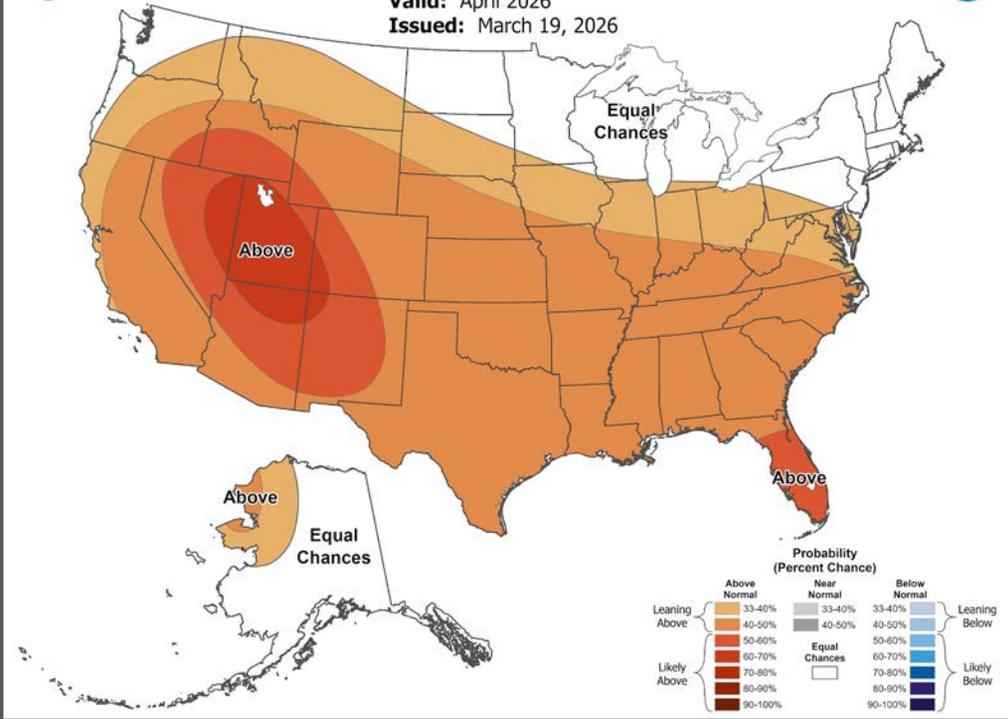
Monthly Precipitation Outlook

Valid: April 2026
Issued: March 19, 2026



Monthly Temperature Outlook

Valid: April 2026
Issued: March 19, 2026



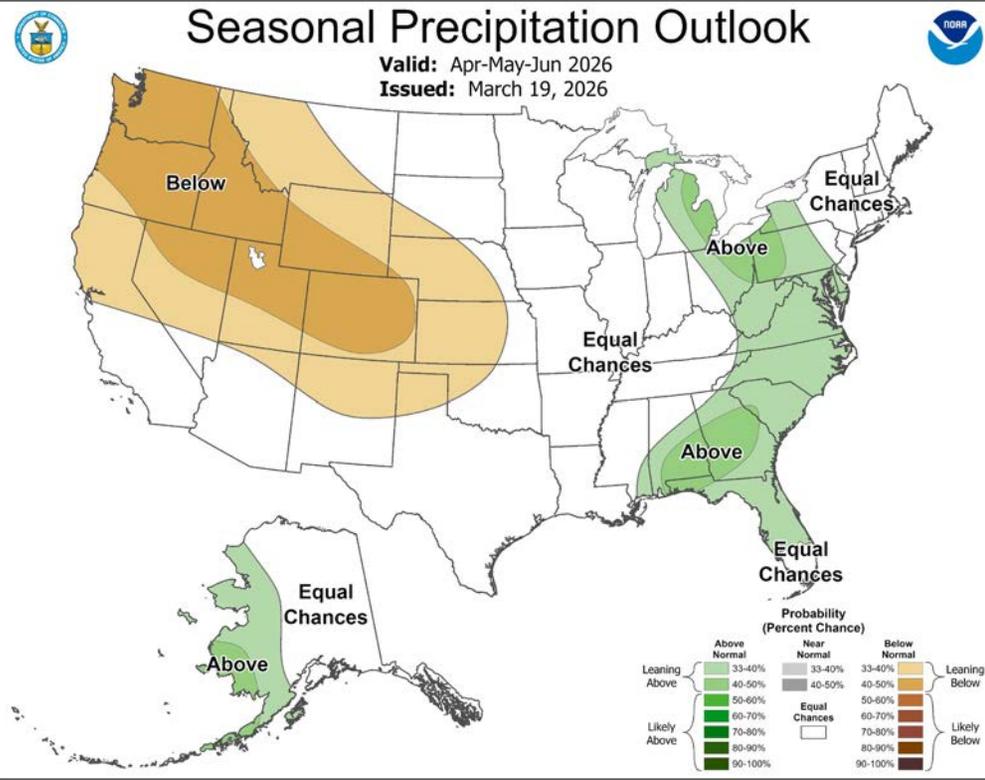


Seasonal Outlooks

Valid April, May, June 2026
Issued: March 19, 2026

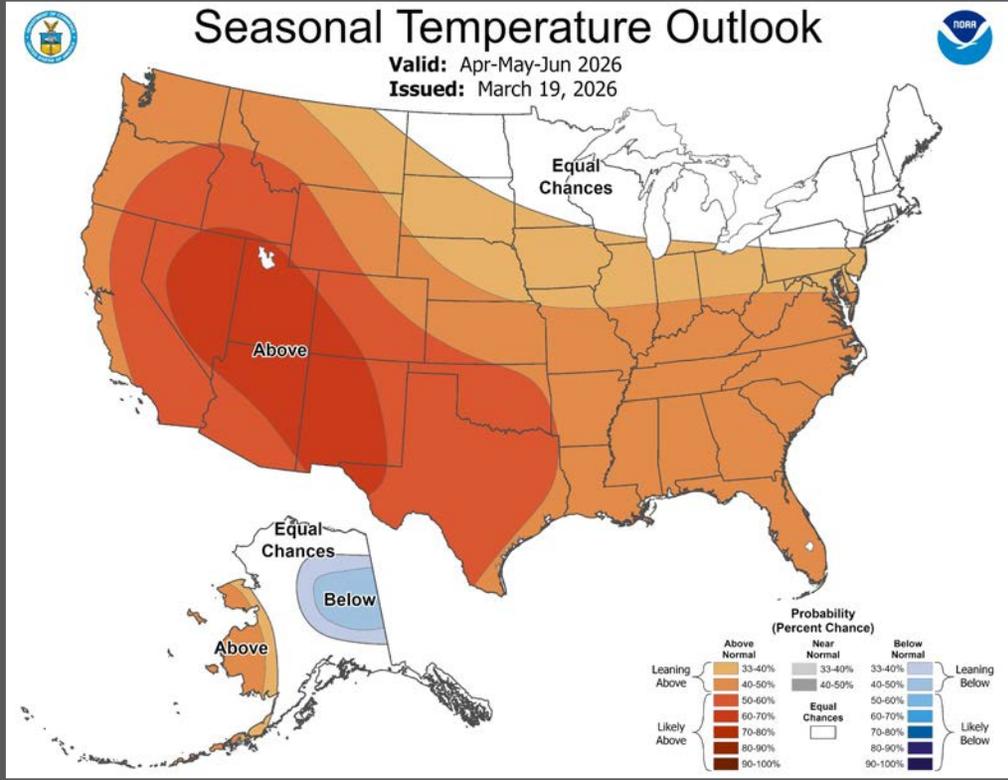
Seasonal Precipitation Outlook

Valid: Apr-May-Jun 2026
Issued: March 19, 2026



Seasonal Temperature Outlook

Valid: Apr-May-Jun 2026
Issued: March 19, 2026

