

Water Resources Coordinating Council

Tuesday, April 1, 2025

Meeting Notes

Call to Order and Virtual Meeting Logistics

The meeting was called to order at 1:16 PM. A total of 22 members and other participants were in attendance or viewing virtually. A roster of members and their attendance is included in the meeting notes.

WRCC Agency Updates

NWS/NOAA- Jeff Zogg is unable to participate due to staffing shortages through federal transition. He did provide a briefing which was covered during the meeting and is attached to the meeting notes.

DOT (Solberg)- Working to wrap up newly obligated projects and navigating eligibility of projects in the midst of transition. Particular emphasis on bridge repairs this season, especially pertaining to flood repair work.

USGS (Nania)- Reiterated streamflow conditions are below normal. Doing high water mark analysis on 2024 summer floods in northwest Iowa, primarily near bridge sites. Available on USGS flood viewer. Will use data to update flood frequency. Continued work on multi-matrix study, paper presented to council in 2024 is nearing completion with final touches coming this spring.

USACE (Steele)- Rock Island district busy with transition. Hiring freeze and five positions short. DoD buyout offer forthcoming. Lots of people shifting within districts. Some emergency permitting underway and initial WOTUS input forthcoming. Nationwide permits expire in March 2026, which impact nearly 90% of projects subject to permits within USACE. Some initial work underway but concerns about finishing on time. In Midwest regional permits are being crafted to mirror nationwide permits as a contingency to keep work going. Reviewing RGP39 and going through comments as well.

EPA (Reed)- Transition situation is similar to other agencies. Grants to states are under review and some money is moving but most programs are on hold. Gulf hypoxia implementation letter has been issued to states as well, will result in updates to workplans.

IEDA (Geerts)- Continuing to work with IDALS on disaster recovery projects and green infrastructure projects. Awarded 2 5 wastewater and 3 water projects through CDBG last quarter. \$3.7 million in grants leveraging \$18 million in other funding.

HHS (Wickam)- Continuing to get toxicology capacity restored. Looking at contracting with University of Iowa for coverage.

ISU Extension (Stefanik)- Summer field days are being scheduled. ISUEO online calendar has more information. INRC proposals are due May 2.

UNI (Clayton)- Ribbon cutting for applied engineering facility just occurred. Please come and visit! Tallgrass Prairie Center is hosting an open house from 4-6 PM on June 20th. Their web site (<https://tallgrassprairiecenter.org/>) also has lots of resources that might be useful.

DNR (Schneiders)- EO10 process on water quality rules is being finalized; moving on to air quality rules next. Many federal grants in holding pattern. Unclear if responsibilities of federal agencies will be shifted to states. DNR/DOT/IDALS will coordinate input on WOTUS comments and reach out as needed. Supreme Court ruling in San Francisco case may impact combined sewer permitting going forward.

IDALS (Kozak)- IDALS transition impacts included freeze on AML funding which has lifted but uncertainty remains. Money through USDA is moving again after delays in payment. Impacts to field offices are largely contained to partner staff. Urban announcements will be coming in the next week or so. Soil and Water Conservation Week is April 28-May 2. IDALS will host several events including an AML field day in Mahaska County. Newly reformed State Soil Conservation and Water Quality Committee has met and is off to good start. Meetings will be held at least quarterly. Sec. Naig and staff also had the opportunity to visit a levee repair project in Pottawattamie County in late March.

Improving Native Species Establishment in Iowa's Abandoned Mine Land Reclamation Projects

Vince Sitzmann, IDALS and Justin Meissen, PhD., UNI Tallgrass Prairie Center, gave a presentation on a collaborative effort to optimize establish native plant species in abandoned mine land reclamation projects constructed through IDALS. A copy of the presentation is included with the meeting notes.

City of Ames Nutrient Reduction Strategy Projects Overview

Adam Schneiders, Iowa DNR, gave an overview of Nutrient Reduction Strategy point source efforts and introduced John Dunn with the City of Ames, who gave a presentation on the City's point source and nonpoint source efforts to participate in nutrient reduction activities. A copy of that presentation is included with the meeting notes.

Public Comments

There were no requests for public comment by attendees.

Adjournment

The meeting was adjourned at 2:53 PM. The next meeting will be held in mid-June, date to be determined. This meeting will occur entirely virtually as IDALS will be in the process of relocating from the Wallace Building to the Hoover Building.

	WRCC Representative	Position	Organization
<input checked="" type="checkbox"/>	1 Mike Naig	Secretary (WRCC Chair)	Iowa Department of Agriculture & Land Stewardship
<input type="checkbox"/>	2 Kim Reynolds	Governor	Governor's Office
<input type="checkbox"/>	Lillie Brady	Designee	Governor's Office
<input type="checkbox"/>	3 Kayla Lyon	Director	Iowa Department of Natural Resources
<input checked="" type="checkbox"/>	Adam Schneiders	Designee	Iowa Department of Natural Resources
<input checked="" type="checkbox"/>	4 Susan Kozak	Director	IDALS - Division of Soil Conservation & Water Quality
<input checked="" type="checkbox"/>	Jake Hansen	Designee	IDALS - Division of Soil Conservation & Water Quality
<input type="checkbox"/>	5 Kelly Garcia	Director	IA Department of Public Health
<input checked="" type="checkbox"/>	Tim Wickam	Designee	IA Department of Public Health
<input type="checkbox"/>	6 John Benson	Acting Director	Iowa Homeland Security & Emergency Management
<input type="checkbox"/>	Larry Giofreddi	Designee	Iowa Homeland Security & Emergency Management
<input type="checkbox"/>	7 Dan Robison	Dean	College of Agriculture and Life Sciences, ISU
<input checked="" type="checkbox"/>	Jamie Benning (Kay Stefanik)	Designee	College of Agriculture and Life Sciences, ISU
<input type="checkbox"/>	8 Edith Parker	Dean	College of Public Health, University of Iowa
<input type="checkbox"/>	Tom Peters	Designee	College of Public Health, University of Iowa
<input type="checkbox"/>	9 John Fritsch	Dean	College of Humanities, Arts and Sciences, UNI
<input checked="" type="checkbox"/>	Maureen Clayton	Designee	College of Humanities, Arts and Sciences, UNI
<input type="checkbox"/>	10 Scott Marler	Director	Iowa Department of Transportation
<input checked="" type="checkbox"/>	Marc Solberg	Designee	Iowa Department of Transportation
<input type="checkbox"/>	11 Debi Durham	Director	Iowa Economic Development Authority
<input checked="" type="checkbox"/>	Jeff Geerts	Designee	Iowa Economic Development Authority
<input type="checkbox"/>	12 Debi Durham	Executive Director	Iowa Finance Authority
<input type="checkbox"/>	Tony Toigo	Designee	Iowa Finance Authority
<input type="checkbox"/>	13 Alec Scranton	Dean	College of Engineering, University of Iowa
<input type="checkbox"/>	Larry Weber	Designee	College of Engineering, University of Iowa
<input checked="" type="checkbox"/>	14 Jon Nania	Director	USGS, Iowa-Illinois Water Science Center
<input type="checkbox"/>	Steve Kalkhoff	Designee	USGS, Iowa-Illinois Water Science Center
<input type="checkbox"/>	15 Jon Hubbert	State Conservationist	USDA, Natural Resources Conservation Service
<input type="checkbox"/>	Scott Cagle	Designee	USDA, Natural Resources Conservation Service
<input type="checkbox"/>	16 Vacant (Curt Goettsch)	State Executive Director	USDA, Farm Service Agency
<input type="checkbox"/>	17 Vacant	State Director	USDA, Rural Development
<input type="checkbox"/>	Kate Sand	Designee	USDA, Rural Development
<input type="checkbox"/>	18 Jim Macy	Regional Administrator	EPA-Region 7
<input checked="" type="checkbox"/>	Amanda Reed	Designee	EPA-Region 7
<input type="checkbox"/>	19 Colonel Jesse Curry	Rock Island District Commander	US Army Corps of Engineers Rock Island District
<input checked="" type="checkbox"/>	Abby Steele	Designee	US Army Corps of Engineers Rock Island District
<input type="checkbox"/>	Philip Brown	Designee	US Army Corps of Engineers
<input type="checkbox"/>	Jeff Zogg	Designee	National Weather Service



