

Governor Doug Burgum



The Honorable Joseph R. Biden, Jr. President of the United States The White House 1600 Pennsylvania Avenue NW Washington, D.C. 20500

Through:

Tammy Littrell, Acting Regional Administrator

Federal Emergency Management Agency

Region VIII

Denver Federal Center Building 710, Box 25267 Denver, CO 80225-0267

RE: REQUEST FOR A PRESIDENTIAL MAJOR DISASTER DECLARATION

Dear Mr. President:

The State of North Dakota appreciates the support your Administration is providing our agricultural producers and wildfire response teams this year as we experience one of the worst droughts on record. The consequences of drought, wildland fires and recent severe summer weather threaten the livelihoods of our farmers and ranchers, as well as the viability of their communities.

We ask for your continued support as we recover from another disaster, a June 7-11, 2021, severe summer weather pattern that caused extensive damages in areas already reeling from the impacts of the 2020-2021 drought, wildfire response and recent multiple disasters. Pursuant to Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§5121-5207 (Stafford Act), and implemented by 44 CFR §206.36, the State of North Dakota requests a major disaster declaration for the June 7-June 11, 2021, severe summer storms and subsequent overland flooding for the counties of Burke, Divide, Emmons, Grant, Kidder, LaMoure, Sioux and Williams. These counties, listed in Attachment A, Jurisdictions Impacted by the June 7-11, 2021, Severe Summer Storms, recorded extensive damages as this severe weather pattern ripped across the state for five days producing tornadoes, up to baseball-size hail, damaging winds of up to 93 miles per hour (mph) and torrential rainfall that led to overland flooding.

These unrelenting storms produced very significant rainfall, sometimes tracking back over areas already inundated by runoff. Large hail shattered windows and caused extensive damage to homes and businesses. Heavy rainfall on drought-stricken lands quickly evolved into overland flooding as a result of nearly impermeable topsoil. Basements flooded as runoff rapidly exceeded the capacity of storm sewer systems across the state. Powerful runoff blew culverts out of place, created gravel washes, and damaged roads and bridges. Gusty winds snapped power poles and downed power lines, temporarily disrupting service to several communities.

These impacts occurred at a time when our state is experiencing one of the worst droughts on record since the year 2000. State Climatologist Adnan Akyüz, Ph.D., Professor of Climatological Practice at North Dakota State University (NDSU), worries this drought will evolve into a disaster comparable to the 1930s. Additionally, dry conditions conducive to the spread of wildfires have accelerated the spread of flames as our firefighters, over 93% of whom are volunteers, work exhaustive hours to protect their communities. This spring and summer, North Dakota has recorded some of its largest wildland fires, which have forced evacuations of communities and farmsteads.

Within the past three years alone, North Dakota has been designated a Presidential disaster area six times in response to severe summer weather, flooding, and the COVID-19 worldwide pandemic. With this most recent disaster, I issued Executive Order 2021-14, formally mobilizing state resources and ensuring a coordinated approach to the needs of our citizens and their communities in response to these storms and the continuing threat posed by severe summer weather.

June 7-11, 2021, Severe Summer Storm Analysis

Forecasters and emergency managers across the state urged community preparedness as North Dakota entered an active weather pattern conducive for producing severe weather during June 7-June 11. Powerful, damaging storms began adversely impacting North Dakota as they developed on June 7, and continued into June 9, with continued series of storms pounding the state through June 11. As Dr. Adnan Akyüz stated in Attachment B, *The Synopsis of June 7-11 Storms in North Dakota*, this family of storms pummeled the state, causing extensive damage to property with 167 significant events including six tornadoes, and 102 wind and 59 hail damage reports.

Dry, crusty soils contributed to widespread overland flooding. As described by National Weather Service (NWS) meteorologists in Attachment C, North Dakota Department of Emergency Services (NDDES) Summary for Severe Thunderstorms and Flash Flooding in Western and Central North Dakota, Date: June 7-11, 2021, "When in a drought, a common thought is that the risk of flooding is lessened significantly. In some cases, this is true but

often the topsoil becomes hardened and more impermeable during a drought, resulting in very heavy or torrential rains from thunderstorms running off more quickly than what would otherwise happen."

