

# Issues Facing Water/Wastewater Utilities in Florida – GRU Perspective

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# Topics

- GRU Overview
- Water Supply Challenges
- Water Reuse & Water Quality
- Aging Infrastructure
- Irma Response

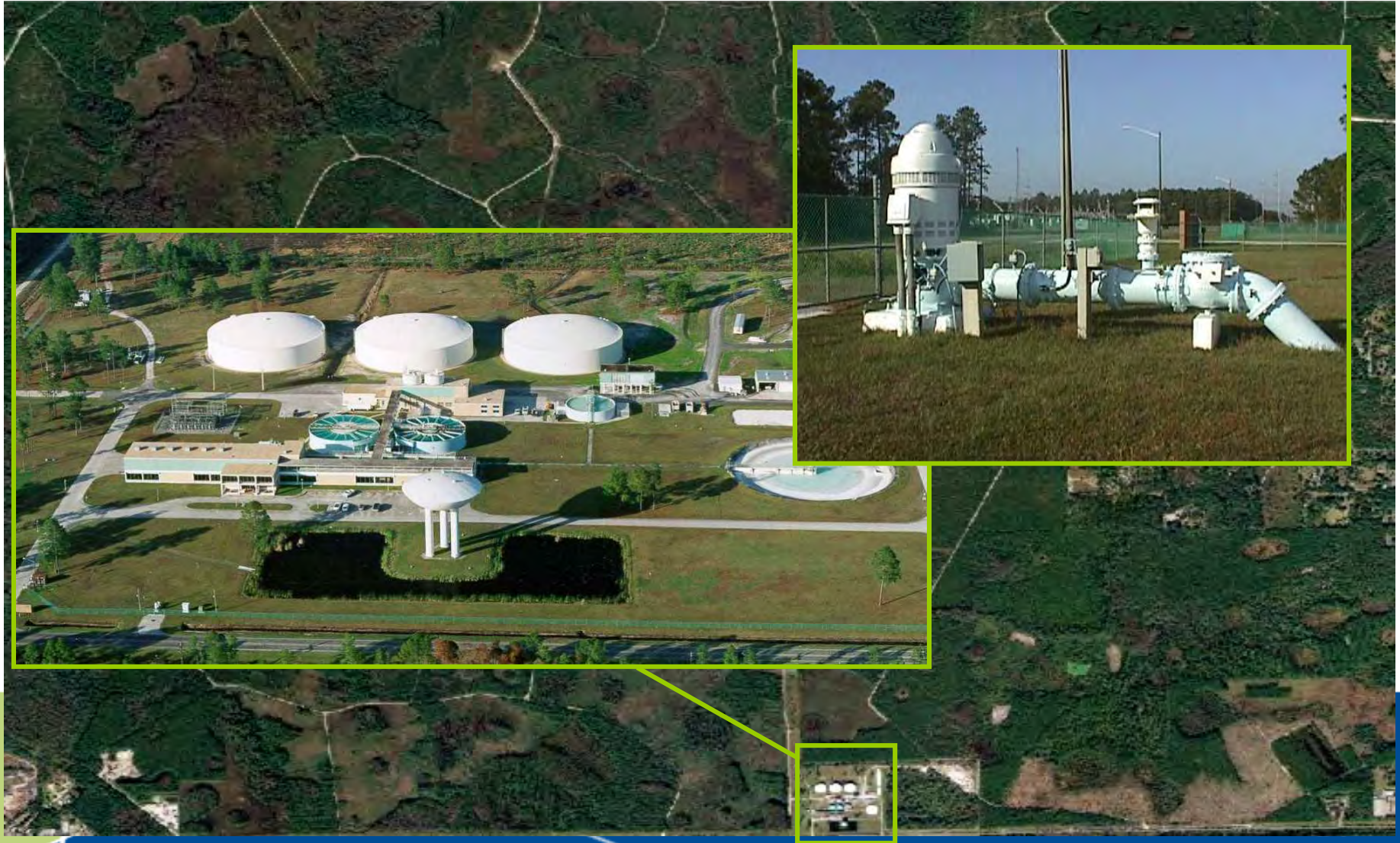
# GRU Overview

- GRU Services
  - Water – Electric Power – Internet
  - Wastewater – Natural Gas
- Owned by City of Gainesville
- Profits (General Fund Transfer) to City
  - Approximately 40% of City operating revenue
- Governed by City Commission






