

Western Intake Partnership

Community Meeting

July 20, 2023



Western Intake
Partnership

Welcome!

- Community meeting is part of rezoning process
- As noted in Adjacent Property Owner letter, adjacent owners will be notified when rezoning application is submitted
- Please sign in if you did not already
- Location of restrooms
- Use side door when you leave (after library hours)



June 30, 2023

RE: **Development Input Meeting** for the Western Intake Partnership (WIP) Regional Drinking Water Treatment Facility (Seaforth Road/North Pea Ridge Road) to be held on July 20, 2023

Dear Adjacent Property Owner,

This letter is to invite you to attend a community meeting regarding a rezoning matter relating to a regional drinking water treatment facility the WIP (Chatham County, City of Durham, Town of Pittsboro and Orange Water and Sewer Authority) proposes on approximately 122 acres near your property, on Parcel Numbers 17538 and 17546, near the intersection of North Pea Ridge Road and Seaforth Road. An informal community meeting will be held at the Holmes Meeting Room at the Chatham Community Library on Thursday, July 20, 2023 beginning at 6:30 pm and last approximately 1 hour. Detailed directions are on the back of this letter.

Preliminary site plans and other information will be presented, and you will have the opportunity to make comments and ask questions of people knowledgeable about the details of our project. The project plans may be revised based on your input before we submit our application to the County.

This meeting is part of the County zoning process; however, County Planning Department staff will not participate in the meeting. The Partnership is planning to submit our official plans to the County Planning Department in the future. You will receive a notice from the County about this submittal once the application has been made.

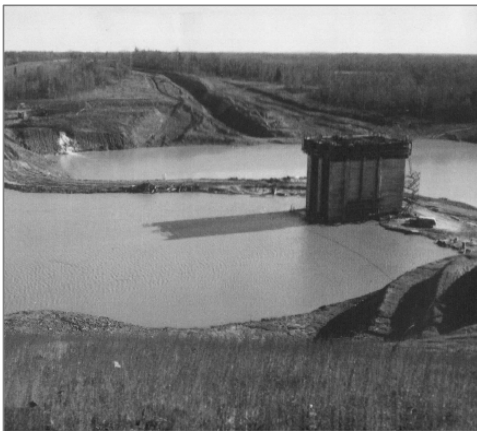
We would appreciate your attendance and input at the community meeting. If you have questions before the meeting, please email contact@westernintakepartnership.com. More information about the project can be viewed on the project website at www.westernintakepartnership.com

Sincerely,



C. Jeff Adkins, P.E.
WIP Program Manager

Jordan Lake's Origin Story



- Cape Fear River Basin long prone to flooding
- Reservoir authorized 1963, constructed 1967-82
- Federally Authorized Purposes
 - ✓ Flood Control
 - ✓ Water Quality
 - ✓ Water Supply
 - ✓ Recreation
 - ✓ Fish & Wildlife Conservation
- State of North Carolina administers Jordan Lake water supply pool (~100 mgd yield)

