



December 13, 2019

The Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

Through: Lee K. dePalo
Federal Emergency Management Agency
Region VIII
Denver Federal Center
Building 710, Box 25267
Denver, CO 80225-0267

RE: REQUEST FOR PRESIDENTIAL MAJOR DISASTER DECLARATION

Dear Mr. President:

Thank you for your support during this tumultuous year of disasters in North Dakota. State residents have experienced nearly every potential adverse weather impact in 2019. We are grateful to you and your administration for the presidential disaster declaration, FEMA-DR-4444-ND, in response to spring flooding in 19 western, central and eastern counties, and the Secretarial Disaster Designation for 47 of our 53 counties following an October precipitation event that culminated in widespread devastation of crops.

We continue to deal with the ramifications of disasters. Pursuant to Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (Stafford Act), as implemented by 44 CFR §206.36, the State of North Dakota requests a major disaster declaration for our most recent event, fall flooding in central and eastern North Dakota after a three-day October storm generated heavy rain before transitioning to snow containing up to 3 inches of water content equivalent. Nearly 30 inches of snow blanketed prime farmland, decimating unharvested crops. As your State Farm Service Agency determined, our producers have suffered nearly \$423 million in losses for just

the one crop in each county with at least 30 percent loss, and billions of dollars in additional crop and livestock value is still at risk.

Due to historically high groundwater saturation, the subsequent rapid snowmelt created an unprecedented October flood in central and eastern North Dakota. Powerful floodwaters washed surface gravel and culverts from county and township roads and disrupted lifeline infrastructure, creating significant delays for first responders struggling to reach citizens in need. School bus transportation became precarious as drivers negotiated hazardous road conditions. Saturated roadways forced our producers to drive miles out of their way with heavy, tracked equipment to reach wet fields during a critical time in harvest when daylight hours are limited. James River residents mobilized resources to respond to high flow releases from upstream dams. Red River of the North communities north of Fargo experienced record-breaking fall flow with the gauge at Grand Forks recording levels 10 feet higher than the previous record, which equates to 40 percent greater flow volume. Our communities spent nearly three weeks battling high water levels until October 26, 2019, when the Red River of the North crested at 45.48 feet at Pembina, the farthest northeastern point in our state, before moving northward into Canada. That same day, inflows for the Jamestown Reservoir also crested, signaling the peak of our fall flood.

In response to the needs of our citizens I took a number of actions. Executive Order 2019-09, dated October 11, 2019, and Executive Order 2019-10, dated October 21, 2019, officially activated the State Emergency Operations Plan (SEOP) and mobilized state resources in support of local and tribal governments. Executive Order 2019-11, dated November 2, 2019, and Executive Order 2019-12, dated November 7, 2019, waived hours of service requirements for drivers of commercial vehicles transporting hay supplies, livestock, propane, gasoline and diesel fuel to ensure continued delivery of these vital resources.

Jurisdictions most adversely impacted are the counties of Barnes, Foster, Griggs, Grand Forks, Kidder, LaMoure, Logan, Mountrail, Nelson, Sargent, Sheridan, Stutsman, Traill, Walsh and Wells.

Tumultuous Year of Disasters

The year 2019 will long be remembered for the destruction experienced by spring flooding, an early summer drought, extraordinary rainfall during late summer and early fall, followed by an October rain/snowstorm event, and subsequent fall flooding. This land of extremes seldom experiences the wrath of Mother Nature on multiple fronts and

to this degree of intensity. Our State Climatologist, Dr. Adnan Akyuz of the North Dakota State University (NDSU) Agricultural Experiment Station, aptly characterized 2019 as “topsy turvy.”

In the spring, widespread flooding inundated much of the state, impacting areas seldom subjected to high waters. A cool spring and wet conditions delayed the start of the planting season. By summer, dry conditions became problematic in the northern tier of North Dakota, an area plagued by multiple years of severe drought. Torrential downpours in late summer and fall swamped infrastructure and farmland throughout the state during harvest time. The October storm and subsequent snowmelt created our third disaster, fall flooding.

Spring Flooding

In North Dakota, communities began flood preparedness in earnest with the issuance of the first Spring Flood Outlooks in January by our National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) partners. Initial forecasts looked promising for limited flooding in 2019. However, conditions deteriorated in February after record snowfall resulted in impactful snowmelt, and two major March storms blanketed the state with heavy, wet snow. North Dakotans engaged in extensive flood fight efforts for 39 days, from March 21, 2019, until April 28, 2019. Inundated fields and extensive road damage prevented farmers from accessing their lands for several weeks, well past optimal planting times.

Impacts in McKenzie County in western North Dakota exemplified the consequences experienced by producers elsewhere in the state. Flooding along the Yellowstone River displaced 110 Fairview area residents for several days. When they returned, they discovered extensive property damage, including homes moved off their foundations and destroyed farm machinery. Area farmers and ranchers also experienced substantial economic losses after floodwaters swamped an estimated 14,482 acres, delaying, and in many cases preventing, spring planting.

Officials for the North Dakota Department of Emergency Services (NDDDES) placed spring flood damages to our state’s transportation system at \$11.5 million. The rural roads our producers rely upon to access their fields accounted for 86 percent of the damaged infrastructure.

Late Summer/Early Fall Torrential Rains

Ironically, it appeared in early summer that drought would become the next disaster when the northern and central portions hit the state's peak drought designation on June 18, 2019, with severe drought, moderate drought and abnormally dry conditions. But by late summer, an El Niño weather pattern gripped the area and substantial rainfall in August and September led to flash floods and ponding of water in agricultural and urban areas, disrupting the harvest cycle.

Attachment A, North Dakota Weather Summary for the Record Wet Period Extending from the Middle of August into Early October 2019, provided by the NWS, discusses how the state experienced heavy precipitation in late summer and early fall with September 2019 ranked as the wettest September on record for 125 years of data. The report contains daily observed precipitation maps for September 19, 2019, to October 24, 2019, illustrating the frequency of rainfall that reached well above normal on multiple days. This comprehensive report includes climate data for September 20, 2019, through October 13, 2019, showing 385 percent of normal precipitation.

As evidenced by the September 20-22, 2019, Accumulated Precipitation Map, in Attachment A, rainfall amounts exceeded 6 inches, well above normal for that time of year. Emergency managers reported heavy rain resulted in road closures across central and eastern North Dakota, including a flooded I-29 near the Red River Valley city of Grand Forks. The city recorded 6.43 inches of rainfall in six hours as heavy runoff blew manhole covers, disrupted sewage operations, and stranded motorists. The overwhelming volume of inflow into the Grand Forks and East Grand Forks, Minn., water treatment plants required bypass operations and limits on residential use. Once back online, treatment plant crews pumped 17 million gallons of water in one day compared to a daily average of 8.5 million gallons. Several hundred homes in Grand Forks flooded when wastewater systems failed to keep pace with inflows and the heavy downpour swamped basements. The Grand Forks Emergency Management Office staff coordinated unmet needs, mental health services and cleanup help with voluntary agencies that assisted nearly 75 vulnerable residents. City crews and residents hauled hundreds of tons of water-damaged materials to the landfill.

High winds, hail and heavy rain damaged crops and saturated roads, preventing agricultural producers from reaching their lands. Residents in the north-central farming community of McClusky in Sheridan County reported sewage backup in homes due to an overloaded lift station. Subsequent runoff from 9 inches of rain inundated fields and roadways, nearly isolating the City of Bowdon in southern Wells County. Floodwaters

swamped an estimated 75 basements in Fessenden and in southern Wells County, with 12 homeowners reporting sewage backup after lift stations failed to keep up with excess water.

Water board members in Wells and Foster counties worried high flows would damage the structural integrity of Rocky Run, Pipestem Creek and Sykeston Dams and would result in downstream damage to farmsteads and transportation systems. North Dakota State Water Commission (NDSWC) engineers found high flows caused erosion behind a Sykeston Dam spillway wall. High inflows prompted NDSWC engineers to suspend outlet pumping operations at Devils Lake, where tens of thousands of acres of prime farmland remain inundated after 26 years of closed-basin flooding. Dam operators across the state, including the U.S. Bureau of Reclamation (USBOR) and the U.S. Army Corps of Engineers (USACE) substantially increased releases from such dams as Heart Butte in the west and the Jamestown and Pipestem Dams in the central parts of the state to keep up with high inflows.

October Precipitation Event

The October 9-12, 2019, rain and snow event became the proverbial straw that broke the camel's back and led to unprecedented fall flooding at a time when wildland fires typically become our greater threat. As noted in the NWS report, heavy, wet snow blanketed the state, from several inches in the northwestern and southeastern portions of the state to nearly 3 feet around the Devils Lake Basin.

The NWS report references maps from the U.S. Geological Survey (USGS) showing the monthly average stream flow for August reaching much above normal at greater than 90 percent. Some areas of the state reached the highest stream flow level by September; and by October the far northwest and significant portions of eastern North Dakota were in the highest category. The accumulated precipitation from September 20, 2019, through October 13, 2019, reached 750 percent of normal. The NWS recorded soil moisture levels up to 99 percent of normal in North Dakota as of October 31.

The intense, historic storm unfolded in two waves, with the first event bringing rain that transitioned to sleet and then up to 1 foot of heavy, wet snow in central and eastern North Dakota during October 9-10, 2019. The second wave on October 10-12, 2019, paralyzed the state with heavy snow and wind speeds of up to 66 miles per hour, creating whiteout conditions and large impassable snow drifts. Local law enforcement

and public works officials issued travel advisories, closed roads and pulled snow removal crews. Emergency managers conferred with voluntary agencies about the possibility of establishing shelters. Snowplow operators, farmers, ranchers and law enforcement rescued nearly 100 motorists, including 38 passengers in a bus stranded north of Grand Forks and another 40 occupants of a Greyhound bus in Stutsman County. A farmer rescued seven hunters stranded north of the city of Michigan in Nelson County. Traill County deputies collaborated with mutual aid partners to conduct a water rescue of two men who drove into a flooded low-water crossing and encountered swift currents. The North Dakota National Guard (NDNG) readied eight regional response ground search and rescue teams. Ice and snow buildup caused damages to agricultural and residential buildings as power outages and multiple motor vehicle accidents occurred throughout North Dakota.

As stated in the NWS report, saturated soils led to very efficient runoff from rain and snowmelt that exacerbated overland and riverine flooding, with river levels cresting higher than they had during the spring flood.

Impacts

Agricultural

Our wet weather cycle resulted in an abrupt and unfortunate end to the 2019 growing and harvest seasons with greatly reduced yields or total crop losses. The wet weather caused much disease and created an inability to harvest remaining cereal grains, soybeans, wheat, barley, potatoes and sugar beets. The abbreviated growing season also did not provide the necessary growing degree days for crops to reach maturity. As Dr. Akyuz said, "Farmers have received blow after blow this growing season. The heavy snow probably killed unharvested crops."

The impacts to soybean production serve as a microcosm to illustrate setbacks experienced by producers of other crops. As the October storm moved eastward across the state, Stephanie Sinner, Executive Director of the North Dakota Soybean Council, and Nancy Johnson, Executive Director of the North Dakota Soybean Growers Association, conducted an initial damage assessment with concerned board members and producers. Due to the cool, wet start of the 2019 growing season, only 6 percent of soybeans had been harvested when the storm hit; rows of soybeans trapped under the

weight of heavy, wet snow further delayed harvest. Producers expect a tremendous economic blow once harvest, which continues today, has been completed. Last year's crop generated \$2.02 billion for North Dakota.

Agriculture Commissioner Doug Goehring and I traveled to the hardest hit areas of the state on October 14, 2019, to listen to producers' concerns as well as those of their communities. Our typically stoic producers shared their concerns about crop damages and crop prices for the few remaining salvageable crops. Our producers told stories of cattle stranded by floodwaters and thousands of inundated acres. The Commissioner and I worked with your Farm Service Agency and received a Secretarial Disaster Declaration from Secretary of Agriculture Sonny Perdue for our producers. As reported to the State Emergency Board, 45 counties experienced a 30 percent crop loss and two counties met credit survey criteria. Six requested a deferral until after harvest.

Infrastructure

Unable to harvest their crops, our producers have been equally challenged by flooded roads that restrict their access and force them to drive miles out of their way to reach their fields. The southern and eastern portions of Wells County became a bull's-eye for damages after 10 to 12 inches of rain followed by snow resulted in overland and riverine flooding that washed out roads and required producers to travel additional miles after losing access roads to their fields. Tammy Roehrlich, the Wells County Emergency Manager and a former emergency medical technician, worries about time-consuming emergency response delays. "When you are sitting waiting, those minutes take forever," she said. "You don't want the ambulance to go an extra 10 miles." Several key routes are inaccessible for fire, ambulance and police until possibly next spring and then only if additional flooding does not occur. Inaccessibility also impacts school bus drivers and mail carriers who are driving additional miles.

Traci Redlin, who farms with her husband, Doug, in Stutsman and Kidder counties, calls it a vicious cycle. Like other producers, the Redlins travel miles out of their way to access roads, resulting in longer hours in the field. "Most roads are blocked until next year," Mrs. Redlin said. With the priority on harvesting crops, producers like the Redlins fell behind on time to move cattle to shelter.

Stutsman County has become the epicenter of the disaster with \$1,054,960.28 in damages. As Jerry Bergquist, long-time Stutsman County Emergency Manager, reported

to the State Emergency Operations Center (SEOC), frequent rainfall had a cascading effect that culminated in the October storm and unprecedented fall flooding. "We can't handle it anymore," Mr. Bergquist said. "Damages to roadways are escalating after the October rain and snowfall. We are losing township roads." Officials are apprehensive about school buses traveling on township roads.

As in other areas of the state, citizens and officials for the City of Jamestown and the county engaged in a flood fight to battle significant runoff. Officials requested a sandbag machine from the SEOC to help with flood fight efforts. The residents of Jamestown sandbagged along the James River after the USACE began evacuating flood storage in the Jamestown and Pipestem Dams. In adjacent Barnes County, the USACE increased releases from Baldhill Dam as Lake Ashtabula's levels rose. In the lower James River Basin, volunteers and officials for the City of LaMoure in LaMoure County battled the increased inflows. Crews plugged storm sewers, operated a large pump to alleviate pressure on the storm water system and pre-positioned pumps. The USGS installed a rapid deployment gauge at Adrian to help local officials more accurately determine flows. To the south, there were several areas in Dickey County where only one road was available due to flooding and the inability to repair infrastructure until spring.

The Red River of the North Basin has also endured significant impacts. In Traill County, washed-out roads impeded access during continuous days of rain this fall. Heavy rain and snow in October compounded soaked conditions to the point where county and township roads have been closed after gravel and culvert washouts. Many roads remain inundated, further limiting access to fields. Upstream in Walsh County, Water Board members have identified legal drains that are likely damaged; however, water levels remain too high to access the sites. Several residents reported sump pumps were still operational. Through good planning and execution, Crystal Sugar workers relocated sugar beets before they became inundated.

Floodwaters isolated homes and farmsteads in Grand Forks County, prompting public safety crews to prepare for potential rescues. The City of Grand Forks wastewater treatment plant operated at maximum capacity once again, and homeowners reported a second round of flooded basements. Officials relocated campers working the sugar beet harvest to a drier location.

The Missouri River Basin also experienced high flows, as discussed during a 2020 spring flood preparedness meeting held earlier this month at the SEOC. The hardest hit

jurisdiction, Mountrail County, reported several county and township roads were inundated after heavy October rain filled sloughs beyond capacity.

Like their counterparts throughout the state, Mr. Bergquist and Mrs. Roehrich worry about the ramifications of fall flooding for the 2020 spring. The ground is so saturated that runoff next year likely will not percolate through the soils and instead could result in a repeat of widespread overland and riverine fall flooding. In Wells County, "Every slough and pothole" is full, Mrs. Roehrich said. While many roads are inundated, water is encroaching on the others. Additional flooding will make many farmsteads inaccessible. "There is no history or precedent for having this much liquid moisture in the system this late in the season," Mr. Bergquist said.

Their comments point to the need to repair as many roads as possible between now and planting season next year, or a one-year disaster will become a long-term disaster to our economy with producers unable to reach their crops. **In total, the state estimates public infrastructure damages total \$9,695,005.69.** My team has recorded \$5,621,318.77 in visible infrastructure damages. But that total does not account for the 127 currently water-inundated roads with a cost estimate of \$2,073,686.93. Additionally, local communities have indicated there is potentially another \$2,000,000 in damages that could not be verified due to snow cover this late into the year.

Economic Impacts

The cost of three disasters this year adds to the financial burden of jurisdictions that have depleted their road and emergency fund budgets. Local public works and contractor crews have been struggling to keep up with repairs after sites that had been fixed this spring were once again inundated by fall flooding. Attachment C, North Dakota Presidential Disaster Declarations 1993 to 2019, lists the state's 35 disaster declarations during the past 26 years, the majority of which resulted from widespread flooding including the catastrophic event of 2011, FEMA-DR-1981. Communities are still recovering eight years later from the event for which federal, state and local costs exceeded \$1 billion.

As discussed earlier in this letter, the spring flood resulted in \$11.5 million in repair costs for communities whose finances had been depleted during past disasters. The tax base for these communities, agricultural producers, are suffering devastating losses as a

result of the October storm. Losses are expected to grow significantly as producers conclude efforts to salvage crops.

A Whole of Government Approach

Response and recovery to this disaster required public and private partners to collaborate on the best and most effective way to deliver resources to our communities. The Governor's Office takes a leading role for joint information system operations and for coordinating assistance requests. In late November, we were confronted by a severe propane distribution and supply issue that once again added an additional stress for our producers who need the fuel to dry crops. We sent a letter to the Federal Energy Regulatory Commission requesting additional action to increase the supply of propane to our state.

During the onset of the event, the North Dakota Department of Agriculture activated the hay hotline for producers and supported the Secretarial Disaster Designation request. NDDDES, Division of Homeland Security (HLS), elevated the SEOC to Level 2 as staff monitored conditions and coordinated resource deployments in support of local and tribal governments. NDDDES HLS staff conducted coordination calls to discuss preparedness measures with representatives of the North Dakota Department of Transportation (NDDOT), North Dakota Highway Patrol (NDHP), NDNG, North Dakota Department of Agriculture, North Dakota Department of Human Services (NDDHS), North Dakota Department of Health (NDDoH), North Dakota Wing of the Civil Air Patrol (CAP), NDDDES State Radio, NDSWC, NWS, North Dakota Association of Rural Electric Cooperatives and voluntary agencies, including the American Red Cross.

Dispatchers for NDDDES State Radio handled a high volume of calls, assisting in rescue operations for stranded motorists. The NDDoH coordinated with NDDDES on the placement and location of emergency generators, provided guidance to health care providers on necessary storm preparations, and ensured the readiness of a medical cache and a statewide response team. NDDOT crews plowed roads and coordinated with NDHP troopers on road closures and rescue operations as the NDNG and the CAP readied resources for potential search and rescue missions. The North Dakota Association of Rural Elective Cooperatives provided data on power outages and restoration efforts. NWS meteorologists provided weather analysis to the SEOC. The American Red Cross prepared for potential shelter operations in coordination with the NDDHS and the North Dakota Voluntary Organizations Active in Disaster (NDVOAD).

The member agencies of the Upper Red River Valley Community Organizations Active in Disaster assisted with cleanup of basements, moving furniture, removing carpet and clearing water in Grand Forks area homes, totaling 182.45 hours of cleanup assistance. FirstLink assisted with volunteer registration and provided oversight at various volunteer locations.

As storm conditions transitioned to flooding, the North Dakota State University Extension staff assisted with damage assessments and provided a wealth of information to help producers with harvest production. The Farm Service Agency coordinated efforts to assess impacts to producers and convened the State Emergency Board. The NDSWC monitored flood impacts and assisted the USGS with installation of a gauge at Adrian on the James River. The USACE and the USBOR coordinated with communities engaged in flood fights resulting from the high volume of runoff that was released from dams.

As crop producers realize the extent of crop losses and worry about future crop production, the Agriculture Commissioner and I are particularly worried about the inordinate and unabated stress on our producers. We value each and every life and do not want to lose producers to physical and mental health problems. We are not alone in that concern as we collaborate with our public and private partners to urge our citizens to reach out for mental health support if they are struggling with depression, sadness and hopelessness. NDDHS staff has responded to the behavioral health needs of our residents by creating a number of resources. NDSU Extension has experienced a demand in behavioral health services, and FirstLink volunteers have been sharing information on the 2-1-1 helpline and also giving resources, listening and supporting those in need. FirstLink also answers the 24/7 national suicide prevention lifeline, helping those struggling with behavioral health and suicidal thoughts.

Our State's Emphasis on Mitigation

In North Dakota, we counter the impacts of repetitive disasters by enacting a results-driven mitigation program. The impacts from fall flooding, while detrimental to our communities, could have been far greater without mitigation measures that have increased our state's resiliency. North Dakota has enacted 390 projects through the federal Hazard Mitigation Assistance (HMA) programs since 1997 with a total estimated cost of \$260,320,863. Based on the 2016 study conducted by the National Institute of Building Sciences, which specifically analyzed projects funded through the federal HMA programs, it has been determined that for every \$1 spent on hazard mitigation, an average of \$6 is saved in long-term disaster response and recovery costs. Using that

average, the \$260,320,863 spent on hazard mitigation in North Dakota would equate to a long-term savings of \$1,561,925,178 for disaster response and recovery operations.

The 2019 fall flood had far fewer personal impacts than previous disasters, a direct result of efforts to relocate individuals and families from harm's way. With the assistance of the HMA programs and Community Development Block Grants (CDBG), the state has created green space along rivers and lakes by acquiring more than 1,400 properties in flood-prone areas at an estimated cost benefit of \$386,400,000. Many of these properties were located in eastern North Dakota in areas that were directly impacted by 2019 flooding.

Furthermore, North Dakota is also compliant with federal requirements of the Public Assistance Program by having the *State of North Dakota Enhanced Mitigation Mission Area Operations Plan*, which received approval by FEMA on February 6, 2019. This plan reflects the state's long-standing high commitment to enact an effective mitigation program in collaboration with 84 local, state, federal and non-governmental organizations. The enhanced plan demonstrates that North Dakota has been effectively implementing its mitigation program using a whole community approach and effectively utilizing these programs and their funding sources to strengthen our communities and prevent impacts from natural and technological hazards.

Based on the State's history of effectively implementing and managing HMA programs, NDDDES was also approved to fully utilize the Program Administration by State (PAS) Program for FEMA-DR-4323 and FEMA-DR-4444. Based on the efforts of the NDDDES mitigation staff, all North Dakota jurisdictions either have or are currently developing mitigation plans.

NDDDES is committed to the utilization of effective mitigation measures whenever possible to help prevent damages to public and private property, as well as save local, state and federal taxpayer dollars.

Conclusion

Pursuant to 44 CFR§206.35, I have determined fall flooding was of such severity and magnitude that effective response and recovery is beyond the capabilities of the State and affected local governments. For the reasons described in this letter and its supporting documentation, I respectfully request that you declare a major disaster, with an incident period starting October 9, 2019, and ending October 26, 2019, for the counties of Barnes, Foster, Griggs, Grand Forks, Kidder, LaMoure, Logan, Mountrail,

Nelson, Sargent, Sheridan, Stutsman, Traill, Walsh and Wells. I also request North Dakota be designated as a Public Assistance Managing State, as it has in previous disasters, and that the Hazard Mitigation Grant Program be implemented on a statewide basis.

I certify for this major disaster that the state and local governments will assume all applicable non-federal shares of costs required by the Stafford Act 93-288. Enclosure A is my certification that the expenditures and obligations will include the non-federal shares of costs required by PL 93-288, as amended. Preliminary Damage Assessments (PDAs) indicate that damages are expected to exceed \$5,621,318.77 as detailed in Enclosure B. However, at the time of inspections, many damage sites were still inundated with floodwaters, and we estimate that an additional \$2,073,686.93 will be eligible when floodwaters recede, with a potential for an additional \$2,000,000 in damages that could not be verified due to snow cover. Furthermore, I reserve the right to request crisis counseling and disaster unemployment assistance if we see a significant increased need in our state for these resources.

I have designated MG Alan S. Dohrmann and Homeland Security Director Cody Schulz as the State Coordinating Officers (SCO) for this request. They will work with the Federal Emergency Management Agency to coordinate damage assessments and may provide further information or justifications on my behalf.

Thank you for your consideration of my request of a Presidential Major Disaster Declaration for the State of North Dakota and for your continued support as we recover from this unprecedented year of disasters.

Sincerely,



Doug Burgum
Governor

Enclosures: Enclosure A: Governor's Certifications
Enclosure B: North Dakota Preliminary Damage Assessment

Attachments: Attachment A: North Dakota Weather Summary for the Exceptionally Wet Period that continued from the Middle of August into Late October 2019
Attachment B: Jurisdictions Impacted by 2019 Fall Flooding

Attachment C: ND Presidential Disaster Declarations: 1993-2019

CC: Senator John Hoeven
Senator Kevin Cramer
Representative Kelly Armstrong
MG Alan S. Dohrmann, Director, North Dakota Department of Emergency
Services
Cody Schulz, Director, North Dakota Division of Homeland Security
Justin Messner, Disaster Recovery Chief, North Dakota Division of Homeland
Security

Enclosure A – Governor’s Certifications

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
REQUEST FOR PRESIDENTIAL DISASTER DECLARATION
MAJOR DISASTER OR EMERGENCY

OMB Control Number 1660-0009
Expires 09/30/2019

1. Request Date Dec 12, 2019

Burden Disclosure Notice

Public reporting burden for this form is estimated to average 9 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting the form. This collection of information is required to obtain a benefit. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472, Paperwork Reduction Project (1660-0009). **NOTE: Do not send your completed form to this address.**

Completion of this form including applicable attachments satisfies legal requirements for emergency and major disaster declaration requests under 42 U.S.C. §§ 5170 and 5191, respectively, as implemented at 44 C.F.R. §§ 206.35 and 206.36. Failure to use this form may result in a failure to meet these requirements and/or a delay in processing the request.

<p>2a. Name of State (as defined in Stafford Act 102, 42 U.S.C. § 5122) or Indian tribal government requesting declaration.</p> <p>State of North Dakota</p>	<p>2b. Population (as reported by 2010 Census) or estimated population of Indian tribal government's damaged area(s). <u>672,591</u></p>
<p>3. Governor's or Tribal Chief Executive's Name</p> <p>Governor Doug Burgum</p>	<p>4. Designation of State or Tribal Coordinating Officer upon declaration (if available) and phone number</p> <p>MG Alan S. Dohrmann, Director, ND Dept. of Emergency Services, 701-333-2300</p>
<p>5. Designation of Governor's Authorized Representative or Tribal Chief Executive Representative upon declaration (if available) and phone number</p> <p>Cody Schulz, Director, Director, ND Division of Homeland Security, 701-328-8256</p>	
<p>6. Declaration Request For: <input checked="" type="checkbox"/> Major Disaster (Stafford Act Sec. 401) <input type="checkbox"/> Emergency (Stafford Act Sec. 501 (a))</p>	
<p>7. Incident Period: Beginning Date <u>Oct 9, 2019</u> End Date <u>Oct 26, 2019</u> or <input type="checkbox"/> Continuing</p> <p style="text-align: right;"><i>If requesting a "continuing" incident period, enclose an official statement from a qualified Federal Government agency acknowledged as a national authority in a specific incident field (e.g., United States Geological Survey for seismic incidents, the National Weather Service for flooding).</i></p>	
<p>7b. Type of Incident (Check all that apply)</p> <p> <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Explosion <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Hurricane <input type="checkbox"/> Landslide <input type="checkbox"/> Mudslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Snowstorm <input type="checkbox"/> (rain, high water, wind-driven, rain, hail, lightning) <input type="checkbox"/> (Must include Enclosure D: Historic and Current Snowfall Data) <input type="checkbox"/> Straight-Line Winds <input type="checkbox"/> Tidal Wave <input type="checkbox"/> Tornado <input type="checkbox"/> Tropical Depression <input type="checkbox"/> Tropical Storm <input type="checkbox"/> Tsunami <input type="checkbox"/> Volcanic Eruption <input type="checkbox"/> Winter Storm <input type="checkbox"/> Other (please specify) _____ </p>	
<p>8. Description of damages (Short description of impacts of disaster on affected area and population). Include additional details in enclosed Governor's or Tribal Chief Executive's cover letter.</p> <p>The State of North Dakota requests a major disaster declaration for fall flooding in central and eastern North Dakota that occurred after an October 9-12, 2019, storm generated heavy rain before transitioning to snow containing three inches of water equivalent. The subsequent rapid runoff impacted several communities that had repaired roads following spring flooding. Powerful floodwaters washed surface gravel and culverts from county and township roads and disrupted lifeline infrastructure, creating significant delays for first responders struggling to reach citizens in need. School bus transportation became precarious as drivers negotiated hazardous road conditions. Saturated roadways forced our producers to drive miles out of their way with heavy, tracked equipment to reach wet fields during a critical time in harvesting.</p>	
<p>9. Description of the nature and amount of State and local or Indian tribal government resources which have been or will be committed. Include additional details in enclosed Governor's or Tribal Chief Executive's cover letter.</p> <p>North Dakota enacted a whole of government approach with public and private partners. The Governor's Office led the joint information system and resource support. The ND Department of Emergency Services (NDDes), Homeland Security Division, coordinated operations and resource requests. NDDes State Radio handled a high volume of emergency calls. The ND Department of Transportation and the ND Highway Patrol conducted search and rescue missions while the ND National Guard, ND Department of Health and ND Civil Air Patrol readied resources. The ND Department of Agriculture activated resources for producers. ND Department of Human Services collaborated with NDSU Extension and voluntary agencies to provide mental health resources. ND State Water Commission provided analysis of flood conditions. ND Association of Rural Electric Cooperatives monitored outages. FirstLink, Upper Red River Valley COAD, the American Red Cross and NDVOAD supported citizen needs.</p>	

10. Joint Preliminary Damage Assessment*

☐ Individual Assistance Dates Performed **Requested** _____ **Start** _____ **End** _____

Individual Assistance Accessibility Problems (Areas that could not be accessed, and why)

☒ Public Assistance Dates Performed **Requested** Nov 18, 2019 **Start** Nov 20, 2019 **End** Dec 6, 2019

Public Assistance Accessibility Problems (Areas that could not be accessed, and why)
PDA crews determined the 127 infrastructure sites were inundated and estimate potential repairs at \$2,073,686.93.