# Water Supply: GRU Wellfield





NOTE: LOCATIONS AND DIMENSIONS ARE  
GIVEN FOR UTILITIES STAFF USE ONLY.  
ENGINEER/CONTRACTOR IS RESPONSIBLE  
FOR FIELD VERIFICATION

## Legend

 Geodatabase Features-Mains

Murphree Water  
Treatment Plant

**Miles of Water Pipe = 1,141 mi.**

**Customers = 70,824**

**Sales = 6,785,701,000 Gal**

**GRU Provides Fire Protection**

0 3,000 6,000  
Feet



**GRU**  
More than Energy™

PLOTTED 02/07 BY C.A.O.  
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# GRU Wastewater Collection Facilities

NOTE: LOCATIONS AND DIMENSIONS ARE GIVEN FOR UNITS OF 1/4"=1'-0" ONLY. ENGINEER/CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION.

0 3,000 6,000  
Feet



## Legend

- WW Treatment Plant
- Force Main
- Lift Station
- Gravity Main
- Plant Divider
- City Limits

**Miles of Gravity Pipe = 632 mi.**

**Mile of Force Main Pipe = 140 mi**

**# of Lift Stations = 168**

**Customers = 63,191**

**Sales = 4,491,110,000 Gal**

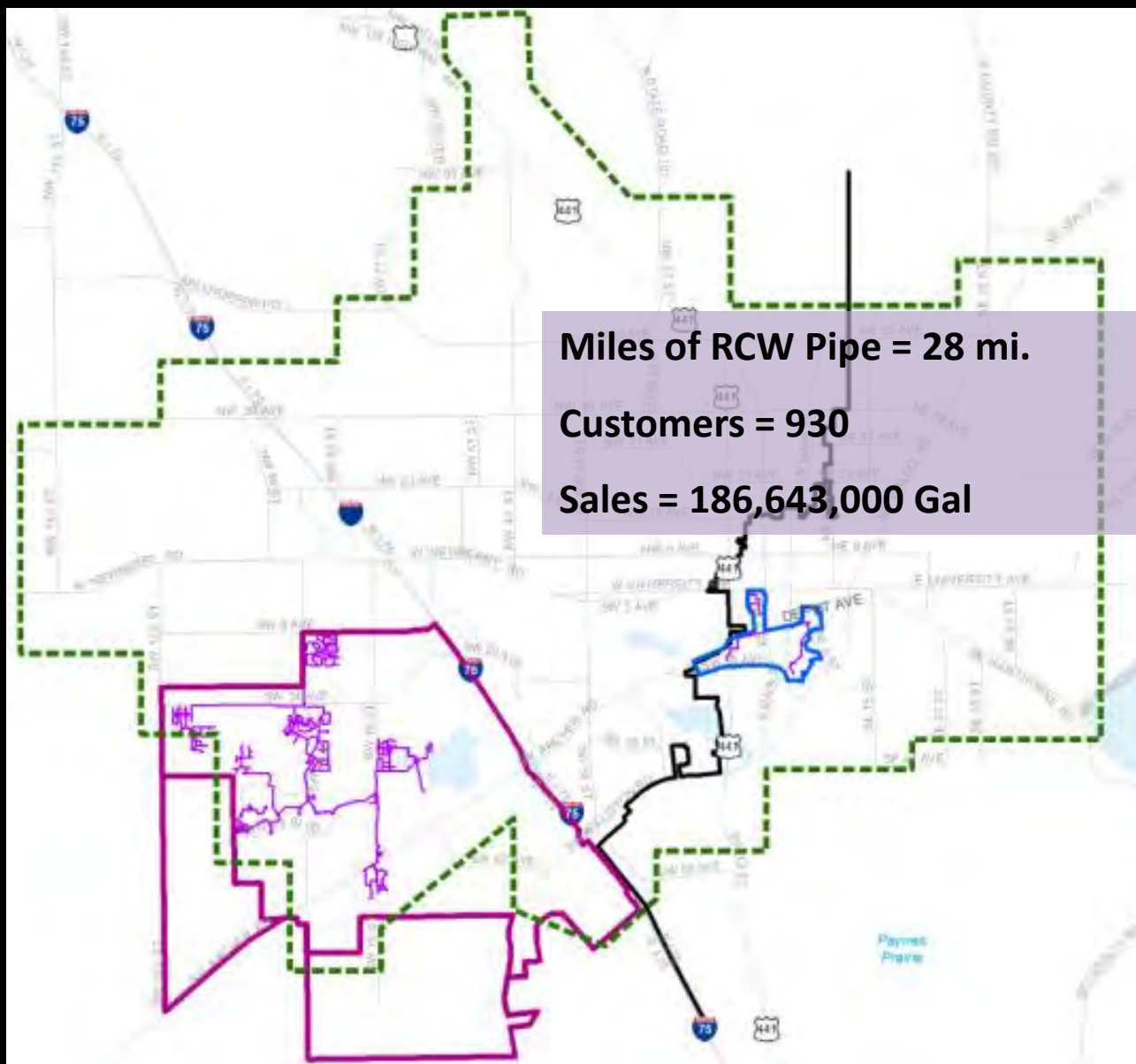
NOTE: If shown, the "Plant Divider" layer illustrates the approximate dividing line between flow that goes west to the Kanapaha WRF and flow that goes east to the Main Street WRF.



