JEA Water System Overview

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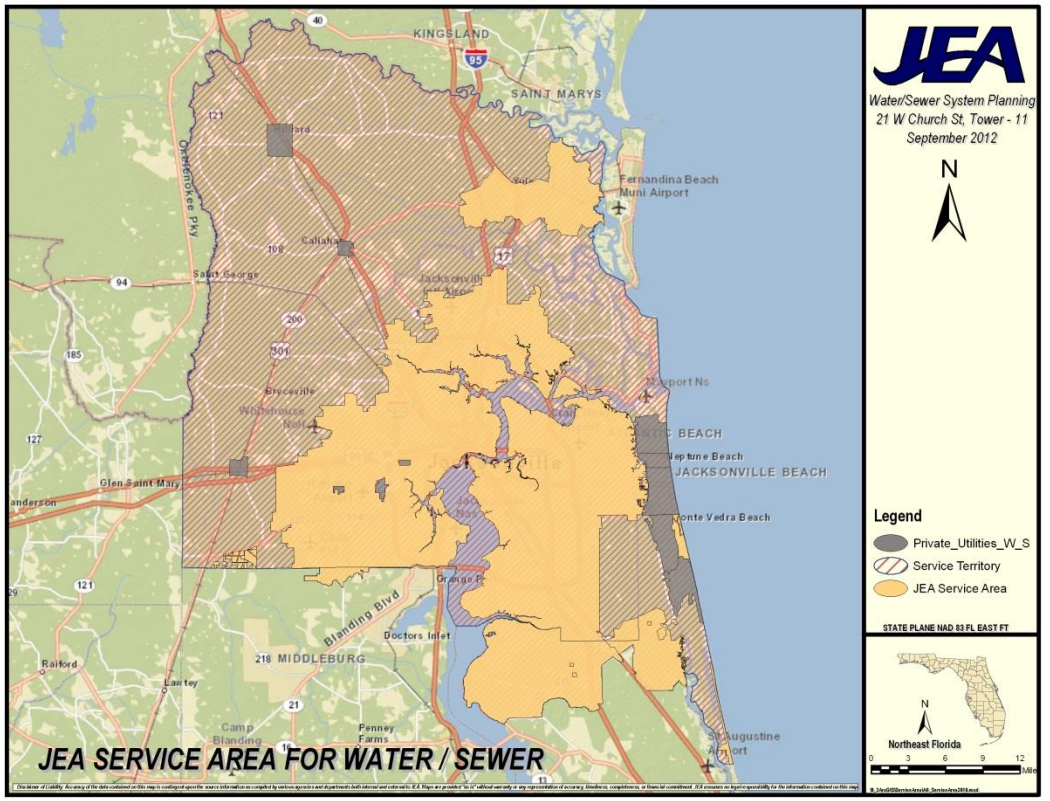
JEA

JEA Water System Overview

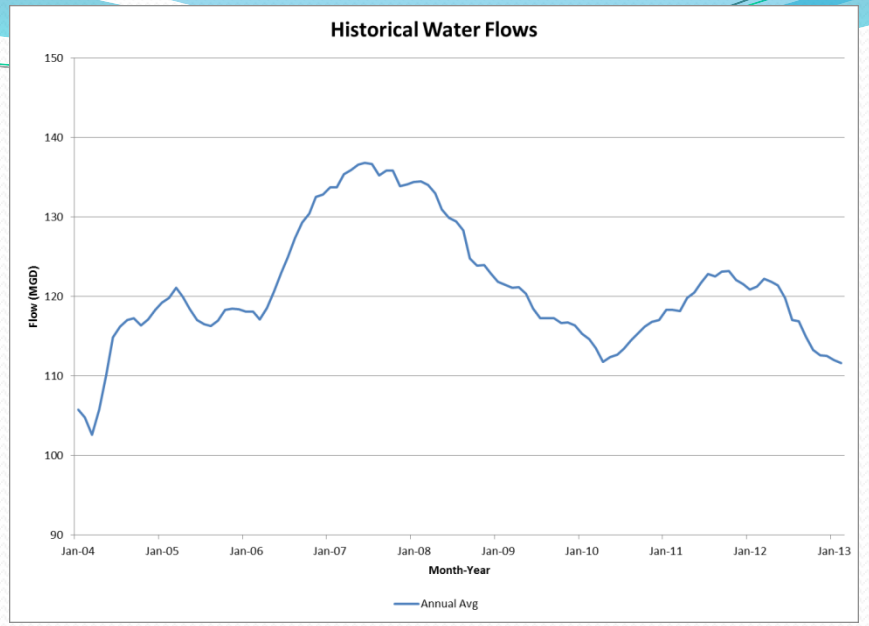
- Water System Overview
- Water Challenges
- Wastewater Challenges
- Sea Water Rise
- Summary

