



# 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 an initial needs assessment by the Department of Environmental Quality. Total water and sewer estimated need is \$100 million, \$42 million of which we expect to be covered from federal and private funds, resulting in an unmet need of \$58 million. These estimates are in the very early stages of the recovery process and will be refined as more detailed surveys and 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.

<b>Preliminary Damage and Recovery Needs (Millions)</b>						
<b>Category</b>	<b>Direct</b>	<b>Indirect/ Induced</b>	<b>Total Impact</b>	<b>Federal Funding</b>	<b>Private Funding</b>	<b>Unmet Impact</b>
Water, Sewer, storm water*	\$100.0	\$0.0	<b>\$100.0</b>	\$39.0	\$3.0	<b>\$58.0</b>
Gas, Electric	\$691.0	\$0.0	<b>\$691.0</b>	\$30.0	\$650.0	<b>\$11.0</b>
Local Fee Revenue loss*	\$0.0	\$0.0	<b>\$0.0</b>	\$0.0	\$0.0	<b>\$0.0</b>
<b>Subtotal</b>	<b>\$791.0</b>	<b>\$0.0</b>	<b>\$791.0</b>	<b>\$69.0</b>	<b>\$653.0</b>	<b>\$69.0</b>
Resiliency efforts	\$0.0	\$0.0	<b>\$25.0</b>	\$0.0	\$0.0	<b>\$25.0</b>
<b>Total</b>	<b>\$791.0</b>	<b>\$0.0</b>	<b>\$816.0</b>	<b>\$69.0</b>	<b>\$653.0</b>	<b>\$94.0</b>

\* The state will conduct a local government survey in the coming weeks to quantify local government property damage, water and sewer damage, and estimated lost local fee revenue from water and sewer operations.

## **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 a mix of known damages and estimates based on historical data from past storms. The state is continuing to do detailed assessments of damaged systems in disaster declared counties. In addition to on the ground inspections, the state plans to survey local government units in the coming weeks regarding damages related to local government buildings and water and sewer systems. As damages are assessed and additional data becomes available, the estimates provided in this document 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 detail

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.

Municipal:

- Pending local survey

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 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 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 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.