



NORTH CAROLINA

Department of Transportation



Weathering the Storms: Hurricane Florence and Michael Updates

Joint Legislative Transportation Oversight Committee

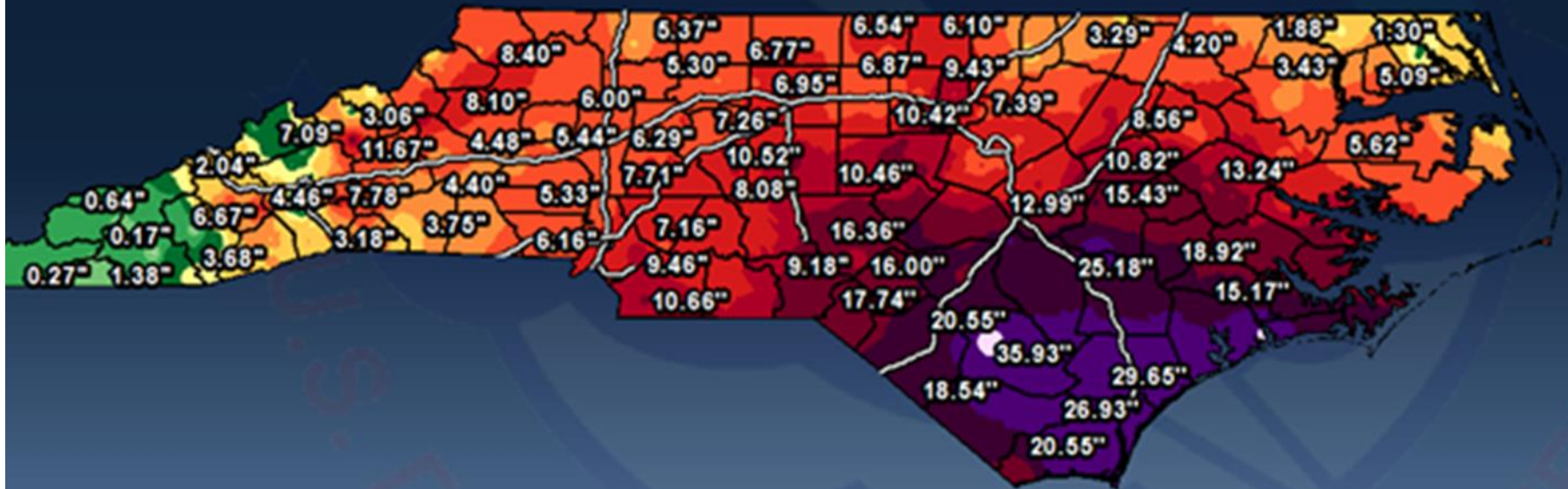
Emily McGraw, PE

November 8, 2018

National Weather Service Raleigh, North Carolina

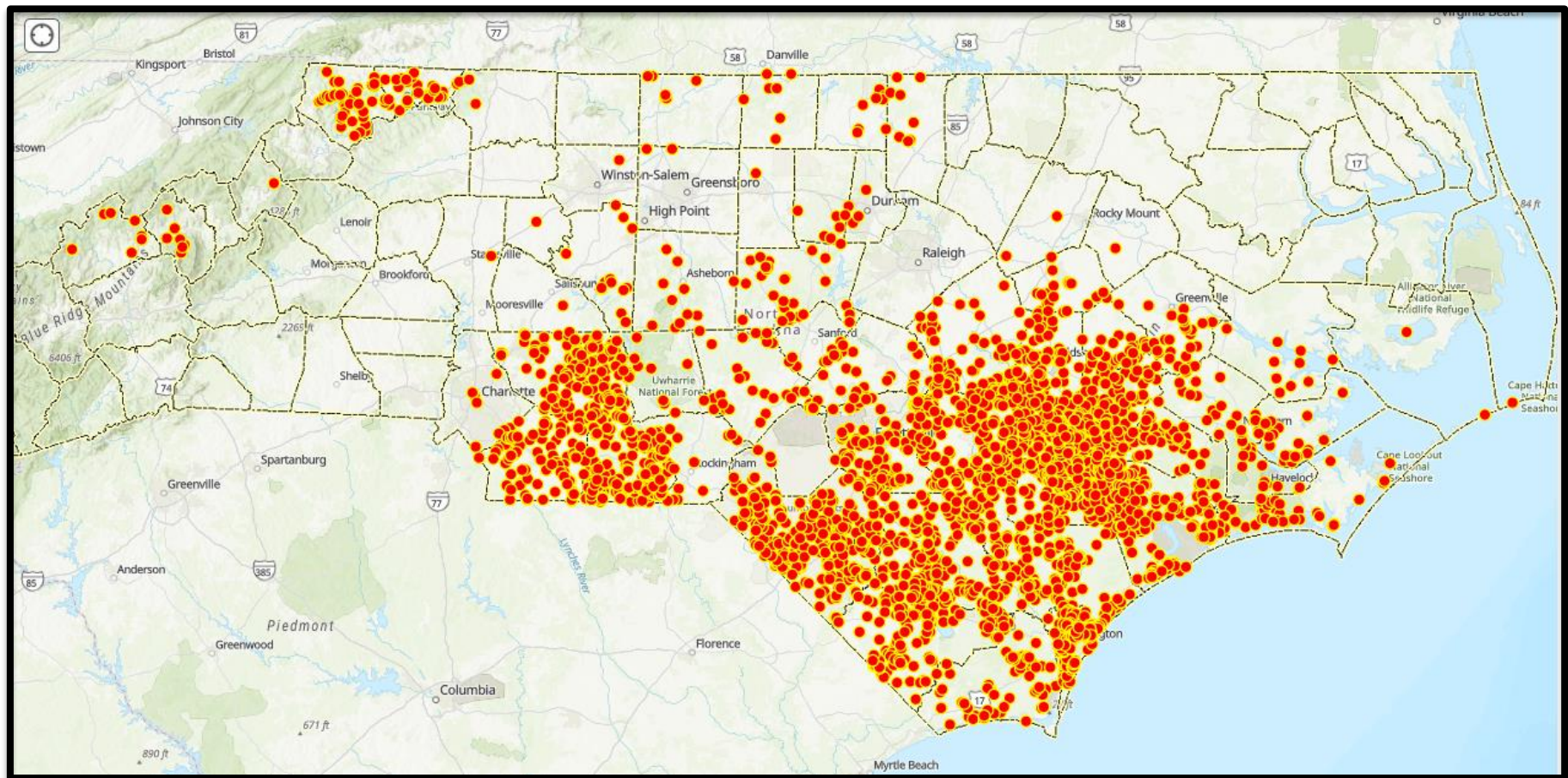
Preliminary Hurricane Florence Rainfall Totals

Data Source: Regional Observations(PNS)



