



**STATE OF NORTH CAROLINA  
OFFICE OF THE GOVERNOR**

ROY COOPER

GOVERNOR

November 28, 2018

The Honorable Richard Shelby  
United States Senate

The Honorable Patrick Leahy  
United States Senate

The Honorable Nita Lowey  
U.S. House of Representatives

The Honorable Rodney Frelinghuysen  
U. S. House of Representatives

Dear Appropriations Leaders,

In the wake of the devastation caused by Hurricane Florence, the state of North Carolina urgently needs federal support. The unprecedented deluge of rain and storm surge left North Carolina with nearly \$17 billion in damage and needs and is summarized below.

<b>Preliminary Total Damage and Needs Assessment Costs (Millions)</b>					
<b>Category</b>	<b>Direct</b>	<b>Indirect/ Induced</b>	<b>Subtotal</b>	<b>Resiliency</b>	<b>Total Impact</b>
Business	\$3,780	\$1,900	<b>\$5,680</b>	\$20	<b>\$5,700</b>
Housing	\$5,339	\$0	<b>\$5,339</b>	\$291	<b>\$5,630</b>
Agriculture	\$1,332	\$1,023	<b>\$2,355</b>	\$75	<b>\$2,430</b>
Utilities, Water and Sewer	\$779	\$0	<b>\$779</b>	\$25	<b>\$804</b>
Natural Resources	\$410	\$0	<b>\$410</b>	\$145	<b>\$554</b>
Government Property and Revenue	\$333	\$69	<b>\$402</b>	\$5	<b>\$407</b>
Transportation	\$419	\$7	<b>\$426</b>	\$50	<b>\$476</b>
Education	\$275	\$28	<b>\$303</b>	\$0	<b>\$303</b>
Health and Human Services	\$192	\$40	<b>\$233</b>	\$0	<b>\$233</b>
Recovery Operations	\$194	\$0	<b>\$194</b>	\$0	<b>\$194</b>
<b>Total Recovery Costs</b>	<b>\$13,053</b>	<b>\$3,067</b>	<b>\$16,120</b>	<b>\$611</b>	<b>\$16,731</b>

The impact exceeds the cumulative damage caused by Hurricane Matthew in 2016 and Hurricane Floyd in 1999. North Carolina lost 42 lives because of the storm. People have been displaced, businesses have been ruined, farms have been flooded.

The communities devastated by the storm are some of the most vulnerable in the state, with over half of the affected population living below the 150% poverty line. The area is also critically important to our state's \$87 billion agricultural economy that employs one in six North Carolinians. This crisis occurred at harvest time for many of North Carolina's important crops, multiplying the pain of many farmers who have now experienced two destructive storms in the last two years. We also saw major damage to some of our thriving economic engines in the east. The hit to these important areas made the blow that much worse.

From this devastation we must seize the opportunity to rebuild stronger and smarter. We should help move people and their belongings from harm's way. We must make sure those who live and do business along our rivers are protected from flood waters. We should repair damage with more resilient homes, roads, and water and sewer infrastructure.

To do so, the State of North Carolina is asking for additional federal support. North Carolina currently anticipates receiving approximately \$2.5 billion in federal funds, including FEMA IA, PA, HMGP (\$880 million), HUD CDBG-DR (\$1.1 billion), DOT-FHA (\$196 million), DOC for SBA Loans (\$270 million) and other smaller sources. North Carolina is seeking an additional \$6.3 billion that should be funded from federal programs. A list of potential funding options that have already been appropriated or require an additional appropriation is included in the attached table.

The total federal funding request of \$8.8 billion (including anticipated and additional requests) covers 52% of total damages in North Carolina. This amount is consistent with federal support to states for other major disasters across the country since Hurricane Katrina in 2005.

I have put forward a comprehensive \$1.5 billion state recovery plan, with \$850 million already committed by our General Assembly and additional funding expected to be provided over several years. This represents a significant state investment totaling 3.6% of North Carolina's annual operating budget, a bold commitment compared to a 2% state investment that Texas and Florida put forth in the immediate aftermath of Harvey and Irma.

### **IMMEDIATE PRIORITIES FOR FEDERAL FUNDS**

The State of North Carolina intends on using these requested federal funds both to rebuild and also to make North Carolina more resilient the next time a storm comes to our shores. Select areas include:

- Repairing our highways, interstates, and coast in ways that are resilient and safe, supporting our thriving economy and tourism industry.
- Building more resilient homes in safe areas across North Carolina.
- Reviving businesses that lost workers, income and stock with forgivable loans to get people back to work.
- Expanding a robust Recovery and Resiliency Office to coordinate efficient state and federal financial assistance for housing, infrastructure and recovery.
- Helping farmers whose harvest-time crops were ruined and providing incentives for farmers to invest in resiliency measures.
- Ensuring medical help and mental health treatment get to those suffering the devastating after-effects of storm damage and uncertainty.

There are several existing federal programs that will be vital to North Carolina's recovery but that do not require an emergency appropriation. Examples include the USDOT 'INFRA' grant program which NCDOT will pursue to support elevation of key segments of Interstates 40 and 95 that were inundated by Florence, and NOAA coastal resilience accounts. As our local governments and state agencies make applications for federal grants in existing programs, we will work closely with you to advocate for North Carolina's recovery.

Finally, several Department of Defense installations in Eastern North Carolina sustained significant damage from Hurricane Florence. While damage assessments are not yet final, we urge Congress to provide timely emergency Military Construction appropriations to support facility repairs, mission sustainment and readiness for these installations to support their full recovery, and that of their surrounding communities.

In addition to these critical funding items, I am asking for legislative changes that would ensure that all survivors of Hurricanes Matthew and Florence, whether they were impacted by only one storm or both, are treated equitably. By working with Congress and the Administration to eliminate redundant regulatory hurdles we will be able to streamline the recovery effort and expedite help to affected communities.

I also ask that Congress examine the potential for interest free loan and tax-advantaged bond approaches that might benefit school districts facing repair costs due to Florence's impacts, as well as proposals to allow tax relief to individuals suffering uncompensated losses and other storm-related impacts as have been enacted in connection with other disasters.