11. Programs and Areas Requested

Individual Assistance ☐ N/A ☐ Individuals and Households Program ☐ Crisis Counseling Program ☐ Disaster Unemployment Assistance

☐ All ☐ Disaster Case Management ☐ Disaster Legal Services ☐ Small Business Administration (SBA) Disaster Assistance

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)) If additional space is needed, please enclose additional documentation).

For States, identify Federally-recognized Tribes in the requested counties (if applicable).

Please see **Enclosure A: Supplemental Information for Individual Assistance** for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Public Assistance ☐ N/A ☒ Debris Removal (Category A) ☒ Emergency Protective Measures (Category B) ☒ Permanent Work (Categories C-G)* (not available for Emergency Declaration Requests)

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)). If additional space is needed or your request includes different categories of work for different jurisdictions; please enclose additional documentation.

Counties of Barnes, Foster, Griggs, Grand Forks, Kidder, LaMoure, Logan, Mountrail, Nelson, Sargent, Sheridan, Stutsman, Traill, Walsh and Wells.

For States, identify Federally-recognized Tribes included in the requested counties (if applicable).

Please see **Enclosure B: Supplemental Information for Public Assistance** for additional information in support of this request*.

Indemnification for Debris Removal Activity

☐ I do not anticipate the need for debris removal.

☒ I anticipate the need for debris removal, which poses an immediate threat to lives, public health and safety. Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. §§ 5170b & 5173, the State or Indian tribal government agrees to indemnify and hold harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State or Indian tribal government agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris.

Request for Direct Federal Assistance

☒ I do not request direct Federal assistance at this time.

☐ I request direct Federal assistance for work and services to save lives and protect property, and:

a. I request the following type(s) of assistance:

b. List of reasons why State and local or Indian tribal government cannot perform, or contract for, required work and services.

c. In accordance with 44 C.F.R. § 206.208, the State or Indian tribal government agrees that it will, with respect to direct Federal assistance: (1) Provide without cost to the United States all lands, easements, and rights-of-ways necessary to accomplish the approved work; (2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work; (3) Provide reimbursement to FEMA for the non-Federal share of the cost of such work in accordance with the provisions of the FEMA-State or FEMA-Tribe Agreement ; and (4) Assist the performing Federal agency in all support and local jurisdictional matters.

Request for Snow Assistance

☒ N/A ☐ I request snow assistance.

Snow assistance for the following jurisdictions (Specify counties, independent cities or tribes and/or tribal areas).

Please see **Enclosure D: Historic and Current Snowfall Data** for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Hazard Mitigation* ☒ Statewide

OR

For the following specific counties, parishes, independent cities or tribes and/or tribal areas.

12. Mitigation Plan Information*

a. Mitigation Plan Expiration Date February 5, 2024

b. Type of Plan

☒ Enhanced

☐ Standard

13. Other Federal Agency Programs

☒ I do not anticipate requirements from Other Federal Agencies

☐ I do anticipate requirements from Other Federal Agencies

Please see **Enclosure C**: Requirements for Other Federal Agency Programs for additional information in support of this request*.

14. Findings and Certifications

☒ I certify the following:

a. I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local government or Indian tribal government and that supplementary federal assistance is necessary.

b. In response to this incident, I have taken appropriate action under State or tribal law and have directed the execution of the State or Tribal Emergency Plan on 10/11/19 and 10/21/19 in accordance with the Stafford Act.

c. The State and local governments, or Indian tribal government will assume all applicable non-Federal share of costs required by the Stafford Act.

15. List of Enclosures and Supporting Documentation

☒ Cover Letter ☐ Enclosure A (Individual Assistance)*

☒ Enclosure B (Public Assistance)*

☐ Enclosure C (Requirements for Other Federal Agency Programs)

☐ Enclosure D (Historic and Current Snowfall Data)

☒ Additional Supporting Documentation Attachment A -- NWS data; Attachment B -- Disaster Map; Attachment C-- Presidential Decs.


Governor's or Tribal Chief Executive's Signature

12-13-2019
Date

If anyone except the Governor or Tribal Chief Executive signs this document, please provide the documentation that establishes that this individual has the legal authority to act on behalf of the Governor or Tribal Chief Executive.

*Not Required for Emergency Declaration Request

**Enclosure B – North Dakota Preliminary Damage
Assessment**

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
Adams County	2,343									
<i>Total Adams County</i>		0	0	0	0	0	0	0	\$0	\$8,997
Barnes County	11,066			83,996						
Valley City			185,197							
Barnes Rural Water District					497,700					
<i>Total Barnes County</i>		0	185,197	83,996	497,700	0	0	0	\$766,893	\$42,493
Benson County	6,660									
<i>Total Benson County</i>		0	0	0	0	0	0	0	\$0	\$25,574
Billings county	783									
<i>Total Billings county</i>		0	0	0	0	0	0	0	\$0	\$3,007
Bottineau County	6,429									
<i>Total Bottineau County</i>		0	0	0	0	0	0	0	\$0	\$24,687
Bowman County	3,151									
<i>Total Bowman County</i>		0	0	0	0	0	0	0	\$0	\$12,100
Burke County	1,968									
<i>Total Burke County</i>		0	0	0	0	0	0	0	\$0	\$7,557
Burleigh County	81,308									
<i>Total Burleigh County</i>		0	0	0	0	0	0	0	\$0	\$312,223
Cass County	149,778									
<i>Total Cass County</i>		0	0	0	0	0	0	0	\$0	\$575,148
Cavalier County	3,993									
<i>Total Cavalier County</i>		0	0	0	0	0	0	0	\$0	\$15,333
Dickey County	5,289									

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
<i>Total Dickey County</i>		0	0	0	0	0	0	0	\$0	\$20,310
Divide County	2,071									
<i>Total Divide County</i>		0	0	0	0	0	0	0	\$0	\$7,953
Dunn County	3,536									
<i>Total Dunn County</i>		0	0	0	0	0	0	0	\$0	\$13,578
Eddy County	2,385			16,950						
<i>Total Eddy County</i>		0	0	16,950	0	0	0	0	\$16,950	\$9,158
Emmons County	3,550									
<i>Total Emmons County</i>		0	0	0	0	0	0	0	\$0	\$13,632
Foster County	3,343			81,191						
<i>Total Foster County</i>		0	0	81,191	0	0	0	0	\$81,191	\$12,837
Golden Valley County	1,680									
<i>Total Golden Valley County</i>		0	0	0	0	0	0	0	\$0	\$6,451
Grand Forks County	66,861	\$ 81,780.00	\$ 33,457.76	\$ 386,730.00						
Larimore		\$ 3,836.00								
Northwood							\$ 8,770.00			
Thompson							\$ 10,333.00			
Grand Forks (City)		50,820	128,578							
Grand Forks Park District		72,060								
Grand Forks Public Schools			71,084							
<i>Total Grand Forks County</i>		208,496	233,120	386,730	0	0	19,103	0	\$847,449	\$256,746
Grant County	2,394									
<i>Total Grant County</i>		0	0	0	0	0	0	0	\$0	\$9,193
Griggs County	2,420			33,800						

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
<i>Total Griggs County</i>		0	0	33,800	0	0	0	0	\$33,800	\$9,293
Hettinger County	2,477									
<i>Total Hettinger County</i>		0	0	0	0	0	0	0	\$0	\$9,512
Kidder County	2,435			1,104,199						
<i>Total Kidder County</i>		0	0	1,104,199	0	0	0	0	\$1,104,199	\$9,350
LaMoure County	4,139			\$ 260,647.90						
LaMoure (City)			110,264							
<i>Total LaMoure County</i>		0	110,264	260,648	0	0	0	0	\$370,912	\$15,894
Logan County	1,990			90,702						
<i>Total Logan County</i>		0	0	90,702	0	0	0	0	\$90,702	\$7,642
McHenry County	5,395									
<i>Total McHenry County</i>		0	0	0	0	0	0	0	\$0	\$20,717
McIntosh County	2,809									
<i>Total McIntosh County</i>		0	0	0	0	0	0	0	\$0	\$10,787
McKenzie County	6,360									
<i>Total McKenzie County</i>		0	0	0	0	0	0	0	\$0	\$24,422
McLean County	8,962									
<i>Total McLean County</i>		0	0	0	0	0	0	0	\$0	\$34,414
Mercer County	8,424									
<i>Total Mercer County</i>		0	0	0	0	0	0	0	\$0	\$32,348
Morton County	27,471									
<i>Total Morton County</i>		0	0	0	0	0	0	0	\$0	\$105,489

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
Mountrail County	7,673			89,000						
Total Mountrail County		0	0	89,000	0	0	0	0	\$89,000	\$29,464
Nelson County	3,126			210,344						
Total Nelson County		0	0	210,344	0	0	0	0	\$210,344	\$12,004
Oliver county	1,846									
Total Oliver county		0	0	0	0	0	0	0	\$0	\$7,089
Pembina County	7,413									
Total Pembina County		0	0	0	0	0	0	0	\$0	\$28,466
Pierce County	4,357									
Total Pierce County		0	0	0	0	0	0	0	\$0	\$16,731
Ramsey County	11,451									
Total Ramsey County		0	0	0	0	0	0	0	\$0	\$43,972
Ranson County	5,457									
Total Ranson County		0	0	0	0	0	0	0	\$0	\$20,955
Renville County	2,470									
Total Renville County		0	0	0	0	0	0	0	\$0	\$9,485
Richland County	16,321									
Total Richland County		0	0	0	0	0	0	0	\$0	\$62,673
Rolette County	13,937									
Total Rolette County		0	0	0	0	0	0	0	\$0	\$53,518
Sargent County	3,829			87,760						

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
<i>Total Sargent County</i>		<i>0</i>	<i>0</i>	<i>87,760</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$87,760</i>	<i>\$14,703</i>
Sheridan County	1,321			46,000						
<i>Total Sheridan County</i>		<i>0</i>	<i>0</i>	<i>46,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$46,000</i>	<i>\$5,073</i>
Sioux County	4,153									
<i>Total Sioux County</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$0</i>	<i>\$15,948</i>
Slope County	727									
<i>Total Slope County</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$0</i>	<i>\$2,792</i>
Stark County	24,199									
<i>Total Stark County</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$0</i>	<i>\$92,924</i>
Steele County	1,975									
<i>Total Steele County</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$0</i>	<i>\$7,584</i>
Stutsman County	21,100			1,054,960						
Jamestown		7,455	62,765							
Streeter			40,912							
Medina			4,000		4,300					
<i>Total Stutsman County</i>		<i>7,455</i>	<i>107,677</i>	<i>1,054,960</i>	<i>4,300</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$1,174,393</i>	<i>\$81,024</i>
Towner County	2,246									
<i>Total Towner County</i>		<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$0</i>	<i>\$8,625</i>
Traill County	8,121			\$ 74,070.88						
<i>Total Traill County</i>		<i>0</i>	<i>0</i>	<i>74,071</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$74,071</i>	<i>\$31,185</i>
Walsh County	11,119	\$ 25,000.00	\$ 7,535.22	\$ 221,238.24						
<i>Total Walsh County</i>		<i>25,000</i>	<i>7,535</i>	<i>221,238</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>\$253,773</i>	<i>\$42,697</i>
Ward County	61,675									

Enclosure B

NORTH DAKOTA PRELIMINARY DAMAGE ASSESSMENT

Conducted November 20 through December 6, 2019
Estimates of Eligible Public Assistance Under PL 93-288, as Amended

COUNTY	2010 Population	Category A Debris Clearance	Category B Protective Measures	Category C Road Systems	Category D Water Control	Category E Buildings & Equipment	Category F Utility Systems	Category G Other	Total Estimated Damage	Threshold Required
<i>Total Ward County</i>		0	0	0	0	0	0	0	\$0	\$236,832
Wells County	4,207			373,881						
<i>Total Wells County</i>		0	0	373,881	0	0	0	0	\$373,881	\$16,155
Williams County	22,398									
<i>Total Williams County</i>		0	0	0	0	0	0	0	\$0	\$86,008
Fort Berthold Reservation	6,341									
<i>Total Fort Berthold Reservation</i>		0	0	0	0	0	0	0	\$0	\$24,349
Lake Traverse Reservation	169									
<i>Total Lake Traverse Reservation</i>		0	0	0	0	0	0	0	\$0	\$649
Spirit Lake Reservation	4,238									
<i>Total Spirit Lake Reservation</i>		0	0	0	0	0	0	0	\$0	\$16,274
Standing Rock Reservation	4,153									
<i>Total Standing Rock Reservation</i>		0	0	0	0	0	0	0	\$0	\$15,948
Turtle Mountain Reservation	8,656									
<i>Total Turtle Mountain Reservation</i>		0	0	0	0	0	0	0	\$0	\$33,239
	0									
		0	0	0	0	0	0	0	\$0	\$0
	672,591									1,029,064
TOTAL STATE COSTS		240,951	643,794	4,215,471	502,000	0	19,103	0	5,621,319	\$1,029,064
County Per Capita = \$ 3.84 State Per Capita = \$ 1.53 The population of Grantee is 672,591 (July 1, 2010 Census)										

**Attachment A – North Dakota Weather Summary for
the Exceptionally Wet Period that continued from the
Middle of August into Late October 2019**



National Weather Service

Bismarck and Grand Forks, ND

North Dakota Weather Summary for the Exceptionally Wet Period that continued from the Middle of August into Late October 2019

Prepared For: North Dakota Department of Emergency Services

Submitted On: Thursday, November 21, 2019

Prepared By: National Oceanic and Atmospheric Administration

National Weather Service Bismarck and Grand Forks, ND

Contact: John Paul Martin (701) 250-4495 john.paul.martin@noaa.gov



Building a Weather-Ready Nation



National Weather Service

Bismarck and Grand Forks, ND

Summary: The period from middle August into late October, 2019, was an exceptionally wet period in North Dakota. In some cases records were broken with respect to how wet it was. This came in the form of statewide very heavy rains, some that led to flash floods and ponding of water in agricultural and urban areas. In fact, September 2019 ranked number one as the wettest September on record (125 years of data) for the state of North Dakota.

The north-central and northeastern parts of the state received four to eight inches of rain from thunderstorms on September 20 and 21. On these days the city of Grand Forks, and other areas, had very severe flash flooding. This was followed by an historic early season winter storm from October 9 through 12. That storm produced between one and two feet of snow across large parts of central and eastern North Dakota, along with very high winds, resulting in a blizzard. This negatively impacted commerce and transportation and forced school closures. The hardest hit areas were in and around the Devils Lake Basin where nearly three feet of snow fell. Between these two major events numerous less intense storms passed through the state.

Saturated soils led to very efficient runoff from rain and snowmelt. The snowmelt from the October blizzard exacerbated overland and riverine flooding. Some river levels crested higher during this period than they did earlier this year with the spring snowmelt. In some cases, river levels were higher this fall than they had ever been during this time of the year.

The following pages of this report present supporting documentation in the form of statewide maps. These show daily precipitation amounts and percentage of normal precipitation and snow. Also included are maps on streamflow and a table with data for the nine North Dakota climate divisions.



Building a Weather-Ready Nation



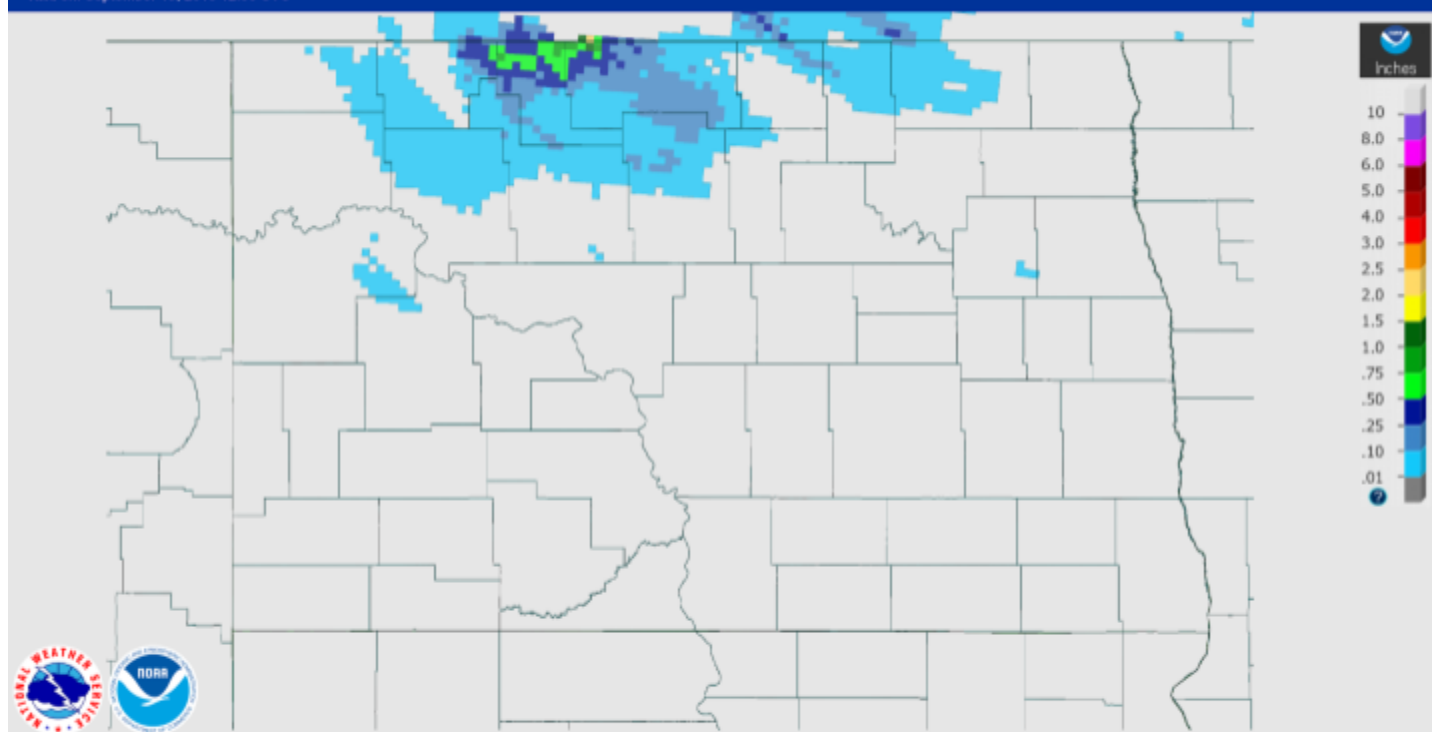
National Weather Service

Bismarck and Grand Forks, ND

September 19, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:42 UTC

Valid on: September 19, 2019 12:00 UTC



September 19, 2019 - 1 Day Observed Precipitation



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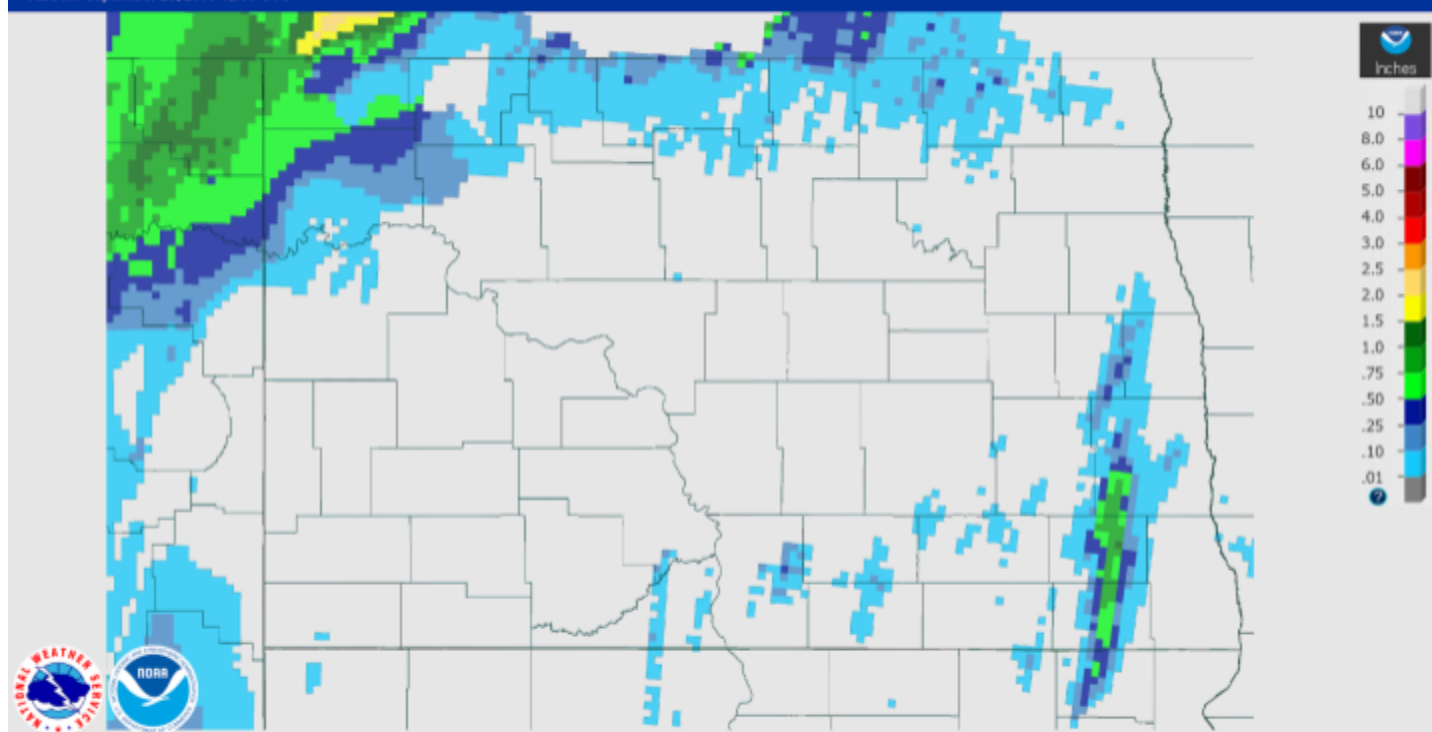
National Weather Service

Bismarck and Grand Forks, ND

September 20, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:03 UTC

Valid on: September 20, 2019 12:00 UTC



September 20, 2019 - 1 Day Observed Precipitation



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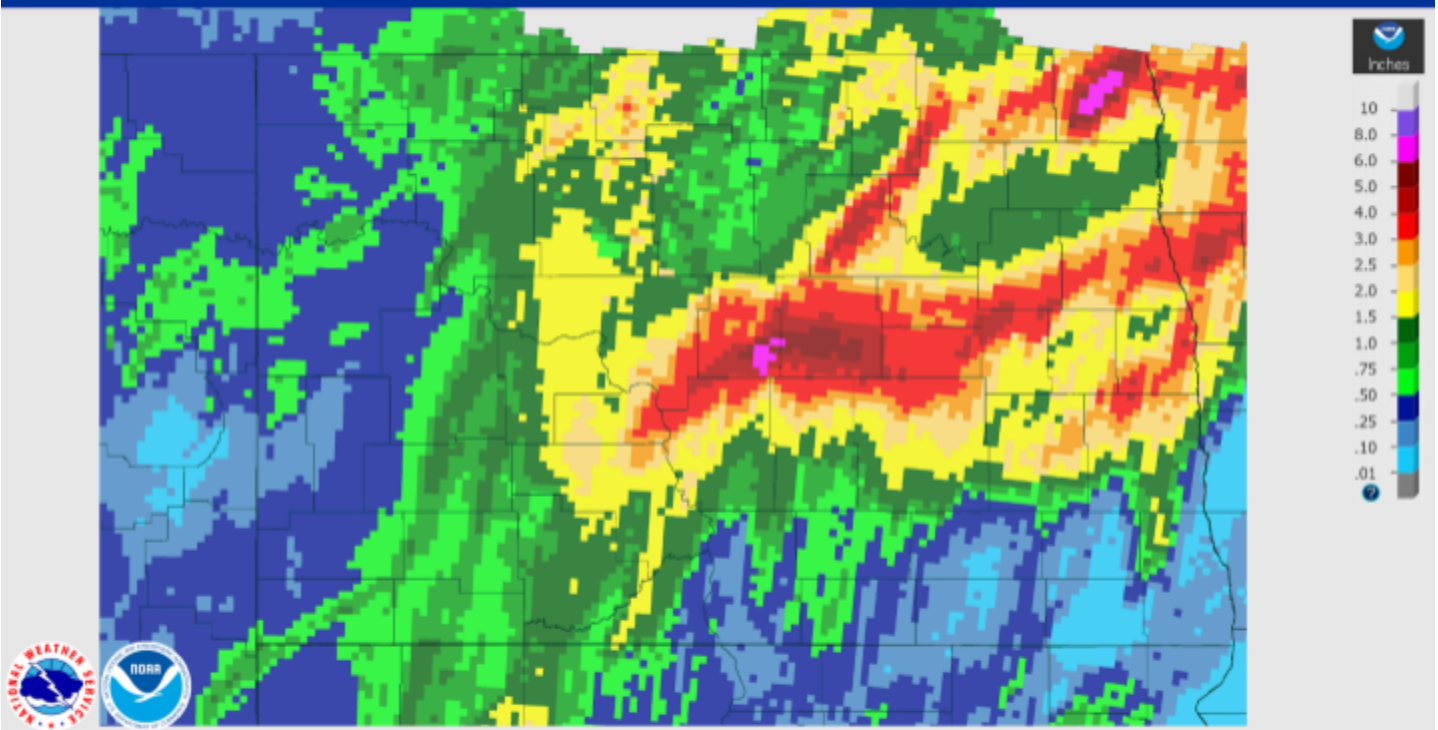
National Weather Service

Bismarck and Grand Forks, ND

September 21, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:04 UTC

Valid on: September 21, 2019 12:00 UTC



September 21, 2019 - 1 Day Observed Precipitation



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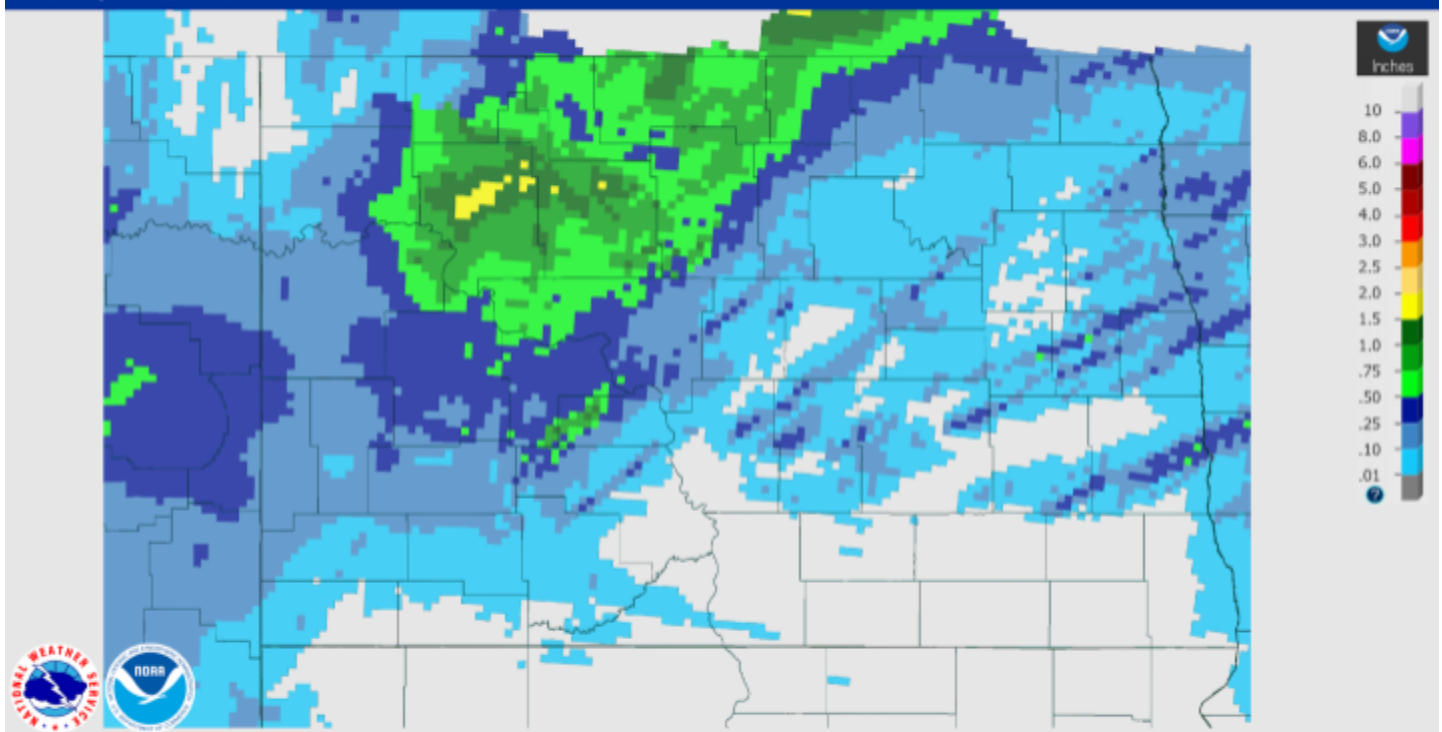
National Weather Service