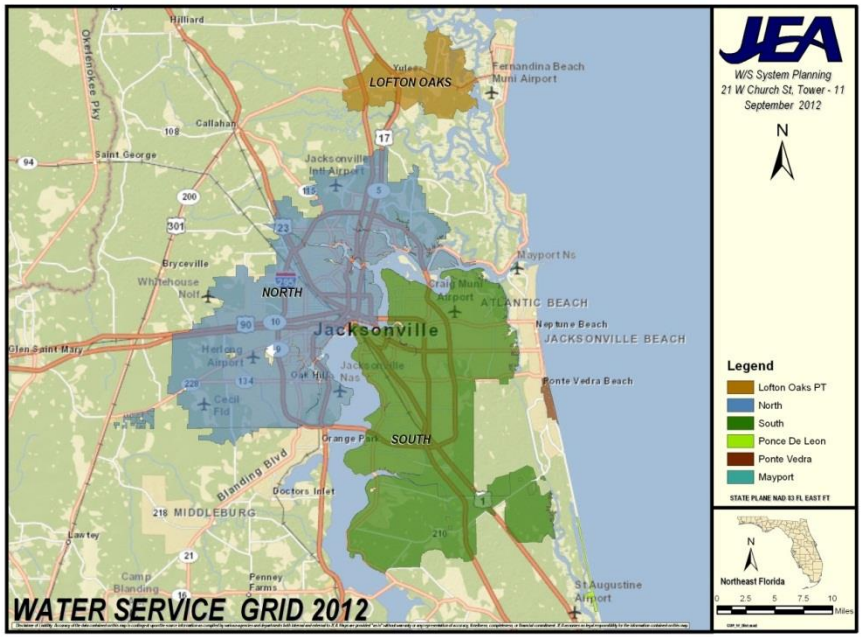


Water System

- 100% groundwater supply
- 311,019 Customers
- 36 Water Treatment Plants
- 135 Active Wells
- 2 Major Grids (with 1 active River Crossing)
- 4 County Service Area
- 286 MGD Gridded Capacity
- 298 MGD Total Systems Capacity
- 111 MGD AADF
- 154 MGD MDF
- 4,276 miles pipe

