

# Jordan Lake Water Supply Program



Western Intake  
Partnership



# Welcome & Introductions



# Agenda

- Welcome
- Introductions (around the entire room)
- Western Intake Partnership Structure
- Program Overview
- Next Steps
- Q & A
- Networking
- Adjourn



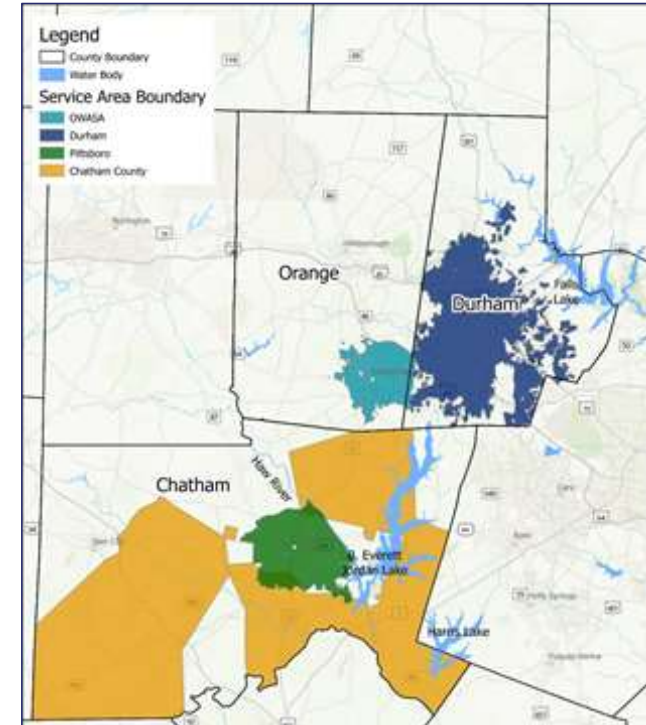
# Western Intake Partnership

# Western Intake Partnership



# Jordan Lake Drinking Water Allocations

| Allocation Holder<br>(from Round 4 in 2017) | Allocation % |
|---|--------------|
| Cary-Apex-Morrisville-RTP South             | 46.2         |
| Durham                                      | 16.5         |
| Chatham Co.-North                           | 13.1         |
| Pittsboro                                   | 6            |
| OWASA                                       | 5            |
| Holly Springs                               | 2            |
| Orange Co.                                  | 1.5          |
| Hillsborough                                | 1            |



## Western Intake Partnership

- City of Durham - Contracting Entity
  - Project Manager – Sydney Miller
- HDR - Program Manager
  - HDR is not eligible to be a design engineer on the Program
- All Meeting and/or Information Requests shall be directed to HDR:
  - Jeff Adkins – [jeff.adkins@hdrinc.com](mailto:jeff.adkins@hdrinc.com)
  - Kip Kalisiak – [kip.kalisiak@hdrinc.com](mailto:kip.kalisiak@hdrinc.com)
  - Jason Cook – [jason.cook@hdrinc.com](mailto:jason.cook@hdrinc.com)

# Western Intake Partnership



## Mission

*To continue to provide reliable, high quality drinking water to the Triangle region*



## Core Values

*Quality* – Access to safe water is essential; your health is our primary focus

*Sustainability* – Water is a finite resource. From spending responsibly to protecting the environment, we are committed to doing what's best for our community.



*Transparency* – You can rely on us to keep you informed every step of the way.

*Equity* – We believe everyone deserves equal access to quality water, and we're dedicated to serving our communities with care and compassion.



*Partnership* – The best solutions are born of inclusion and collaboration.