Bismarck and Grand Forks, ND

September 22, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:05 UTC

Valid on: September 22, 2019 12:00 UTC



September 22, 2019 - 1 Day Observed Precipitation



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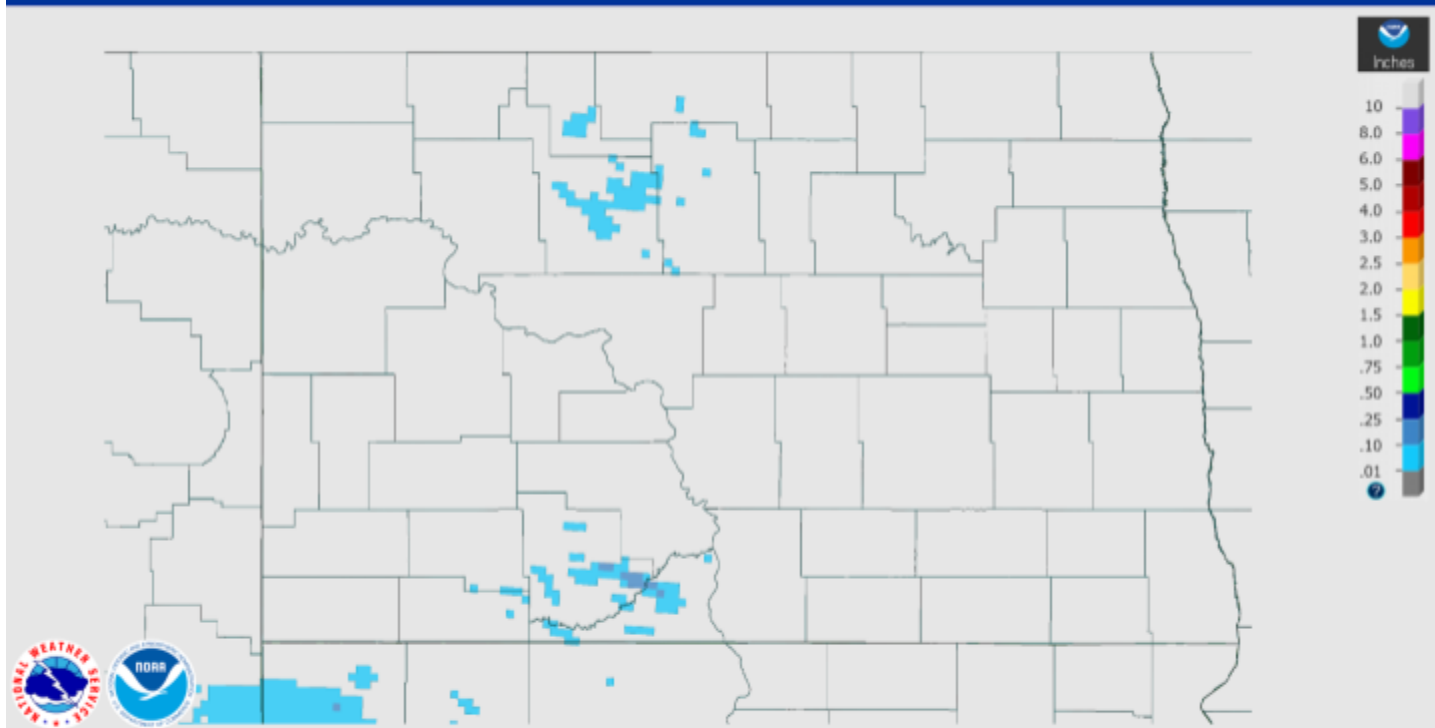
National Weather Service

Bismarck and Grand Forks, ND

September 23, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:08 UTC

Valid on: September 23, 2019 12:00 UTC



September 23, 2019 - 1 Day Observed Precipitation



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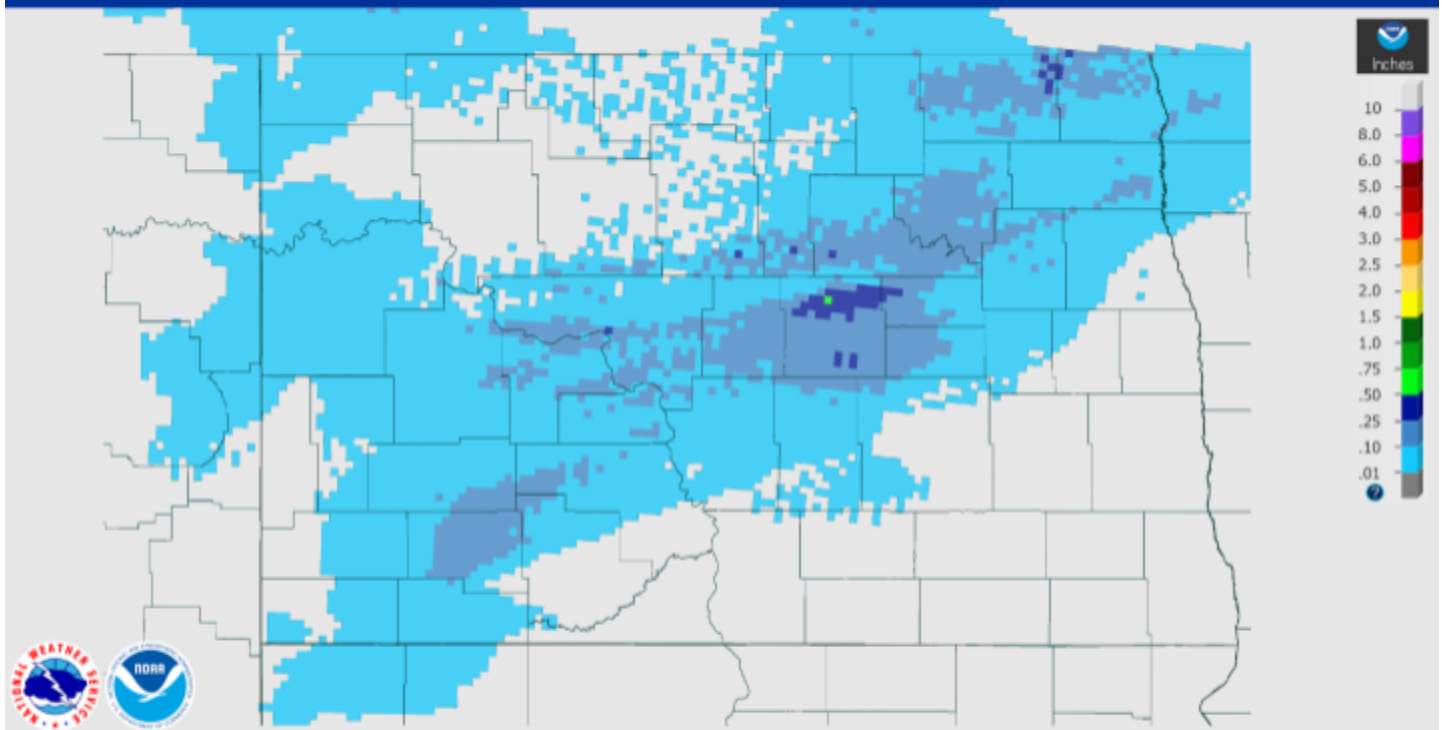
National Weather Service

Bismarck and Grand Forks, ND

September 24, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:10 UTC

Valid on: September 24, 2019 12:00 UTC



September 24, 2019 - 1 Day Observed Precipitation



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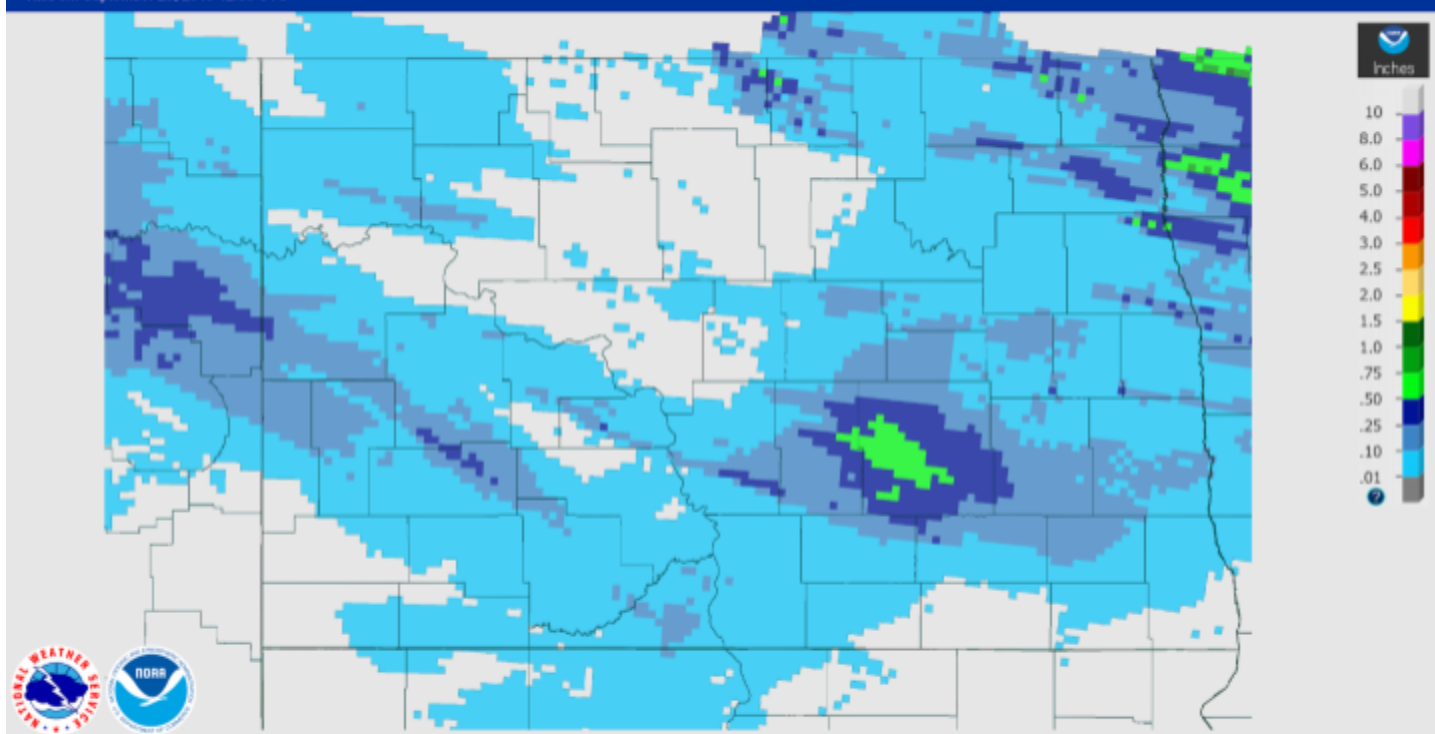
National Weather Service

Bismarck and Grand Forks, ND

September 25, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:12 UTC

Valid on: September 25, 2019 12:00 UTC



September 25, 2019 - 1 Day Observed Precipitation



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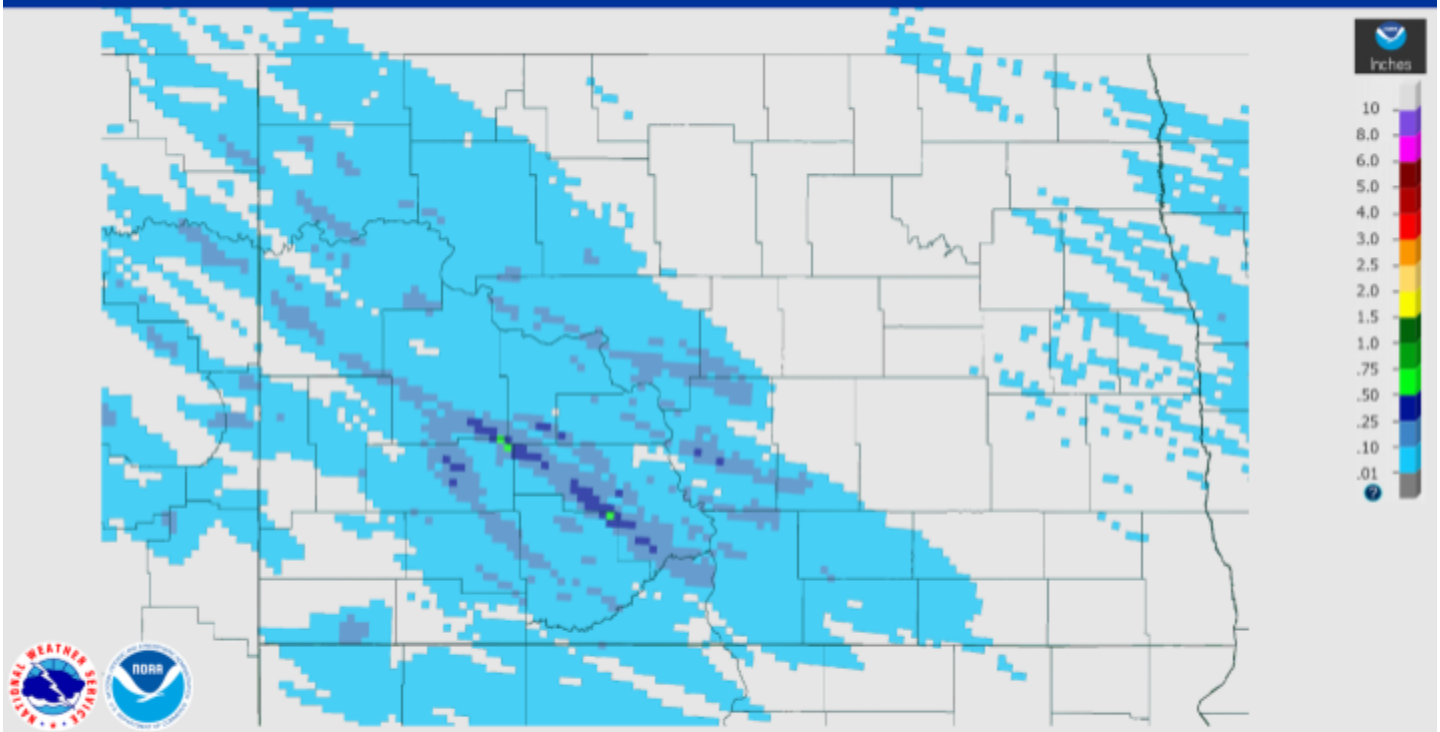
National Weather Service

Bismarck and Grand Forks, ND

September 26, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:13 UTC

Valid on: September 26, 2019 12:00 UTC



September 26, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



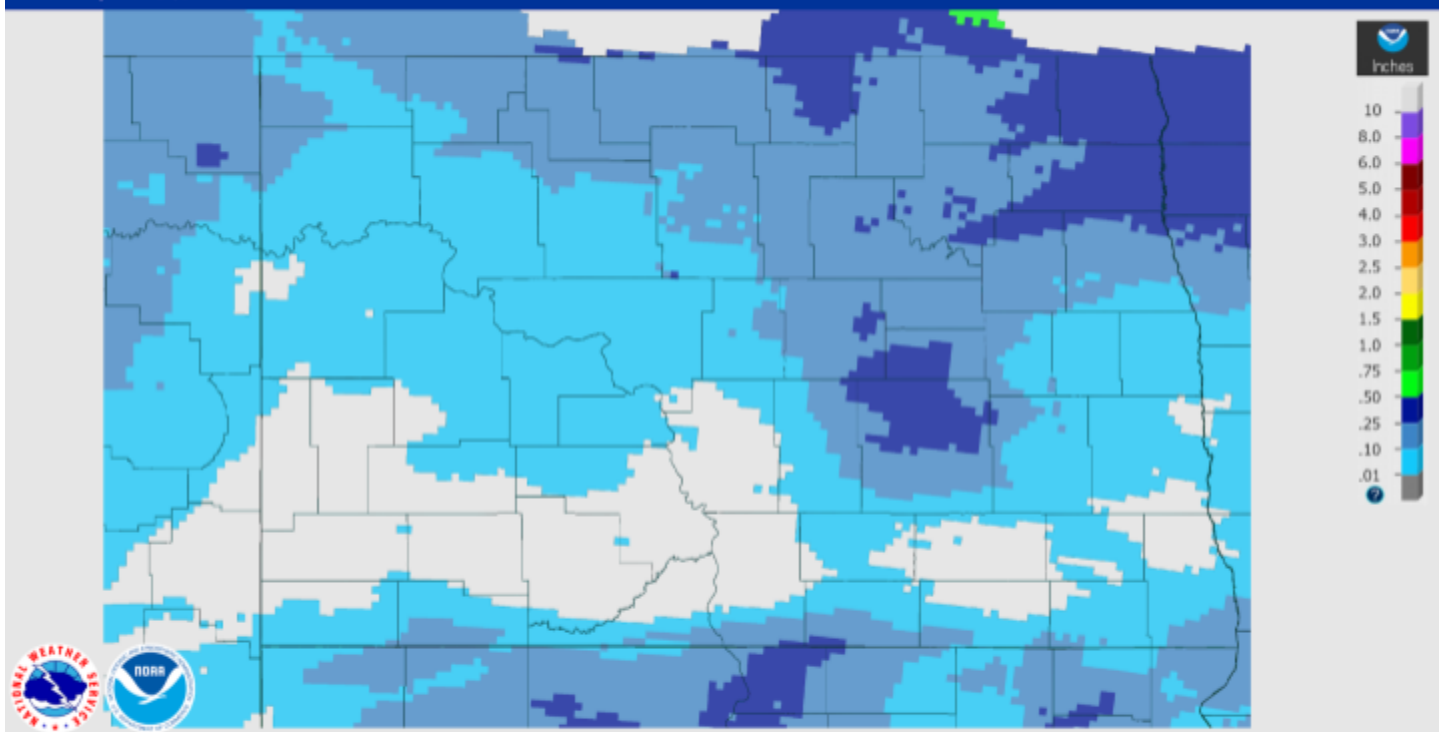
National Weather Service

Bismarck and Grand Forks, ND

September 27, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:15 UTC

Valid on: September 27, 2019 12:00 UTC



September 27, 2019 - 1 Day Observed Precipitation



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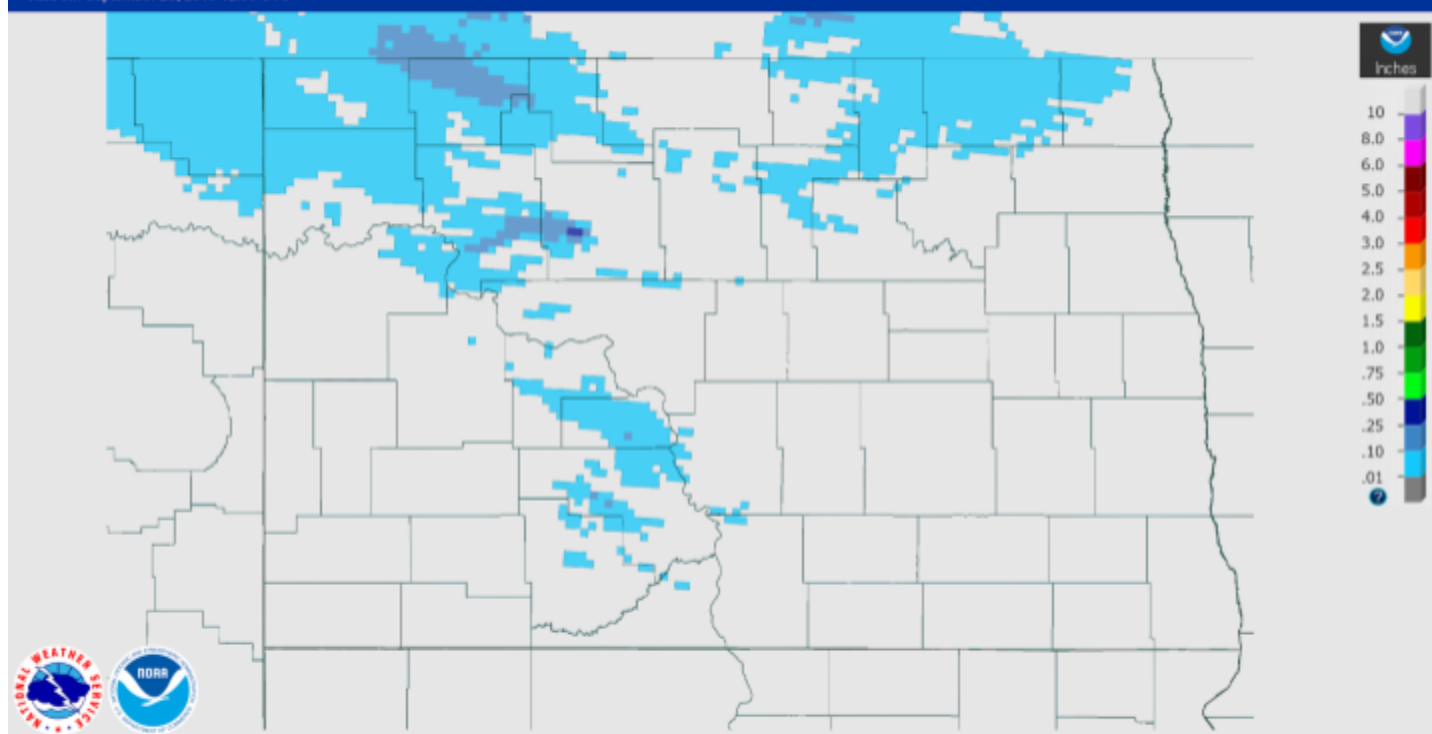
National Weather Service

Bismarck and Grand Forks, ND

September 28, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:15 UTC

Valid on: September 28, 2019 12:00 UTC



September 28, 2019 - 1 Day Observed Precipitation



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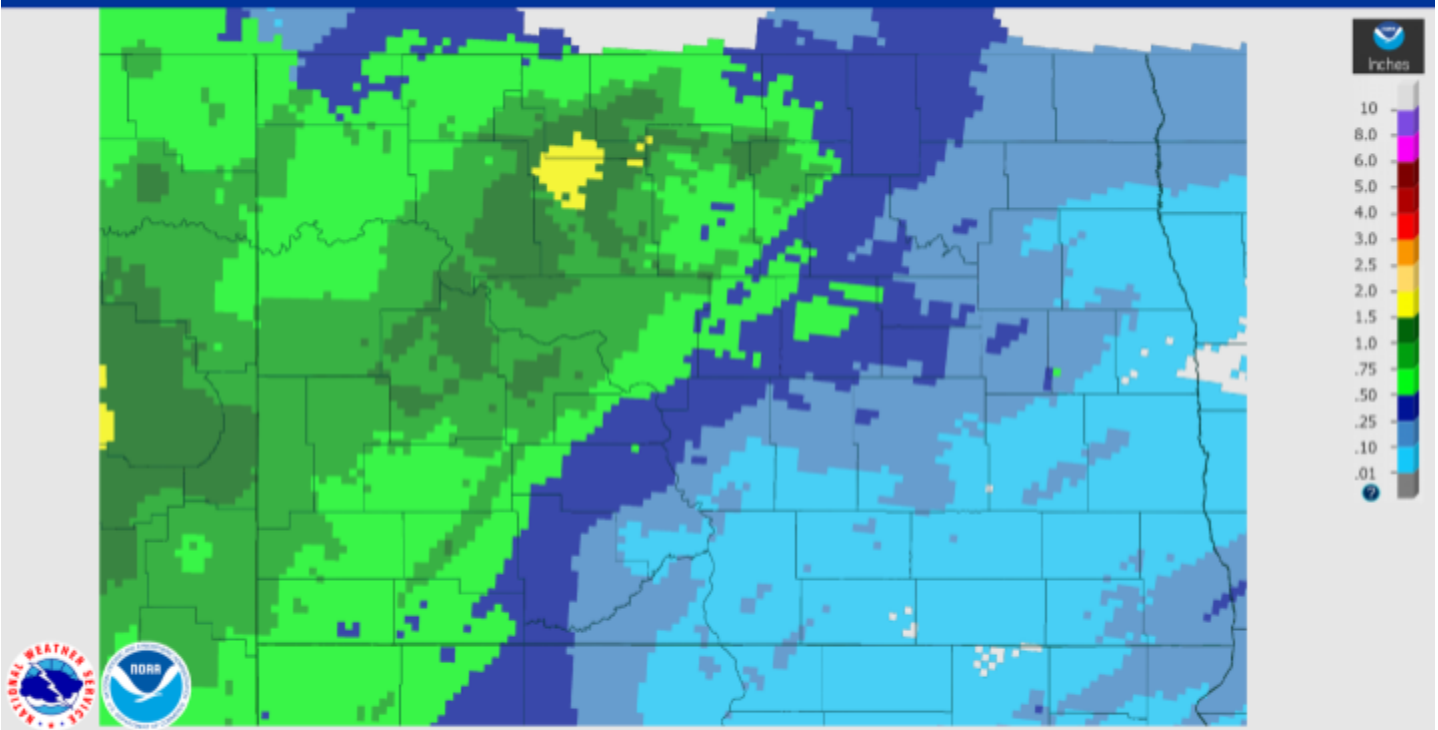
National Weather Service

Bismarck and Grand Forks, ND

September 29, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:16 UTC

Valid on: September 29, 2019 12:00 UTC



September 29, 2019 - 1 Day Observed Precipitation



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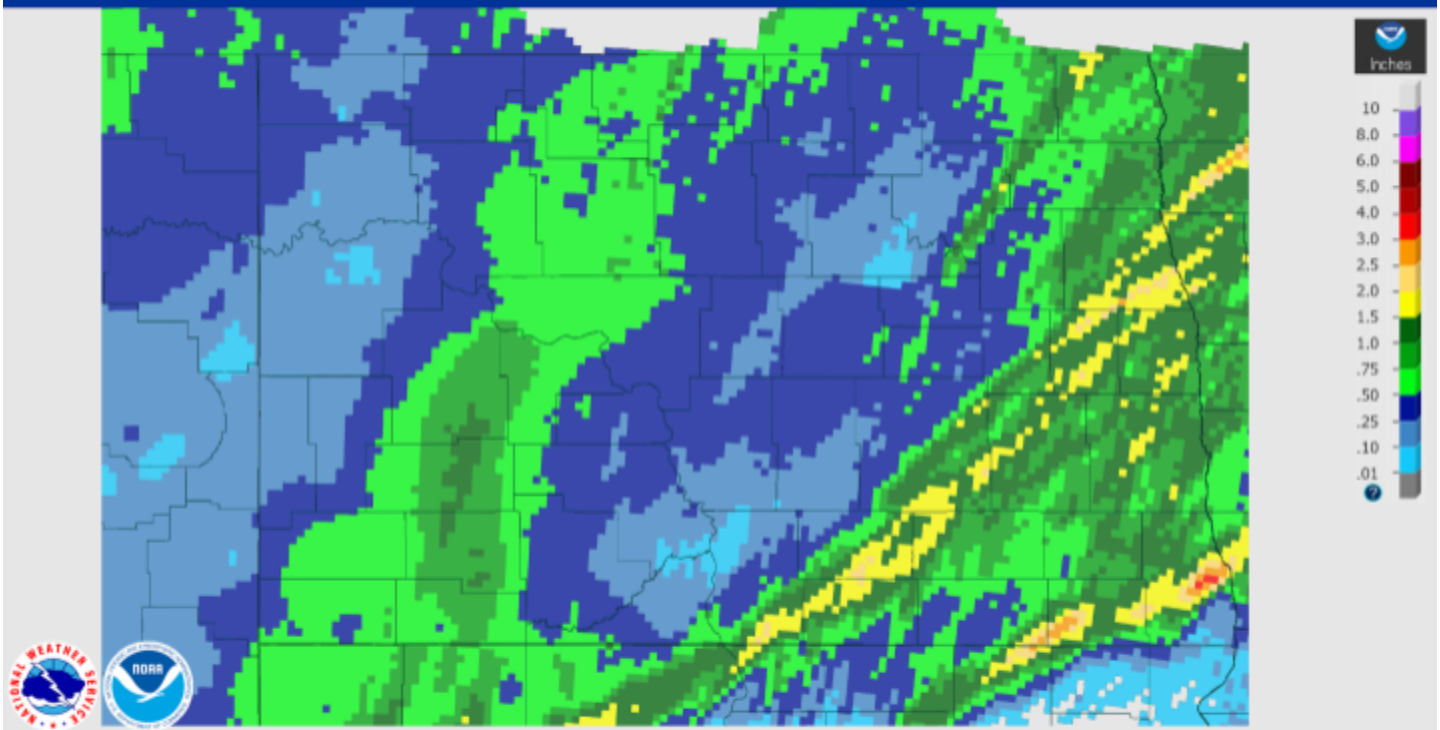
National Weather Service