*as of February 2013

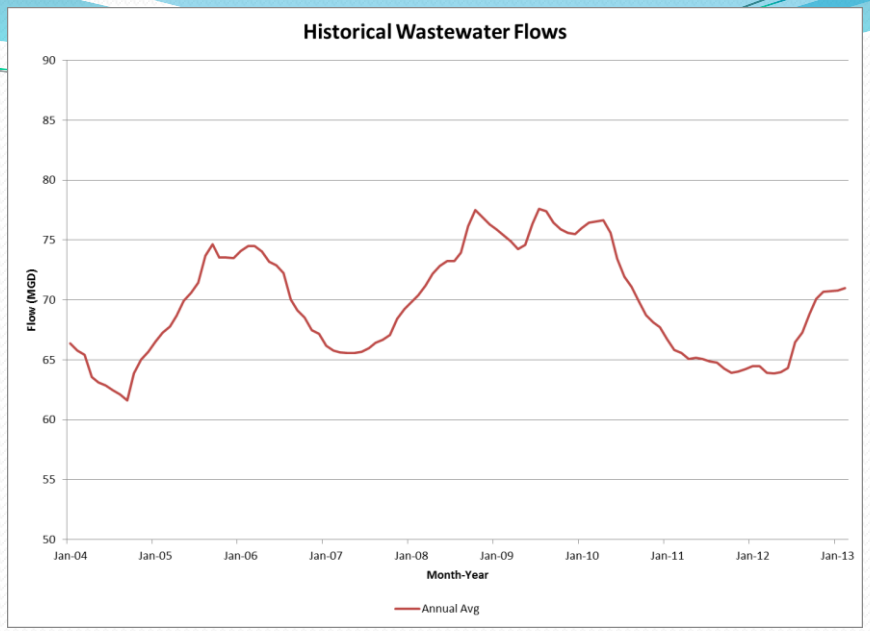


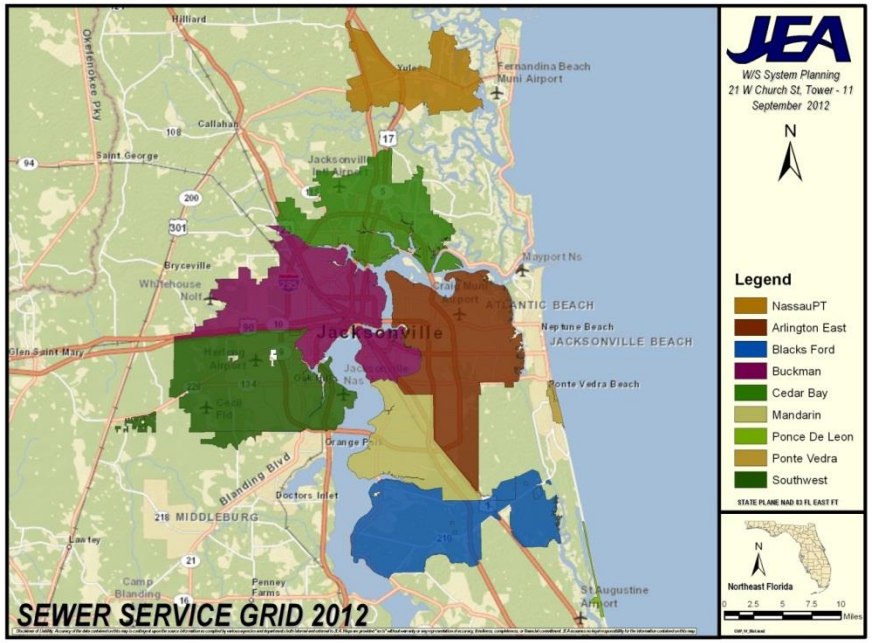


Wastewater System

- 237,481 Customers
- 13 Treatment Plants
- 1,296 Pump Stations
- 4 County Service Area
- 240 MGD Peak Capacity
- 67 MGD AADF
- 185 MGD MDF
- 3,755 miles of pipe