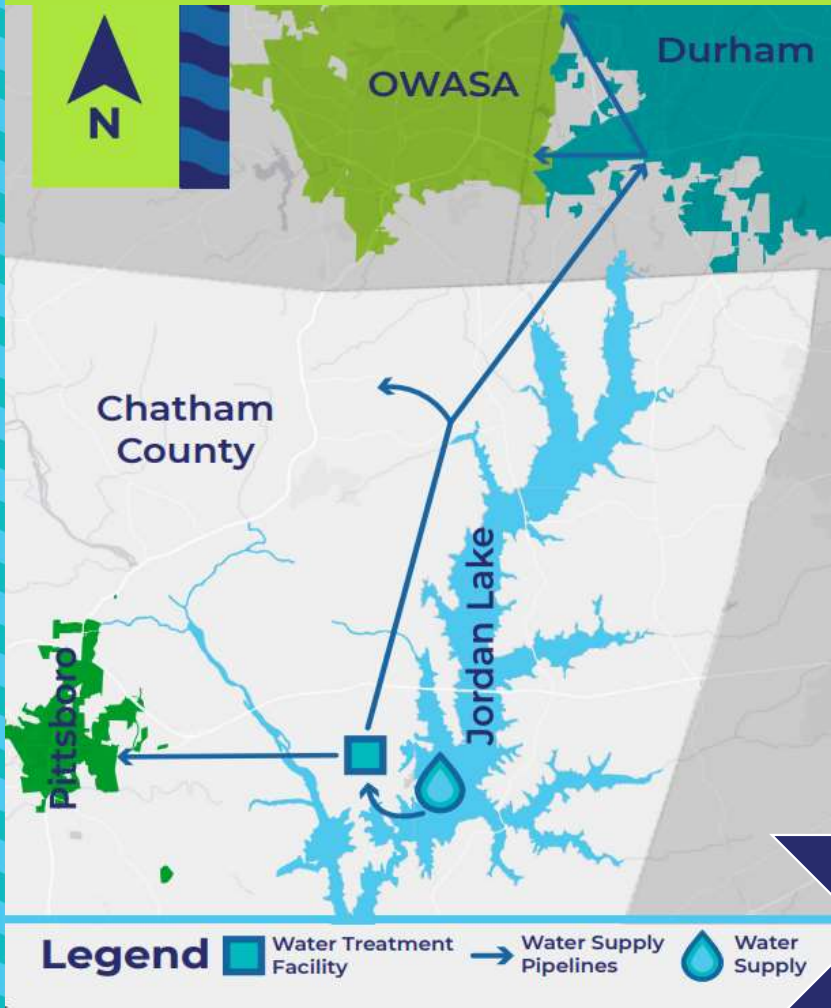




# Program Overview



# Western Intake Partnership Water Supply Project



- Access Partners' Jordan Lake allocations
- Jointly plan, design, construct and operate:
  - *Jordan Lake Intake, Raw Water Pipeline (~1 mile) & Pumping Station*
  - *Regional Water Treatment Facility (initial capacity ~27 mgd, plans for future expansion)*
  - *Finished Water Transmission Pipelines to each Partner (~23 miles total)*