Bismarck and Grand Forks, ND

September 30, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:17 UTC

Valid on: September 30, 2019 12:00 UTC



September 30, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



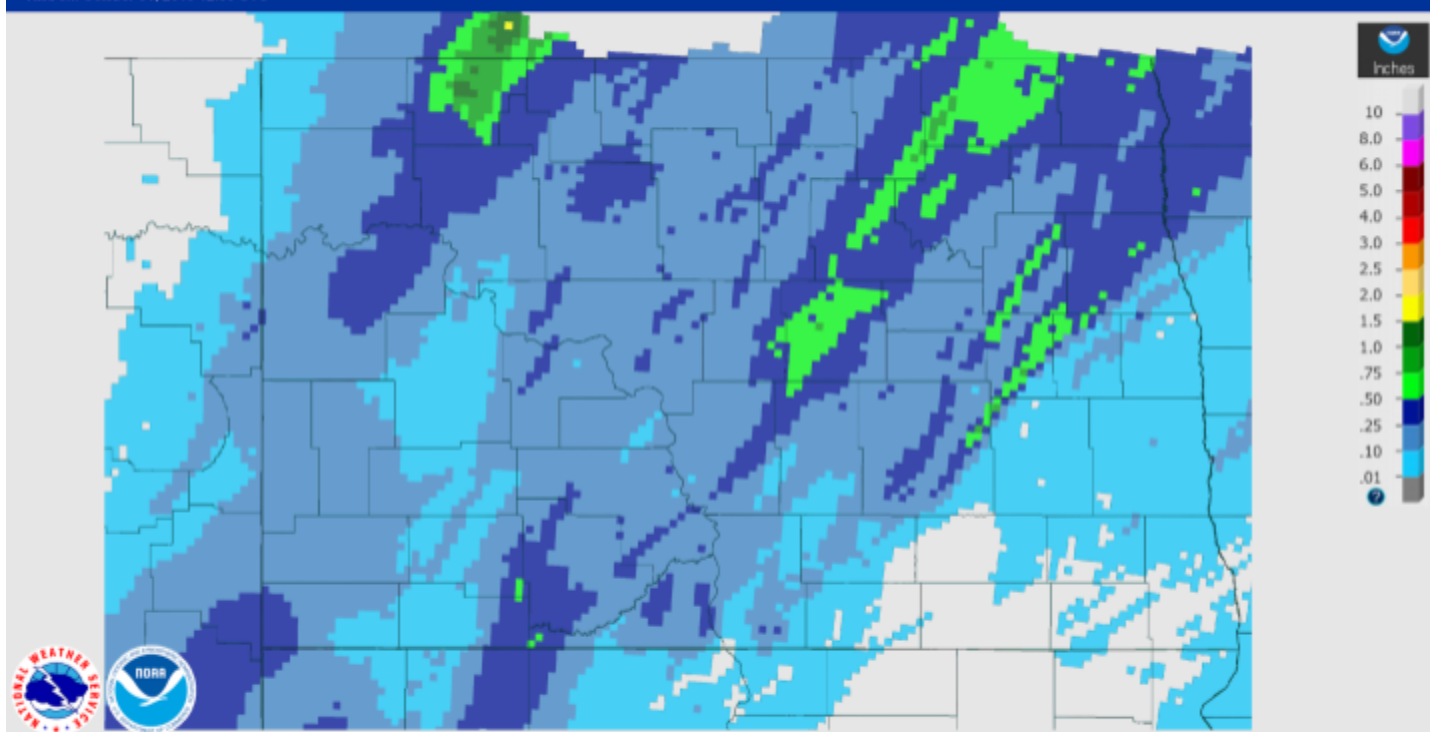
National Weather Service

Bismarck and Grand Forks, ND

October 01, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:18 UTC

Valid on: October 01, 2019 12:00 UTC



October 1, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



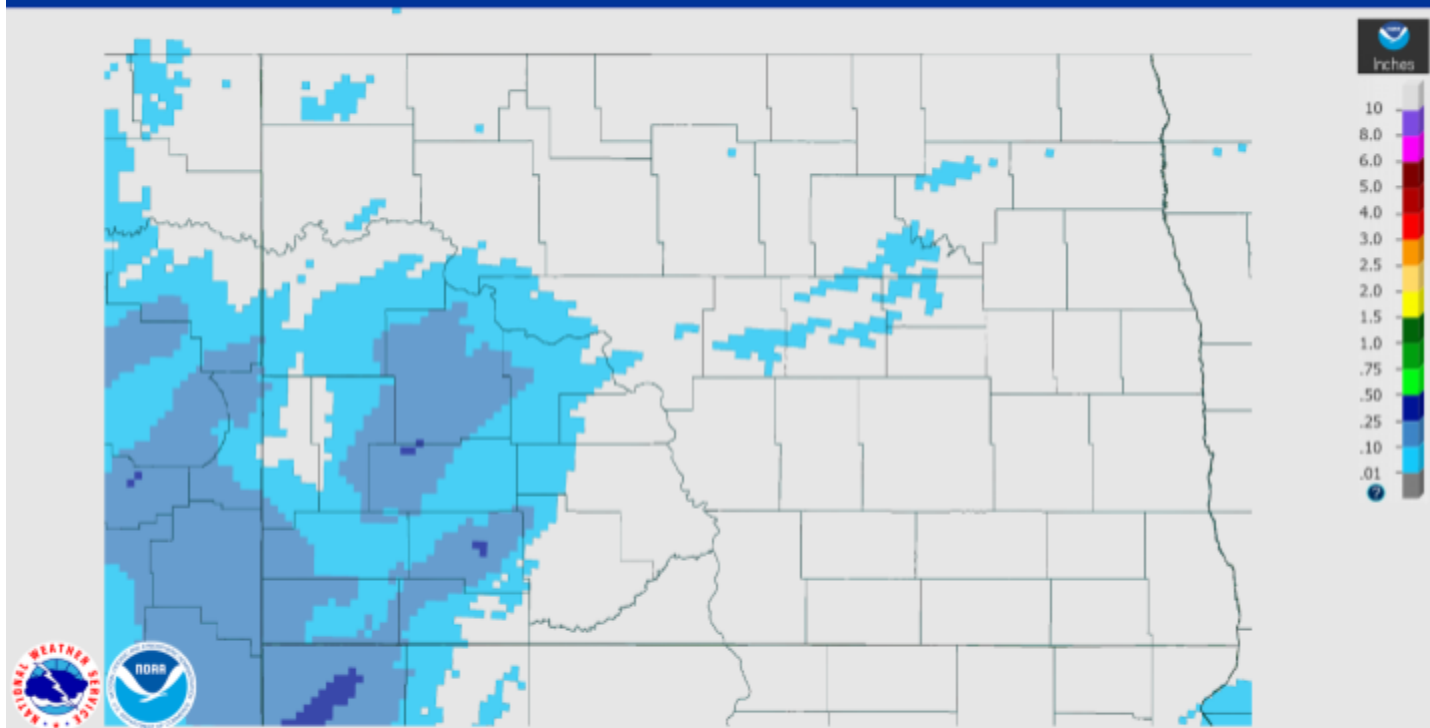
National Weather Service

Bismarck and Grand Forks, ND

October 02, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:19 UTC

Valid on: October 02, 2019 12:00 UTC



October 2, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation

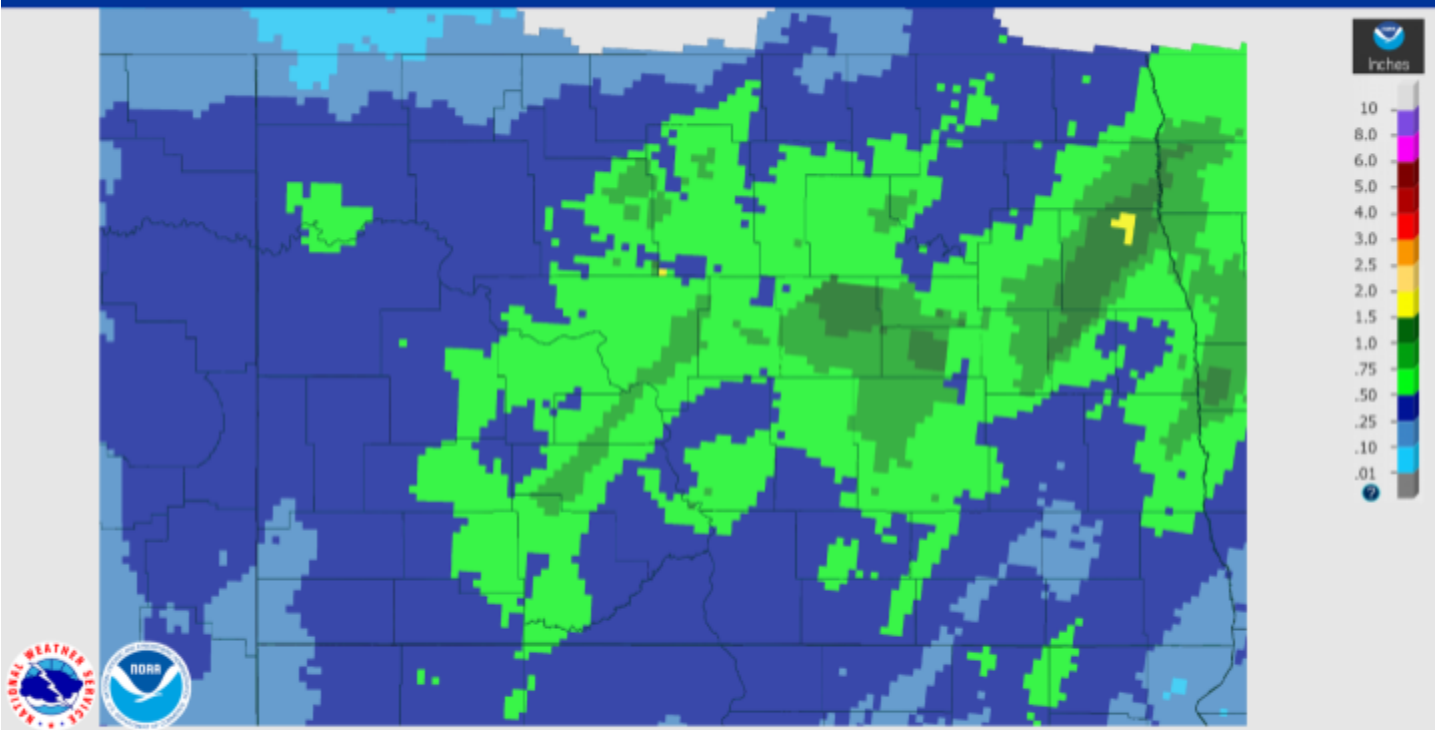


National Weather Service

Bismarck and Grand Forks, ND

October 03, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:20 UTC
Valid on: October 03, 2019 12:00 UTC



October 3, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



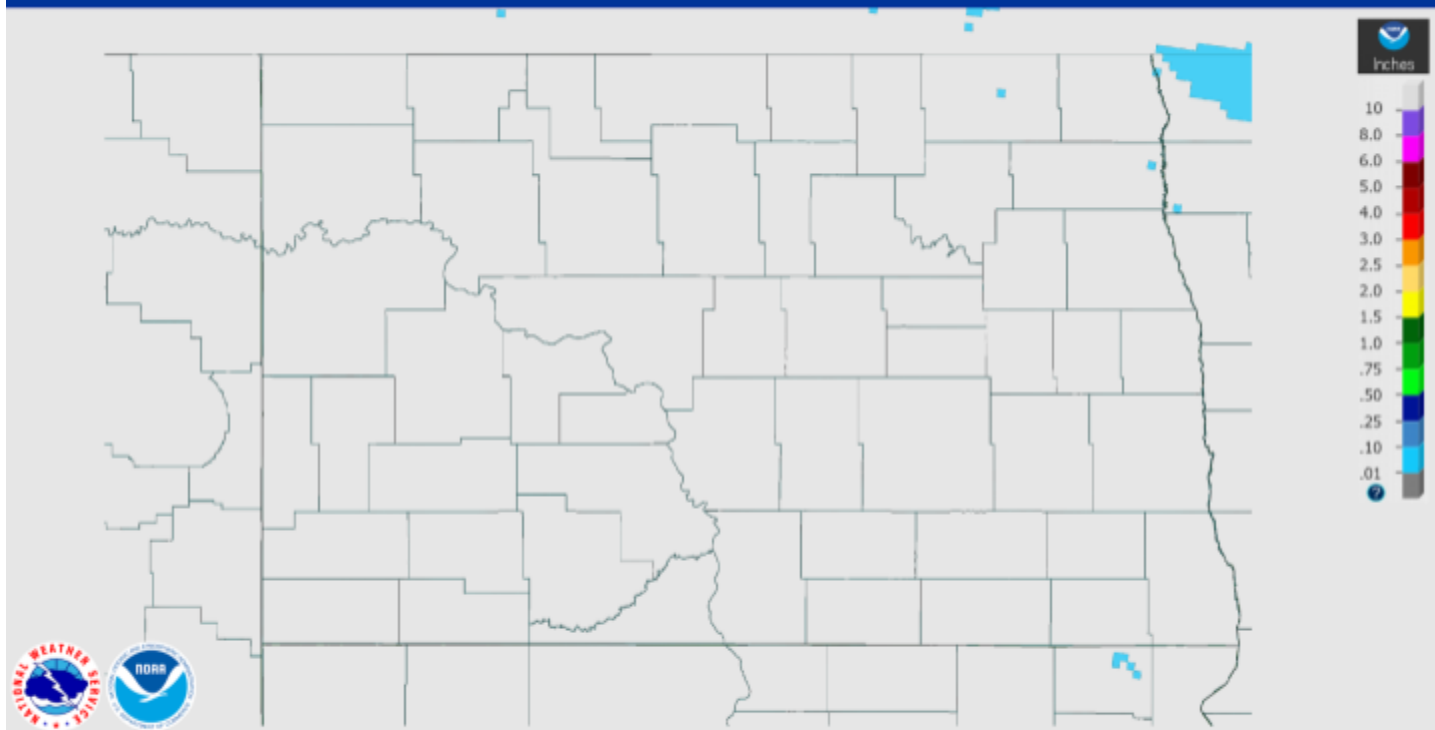
National Weather Service

Bismarck and Grand Forks, ND

October 04, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:21 UTC

Valid on: October 04, 2019 12:00 UTC



October 4, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



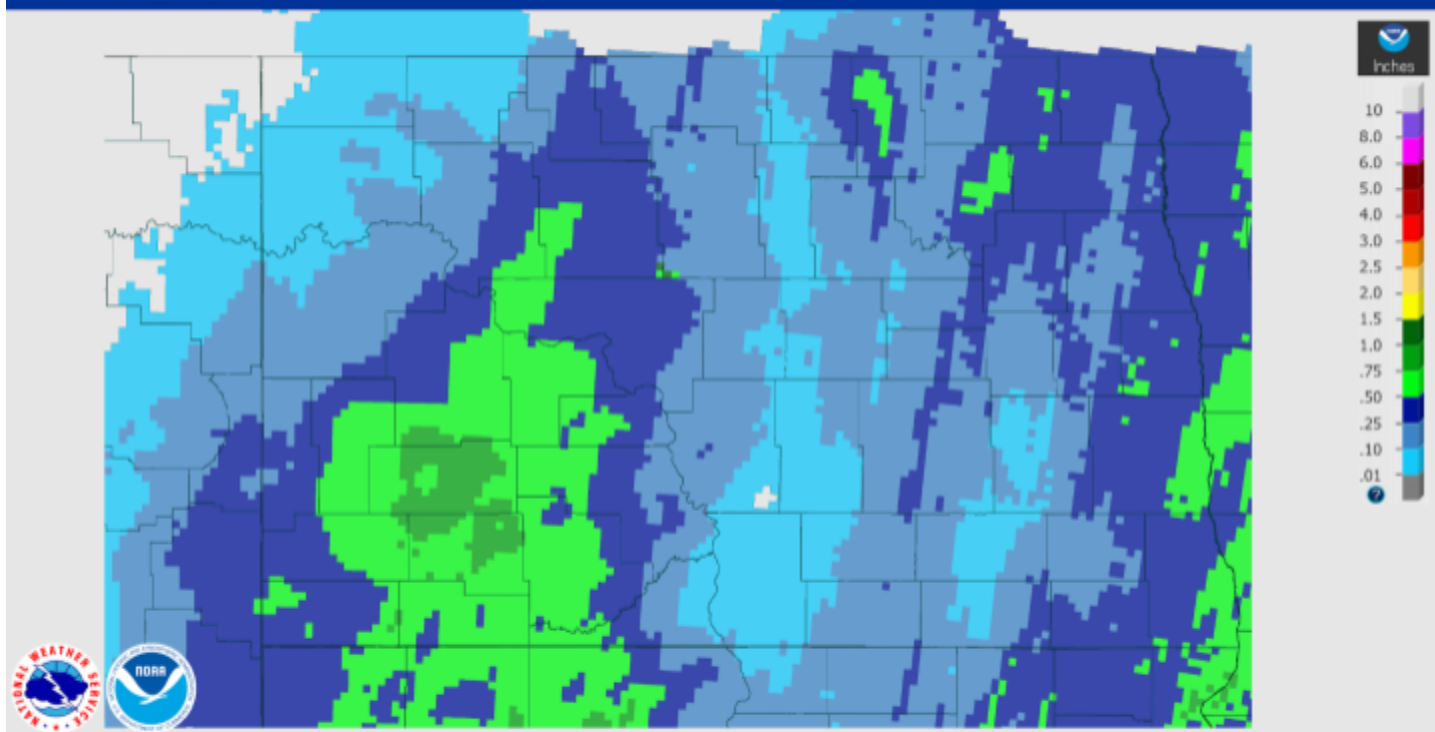
National Weather Service

Bismarck and Grand Forks, ND

October 05, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:22 UTC

Valid on: October 05, 2019 12:00 UTC



October 5, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



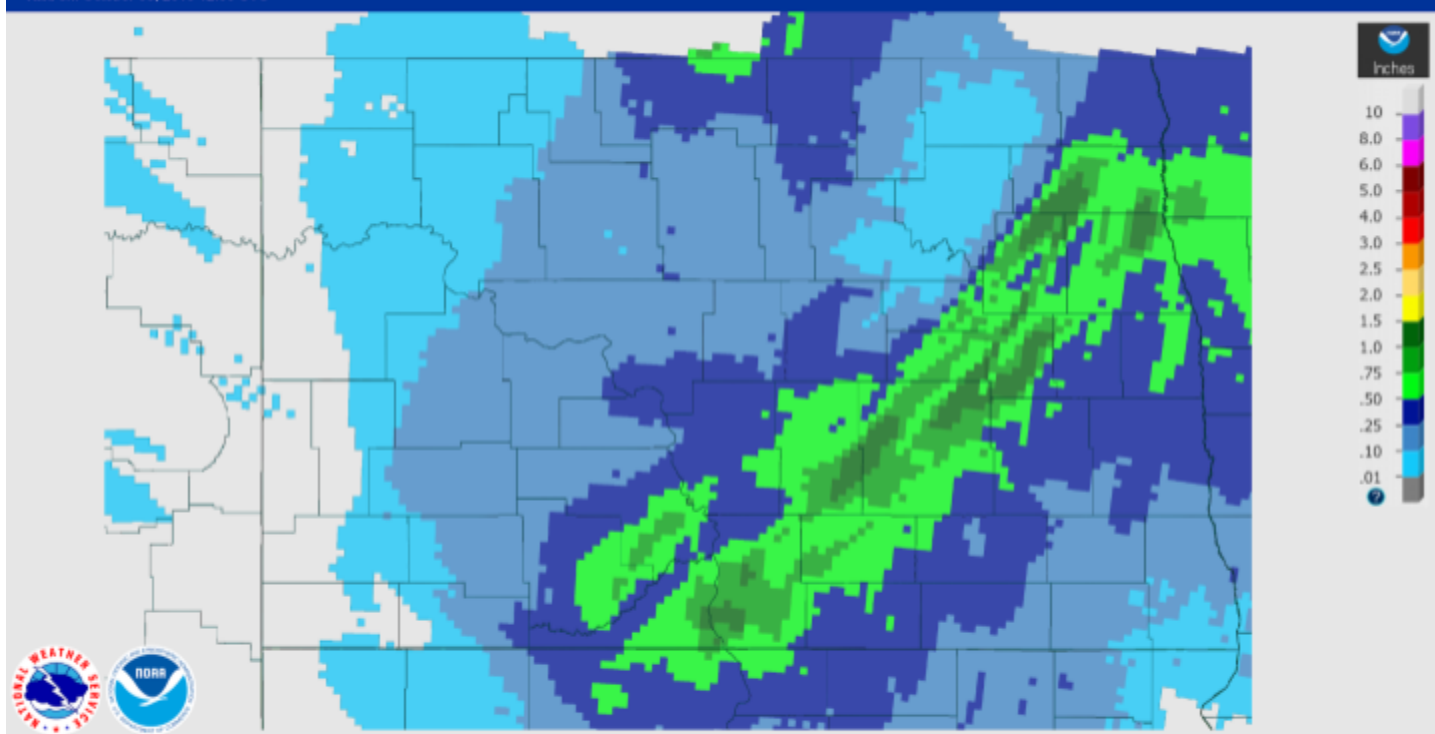
National Weather Service

Bismarck and Grand Forks, ND

October 06, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:22 UTC

Valid on: October 06, 2019 12:00 UTC



October 6, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



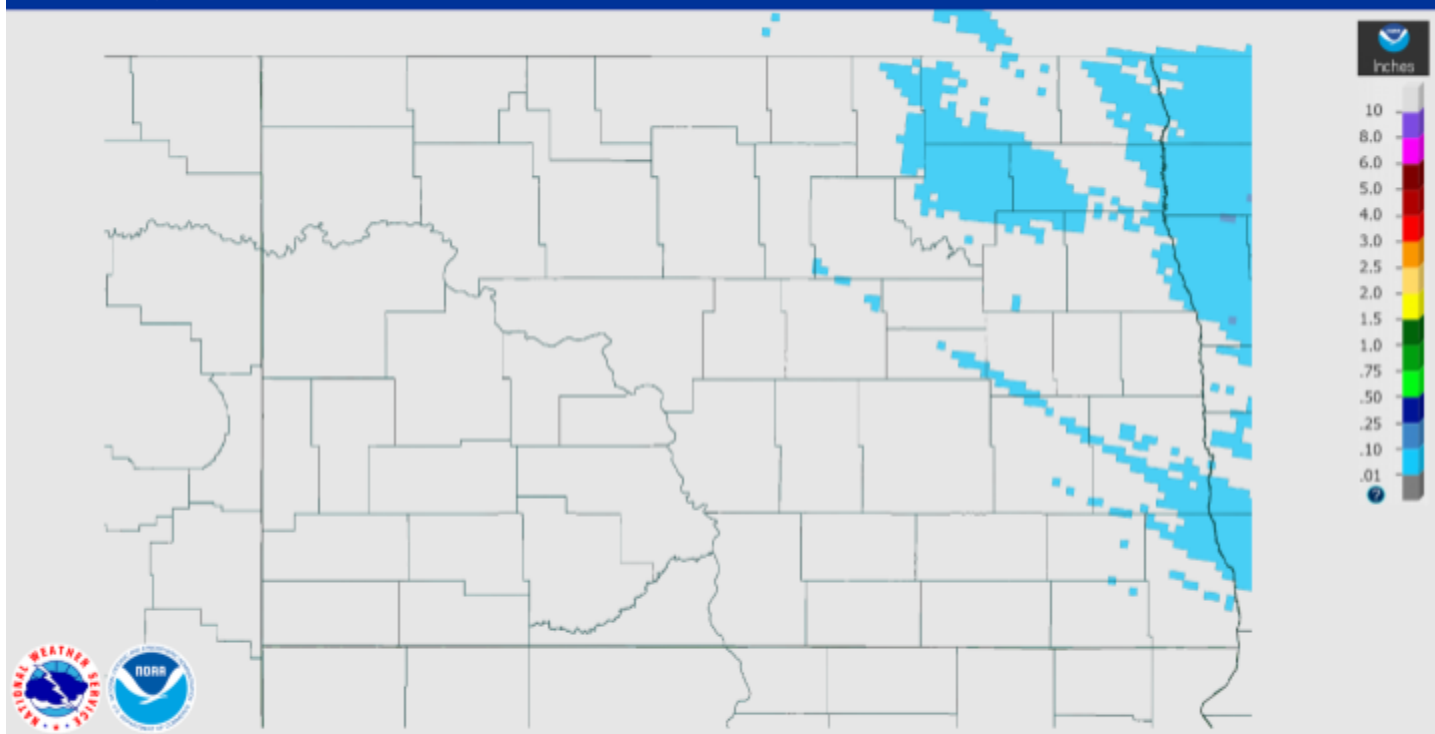
National Weather Service

Bismarck and Grand Forks, ND

October 07, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:23 UTC

Valid on: October 07, 2019 12:00 UTC



October 7, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation

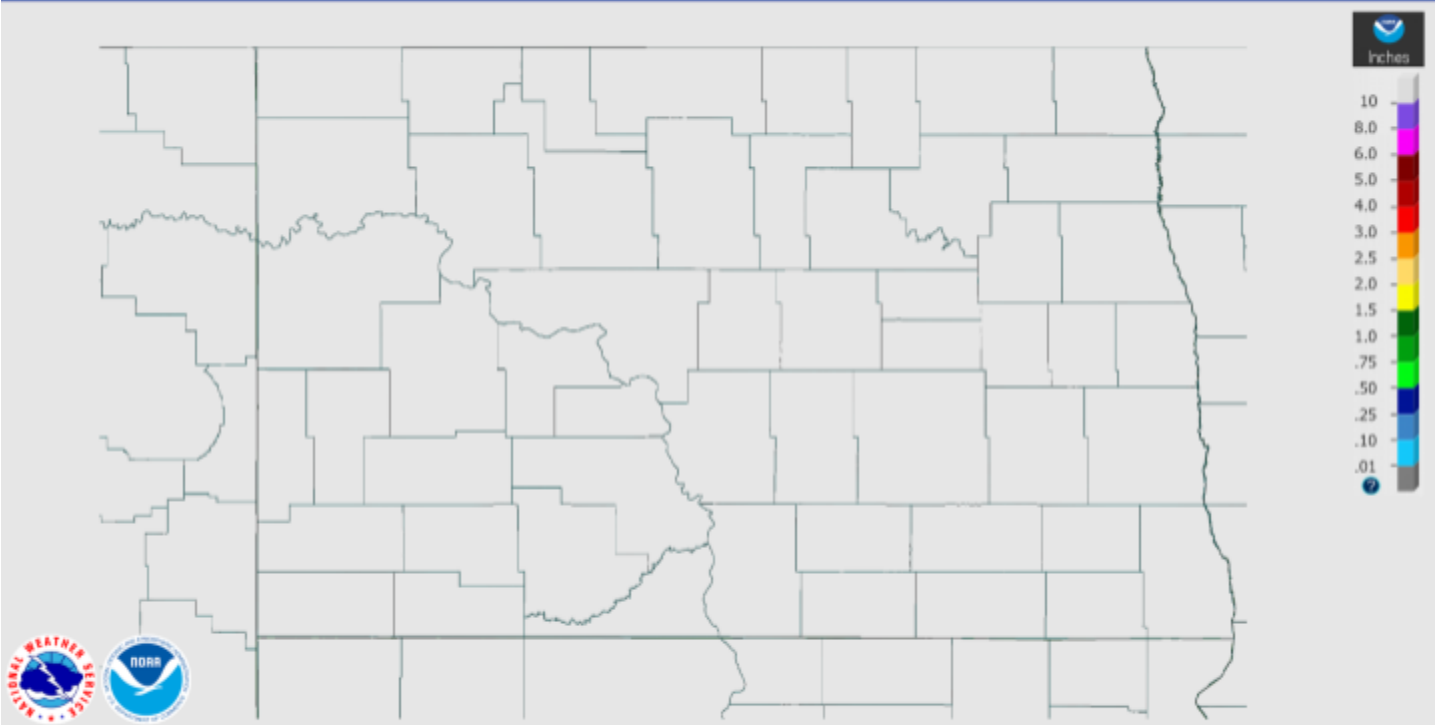


National Weather Service

Bismarck and Grand Forks, ND

October 08, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:24 UTC
Valid on: October 08, 2019 12:00 UTC