Western Intake Partnership

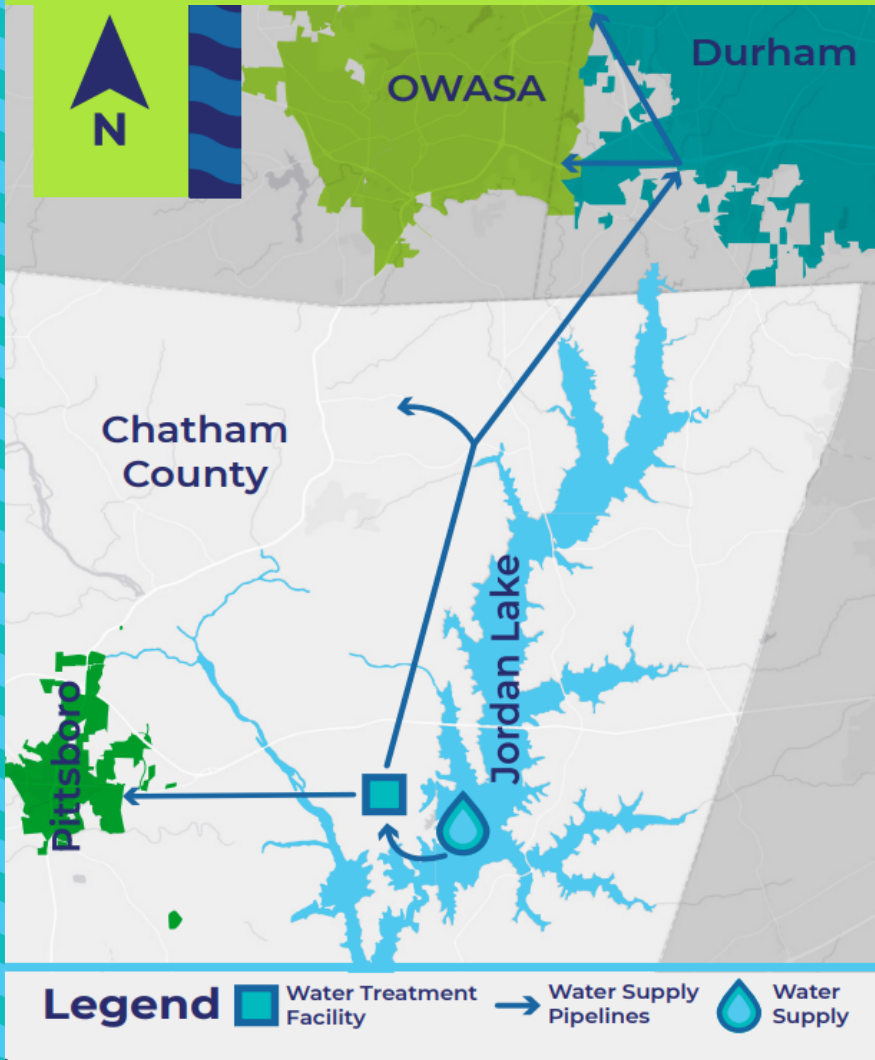
Mission

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

Core Values

- *Quality*
- *Sustainability*
- *Transparency*
- *Equity*
- *Partnership*



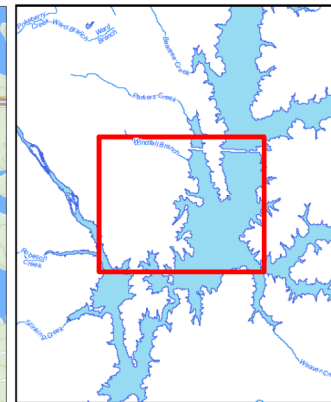
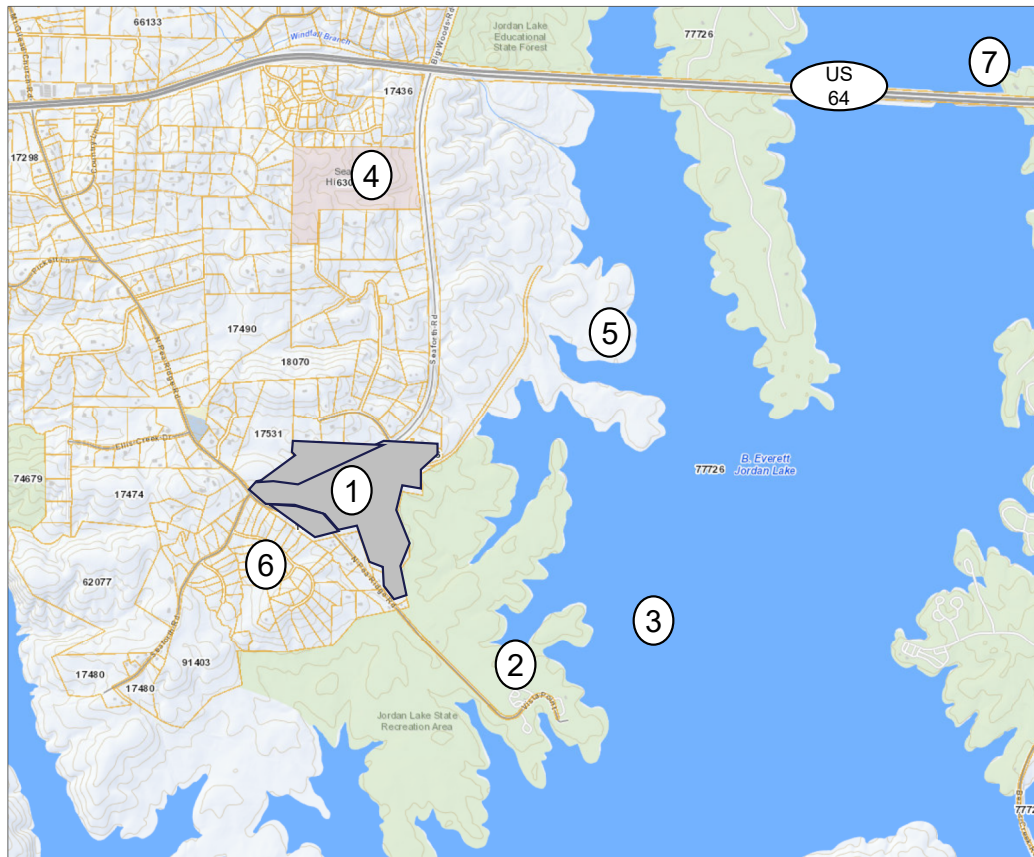