# Wastewater Collection & Treatment

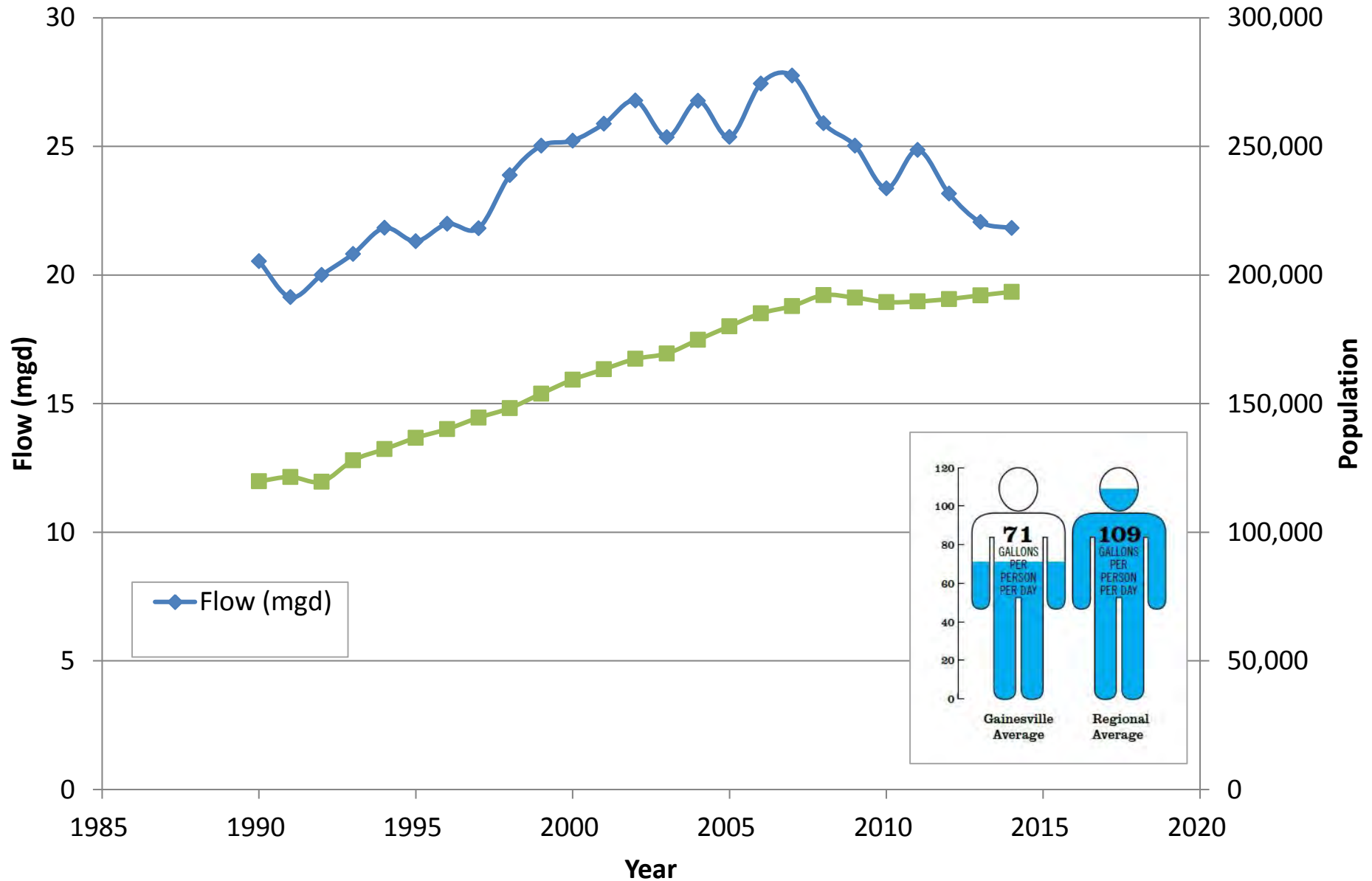


**Kanapaha Water Reclamation Facility**





# GRU Water System Service Population and MWTP Flows



# GRU Water Reuse Program

## 1. Irrigation & Cooling

- Reduce demand for groundwater
- Residential & golf course irrigation
- Industrial cooling