Thank you for your service to our nation. I am proud of the people of our state who are working together to overcome these disasters. Now it is our job to work together to rebuild North Carolina stronger and smarter.

Sincerely,

A handwritten signature in black ink that reads "Roy Cooper". The signature is written in a cursive style with a large, stylized "R" and "C".

Roy Cooper

**Table 1.** Potential additional federal programs for Hurricane Florence recovery effort (list is not exhaustive)

Agency	Program	Notes	\$ in M
HUD	CDBG-DR	\$1.6B appropriated for Hurricane Florence for NC and SC. Additional funds would require future appropriation	\$2,937
USDA	2017 Wildfires and Hurricanes Indemnity Program	Provided disaster payments to agricultural producers to offset losses from hurricanes and wildfires during 2017. Would require future appropriation	\$780
USDA	Emergency Watershed Protection Program <sup>1</sup>	Watershed and flood prevention operations. Not specific to natural disasters. Would require future appropriation	\$100
USDA	Emergency Conservation Program	Helps farmers repair damage to farmland caused by natural disasters	\$18
USDA	Emergency Forest Restoration	Provides payments to eligible nonindustrial private forest landowners in order to restore land damaged by natural disasters	\$22
USACE	Coastal Storm Damage Reduction and Shore Protection	Beach erosion and dredging projects	\$371
USACE	Flood Risk Management	Study and construction projects to reduce risks from coastal floods and storms	\$1,393
DOC	Economic Development Administration	Provided grants to support disaster recovery activities as a result of Hurricanes Harvey, Irma, Maria, and wildfires and other 2017 natural disasters. Would require future appropriation	\$300
DOC	NOAA Fisheries Disaster Assistance	Governor Cooper requested federal fishery resources disaster declaration from Secretary Ross on November 1. Once appropriated, funding is available through the Magnuson-Stevens Fishery Conservation and Management Act and the Interjurisdictional Fisheries Act	\$20
HHS	SSBG	Precedent for designating supplemental social services awards above and beyond appropriated amount	\$200
DOE	Temporary Emergency Impact Aid for Displaced Students	Provides grants for emergency impact aid payments to eligible school districts for the cost of educating. Funding could also be available from McKinney-Vento. Would require future appropriation	\$60
DOE	Immediate Aid to Restart School Operations (RESTART)	Assists local educational agencies and non-public schools with expenses related to the restart of schools where a major disaster or emergency was declared. Would require future appropriation	\$40
DOI	Historic Preservation Fund Grant Program	Provided \$50 million to historic preservation projects resulting from 2017 storms	\$50
<b>Total</b>			<b>\$6,291</b>

<sup>1</sup> This includes \$50 million of aid for the Emergency Watershed Program – Floodplain Easements program not included in the North Carolina Department of Agriculture and Consumer Services federal request.

# Housing and Urban Development (HUD)



Photo credit: National Guard

## Hurricane Florence Impact on Housing, Businesses, and Infrastructure



Homes

74,000+  
Homes flooded

230,000+  
Wind-damaged homes

70%  
of flood-damaged homes are underinsured

20,000+  
Peak population in Shelters



Business

3,800+  
Businesses flooded

23,000+  
Wind-damaged businesses



Other  
infrastructure

7  
School districts missed 20+ Days

300+  
Other flooded government buildings

40  
Wastewater treatment facilities flooded

### Number of homes impacted during Hurricane Florence by type

	Wind		Surge flooding		Riverine flooding		Totals	
	Damages (\$M)	Building count	Damages (\$M)	Building count	Damages (\$M)	Building count	Damages (\$M)	Building count
<b>Total</b>	\$2,522	232,725	\$1,730	32,887	\$799	41,676	\$5,051	307,288

## TOTAL UNMET NEED: \$3.0B<sup>1</sup>

<sup>1</sup> Corresponds to needs within the Damage and Needs Assessment to be addressed using CDBG-DR—includes housing, physical damage to businesses, physical infrastructure, recovery operations, and resiliency efforts. Also includes additional CDBG-DR programs for non-construction-related housing needs. Excludes \$1.14B in HUD funding North Carolina is anticipating for housing recovery

# Housing and Urban Development (HUD)

## ADDITIONAL HUD FUNDING NEED: \$3.0 BILLION<sup>1</sup>

### 1 HOUSING REPAIR, RECONSTRUCTION AND MITIGATION

Provide grants to eligible homeowners to rehabilitate damaged homes, replace destroyed homes, elevate homes in high-flood-risk areas, and undertake other mitigation measures to ensure a more resilient housing stock. Funding would include reimbursements to homeowners who incurred rehabilitation expenses prior to the onset of the program. Part of the program funding would be used to cover the state match for FEMA housing assistance. NC will likely pursue a waiver for low- and moderate-income (LMI) requirements and for duplication-of-benefit requirements.<sup>2</sup>

This funding would assist many of the estimated 50,000+ owner-occupied homes with flood damage and a smaller proportion of the 350,000 homes affected by wind and other storm-related hazards.<sup>3</sup> Estimated per unit costs for rehabilitation and reconstruction vary, from approximately \$70,000 to replace a single-wide mobile home, to \$180,000-\$200,000 for full reconstruction of homes without elevation, to nearly \$250,000 for full reconstruction plus infrastructure costs for new developments.

This program would primarily address the estimated \$1.3 billion in unmet housing need.

### 2 RESIDENTIAL PROPERTY BUYOUT

Partner with local communities to offer a buyout option to owners of substantially damaged homes that are prone to frequent flooding.

Approximately 10,000 homes were destroyed or severely damaged by flooding alone during Hurricane Florence. Recent analyses of the Lumber, Neuse, and Tar River basins found nearly 6,000 buildings in the 50-year floodplain and more than 12,000 in the 100-year floodplain. Roughly 3,000 homeowners in the Eastern counties have already stated a preference for having their homes bought out or elevated.<sup>3</sup> Estimated per unit costs for acquisitions are \$180,000 to \$200,000.