This is an experimental product. Care should be taken in using the data. Unofficial observations are plotted. Values at interpolated locations may not represent actual precipitation totals at that location.

Response and Recovery – Florence Damaged Sites



Response and Recovery – Florence Damaged Sites

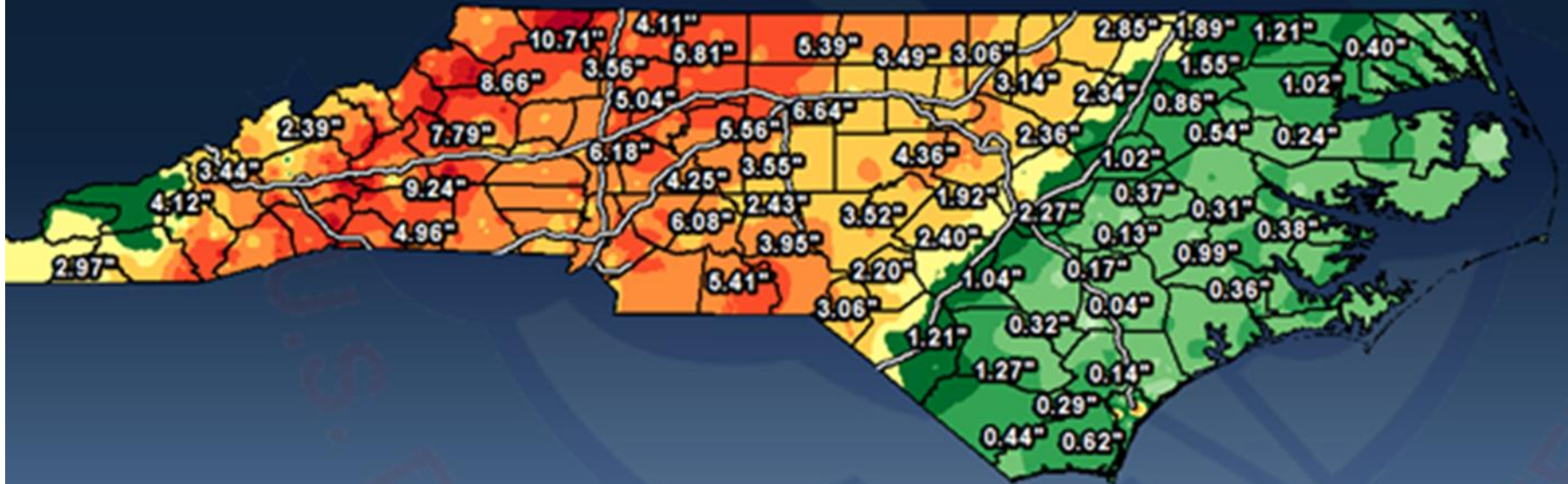
- 2,642 Identified FEMA Route Sites
- 853 Identified FHWA Route Sites