## 2. Aquifer Recharge

## 3. Environmental Restoration





# Aquifer Recharge

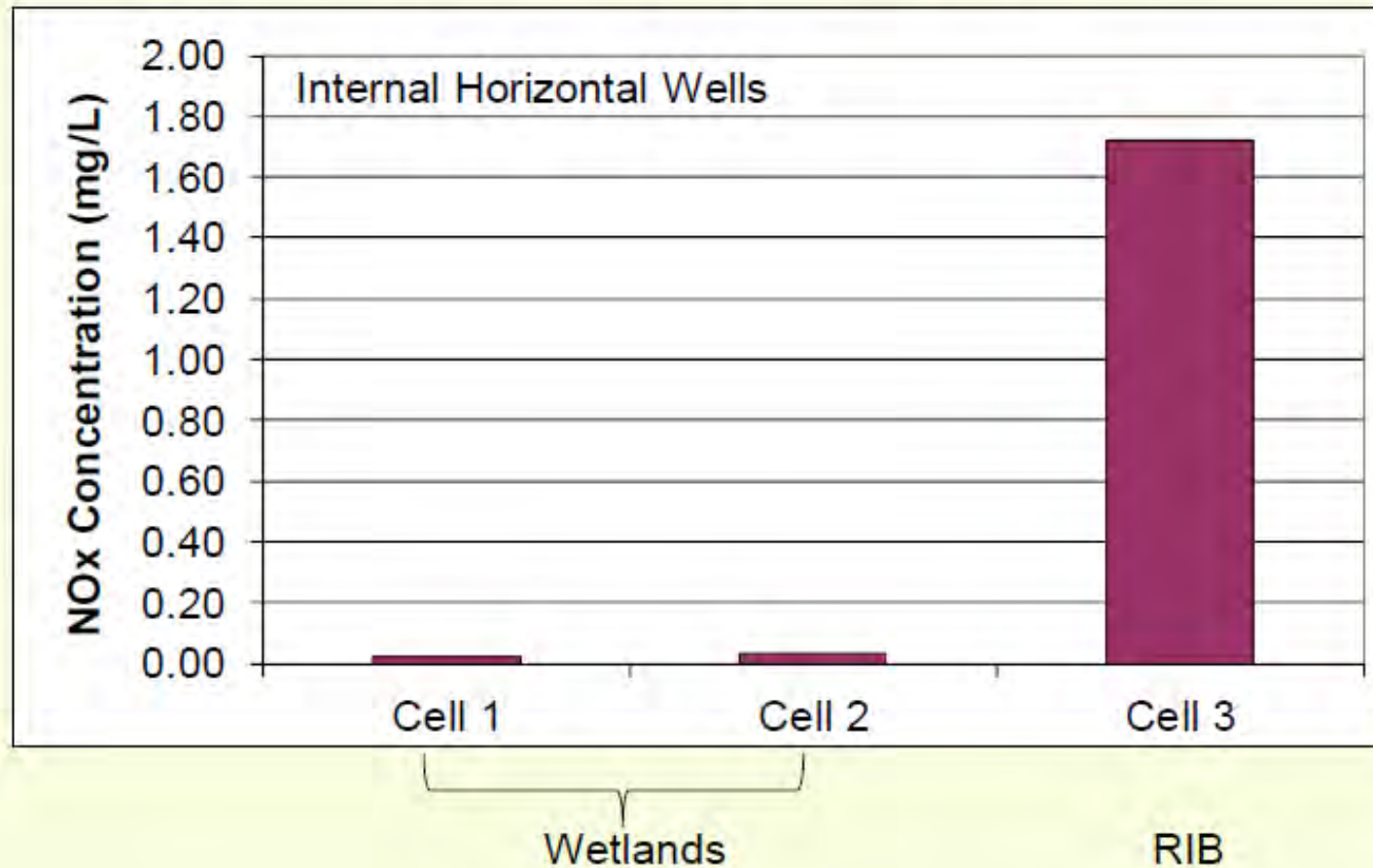




Reclaimed  
Water/Stormwater Recharge  
Wetland Kanapaha Middle  
School — Gainesville, FL