WIP Purposes

- Access Partners' Jordan Lake allocations
- Jointly plan, design, construct and operate:
 - *Jordan Lake Intake & Raw Water PS/ Pipeline*
 - *New Regional Water Treatment Facility (initial capacity ~27 mgd, plans for future expansion)*
 - *Finished Water Transmission Pipelines to each Partner (~26 miles total)*

Overview – Western Intake Partnership Project Locations

Chatham County Tax Map



0 0.475 0.95 mi

Service Layer Credits: Chatham County, Chatham County GIS

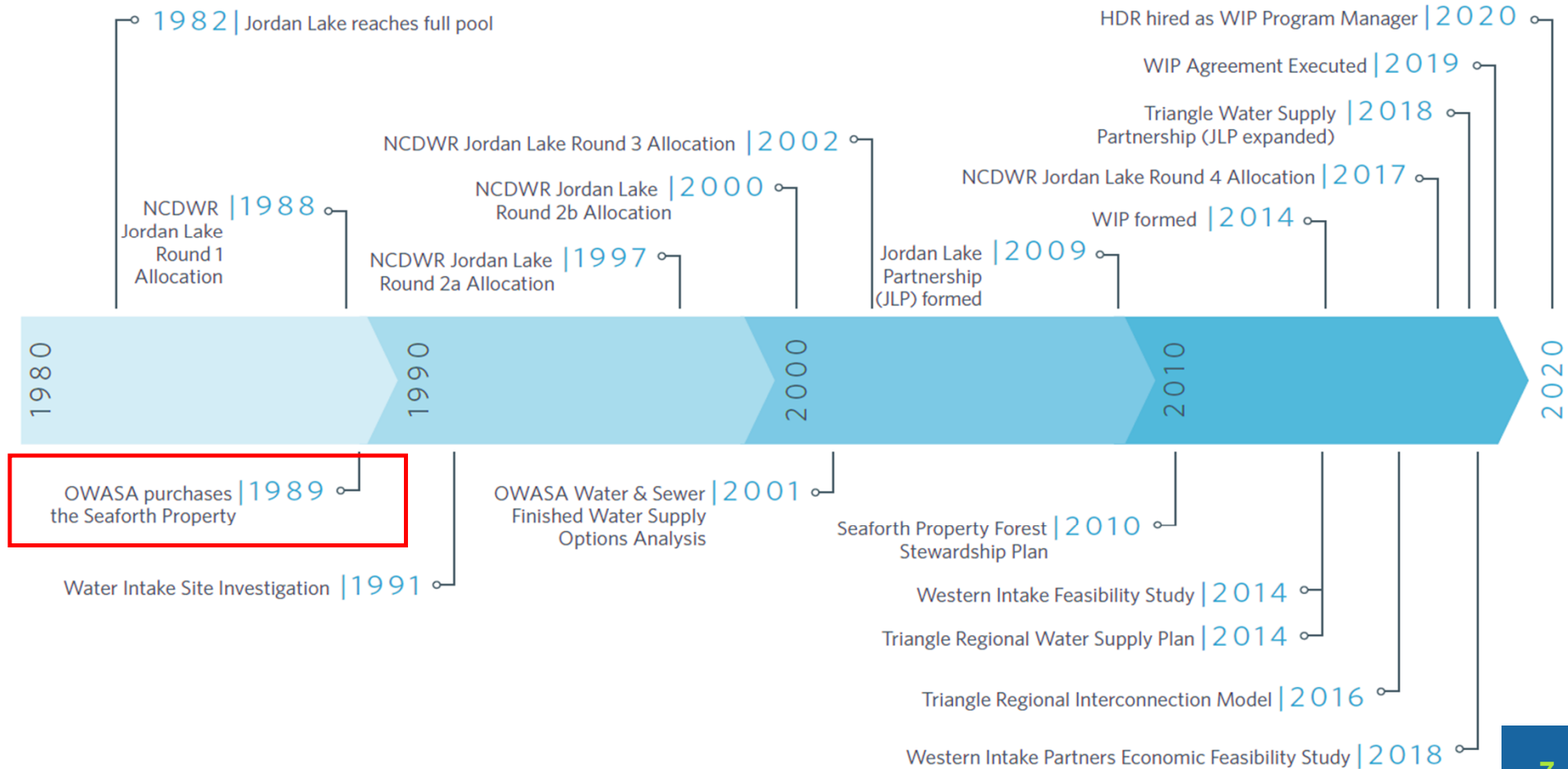
Date: 1/3/2020
Time: 11:08:34 AM



Areas of Significance

- ① OWASA Seaforth property
- ② Vista Point State Rec Area