During the first round of storms, NWS offices in Bismarck and Grand Forks began issuing severe weather watches as a cold front capable of producing heavy rain and extreme storm conditions advanced toward the state. By late June 7 and early June 8, this cold front passed through and returned north into North Dakota as a warm front with a significant amount of moisture. The atmosphere set up in such a way that these storms fulfilled promises of becoming very efficient rain producers, ensuring a deluge as they tracked back over the same areas, including LaMoure County. More than 10 inches fell in the City of Marion area, and high winds of 65 mph and up to tennis ball-size hail battered the northern tier of LaMoure County. During June 8 and 9, storms stalled over the Jamestown area before pivoting and building back toward the west and pushing west through central and south-central North Dakota, including the Standing Rock Sioux Nation and the counties of Kidder, Logan, McIntosh, Emmons, Sioux and Grant, areas where weather observers reported golf ball-size hail and 60 mph wind gusts.

As these storms hovered over the state for three days, the NDDES began receiving damage reports. In central and eastern North Dakota, gusty winds uprooted trees, blew the blades off a wind turbine, flipped trailers, toppled sheds and snapped power poles in half while hail pelted homes and businesses, causing damage to siding and roofs. Rapid rainfall overwhelmed infrastructure, washing gravel from roadways and damaging culverts, temporarily isolating residents on sole access roads. Officials in Morton County recorded damages to pole barns, trees and homes in Hebron, New Salem and Glen Ullin as overland flooding caused the Cannonball River at Breien to rise nearly 15 feet during June 8-9, 2021. Torrential rainfall exceeded the capacity of drainage systems in southern Grant County, resulting in widespread damage of roads, bridges and culverts. In neighboring Sioux County, officials reported culvert and bridge washouts.

Across the Missouri River, rapid rainfall swamped infrastructure in Emmons County, causing at least \$286,000 in damages, and resulting in multiple gravel and culvert washouts in Kidder County. LaMoure County officials reported hail up to 2 inches in diameter crashed through windows and damaged roofs while heavy rainfall inundated roads. Marion's mayor rented a tractor/pump to move water out of the overwhelmed storm sewer system and save infrastructure as residents battled sewer backup and basement inundation that resulted in collapsed walls. Lightning strikes left 5,000 people temporarily without power in Cass County,

This active weather pattern continued spawning multiple tornadoes, rain and hail in western and central North Dakota. Heavy rainfall from multiple rounds of storms overwhelmed city

drainage systems in northwestern North Dakota, flooded basements and submerged cars. An especially strong thunderstorm moved through the Williston area during the evening of June 10, pounding the area with 2-inch hail. Dr. Akyüz's analysis indicates wind speeds reached 93 mph, and 4.56 inches of rain produced flash flooding in Williston that exceeded the 200-year rainfall frequency. In Divide County, the City of Noonan received 4.96 inches of rainfall, an amount ranging from a 200-year to 500-year event for that area. As the storm moved over central North Dakota, wind gusts that peaked at 79 mph caused extensive damages to trees and structures.

Williams County took an especially brutal hit during the June 10-11 storms with multiple reports of flooding, hail damage and home fires caused by lightning strikes. The first report of damage occurred when high winds blew the roof off a Williston car and truck wash. Cars floated down streets, swept away by the heavy rainfall. The pressure of overland floodwaters cracked windows and filled basements with up to 8 feet of water. Lightning strikes caused the destruction of one home in Williston and another in Alamo. Emergency Manager Mike Smith, who characterized the event as one of the worst to impact the area, reported hail damaged every police vehicle in Williston and all vehicles parked in the county lot.