*as of February 2013

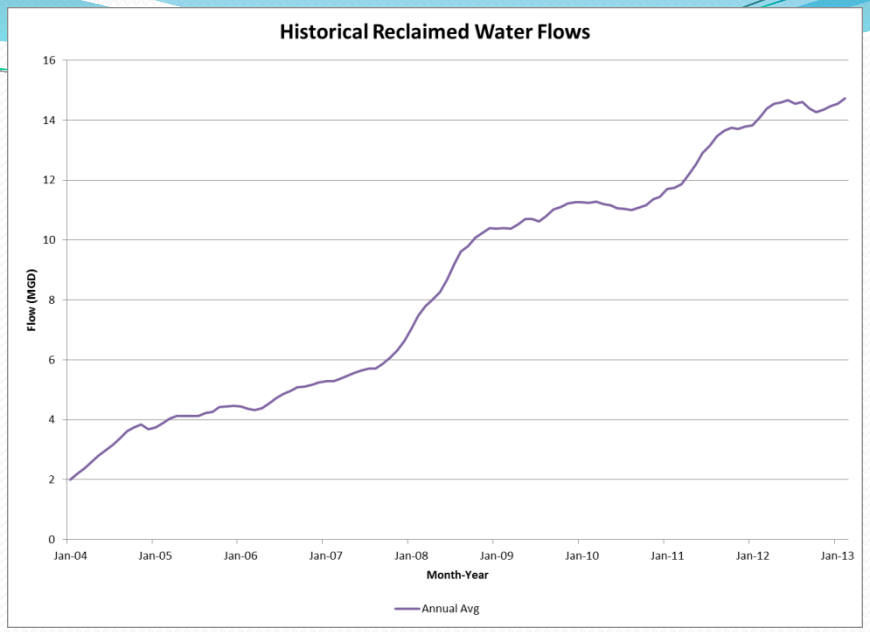


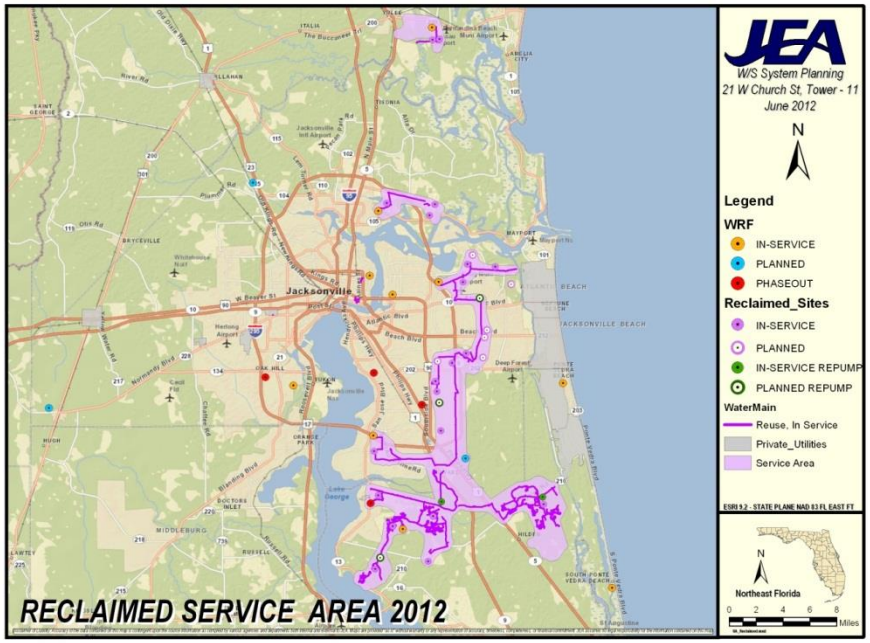


Reclaimed Water System

- 2,844 Customers
- 11 Reclaimed Water Production Facilities
- 30 MGD Capacity
- 15 MGD AADF
- 2 Storage and Re-pump Facilities
- 168 miles of pipe