- ③ Proposed Water Intake
- ④ Seaforth High School
- ⑤ USACE/State lands around lake
- ⑥ Seaforth Landing Neighborhood
- ⑦ Cary-Apex Water Intake

Western Intake Partnership Milestones





Western Intake
Partnership

Project Schedule

The project is planned to proceed in three phases. We are aiming to make the facilities operational by 2031. Our anticipated schedule is shown below and subject to change.

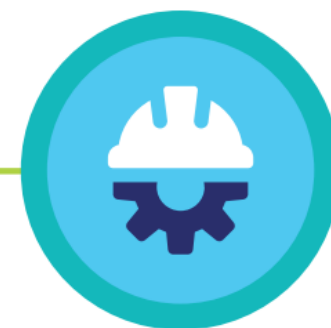


Planning & Permitting
2020-2024

WE ARE HERE



Design & Bidding
2024-2027



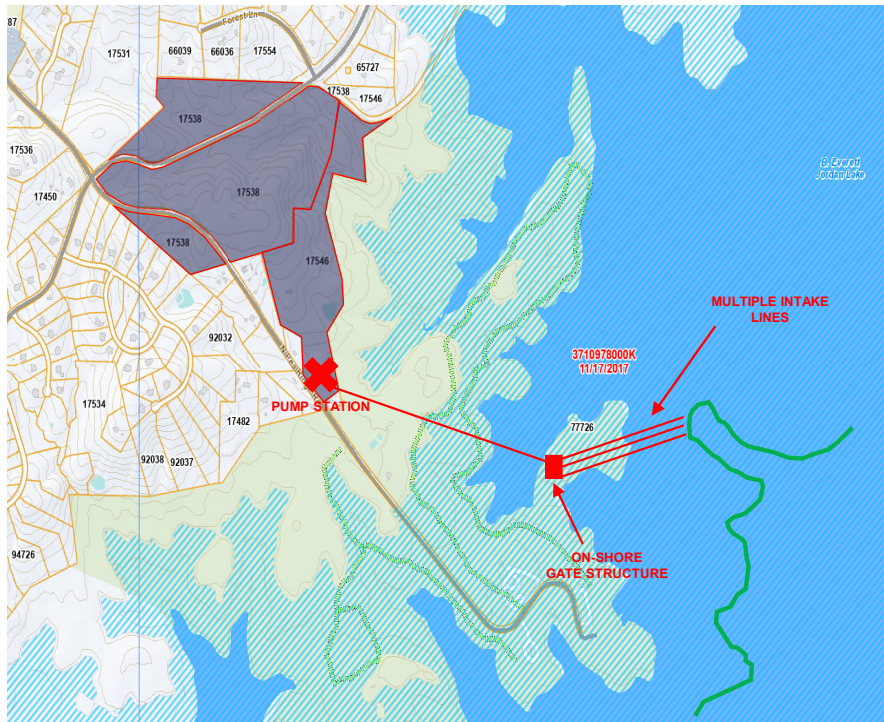
**Construction
& Start-Up/
Commissioning**
2027-2031