Iowa River and Weather Briefing

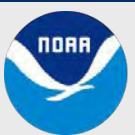
April 1, 2025
8:00 AM



National Weather Service

Des Moines, IA

April 1, 2025



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

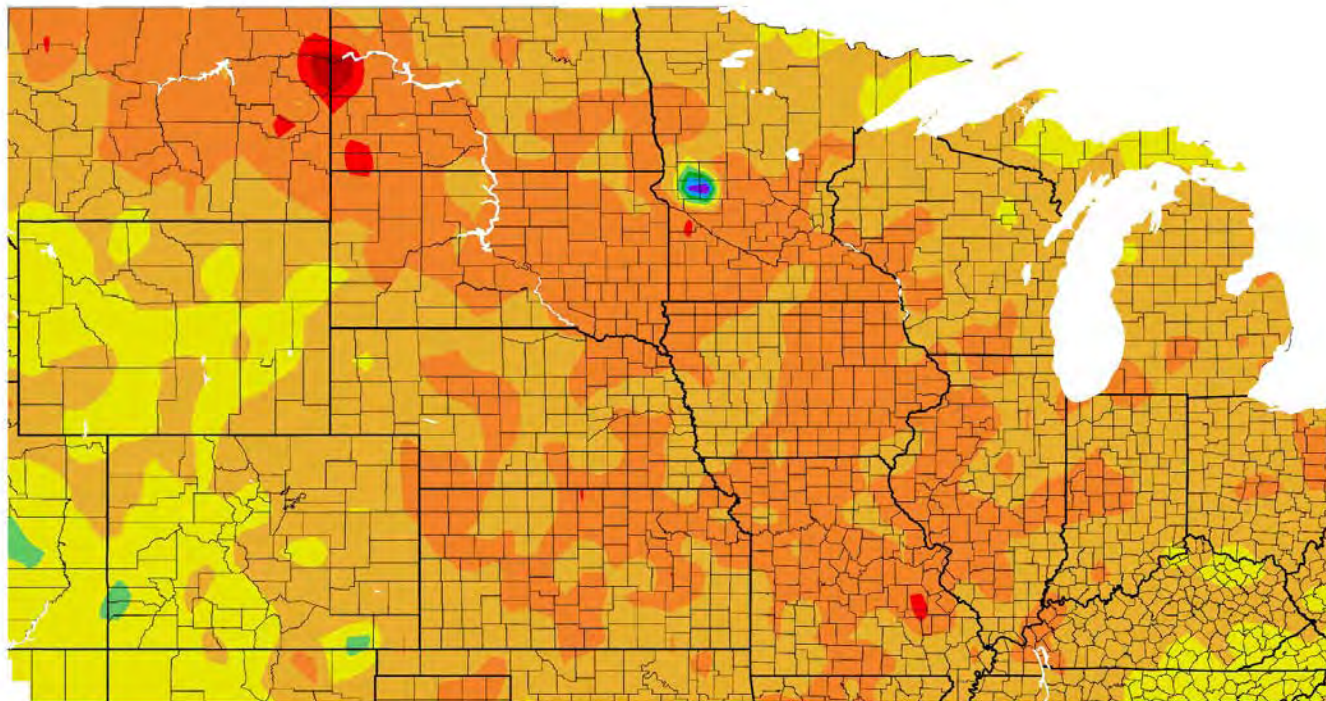
National Weather Service
Iowa



Observed Temp & Precip Departure

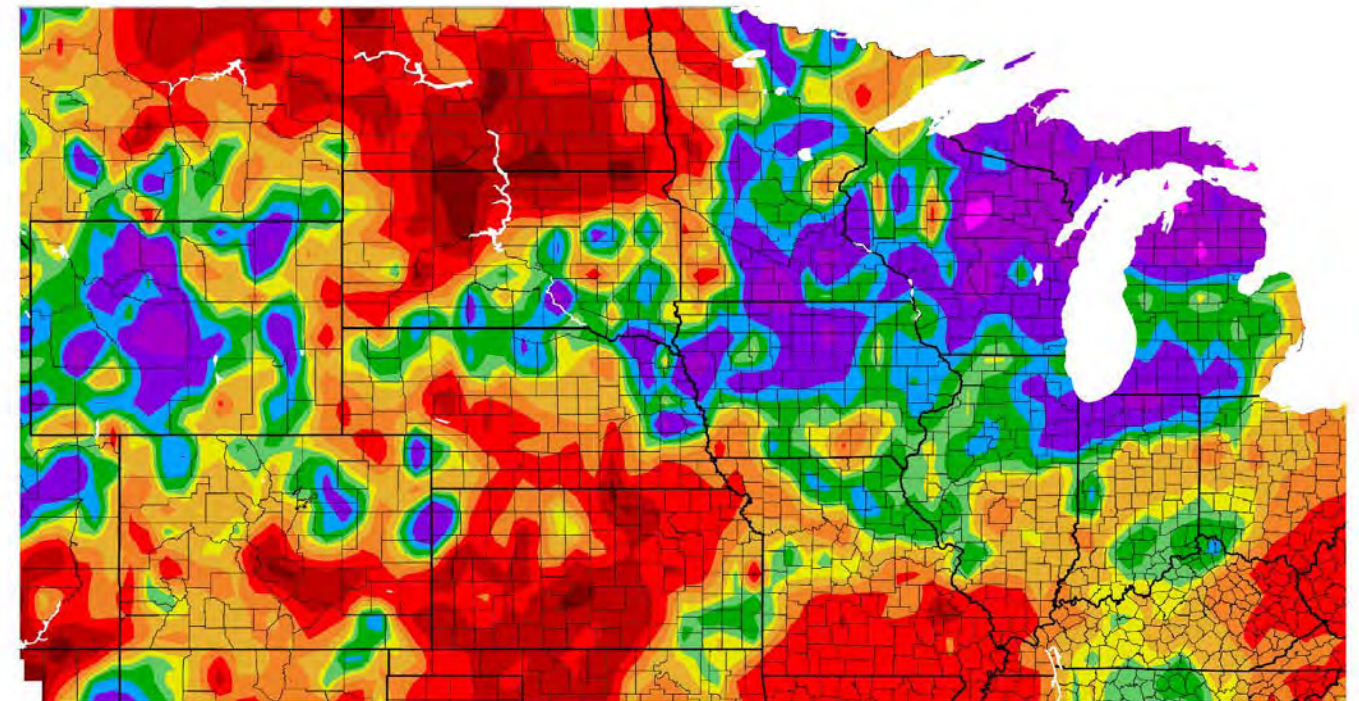
Departure from normal

Departure from Normal Temperature (F)
3/1/2025 – 3/30/2025



Generated 3/31/2025 at HPRCC using provisional data. NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
3/1/2025 – 3/30/2025



Generated 3/31/2025 at HPRCC using provisional data. NOAA Regional Climate Centers



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

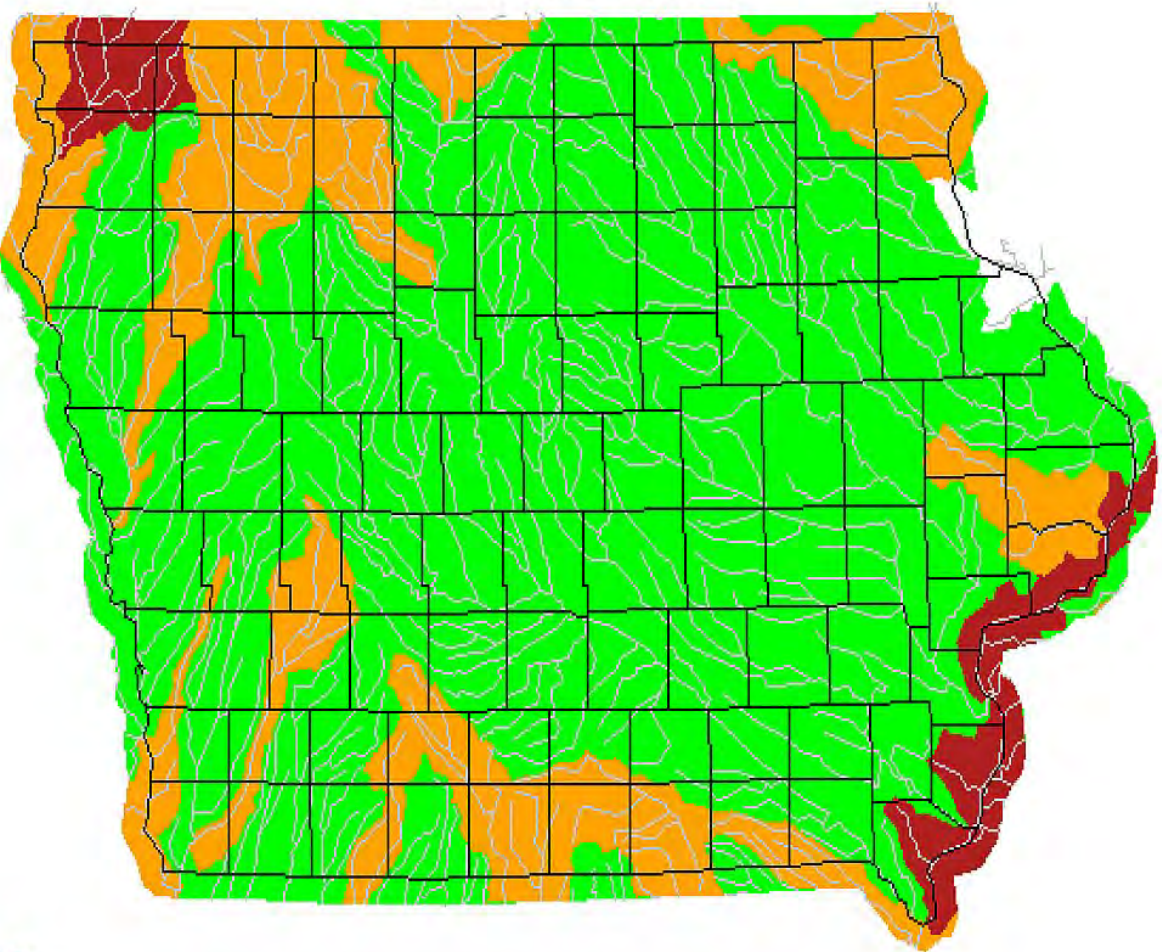
National Weather Service
Iowa



Current & Past Streamflows

Streamflow percentiles

Sunday, March 30, 2025

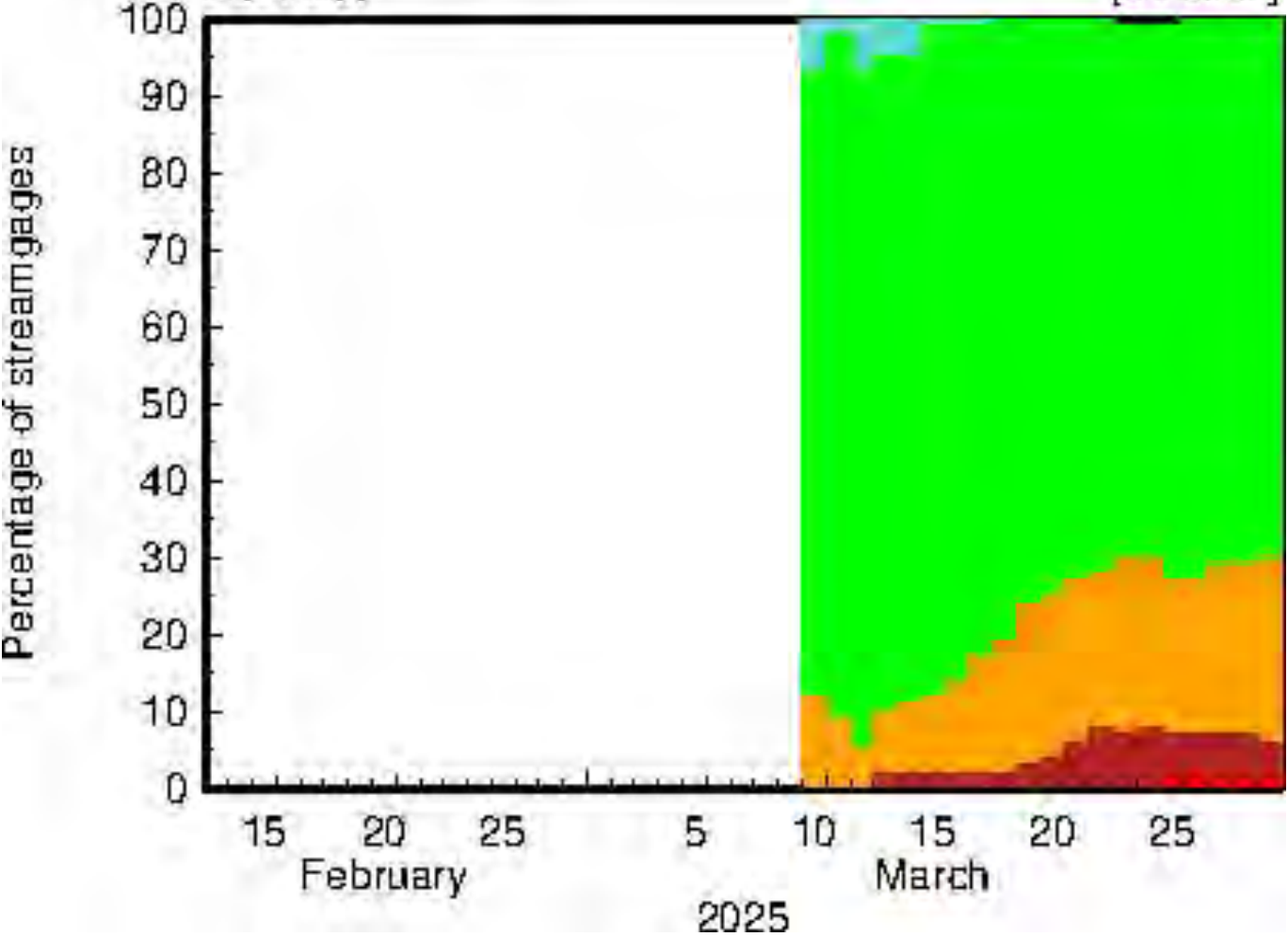


Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Last 45 Days

Iowa

[81 sites]

