

ROY COOPER GOVERNOR

STATE OF NORTH CAROLINA OFFICE OF THE GOVERNOR

July 30, 2018

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

Through:

Regional Administrator Gracia B. Szczech

FEMA Region IV

3003 Chamblee Tucker Road

Atlanta, GA 30341

President Trump:

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 C.F.R. § 206.36, I request that you declare a major disaster for the State of North Carolina as a result of the impacts from a sustained rain and flooding event that occurred in western North Carolina during the period of May 15-31, 2018.

There has been a total of five confirmed event-related deaths, three in Polk County and two in Watauga County, as a direct result of flooding, landslides, and falling trees associated with this event.

I have taken appropriate action under state law and declared a state of emergency on May 30, 2018. As part of that declaration, I directed the execution of the state emergency operations plan, in accordance with Section 401(a) of the Stafford Act. The emergency area under the declaration is the following North Carolina (NC) counties:

Alexander, Alleghany, Ashe, Avery, Burke, Buncombe, Cabarrus, Caldwell, Catawba, Cherokee, Clay, Cleveland, Gaston, Graham, Haywood, Henderson, Iredell, Lincoln, Jackson, Macon, Madison, McDowell, Mecklenburg, Mitchell, Polk, Rowan, Rutherford, Stanly, Swain, Transylvania, Union, Watauga, Wilkes, and Yancey.

In addition to the State's emergency declaration, the counties of Polk, Henderson, Rutherford, and Swain also issued their own proclamations of states of emergency.

Overall impact to the State and affected local communities as a result of the event

Widespread rainfall produced North Carolina's wettest May on record dating back to 1940 according to data from the North Carolina State Climate Office and the North Carolina Division of Emergency Management. The heaviest rain occurred at the end of the month when moisture from Subtropical Storm Alberto soaked an already saturated western NC.

The National Weather Service data from May 15-31 showed that, portions of Watauga, Caldwell, Avery, Burke, Mitchell, Yancey, McDowell, Buncombe, Henderson, Transylvania, Jackson, Macon, Polk and Rutherford Counties received 10-20" of rainfall with scattered showers and thunderstorms occurring in at least one location every day. On average, these areas would typically receive 1.5-3.0" of rainfall during this period. These counties experienced 300-600% of normal rainfall from mid- to late-May.

Western NC saw several inches of rain between May 15 – 20, resulting in some flash flooding and isolated landslides. The Weather Prediction Center issued Mesoscale Precipitation Discussions (MPDs) for favored efficient rainfall processes and the increased concern of heavy rain rates. The Mesoscale Precipitation Discussions, a short-term technical weather forecast product issued by the National Weather Service Weather Prediction Center for increased concerns of heavy rainfall and flash flooding, were disseminated on May 15, 16, 17, 18, 26, 28, 29, 30, and 31 for either parts of or all of the Mountains and Foothills of North Carolina. These products consistently highlighted high rain rates of 1-3" (locally up to 4") per hour where cells merged and remained over one area for a long period of time. In some cases, thunderstorms became nearly stationary. Rates were enhanced in part by orographic lift across the Mountains and Foothills. Given that convection was tied to the terrain and impacts from flash flooding were already ongoing, additional flood impacts persisted.

During this time, Subtropical Storm Alberto contributed to the abundant moisture across western NC with some areas receiving more than a foot of rain between May 27 – 30. Heavy rain from the remnants of Alberto prompted flash flooding, landslides and main stream river flooding and threatened the failure of the Lake Tahoma dam.

Throughout the period of May 15-31, catastrophic damages to infrastructure occurred severing transportation routes and endangering public health and safety. During the week of May 21-27, North Carolina Department of Transportation (NCDOT) State Maintenance Operations reported approximately \$3.5 million in damages across 35 sites in three divisions which make up the majority of the western part of NC (see *Enclosure B*). Road systems were heavily impacted and make up 78% of the total damage costs to public infrastructure. Of these road damages, 75% were caused by slope failure and embankment washouts. The fact that these failures continued to occur and grow throughout the requested incident period, and continued occurring after May 31, 2018, is an indication that the soil in slopes above and below roadways continued to be oversaturated from the heavy rains, losing stability and sliding down hillsides. In addition to infrastructure damages, several counties reported major damage to streams, some due to debris blocking stream flow which subsequently changed the path of water. Other

damages occurred due to the increased velocity and volume of stream flow causing banks to be washed out and stream paths to be altered. Counties are concerned that several of these streams are now a threat to infrastructure.

Any attempt to separate damages that could be attributed to the two rainfall events disregards what was occurring geo-physically in the soil and the many integral slopes adjacent to and below the many highways in these counties. To limit this consideration to only damages that occurred during the rainfall directly related to Subtropical Storm Alberto does not encompass the full impact of the heavy rainfall, sustained high water levels in rivers, and widespread landslides that occurred throughout the requested incident period.