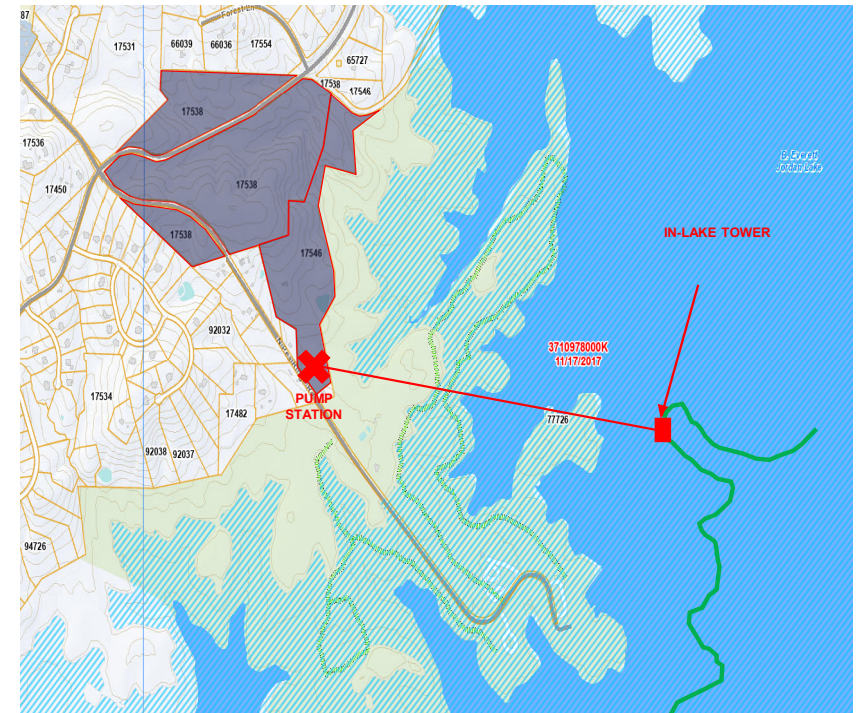
**A new raw water intake
and pump station on
the west side of
Jordan Lake.**



Concepts for Raw Water Intake and Tunnel to RWTF



Submerged Screen Intake



Tower Intake

What's included in a water plant?



A regional water
treatment plant.

- ~10-20 employees typical
 - Plant tours for student groups are common
- 2+ entrances
- Fencing & gates
- Physical security (CCTV cameras, key-card access for gates & buildings)
- Employee & visitor parking
- Administration offices
- Laboratory
- Maintenance shop
- Electrical power supply
- Emergency generators
- Storage tanks for untreated and treated water
- Treatment basins & facilities
- Chemicals to treat the water
- Disinfection process
- Treated water (“finished water”) pump station
- Facility to thicken, store & haul away solids/sediments from treatment process
- Roads, stormwater management
- Space for future expansion