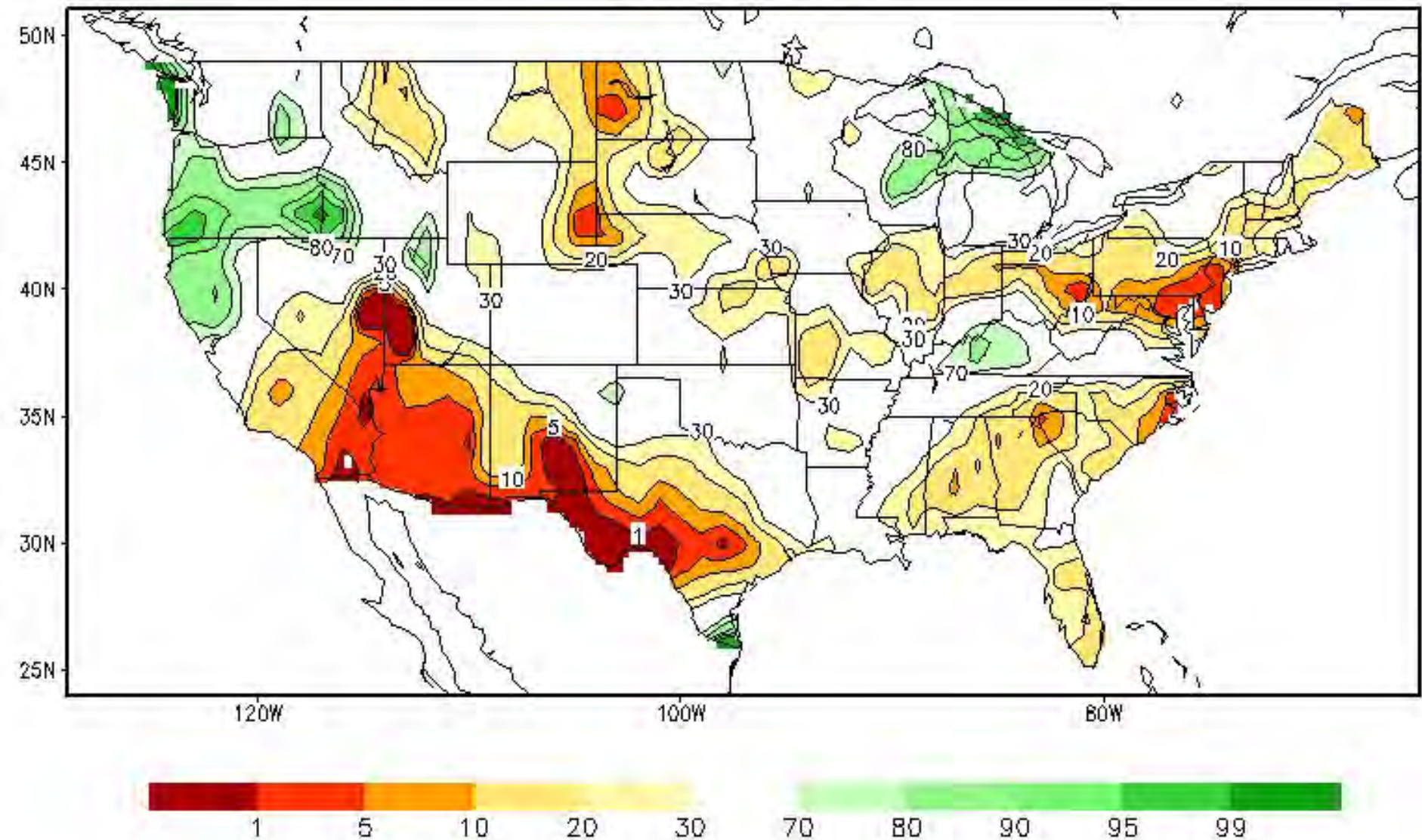




Current Soil Moisture

Wetness percentiles

Calculated Soil Moisture Ranking Percentile
MAR 30, 2025



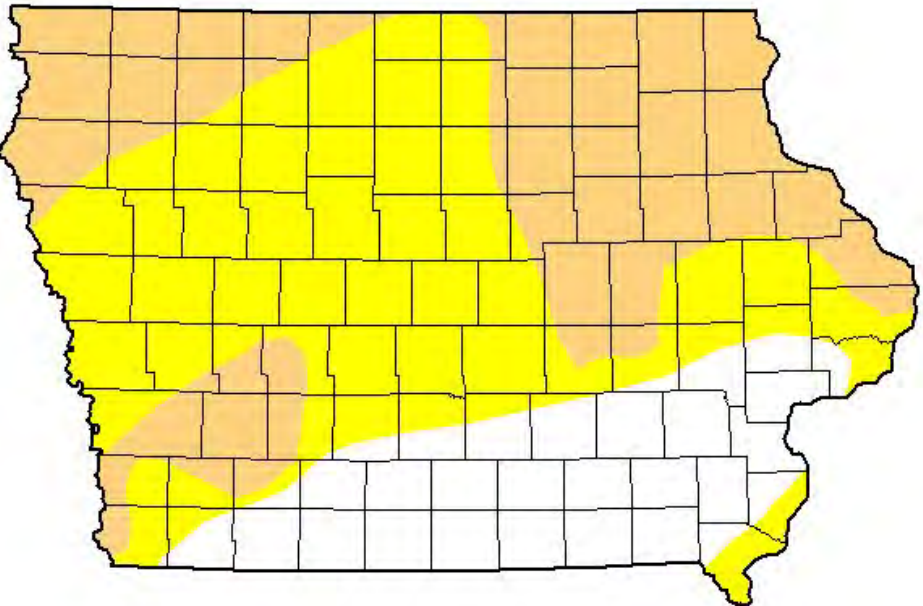
Near to below normal across Iowa





Current Drought Monitor

U.S. Drought Monitor Iowa



March 25, 2025

(Released Thursday, Mar. 27, 2025)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	20.98	79.02	34.53	0.00	0.00	0.00
Last Week 03-18-2025	20.93	79.07	56.42	1.17	0.00	0.00
3 Months Ago 12-24-2024	20.57	79.43	61.15	1.30	0.00	0.00
Start of Calendar Year 01-07-2025	20.41	79.59	57.13	1.30	0.00	0.00
Start of Water Year 10-01-2024	6.02	93.98	23.20	1.29	0.00	0.00
One Year Ago 03-26-2024	9.65	90.35	71.27	34.90	12.09	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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:

Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu

Category	Historically observed impacts
D0	Corn shows drought stress; soil is dry
D1	Soybeans abort pods; corn test weights are struggling Grasses are brown; more grass fires occur; burn bans are issued Pond levels decline
D2	Dryland corn has extremely low yields; commodity shortages are noted; livestock is stressed Fire danger is high Fewer mosquitoes are observed Surface water levels are low; algae blooms increase; voluntary water conservation is requested
D3	Pastures are dry; producers sell cattle; crops are tested for toxins; crops have pest infestation Seasonal allergies are worse; farmers are stressed about high feed prices Trees drop leaves; acorns are underdeveloped Warm water leads to fish kills; streambeds are low to dry
D4	Row crop yields and forage production have significant impacts Extreme measures are taken to conserve water Aquatic invertebrates in waterways increase