October 8, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



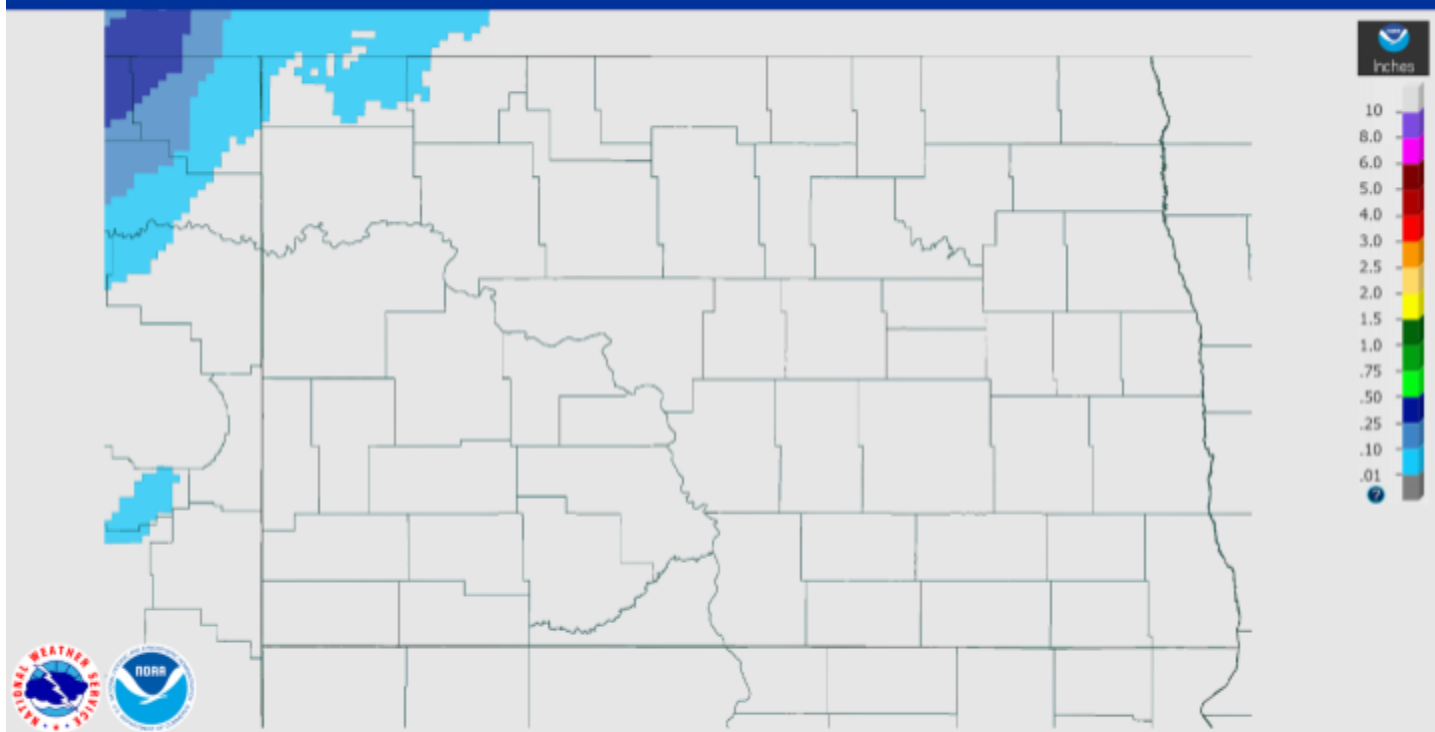
National Weather Service

Bismarck and Grand Forks, ND

October 09, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:24 UTC

Valid on: October 09, 2019 12:00 UTC



October 9, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



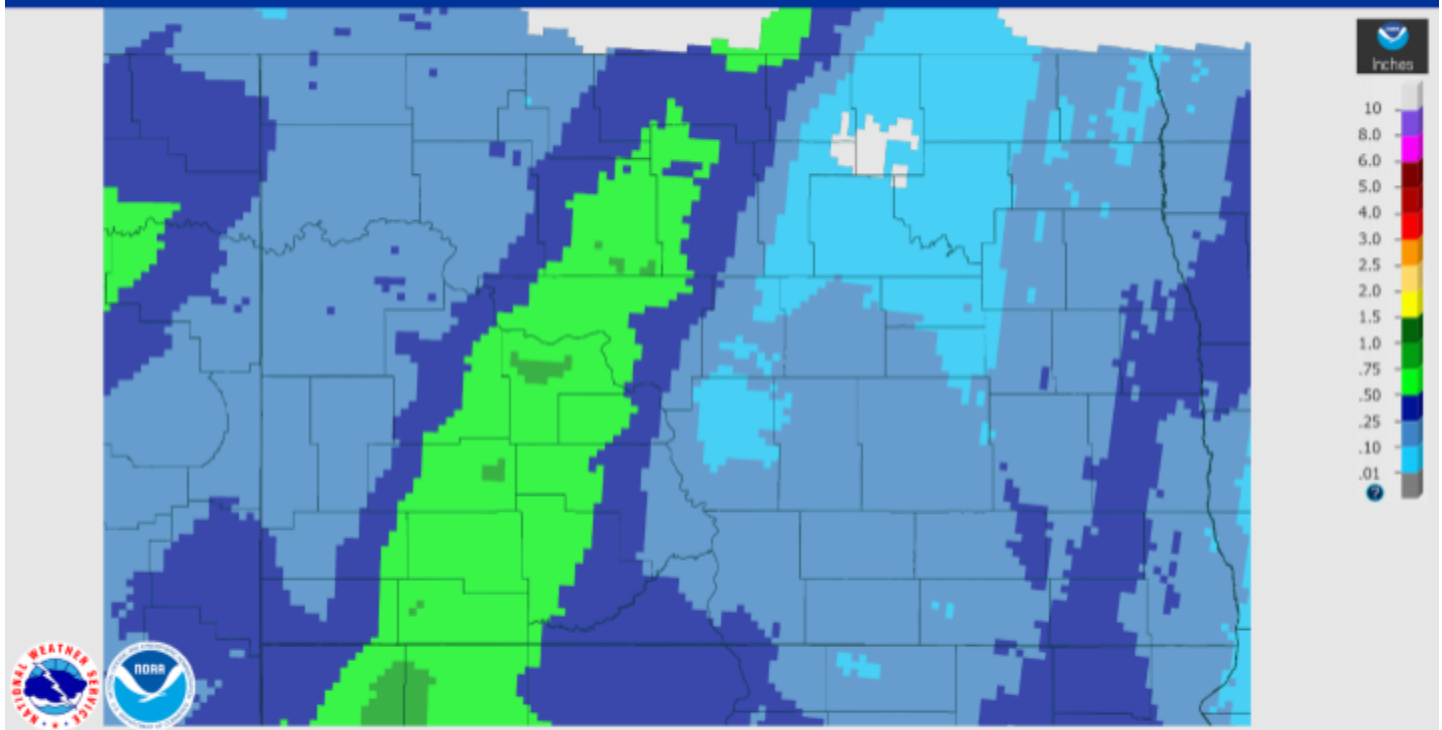
National Weather Service

Bismarck and Grand Forks, ND

October 10, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:25 UTC

Valid on: October 10, 2019 12:00 UTC



October 10, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation

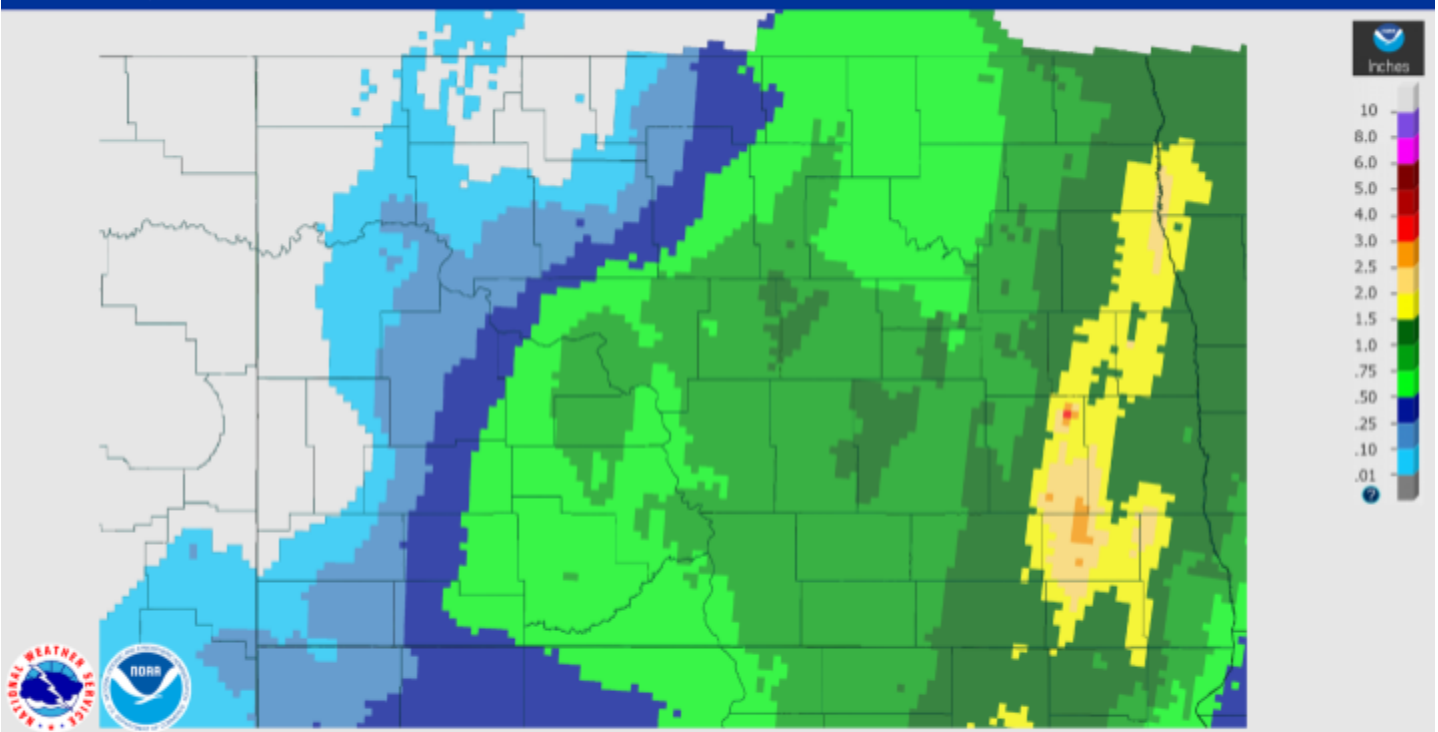


National Weather Service

Bismarck and Grand Forks, ND

October 11, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:25 UTC
Valid on: October 11, 2019 12:00 UTC



October 11, 2019 - 1 Day Observed Precipitation



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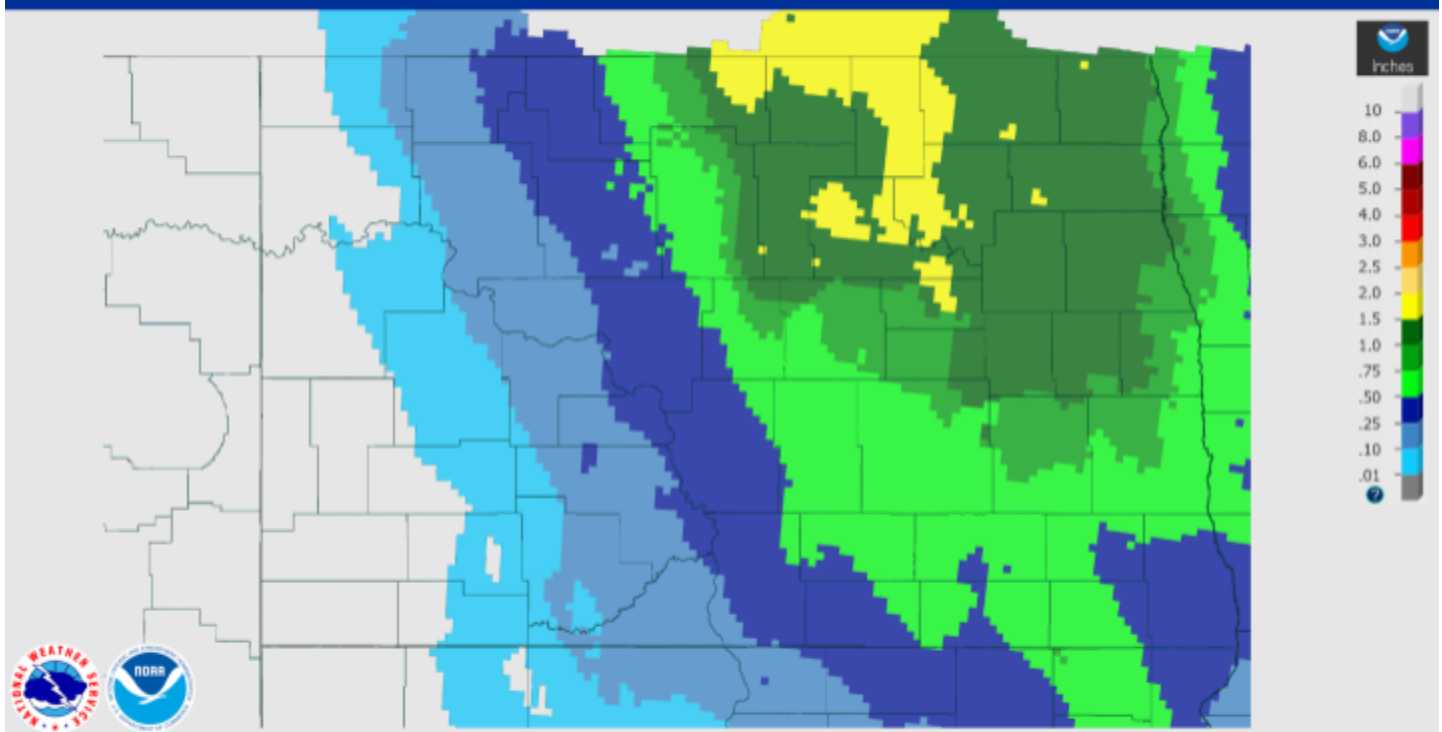


National Weather Service

Bismarck and Grand Forks, ND

October 12, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:26 UTC
Valid on: October 12, 2019 12:00 UTC



October 12, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



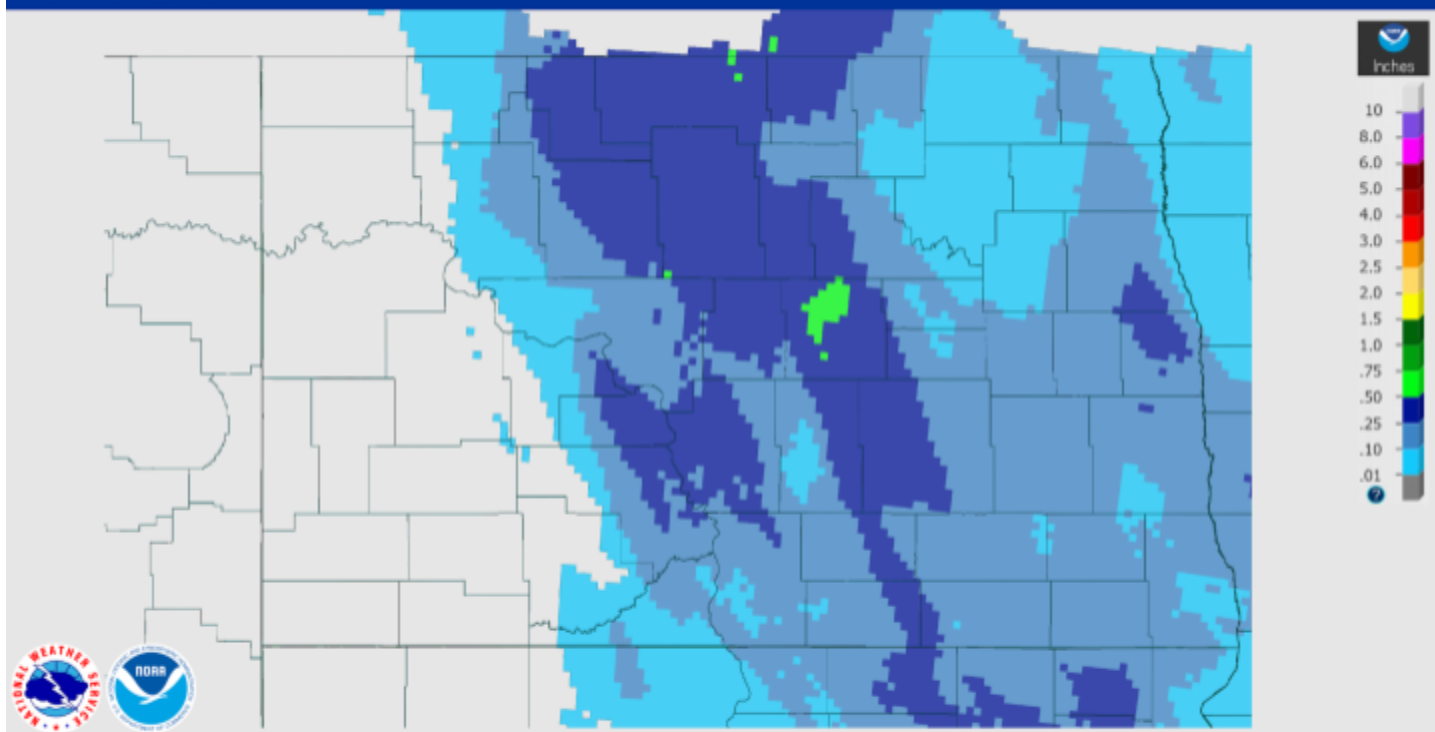
National Weather Service

Bismarck and Grand Forks, ND

October 13, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:27 UTC

Valid on: October 13, 2019 12:00 UTC



October 13, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



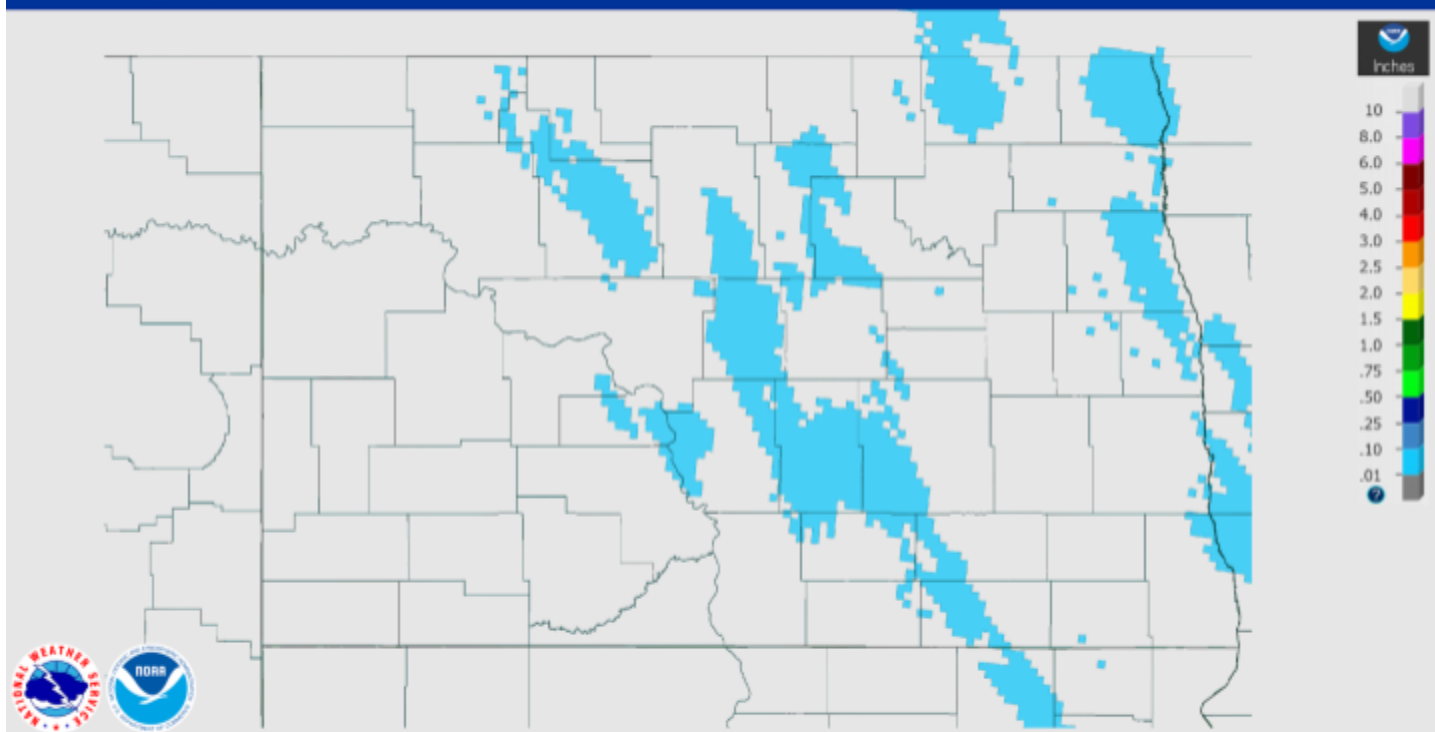
National Weather Service

Bismarck and Grand Forks, ND

October 14, 2019 1-Day Observed Precipitation

Created on: November 14, 2019 - 21:27 UTC

Valid on: October 14, 2019 12:00 UTC



October 14, 2019 - 1 Day Observed Precipitation



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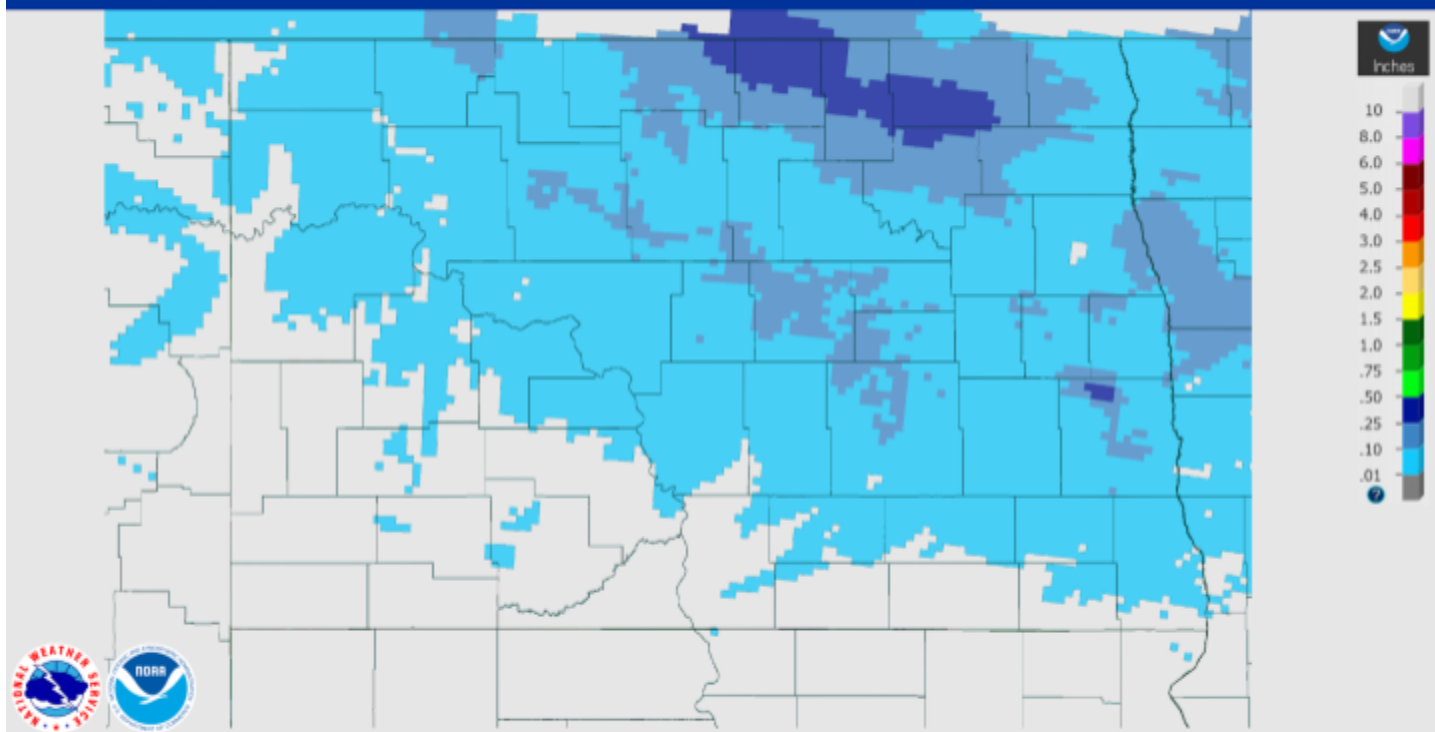
National Weather Service