Public infrastructure was significantly impacted by this event. Some of the county impacts include, but are not limited to:

Avery – NCDOT conducted debris removal in response to landslides; repaired 4 slope failures; 4 other sites required drainage and shoulder repair;

Buncombe – NCDOT conducted debris removal in response to landslides; 6 slope failures; 1 road washout;

Burke – NCDOT conducted debris removal in response to landslides; 1 shoulder stabilization; 1 shoulder repair;

Caldwell – landslide closing road; 20 mudslides affected roadways; NCDOT conducted debris removal in response to landslides; NCDOT wall fell into Wilson's Creek; landslide in Patterson Community affected NCDOT infrastructure blocking both lanes; NCDOT provided dump trucks and backhoe to remove landslide debris from roadway; made repairs to 14 dirt roads, 13 slope failure repairs, and 5 bridge repairs;

Henderson – landslide in Etowah Community; damage to U.S. Post Office in Bat Cave due to slope failure which impacted building; Post Office and adjacent building evacuated and marked off for safety; multiple road closures due to washouts, flooded roadways, and rock/mudslides; swift water rescue team staged at Bat Cave; NCDOT conducted debris removal in response to landslides and made road repairs at 10 sites; NC Wildlife Resources Commission had significant damage to the Gallimore Access Trail to the Green River Gorge including loss of aggregate surface and roadway embankments, slope failures above and below trails, culvert failures, and the accumulation of large amounts of vegetative debris;

Jackson – NCDOT conducted debris removal in response to landslides; slope failures at 4 sites; replaced 1 culvert;

Madison – NCDOT conducted debris removal in response to landslides; 35 slope failure repairs; 11 road washouts;

McDowell – shelter opened; mudslides on railroad tracks, CSX halted rail traffic and removed debris; telephone/internet outage resulted in loss of phone/internet connectivity at Emergency Operations Center (EOC); English Rd blocked due to landslide; responded to calls from residents requesting assistance due to being isolated and assisted with installation of temporary foot bridges; evacuation of downtown Old Fort due to townwide flooding; multiple NCDOT road closures due to slides and dangers of secondary slides; NCDOT road closures due to undermining of roads; NCDOT conducted debris removal in response to landslides; 10 slope failures; 4 road washouts; 1 box culvert repair;

Mitchell – NCDOT conducted debris removal in response to landslides; road repairs; d closed 1 bridge due to flooding;

Polk – 3 event-related fatalities; housing development cut off due to floodwater covering the only entrance and accessible by boat only; NCDOT road closures due to landslides and washed out roads; a secondary drinking water pipeline from the Town of Tryon to supply water to the towns of Saluda and Columbus was damaged resulting in nonfunctionality of the water line and an associated pump station; the NCDOT road along which the water line ran was also damaged at 23 locations and will be closed to traffic for an extended period of time; NCDOT also conducted debris removal in response to landslides and repaired 3 culverts and 4 slope failures; NC Wildlife Resources Commission had damage to at least 3 major access trails to Wildlife management areas, including loss of aggregate surface and roadway embankments, slope failures above and below trails, culvert failures, and the accumulation of large amounts of vegetative debris;

Rutherford – many roads closed while NCDOT worked to clear mudslides; structural damage at Chimney Rock Fire Department due to mudslide; numerous mudslides and trees down blocked roads in Lake Lure and Chimney Rock; evacuations from Chimney Rock;

Swain – 60-foot-long section of 60-inch-diameter corrugated metal storm drain which serves 8 facilities at the Swain County Industrial Park was severely damaged with a section completely collapsing during the event; trees down county-wide; landslide caused road closure; NCDOT conducted debris removal in response to landslides and made repairs at 9 road sites;

Transylvania – NCDOT conducted debris removal in response to landslides and made repairs at 12 road sites;

Watauga – 2 event-related deaths; NCDOT conducted debris removal in response to landslides; repaired 2 bridges and 2 culverts; road repairs at 30 sites;

Yancey — campground evacuated; Town of Burnsville had damage to a wastewater treatment plant and pumping station; Yancey County had damage to recreational facilities

in a county park; NCDOT conducted debris removal in response to landslides and made multiple road repairs.

Nature and amount of State and local resources that have been or will be used to alleviate the conditions of this disaster

NC Baptist Men, Team Rubicon, and other VOAD members are assisting with debris removal. Red Cross and other volunteer agencies assisted with sheltering operations and providing food and water. The NC Baptist men provided portable showers, a laundry unit, and a generator to run both.