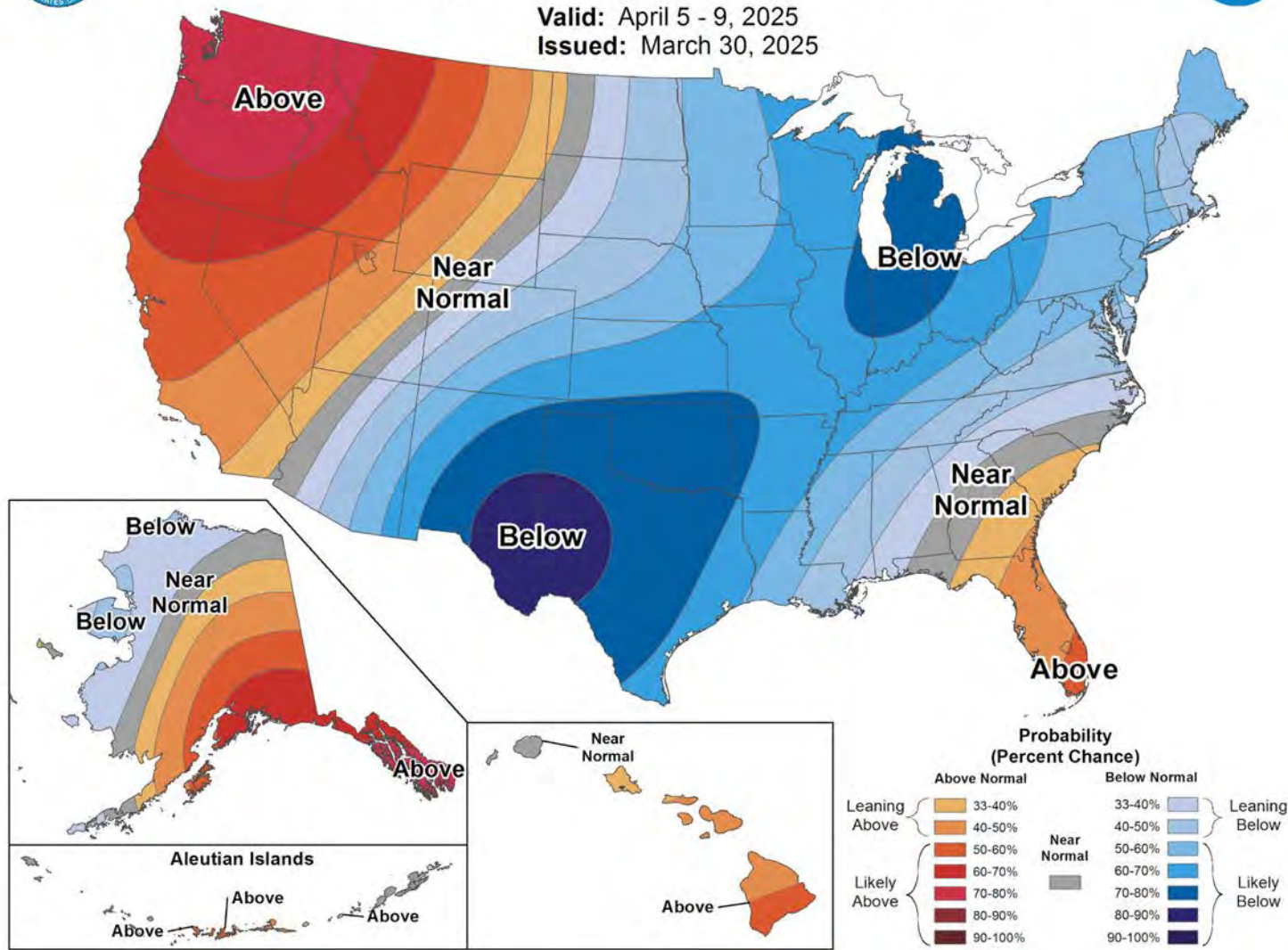


6-10 Day Temp & Precip Outlooks



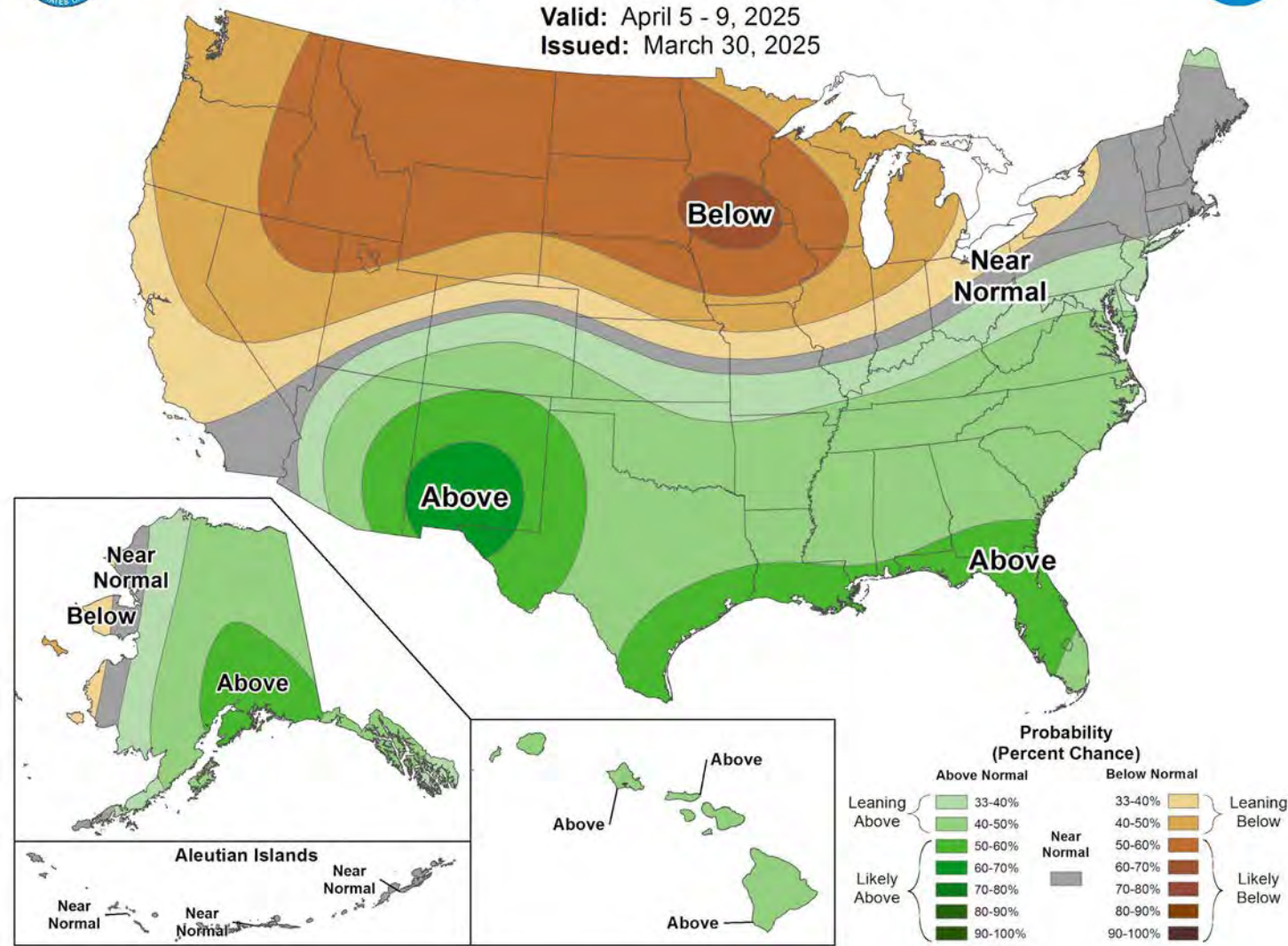
6-10 Day Temperature Outlook

Valid: April 5 - 9, 2025
Issued: March 30, 2025



6-10 Day Precipitation Outlook

Valid: April 5 - 9, 2025
Issued: March 30, 2025



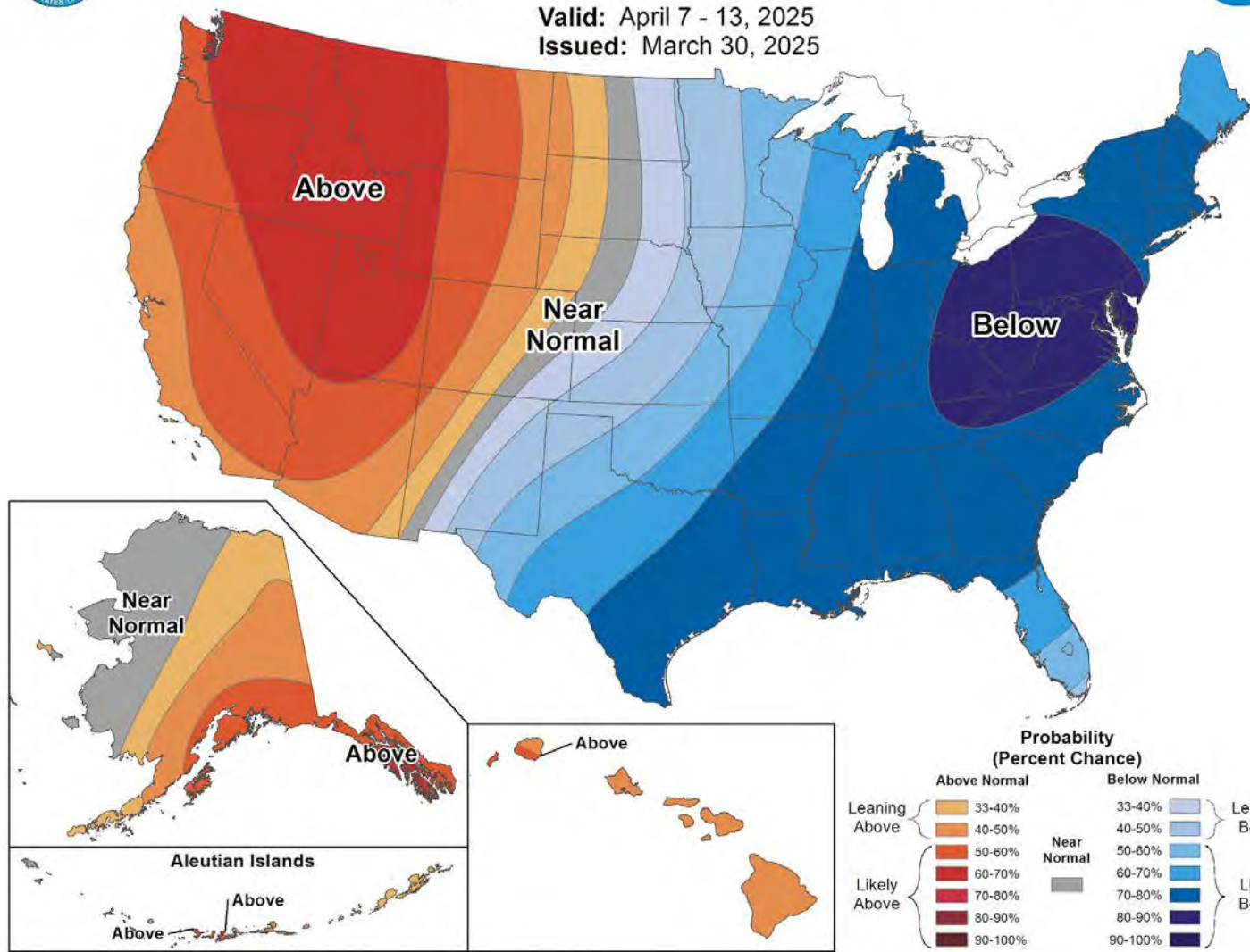


8-14 Day Temp & Precip Outlooks



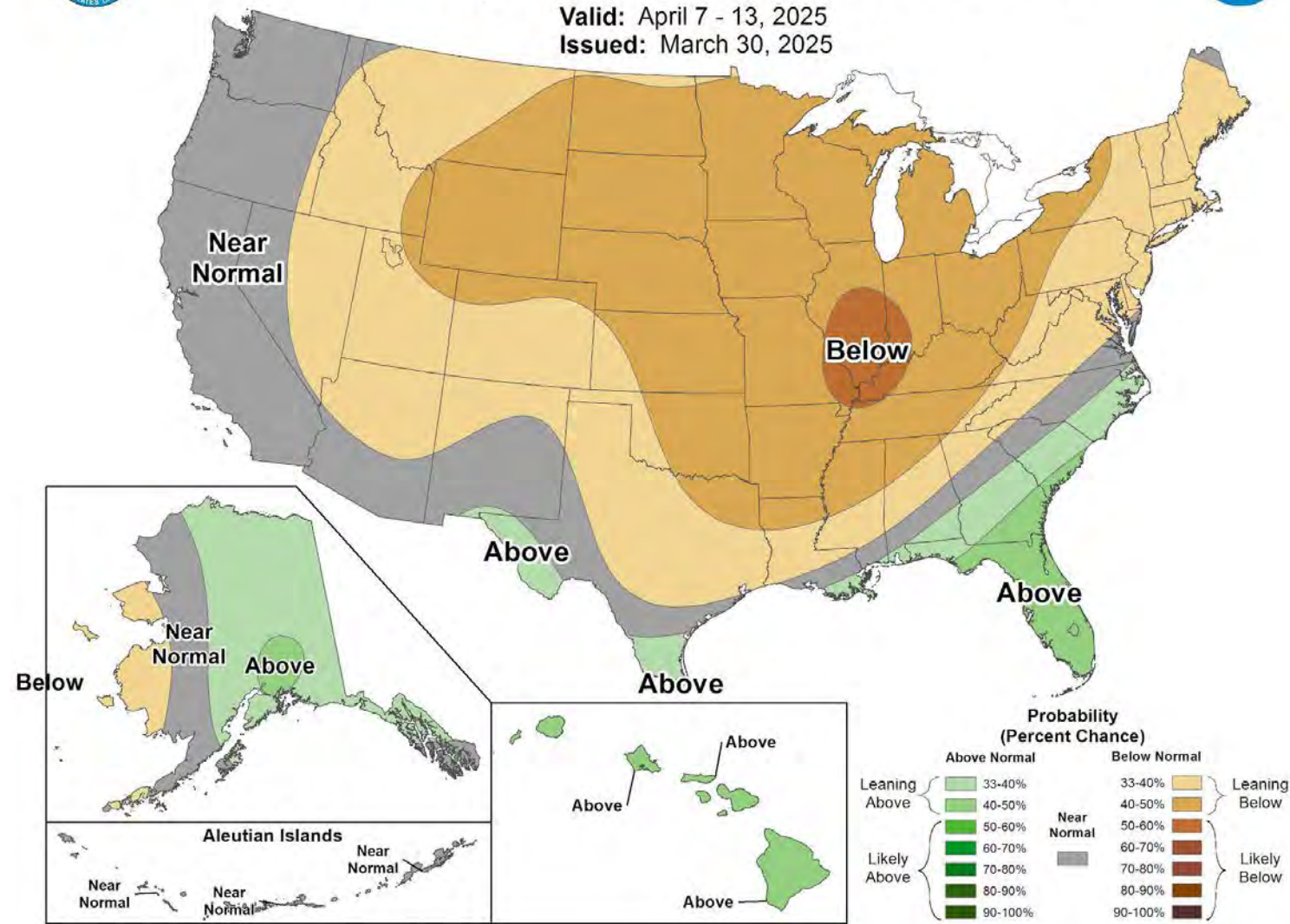
8-14 Day Temperature Outlook

Valid: April 7 - 13, 2025
Issued: March 30, 2025



8-14 Day Precipitation Outlook

Valid: April 7 - 13, 2025
Issued: March 30, 2025