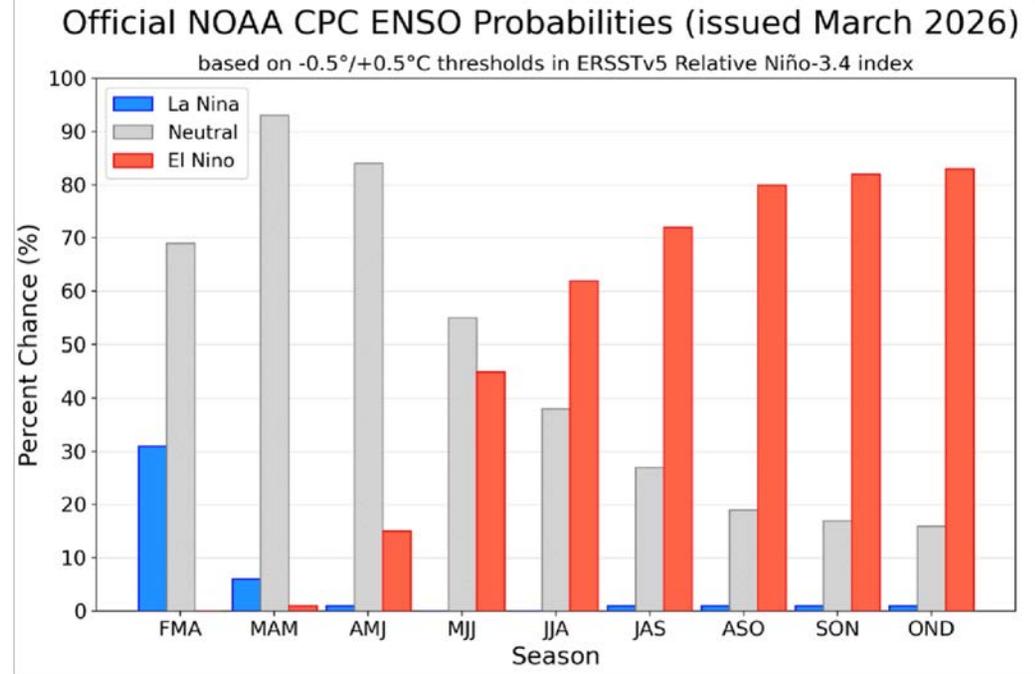
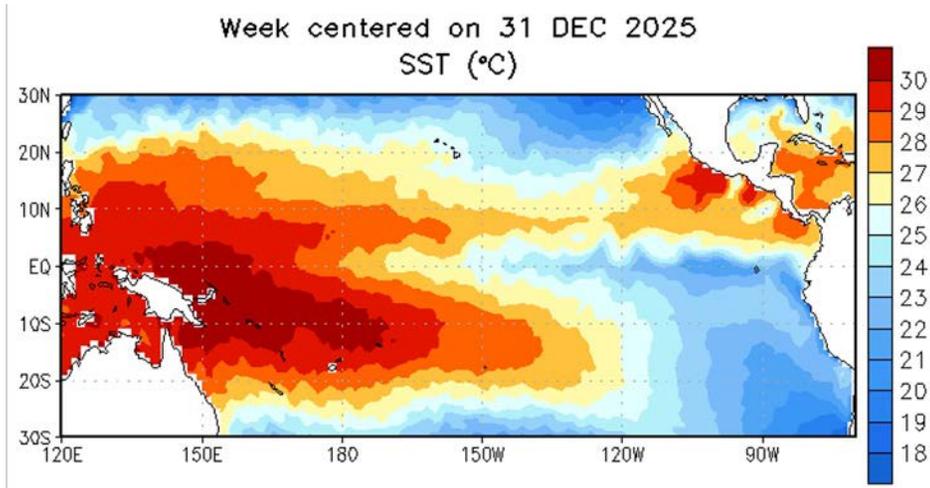


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El Nino/Southern Oscillation



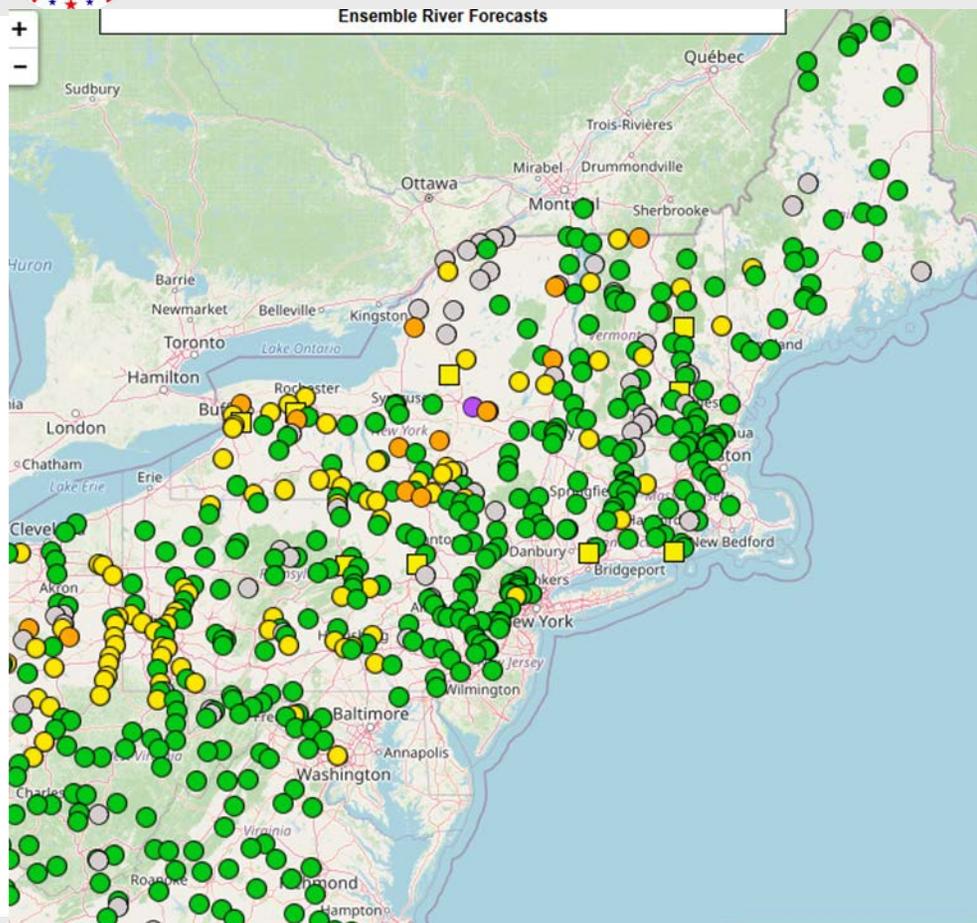
NWS Climate Prediction Center: A transition from La Niña to ENSO-neutral is expected in the next month, with ENSO-neutral favored through May-July 2026 (55% chance). In June-August 2026, El Niño is likely to emerge (62% chance) and persist through at least the end of 2026.