This program would primarily address the estimated \$0.3 billion in housing resilience need, a subset of the \$1.3 billion in total unmet housing need.

### 3 RENTAL HOUSING AND RENTER ASSISTANCE

Provide direct assistance to renters to avoid homelessness and out-migration from the area, and provide funding for rehabilitation, reconstruction, and new construction of affordable multi-family rental structures. Priority will be given to the most impacted communities. A part of the program funding would be used to cover the state match for FEMA assistance for renters.

Rental structures account for an estimated 30% of the damaged structures.<sup>3</sup>

This program would primarily address the estimated \$1.3 billion in unmet housing need.

<sup>1</sup> This figure is in addition to the \$1.14B in HUD funding that North Carolina anticipates receiving

<sup>2</sup> NC will likely request additional waivers to allow maximum flexibility in implementing CDBG-DR funds

<sup>3</sup> For more information, see Housing Section on page 18 of the [Preliminary Damage and Needs Assessment Report](#)

# Housing and Urban Development (HUD)

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## ECONOMIC REVITALIZATION

Offer deferred and forgivable loans of up to \$100,000 to small businesses affected by the hurricane to enable job creation and retention benefitting low- and moderate-income employees. Eligible uses of funds include repair, reconstruction, mitigation, equipment/inventory replacement, refinancing, flood insurance, and working capital. Preference shall be given to historically underutilized businesses.

Close to 4,000 businesses and nonprofits incurred water damage and approximately 23,000 incurred wind damage. In the 31 counties eligible for FEMA IA assistance,<sup>1</sup> approximately 96% of businesses had 50 or fewer employees.<sup>2</sup>

This program would address the \$0.4 billion in unmet need for damage to business property, but does not address the estimated \$4.6 billion in lost permanent business revenue from direct and indirect business disruption.<sup>2</sup>

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## INFRASTRUCTURE RECONSTRUCTION

Provide for rebuilding or upgrading local government infrastructure, including: sewer, water, public facilities, schools, hospital and health care centers, roads and bridges, drainage improvements.<sup>2</sup> The state will request a waiver for "buildings for the general conduct of government" to allow for the rehabilitation or reconstruction of public buildings that are otherwise ineligible.

This program would address the \$0.3 billion in unmet need for damage to public infrastructure.<sup>2,3</sup>

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## DISASTER MITIGATION PLANNING

Collaborate with affected local communities to develop plans to promote long-term recovery and mitigate potential damage from future storms.

Identify critical infrastructure that would be most vulnerable to future storm events.

Undertake studies on flood control, drainage improvement, resilient housing solutions, homelessness, surge protection, economic development, infrastructure improvement, or other efforts to further recovery and mitigate future damages.

This would address the \$0.2 billion in unmet resiliency efforts across several categories, including agriculture, natural resources, and business.<sup>2,4</sup>

<sup>1</sup> As of 10/22/18

<sup>2</sup> For more information, see the [Preliminary Damage and Needs Assessment Report](#).

<sup>3</sup> This covers parts of the following Damage & Needs Assessment categories: Government Property, Utilities, Education, Transportation, and Health/Human Services

<sup>4</sup> The stated \$0.2 billion excludes the resiliency efforts requested through USACE for Natural Resources

## Housing and Urban Development (HUD)

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### RECOVERY OPERATIONS

Ensure that North Carolina has sufficient administrative capability to implement large scale recovery initiatives. This would come in two forms. First, North Carolina would finalize staffing the Office of Recovery and Resiliency, through which relief efforts would be coordinated. Second, additional staff would be added to some local governments and agencies as needed to help handle the exponential growth in budget, scope of activities, and acceleration of timelines.

This would address the \$0.1 billion unmet need for recovery operations.<sup>1</sup>

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### OTHER POTENTIAL PROGRAMS

There are a number of programs that can provide assistance beyond what is covered above. These include grants to low- and moderate-income households for non-construction housing needs, such as short-term mortgage assistance and utility payments assistance. They may also include resiliency programs, grants and/or loans to agri-businesses and micro-businesses, job training programs and blight reduction programs.

We expect North Carolina to be eligible for at least \$0.7 billion for these programs.

<sup>1</sup>For more information, see the [Preliminary Damage and Needs Assessment Report](#).

# Housing and Urban Development (HUD)

## APPENDIX: SUPPLEMENTAL CDBG-DR UNMET NEED HOUSING CALCULATION

HUD calculates “unmet housing needs” as the number of housing units with unmet needs times the estimated cost to repair those units (HUD Multiplier) less repair funds already provided by FEMA and SBA. Each housing unit is categorized as either (1) Minor-Low, (2) Minor-High, (3) Major-Low, (4) Major-High, (5) Severe.<sup>1</sup>

**Table 1.** Estimate of North Carolina Unmet Need by standard HUD classification for owners and renters

HUD Category	Count of Owner units <sup>1</sup>	Count of Renter units <sup>1</sup>	Total	HUD Multiplier <sup>2</sup>	Unmet Need
Minimal <sup>3</sup>	9,123	35,769	44,892		
Minor-Low	26,905	9,279	36,184		
Minor-High	2,527	501	3,028		
Major-Low	10,420	2,408	12,828	\$45,637	\$585,431,693
Major-High	2,205	784	2,989	\$61,085	\$182,584,081
Severe	812	152	964	\$82,126	\$79,169,368
<b>Total</b>	<b>51,992</b>	<b>48,893</b>	<b>100,885</b>		<b>\$847,185,141</b>

The State of North Carolina’s total estimated Unmet Housing Need includes several additional factors not in HUDs methodology (e.g., damage estimates for Minor-Low and Minor-High categories, elevation and buyouts, higher construction costs, etc.). These estimates, when layered with the HUD methodology produce an Unmet Need of \$2.1 billion as outlined in Table 2 below.