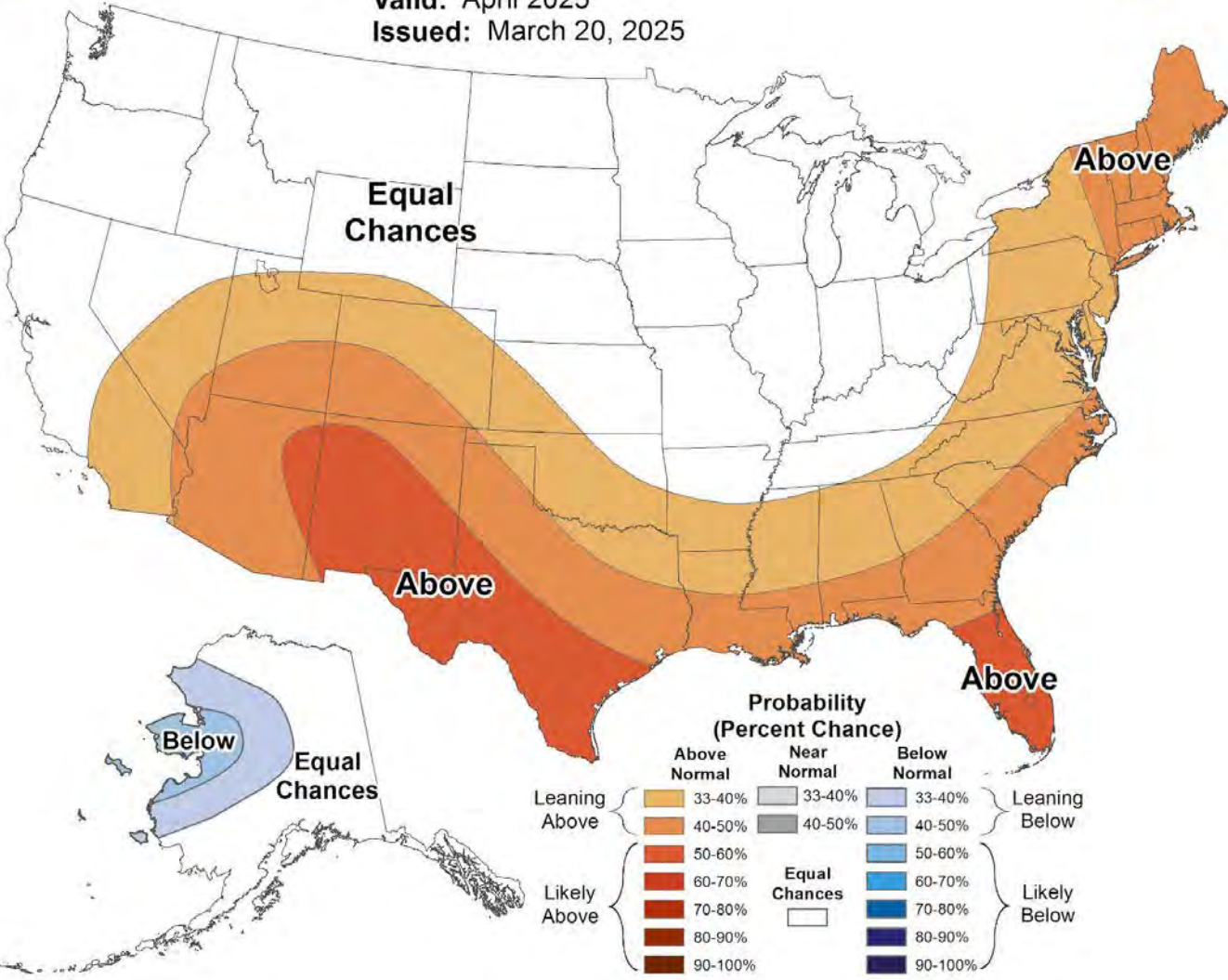


Monthly Temp & Precip Outlooks



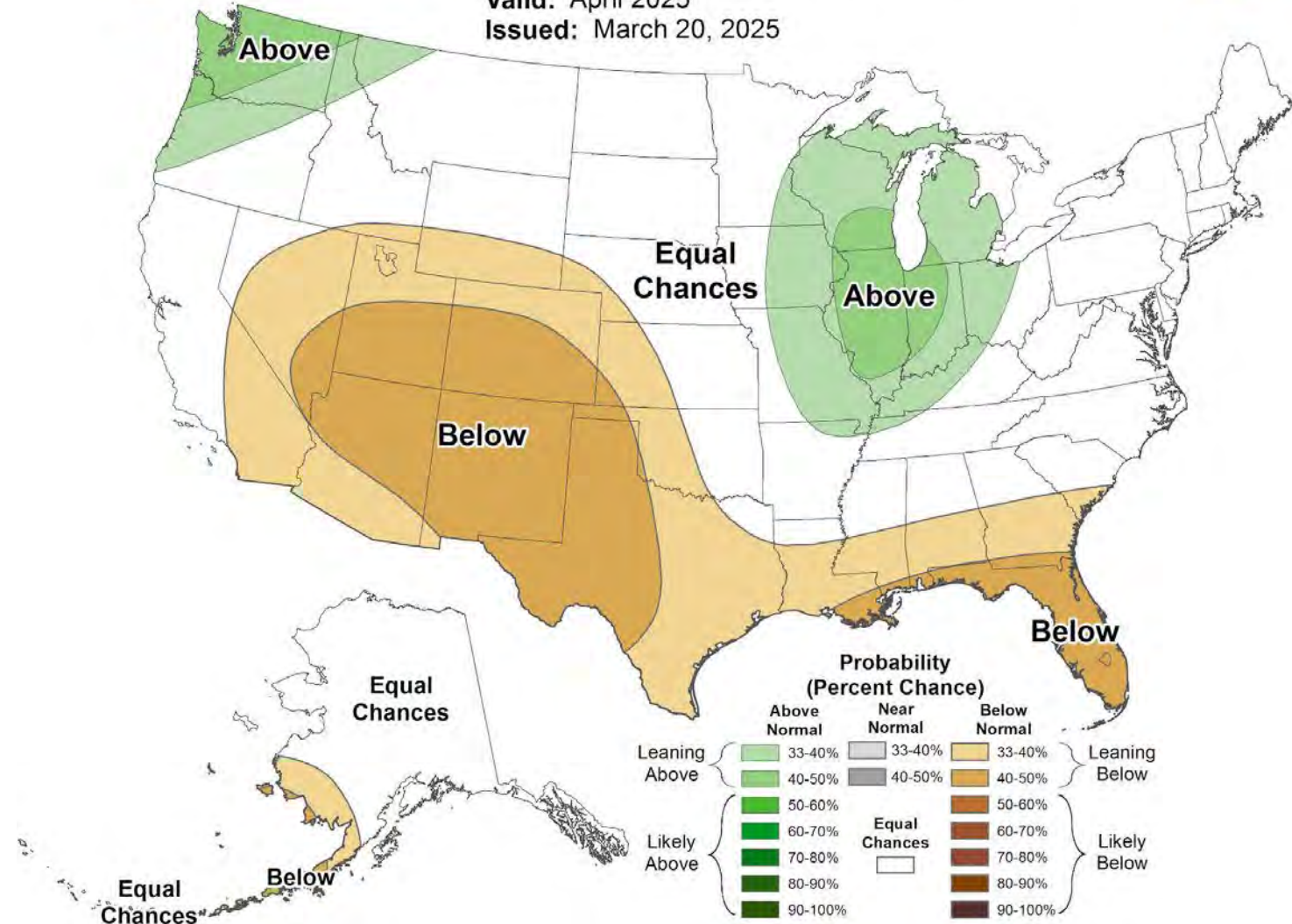
Monthly Temperature Outlook

Valid: April 2025
Issued: March 20, 2025



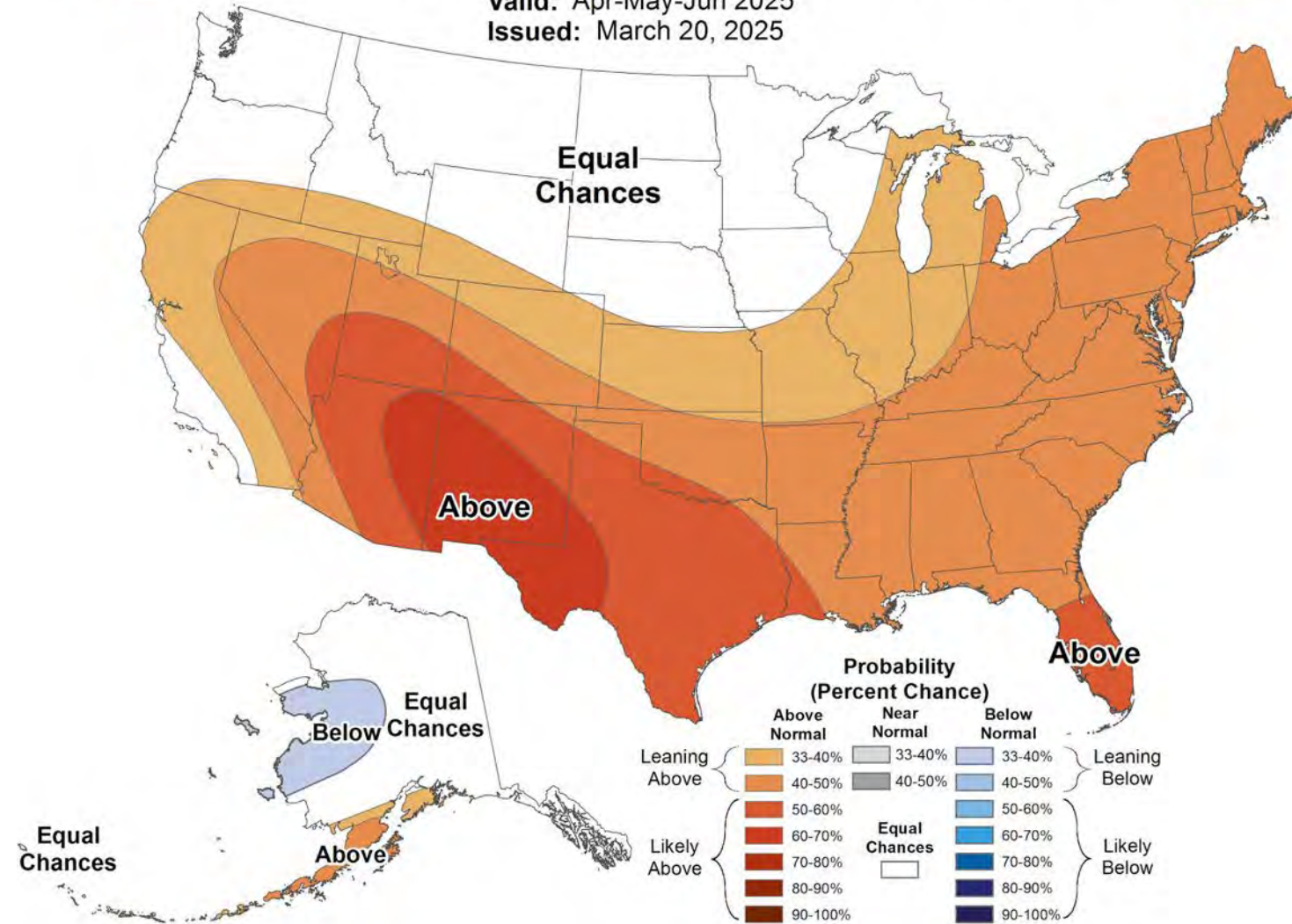
Monthly Precipitation Outlook

Valid: April 2025
Issued: March 20, 2025

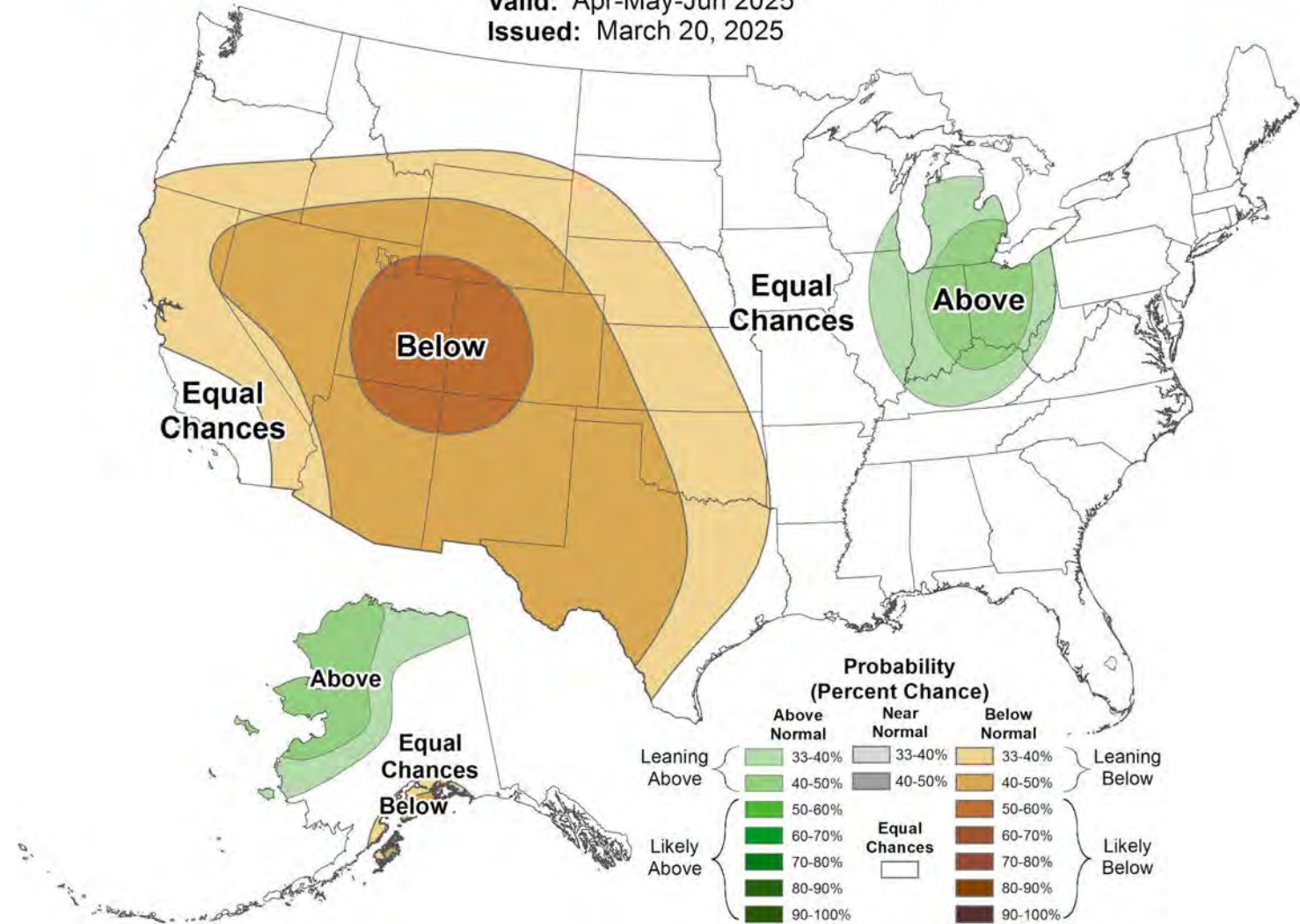




Valid: Apr-May-Jun 2025
Issued: March 20, 2025



Valid: Apr-May-Jun 2025
Issued: March 20, 2025

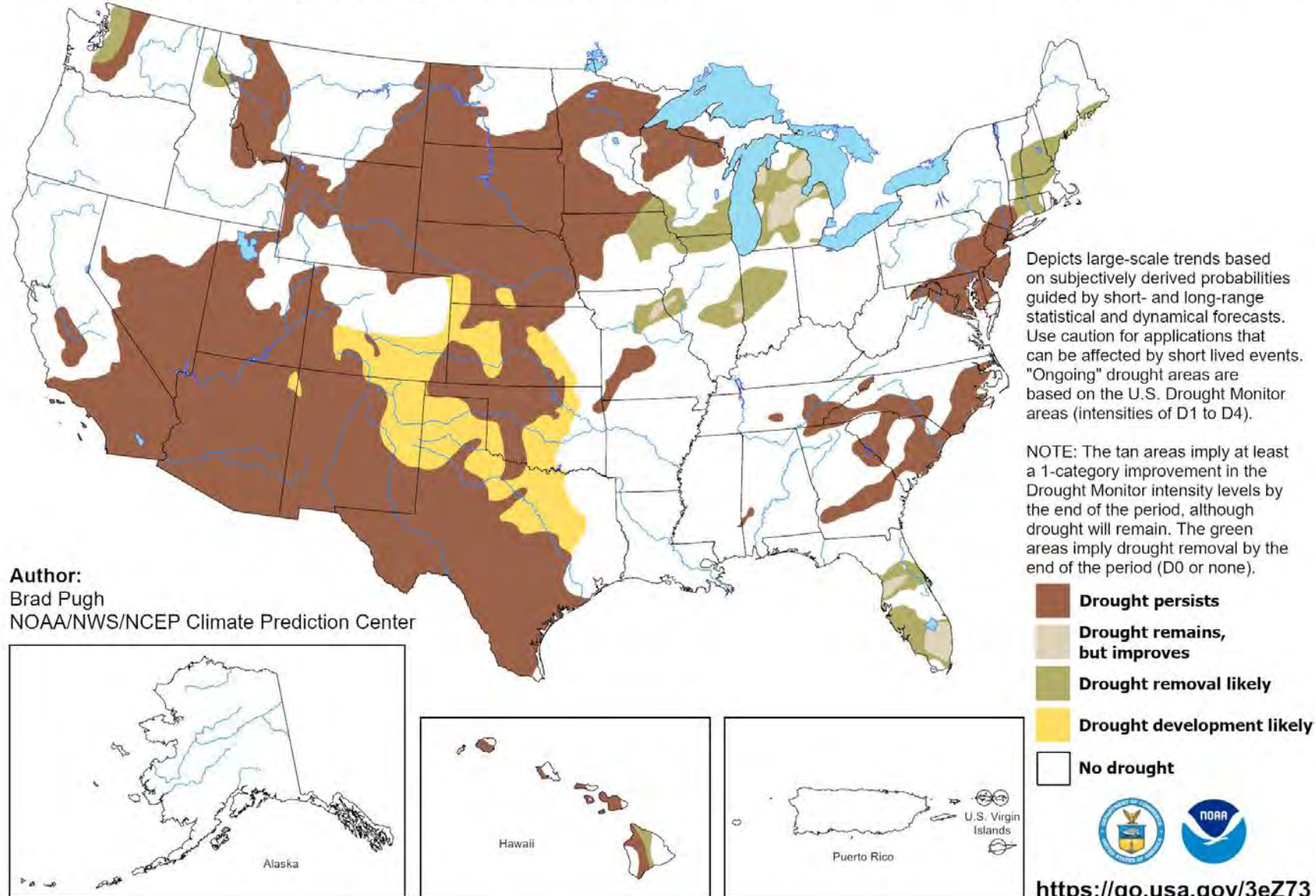




Seasonal Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for March 20 - June 30, 2025