Strong El Niño conditions often coincide with below average Atlantic tropical cyclone seasons.





River Ensemble Outlooks



- Over the next 10 days, the river flood risk is relatively low, based on NAEFS ensemble forecasts of precipitation and snowmelt.

NAEFS

North American Ensemble Forecast System

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
	= less than 30% chance of reaching Action level	
	= no critical levels defined for this point	



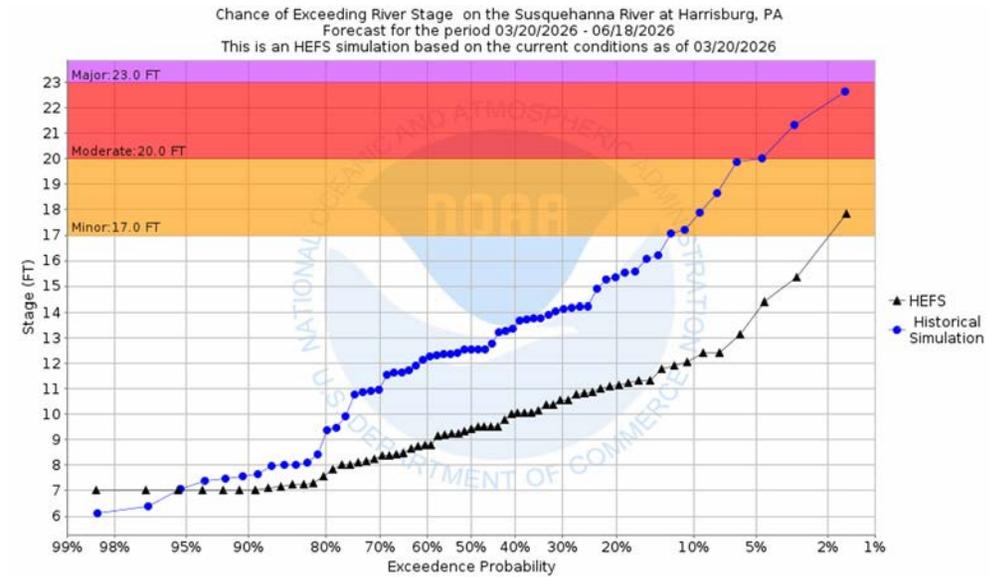
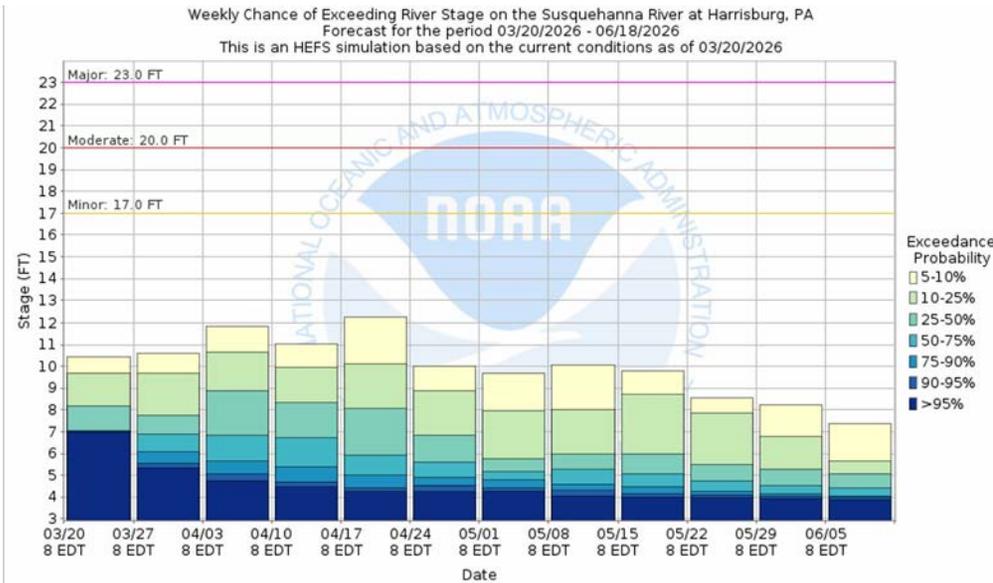
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90-Day Ensemble Graphics

NEW: Ensemble graphics on NWPS have been expanded from 30 days to 90 days.



Example:

<https://water.noaa.gov/gauges/HARP1>





2026 National Hydrologic Assessment

Released Mar 19, 2026

<https://storymaps.arcgis.com/collections/de248c5b879a45609ba0e4457cc336f8>


Collection
2026 National Hydrologic Assessment

- 
1 NHA Executive Summary
- 
2 Current Flooding and Antecedent Conditions
- 
3 NWS Long Range Flood Outlook
- 
4 Alaska Spring Ice Breakup Outlook
- 
5 Western Water Supply Forecast
- 
6 Gulf of America Hypoxia Outlook