Kanapaha Water Reclamation Facility  
**Groundwater Recharge Wetland**  
Gainesville Regional Utilities



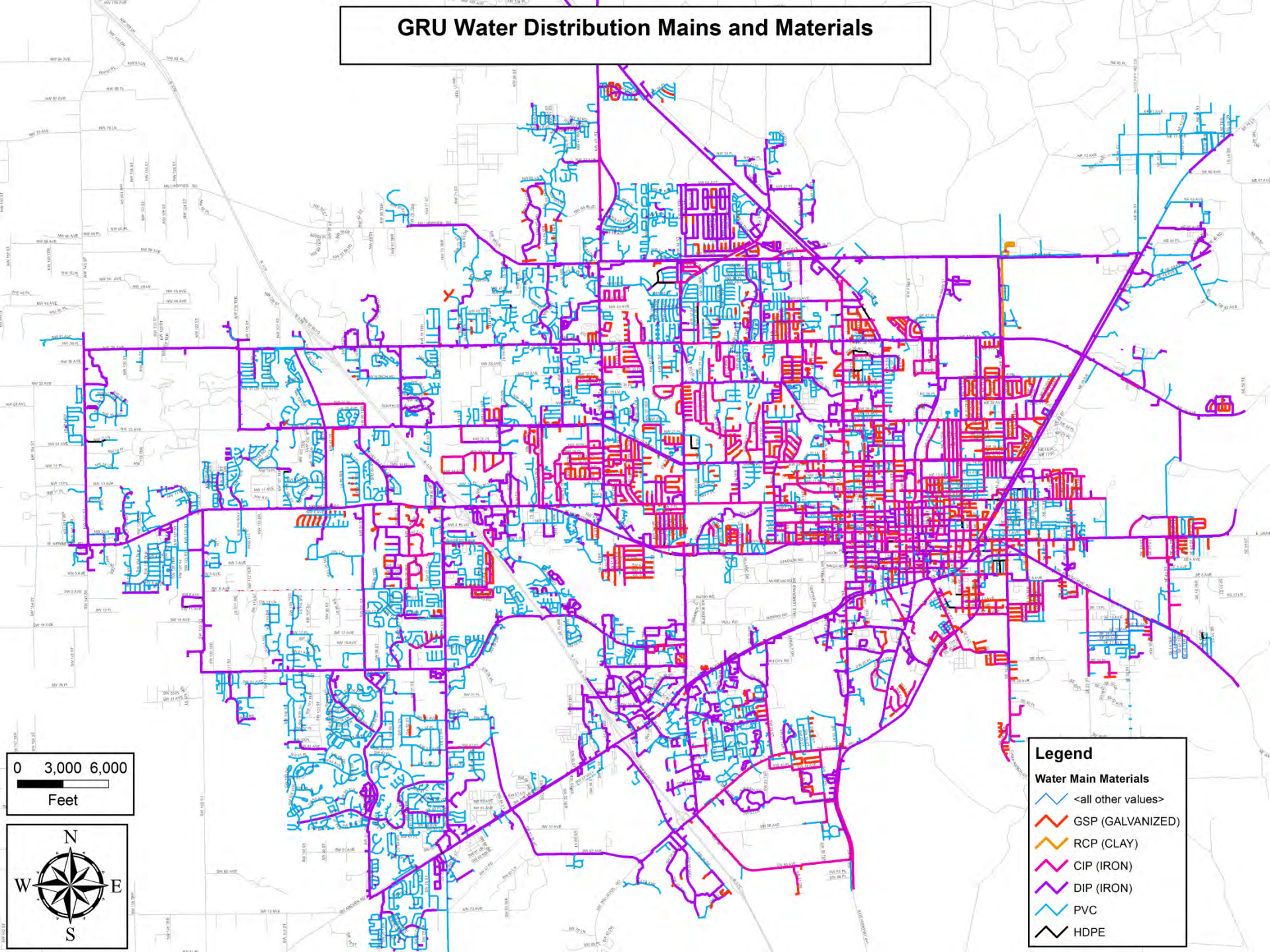


# Sweetwater Wetlands — Gainesville, FL





# GRU Water Distribution Mains and Materials



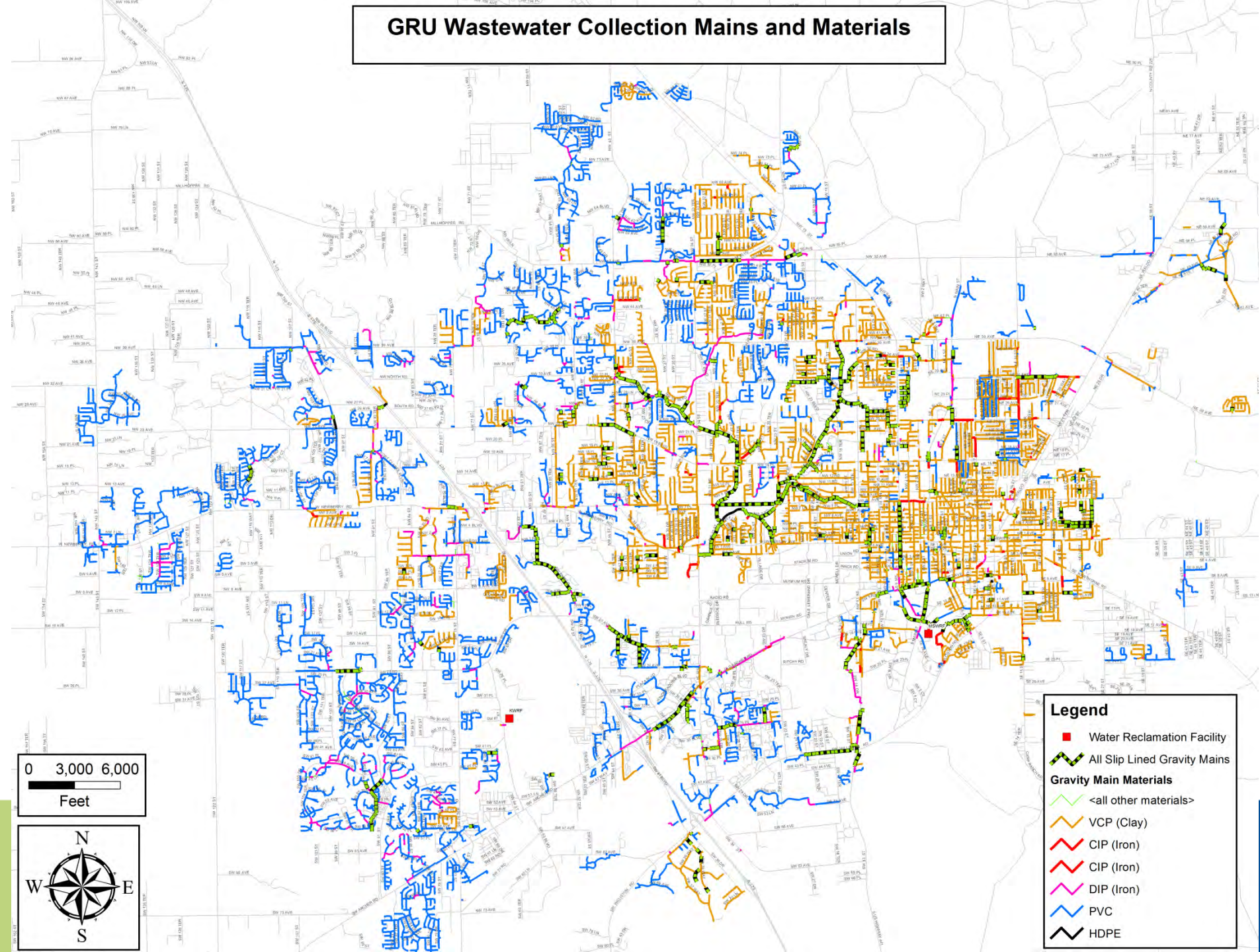
## Legend

### Water Main Materials

- <all other values>
- GSP (GALVANIZED)
- RCP (CLAY)
- CIP (IRON)
- DIP (IRON)
- PVC
- HDPE



# GRU Wastewater Collection Mains and Materials





# Gainesville Regional Utility MSWRF / Duck Pond Basin

**MH -3952-74**





# Hurricane Irma Response







# Ongoing Efforts

- Significant investment in R&R and update of our systems
- Continuing to ramp up R&R of WW Collection & Water Distribution
  - Will need to ramp this up further
  - Inflow & Infiltration is “eating up” plant capacity
  - More comprehensive assessment coming





# Questions?

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