

Hurricane Matthew

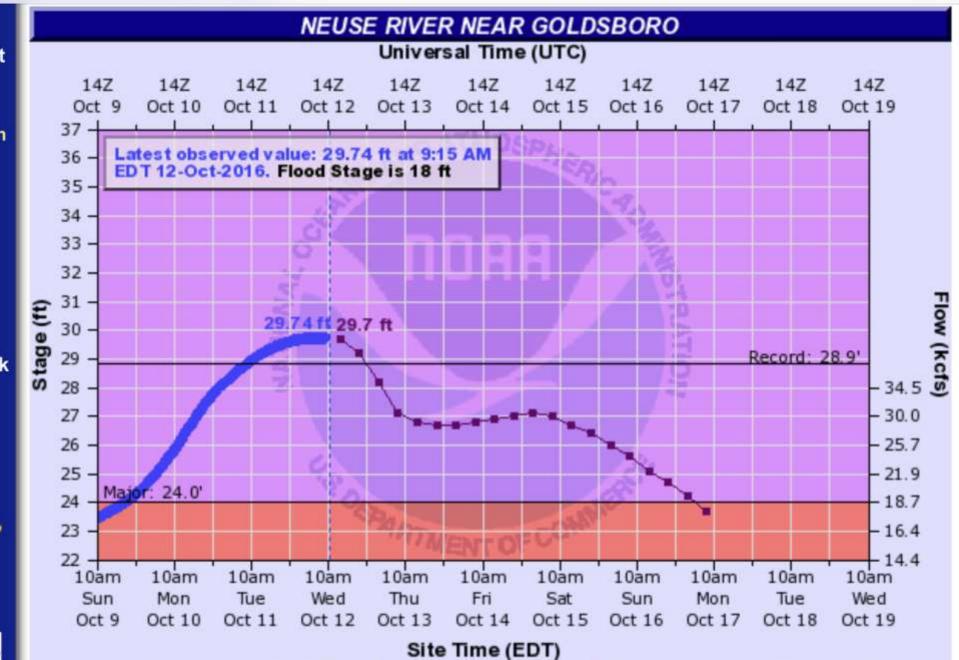


#### Mike Wagner: Deputy Director Public Works-Utilities

- How I got here: From Titusville, PA to Goldsboro, NC
- 9th State PA, NJ, VA, WI, RI, SC, CA, FL, NC
- Grade IV, C-Surface, LA, SI, (SS school only)
- St. Leo University:
  - BA Business Management
- UTILITY MANAGMENT CERTIFICATE
  - First Week in August
  - American Water College / Fresno State
- North Carolina Central University:
  - EMPA Program: Masters Public Administration
  - Liberia Water and Sewer Corporation

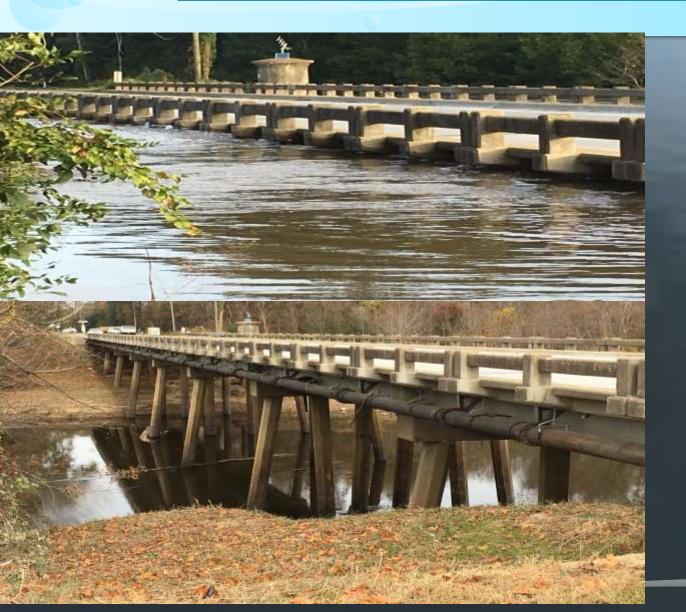


water.weather.gov



Graph Created (10:33AM Oct 12, 2016) - Observed - Forecast (issued 9:11AM Oct 12)

#### **Arrington Bridge Road**



10/12/16 29.7 Feet

11/28/16 4.4 Feet



## Our Employees



Water Treatment Plant

Water Reclamation Facility = 721 Hours

Compost Facility

= 346 Hours

= 346 Hours

#### **1277 Hours**





# Hurricane Preparedness

- National Incident Management System: IS-100, IS-700
  - Mandated by the Post-Katrina Emergency Management Reform Act of 2006
- Establish lines of communication / Establish
  Operator Schedules / Get Food and Water
- Top off fuel in Generators
- Sandbagging, flood shields, and other barriers