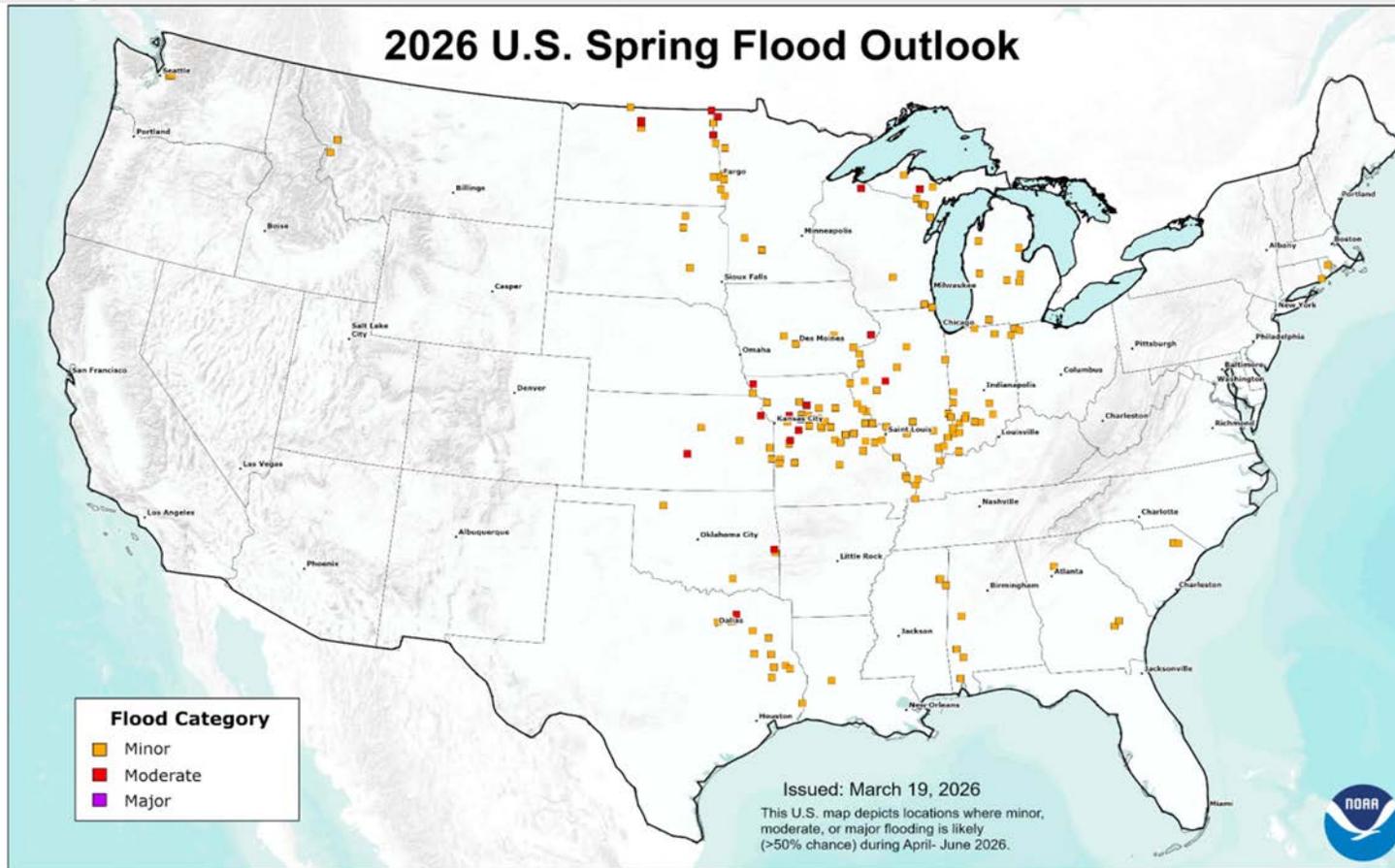


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2026 National Hydrologic Assessment



- This U.S. map depicts locations where minor, moderate, or major flooding is likely (>50% chance) during April-June 2026.

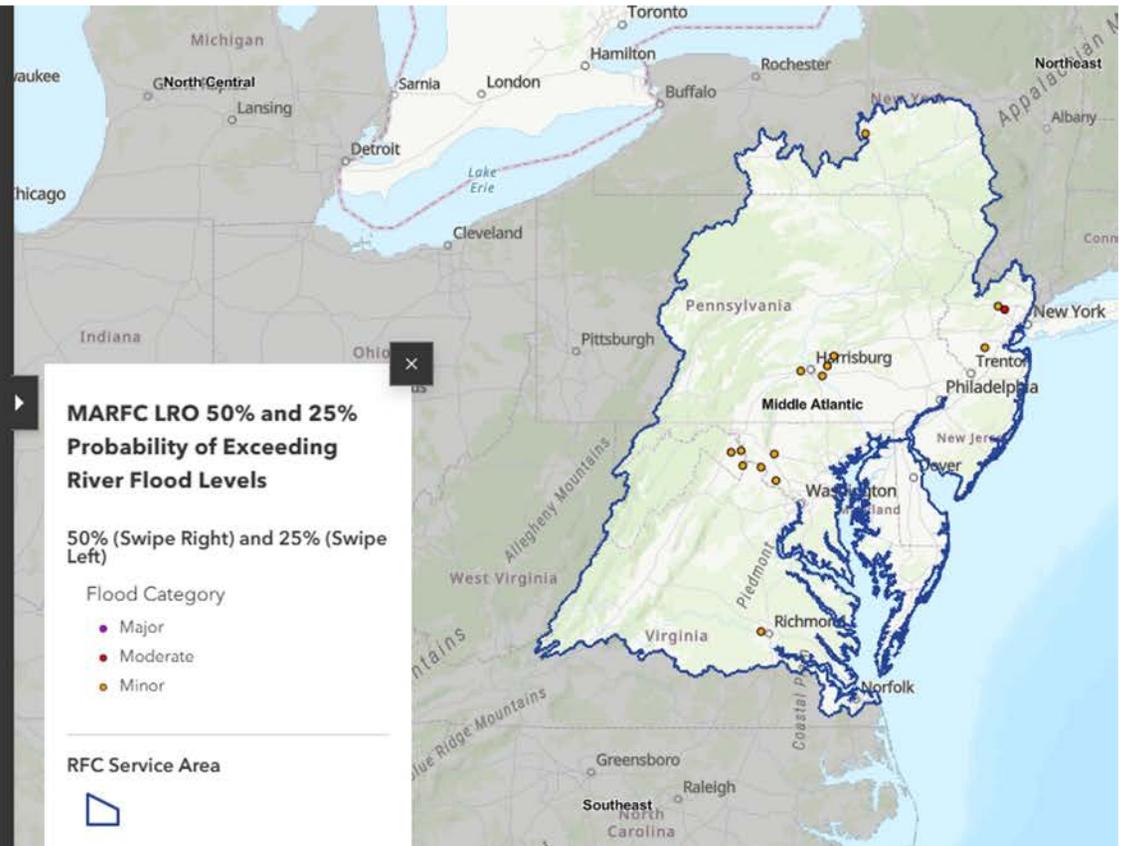




Long Range Flood Outlook: Mid-Atlantic

Mid-Atlantic

- Minor to isolated moderate flooding is possible into mid-March for portions of southern New York and northern New Jersey as any rainfall may combine with any diminishing snowpack that remains across the region.
- By the end of March, little to no snowpack is expected to remain across the Mid-Atlantic region which will reduce the potential for any river flooding caused by spring snowmelt.
- Dry conditions over the region will help reduce the potential flooding for the remainder of the spring, however heavy rainfall at any time can lead to flooding.