**Table 2.** Estimate of North Carolina unmet need including factors beyond standard HUD classification

HUD Category	Count of Owner units <sup>1</sup>	Count of Renter units <sup>1</sup>	Total	HUD Multiplier <sup>2</sup>	Unmet Need
Minimal <sup>3</sup>	9,123	35,769	44,892	\$3,058	\$137,265,386
Minor-Low	26,905	9,279	36,184	\$15,288	\$553,195,527
Minor-High	2,527	501	3,028	\$30,577	\$92,586,561
Major-Low	10,420	2,408	12,828	\$45,637	\$585,431,693
Major-High	2,205	784	2,989	\$61,085	\$182,584,081
Severe	812	152	964	\$82,126	\$79,169,368
<b>Subtotal</b>	<b>51,992</b>	<b>48,893</b>	<b>100,885</b>		<b>\$1,630,232,615</b>
Other resiliency efforts <sup>4</sup>					\$290,000,000
Adjusting for higher construction costs (10% of flood damages) <sup>5</sup>					\$163,023,262
<b>Total</b>					<b>\$2,083,255,877</b>

\*Table footnotes on following page

# Housing and Urban Development (HUD)

## APPENDIX: SUPPLEMENTAL CDBG-DR UNMET NEED HOUSING CALCULATION

### Table 1 & 2 Footnotes

1. The structure counts by damage level are based on FEMA inspections for 91,969 Individual Assistance registrants as of 11/9/2018. OSBM categorized the records into damage categories based on the 2017 HUD guidelines in the Federal Register, Volume 83, Number 157. OSBM then extrapolated these structure counts to the FEMA projections of 153,700 IA registrations for Hurricane Florence in North Carolina as of 10/12/2018, assuming that inspections of the remaining projected registrants will mirror the distribution of FEMA inspections to date.

2. The HUD multipliers are equal to 81% of the 2017 HUD multipliers for Texas. The average IHP award for North Carolina as of 11/13/2018 is \$3,551, which is approximately 81% of the average IHP award of \$4,370 for Texas in 2017. Minor-High multipliers for wind and flood are computed separately and equal the Major-Low multiplied by the ratio of the average FEMA Verified Loss (FVL) for Minor-High versus average FVL for Major-Low. For flood damage, the Major-Low and Minor-High multipliers are equal due to the average FVL being higher for Minor-High than for Major-Low. The Minor-Low multipliers are equal to the Minor-High multiplier multiplied by the ratio of the average FEMA Verified Loss (FVL) for Minor-Low versus average FVL for Minor-High, and the Minimal multiplier, which accounts for losses not included in FVL, is computed via the same method.

These multipliers are likely conservative relative to actual damages: the resulting weighted-average multipliers for above-substructure flooding (\$43,400) is less than the average NCEM-modeled flood damages for uninsured structures with above-substructure flooding (\$49,507), and the weighted-average wind multiplier (\$6,451) is less than the average insured wind losses paid (\$7,199), as reported to the NC Department of Insurance as of 10/17/2018.

3. Minimal category includes housing units with no FEMA Verified Loss to account for damages to homes that are otherwise "safe, sanitary, and secure."

4. Other resiliency efforts include both buyouts and elevations. Roughly 3,000 homeowners in the disaster counties have already stated a preference for having their homes bought out or elevated. Estimated per unit costs for acquisitions are \$180,000 to \$200,000.

5. Experience from Hurricanes Matthew, Katrina, Harvey, and Superstorm Sandy suggests construction costs were 8-20% higher in the aftermath of the event due to a shortage of available construction services or an increase in the cost of raw material or labor. In addition, Hurricane Florence construction costs may be driven up by the impact of tariffs on the price of lumber, steel, aluminum, and other materials, which would further increase the preliminary estimate.

## North Carolina Unmet CDBG-DR Calculation

#	Brief Description	Amount
1	Housing (includes repairs, reconstruction, and buyouts)	1,300,000,000
2	Economic Revitalization (mainly small business assistance)	400,000,000
3	Infrastructure (water, sewer, public facilities)	300,000,000
4	Disaster Mitigation Planning	200,000,000
5	Recovery Operations	100,000,000
6	Other (mortgage assistance, job training, blight reduction, etc.)	<u>700,000,000</u>
7	<b>Total</b>	<b>3,000,000,000</b>

# UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)



Photo credit: (left): Steve Helber / AP - A pickup truck drives on a flooded road past a farmhouse that is surrounded by flooded fields from Tropical Storm Florence in Hyde County, North Carolina, on September 15, 2018

## Hurricane Florence Impact on Agriculture

Agriculture is North Carolina's largest industry, with \$87 billion in annual economic activity that employs one in six North Carolinians. 65% of the state's agricultural production occurs east of Interstate 95 in the region most heavily impacted by Florence. Over the course of the storm, eastern parts of the state received up to 3 feet of rainfall, causing devastating flooding that resulted in 23 eastern counties - including the top six agricultural producers - receiving FEMA IA disaster designations.

This crisis occurred at harvest time for many of NC's major crops, exacerbating the pain of NC farmers who have experienced two destructive storms in just the past three years. As the number of farms declines annually in NC and around the country, concern is mounting that Hurricane Florence might cause many small family-owned farms to close their doors unless significant assistance is provided to get them back on their feet.



**4+ million** poultry killed



**\$404 million**  
impact to soybean crops



**5,500** hogs killed



**\$328 million**  
impact to sweet potatoes

### Total Economic Impact (millions)

Crops	1,990
Forestry	85
Ag. Buildings & Equipment	62
Stream Restoration/ Debris Removal	57
Agricultural Infrastructure	56
Livestock	42
Fishing	33
Livestock Disposal	20
Coop. & Growers' Assoc.	10
<b>Total</b>	<b>2,355</b>

TOTAL DAMAGE ESTIMATE: \$2.4 BILLION  
UNMET IMPACT: \$2.2 BILLION

# UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

## POTENTIAL USDA PROGRAMS – TOTAL \$920 MILLION

### 1

#### Special Indemnity Program - \$780 MILLION

Provide grants to farmers, commercial fishers, farmer's associations, and grower's cooperatives to offset uninsured and underinsured losses from hurricane damage. The 2017 Wildfires and Hurricane Indemnity Program (WHIP) compensated eligible producers for 60-95% of their individual losses of crops, trees, bushes, and vines. A special appropriation bill specific to either Hurricane Florence or 2018 hurricane-related damages is needed to help North Carolina access this program.