In response to this event, state and local agencies performed emergency measures to protect public safety and open roads closed due to downed trees and mudslides. Some of the response operations performed and assets deployed to the requested counties include, but are not limited to:

Avery – 2 NC Forest Service bridge crews deployed to construct temporary footbridge;

Buncombe – fire department evacuated 22 residents from Riverside Family Care Homes to shelter; evacuated mobile home park; water leak in town of Black Mountain resulted in water loss for approximately 4000 residents; Henderson County sent Type 3 Swiftwater Rescue Team to Black Mountain;

Caldwell – State of Emergency declared (6/1/2018); 5 people extricated from flood area to safe area; 10+ rescues; shelter opened; request for footbridge and ES/NC Forest Services provided footbridge; NCDOT repaired multiple bridges and restored access to residences; landslide in Patterson Community affected NCDOT infrastructure blocking both lanes; NCDOT provided dump trucks and backhoe to remove landslide debris from roadway;

Henderson – State of Emergency declared; deployed a shelter trailer to Swannanoa;

Jackson – sent code red message to residents; door-to-door to notify residents of rising water; multiple road closures due to rising Tuckasegee River; received swiftwater rescue teams from Greensboro; Eastern Band of Cherokee Indians also performed debris removal operations within their jurisdiction, and had a slope failure completely block a roadway with soil and rock that will require slope repairs as an integral part of the roadway;

McDowell – State of Emergency declared (5/29/2018) for county, Marion, Old Fort; received mutual aid from Guilford County to provide 3 emergency management team members to assist in the county EOC; received 4-person crew from Avery County to assist with evacuations; received 22 personnel from Burke County to assist with evacuations; water rescues from Old Fort area; voluntary evacuation of multiple campgrounds; water rescue for NCDOT crew whose truck slid into the river; rescue of driver from vehicle

trapped in landslide; received two 14-person swiftwater teams and two field communications members from Charlotte;

Polk – State of Emergency declared (5/23/2018); Red Cross and county went door-to-door for wellness checks and provided food/water; voluntary evacuations; shelter opened (5/27/2018); swiftwater rescue missions to extract residents from high water areas; evacuation of mobile home park; received CAMET trailer from Rutherford County; Urban Search and Rescue team from Buncombe County deployed to Polk;

Rutherford – State of Emergency declared for county and Lake Lure (5/29/2018); received mutual aid swiftwater team from Buncombe County;

Swain – State of Emergency for county and Bryson City (6/1/2018).

Twelve-Month Disaster History

In May 2017, there was a straight-line winds and severe weather event in Sampson County, which resulted in a U.S. Small Business Administration (SBA) and a State Type I Individual Assistance declaration for that county. The estimated cost to the state was \$650,000.

On August 16, 2017, a State Type I disaster for Public Assistance was declared for the Town of Windsor in Bertie County for the remnants of Tropical Storm Julia in late September 2016 for which the state was responsible for \$66,704.66 of the cost.

On November 15, 2017, a State Type I disaster for Public Assistance was declared for the City of Eden in Rockingham County for a straight-line wind event that occurred on May 5, 2017 for which the state was responsible for \$186,301 of the cost.

On November 22, 2017, a State Type I disaster for Individual Assistance was declared for Watauga County and the contiguous counties of Ashe, Avery, Caldwell, and Wilkes for severe damages as a result of flooding and heavy wind for which the state is responsible for \$87,084 of the cost. This event also qualified for a SBA disaster declaration.

On April 24, 2018, a State Type I disaster for Public Assistance was declared for the Village of Cedar Rock in Caldwell County and the Town of Tryon in Polk County due to damages from the remnants of Tropical Storm Nate that occurred on October 8, 2017, for which the state is responsible for \$44,410.69 of the cost.

On May 8, 2018, a Stafford Act declaration for Individual Assistance was issued for a tornado and severe storms that occurred on April 15, 2018, for the counties of Guilford and Rockingham. The estimated state share of this disaster is \$155,401.75.

In addition, there is a State Type I disaster declaration for Public Assistance pending for the towns of Hildebran (Burke County), Blowing Rock (Watauga County), Marshall

(Madison County), Granite Falls (Caldwell County), Wilkesboro (Wilkes County), and North Wilkesboro (Wilkes County) for a severe weather and tornado event that occurred on October 23, 2017, for which the state is responsible for \$811,810 of the cost.

Individual Assistance Request

Throughout this event in the requested counties listed below, 314 homes had their access affected due to rising floodwaters and washed out roads and bridges, and 176 homes were affected and/or damaged. There were also 146 private bridges, roads, culverts, and driveways impacted causing access issues for residents. Of these 146 sites, 20 were totally destroyed and 52 had major damage. There were also 21 businesses affected by the event (see *Enclosure A*).