Other western counties also suffered the ramifications of this powerful storm system. Rainfall of up to 5.5 inches saturated roads in Burke County and destroyed culverts, prompting officials to enact road weight restrictions. The Burke-Divide Electric Cooperative experienced damages to poles and transformers, and the Mountrail-Williams Electric Cooperative recorded 52 broken poles, toppled transmission lines and a washout of an underground distribution line. McKenzie County residents reported forceful straight-line winds pushed trees onto homes and disrupted power.

The June 10-11 events compounded problems for jurisdictions suffering from the entirety of the system. In LaMoure County, winds flipped boats and campers at Lake LaMoure and damaged homes and grain bins. Emergency Managers in adjacent McIntosh and Logan counties reported hail and high winds uprooted trees, damaged roofs and foundations of rural buildings, and scattered branches throughout cities. In eastern North Dakota, wind speeds of up to 80 mph toppled trees onto garages and downed power lines, resulting in temporary power outages in the Finley area in Steele County and the cities of Reynolds and Buxton in neighboring Traill County. Storm conditions resulted in multiple accidents along I-29 in both counties with high winds knocking a semi-truck over. Emergency Managers in Grand Forks and Pembina counties reported flattened buildings and uprooted trees.

Community and Government Partnerships

Residents and their communities continue to rise to the challenge when it comes to taking a whole community approach to disasters. In response to the storms, local and tribal auditors,

mayors, and council members secured resources to help communities with cleanup. Public works crews assessed damages and initiated repair of infrastructure. In Williston, residents and oil companies rallied around homeowners whose basements had flooded by clearing debris and loaning vacuum trucks and portable wet/dry vacuums to remove water. The Williams County Emergency Manager visited with fire and flood survivors to determine levels of damage and assistance needs.

The Disaster Preparedness Administrator for the North Dakota Department of Human Services (NDDHS) worked with NDDES, the North Dakota Voluntary Organizations Active in Disaster (NDVOAD), Team Rubicon, the Christian Congregation of Jehovah's Witnesses, the American Red Cross and St. Vincent de Paul to ready resources and prepare for potential damage assessments. The Voluntary Agency Liaisons for the Federal Emergency Management Agency (FEMA) provided technical assistance to NDDHS, the NDVOAD and NDDES. Insurance companies responded quickly to the needs of two Williams County families who lost their homes to fire.

NDDES provided frequent assessments of storm conditions and damages, coordinated resource requests and conducted a Preliminary Damage Assessment with local and federal partners. The North Dakota Highway Patrol and the North Dakota Department of Transportation (NDDOT) collaborated on road closures and alerted motorists to hazards. Additionally, the North Dakota Department of Agriculture and NDSU Extension evaluated impacts of the severe weather pattern on producers along with the U.S. Department of Agriculture's Farm Service Agency.

Long-Term Implications of Recent Disasters

Ironically, areas impacted by storms also are struggling with severe to exceptional drought conditions. North Dakota experienced an unusually dry fall in 2020, with scant snowfall during the winter of 2020-2021 followed by episodic rainfall during spring 2021, a crucial time for our agricultural producers. Typically, North Dakota experiences two fire seasons, the first ending in late spring with green-up, and then in fall during harvest. This year, however, North Dakota, feeling the effects of a devastating drought cycle, has experienced a continuous fire season with some of the driest winter and spring months in 127 years of recordkeeping.

Limited moisture along with warm temperatures have increased the intensity and size of wildfires this year. Since the first reported fire in January, firefighters across the state have worked hard to save homes, farmsteads and cropland without reprieve. NDDES established the State Unified Command for Wildfires and Drought on April 15, 2021, mobilizing resources to support local and tribal governments. Large-scale fires have exhausted mutual aid resources, requiring assistance from the North Dakota Forest Service (NDFS), North

Dakota Civil Air Patrol, NDDOT and North Dakota National Guard as well as support from the South Dakota National Guard through the Emergency Management Assistance Compact (EMAC). Blackhawk crews from both states' National Guards supported suppression efforts for rapidly moving fires that forced evacuations of communities. Flames came perilously close to several towns including the historic town of Medora in the Badlands and Carpio in Ward County in north central North Dakota. By July 15, 2021, NDFS and NDDES reported nearly 1,500 fires had scorched more than 111,000 acres across the state compared to the 2020-year total when 500 fires burned 9,200 acres.