*as of February 2013

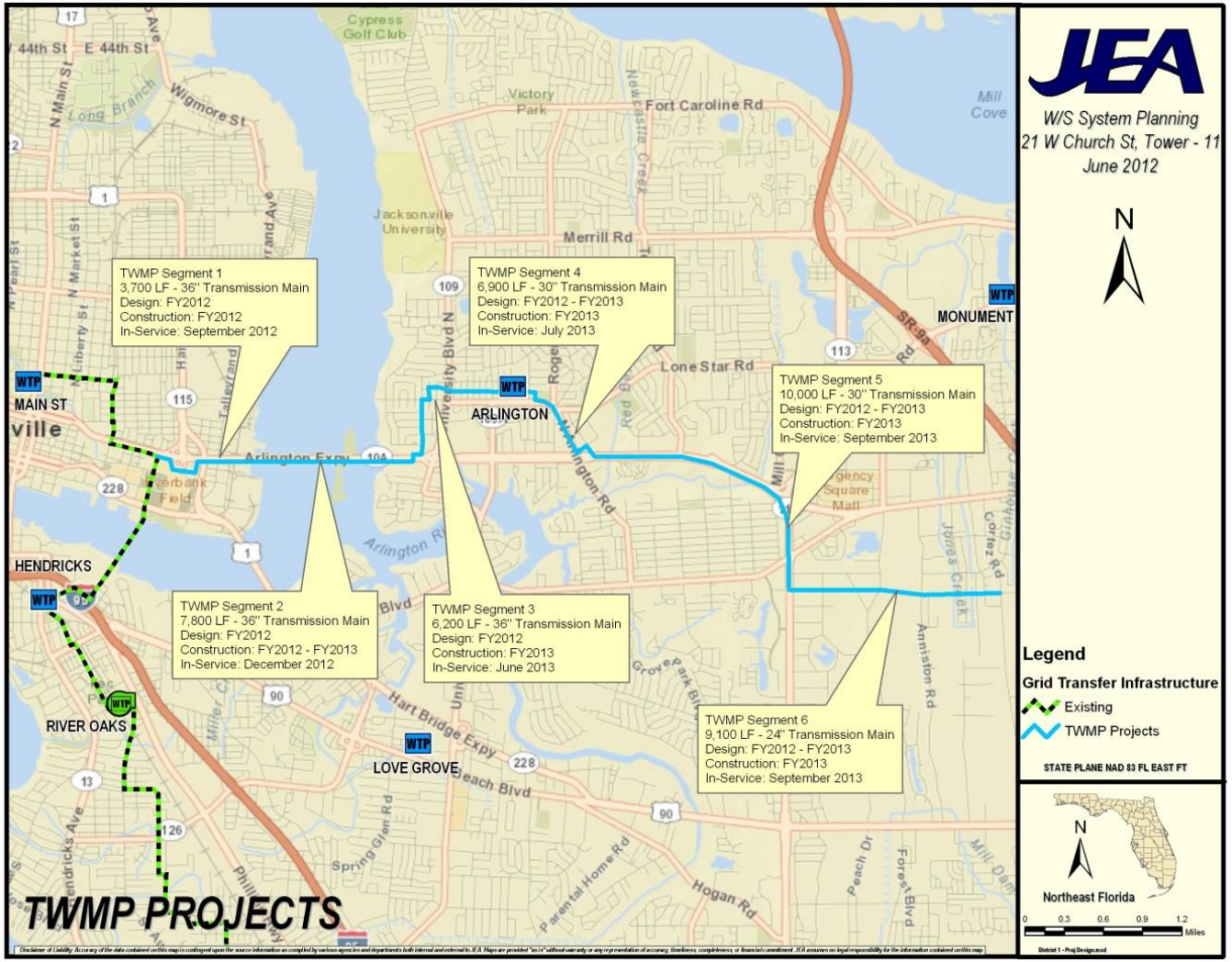




Total Water Management Plan (TWMP)

- Challenge
  - Increasing chlorides in some South Grid wells
  - Consumptive Use Permit withdrawal restrictions
- Current Solution
  - Increased Reclaimed Water (potable offset)
  - Increased Conservation
  - Increased N → S Grid Transfer