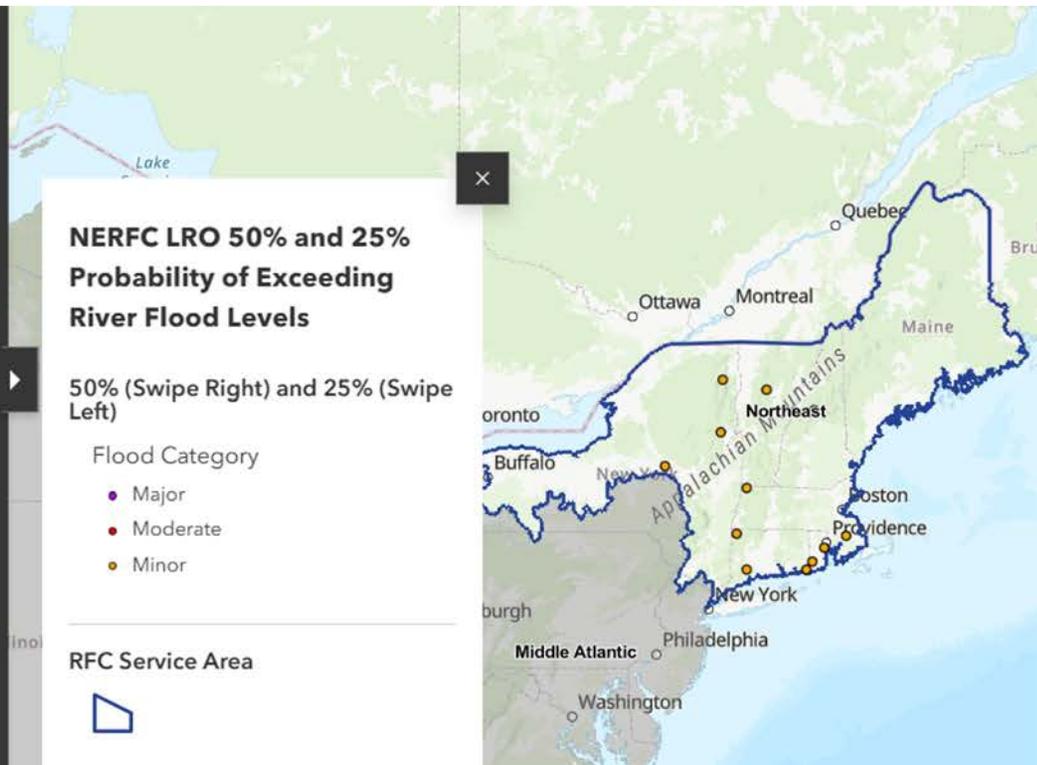




Long Range Flood Outlook: Northeast

Northeast

- Isolated minor flooding is possible through the remainder of March for portions of New York, Vermont, and southern New England.
- After mid-March, the existing snowpack will have melted off. This will end the snowmelt related flood risk moving into the spring.
- Spring flooding in the Northeast is usually driven by a combination of rainfall, snowmelt, and ice jamming on rivers.





Summary

Key Messages

- Recent active weather pattern is likely to continue, but the Northeast/Mid-Atlantic region is still experiencing longer-term precipitation deficits.
- Average to below average river flood risk this Spring for our area.





Harmful Algae Blooms

What are HABs?

- Occur when algae (simple photosynthetic organisms that live in sea & freshwater) grow out of control while producing toxic or harmful effects on people, fish, shellfish, marine mammals, and birds.
- Blooms of toxic dinoflagellates
 - Dinoflagellates - microscopic algae
 - Existed before dinosaurs
 - Types common to the Northeast:
 - **Alexandrium Catenella**
 - *Margalefidinium polykrikoides*
 - *Pseudo-nitzschia*
- Also referred to as Red Tides:
 - Most blooms are luminescent
 - Rarely will a bloom be so concentrated that it produces a “redish” appearance.

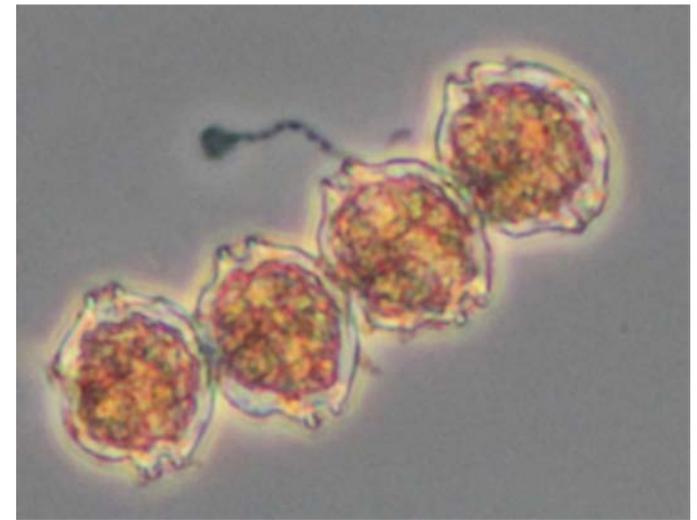


Photo credit: Brian Bill, NOAA





Harmful Algae Blooms

What are HABs Continued...