Our current drought began in 2020, constituting the worst since 2000, and comparable in magnitude to droughts of the 1930s, 1950s and 1980s, according to Dr. Akyüz. Because our farmland lacked deep soil moisture at the onset of spring, the lack of consistent rainfall and dry soil conditions have contributed to spotty germination of crops. The June 7-11 storms washed out several crops, such as occurred in Kidder County, where Miranda Meehan, Ph.D., Livestock Environmental Stewardship Specialist for NDSU Extension, reported sugar beet farmers have been forced to replant for a third time this year. Producers are struggling to maintain operations as they deal with a 60 percent or greater reduction in hay production and 50 percent or greater decrease in range and pasture production. Small grains are growing in uneven stands promising low yields with many stands lacking growth required for harvest or haying. The lack of water is resulting in water quality issues that are potentially toxic to livestock. Heavy culling of cattle herds is occurring with one of the largest livestock auctioneers selling 51,000 head by July compared to the annual average, which is 65,000.

The June 7-11 storms and repeated disasters have disproportionately impacted an underrepresented population group in our country, rural Americans. Our producers provide the tax base for our local and tribal communities. Emmons County Emergency Manager Mary Senger, a 31-year veteran of the field, describes the stoicism of North Dakotans as a reflection of their "resilient heritage." However, Ms. Senger noted the recent spate of disasters and the continual need for repair has taken its toll on our citizens and local and tribal officials as they are forced to prioritize infrastructure repairs based on the constraints of limited budgets.

Currently, North Dakota has six open Presidential disasters totaling over \$150 million in costs for which local and tribal jurisdictions are struggling to meet their cost shares. Disasters include DR-4444-ND, issued in 2019 for flooding that required a 39-day battle and resulted in \$10.8 million in damages to our state transportation system. In the fall of 2019, an early October winter storm disrupted harvest, generating heavy rain before transitioning to snow containing up to 3 inches of water equivalent. Nearly 30 inches of snow blanketed prime farmland, decimating unharvested crops. Subsequent rapid snowmelt created a rare

fall flood that required federal aid provided through DR-4475-ND to address the \$8.9 million in infrastructure damages.

High ground saturation contributed to overland and riverine flooding in 2020 during DR-4553-ND, causing an estimated \$8.3 million in infrastructure damages in central and eastern North Dakota. A few short months later, North Dakota was again declared a disaster area, DR-4565-ND, for severe storms and flooding during June 29-July 1, 2020, that caused an estimated \$2.25 million in damages. In response to two COVID declarations, NDDES has worked with its federal partner, FEMA, to obligate 120 Public Assistance projects totaling \$107 million. The need for COVID-19 relief continues with an anticipated \$14 million in additional costs. During the past 28 years, North Dakota has received 40 disaster declarations, including the catastrophic flood events of 2009, DR-1829-ND; and 2011, DR-1981-ND. Communities are still recovering 10 years later from these event in which federal, state, tribal and local costs exceeded \$1 billion. Attachment D: ND Presidential Disaster Declarations: 1993-2020 provides a strong visual of the frequency of disasters in our state.

Based on data from the North Dakota Office of State Tax Commissioner, we anticipate recovery will take years to recoup losses and regain financial stability. Sales tax collections for the April-May-June quarter of 2021 were \$1.4 million less than they were in the same quarter of 2019. We would have expected the revenues to be at least \$19 million higher than those 2019 collections had it not been for COVID-19, the drought, and now the June 7-11 storms. Income tax collections are \$3.8 million below pre-pandemic levels for the three-month period of April, May and June in 2019. The April-May-June quarter of withholding from employee wages also continues to lag behind 2019 levels by over \$2 million. Oil tax revenue for the quarter has shown the least amount of rebound, still down by over \$131 million compared to April, May, and June of 2021.