Current Solution



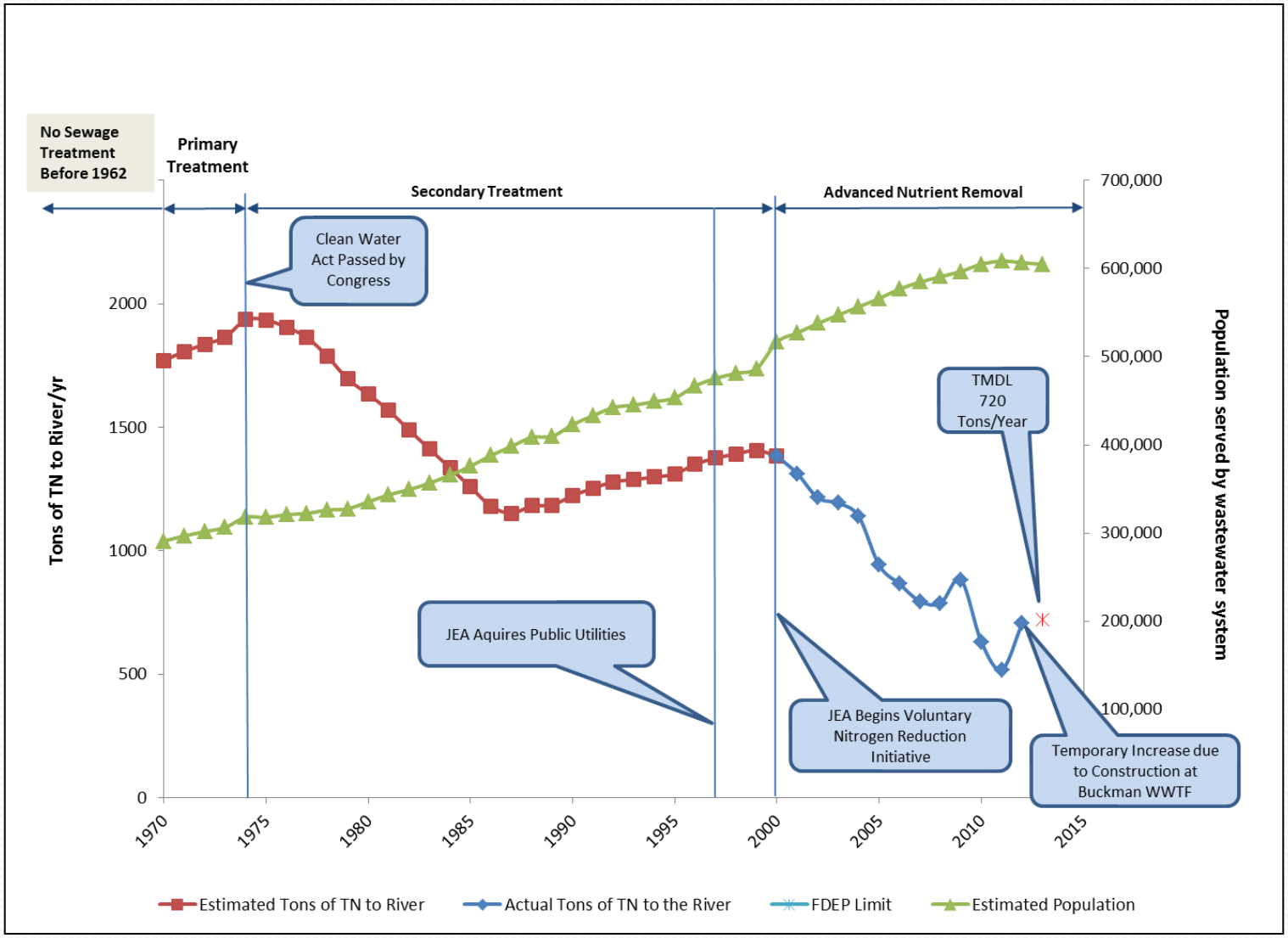
Total Water Management Plan (TWMP)

- Potential Future Solution
  - Alternative Water Supplies
    - Aquifer Recharge
    - Ocean Desalination
    - Intermediate Aquifer

Nutrient Reduction to the St. Johns River

- Challenge
  - Nutrients Discharged to St. Johns River
- Current Solution
  - Reduce Inflow and Infiltration (I&I)
  - Increase Reclaimed Water Use
  - Improve Wastewater Treatment