Additional programs would be needed, such as the Livestock Indemnity Program and/or Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish (ELAP), to address North Carolina's other agricultural losses.

North Carolina's total direct agriculture loss is over \$1.1 billion across crops, livestock, commercial fishery and forestry. The Department of Agriculture & Consumer Services (DACS) is requesting \$780 million in special indemnity program(s) which would cover only a portion of North Carolina's farmers that have been devastated for the second time since 2016.

### 2

#### EMERGENCY CONSERVATION PROGRAM- \$18 MILLION

ECP is a cost-share that provides emergency funding and technical assistance "to farmers and ranchers to rehabilitate farmland damaged by natural disasters and to implement emergency water conservation measures in periods of severe drought." According to NC FSA, when the complete payment on ECP projects from Hurricane Matthew, they will have spend \$18 million. They anticipate spending about the same amount for ECP - including grading, shaping, and releveling fields, debris removal, conservation practices and repairing fences – from Hurricane Florence

North Carolina farmers have experienced \$56 million in infrastructure damage (e.g., road repairs, conservation practices/structures, and pasture renovations). The ECP would only cover a portion of this agricultural infrastructure damage.

# UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

## POTENTIAL USDA PROGRAMS – TOTAL \$920 MILLION

### 3

#### EMERGENCY WATERSHED PROGRAM - RECOVERY - \$50 MILLION

The USDA/Natural Resources Conservation Service (NRCS)'s Emergency Watershed Protection Program - Recovery (EWP-R) provides financial and technical assistance to landowners for the following activities: (1) stream debris removal; (2) streambank restoration; (3) drainage facility repair; (4) vegetative cover on eroding lands; and (5) levee repair and conservation practices. Federal EWP assistance covers 75% of eligible costs, and the state must provide remaining funds.

North Carolina farmers are facing an unmet need of \$58 million for stream debris removal and restoration that is impacting their ability to farm safely.

EWP could assist North Carolina landowners with this stream restoration and debris removal, as well as farm field drainage repairs and resiliency efforts. The EWP funding request reflects the federal portion of the \$10 million in state matching funds that DACS indicated were appropriated for EWP.

### 4

#### EMERGENCY WATERSHED PROGRAM – FLOODPLAIN EASEMENTS - \$50 MILLION

The USDA/ NRCS's Emergency Watershed Protection Program – Floodplain Easement (EWP-FPE) provides an alternative measure to traditional EWP recovery, where it is determined that acquiring an easement in lieu of recovery measures is the more economical and prudent approach to reducing a threat to life or property. The easement area will be restored to its natural condition to the maximum practicable extent.

North Carolinians have experienced \$58 million in stream debris removal and restoration needs and \$62 million in damage to agricultural buildings and equipment. Floodplain easements can enhance and protect the functions of floodplains. This would make North Carolina more resilient to future storm damage and is much more cost-effective than an extensive buyout program.

# UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

## POTENTIAL USDA PROGRAMS – TOTAL \$920 MILLION

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### EMERGENCY FOREST RESTORATION PROGRAM - \$22 MILLION

The USDA/Farm Service Agency provides payments to eligible nonindustrial private forest landowners in order to restore land damaged by natural disasters.

In North Carolina, approximately 900,000 acres of private timberland were impacted. The estimated amount of timber damaged includes 0.9 million tons of pulpwood and 277,000 board feet of sawtimber. At current stumpage values, this amounts to approximately \$49 million.

The Emergency Forest Restoration Program will enable private forest landowners to restore a portion of this land that was damaged by Florence.

# UNITED STATES ARMY CORPS OF ENGINEERS (USACE)



Photo credit: NC  
Department of  
Transportation

## Hurricane Florence Impact on Natural Resources

Tourism is a crucial part of North Carolina's economy. In 2016, almost 50 million U.S. visitors spent a total of \$23 billion in the state, directly supporting over 45,000 businesses. The coast and outer banks, which depend heavily on tourism income, suffered such severe flooding that runoff made their ocean waters unsafe for swimming for weeks after the hurricane. Damaged beaches also put local communities at increased risk of future storm damage due to reduced protection from wind and water inundation.

Central and Eastern North Carolina have experienced numerous major flooding events over the past 25 years from Hurricanes Fran (1996), Floyd (1999), Matthew (2016) and now Florence. Infrastructure projects such as reservoirs, detention basins, and the acquisition and elevation of homes in floodplains, as well as technology and tools such as stream gauges and inundation modeling systems, could reduce damage and save lives in future storms. North Carolina needs support to pursue flood mitigation activities and build more resilient communities—especially along the Cape Fear, Cashie, Tar, Neuse, Lumber, Roanoke Rivers—so North Carolinians will be out of harm's way for the next storm.



**55 distinct** beach renourishment, channel dredging, and  
flood mitigation projects needed  
**across 14 municipalities**

# UNITED STATES ARMY CORPS OF ENGINEERS (USACE)

## POTENTIAL USACE PROGRAMS<sup>1</sup> – TOTAL \$1.764 BILLION

### COASTAL STORM DAMAGE REDUCTION AND SHORE PROTECTION PROJECTS - \$371 MILLION

Without specific authorization, the Corps may study, adopt and construct continuing authority beach erosion control projects. In addition, the Corps is responsible for maintaining and improving shallow-draft inland and intracoastal waterways and 13,000 miles of deep-draft coastal channels in the US. The requested \$371 million in supplemental appropriations would be used for two types of USACE projects:

- 1) for coastal storm damage reduction and beach renourishment, and
- 2) for coastal channel dredging. This will directly address the damage Hurricane Florence caused to North Carolina's coast and beaches.

