



STATE OF NEW HAMPSHIRE
OFFICE OF THE GOVERNOR

CHRISTOPHER T. SUNUNU
Governor

August 8, 2019

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

Through: Capt. W. Russell Webster (USCG Ret.), CEM
Regional Administrator
FEMA Region 1, Boston, MA 02110

RE: Request for Presidential Major Disaster Declaration

Dear Mr. President:

Under the provisions of 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, I respectfully request that a major disaster be declared for the State of New Hampshire (NH). This request is a result of a severe rain and flash flooding event which occurred on July 11-12, 2019, that overwhelmed state and local resources and required an immediate and urgent response. At the peak of the incident, rapid flash flooding occurred with little warning that prompted a significant swift water rescue effort, washed out road infrastructure in ten (10) communities, and required the State Emergency Operations Center (SEOC) to open and provide coordination and information sharing support. This request includes a designation of the full Public Assistance Program for Grafton County and a statewide designation of the Hazard Mitigation Grant Program.

As a direct result of the incident, NH sustained major damages to state and local infrastructure which lead to numerous requests for state assistance. Reported damages were concentrated in Grafton County where the heaviest rain fell; however, other areas of the state saw intense rain and flooding that threatened public safety and damaged infrastructure. The impact of this event was felt throughout the mutual aid and state systems, as resources were diverted to the incident area. The response consumed staff time and exhausted available resources, due to significant flash flooding conditions that caused extensive roadway destruction and left debris that restricted travel and emergency operations. Fortunately, there were no deaths or serious injuries associated with this incident.

Two rounds of heavy precipitation moved into Grafton County in the afternoon and evening hours of July 11, 2019. A combination of very warm, moist air and repetitive thunderstorm cells (known as training thunderstorms) deposited rainfall in excess of three (3) inches across the disaster area, with the highest official rainfall report being 6.83 inches. The majority of the precipitation fell within a period of less than six (6) hours, with rainfall rates as high as 4.75 inches per hour reported at times. Towns in Grafton County typically see around four to five (4-5) inches of rainfall throughout the entire month of July. In Orange, a local Mesonet weather station reported approximately 5.58 inches of rainfall in a two (2) hour period. According to NOAA Atlas data, the recurrence interval of a rainfall event of this magnitude is once every 1,000 years, or 0.1% chance annually, making it a rare occurrence (see “New Hampshire Weather and Hydrological Summary” for supporting documentation and NOAA Atlas data explanation).

This extreme rainfall was rapidly channeled through steep terrain and into waterways, causing a sudden flash flooding event that resulted in severe damage to over seventy-five (75) miles of local and state roadways and more than fifty (50) culverts. State departments responded to assess road and infrastructure status, blocked off dangerous areas, and closed roads that were impassable. The rapid rise of flood waters occurred after dark and took many residents and visitors in the area by surprise, prompting the activation of eight (8) swift water rescue teams from communities as far away as Concord. Eighty-five (85) first responders rapidly assembled to complete swift water rescue missions. These mutual aid resources, in tandem with local first responders, aided in the response and rescue of residents, including the occupants of a home that was ultimately moved by flood waters. Additionally, the teams evacuated numerous families from a campground that rapidly flooded to a depth of three to five (3-5) feet, preventing egress and trapping them in the area. These teams successfully completed response and reunification for the approximately fifty (50) campers present during the flood.

The towns of Orange, Canaan, Groton, and Hebron opened their local Emergency Operations Centers (EOC) to coordinate their response efforts, assess damages, set up barricades, monitor traffic control points, and respond to emergency calls. The towns of Orange and Groton opened overnight shelters for residents with structural damage to their homes or those who did not have access to food and water.

Based on Initial Damage Assessments (IDA) reported by the communities, the Director of Homeland Security and Emergency Management (HSEM), Jennifer L. Harper, requested a Joint Preliminary Damage Assessment (PDA) on July 18, 2019. The assessment was conducted from July 23, 2019, through July 26, 2019, by teams comprised of representatives from local, state, and federal agencies.

Joint PDAs were completed in ten (10) communities in Grafton County. Additionally, three (3) state agencies—Department of Transportation, Department of Natural and Cultural Resources, and the Fish and Game Department—completed PDAs. The effects of this incident are evident as demonstrated in the Public Assistance summary (Enclosure B).