National Weather Service Raleigh, North Carolina

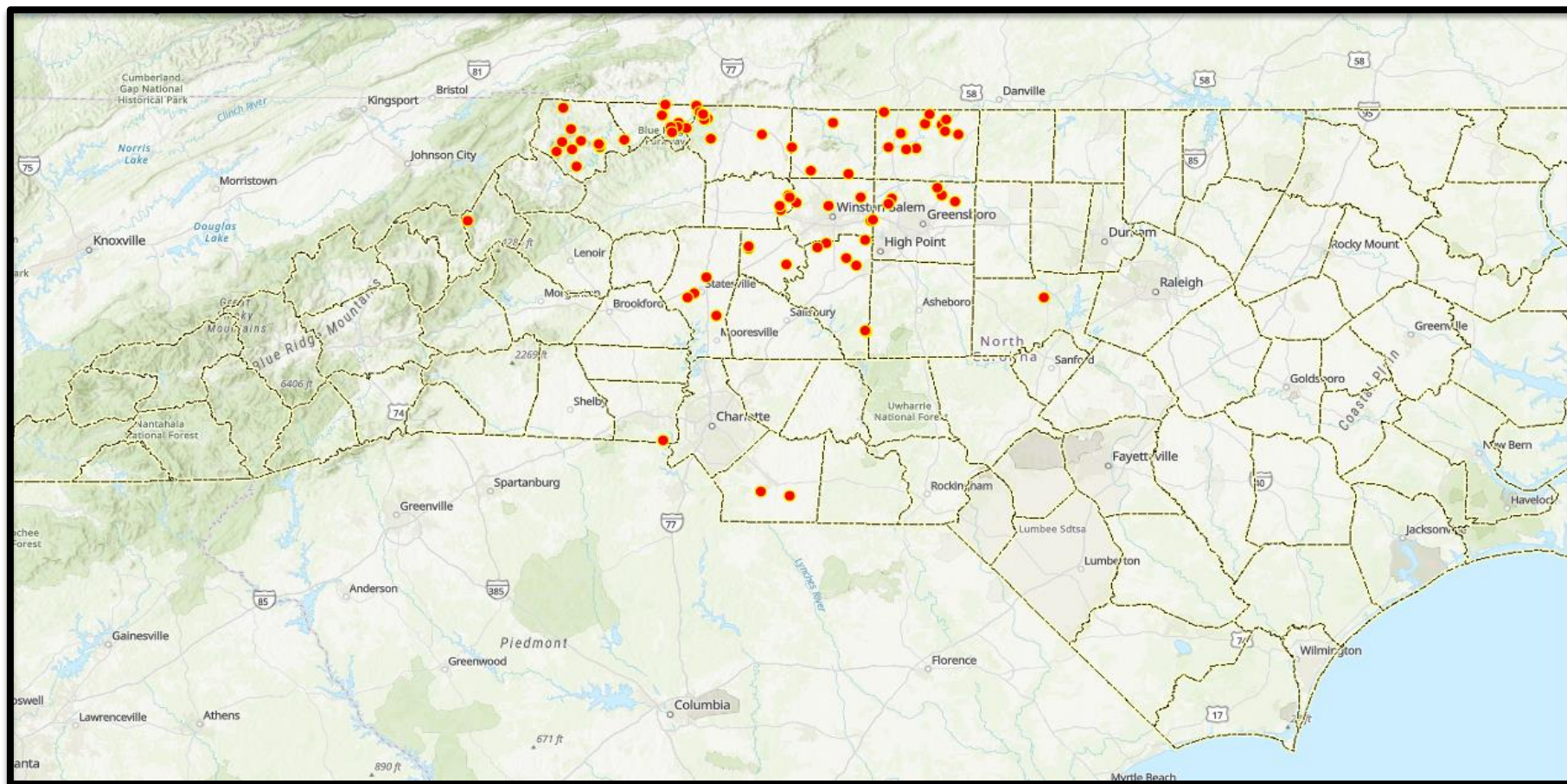
Storm Total Rainfall from Tropical Storm Michael (10/10-10/11)