2020-2024  
Governance  
Prelim Engineering  
Permitting

2024-2027  
Final Design

2027-2031  
Construction





★ Raw Water Intake

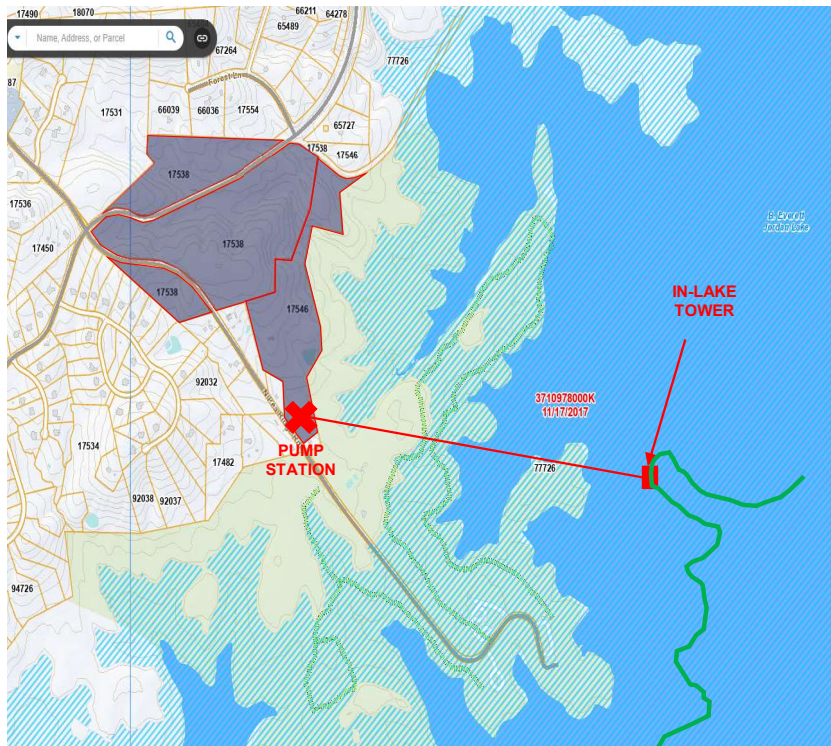
● Raw Water PS

Regional Water Treatment Facility

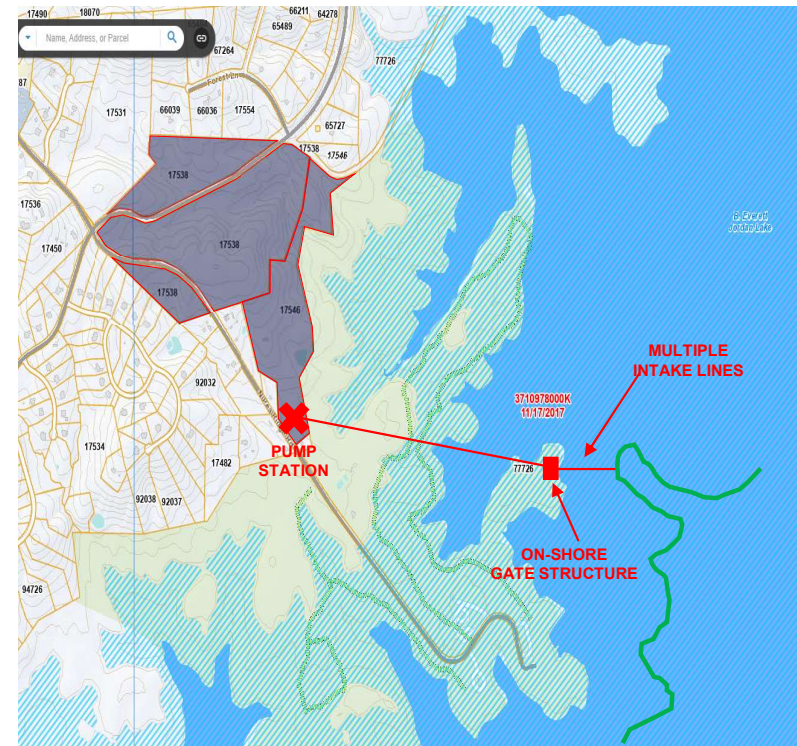