Aerial View of Preliminary Site Plan



Preliminary Site Plan/Landscape Plan



Preliminary Planting/Landscape Plan



VIEW 1



VIEW 4



VIEW 2



VIEW 5

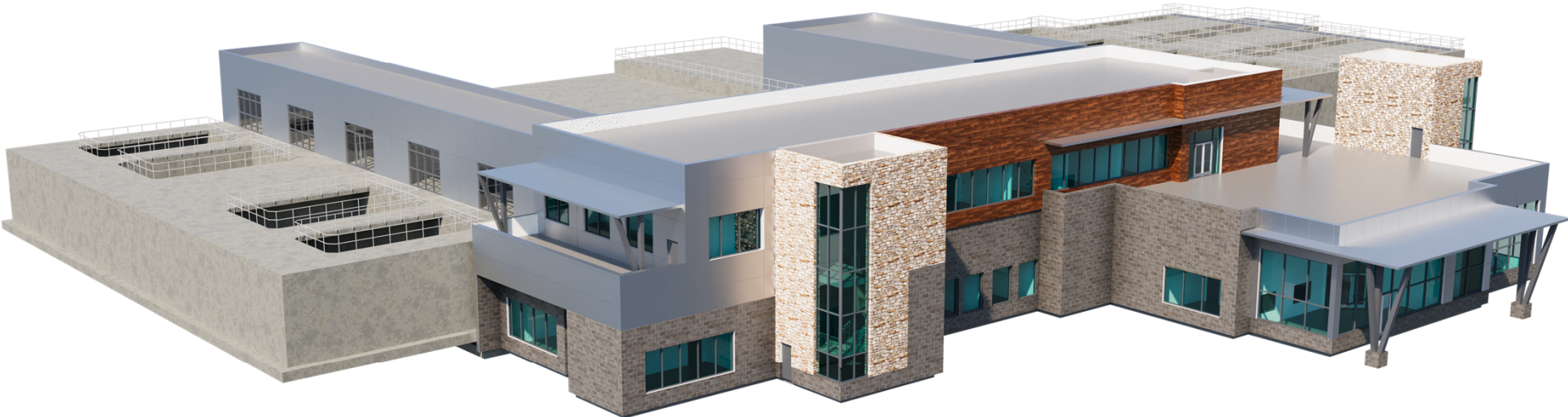


VIEW 3

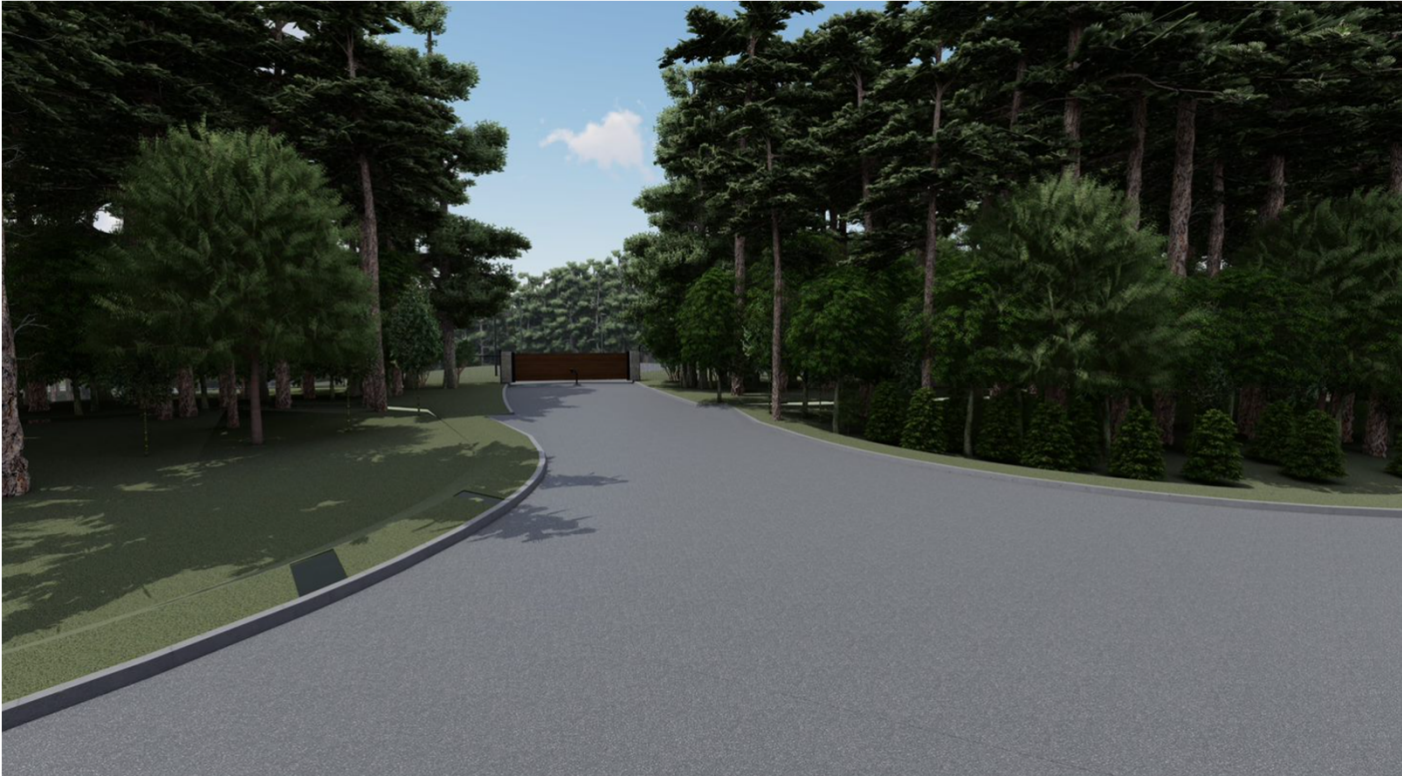


VIEW 6

Tentative Operations Building Visual – Natural Aesthetic