The State indicator has exceeded \$1,974,705 (\$1.50 per capita), with current state and local damages verified at \$2,882,518 (\$2.19 per capita) from this event. The figures captured in Enclosure C reflect uninsured losses and include only those that meet FEMA project eligibility at initial review; the overall losses were significantly higher and are expected to rise. Most of the PDAs focused on reviewing damages to permanent work categories. As described below, over 86% (\$2,490,863) of the Public Assistance cost estimate involved roads and bridges (Category C). Category G (Parks and Other) has a current assessment of \$293,671 which is 10.19% of the Public Assistance cost estimate. Emergency work, Category A (Debris Management) and Category B (Emergency Protective Measures), is estimated at \$97,985 in damages, which is 3.40% of the total Public Assistance cost estimate. We anticipate these costs to increase significantly, as communities and state partners are able to gather additional costs and damage information for both emergency and permanent work.

Across the state, the communities that sustained the most eligible damage include Orange, Groton, and Canaan. Additionally, the Department of Transportation experienced significant damages from this event.

In Grafton County, the Town of Orange (2010 pop 331) suffered \$846,897 in FEMA verified damages, resulting in a damage per capita for the community of \$2,558.60. The Town of Groton (2010 pop 593) suffered \$516,230 in FEMA verified damages. The resulting per capita damage for the community is \$870.54. The Town of Canaan (2010 pop. 3,909) experienced \$311,698 in FEMA verified damages from the storm, resulting in a \$79.74 per capita damage for the community.

The annual budgets for these small towns have been far exceeded by this event. The Town of Orange has an annual road budget of approximately \$100,000, the primary income for which is local taxes. With over \$850,000 in verified damages for this event alone, a number that is expected to rise, the Town is unable to absorb the cost of the immense damages. The Town of Groton reports a 2019 operating budget of \$766,652, with approximately \$160,000 dedicated to highways and streets (an amount that represents a 25% increase from the 2018 budget). Even with this increased road budget, the estimated cost of this disaster represents over half of their operating budget and is over three (3) times their annual road budget. Additionally, the Town of Groton was hit particularly hard by the October 2017 storm (DR 4355) and accumulated a net cost of over \$565,000 in damages in that disaster (non-federal share of approximately \$141,000). The Town had completed a significant amount of its recovery from that event before running low on funds. The Town had requested a cash advance from the state to complete the DR 4355 work, when this flash flooding event hit.

The financial hardships that both Orange and Groton have endured due to repetitive disasters cannot be understated and are common to many towns in Grafton County, including the ones impacted by this event. These towns will have to cut back on planned road repairs, delay scheduled road work, increase taxes, and take out loans in an attempt to recover. The Town of Canaan, in particular, has already postponed all of its paving projects for the remainder of 2019

and cancelled one bridge replacement, due to the need for town funds to be diverted to the recovery of this most recent disaster.

Throughout these communities, roads were undermined, and roadside shoulders, ditches, and adjacent slopes were washed away. State and local culverts, pipe headwalls, and other drainage structures were overwhelmed with water and debris causing damage or complete destruction to the drainage system and surrounding areas and infrastructure. Water that would have normally been conveyed by the drainage system was forced to detour to other areas not designed to handle such flows. Road washouts were impressive, with some areas seeing washout depths of over six (6) feet deep. These damages presented a hazard to the travel of the general public, as well as obstacles for first responders in preserving public health and safety. Some of the washouts carried dirt and cobble into fields and onto private property, and large amounts of debris were deposited on roads thus making them impassable. Guardrails were left suspended in air as their foundations washed away, and roads were undermined making them unsafe for travel. The extensive damage to state, local, and private roads in these communities trapped residents in their homes and prevented access by emergency personnel. As many as seventy (70) homes in the Town of Groton were cut off from the rest of the community and emergency services for up to thirty (30) hours, while the town constructed temporary, single lane access roads.