# Two Intake/Raw Water PS Concepts Remain Under Consideration

## Intake Tower



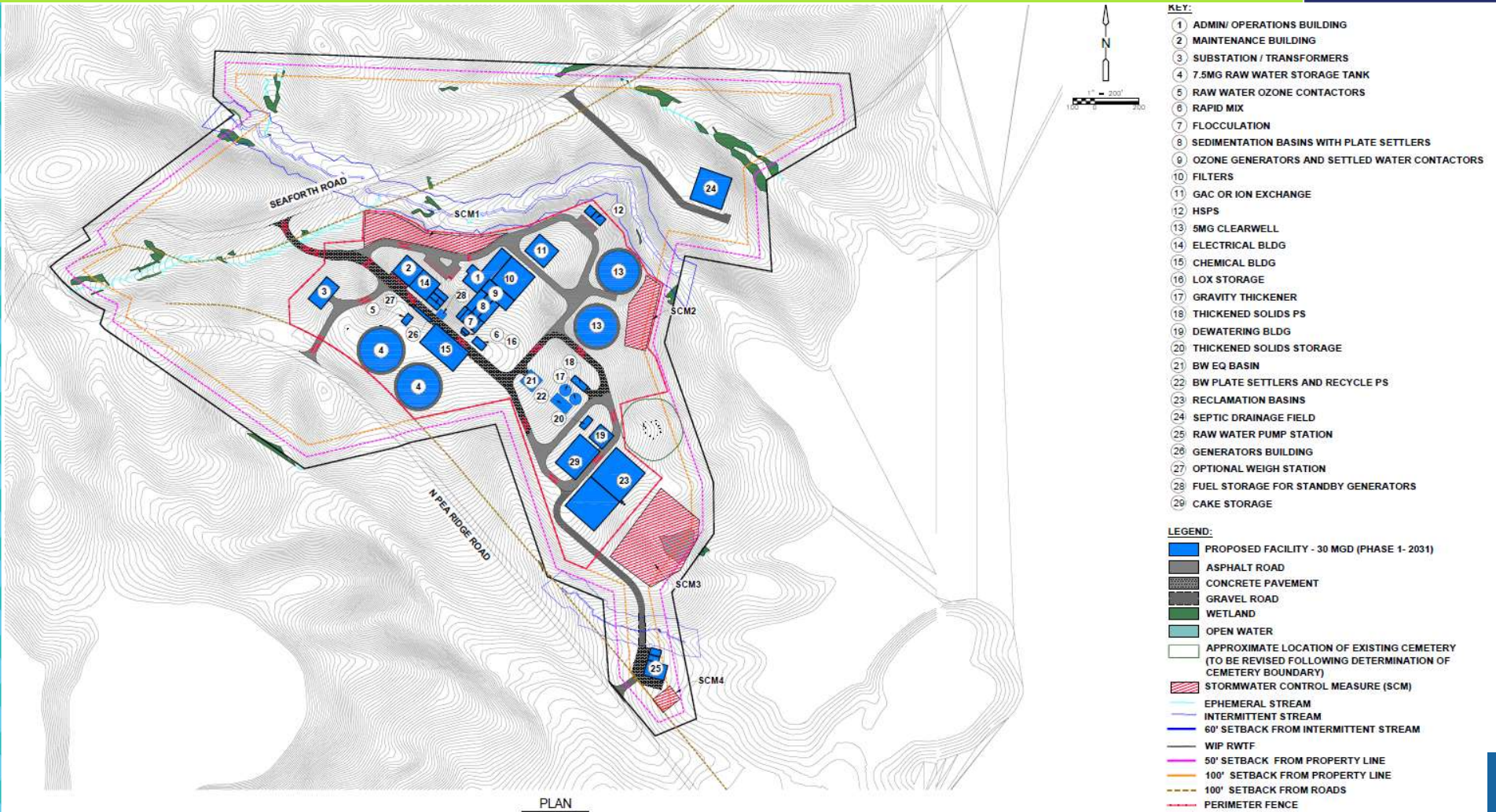
## Submerged Intake



Approximately 1-mile trenchless install of raw water transmission pipe from intake to new pump station