View of Entrance from N. Pea Ridge Road



Common Questions Received

- Vegetated buffers – screening views into water plant
- Traffic
- Noise
- Lighting
- Chemicals and Odors
- Groundwater
- Community commitment

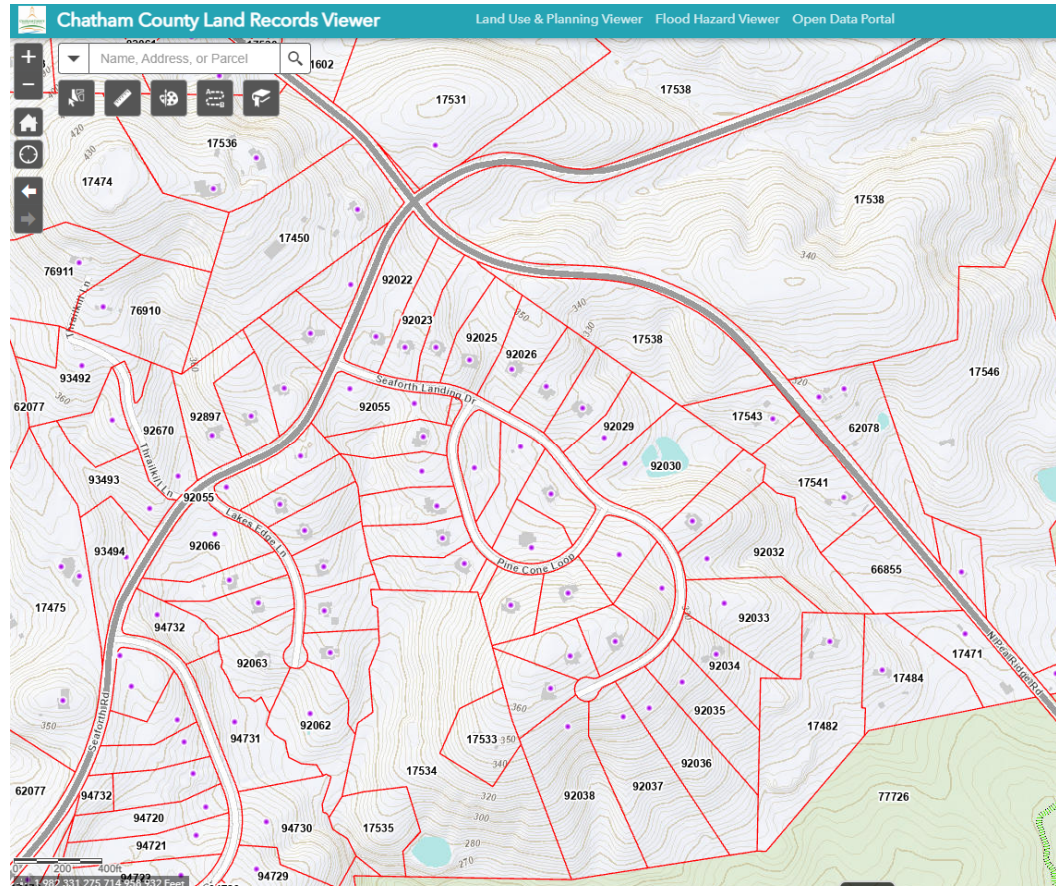
Views into Plant Site – Vegetated Buffer