Bismarck and Grand Forks, ND

October 15, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:43 UTC

Valid on: October 15, 2019 12:00 UTC



October 15, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



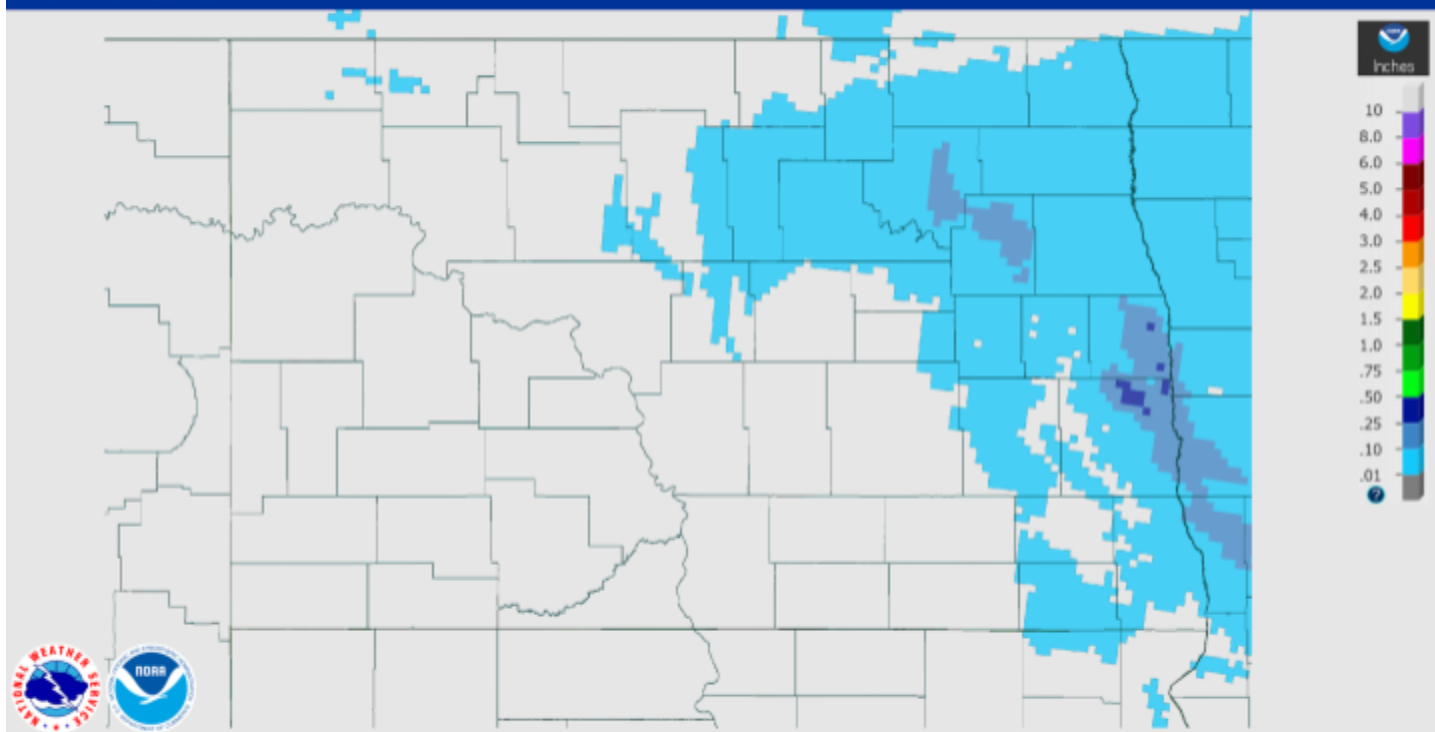
National Weather Service

Bismarck and Grand Forks, ND

October 16, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:44 UTC

Valid on: October 16, 2019 12:00 UTC



October 16, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



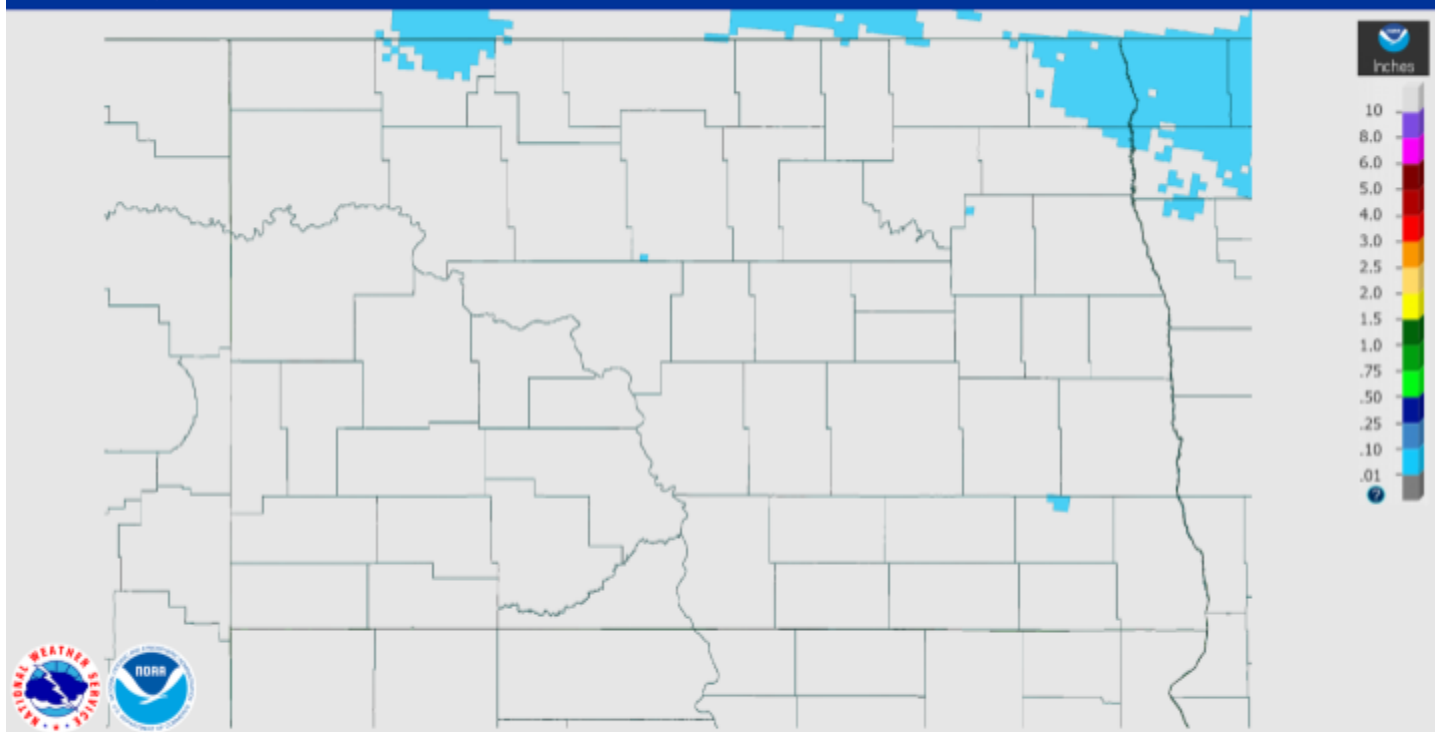
National Weather Service

Bismarck and Grand Forks, ND

October 17, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:44 UTC

Valid on: October 17, 2019 12:00 UTC



October 17, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



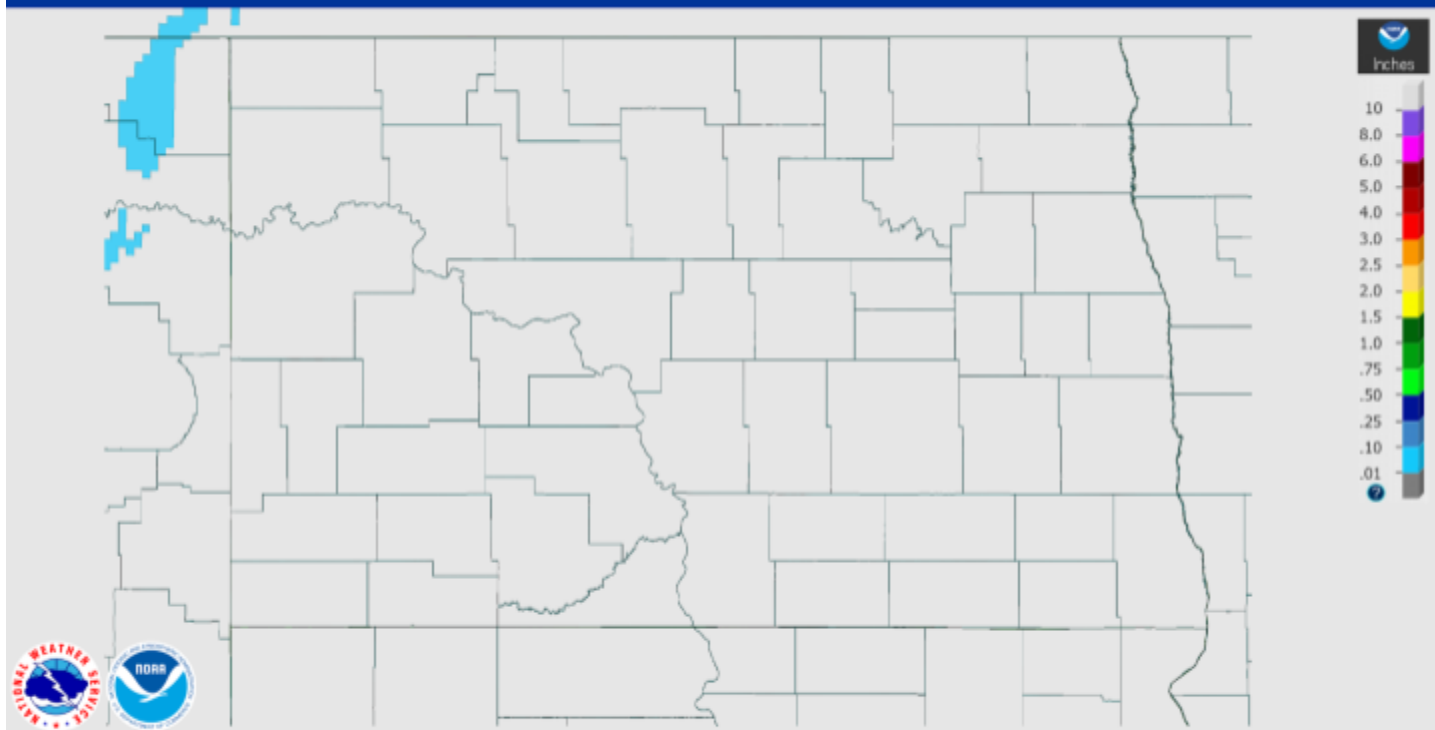
National Weather Service

Bismarck and Grand Forks, ND

October 18, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:45 UTC

Valid on: October 18, 2019 12:00 UTC



October 18, 2019 - 1 Day Observed Precipitation



Building a Weather-Ready Nation



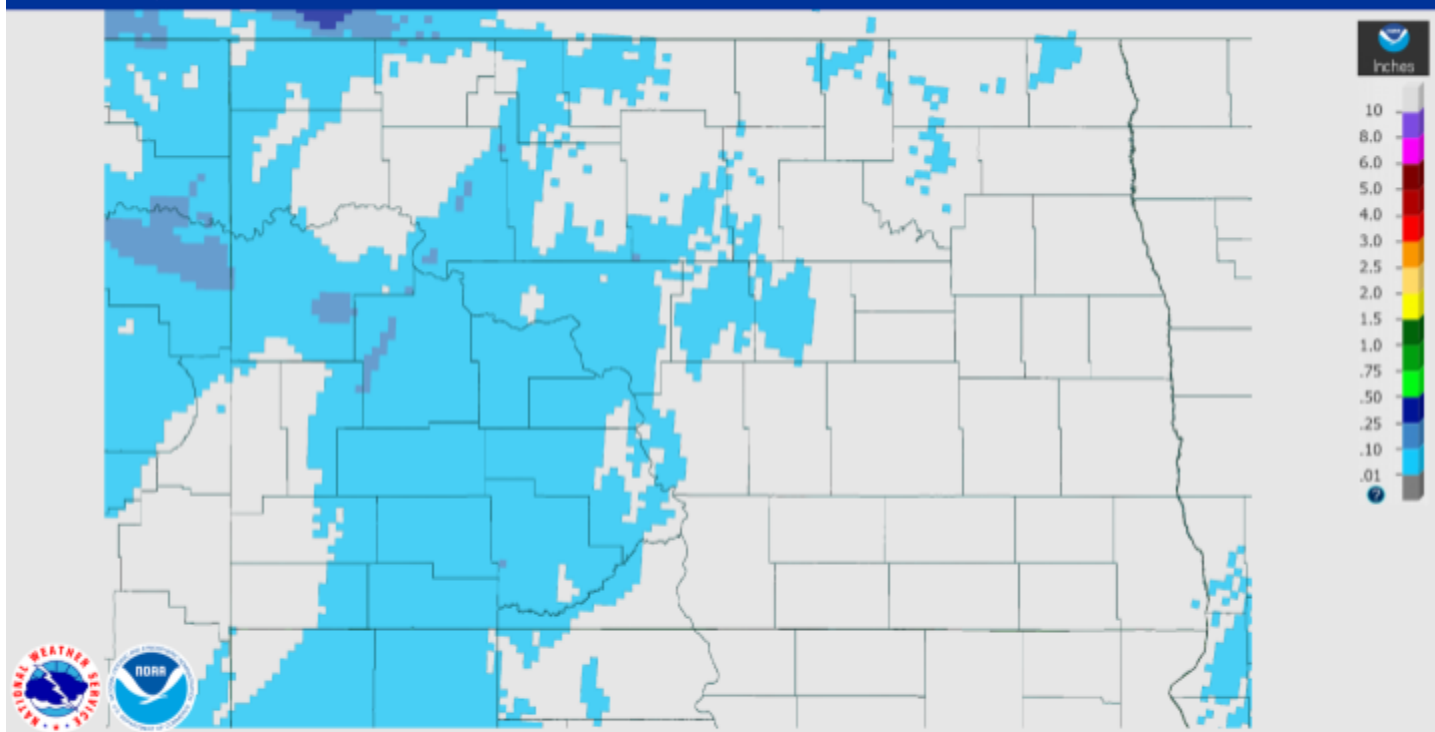
National Weather Service

Bismarck and Grand Forks, ND

October 19, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:46 UTC

Valid on: October 19, 2019 12:00 UTC



October 19, 2019 - 1 Day Observed Precipitation



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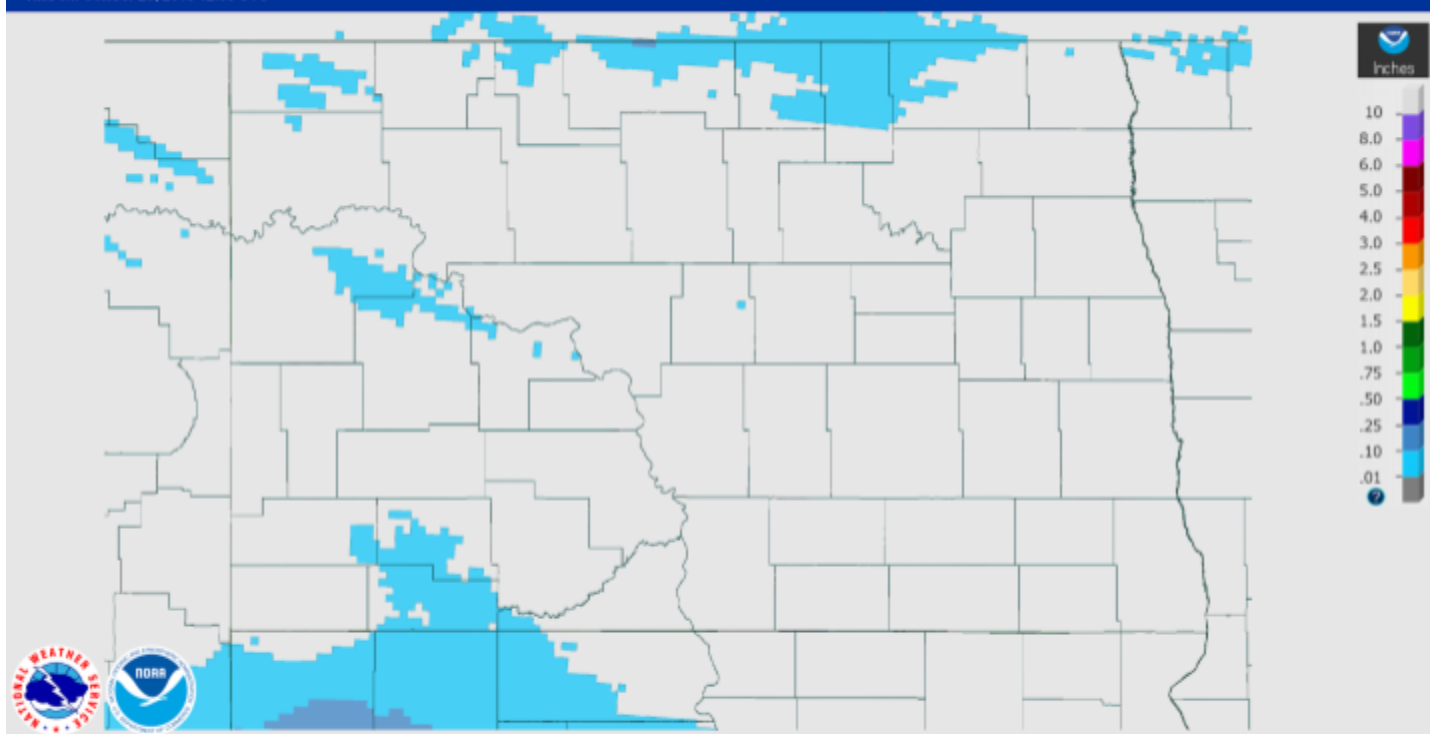
National Weather Service

Bismarck and Grand Forks, ND

October 20, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:46 UTC

Valid on: October 20, 2019 12:00 UTC



October 20, 2019 - 1 Day Observed Precipitation



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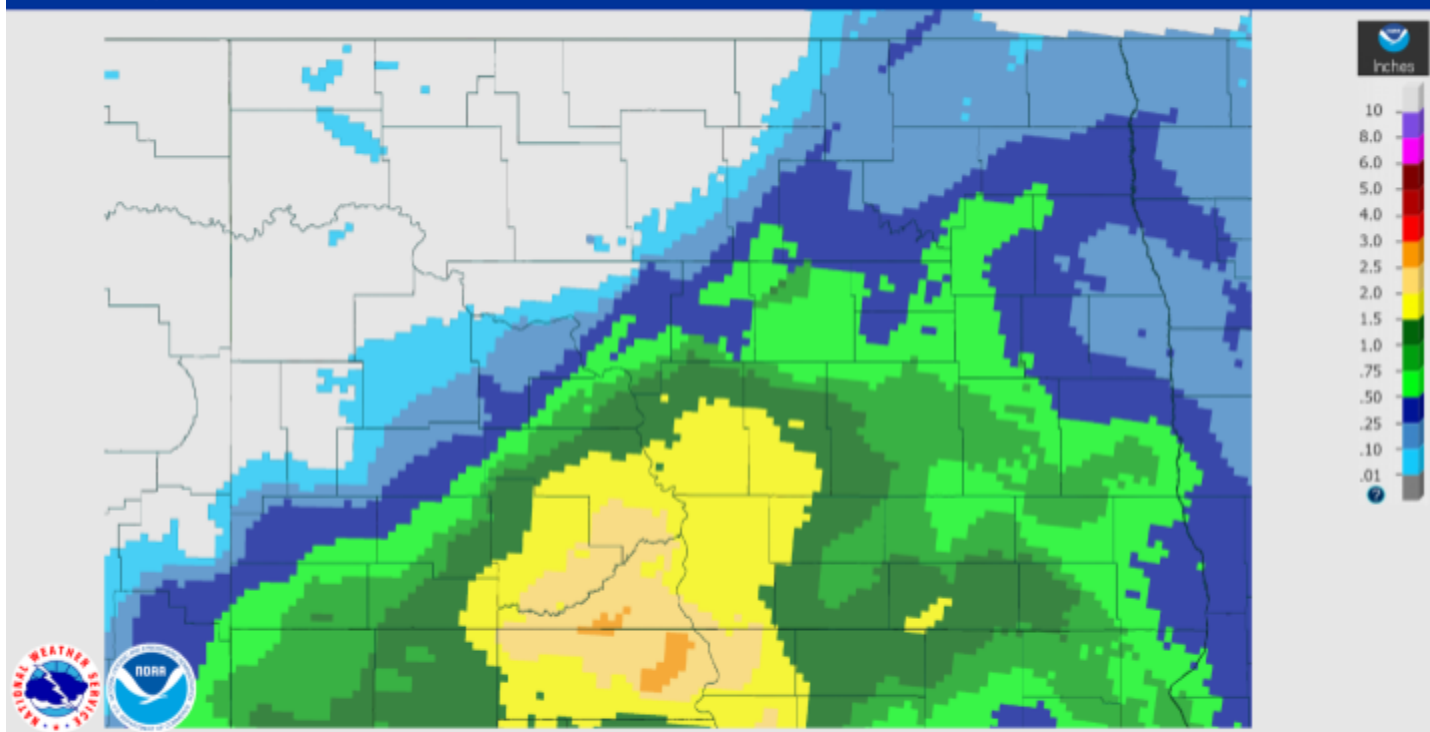
National Weather Service

Bismarck and Grand Forks, ND

October 21, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:47 UTC

Valid on: October 21, 2019 12:00 UTC



October 21, 2019 - 1 Day Observed Precipitation



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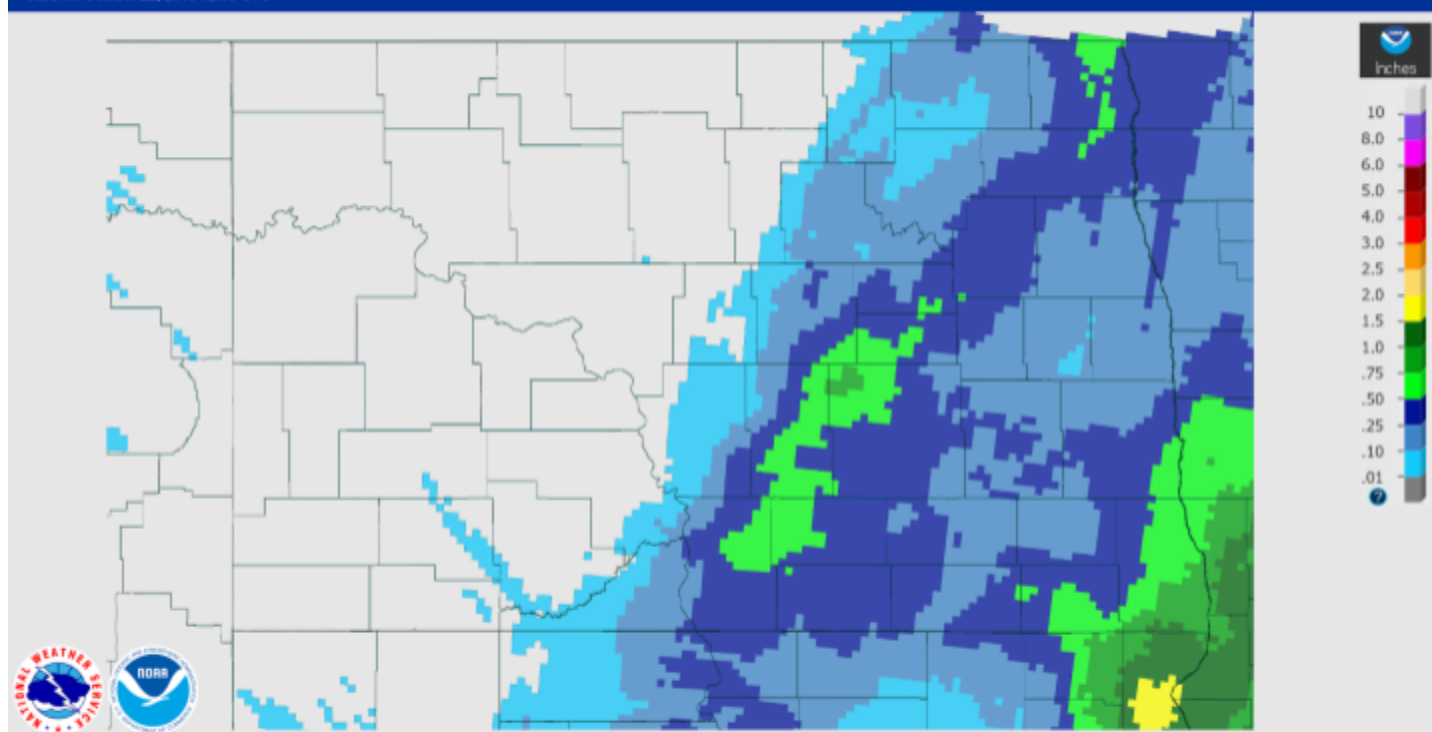
National Weather Service

Bismarck and Grand Forks, ND

October 22, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:48 UTC

Valid on: October 22, 2019 12:00 UTC



October 22, 2019 - 1 Day Observed Precipitation



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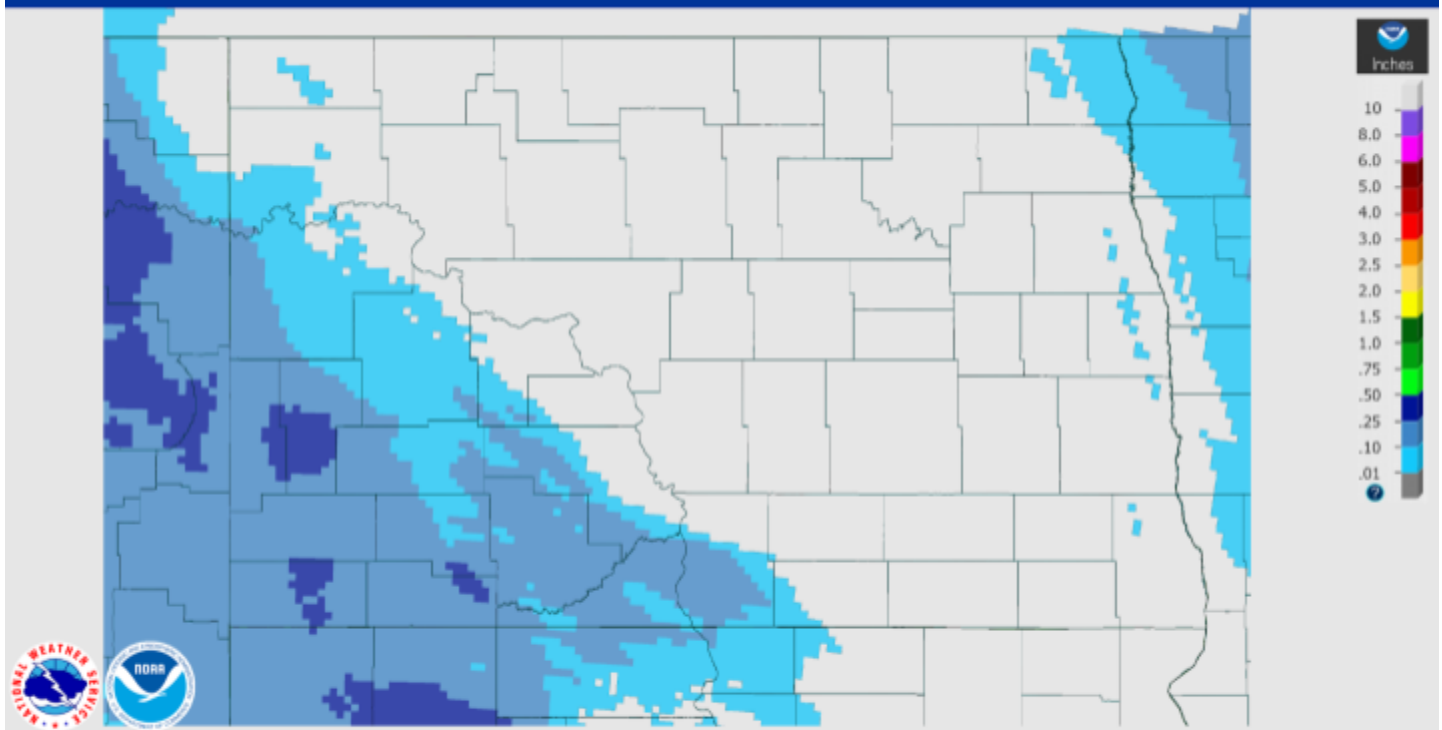
National Weather Service

Bismarck and Grand Forks, ND

October 23, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:48 UTC

Valid on: October 23, 2019 12:00 UTC



October 23, 2019 - 1 Day Observed Precipitation



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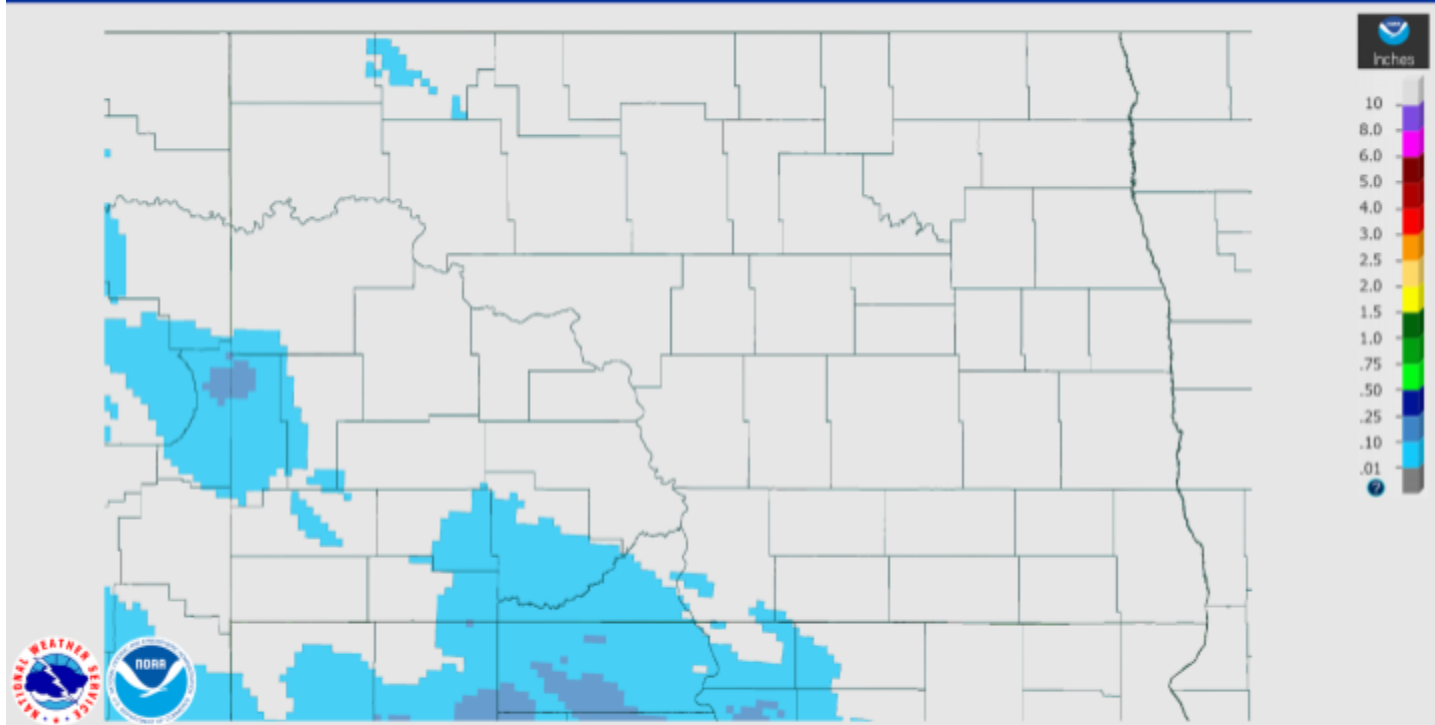
National Weather Service

Bismarck and Grand Forks, ND

October 24, 2019 1-Day Observed Precipitation

Created on: November 15, 2019 - 21:49 UTC

Valid on: October 24, 2019 12:00 UTC



October 24, 2019 - 1 Day Observed Precipitation



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National Weather Service

Bismarck and Grand Forks, ND

North Dakota



North Dakota Climate Divisions



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National Weather Service

Bismarck and Grand Forks, ND

Climate Division Data by State between Two Dates
From Midwestern Regional Climate Center

North Dakota
9/20/2019 to 10/13/2019

cd	Temperature			prcp	Precipitation		
	temp	norm	dev		norm	dev	percent
1	45.2	48.2	-3.1	3.60	1.04	2.57	347
2	45.3	48.4	-3.1	5.42	1.20	4.21	450
3	46.5	48.6	-2.1	7.26	1.39	5.87	522
4	46.0	49.8	-3.8	4.44	1.19	3.25	374
5	47.4	50.1	-2.7	5.77	1.32	4.45	437
6	48.9	50.3	-1.4	6.23	1.50	4.73	415
7	45.9	50.4	-4.5	3.26	1.16	2.10	280
8	47.1	51.0	-3.9	3.93	1.15	2.78	341
9	49.3	51.0	-1.6	4.16	1.46	2.70	286
State	46.6	49.6	-3.0	4.82	1.25	3.57	385

Midwestern Regional Climate Center
MRCC Applied Climate System
Generated at:
Tue Nov 19 08:31:26 CST 2019

Temperature and Precipitation Data for North Dakota Climate
Divisions from September 20 to October 13, 2019



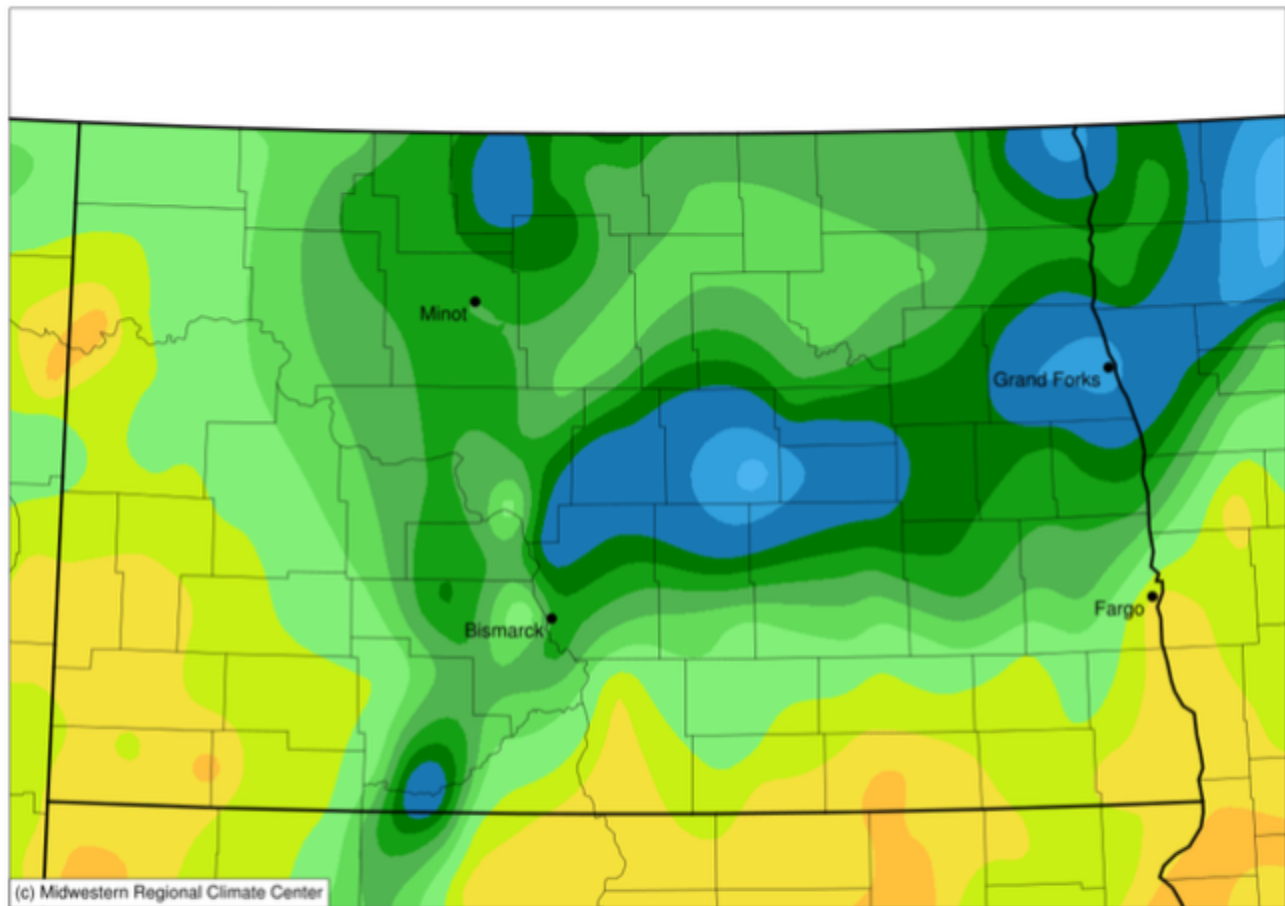
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National Weather Service

Bismarck and Grand Forks, ND

Accumulated Precipitation (in)
September 20, 2019 to September 22, 2019



0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 8

Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 11/13/2019 1:21:17 PM CST

This precipitation fell as rain.