Data Source: Regional Observations(PNS)



This is an experimental product. Care should be taken in using the data. Unofficial observations are plotted. Values at interpolated locations may not represent actual precipitation totals at that location.

Response and Recovery – Michael Damaged Sites



Response and Recovery – Michael Damaged Sites

- 57 Identified FEMA Route Sites
- 22 Identified FHWA Route Sites
- ~ 5,600 CY of Vegetative Debris To Date



Financial Recovery



U.S. Department of Transportation
**Federal Highway
Administration**

- Provides reimbursement for damages to Federal Aid routes, typically US, NC, and Interstate routes.
- ~\$700,000 DOT Statewide Declaration Threshold for Emergency Reimbursement Eligibility
- \$5,000 Minimum project threshold
- Eligible Work:
 - Emergency Repairs (First 180 Days)
 - (100% reimbursement)
 - Permanent Repairs
 - (90% reimbursement on Interstates)
 - (80% reimbursement on other Federal Aid routes)



Financial Recovery

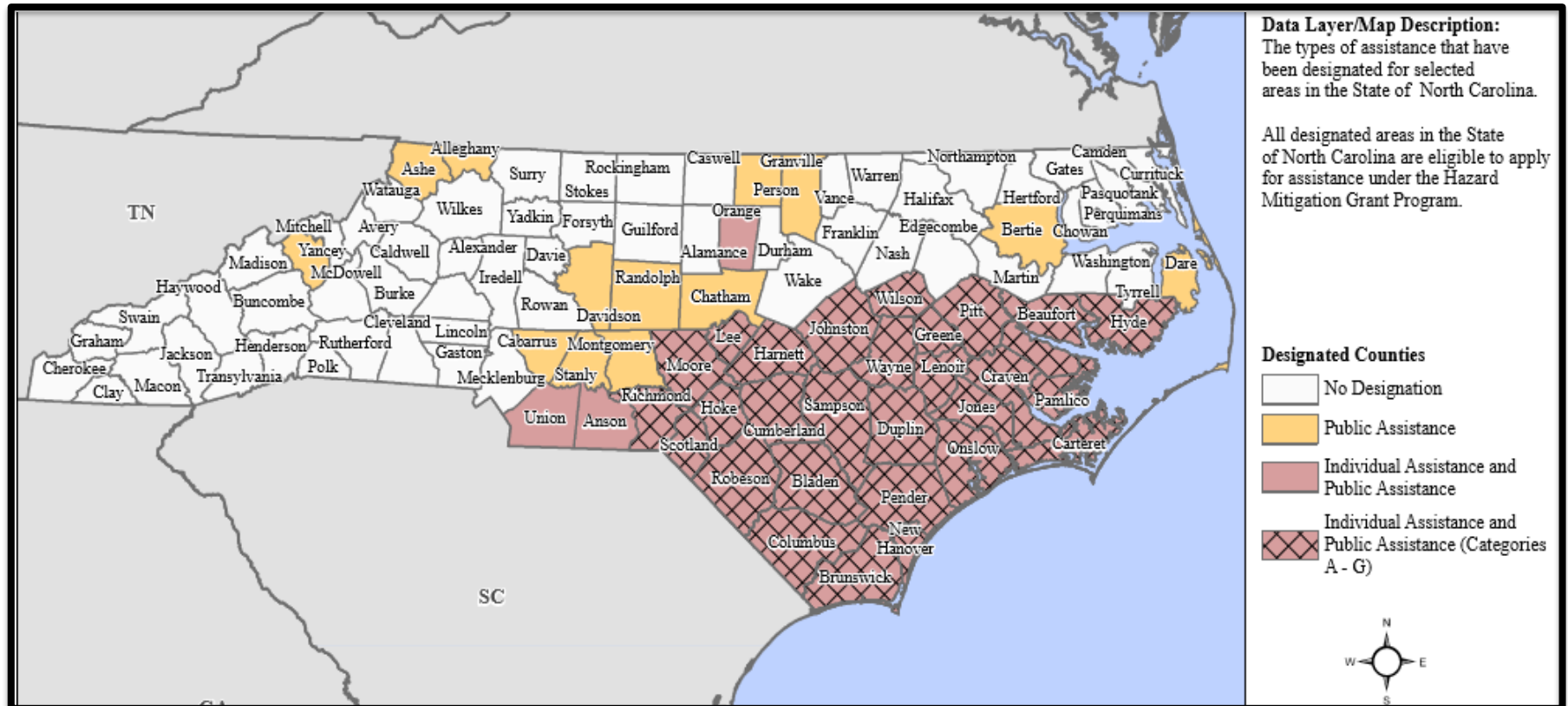


FEMA

- Provides reimbursement for damages to state maintained secondary routes.
- ~ \$13M Statewide Declaration Threshold for Reimbursement Eligibility
- \$3,100 Minimum project threshold
- Eligible Work:
 - Cat A – Debris Removal
 - (~80% reimbursement)
 - Cat B – Emergency Protective Measures
 - (75% reimbursement)
 - Cat C – Roads/Bridges
 - (75% reimbursement)
 - Cat E – Buildings/Equipment
 - (75% reimbursement)



Financial Recovery – Hurricane Florence
FEMA Declared Counties



Financial Recovery – Hurricane Florence

Agency	Preliminary Cost Estimates	Cost to Date as of 10/25/18	Anticipated Reimbursement	Anticipated Cost to DOT