Released March 20, 2025

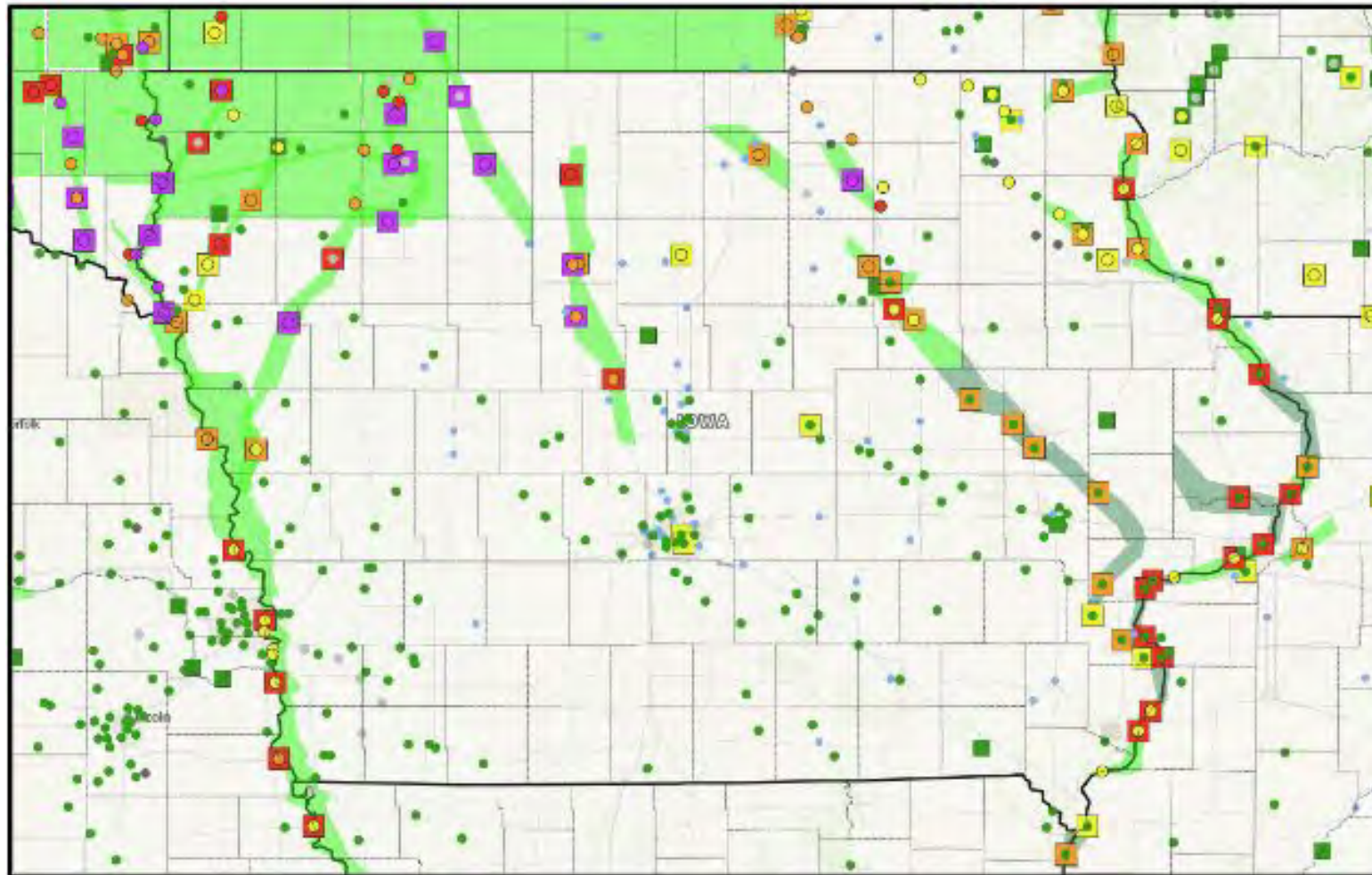




Latest Waterway Observations & Forecasts

National Water Prediction Service (NWPS)

- Visit weather.gov/desmoines/water.
- More information at weather.gov/desmoines/nwps_info.



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

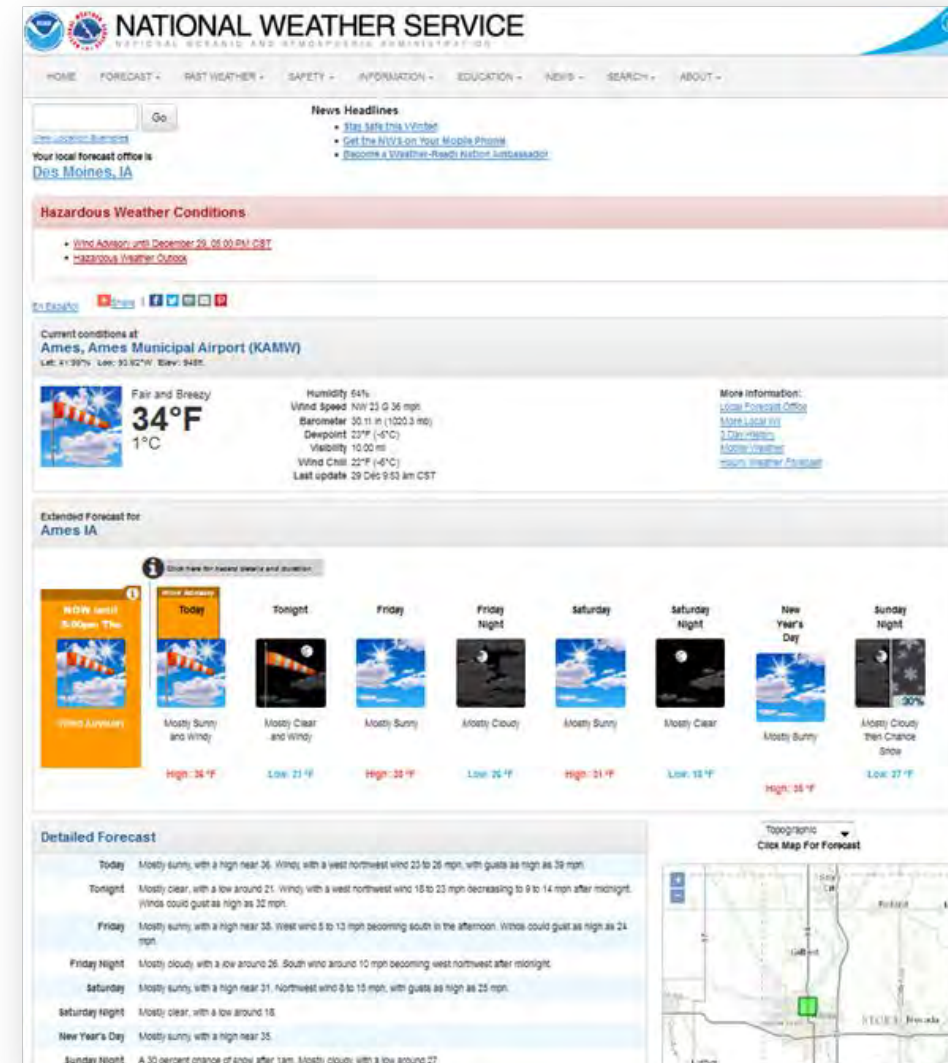
National Weather Service
Iowa



For the Most Recent Forecast

- For the most recent information for your area please visit <http://weather.gov/desmoines> and enter your location.

