



Utilities, Water, Sewer

Addresses the physical damage to energy and water infrastructure

1. Summary

The following is documentation of the methodology used to estimate water, sewer, storm water, and utilities costs due to Hurricane Florence.

Preliminary estimates for water and sewer are based on a local government survey issued by the Office of State Budget and Management. Total water and sewer estimated need is \$88 million, \$42 million of which we expect to be covered from federal and private funds, resulting in an unmet need of \$46 million. These estimates will be refined as more detailed assessments are done.

Preliminary estimates for utilities are based on information provided by the North Carolina Electrical Cooperatives Association, Public Works Commission of Fayetteville, Greenville Utilities Commission, and Duke Progress Energy. The Electrical Cooperatives are designated as nonprofits and can receive FEMA reimbursement for storm related damages. The Association has already compiled early damage estimates on behalf of its members working with the Federal FEMA coordinator and Emergency Management. Duke Progress Energy is a for-profit corporation with the expectation that damages will be covered through available reserves, insurance, and potentially rate adjustments. Duke Progress Energy also operates the Piedmont Natural Gas Company which provides gas service to the hardest hit region of North Carolina. Duke Progress has provided the State with preliminary cost estimates for both electrical and gas restoration in North Carolina. Total electrical and gas need is estimated at \$691 million, \$680.0 million of which we expect to be covered by Federal and Private sources of funding, resulting in an unmet electrical and gas utility need of \$11.0 million. The \$11.0 million represents the FEMA state match for the North Carolina Electrical Cooperatives and governmental operated utilities affected by the storm. For water and sewer, estimates are based on survey data gathered from local governments and data obtained from the Department of Environmental Quality.

Preliminary Damage & Need Estimate (Millions)							
				Expected Funding		Appropriated	
Category	Direct	Indirect/Induced	Total Impact	Federal	Private	State	Unmet Impact
Water, Sewer, storm water*	\$88.0	\$0.0	\$88.0	\$39.0	\$3.0	-	\$46.0
Gas, Electric	\$691.0	\$0.0	\$691.0	\$30.0	\$650.0	-	\$11.0
Local Fee Revenue loss*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	-	\$0.0
Subtotal	\$779.0	\$0.0	\$779.0	\$69.0	\$653.0	-	\$57.0
Resiliency efforts	\$0.0	\$0.0	\$25.0	\$0.0	\$0.0	-	\$25.0
State appropriations	-	-	-	-	-	\$15.9	-
Total	\$779.0	\$0.0	\$804.0	\$69.0	\$653.0	\$15.9	\$66.1

1. The state will conduct a local government survey to estimate lost local fee revenue from local municipalities and counties.

2. Scope

Scope for utilities estimates include:

- Public Water, Sewer, Storm water
- Gas, Electric
- Revenue loss (TBD from local survey)

3. Methodology

Water and Sewer: The estimate provided for water and sewer are based on survey data gathered by the Office of State Budget and Management. OSBM obtained a listing of at least 233 water systems located in the 44 counties currently receiving federal assistance. Of the 233 only 46 responded with damage estimates. OSBM calculated an average damage amount per client served using additional data provided by the North Carolina Department of Environmental Quality. This average per client was then applied to the populations served by all 233 water systems to determine an initial damage assessment. As local systems complete their damage assessments for FEMA reimbursement, inspection data will become available for actual damage to water and sewer systems. Once damages have been assessed, estimates provided in this section will be refined.

Electrical and Gas: Information was collected from Emergency Management, the NC Electrical Cooperatives, Public Works Commission of Fayetteville, Greenville Utilities Commission, and Duke Progress Energy. The utilities stated their methodology is based on past storm damage and some early actual estimates for personnel, right-of-way clearance, equipment, powerlines, and pole replacements.

4. Assumptions

The needs estimates from the Department of Environmental Quality are preliminary for water and sewer. These estimates will evolve as detailed inspections occur. The State will cover the FEMA match funds, as with past storms, for the Electrical Cooperatives and some governmentally owned electric, water, and sewer repairs that file reimbursement through the State. Since Duke Progress Energy is a for-profit corporation, the company will not be eligible for direct state or federal assistance through existing programs but may request storm related rate adjustment through the State's Utility Commission.

5. Primary data sources

- Division of Emergency Management (DEM)
- Duke Progress Energy
- North Carolina Electrical Cooperatives Association
- Fayetteville Public Works Commission and Greenville Utilities
- Department of Environmental Quality (DEQ)

6. Potential sources of funding for Unmet Impact

Federal:

- FEMA has provided early estimates of federal utility reimbursement based on past storms and has shared that information with the Division of Emergency Management and the Office of State Budget and Management. FEMA estimates federal assistance for utilities at \$69 million and a state share of \$23 million.

Private:

- \$650 million for Duke Progress Energy made up of reserves, insurance claims where applicable, and possible future rate adjustments will make up the difference.
- The state is estimating \$3 million in insurance claims related to local water and sewer facilities.

7. State Funding Recommendations for Unmet Impact

Rebuilding - \$48 million

FEMA Match – State Share - \$23.0 million

Provides funding for the state share of FEMA funding for public assistance. Public assistance projects could potentially include repair of electrical power grids, water and sewer systems operated by governmental and non-profit utilities.

Golden L.E.A.F. - \$25.0 million

Provides funding for grants to local governments and to 501(c) (3) nonprofit corporations for assistance and relief from Hurricane Florence. The nonprofit would provide infrastructure grants that will help restore water and sewer systems and repair storm drainage systems.

Resiliency - \$25 million

Wastewater and Drinking Water Grants - \$25.0 million

Provides supplemental grant funds to two existing programs for State Wastewater and State Drinking Water. Both programs cover infrastructure needs such as resolving failed systems, rehabilitation and replacement, expanding, consolidation of regional systems. State wastewater grants can also be used for stream, wetland, and stream buffers. State drinking water grants can be used to aid the merger of failing public water systems, resolve documented low pressure in an existing system, the treatment of contaminated water, and support connections between systems or cover a public need.

Clean Water Management Trust Fund (CWMTF): Please see the Natural Resources section funding recommendations under Resiliency for recommendations on activities related to resiliency and storm water.

9. Funding Provided in S.L. 2018-134 and S.L. 2018-136

Share of State Match - \$15.9 million

North Carolina has allocated \$115 million to the Hurricane Florence Disaster Relief Fund for the required State match for various Federal funding programs. Based on the remaining match needs across categories, an estimated \$15.9 million is expected to be dedicated to utilities and water infrastructure.

Golden LEAF Local Government Infrastructure Fund

Allocates \$20 million to Golden LEAF for local government infrastructure and equipment repair and replacement. Infrastructure includes facilities, vehicles, equipment, and utilities (water, sewer, and storm water). This funding is accounted for in the Government section of this document.