# 1

**Beach Renourishment** - The Department of Environmental Quality surveyed all local partners regarding beach erosion and determined \$287 million of total need. In some cases, surveys have been completed by the USACE, but not all projects have yet received surveys. North Carolina anticipates receiving \$67 million in FEMA PA funding, which will be used for beach renourishment purposes for use in areas without a federally funded beach renourishment project. The State requests an additional \$246 from USACE to fulfill the unmet need. It is recommended that there be no non-federal share funding requirement.

**Navigation and Coastal Channel Dredging** - The Department of Environmental Quality surveyed local partners regarding the status of channels to determine the potential need and identified \$25 million of need for operations and maintenance funds for dredging of channels. It is recommended that there be no non-federal share funding requirement. We would also request an additional \$100 million for additional dredging needs, as shoaling in waterways due to hurricanes is not always immediate, and emergency routes have been inaccessible.

Additional information on Natural Resources damages and potential sources of federal funding can be found in the Natural Resources Section, starting on page 43 of the [Damage and Needs Assessment](#).

<sup>1</sup>Specific titles for USACE projects may vary by location and time period. Program names described here are based on those implemented following previous storms and may be illustrative.

# UNITED STATES ARMY CORPS OF ENGINEERS (USACE)

## POTENTIAL USACE PROGRAMS<sup>1</sup> – TOTAL \$1.764 BILLION

### FLOOD RISK MANAGEMENT PROJECTS \$1.393 Billion

The Corps may study and, if feasible, construct projects or implement programs to provide for reduced risk to life and property from coastal storms and flood situations. Two types of USACE projects are proposed: 1) flood risk management projects 2) flood mitigation river basin projects.

**Flood Risk Management** - \$169 million is requested for additional capabilities including funds for programs that can be of immediate assistance in ensuring the Corps of Engineers has ample resources to carry out recovery and mitigation

- \$142 million is requested for the Continuing Authorities Program (CAP) administrative costs, Planning Assistance to States (PAS), Floodplain Management Services (FPMS), Coordination with Other Water Resources Agencies, Interagency Water Resources Development, and Special Investigations. This would also include additional funding for the South Atlantic Comprehensive Study, which is underfunded and is important to resiliency along the entire Southeastern coast.
- \$27 million for construction of an authorized, but unfunded Corps project in Princeville. As in prior hurricane recovery bills, Corps flood risk mitigation projects that have not been funded receive money to go forward with their project. Princeville has a project that will help the entire town avoid hazardous flooding situations in the future.

**Flood Mitigation - River Basin Projects** - In response to Hurricane Matthew in 2016, preliminary studies were completed for the Tar, Neuse and Lumber River Basins to identify primary sources of flooding and to assess future mitigation strategies. This funding would be for the three previously mentioned rivers and for the Cape Fear, Cashie, and Roanoke Rivers.

- \$24 million would go towards feasibility studies and design build specifications
- \$1.2 billion is the estimated construction need for various mitigation strategies

Additional information on Natural Resources damages and potential sources of federal funding can be found in the Natural Resources Section, starting on page 43 of the [Damage and Needs Assessment](#).

<sup>1</sup>Specific titles for USACE projects may vary by location and time period. Program names described here are based on those implemented following previous storms and may be illustrative.

# UNITED STATES ARMY CORPS OF ENGINEERS (USACE)

## APPENDIX: \$1.764 Billion

### Construction Costs

River Construction (6)	\$1,200,000,000
Princeville	\$27,080,000
Carteret Co	\$44,412,000
West Onslow & New River Inlet	\$46,350,000
Surf City & North Topsail Beach	\$142,811,000
Continuing Authorities Program (CAP), Section 205	\$50,000,000
	<b>\$1,510,653,000</b>

### Investigations

River Studies (6)	\$24,000,000
South Atlantic Comprehensive Study	\$7,000,000
Planning Assistance to States (PAS)	\$20,000,000
Floodplain Management Services (FPMS)	\$20,000,000
Coordination with Other Water Resources Agencies	\$10,000,000
Interagency Water Resources Development	\$5,000,000
Special Investigations	\$10,000,000
	<b>\$96,000,000</b>

### Expenses

Administrative Costs	\$20,000,000
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### Operations and Maintenance

Navigation	\$125,000,000
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### Flood Control and Coastal Emergencies

Beach Renourishment	\$12,500,000
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### Total

Total	<b>\$1,764,153,000</b>
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# North Carolina Hurricane Florence – Social Services Block Grant Funding Request

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## Demographics

The majority of damage from Hurricane Florence was to an especially vulnerable part of North Carolina. Many of the eastern and southern counties impacted by the storm had not yet recovered from the severe damage of Hurricane Matthew in 2016.

Almost 40% of the state’s population lives in the 34 counties the Federal Emergency Management Agency (FEMA) declared eligible for individual assistance, and many of those people lack the capacity to respond to such a devastating event. Approximately one in five residents in the region live in poverty, and an additional 30% live below 150% of the poverty line. More than 40% of the state’s Medicaid population, and 37% of its Children’s Health Insurance Program (CHIP) recipients, live in the area. Under normal circumstances, these residents often rely on a combination of government-subsidized health and human services for food, medical care and housing assistance. In the wake of the hurricane, they’ve turned to emergency assistance programs such as the Disaster Supplemental Nutrition Assistance Program (D-SNAP), and temporary housing shelters until they can return to their homes.

Estimates were calculated as specifically as possible based on historical data and the demographics of affected counties. The limited availability of current data makes it difficult to quantify the effects of trauma experienced by individuals and families impacted by the storm. In addition, the nature of DHHS services will require a comprehensive and thoughtful long-range approach in responding to this disaster.