FEMA	\$188,000,000.00	\$36,507,138.37	\$126,900,000.00	\$61,100,000.00
FHWA	\$72,000,000.00	\$5,304,493.50	\$51,840,000.00	\$20,160,000.00
Total	\$260,000,000.00	\$41,811,631.87	\$178,740,000.00	\$81,260,000.00

Financial Recovery – Hurricane Michael

Agency	Preliminary Cost Estimates	Cost to Date as of 10/25/18	Anticipated Reimbursement	Anticipated Cost to DOT
FEMA	\$5,001,000.00	\$2,746,608.29	\$0.00	\$5,001,000.00
FHWA	\$2,483,000.00	\$52,428.48	\$1,787,760.00	\$695,240.00
Total	\$7,484,000.00	\$2,799,036.77	\$1,787,760.00	\$5,696,240.00

Response and Recovery – Non-Declared Emergencies



Rain Event, Pine Hall Rd, Forsyth County



Rain Event, NC-251, Buncombe County



TS Alberto, Pilot Rd SR 1515, Avery County

Financial Recovery – Non-Declared Emergencies

	Non-Declared Emergency Expenditures
2014	\$10,405,258.42
2015	\$4,776,029.97
2016	\$11,028,357.94
2017	\$11,023,773.50
2018	\$15,688,190.39
5 Year Total	\$52,921,610.22

- 2015: Hurricane Joaquin, Statewide, ~\$4.2 M
- 2016: Tropical Storm Hermine, Div. 1, ~ \$400,000
- 2016: Tropical Storm Julia, Div. 1, ~\$1.8 M
- 2016: Western Wildfires, ~\$121,000
- 2016: Pipe Failure, Yadkin Co., ~\$1.3 M
- 2016: Sink Hole, Catawba Co., ~\$5 M
- 2017: Hurricane Irma, ~\$2.1 M
- 2017: Slope Failure, Forsyth Co., ~\$1 M
- 2017: Rock Slide, Graham Co., ~\$1.5 M
- 2017: Pipe Failure, New Hanover Co., ~\$794,000
- 2018: Tropical Storm Alberto, ~\$18.3 M
- 2018: Erosion, Ferry Div., ~\$425,000
- 2018: Slope Failure, Columbus Co., ~\$275,000
- FY2017-FY2019: Sand Removal, NC-12, ~1 M Annually

Questions?

