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COOP CLIPBOARD

Welcome Message

By: Rick Krolak, Observing Program Leader

Greetings observers!

Welcome to the long overdue edition of the COOP Clipboard! The last issue was sent just before the pandemic in February of 2020, so here we are 3 years later. We are pretty much back to normal at the office and it is nice to be back into the old routine.

We were so glad to get the annual visits and maintenance caught up this past summer. It was great to see everyone that were able to get to. If we missed you, we will see you soon. My apologies to those of you who we missed. I will work harder to better schedule the next set of visits.

The Groundhog saw his shadow last month. Therefore we would experience 6 more weeks of winter? That's wonderful! I think if it was true science, many of us would be ecstatic to know that we only had 6 more weeks of winter! Especially with the early arrival of the snow and cold temperatures last November! At our location at the airport, we set some noteworthy snowfall records (several daily totals). We started out with a seasonal total of 51.3 inches through December, the most snowfall on record for that period (exceeding the beginning of the 2008-2009 season with 45.8 inches through December). With the lack of January snowfall, we fell to off the pace a bit, but with a return of more active winter weather in late February and March so far, we are back on pace to break the all time seasonal snowfall record. As of this publication (**March 13th**) **we were ranked at the 3rd snowiest season** with **92.5 inches**. The all time snowiest season at our location was **1996-1997** when we totaled **101.6 inches**.

Again I have a huge favor to ask those who report rainfall in the summer but only snowfall in the winter. Please consider taking an extra step to measure and report the liquid content of your snow. We really need this data, especially this season for flood forecasts during the spring melt and runoff. Many of you have also been sending us the snow water content measurements from your core samples. Thank you so much!!

If you report precipitation only on the days that it rains and or snows, we ask that on the days when there isn't any precipitation observed, simply report your zeros. They are just as important as reporting actual measurable amounts.

Stay warm and we will see you soon!