Demographics Snapshot of Disaster-Impacted Counties	
Medicaid	<ul style="list-style-type: none"><li>• 973,000 people enrolled in Medicaid</li><li>• 46,000 children enrolled in CHIP</li></ul>
Uninsured	<ul style="list-style-type: none"><li>• 13% under age of 65 uninsured (311,000)</li><li>• 44% of uninsured fall below 138% of poverty line</li></ul>
Disabled	<ul style="list-style-type: none"><li>• 17% over the age of 18 (486,000)</li></ul>
Public Assistance	<ul style="list-style-type: none"><li>• 16% of households receive FNS benefits (236,000)</li></ul>
Elderly	<ul style="list-style-type: none"><li>• 16% over age of 65 (629,000)</li><li>• 26% of households have at least one person over the age of 65 (385,000)</li></ul>

## Previous Supplemental SSBG Appropriations

Congress appropriated the following supplemental SSBG funds to states to be used for expenses related to hurricanes and other major disasters:

- 2005: \$550 million for expenses related to Hurricanes Katrina, Rita, & Wilma
- 2008: \$600 million for expenses related to Hurricanes Gustave and Ike, along with Hurricanes Katrina and Rita and other disasters
- 2012: \$474 million for expenses related to Hurricane Sandy

The table below shows the amount of funds appropriated to each state that was most impacted by the specific hurricane. In addition, the table presents information on the states' populations and poverty rates. Historically, supplemental SSBG funds have been allocated based on formulas that incorporate the number FEMA registrants, population, and/or poverty rates. Based on poverty rates, of the states that received SSBG following a hurricane, Louisiana and Mississippi more closely resemble North Carolina.

State	Population	Poverty Rate	Population in Counties Impacted	Poverty Rate in Counties Impacted	2005 SSBG Supplemental Funds: Hurricanes Katrina, Rita, & Wilma	2008 SSBG Supplemental Funds: Hurricanes Gustav & Ike <sup>3</sup>	2012 SSBG Supplemental Funds: Hurricane Sandy
Louisiana <sup>1</sup>	4,302,475	18.1%	3,735,319	17.8%	\$ 220,901,534	\$ 129,737,880	
Mississippi <sup>1</sup>	2,845,365	21.2%	1,974,832	20.9%	\$ 128,398,427		
Texas <sup>1</sup>	23,707,679	16.8%	6,945,486	15.5%		\$ 218,852,848	
New York <sup>2</sup>	19,186,062	15.5%	13,104,669	16.0%			\$ 235,434,600
New Jersey <sup>2</sup>	8,739,058	10.9%	8,739,058	10.9%			\$ 226,794,105
North Carolina	9,685,511	16.8%	3,694,340	18.3%			

<sup>1</sup>Poverty and population estimates from 2006-2010 American Community Survey. Population estimate excludes populations in institutional group quarters, college dorms, and unrelated children in households that are less than age 15.

<sup>2</sup>Poverty and population estimates from 2012-2016 American Community Survey. Population estimate excludes populations in institutional group quarters, college dorms, and unrelated children in households that are less than age 15.

<sup>3</sup>2008 SSBG supplemental funds were appropriated for expenses for Hurricanes Gustav and Ike, along with Hurricanes Katrina and Rita and other disasters (Tropical Storm Fay and Hurricane Dolly).

## Priority Programs and Projects

Hurricane Florence disrupted the lives of millions of North Carolina’s citizens. The following programs, funded by the Social Services Block Grant, will help many of these citizens safely return to their homes and communities.

<b>North Carolina SSBG Request</b>		
<b>Area of Assistance</b>	<b>Amount</b>	<b>Programs</b>
Behavioral Health Services	\$ 100,000,000	Mental Health and Substance Use Disorder Services
Housing and Homeless	\$ 30,000,000	Rapid Rehousing
Child Care Assistance	\$ 25,000,000	Child Care Subsidies and Provider Renovation Grants
Vulnerable Population Services	\$ 12,000,000	Adult and Aging Social Services and Legal/Education Services
Health Care Related Expenses	\$ 10,000,000	Health Facilities and Health Needs
Mosquito Abatement	\$ 7,500,000	Mosquito Abatement
Mold Remediation	\$ 7,400,000	Mold Remediation
Food and Nutrition Assistance	\$ 5,100,000	D-SNAP Match
Child Welfare	\$ 3,000,000	Child Services – additional social workers and financial assistance to foster children/families
<b>Total Need</b>	<b>\$ 200,000,000</b>	

### *Mental Health and Substance Use Disorder Services*

Funding will be used to address an anticipated increase in mental health and substance use disorder service needs as a result of the hurricane. Specific areas of need include:

- Increased costs for mental health services in the LME/MCO catchment areas within the first 30 days after the disaster for: responding to trauma; community outreach, screening and training; school screenings and training; and patient transportation for appointments with mental health providers.
- Anticipated increase in mental health services costs for Medicaid beneficiaries starting approximately 2-3 months following the disaster and lasting up to 8 months.
- Increased costs for approximately 3,200-3,750 uninsured adults requiring outpatient therapy, medication management, intensive in-home services, community support team services, assertive community treatment team services, and/or substance abuse intensive outpatient services.

### *Rapid Rehousing/Homelessness Assistance*

Funding will assist individuals and families still living in shelters or staying in unsafe or unstable arrangements due to Hurricane Florence. Individuals and families will receive assistance with housing placement, rent, utility assistance, move-in supplies, job training and placement, and child care.

### *Child Care Assistance Programs*

Funding will be used to provide families with child care subsidies, provide small grants to child care providers for equipment replacement, and offer renovation grants to eligible providers for unreimbursed repairs to facilities to ensure a safe environment for children.

### *Adult and Aging Social Services*

Funding will be used to address anticipated increases in the number of Adult Protective Services and Guardianship cases and to provide additional supports, such as home-delivered meals, transportation assistance, and damage repairs for low-income elderly residents in impacted areas.

### *Legal and Educational Services to Vulnerable Populations*

Legal services would be provided to help vulnerable populations navigate through the insurance and FEMA reimbursement processes as well as other legal issues. Educational services will also be provided to vulnerable populations that may be targets for financial exploitation and fraud following the disaster.