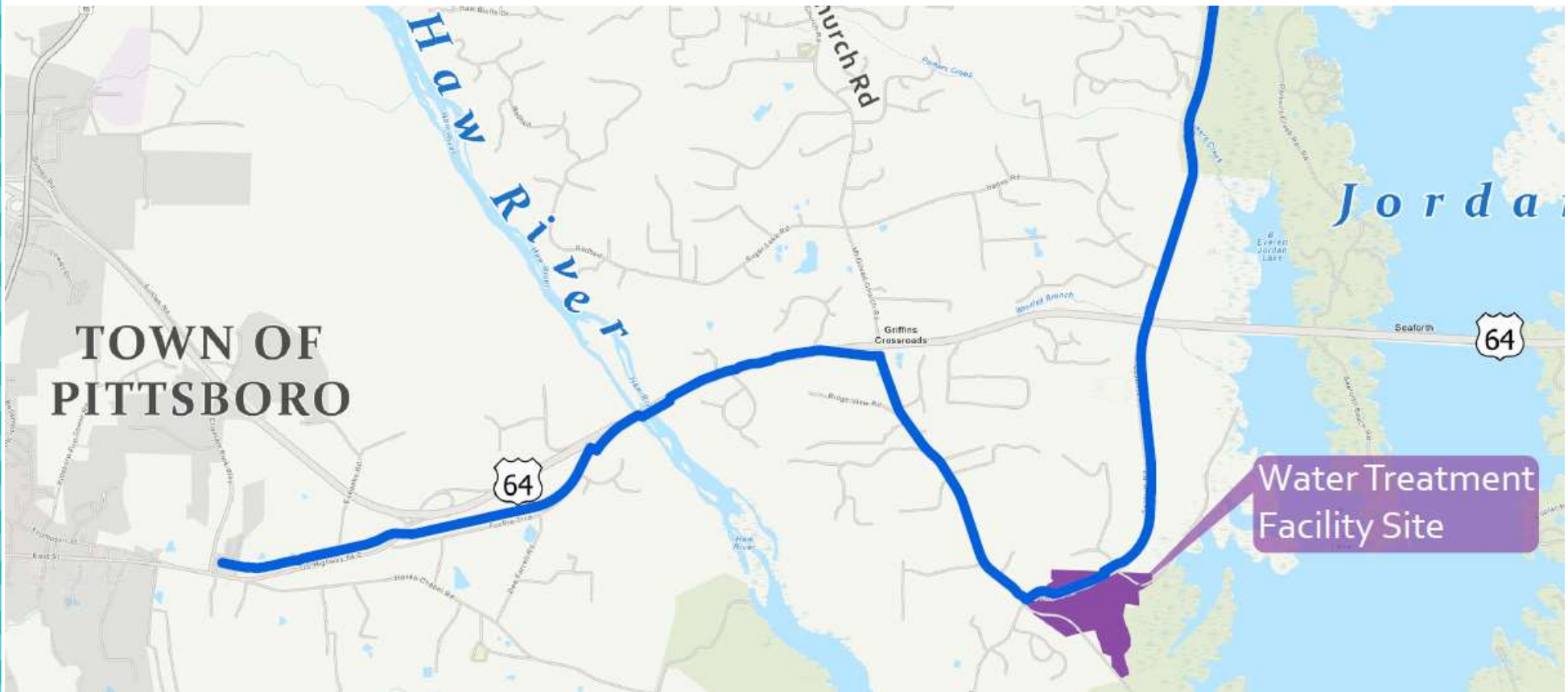


# Preliminary WIP Phase 1 Site Plan



- KEY:**
- 1 ADMIN/ OPERATIONS BUILDING
  - 2 MAINTENANCE BUILDING
  - 3 SUBSTATION / TRANSFORMERS
  - 4 7.5MG RAW WATER STORAGE TANK
  - 5 RAW WATER OZONE CONTACTORS
  - 6 RAPID MIX
  - 7 FLOCCULATION
  - 8 SEDIMENTATION BASINS WITH PLATE SETTLERS
  - 9 OZONE GENERATORS AND SETTLED WATER CONTACTORS
  - 10 FILTERS
  - 11 GAC OR ION EXCHANGE
  - 12 HSPS
  - 13 5MG CLEARWELL
  - 14 ELECTRICAL BLDG
  - 15 CHEMICAL BLDG
  - 16 LOX STORAGE
  - 17 GRAVITY THICKENER
  - 18 THICKENED SOLIDS PS
  - 19 DEWATERING BLDG
  - 20 THICKENED SOLIDS STORAGE
  - 21 BW EQ BASIN
  - 22 BW PLATE SETTLERS AND RECYCLE PS
  - 23 RECLAMATION BASINS
  - 24 SEPTIC DRAINAGE FIELD
  - 25 RAW WATER PUMP STATION
  - 26 GENERATORS BUILDING
  - 27 OPTIONAL WEIGH STATION
  - 28 FUEL STORAGE FOR STANDBY GENERATORS
  - 29 CAKE STORAGE
- LEGEND:**
- PROPOSED FACILITY - 30 MGD (PHASE 1- 2031)
  - ASPHALT ROAD
  - CONCRETE PAVEMENT
  - GRAVEL ROAD
  - WETLAND
  - OPEN WATER
  - APPROXIMATE LOCATION OF EXISTING CEMETERY (TO BE REVISED FOLLOWING DETERMINATION OF CEMETERY BOUNDARY)
  - STORMWATER CONTROL MEASURE (SCM)
  - EPHEMERAL STREAM
  - INTERMITTENT STREAM
  - 60' SETBACK FROM INTERMITTENT STREAM
  - WIP RWTF
  - 50' SETBACK FROM PROPERTY LINE
  - 100' SETBACK FROM PROPERTY LINE
  - 100' SETBACK FROM ROADS
  - PERIMETER FENCE