Rick

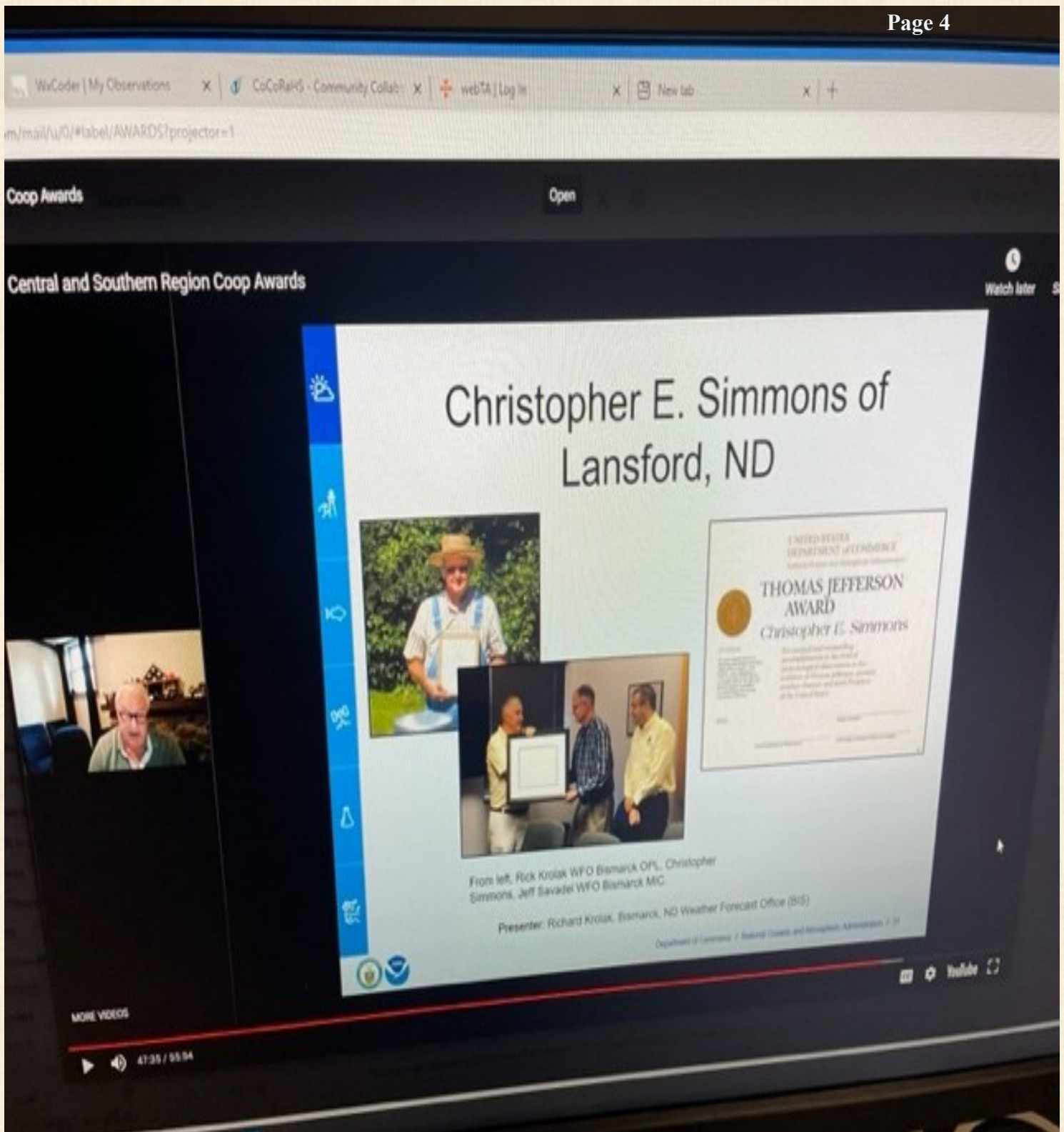


2020-2022 Awardees

Christopher E. Simmons	Lansford	Thomas Jefferson Award
Don Olson	Montpelier	50 Year Length of Service
Don and Marie Olson	Montpelier	50 Year Family Heritage
Arlene Bernhardt	Taylor	45 Year Length of Service
KZZJ Radio	Rugby	40 Year Length of Service
Dickinson Ranch HQ	Manning	40 Year Length of Service
Spencer and Judith Legaard	Fortuna	40 Year Length of Service
John Heiser	Grassy Butte	35 Year Length of Service
Randy Wagner	Max	35 Year Length of Service
Mary Harding	McHenry	30 Year Length of Service
Bruce Wentz	Napoleon	30 Year Length of Service
Vernon Erickson	Elgin	30 Year Length of Service
Watford City Court House	Watford City	30 Year Length of Service

2020-2022 Awardees

Paul Holle	New Salem	25 Year Length of Service
Harold Greek	Mohall	25 Year Length of Service
Larry Dziuk	Underwood	25 Year Length of Service
Dennis Hafner	Sykeston	20 Year Length of Service
Allen Zerr	Harvey	15 Year Length of Service
Reyne Dukart	Dunn Center	15 Year Length of Service
Cindy Schmidt	Hazelton	15 Year Length of Service
Rick Richter	Carrington	15 Year Length of Service
Bill Prellwitz	Willow City	15 Year Length of Service
Linda Heinle	Hebron	10 Year Length of Service
Gordon Grover	Bottineau	10 Year Length of Service
Stu Merry	Garrison	10 Year Length of Service
Dustin Volochenko	Balfour	10 Year Length of Service
Grasslands Research	Streeter	10 Year Length of Service



Mr. Christopher Simmons is one of five observers nationwide to receive the Thomas Jefferson Award for 2022! NWS Bismarck Observing Program Leader Rick Krolak presented Mr. Christopher Simmons the Thomas Jefferson award last October during a virtual award ceremony. We are looking forward to presenting the award in person soon. Congratulations Mr. Simmons on earning this very prestigious award!



Don and Marie Olson (left and center) of Montpelier show off their 50 year length of service and 50 year Family Heritage Award with NWS Bismarck. Meteorologist in Charge Jeff Savadel (right). Photo by Rick Krolak WFO Bismarck Observing Program Leader.