- Wooded buffers to shield Water Plant from view
 - 50-100 ft vegetated buffer
 - Additional plantings designed for extra screening beyond natural growth
- Height of structures expected to be below tops of trees



Traffic

- WIP coordinating with NCDOT for guidance / requirements
- During construction
 - Bulk of construction traffic in middle 2 years (3 years total)
 - Peak 100-150 construction staff
 - Concrete, materials, equipment, hauling away
 - Transmission pipeline installation on Seaforth & N Pea Ridge
- When plant is operating
 - Small number of employees – ~10-20 - not impactful to traffic
 - Deliveries, service vehicles infrequent (weekday, daytime)



Noise

- Vegetated buffers help mitigate off-site noise
- Equipment that creates significant noise (ex: pump motors) to be specified with specific dB limits
- Pumps and emergency generators will be placed in buildings designed with sound attenuation
- Noise study – design
- Vibration during construction or operation – there will be measurements and notifications as needed during construction (e.g., blasting would have notifications to immediate neighbors)

Lighting

- Designing to limit offsite light by using fixtures that limit up-lighting into the sky
- Provide only the necessary amount of on-premise lighting
- Energy-efficient LED, sodium fixtures (warm color)
- Motion sensors, timers to limit unnecessary lighting
- Will comply with County ordinances on lighting

Chemicals and Odors

- Preliminary list of chemicals:
 - Coagulant (such as alum or ferric sulfate)
 - Caustic and/or lime
 - Polymer
 - Sodium Hypochlorite for disinfection
 - Fluoride
 - Corrosion Inhibitor
 - Ozone
 - Permanganate
 - Aqua Ammonia
 - Calcium thiosulfate or bisulfite (for dechlorination)
- Chemicals will be stored in accordance with County and State Building Codes
- All chemicals will be liquid (except ozone, which is generated as needed, and possibly also a dry polymer) and stored in tanks in a building as in the photo
- Most chemicals will be over 6,000 gallons stored so that chemicals can be purchased in truckloads so less trucking required
- No detectable odors are expected offsite



Groundwater

- Impact on wells – construction and operation
- Based on available groundwater data and preliminary findings, it appears that the facilities planned can be designed to not impact offsite wells.
- As part of the contract documents, dewatering for construction should be specified to be controlled by the Contractor to similarly not impact offsite wells.

Community Commitment

- Partners, including Chatham Co., committed to being good neighbor
 - *Sessions like today with community is part of how we live out Partnership's core values: Quality, Sustainability, Transparency, Equity, Partnership*
- WIP is focused only on water supply, not wastewater
- WIP wants to hear constructive ideas for building long-term, “good-neighbor” relationship
 - *County recognizes existing development has private or community wells*

How to Submit a Comment



Submit a comment on the website westernintakepartnership.com using the online comment form.



Mail a letter to 555 Fayetteville Street, Ste 900, Raleigh, NC 27601.



Email:
contact@westernintakepartnership.com

SCAN TO VISIT THE
PROJECT WEBSITE



You can sign up to join our stakeholder email list on the project website:
westernintakepartnership.com



Questions & Discussion