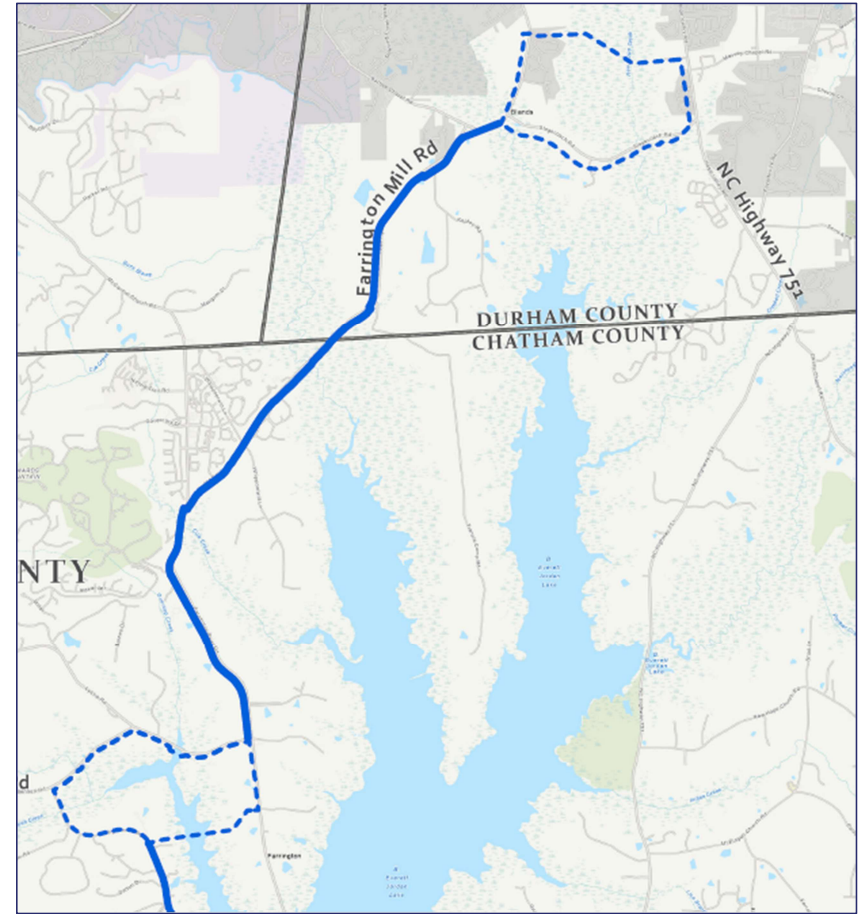
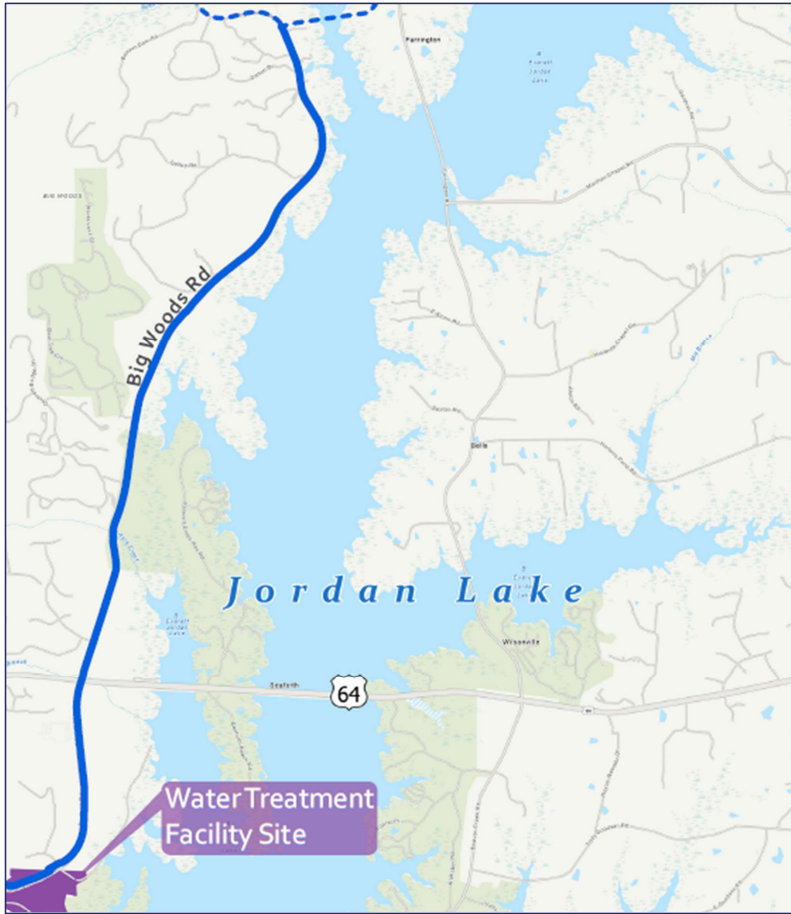
# Approximate Finished Water Transmission Route WTF to Pittsboro Interconnect