Bookmark this page and/or resultant URL for further updates. This will always be the latest information.





Additional NWS Information



Web: weather.gov/desmoines



Facebook: facebook.com/NWSDesMoines



Twitter/X: [@NWSDesMoines](https://twitter.com/NWSDesMoines)

Latest waterway observations & forecasts: weather.gov/desmoines/water

Past precipitation information/estimates: weather.gov/desmoines/pastprecip

Decision support information: weather.gov/dmx/dsscurren



Improving Native Species Establishment on Abandoned Mine Lands

Vince Sitzmann, Bureau Chief

Vince.sitzmann@iowaagriculture.gov

515-205-9014

Justin Meissen, PhD Conservation Biology, PI

Justin.Meissen@ini.edu

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**AGRICULTURE &
LAND STEWARDSHIP**



Mines and Minerals Bureau

License mineral mining in the state

Manage the Title V Coal Regulatory Program

Manage the Title IV Abandoned Mine Land Program



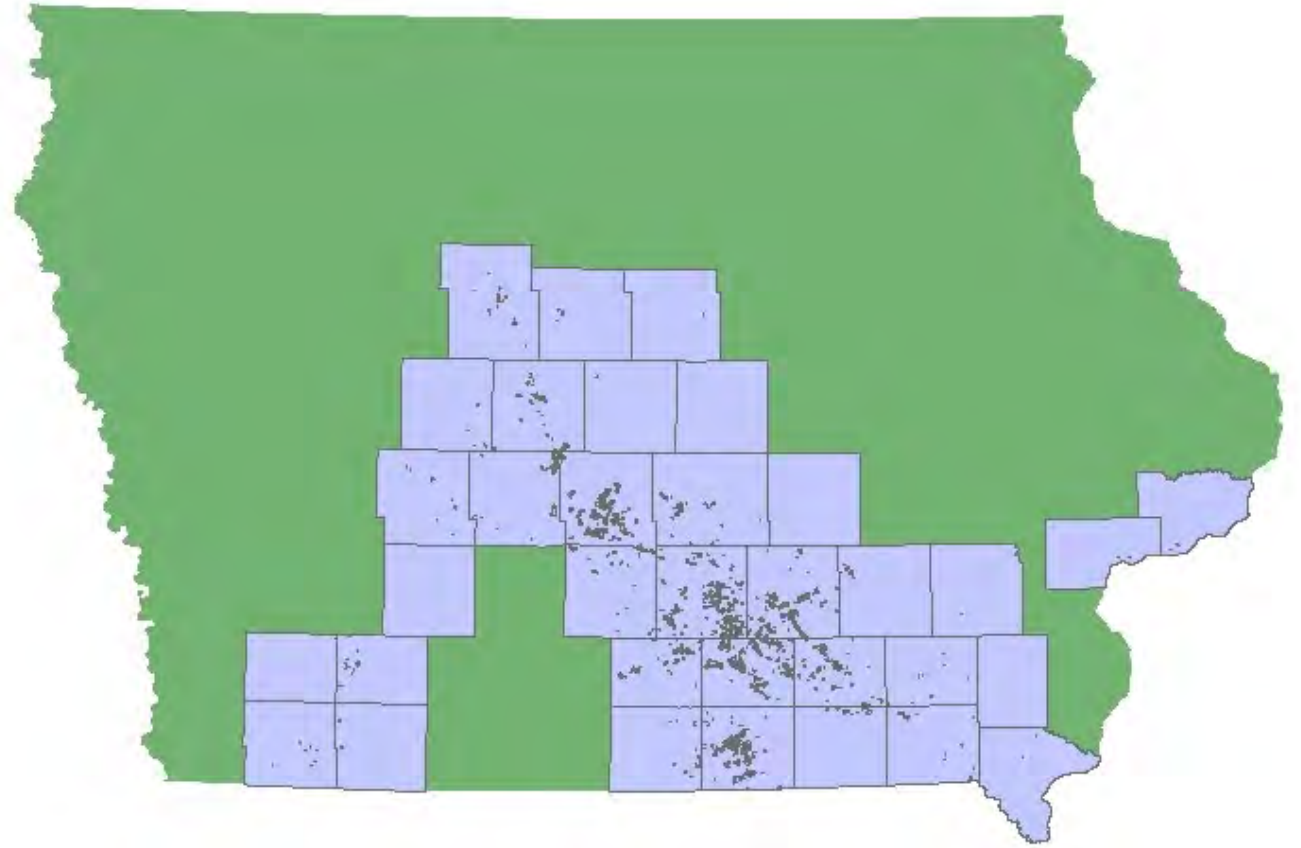
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History of Coal Mining in Iowa

- Pre-1870: Personal Use
- 1870-1920: Industry begins, rapid growth
- 1920-1940: Industry slows



History of Coal Mining in Iowa



Surface Mining



A strip mining operation near Oskaloosa, Iowa. Compare the size of the dragline with the trucks and people in the background.





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Hazardous features left behind create safety and Environmental concerns

Dangerous Highwalls

Dangerous Impoundments

Dangerous Nuisances



Dangerous Piles and embankments



Industrial and residential dumping areas



10.21.2015



Acid Mine Drainage



AML Program in Iowa

- Program established in 1983
- Mission is to permanently reclaim abandoned mine sites by abating hazards, reducing or eliminating adverse effects of past coal mining on the environment and restoring adversely affected waters and land to beneficial use.
- Approximately 300 surface AML sites in Iowa totaling 12,000 acres



Reclamation 101

- Mass grading projects that seek to mitigate hazardous features, stabilizing the site, and improving water quality.
- Begin by contacting landowners to gauge interest in reclamation
- Develop conceptual, preliminary, and final design
- Public bid letting
- Construction
- Post-reclamation management











03.04.2016



Bake Period



Seeding



Seeding Challenges

- Seeding is one of the most important components of a reclamation project
- Poor vegetation establishment can lead to erosion, sedimentation problems, and costly repair projects that cost time and money



What are the landowners goals for the project area

- Pasture/grazing
- Haying
- Wildlife habitat
- Multi-use area



Incorporating Native Species into Iowa Abandoned Mine Land Reclamation Projects

- Agreement with UNI -Tall Grass Prairie Center
 - Training
 - Native grass seeders (not all drills are created equal)
 - Post seeding management techniques and strategies
 - Post seeding vegetative survey
 - Identifying the most effective seed mixes and rates
 - Develop native seeding specifications and standards for the AML program







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LAND STEWARDSHIP**

Awards/Achievements

- Over 132 sites reclaimed
- Over 26 miles of dangerous highwalls remediated
- Over 2,000 acres of dangerous piles and embankments eliminated
- Six regional awards and two National Reclamation Project of the Year Awards



Partners

Iowa AML Partners:

Pathfinders RC&D

Office of Surface Mines, Reclamation & Enforcement (OSMRE)