Herbert Arnold (Center) of Ashley displays his well-deserved 45 year Length of Service Award with NWS Bismarck Observing Program Leader Rick Krolak (left) and Meteorologist In Charge Jeff Savadel (right). Photo taken by Emma, Herbert's daughter.



Bruce Allen (left) and Lila Harstad (right) of Radio Station KZZJ Rugby, received their 40 Year Length of Service Award. Photo taken by Jim Assid, Hydrometeorological Technician, NWS Bismarck.



Gary Ottmar (Dickinson Ranch Headquarters) received the 40 year Length of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Spencer and Judy Legaard of Fortuna, ND with their 40 Year Length of Service Award. Photo by NWS Bismarck Hydrometeorological Technician Jim Assid.



John Heiser of Grassy Butte received his 35 Year Length of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Mary Harding of McHenry received her 30 Year Length of Service Award. Photo by NWS Bismarck Hydrometeorological Technician Jim Assid.



Paul Holle of New Salem, ND was recently presented with his 25 Year Length of Service Award. Photo by Hydrometeorological Technician Jim Assid, NWS Bismarck.



Vernon Erikson of Elgin was recently presented with his 30 Year Length of Service Award. Photo taken by NWS Bismarck Hydrometeorology Technician Jim Assid.



Larry Dziuk of Underwood, ND received his 20 Year Length Of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Allen Zerr of Harvey displays his 15 year Length of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Rick Richter (Carrington Research Extension Center) with his 15 Year Length of Service Award.
Photo by NWS Bismarck Hydrometeorological Technician Jim Assid.



Reyne and Daryl Dukart of Dunn Center were presented with their 15 Year Length of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Linda Heinle of Hebron was recently presented with her 10 Year Length of Service Award. Photo by NWS Bismarck Observing Program Leader Rick Krolak.



Bill Prellwitz of Willow City was recently presented with his 10 Year Length of Service Award. Photo taken by NWS Bismarck Observing Program Leader Rick Krolak.



Candy Pellman of McClusky was recently presented with her 10 Year Length of Service Award. Photo taken by NWS Bismarck Observing Program Leader Rick Krolak.



Cindy Schmidt of Hazelton with her 10 Year Length of Service Award. Photo taken by NWS Bismarck Observing Program Leader Rick Krolak.

Let it snow, let it snow, let it snow!

Here are some locations with seasonal totals through February 2023

COOP Site	Snow Total (inches)	Normal
Bismarck NWS	70.0	37.0
Carrington 4N	67.5	—
McClusky	64.0	—
Streeter 5 NW	63.5	36.6
Dickinson Ranch HQ	63.5	30.7
Elgin	62.5	38.6
Napoleon	61.0	37.6
Ft Yates	59.8	—
Grassy Butte 2 ENE	58.9	30.6
Hebron	58.5	28.4
Dickinson Experimental Station	57.5	—
New Salem 5 NW	57.4	31.1
McHenry 3 W	56.5	46.4
Pretty Rock	56.2	34.2
Lake Metigoshe State Park	56.2	37.6
Montpelier	54.9	35.5
Hazelton 4 NW	54.1	33.7
Heart Butte Dam	52.3	27.1
Bowman	51.4	30.9
Garrison	51.1	31.1
Sykeston	49.8	—
Underwood	49.5	28.4
Shields	49.0	35.2
Jamestown State Hospital	46.5	36.7
Turtle Lake	45.0	35.5
Courtenay 1 NW	44.5	21.8
Dunn Center 1 E	44.3	—

Seasonal Snow Totals for through February 2023

COOP Site	Snowfall Total (inches)	Normal
Bottineau	43.1	37.4
Max	42.0	36.1
Killdeer	40.0	26.3
Keene 3 S	39.0	25.3
Ashley	38.1	30.3
Velva	33.5	31.9
Williston	33.2	37.2
Lansford	31.2	—
Minot Experimental Station	28.5	37.8
Willow City	26.2	—
Ambrose 3 N	19.5	28.5

Seasonal Temperature Outlook

Below

Equal Chances

Above

Above

Equal Chances

Probability (Percent Chance)