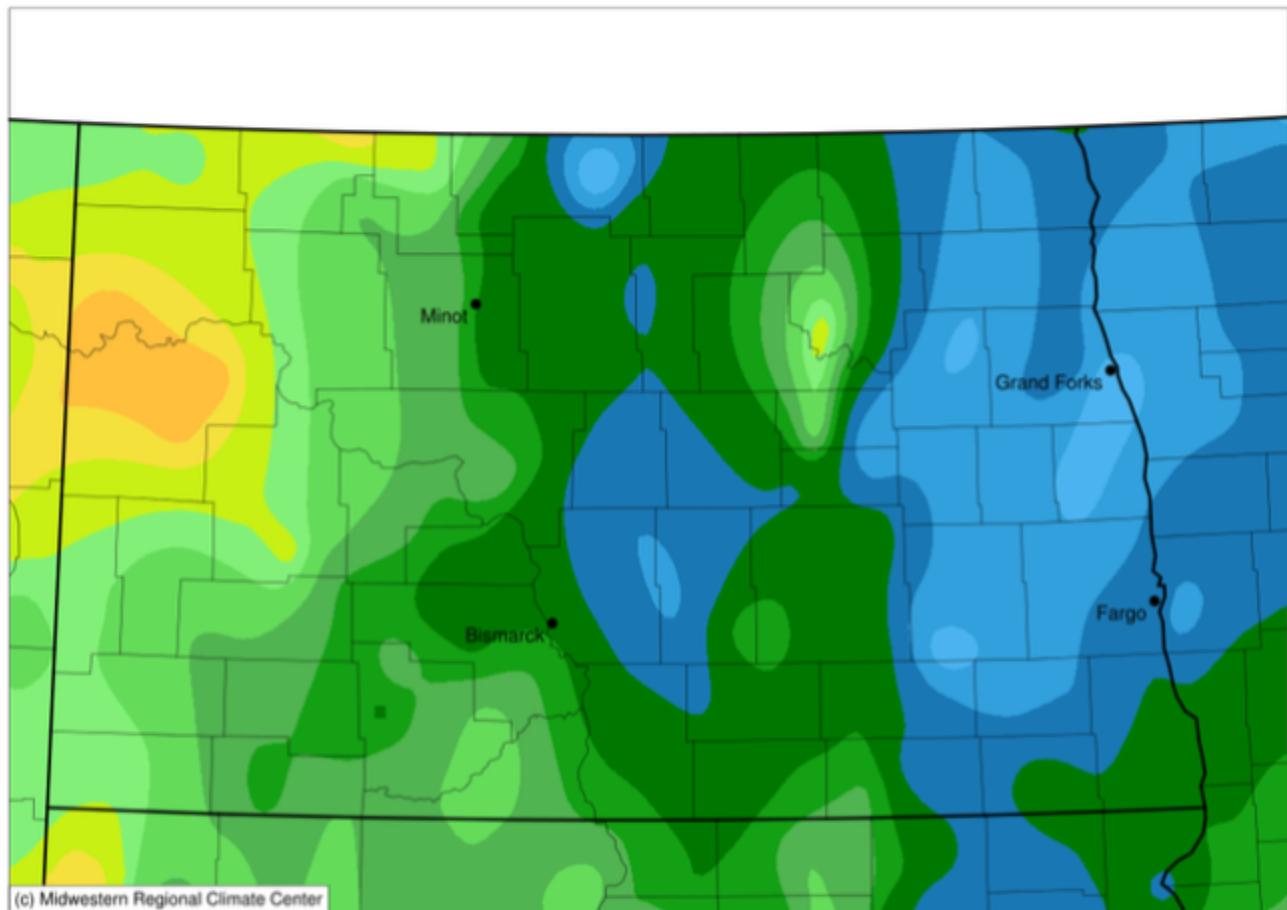
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National Weather Service

Bismarck and Grand Forks, ND

Accumulated Precipitation (in)
October 09, 2019 to October 13, 2019



0.01 0.05 0.1 0.2 0.3 0.5 0.75 1 1.5 2 2.5 3 4

Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 11/13/2019 1:24:18 PM CST

This precipitation fell mainly as snow. Snow amounts ranged from several inches in northwestern and southeastern North Dakota to nearly three feet in and around the Devils Lake Basin (snow map next image).

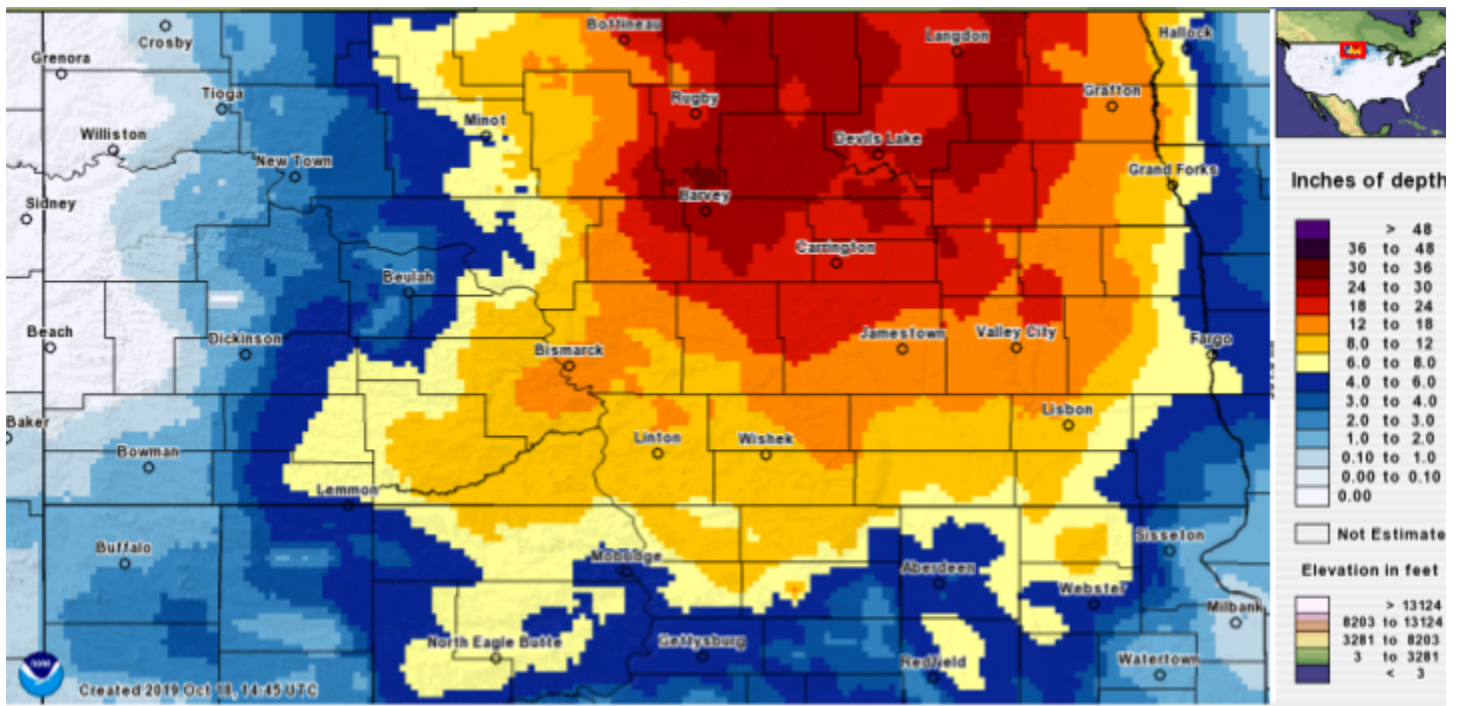


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National Weather Service

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Interpolated Observed Snowfall Analysis during the 72 hours ending 7 am October 13, 2019



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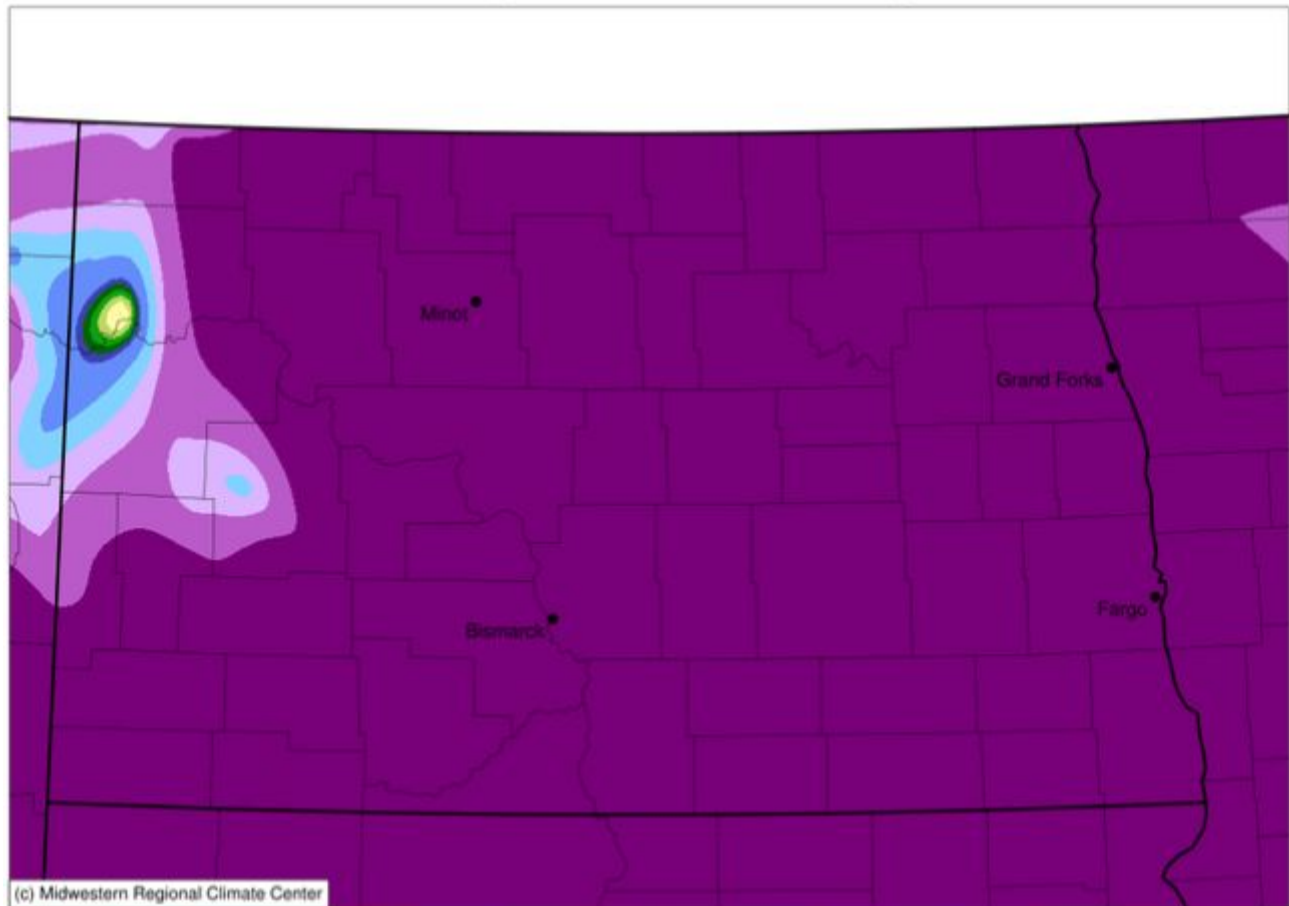


National Weather Service

Bismarck and Grand Forks, ND

Accumulated Snowfall (in): Percent of 1981-2010 Normals

October 09, 2019 to October 13, 2019



(c) Midwestern Regional Climate Center



2 5 10 25 50 75 100 125 150 175 200 300 400 500 750

Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment

Generated at: 11/19/2019 2:18:54 PM CST



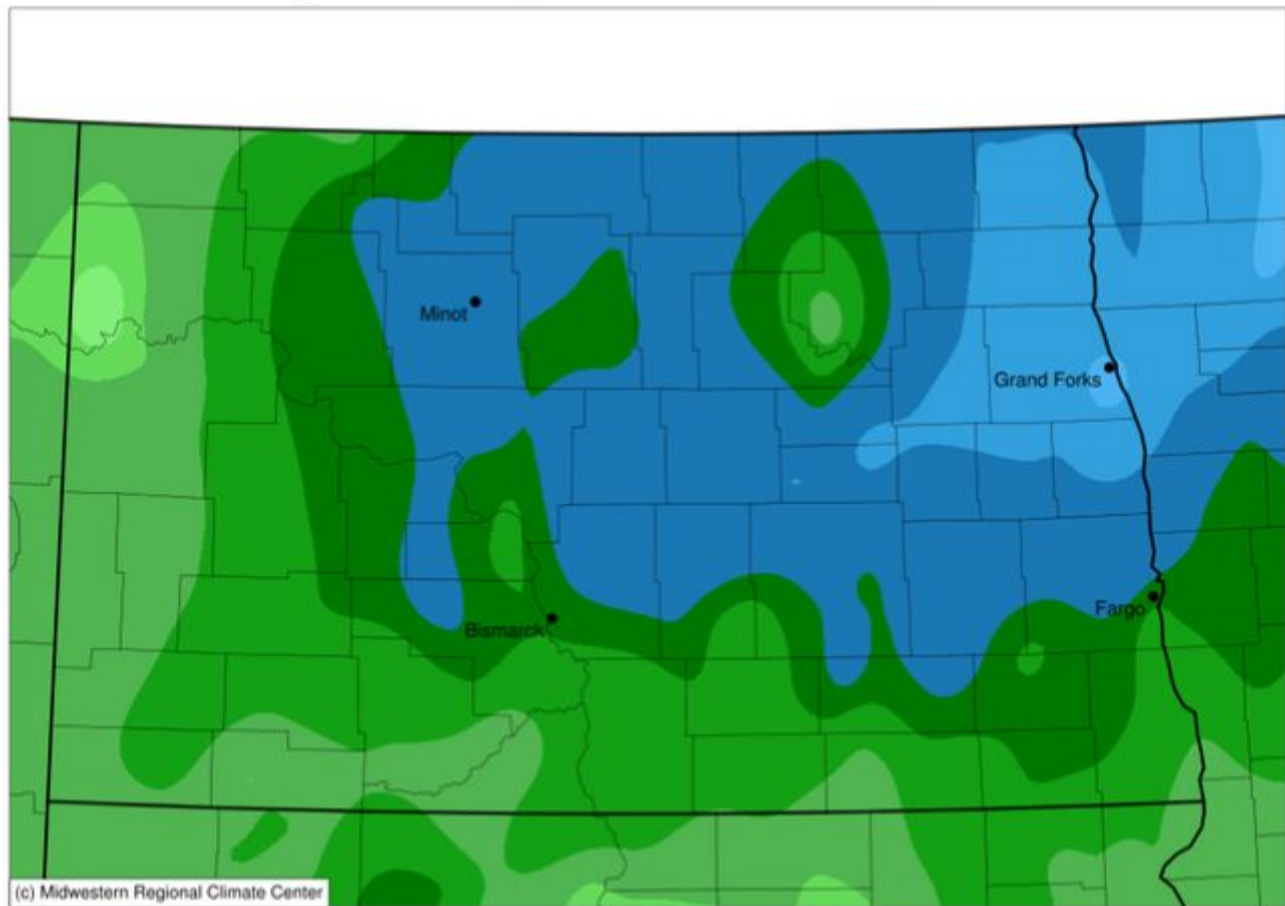
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Bismarck and Grand Forks, ND

Accumulated Precipitation (in)
September 20, 2019 to October 13, 2019



(c) Midwestern Regional Climate Center



0.01 0.1 0.5 1 1.5 2 3 4 5 7.5 10 12.5 15

Stations from the following networks used: WBAN, COOP, FAA, GHCN,
ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 11/13/2019 1:10:15 PM CST



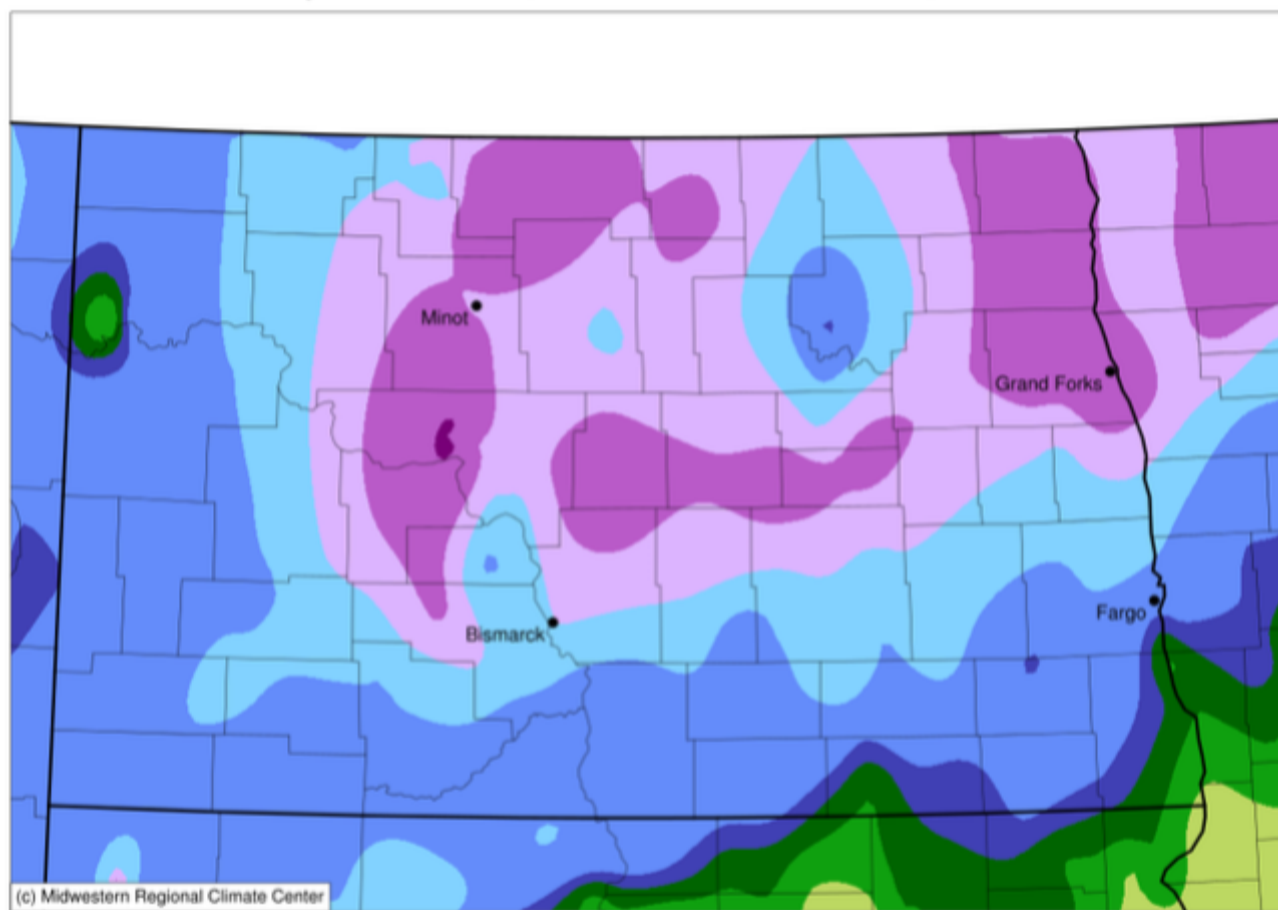
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National Weather Service

Bismarck and Grand Forks, ND

Accumulated Precipitation (in): Percent of 1981-2010 Normals
September 20, 2019 to October 13, 2019



25 50 75 100 125 150 175 200 300 400 500 750

Stations from the following networks used: WBAN, COOP, FAA, GHCN,
ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 11/13/2019 1:22:23 PM CST



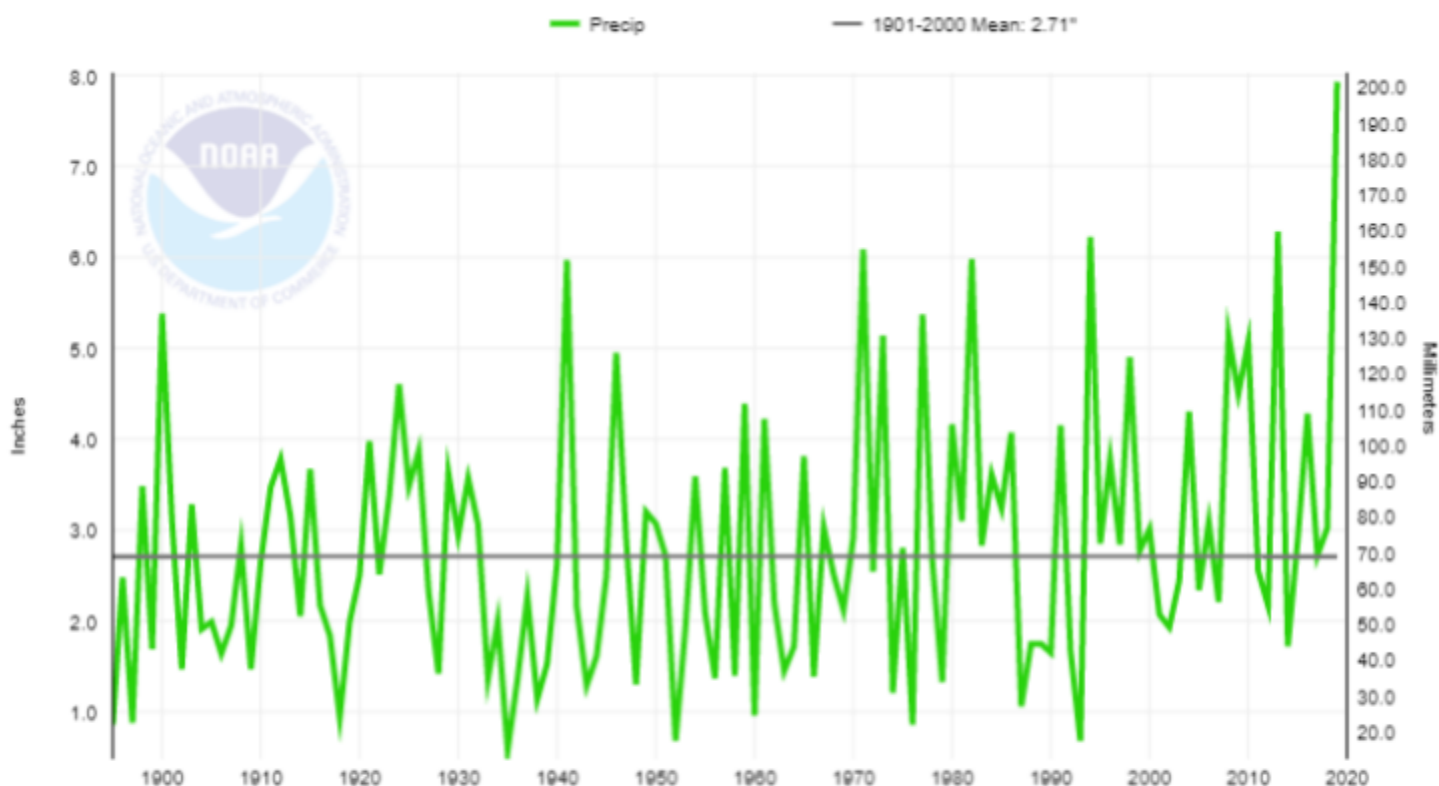
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National Weather Service

Bismarck and Grand Forks, ND

North Dakota, Precipitation, September-October



North Dakota Statewide - All years of record for the months of September and October (combined) Precipitation. September and October 2019 ranked first with 7.93 inches.



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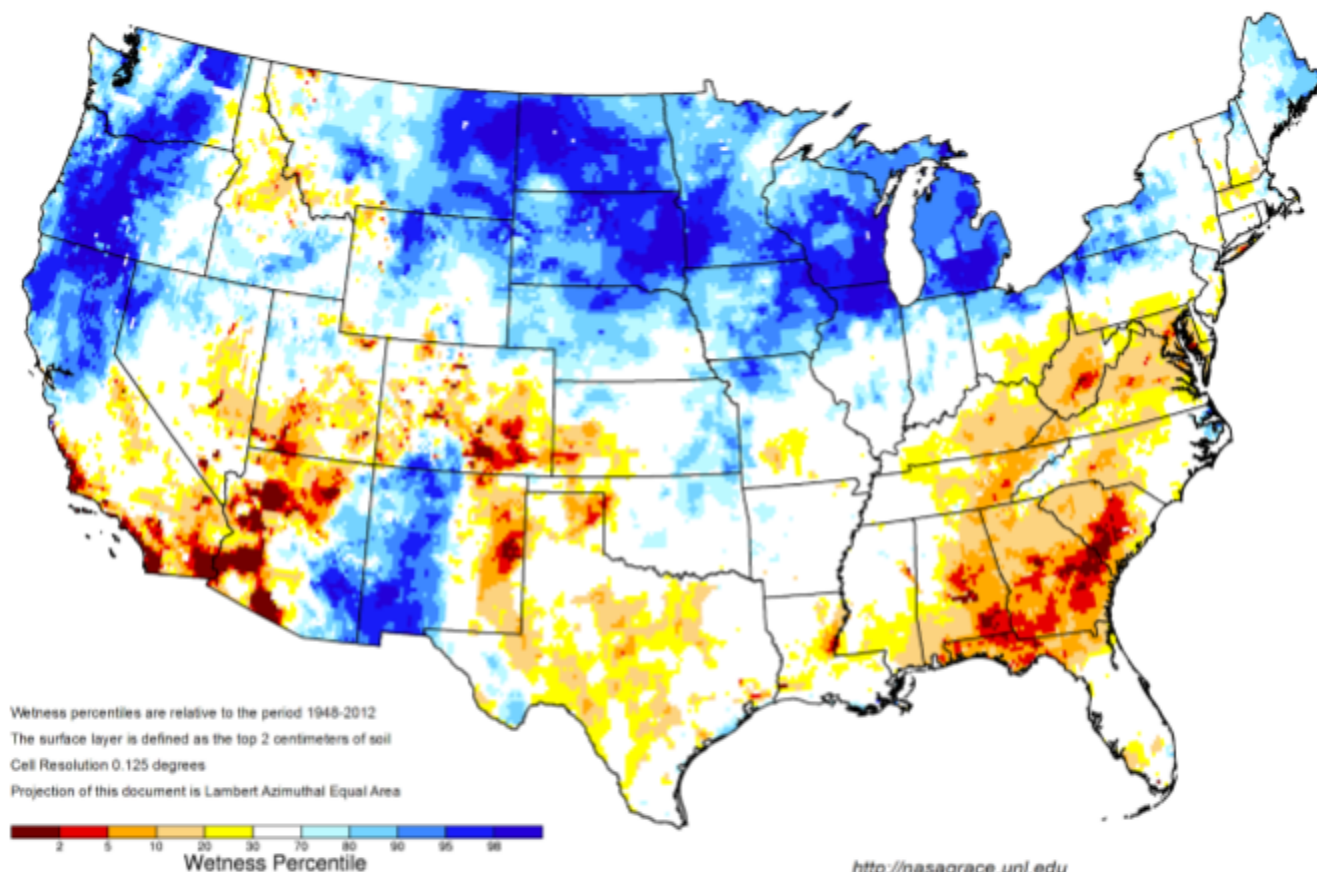
National Weather Service

Bismarck and Grand Forks, ND



GRACE-Based Surface Soil Moisture Drought Indicator

September 16, 2019



Soil Moisture Wetness Percentile September 16, 2019



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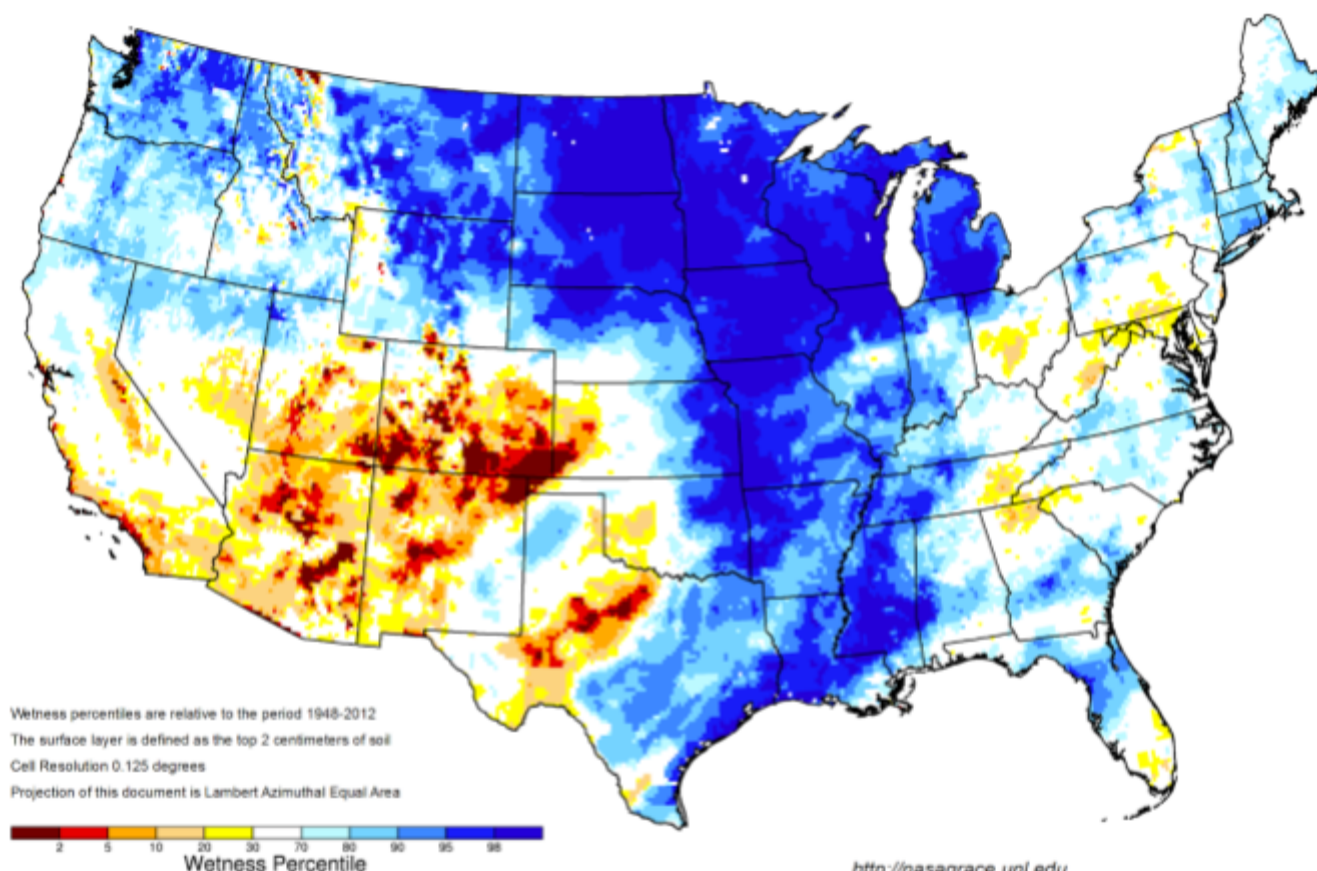
National Weather Service