Results to Date

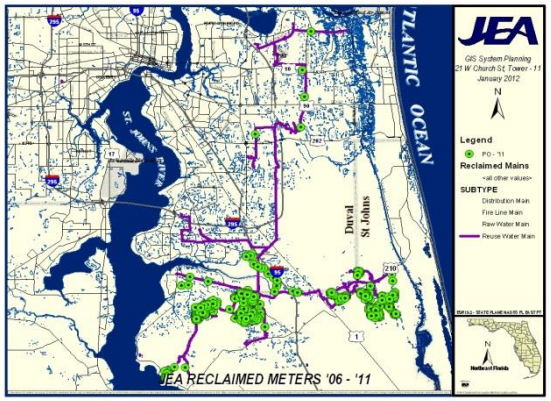


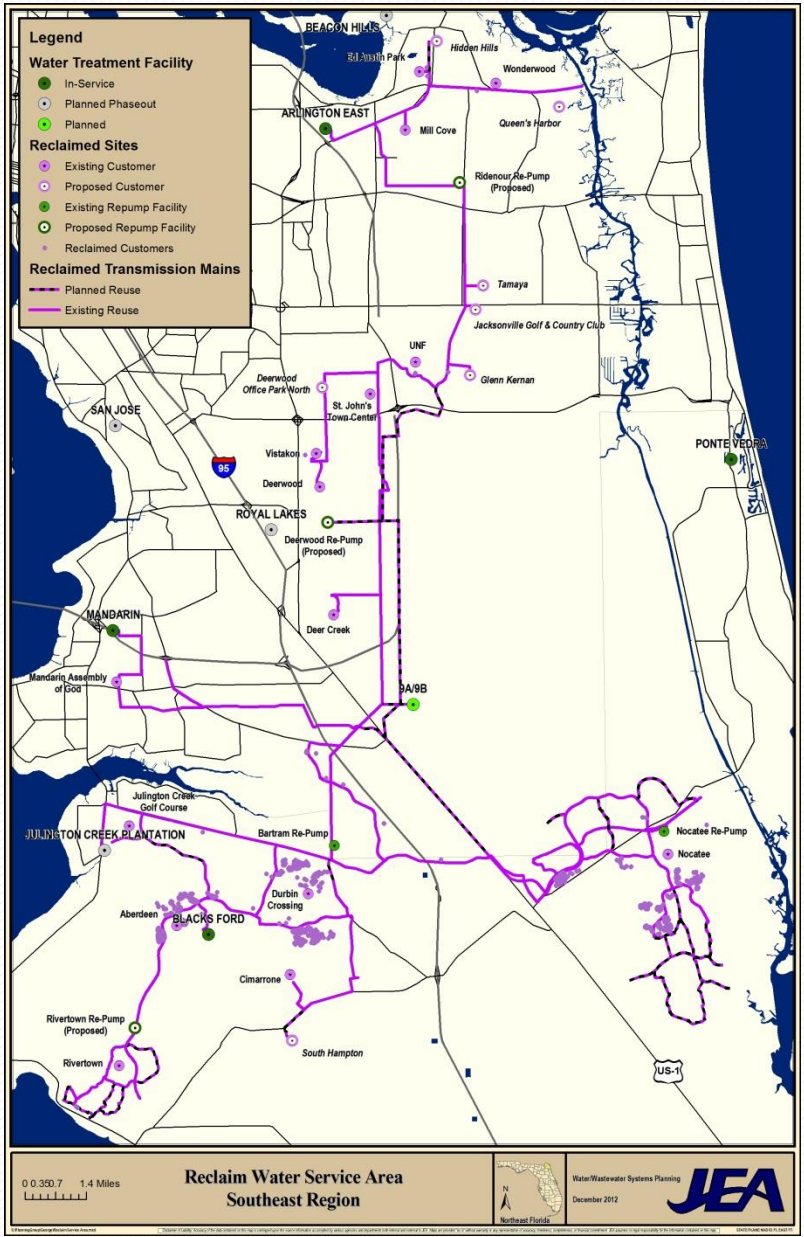
Nutrient Reduction to the St. Johns River

- Future Solution
  - Continued reduction of I&I
  - Continued Growth of Reclaimed Water System
  - Increased Level of Wastewater Treatment

Reclaimed Water

Reclaimed Water helps protect the aquifer and the St. Johns River





Possible Sea Water Rise Implications

- Potable Water
  - Potential for increased salinity in Floridan Aquifer
  - Infrastructure and operational impacts
  - Alternative Water Supply
- Wastewater
  - Infrastructure and operational impacts (e.g. manholes, pump stations, WWTFs)
- Reclaimed Water
  - ???

*Study Planned for 2014

Summary

- Water and Wastewater trends have been relatively flat (long term).
  - Conservation has played a major role in reducing water demands in recent years.
- JEA has found innovative ways to protect the aquifer (TWMP) and nutrient reduction to the river. Future options may include Alternative Water Supplies and additional reclaimed water growth.
- Reclaimed Water plays a key role in reducing aquifer demands and discharges to the river.
- Sea Water Rise impacts are unknown and will be evaluated in 2014.

Questions?

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