Commitment to Resilience

Fortunately, the State Emergency Operations Center (SEOC) did not receive reports of injury or death resulting from the June 7-11 storms. The saving grace for the frequency and intensity of disasters has been the effectiveness of our mitigation program that is protecting lives and substantially reducing the cost of events. NDDES Recovery and Mitigation staff members work hard to help communities build more resiliently before and after a disaster. Since 1997, the State of North Dakota has leveraged over \$287 million to fund 426 projects through the Hazard Mitigation Assistance (HMA) programs. These projects include storm shelters and burial of hundreds of miles of electrical lines to ensure a consistent source of power. Our program also emphasizes storm water management projects, such as upgrades to culverts, diversions, flap gates, floodgates, detention basins and other flood control

measures, which are designed to increase runoff capacity. NDDES mitigators have also successfully pursued funding for riverbank stabilization and floodwalls and upgraded infrastructure at Fargo's and Minot's water treatment plants.

Data from national studies clearly articulates the significant savings resulting from North Dakota's proactive approach to mitigation. In 2018, the National Institutes of Building Sciences in its *Natural Hazard Mitigation Saves: 2018 Interim Report* estimated every dollar spent on federal mitigation grants saves \$6 in damages in North Dakota. The following year, the Pew Charitable Trust conducted a state-by-state analysis of the benefit of HMA programs and determined the return on investment amounted to \$6.54 per every dollar spent on mitigation in North Dakota. Based on that estimate, a total of \$287 million invested in 426 mitigation projects since 1997 has resulted in a savings of \$1.877 billion in long-term disaster response and recovery costs for our state. The state also experienced a significant savings through its aggressive program to acquire more than 1,400 flood-prone properties, the majority of which had been located in areas impacted by 2019 and 2020 flooding and severe summer storm events. With the assistance of the HMA programs and Community Development Block Grants (CDBG), the state acquisition program has created green spaces along rivers and lakes for an estimated cost benefit of \$386.4 million.

Our federal partners recognize the results-driven mitigation program built through the collaboration of 84 public and private partners committed to protecting our state's residents. Based on the State's history of effectively implementing and managing HMA programs, FEMA approved NDDES to fully utilize the Program Administration by State (PAS) Pilot Program. FEMA also provided Enhanced Status designation to the *State of North Dakota Enhanced Mitigation Mission Area Operations Plan* on February 6, 2019. Based on collaborative efforts by NDDES, all North Dakota jurisdictions either have or are currently developing mitigation plans. FEMA has served an integral role by supporting the State Hazard Mitigation Team to enact effective mitigation measures whenever possible to help prevent damages to public and private property, as well as save local, state, tribal and federal taxpayer dollars.

Conclusion

Pursuant to 44 CFR§206.36, we have determined severe summer storm conditions and subsequent flooding were of such severity and magnitude that effective response and recovery are beyond the capabilities of the State and affected local governments. For the reasons described in this letter and its supporting documentation, we respectfully request that you declare a major disaster, with an incident period starting June 7, 2021, and ending June 11, 2021, for the counties of Burke, Divide, Emmons, Grant, Kidder, LaMoure, Sioux and Williams. We 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 \$2,333,350.95 million as detailed in Enclosure B.

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

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

Sincerely,

Doug Burgum

Governor

Enclosures: Enclosure A: Governor's Certifications

Enclosure B: Preliminary Damage Assessment

Attachments: Attachment A: Jurisdictions Impacted by the June 7-June 11, 2021, Severe

Summer Storms

Attachment B: Climatologist Dr. Akyuz Synopsis

Attachment C: NWS Summary for Severe Thunderstorms and Flash Flooding

in Western and Central North Dakota, Date: June 7-11, 2021 Attachment D: ND Presidential Disaster Declarations: 1993-2020

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