Socio-economic comparison of affected areas compared with state and national

averages

averages					
	Average	Median	Percent	Percent	Percent
	Percent of	Household	Elderly*	Disabled*	Pre-Disaster
	Persons Below	Income*			Unemployment*
	Poverty Level*				
National	12.7%	\$55,322	14.9%	19%	4%
Average					
State Average	15.4%	\$48,256	15.7%	16%	4.5%
Avery	19.7%	\$35,891	21.2%	14%	4.7%
Buncombe	13.5%	\$46,902	19.4%	9.5%	3.5%
Caldwell	17.1%	\$37,118	19.3%	13.8%	3.6%
Henderson	12.2%	\$48,138	25.3%	11.1%	3.1%
Madison	18.8%	\$40,408	21.4%	10.5%	6.9%
McDowell	18.4%	\$37,590	20.1%	15.7%	4.1%
Mitchell	16.4%	\$39,658	24.9%	13.6%	4.8%
Polk	14.5%	\$47,396	30.5%	9.6%	4.9%
Swain	16.7%	\$33,598	18.9%	9.2%	4.32%
Yancey	19.1%	\$36,993	25.3%	14%	4.3%

^{*} US Census Bureau

Public Assistance Preliminary Damage Assessment Findings

Public Assistance joint preliminary damage assessments (PDA) with FEMA, state, and local representatives were conducted from June 5-14, 2018, in the following 15 counties: Avery, Buncombe, Burke, Caldwell, Cherokee, Henderson, Jackson, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Watauga, and Yancey. Of the 15 counties assessed, all but two (Burke and Cherokee) have exceeded their county per capita indicator. For each category of damage, insurance coverage was considered and estimates reduced accordingly, such that the reported PDA estimates include only uninsured losses.

The PDA estimate for each category of work is as follows:

Category A – Debris Removal = \$1,176,869

Category B – Emergency Protective Measures = \$267,087

Category C - Roads and Bridges = \$14,083,639

Category D – Water Control Facilities = \$0

Category E – Buildings and Equipment = \$29,240

Category F – Utilities = \$1,491,950

Category G – Parks and Recreation = \$1,070,828

The PDA total for all categories is \$18,119,613. Of the 15 counties assessed, 13 counties exceeded the \$3.68 per capita threshold. A large proportion of the counties have sustained significant damage resulting in extremely high per capita indicators well above the \$3.68 per capita threshold. These counties include Avery County (\$38.77), Henderson (\$17.20), Jackson (\$12.69), Madison (\$28.05), McDowell (\$50.61), Polk (\$31.10), Rutherford (\$21.24), Swain (\$28.71), Watauga (\$16.45), and Yancey (\$20.53).

In conclusion, western North Carolina has suffered devastating effects from the cumulative total of excessive rain that affected the area on a consistent basis from May 15-31, 2018. Many of the same communities were severely impacted throughout the incident period, and many of these same communities have shown extremely high per capita impacts several times higher than the per capita indicator. Joint preliminary damage assessments have estimated Public Assistance costs in excess of \$18 million reported to date, with the potential for additional damages still to be identified and reported. This PDA estimate exceeds the statewide per capita impact indicator of \$13,921,805.18 used to evaluate the impacts for Public Assistance under the Stafford Act.

I have determined that this incident is of such severity and magnitude that effective recovery is beyond the capabilities of the State and affected local governments and that supplementary Federal assistance is necessary. The State has expended an extraordinary amount of money on Stafford Act and non-Stafford Act disasters in the past fiscal year, as well as in the current fiscal year, with serious remaining impacts yet to be addressed.

Therefore, I am specifically requesting Individual Assistance, including the Individuals and Households Program (IHP), the Small Business Administration's Disaster Assistance Loans, Crisis Counseling, Disaster Legal Services, Disaster Unemployment Assistance, and the Disaster Supplemental Nutritional Assistance Program for the counties of Avery, Buncombe, Caldwell, Henderson, Madison, McDowell, Mitchell, Polk, Swain, and Yancey.

I am also requesting Public Assistance for the following 13 counties that exceeded their per capita indicator as documented in the joint preliminary damage assessment: Avery, Buncombe, Caldwell, Henderson, Jackson, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Watauga, and Yancey.

I certify that for this major disaster, the state and local governments will assume all applicable non-Federal shares of costs required by the Stafford Act.

I have designated Mr. Michael A. Sprayberry as the State Coordinating Officer for this request. He will work with the Federal Emergency Management Agency on damage assessments and may provide further information or justification on my behalf.

Sincerely,

Roy Coope

Enclosures

OMB No. 1660-0009/FEMA Form 010-0-13

Executive Order No. 44 Declaration of a State of Emergency

A: Individual Assistance B: Public Assistance

C: Supporting documentation of weather for incident period