# **Water Treatment Facility**



Flooding off
 Little River was
 2' Less than
 Floyd



#### Co\$t of Matthew for WTP

Estimated \$190,000 final repairs

MudBasin Motors and Gearboxes

Erosion to Intake Screen





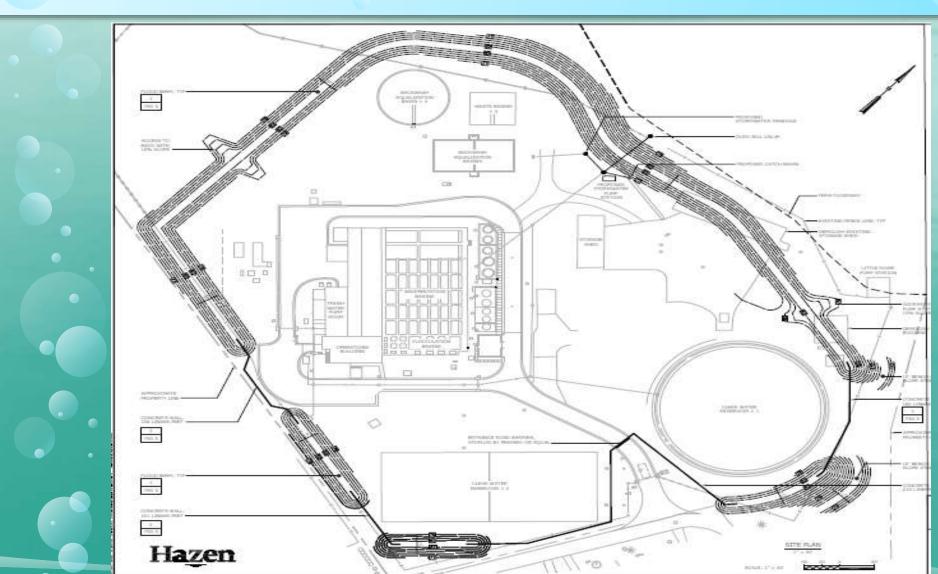


#### WTP Mitigation

Criticality Rating	Definition
1	Plant can operate and produce water as normal.
2	Plant can operate and produce water as normal. Other systems affected.
3	Plant can produce water as normal, but operations may be affected.
4	Partial loss of plant function.
5	Complete loss of plant function.



# Co\$t of Mitigation: \$2,000,000



#### **Pump Stations**

26 Pump
 Stations





 432 Generator Run Hours

### Co\$t at the Pump Stations

- Estimated Total for Final Repairs and Mitigation
  - \$710,000 / 10-11 Months





#### **Pump Station Mitigation**

- 6 Projects
  - Raising panels, flood shields, flood pumps



#### Water Reclamation Facility



Peak Flows of 35 Million? (Average 9.5)

Estimated \$90,000 final repairs



#### **WRF Post Matthew**

- Monday 10/10/17 9am 4 Operators Flooded in
  - Left at 6pm Friday through 2.5' of water
- Topped off fuel @ 7am 2 Generators
  - Lost power Saturday Fuel conservation Thursday
- Food brought in by boat Wednesday



# WRF Pictures





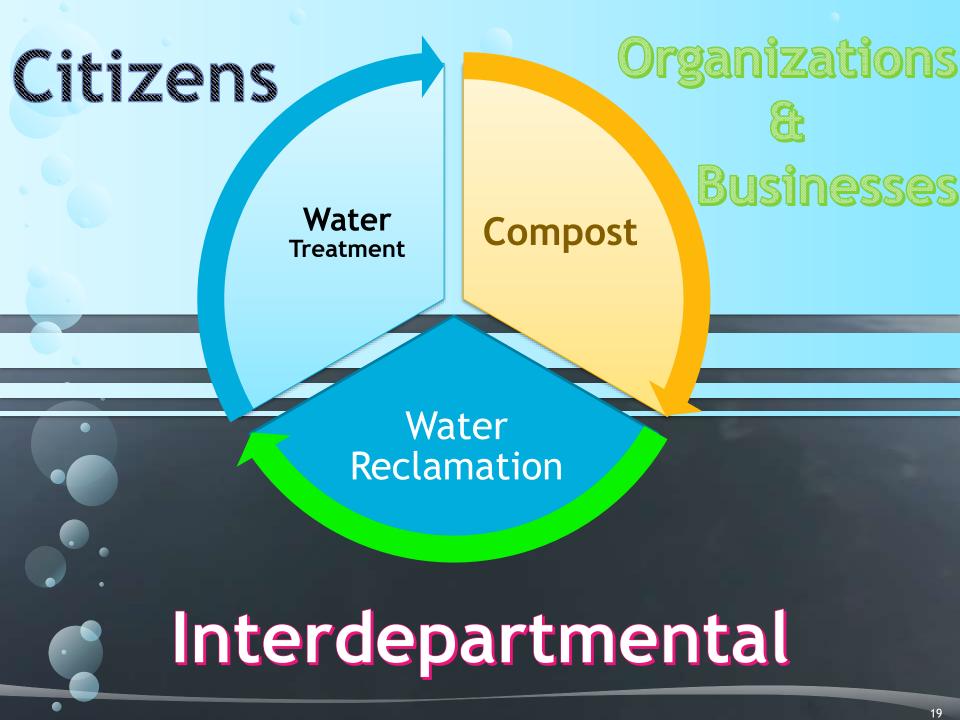
# Compost & Wetlands: Co\$t \$1870





#### **Lesson Learned**

- Fuel and other mitigation
- Prepare
- Document
- Paperwork
- Bring extra cloths ©







Thank You!

**QUESTIONS?**