Length 6.3 miles



# Approximate Finished Water Transmission Route WTF to Chatham / Durham Interconnects



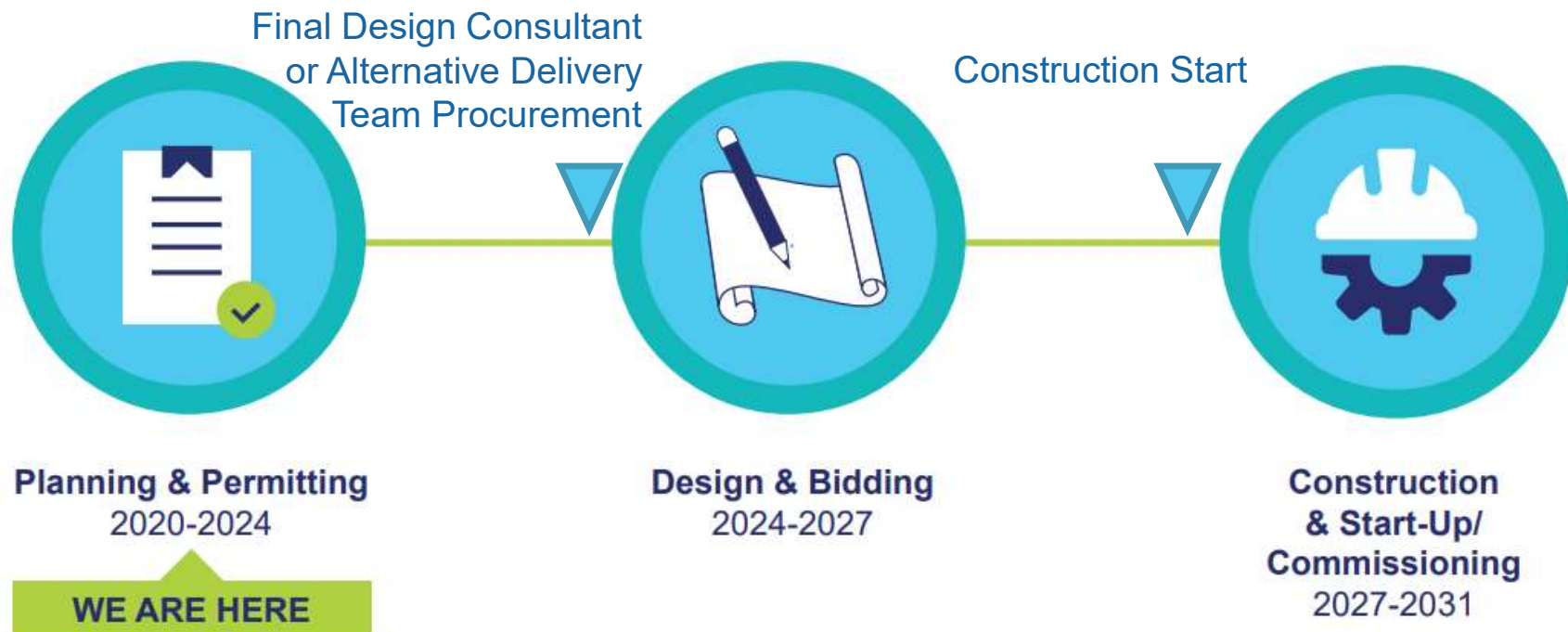
Length 16.1-16.5 Miles



# Next Steps

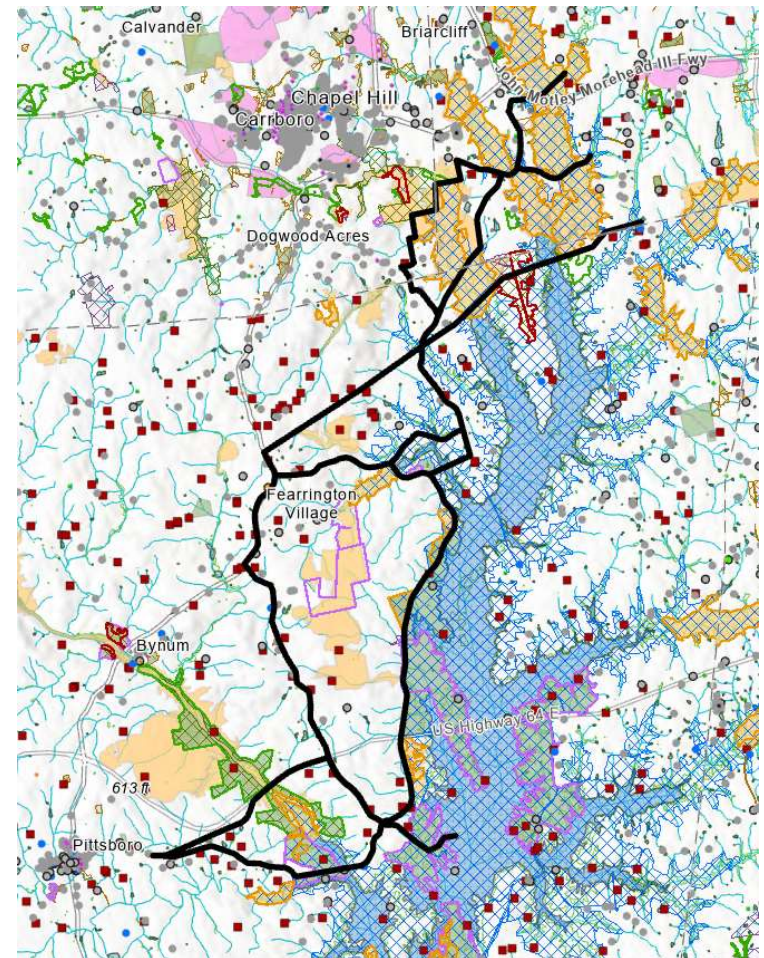


# Program Delivery Schedule

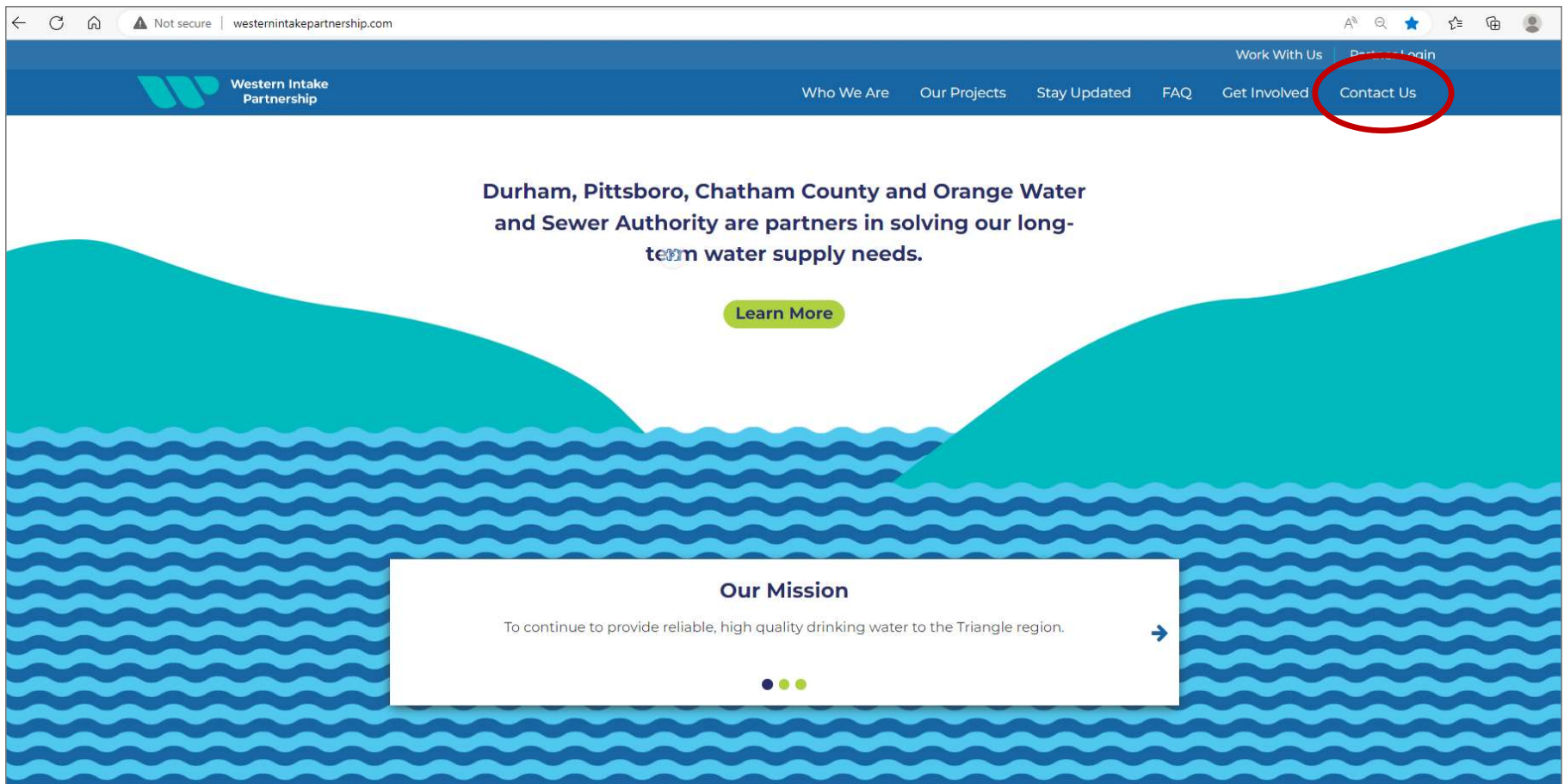


## Next 12 Months

- Continue with planning and preliminary engineering
- Continue with environmental permitting and regulatory approvals
- Evaluate delivery models – DBB, PDB, CMAR, or combination of models
- Update opinion of probable cost



# Partnership Website – sign up for updates & newsletter



westernintakepartnership.com



## Meeting and/or Information Requests

Jeff Adkins – [jeff.adkins@hdrinc.com](mailto:jeff.adkins@hdrinc.com)

Kip Kalisiak – [kip.kalisiak@hdrinc.com](mailto:kip.kalisiak@hdrinc.com)

Jason Cook – [jason.cook@hdrinc.com](mailto:jason.cook@hdrinc.com)