Above Normal

Below Normal

Leaning Above

11-11-11

Likely
Above

Equal Chances

33-40%

40-50%

50-60%
60-70%

70-80%

80-90%

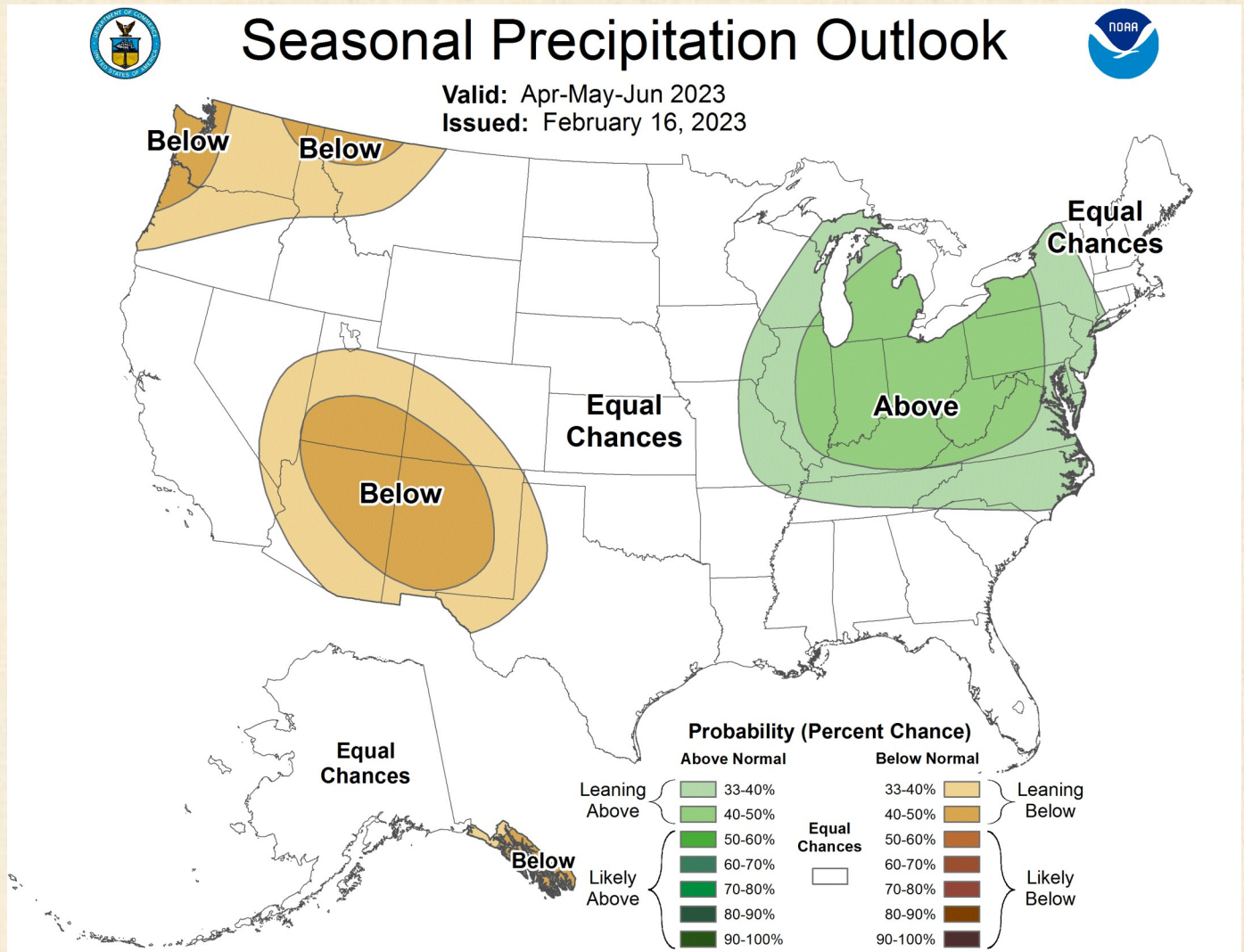
Leaning
Below

144

Likely
Below

The latest Climate Prediction Center's seasonal temperature outlook leans toward cooler temperatures across the northwestern portion of state for April through June.