### *Health Needs*

- *Emergency Prescription Assistance Program (EPAP)* – Funding will be used to cover the state cost for activating the EPAP program to provide eligible, uninsured residents access to a free, 30-day supply of their medication. Estimates assume program will be activated for up to one year.
- *Durable Medical Equipment (DME) and Assistive Technology (AT) Replacement* – Funding would be used to assist individuals with replacing lost devices due to the hurricane and requalifying individuals that require equipment in order to live independently and remain integrated in the community.
- *Intellectual and/or Developmentally Disabled Displacement Recovery* – Funding would be used to ensure adequate access to services for the I/DD population in impacted counties in order for individuals to remain integrated in the community.

### *Health Facilities*

Funding will be used to establish a grant program to assist hospitals, nursing homes, and health care safety net sites (rural health centers, free and charitable clinics, small rural hospitals, critical access hospitals, and school-based health centers) in the 34 affected counties that sustained considerable damage to their facilities as well as expenses associated with transporting patients.

### *Mosquito Abatement*

Funding for assistance to counties to address increases in mosquito population and size as a result of flooding.

### *Mold Remediation*

Funding will address long-term mold issues for an estimated 74,000 homes impacted by flooding.

### *Food and Nutrition Assistance*

Funding will be used to cover the 50% local match required for D-SNAP.

### *Child Services*

Funding will support additional social workers to handle an anticipated increase in the number of child protective services cases. Additionally, a new program would be established to provide assistance of up to \$1,000 per child/household to foster care families, foster children, and families with an open child protective services (CPS) case for repairs and replacement of eligible items.

## North Carolina Hurricane Florence Request – US Department of Education

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### ***Restart***

North Carolina has nearly 625,000 students in 57 school districts who were out of school due to Hurricane Florence. In response to Hurricane Harvey, Congress created the Restart program to assist Texas with reopening schools. Texas received a grant of \$89,420,000 for approximately 1.5 million students. **Using a similar per student amount for North Carolina results in an appropriation of approximately \$37 million for 624,691 students.**

<b>NC School Districts in FEMA Public Assistance Eligible Designated Counties</b>			
	Number of School Districts	Number of Schools	Number of Students
Closed Less Than 10 Days	39	752	438,698
Closed Between 10 and 20 Days	11	198	102,334
Closed 20 Days or More	7	137	83,659

Restart funds may be used for the following activities:

- Recovery of student and personnel data, and other electronic information;
- Replacement of school district information systems, including hardware and software;
- Financial operations;
- Reasonable transportation costs;
- Rental of mobile educational units and leasing of neutral sites or spaces;
- Initial replacement of instructional materials and equipment, including textbooks;
- Redeveloping instructional plans, including curriculum development;
- Initiating and maintaining education and support services;
- Specific educator–related costs; and
- Other activities related to the purposes of the program subject to approval by USDE.
- If necessary and reasonable, these funds may be used for minor remodeling and repair. Minor remodeling refers to minor alterations in a previously completed building. The term also includes the extension of utility lines, such as water or electricity, from points beyond the confines of the space in which the minor remodeling is undertaken but within the confines of the previously completed building. The term does not include building construction, structural alteration to buildings, building maintenance, or repairs (34 CFR 77.1).

### ***Temporary Emergency Impact Aid for Displaced Students***

The purpose of this program is to make emergency impact aid payments to school districts impacted by disasters. In 2017, Texas received a total of \$174,242,375 in this category. Awards were made based on the quarterly counts of displaced students. States could receive \$9,000 for each displaced student who is an English learner, \$10,000 for each displaced student who is a

child with a disability; and \$8,500 for each student who is not reported as a child with a disability or an English learner.

It is still too early to assess how many students may have been displaced and have enrolled in schools in other LEAs within North Carolina or in other states. However, with over 83,000 students in districts that were closed for more than 20 school days, it is reasonable to assume that between 5 and 10% of those students will be displaced. Using an average of \$9,000 per displaced student, **funding would be between \$38 million and \$75 million.**

### ***Assistance for Homeless Children and Youth/McKinney-Vento***

Based on data collected from the school districts in the counties impacted by the hurricane, as of October 31, 2018 **5,368 students in North Carolina are classified as homeless** as a result of Hurricane Florence. Some school districts have experienced a 900% increase in the number of identified homeless students. In 2017 Congress allocated \$25 million to support approximately 46,000 homeless students from those disasters - approximately \$543 per homeless student.

Based on that per student amount, **NC could expect to receive around \$3 million to support students left homeless by Florence.**

### ***Other Potential Education Programs***

#### *Project SERV*

The U.S. Department of Education awarded grants to Texas, Florida, Puerto Rico, and US Virgin Islands last year under the School Emergency Response to Violence (Project SERV) program. Project SERV funding is authorized under the Emergency Supplemental Act of 2002 (P.L. 107-117). The purpose of the Project SERV program is to fund short-term and long-term education-related services for LEAs and Institutions of Higher Education (IHEs) to help them recover from a violent or traumatic event in which the learning environment has been disrupted. **A total of \$8 million was appropriated; Texas received \$2 million.**

The following are types of services allowable under Project SERV:

- Targeted mental health assessments, referrals and services related to the traumatic event with the goal of restoring victims/survivors to their pre-incident levels of functioning
- Overtime for teachers, counselors, law enforcement and security officers and other staff
- Substitute teachers and other staff as necessary
- Emergency transportation
- Technical assistance on developing an appropriate response to crisis
- Transportation and other costs to operate school at an alternative site
- Temporary security measures

In addition to the DOE programs for K-12 students, Congress also appropriated funds for Institutions of Higher Education (IHEs) for 2017 Disasters:

*Emergency Assistance to Institutions of Higher Education*

Congress appropriated \$100 million for this program, which provides emergency assistance to IHEs and their students in areas directly affected by the covered disasters or emergencies, for activities authorized under the Higher Education Act of 1965. As of August 28, 2018, \$63 million had been distributed, of which Texas received about \$2.5 million

*Defraying Costs of Enrolling Displaced Students in Higher Education*

In response to 2017 disasters, Congress appropriated \$75 million for this program, which allows schools to cover associated costs of supporting displaced students—including tuition, fees and room and board.