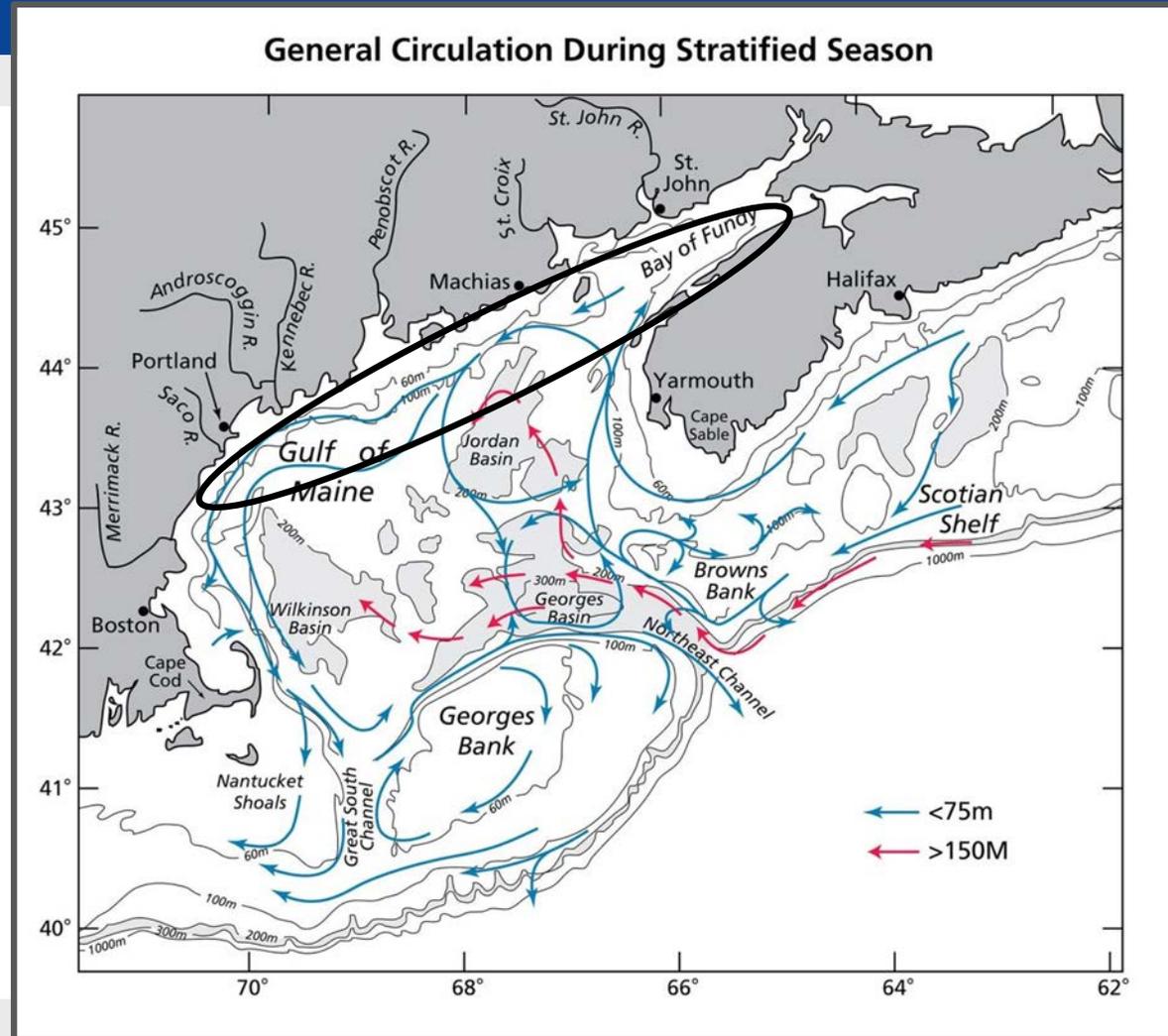
- Non-vegetative periods
 - Become encapsulated - “cyst stage”
 - Can be dormant on the ocean floor for several years
 - Woods Hole Oceanographic Institution (WHOI) maps cysts each fall to estimate the potential bloom magnitude next spring
- During germination - become re-suspended
 - Grow depending on water temperature and chemistry
 - Driven by oceanic processes which control concentration of dissolved inorganic nitrogen and silicate
- Where does NERFC fit in here?
 - Growth/spread driven by rivers emptying into the Gulf of Maine and surface winds - east/northeast wind favors a transport from eastern Maine to the MA coastline





Coastal Currents

- Transport mechanism down the coast is the coastal current
- Typically, the current splits in early spring where $\frac{2}{3}$ of current goes east and $\frac{1}{3}$ moves down the coast
- Illustration on right by Jack Cook, Woods Hole Oceanographic Institution





What do they cause?

- Paralytic Shellfish Poisoning - PSP
 - Shellfish digest the algae
 - Biotoxin is retained in the shellfish tissue
 - Human consumption of toxic tissue can result in serious illness or death
- Shellfish types include:
 - Blue mussels, carnivorous snails, conch, ocean quahogs, razor clams, sea scallops, soft shell clams, surf clams and moon snails

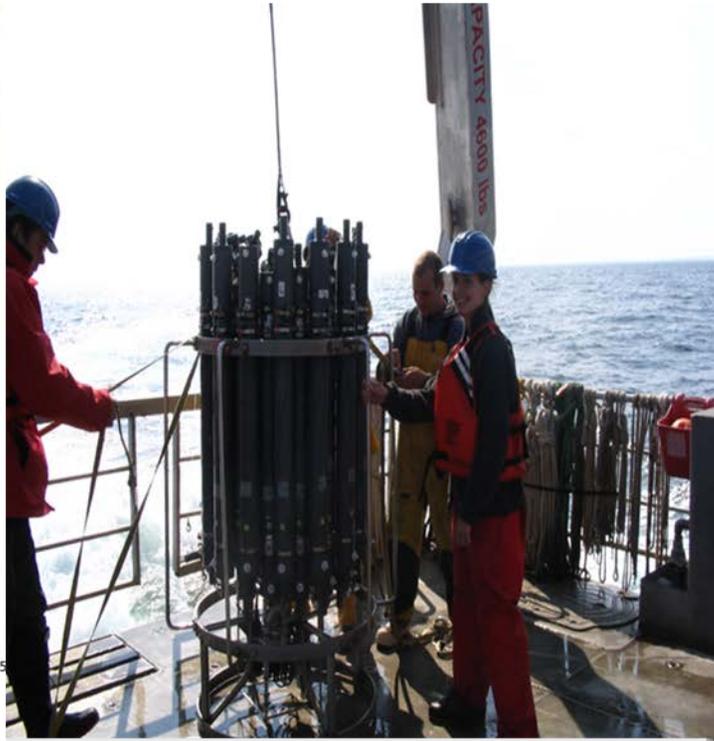
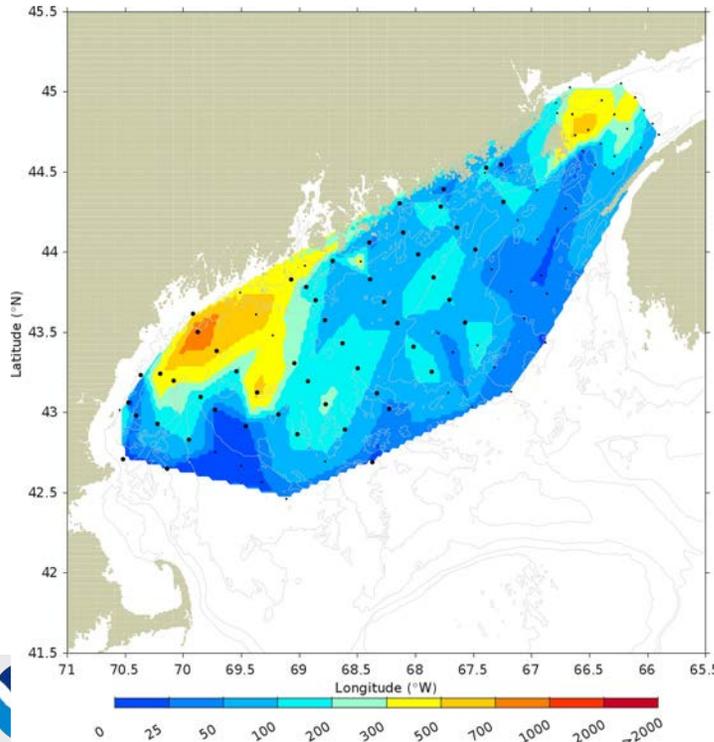