Precipitation Outlook for April through June



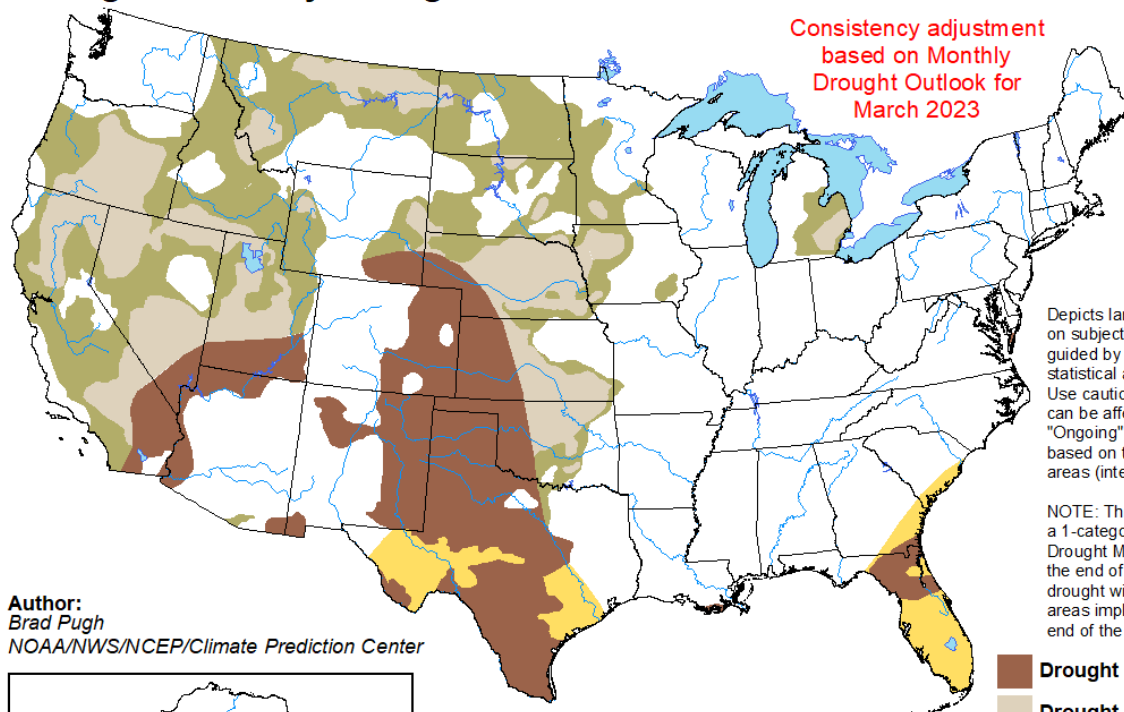
The latest Climate Prediction Center outlook shows Equal chances for above, below, or near normal precipitation for North Dakota for April through June.

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for March 1 - May 31, 2023
Released February 28, 2023