Landowners

Soil and Water Conservation Districts

Natural Resources Conservation Service

County Engineers

IDNR District Foresters

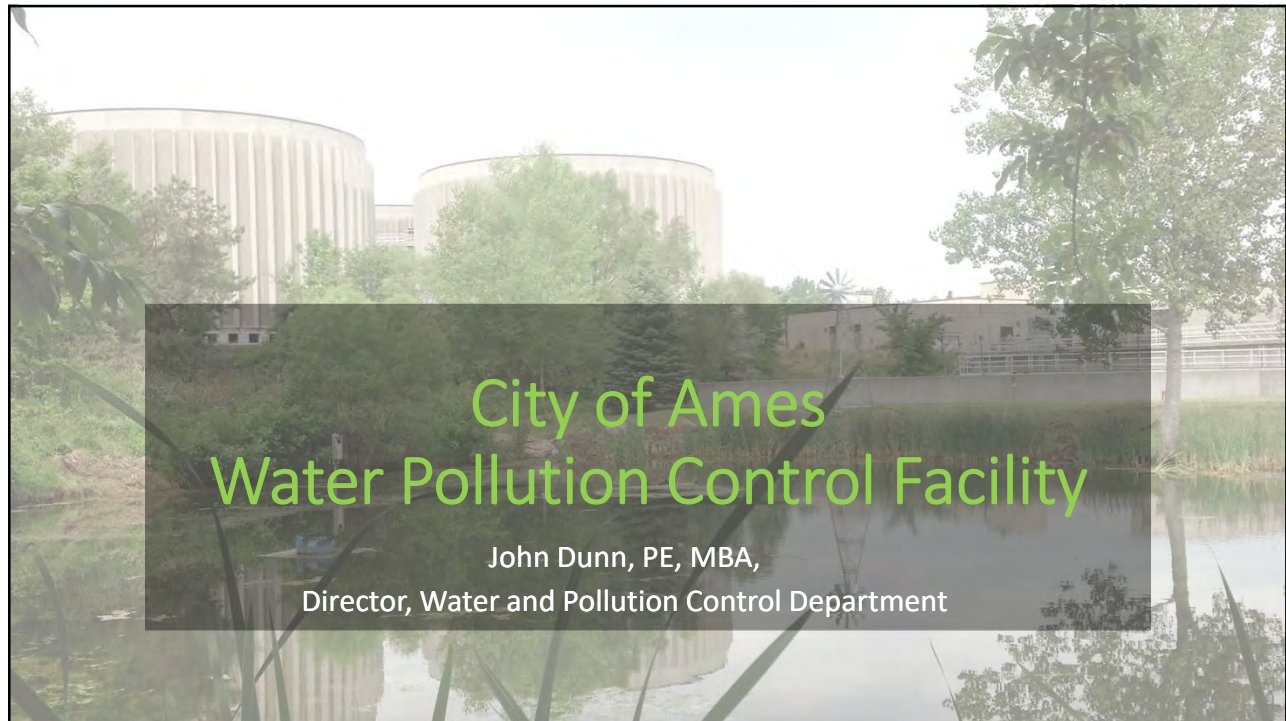


Resources

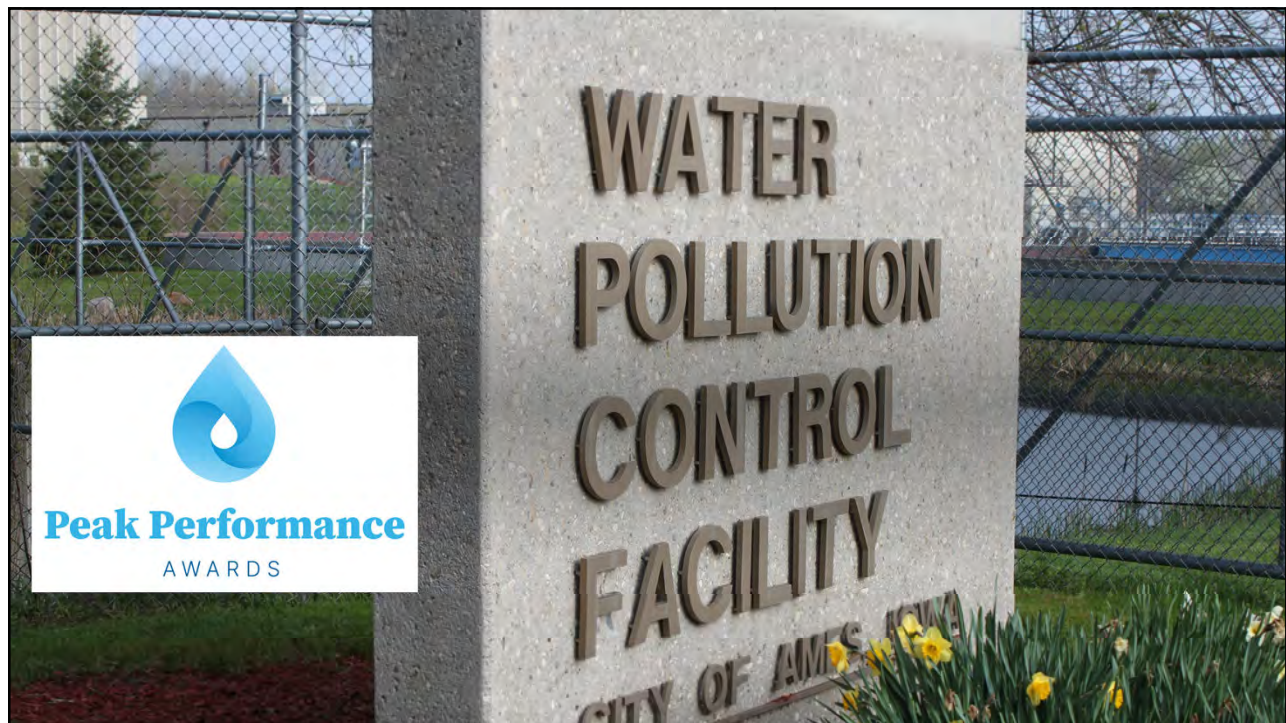
Outreach links and resources:

- Iowa Department of Agriculture & Land Stewardship - Mines and Minerals Bureau
- <https://iowaagriculture.gov/mines-and-minerals-bureau/abandoned-mine-land-reclamation>
- The Last Pony Mine:
- <https://www.youtube.com/watch?v=1WO79vsNAP0>
- Iowa Coal Mines:
- <https://programs.iowadnr.gov/maps//coalmines/>
- Historic aerial photo project:
- <https://programs.iowadnr.gov/maps//aerials/>





1



2

Treatment Data 2024

Parameter	Average Influent	NPDES Permit Limit	Average Effluent
Biochemical Oxygen Demand	206 mg/L	<20 mg/L	5 mg/L
Total Suspended Solids	221 mg/L	<30 mg/L	7 mg/L
Ammonia	28.5 mg/L	1 mg/L summer; 4 mg/L winter	0.29 mg/L
Dissolved Oxygen	N/A	>5 mg/L	9.4 mg/L

2024 Biosolids Data

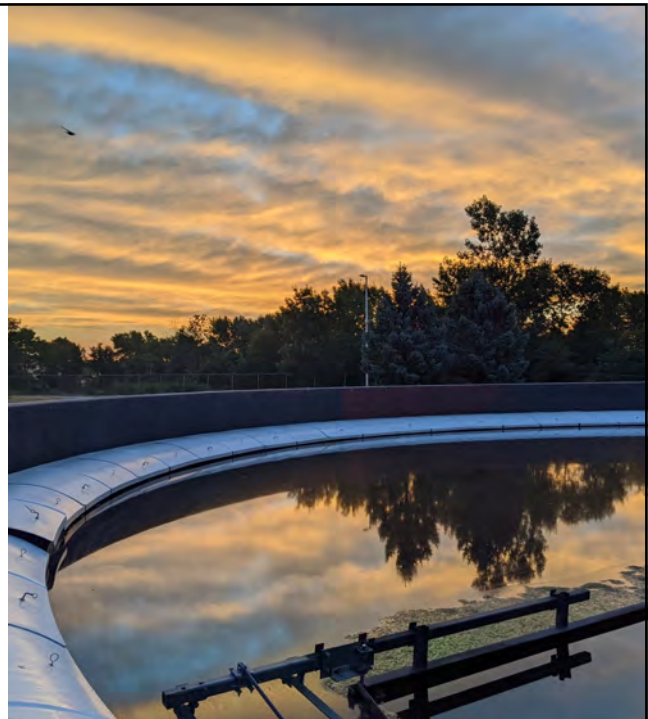
- 369.4 Dry Metric Tons Produced
- Applied to over 266 acres
- Provides Nearly 70% of fertilizer needs



3

Iowa NRS Goals

	Iowa NRS Goals for PS BNR	Ames Current Performance
Nitrogen	67% (or 10 mg/L)	36%
Phosphorus	75% (or 1 mg/L)	19%



4



5

Conclusions of Feasibility Study

- **Optimization was not cost-effective**
 - 6 options – ranged from \$4.9 to \$10.6 million (2018 \$’s)
 - Minimal TN reductions
 - Relied on trickling filters (another \$12 million)
- **Not practical to entirely offset the need for WPCF reductions.**
 - Land required would be prohibitively large.
- **A major treatment upgrade would be required**

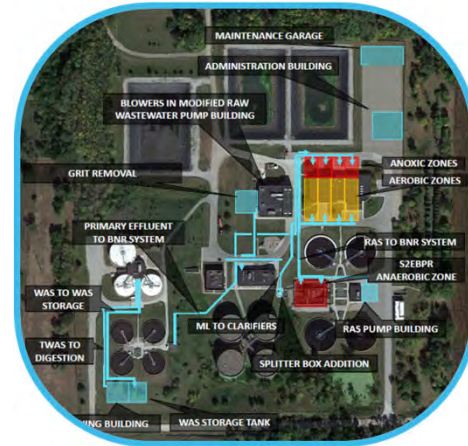


6

Two-Pronged Solution

- **Undertake Phased Construction of Technology Conversion at WPCF ("Inside the fence")**

- Two phases over next 15 years;
 - Phase 1: \$62.5 Million
 - Phase 2: \$70 million
- Replaces existing infrastructure based on anticipated remaining useful life
- Ultimately will meet goals of Iowa NRS (75% TP and 67% TN reductions)



7

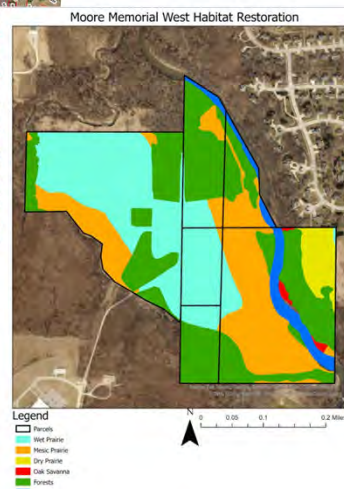
Two-Pronged Solution

- **Invest in Urban and Rural BMP's ("Outside the Fence")**

- \$100,000 per year commitment
- \$325,000 per year in outside funding partnerships
- \$8.5 million over 20 years



Land Retirement of a City Park remnant that was in row crop production



8

Focus of Planned Projects

- **Target Locations**
 - City-owned land (parks, airport, well fields, etc.)
 - Opportunities within the city limits
 - Opportunities upstream in the watershed
- **Bank Credits in the Iowa NRE**
 - Memorandum of Understanding with the Iowa DNR
- **Provide Ancillary Benefits**
 - Flood mitigation, drought mitigation, erosion control, drinking water source protection, recreational opportunities, habitat restoration



Soil sampling and tile outlet surveying for our FY 2022/23 "Batch and Build" project



9

Saturated Buffers



Batch	Installations	Acres Treated	Nitrogen Reduction
FY 21/22	5	294	
FY 22/23	7	219	
FY 23/24	11	284	

10

Denitrifying Bioreactors



Batch	Installations	Acres Treated	Nitrogen Reduction
FY 21/22	5	387	2,653 Pounds
FY 22/23	9	319	
FY 23/24	15	676	

Denitrifying Bioreactor under construction (above) and after completion (right) in our FY 2022-23 "Batch and Build" project

11

Cover Crops



Batch	Acres Treated	Nitrogen Reduction	Phosphorous Reduction
FY 20/21	5,309	34,384	2,387
FY 21/22	4,691	20,583	1,145

12

Constructed Wetlands



13

Land Retirement



14

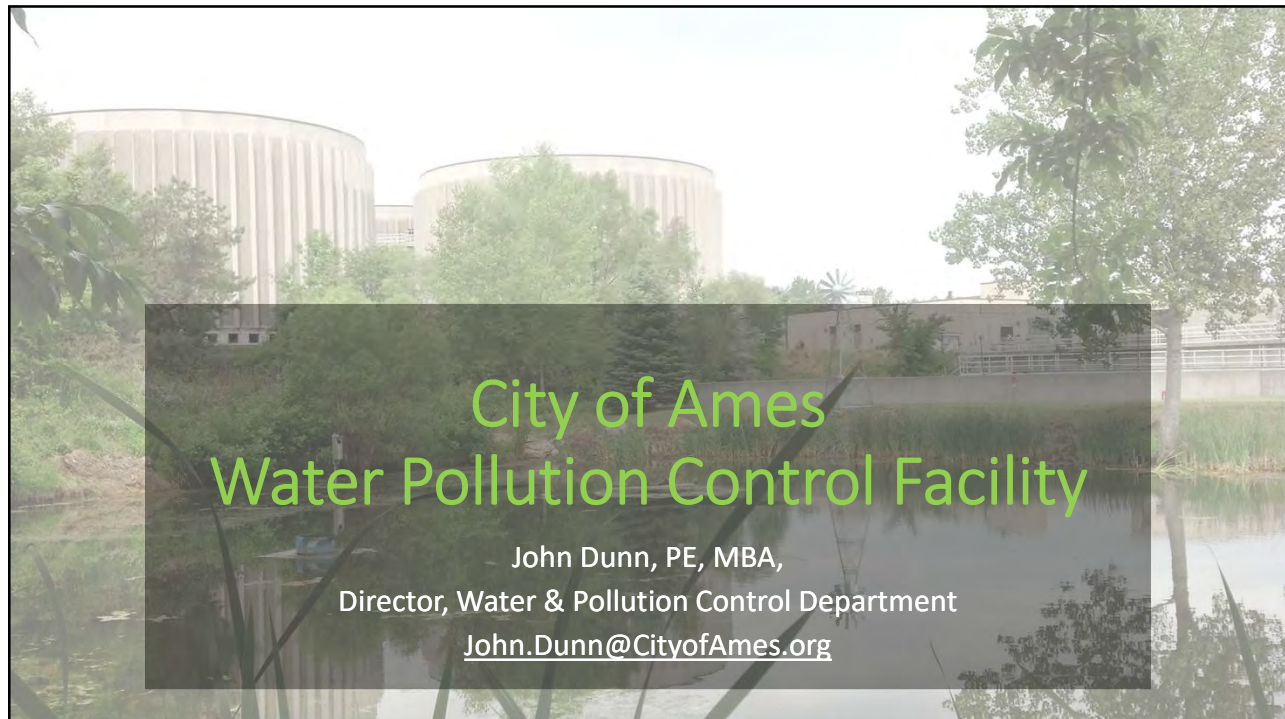
Overall Project Cost & Rate Impacts



- \$132.5 million in capital work “inside the fence”
- \$8.5 million in “outside the fence” BMP’s over 20 years
- Anticipated Sewer Rate Impact: ~5.5% per year over the next 10 years for Phase 1



15



16