As a result of the storm and the associated road damages, travel was difficult or impossible for residents, visitors, and state and local first responders. Some residents were either significantly detoured or were required to abandon automobile travel due to road closures. A state-owned culvert measuring sixteen (16) feet in diameter was plugged by immense amounts of gravel and vegetative debris (namely large trees measuring over one foot in diameter and thirty (30) or more feet long) that was washed downstream in the flood waters. Immense amounts of water dammed up behind this blockage, and the structure around the concrete anchored culvert failed, washing out the road to a depth of twenty (20) feet and causing a sudden release of water that resulted in many of the damages that were seen downstream in surrounding communities. This culvert failure resulted in a complete closure of the road for a total of twenty-four (24) days, blocking emergency vehicle access to the southern half of the community and Cardigan Mountain State Park, a popular hiking destination in the area that draws hundreds of visitors a week from around New England in the summer months. Additionally, this road closure resulted in a lengthy fifteen (15) mile detour through Grafton, adding approximately an hour or more to residents' daily commute and a thirty (30) to forty (40) minute delay in response time of emergency services to Cardigan Mountain State Park.

These damages also presented an adverse effect to local businesses as customer volume was greatly decreased, and in some cases, the businesses were unable to open. In particular, the Canaan Motor Club, a private local business that is home to a 1.3 mile race track in the Town of Canaan, reported over \$1 Million in damages when a "wall of water measuring over fifteen (15) feet high" breached berms along the river that abut the track, flooding the track with over five (5) feet of water. The track not only boosts tourism in the region and is the reason for the employment of many residents at local small businesses, it provides tax income of \$25,000

annually to the Town and represents \$30,000 a year of the Town of Canaan's ambulance budget through contracted services with the track.

Individual Assistance requests from residents have been managed by the state, and twenty-six (26) cases have been reported to date. Additional cases are anticipated. Four (4) of these cases have been moved to long term recovery and are being handled by the Community Action Program (CAP) due to the low-moderate income status of the families involved. Three (3) of these cases were referred to CAP due to lack of access to their homes that was caused by local and private road washouts during the storm. At the time of this writing, one resident must still walk one and a half (1.5) miles one way to access his home. One (1) of these cases was referred to CAP following the destruction of his home and property during the flood, and this individual is now homeless. These cases are of particular concern because they all involve situations where access to the home by first responders is impossible, resulting in a critical life safety issue. The State is working with CAP to fund private road repair to regain access to these homes and is helping residents apply to additional assistance programs they may qualify for given their income status.

The Department of Transportation (DOT) has already spent significant amounts of time and labor on repairs to state maintained land, emergency clearing of roads, road closures, and emergency repairs. Costs will continue to increase, as DOT repairs disaster-damaged infrastructure to a functional capacity. DOT diverted personnel from other patrol sections to work on emergency repairs, resulting in a significant amount of overtime and a minimum of a three (3) week delay in ongoing and planned projects. Some projects will have to be postponed until the following construction season or cancelled altogether, due to the strain on available laborers, machinery, and funding. As most work currently being completed by the DOT is in preparation for the winter season, this disaster has delayed or postponed projects that help keep state roads and the traveling public safe during inclement weather. Additionally, the immense and immediate need for materials and contract labor in the area has caused competition between state and local entities attempting to complete emergency and permanent repair work, as these resources are limited in New Hampshire. Hired contractors were gracious enough to put all their private work on hold to assist the DOT.

The Department of Safety, including State Police and Emergency Communications (i.e. State 911 call centers), responded to emergency calls for assistance from residents, visitors, and towns. Call logs illustrate a number of requests for assistance due to downed trees and power lines, utility poles undermined by flood waters, motorists who became stranded when trying to cross flooded roadways, residents trapped in a flooded homes, multiple propane tanks floating down rivers, power outages, accidents and vehicles off the roadway due to road washouts, and welfare checks on residents with flooded properties. State agencies also responded to call out requests from towns for state assistance.

The Department of Natural and Cultural Resources (DNCR) also experienced significant erosion and washouts to access roads in Cardigan Mountain State Park. Initial assessments showed damages to trails and twenty-two (22) culverts managed by DNCR. Additionally, a primary artery of the State snowmobile trail network that receives hundreds of riders each day during winter

months was significantly washed out. Agencies are still working to gather a full assessment of damages to state-owned property and infrastructure.