Consistency adjustment
based on Monthly
Drought Outlook for
March 2023



Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Drought persists

Drought remains but improves

Drought removal likely

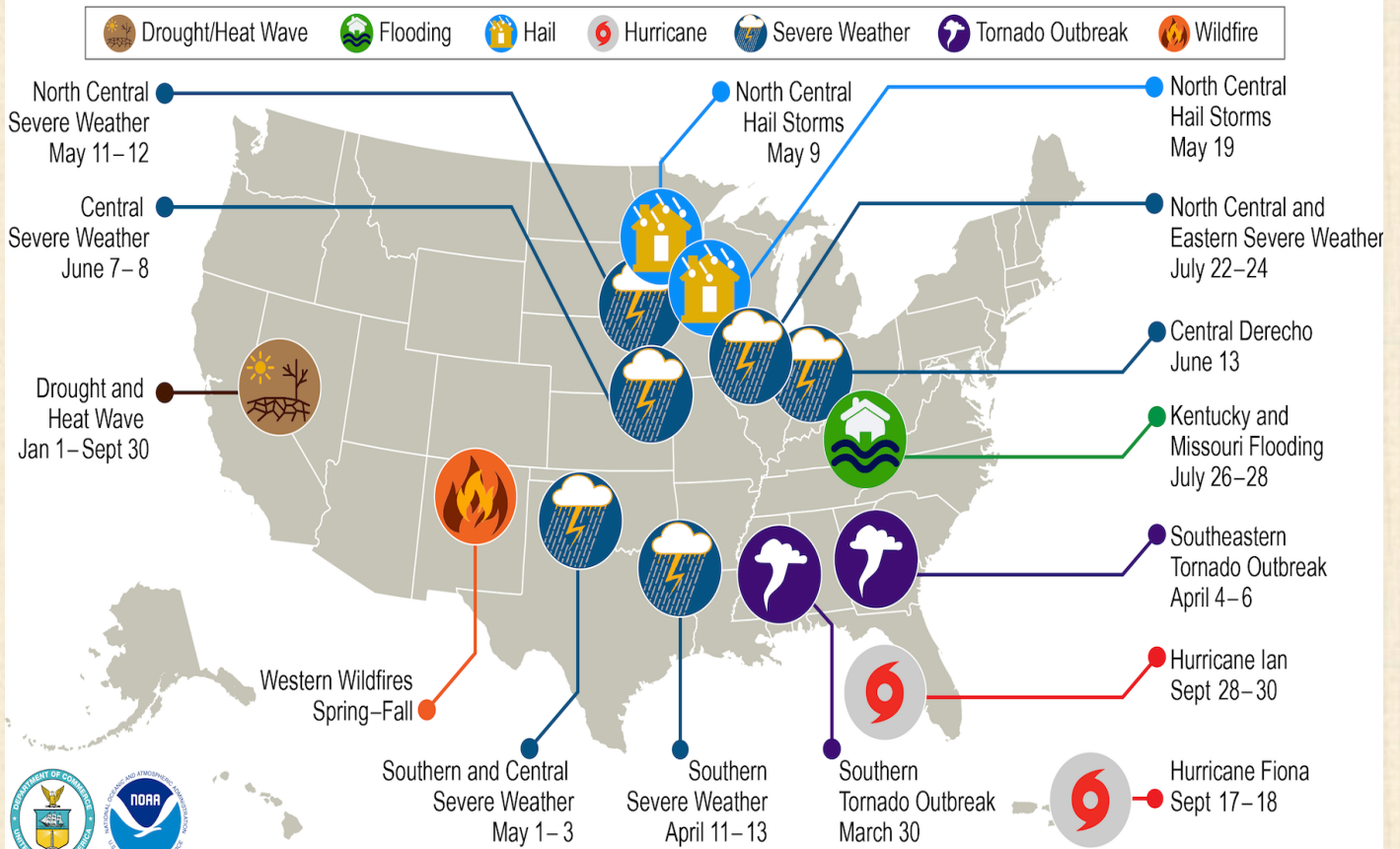
Drought development likely



<http://go.usa.gov/3eZ73>

The latest seasonal drought outlook (through May 31st) favors drought removal for most of North Dakota, along with improving conditions in the far northwestern portions of the state.

U.S. 2022 Billion-Dollar Weather and Climate Disasters



This map denotes approximate location for each of 15 separate billion-dollar weather and climate disasters that impacted the United States January–September of 2022.

Meet one of our Lead Forecasters

Jason Anglin is a Lead Meteorologist at the National Weather Service (NWS) in Bismarck. He developed an interest in all things weather while growing up in Sioux Falls, South Dakota. He then earned an undergraduate B.S. Degree in Atmospheric Science at the University of North Dakota. After graduating, he worked in the private weather sector in Grand Forks for 5 years before joining the National Weather Service at NWS Riverton, Wyoming in 2013. He was then promoted to NWS Great Falls, Montana in 2016 where he worked until joining the team at NWS Bismarck as a Lead Meteorologist in August of 2020. When he is not serving the people of western and central North Dakota he enjoys all things outdoors. His favorite outdoor activities are fishing, boating, and hiking with his family. When he can't be outside you will find him cheering on his favorite football, baseball, and hockey teams. Jason also enjoys taking trips across the region. Whether that's visiting family and friends in the area, or taking in the great scenery of the area, he is always up for a fun drive.