Monitoring & Detection

- States do shellfish sampling
- WHOI does offshore measuring

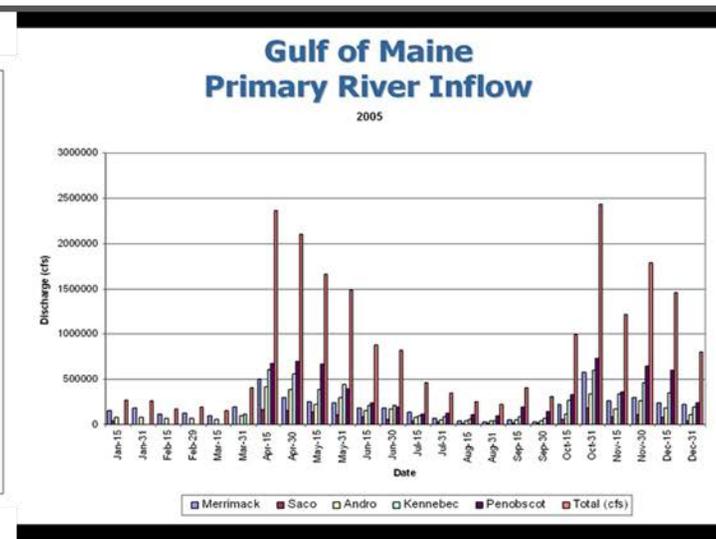
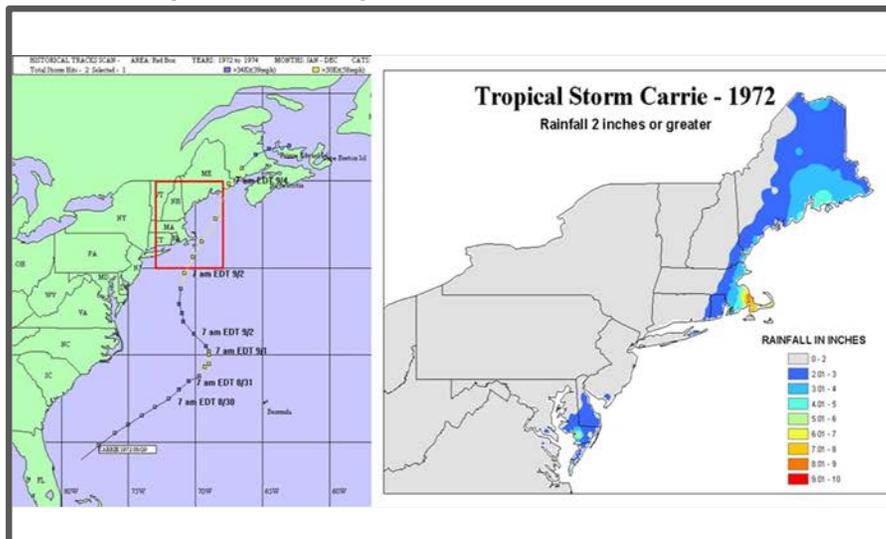
Abundance for top 1 cm sediment layer in Oct 2024





Where NERFC fits in...

- Weather and Water Connection
 - 1972 - Heavy rains associated with Tropical Storm Carrie and her slow movement induced strong northeast winds
 - 2005 - Significant freshwater inflow during May rain/Maine snowmelt - accompanied by consecutive nor'easters





Where NERFC fits in continued....

- Go to:
 - weather.gov/nerfc -> Seasonal Interest -> Harmful Algae Bloom

NWS Northeast River Forecast Center

Weather.gov > Northeast RFC

River Observations and Forecasts Weather Observations and Forecasts Water Supply Climate and History **Seasonal Interest** Additional Info

Notice: The 2026 National Hydrologic Assessment has been released. Flood Inundation Mapping services are now available for 60% of the U.S. resources are available here.

Map

Layers

River Gauge

CATEGORIES	OBSERVATION	FORECAST
Major Flood	0	0
Moderate Flood	0	0
Minor Flood	0	6
Action	4	15
No Flood	329	168
Flood Category Not Defined	171	0
Low Water Threshold	0	0
Data Not Current	41	0
Out of Service	0	0

NERFC HAB Hydromet Outlook

Weather.gov > Northeast RFC > NERFC HAB Hydromet Outlook

River Observations and Forecasts Weather Observations and Forecasts Water Supply Climate and History Seasonal Interest Additional Info

NERFC Hydromet Outlook Page

Supporting Gulf of Maine HAB Monitoring & Forecasting

This hydromet outlook page has been developed in support of Harmful Algal Bloom (HAB) Monitoring and Forecasting Activities in the Gulf Of Maine. Weekly 2-week Outlooks are provided by NERFC from March through the end of June in support of these activities.

30 to 90 Day Precipitation Departures

Snow & Snow Water Streamflow Observations Streamflow Forecasts 7 Day Forecasts 2 Week Weather Outlook Latest HAB Outlook

Latest 30 Day Precipitation Departures from Normal

Latest 60 Day Precipitation Departures from Normal

Latest 90 Day Precipitation Departures from Normal



HAB Outlook

- NERFC creates a briefing every Tuesday in March through June.
- Situational Awareness briefing provides analysis on hydro-meteorological antecedent conditions and a 5 to 10 Day Outlook.
- Focus is for targeted monitoring in anticipation of hydromet conditions conducive to bloom productivity and movement toward the shoreline.



March 17, 2026

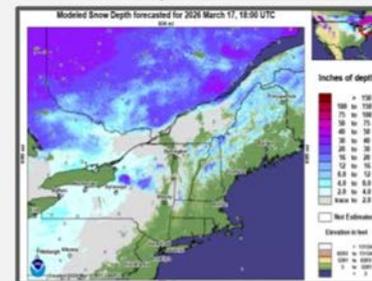
Hydromet Outlook



Northeast River Forecast Center

ACTIVE WEATHER PATTERN WITH LIMITED OPPORTUNITIES FOR EAST TO NORTHEAST WINDS INTO MID NEXT WEEK

STREAMFLOWS	<ul style="list-style-type: none"> ▪ River flows into the Gulf of ME are near to much above normal.
SNOW WATER	<ul style="list-style-type: none"> ▪ Snowpack largely eroded following recent rainfall. ▪ Where snowpack exists, water content is below normal. ▪ Only locations where there is significant snow water (6"+) are across the White Mountains in NH & ME. ▪ Snowpack is ripe from central to northeast ME. ▪ Could add to the snowpack of the higher terrain before next outlook.
PRECIPITATION DEPARTURES	<ul style="list-style-type: none"> ▪ Over the last 30 days precipitation is roughly near to 3 inches lower than normal.
SYNOPTIC OVERVIEW	<ul style="list-style-type: none"> ▪ Active pattern with rain opportunities for southeastern half of ME this weekend of 0.10-0.50". Generally snow across the NW portions of ME. ▪ Below normal temperatures into and through next week. ▪ Any opportunities for E to NE flow are limited and less 12 hrs over the next 10 days.
NEXT BRIEFING	<ul style="list-style-type: none"> ▪ March 24, 2026