Pursuant to the severity of this storm, on July 11th, I executed the State Emergency Operations Plan (SEOP) with the activation of the SEOC to a Partial Level. While I did not declare a State of Emergency in NH, the nature and amount of state and local governmental resources that have been or will be used to alleviate the conditions of this disaster are as follows:

1. The SEOP was activated on July 11, 2019, and I instructed the HSEM Director to staff the SEOC. The SEOC was activated to monitor the situation, coordinate state response activities, and to respond to local requests for assistance and resources. The SEOC was activated at 2145 hours on July 11th at the notification of local calls for swift water rescue assets and was staffed until 0530 hours on July 12th when the flash flood warning expired.
2. ESFs that were activated at the time of the SEOC activation included Emergency Management (ESF 5) and Public Information (ESF 15).
3. The DOT coordinated transportation, public works, and engineering needs across the state. Numerous roads across the state required debris removal and repairs to infrastructure.
4. The Department of Environmental Services (DES) monitored and coordinated response to storm impacts to rivers, dams, and public drinking water supplies across the state. They also provided stream monitoring and dam inspections following the flash flooding and washouts.
5. The American Red Cross provided support and resources for sheltering needs.
6. Four (4) communities activated their local EOCs to respond to the needs and safety of their communities during this disaster. Coordinating activities included sheltering of residents and visitors, clearing debris, reestablishing road access, water level monitoring, health and welfare checks of residents, swift water rescue missions, and coordination of response and recovery efforts.
7. Over the course of the event, two (2) local shelters were opened in Grafton County.

The State is actively managing recovery efforts for four disasters (DR 4329, DR 4355, DR 4370, and DR 4371) that were declared within a ten (10) month period between August 2017 and June 2018. If granted, this would be the third federally declared disaster the State has experienced in the last thirteen (13) months. The following list of incidents capture events over the last twenty-three (23) months in which state and local jurisdictions expended a considerable amount of their own funds for response and recovery efforts:

- March 13-14, 2018: FEMA-4371-DR
 - A severe winter storm resulted in significant snowfall in all ten (10) counties and required a comprehensive statewide snow removal response by local and state agencies. Blizzard conditions caused hundreds of traffic accidents and vehicles off

- the road, forced over 500 school closures, and delayed or canceled transit, rail, and flights across much of the state.
 - NH is still actively managing administrative functions for this disaster declaration.
- March 2-8, 2018: FEMA-4370-DR
 - Strong winds, significant storm surge of up to three (3) feet, and coastal flooding caused widespread damages to infrastructure and the seawall in Rockingham County. At the peak of the incident, wave heights reached upwards of eighteen (18) feet.
 - NH is still actively managing recovery efforts for this disaster. Seawall repairs and mitigation will take multiple years to complete due to project complexity.
- October 29 – November 1, 2017: FEMA-4355-DR
 - A low pressure system combined with the remnants of Tropical Storm Philippe produced a historic coastal storm that caused unprecedented winds and flooding across the entire state and resulted in power outages to over 270,000 customers and significant infrastructure damage.
 - NH is still actively managing recovery efforts for this disaster. Towns in Grafton County were hit particularly hard in this event and were still recovering from DR 4355 when this most recent flash flooding event occurred. Many of the same areas that suffered flooding and damages to their infrastructure in DR 4355 saw new and more significant damage following this flash flooding event.
- July 1-2, 2017: FEMA-4329-DR
 - Severe thunderstorms with heavy rain left widespread damages to state and local infrastructure. The storm resulted in flooded campgrounds that were evacuated to a local shelter and caused significant damages in Coos and Grafton Counties.
 - NH is still actively managing recovery efforts for this disaster. Towns in Grafton County were still recovering from DR 4329 when this most recent flash flooding event occurred. They have not had a chance to completely recover from the severe storm in July when they suffered additional flooding and damages to their infrastructure.

Given the severity and magnitude of this natural disaster, Federal assistance is necessary to supplement the efforts and available resources of the state and local governments to recover from disaster related losses. Additionally, as required by 44 CFR § 206.36 (c)(5), I certify that all state and local government obligations and expenditures for the current disaster will comply with all applicable cost sharing requirements of the Stafford Act.

Thank you for your consideration of this Major Disaster Declaration Request. I look forward to your response. Please do not hesitate to contact me or my staff with any questions.

Sincerely,



Christopher T. Sununu
Governor, State of New Hampshire

*Enclosures: OMB No. 1660-0009/FEMA Form 010-0-13
Weather and Hydrological Summary, NWS Gray, ME
Mesonet Weather Event Summary: Orange, NH and NOAA Atlas Data Analysis
B: Supplemental Information for Public Assistance*