Bismarck and Grand Forks, ND



GRACE-Based Surface Soil Moisture Drought Indicator

October 21, 2019



Soil Moisture Wetness Percentile October 21, 2019



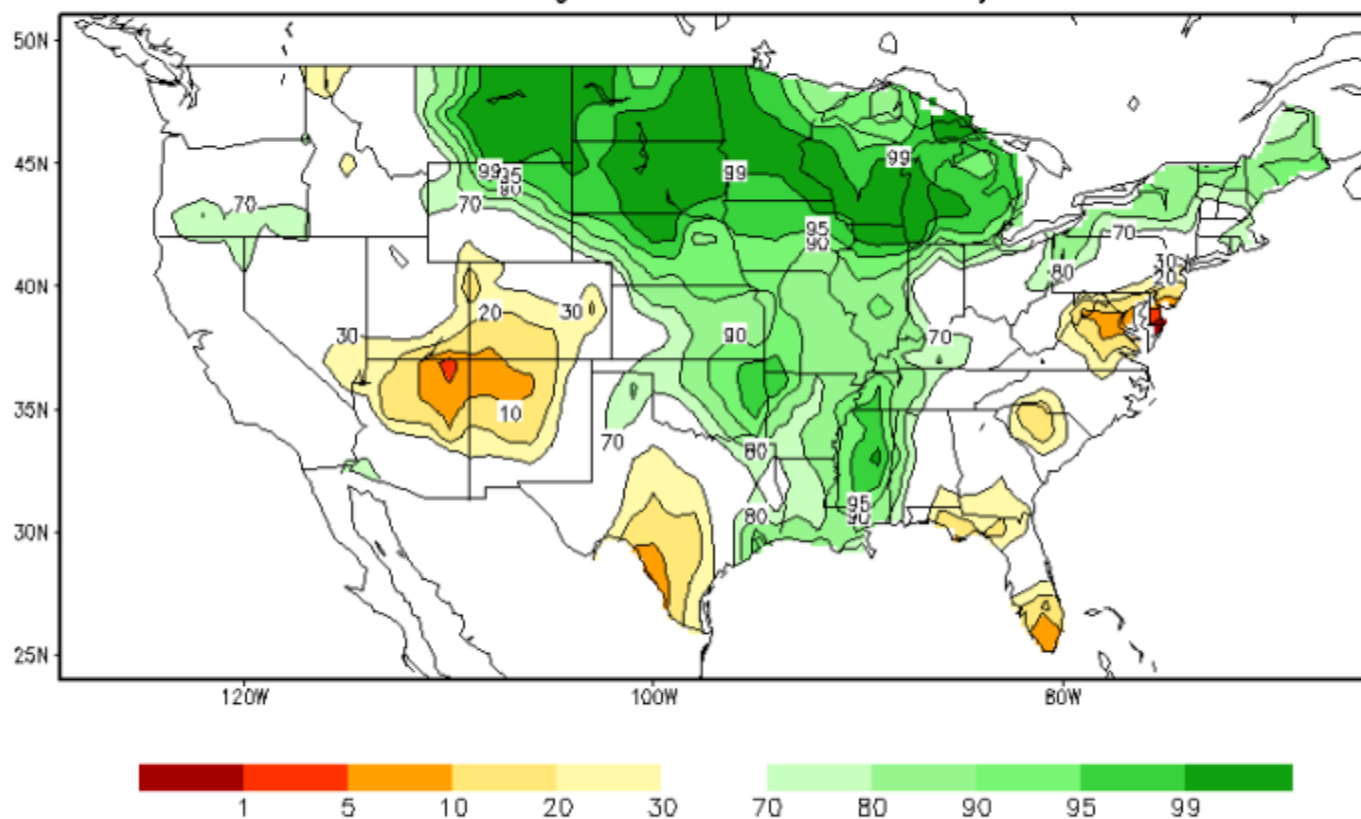
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National Weather Service

Bismarck and Grand Forks, ND

Soil Moisture Ranking Percentile Last day of OCT, 2019



Soil Moisture Ranking Percentile Oct 31, 2019



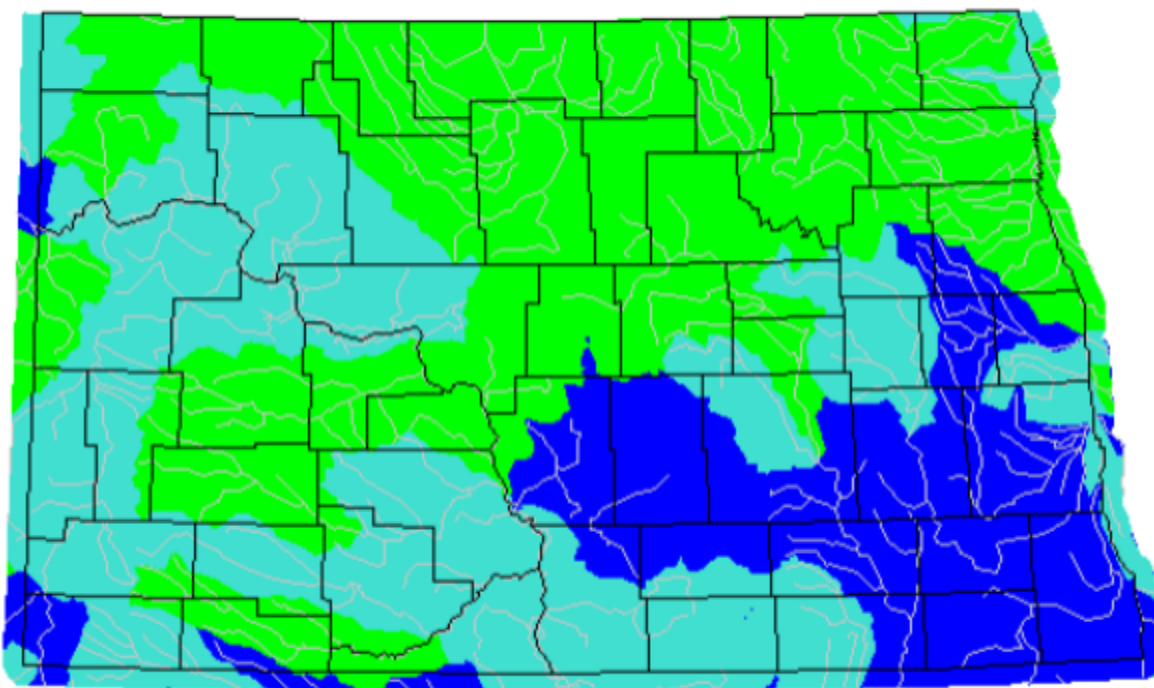
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National Weather Service

Bismarck and Grand Forks, ND

August 2019



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		

August 2019 Monthly Average Streamflow



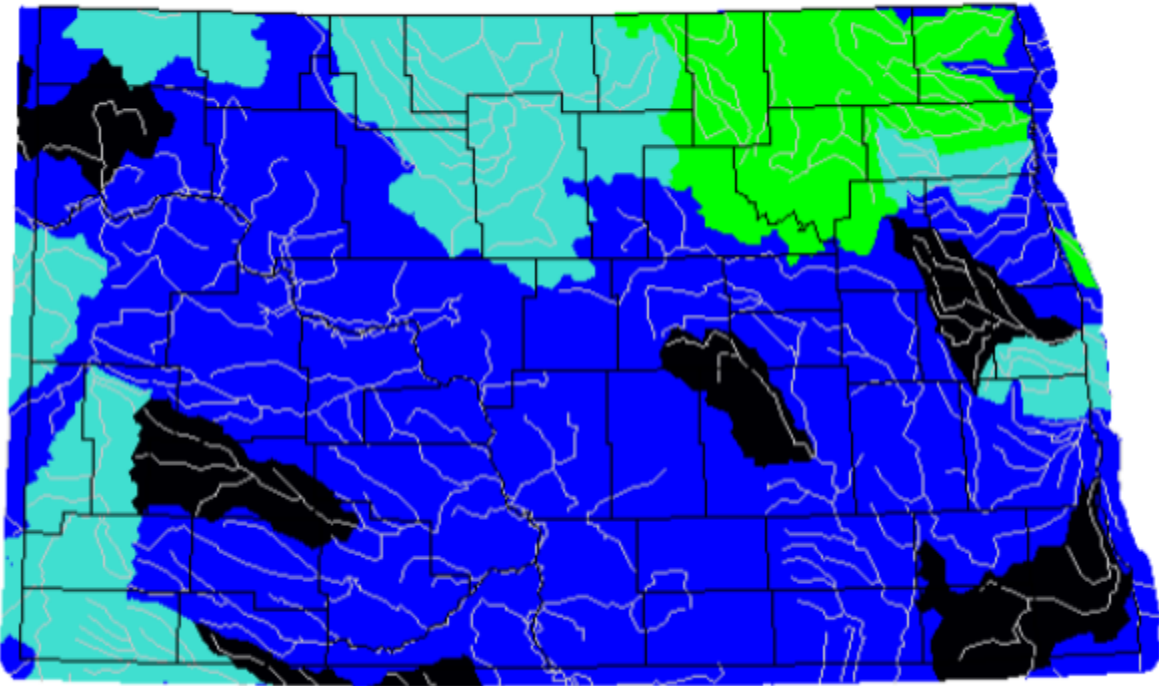
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National Weather Service

Bismarck and Grand Forks, ND

September 2019



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		

September 2019 Monthly Average Streamflow



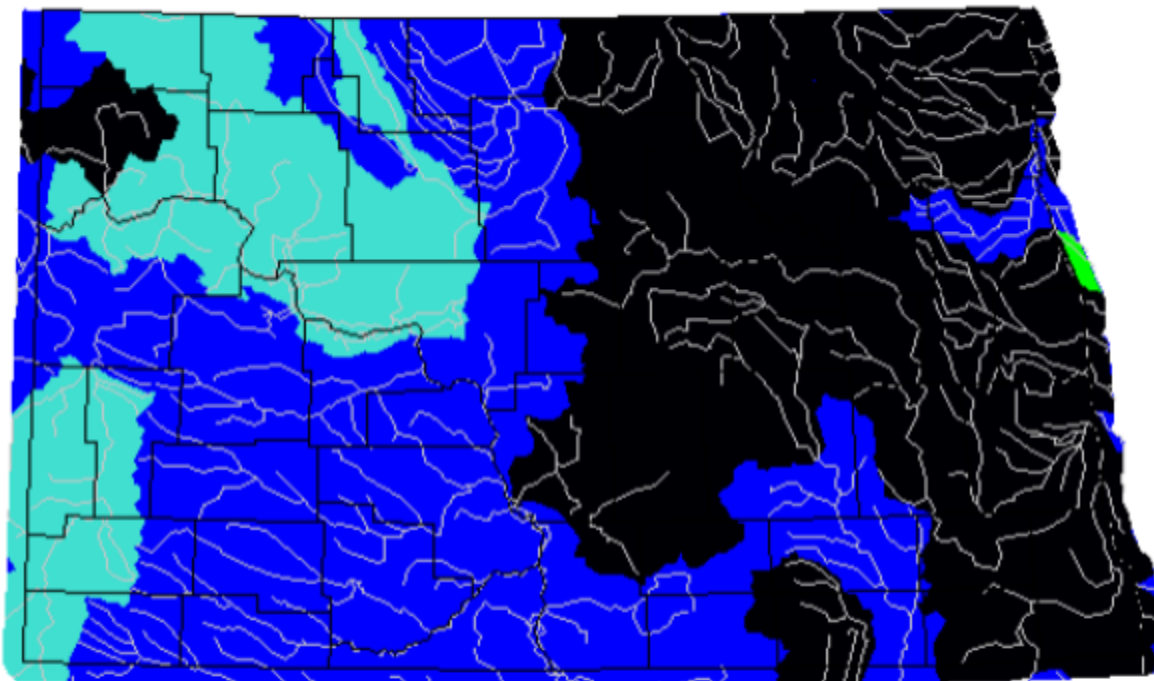
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National Weather Service

Bismarck and Grand Forks, ND

October 2019



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		

October 2019 Monthly Average Streamflow

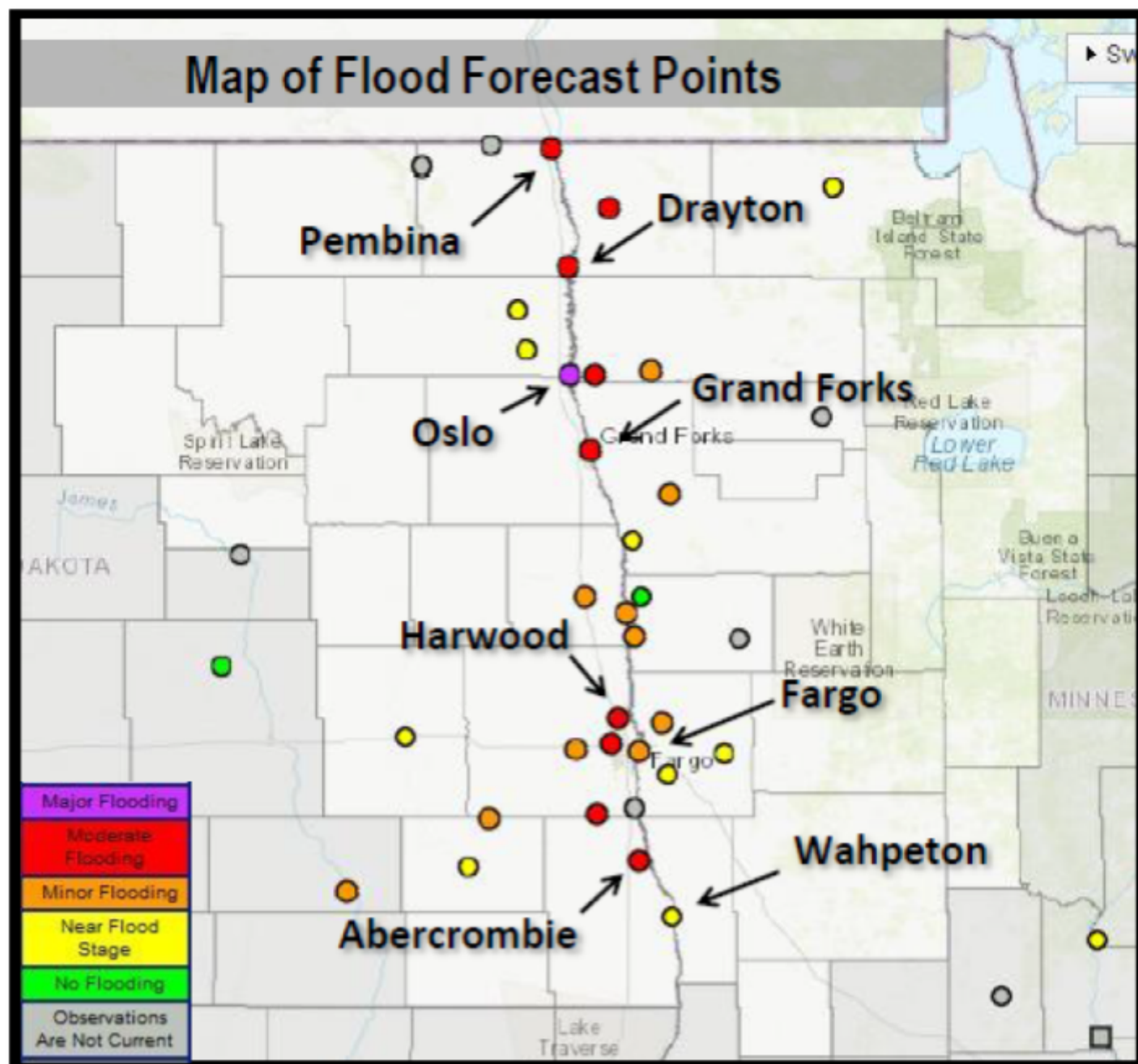


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National Weather Service

Bismarck and Grand Forks, ND



AHPS (Advanced Hydrologic Prediction Service) image showing the highest flood category reached during the fall 2019 flooding.

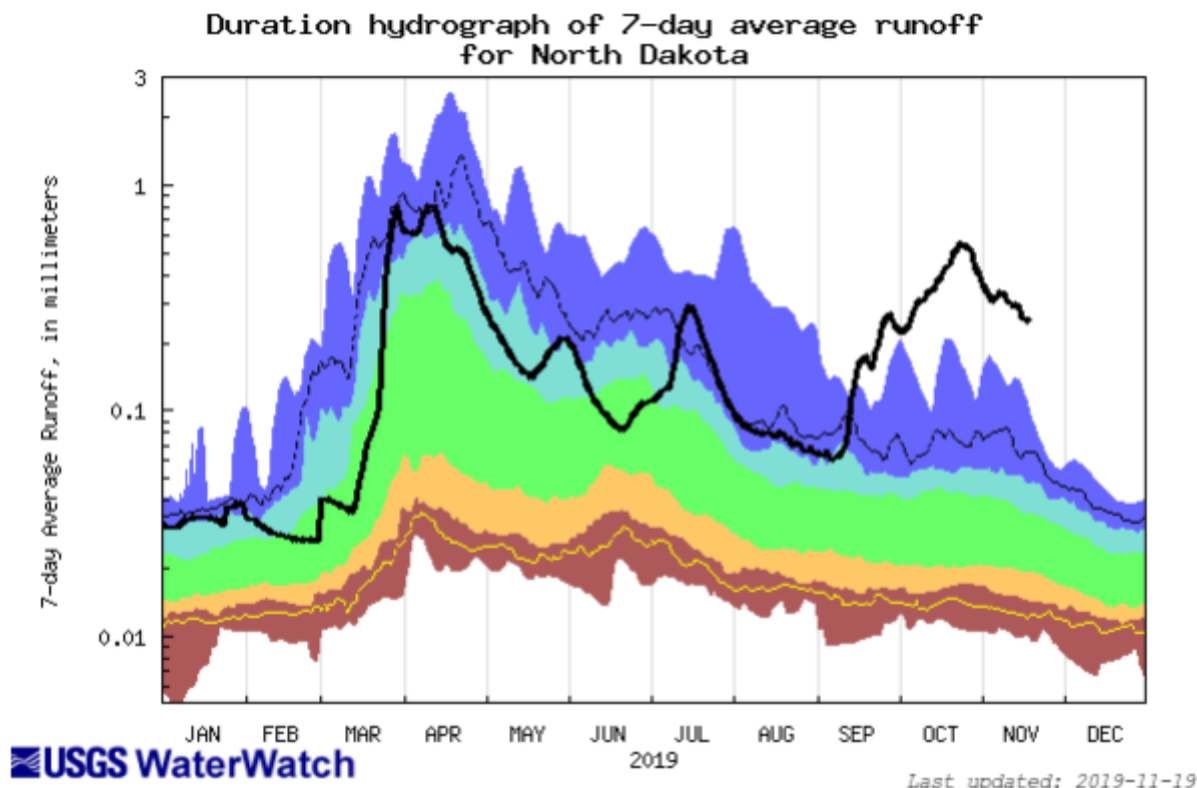


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National Weather Service

Bismarck and Grand Forks, ND



Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff

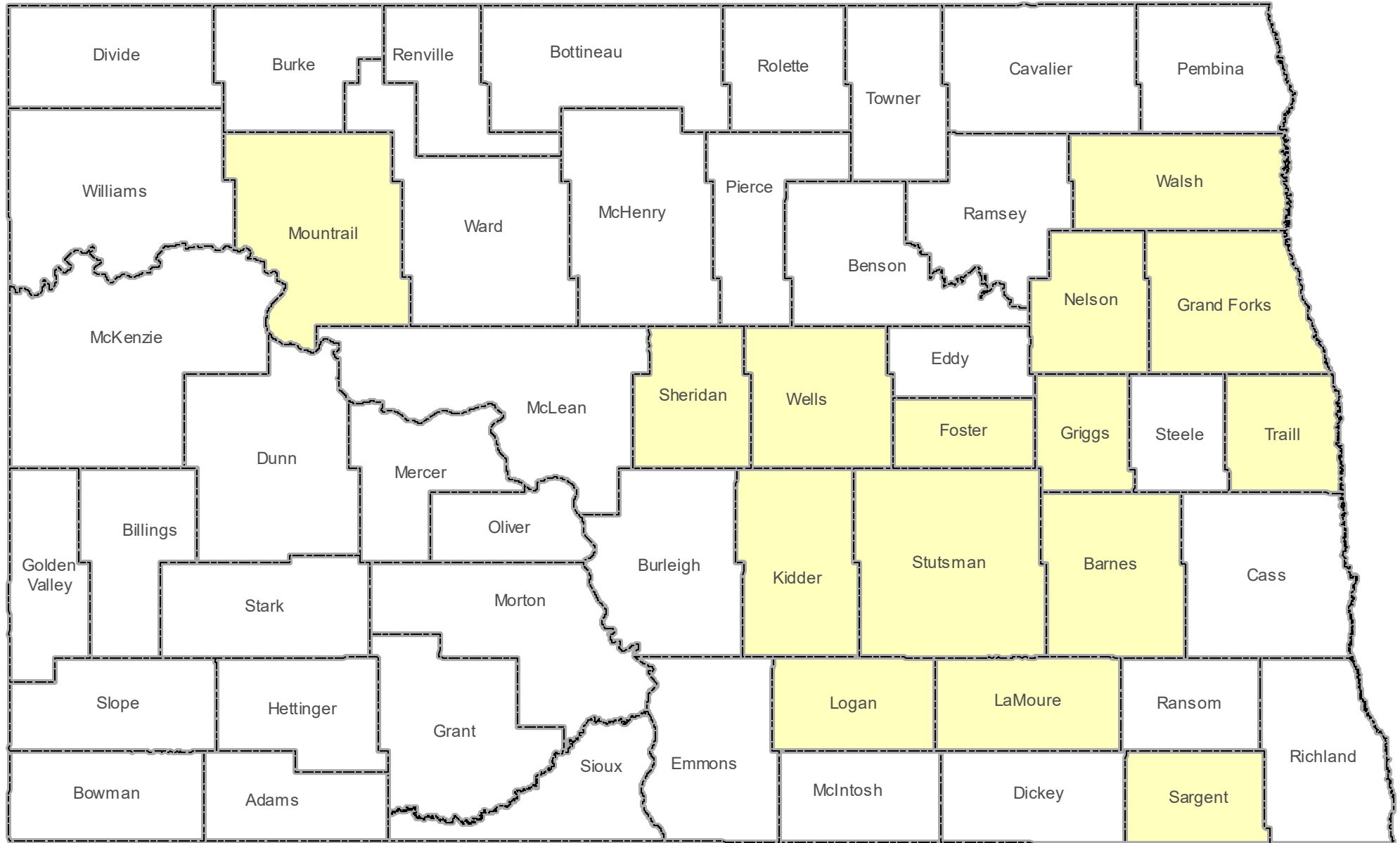
North Dakota 7-Day Average Runoff for 2019



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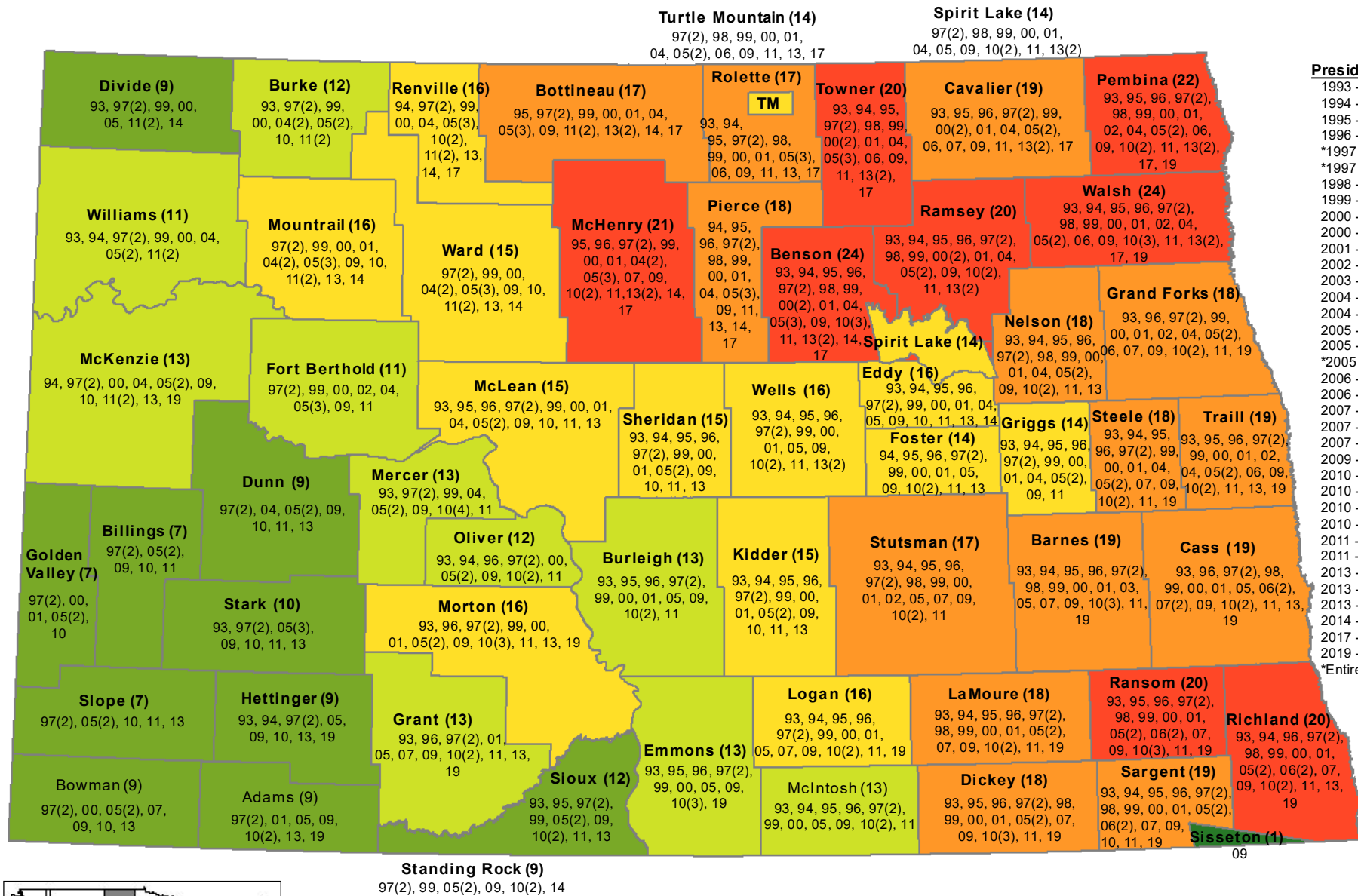
**Attachment B – Jurisdictions Impacted by
2019 Fall Flooding**

Attachment B: Jurisdictions Impacted by 2019 Fall Flooding



**Attachment C – North Dakota Presidential Disaster
Declarations: 1993-2019**

North Dakota Presidential Disaster Declarations 1993 Through 2019



Presidential Declarations

1993 - DR-1001 (PA & IA)
 1994 - DR-1032 (PA Only)
 1995 - DR-1050 (PA & IA)
 1996 - DR-1118 (PA & IA)
 *1997 - DR-1157 (PA Only)
 *1997 - DR-1174 (PA & IA)
 1998 - DR- 1220 (PA & IA)
 1999 - DR-1279 (PA & IA)
 2000 - DR-1334 (PA & IA)
 2000 - DR-1353 (PA Only)
 2001 - DR-1376 (PA Only)
 2002 - DR-1431 (PA Only)
 2003 - DR-1483 (PA Only)
 2004 - DR-3196 (PA Only)
 2004 - DR-1515 (PA Only)
 2005 - DR-1597 (PA Only)
 2005 - DR-1616 (PA Only)
 *2005 - DR-3247 (PA Only)
 2006 - DR-1645 (PA Only)
 2006 - DR-1621 (PA Only)
 2007 - DR-1713 (PA Only)
 2007 - DR-1725 (PA Only)
 2007 - DR-1726 (PA & IA)
 2009 - DR-1829 (PA & IA)
 2010 - DR-1879 (PA Only)
 2010 - DR-1901 (PA Only)
 2010 - DR-1907 (PA Only)
 2010 - EM-3309 (PA Only)
 2011 - DR-1981 (PA & IA)
 2011 - DR-1986 (PA Only)
 2013 - DR-4118 (PA Only)
 2013 - DR-4128 (PA Only)
 2013 - DR-4154 (PA Only)
 2014 - DR-4190 (PA Only)
 2017 - DR-4323 (PA Only)
 2019 - DR-4444 (PA Only)
 *Entire State Declared