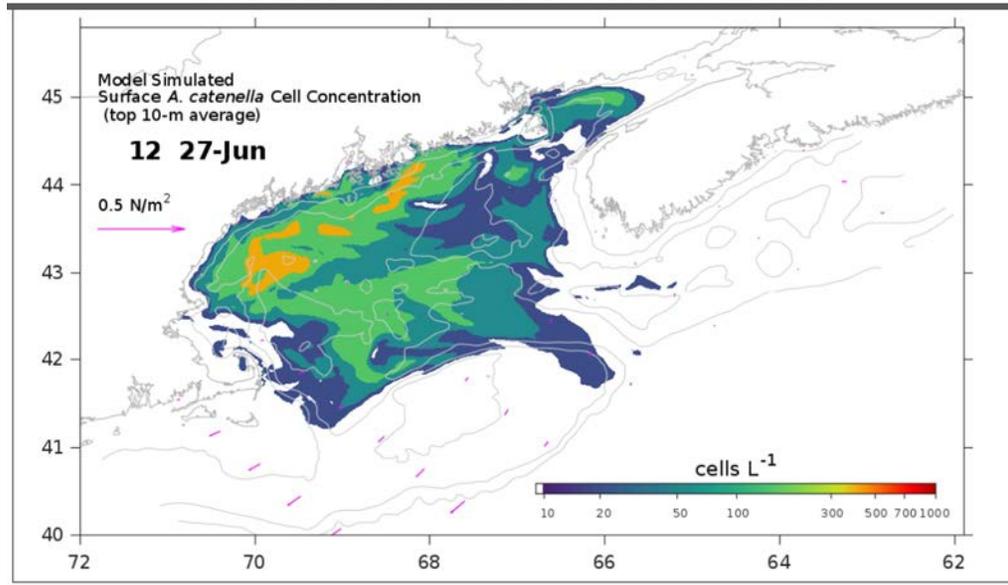
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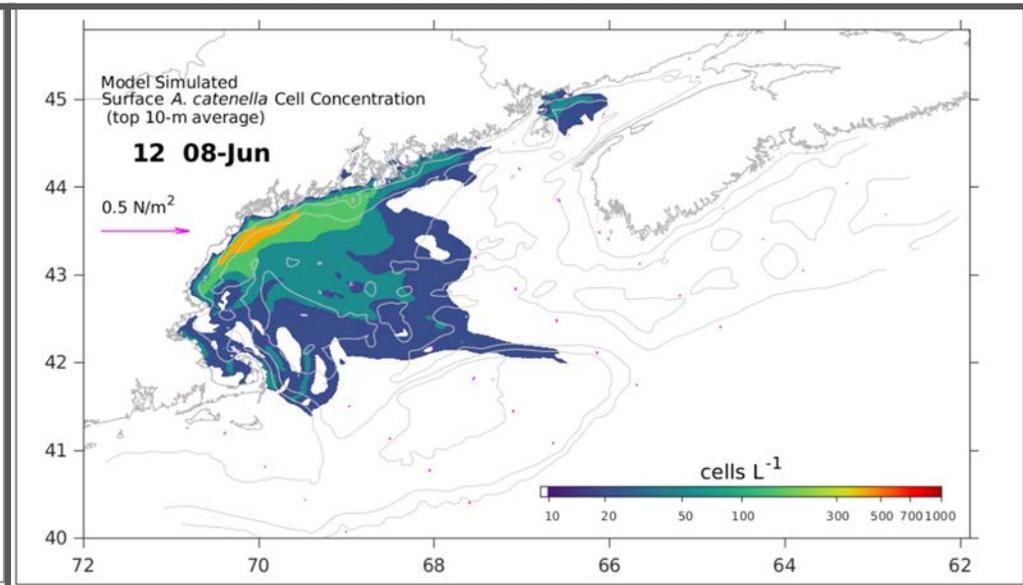


Model Scenarios

Model Simulation from 2025



Model Simulation from 2023



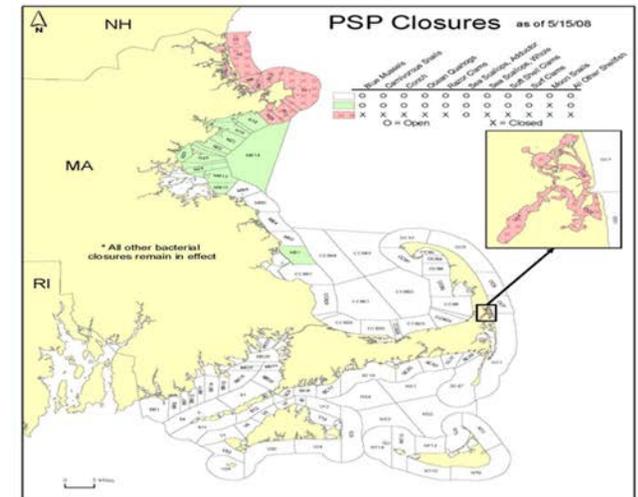
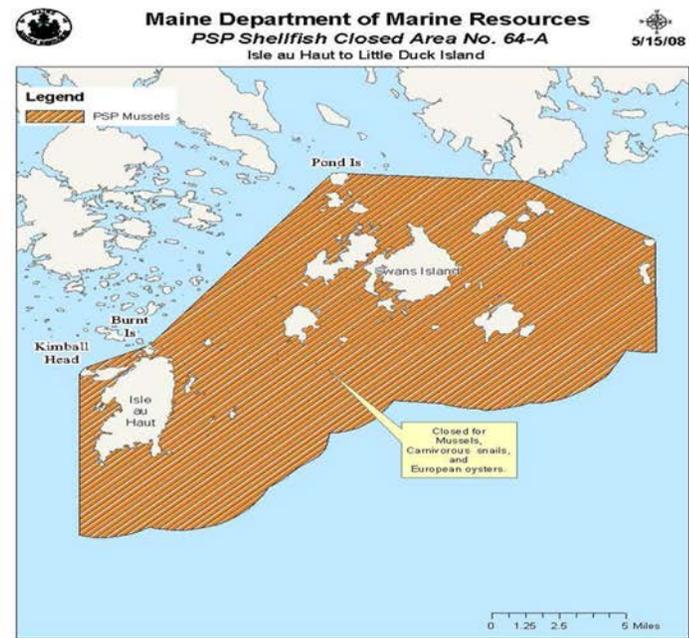
Experimental GOM Nowcast/Forecast Simulations
from National Centers For Coastal Ocean Science (NCCOS):

<https://coastalscience.noaa.gov/science-areas/habs/hab-forecasts/gulf-of-maine/nowcast-forecast-simulation/>



HAB Notifications

- State level closures nearshore
- Federal closures offshore





Summary

Key Messages

- HAB Outlook produced by NERFC on Tuesdays March through June to aid in situational awareness for factors that are conducive for bloom productivity
 - ◆ Increased runoff into the Gulf of Maine and prolonged periods of east to northeast winds

- National Centers For Coastal Ocean Science (NCCOS) produce surface cell concentration model for *A. Catenella*.

- HABs can cause toxic or harmful effects on people, fish, shellfish, marine mammals, and birds

