Public Meeting for the Middle Chattahoochee Regional Water & Sewer Authority Intake, Treatment Plant and Distribution System

July 25, 2022

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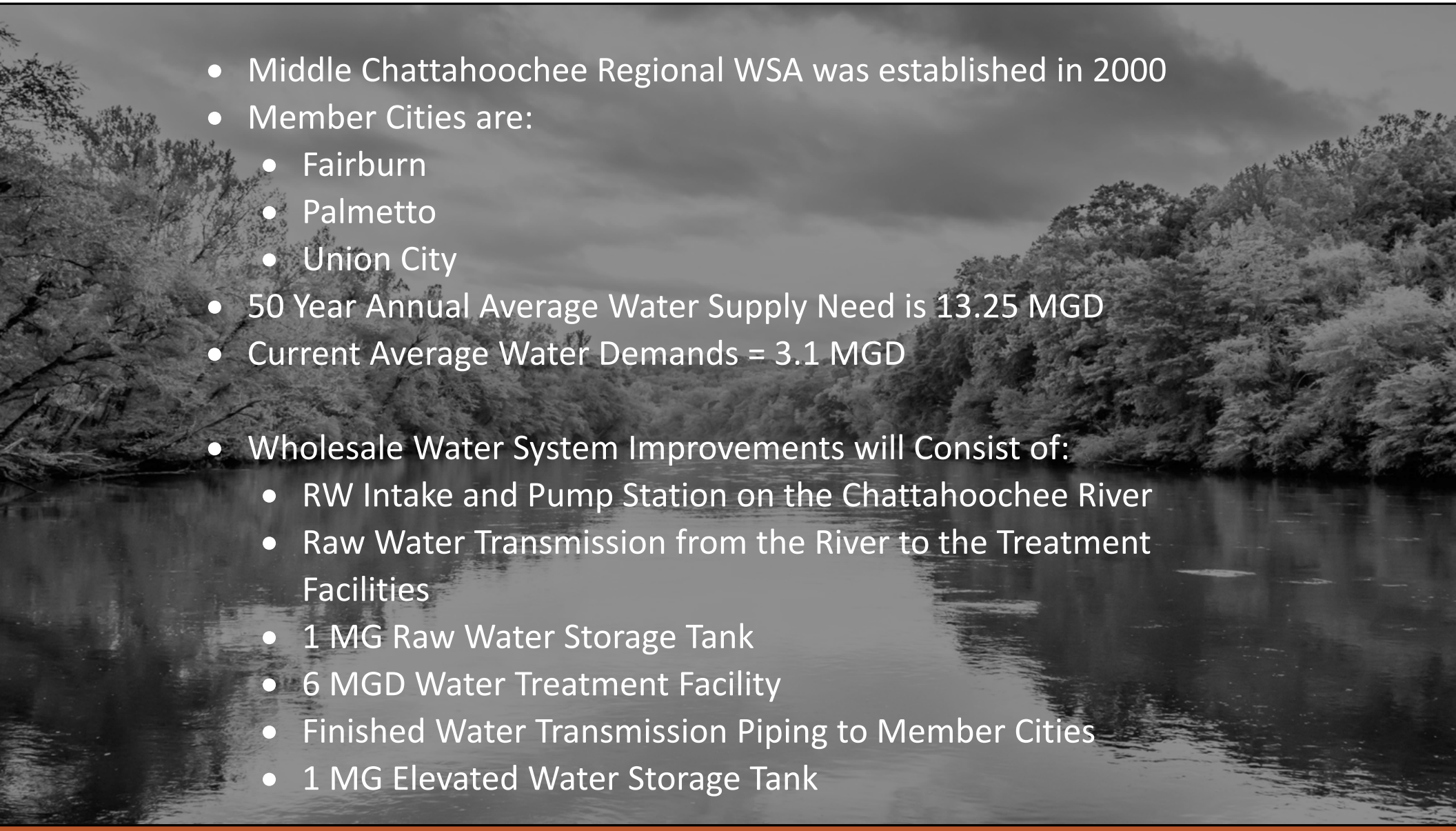


- Middle Chattahoochee Regional WSA was established in 2000
- Member Cities are:
  - Fairburn
  - Palmetto
  - Union City
- 50 Year Annual Average Water Supply Need is 13.25 MGD
- Current Average Water Demands = 3.1 MGD

- Wholesale Water System Improvements will Consist of:
  - RW Intake and Pump Station on the Chattahoochee River
  - Raw Water Transmission from the River to the Treatment Facilities
  - 1 MG Raw Water Storage Tank
  - 6 MGD Water Treatment Facility
  - Finished Water Transmission Piping to Member Cities
  - 1 MG Elevated Water Storage Tank

- The Middle Chattahoochee Regional Water & Sewer Authority is applying for a loan to finance the construction of a proposed raw water intake from the Chattahoochee River, treatment plant and distribution system through the Drinking Water State Revolving Loan administered through the Georgia Environmental Financing Authority (GEFA).

- This public meeting is a requirement of the State Environmental Review Process associated with the GEFA loan.

- Water supply is currently provided to member cities Fairburn and Union City through the purchase of water from Atlanta. There is no contract to assure supply or pricing.

- The City of Palmetto has its own small water supply reservoir and supplements its water by purchasing water from the Coweta County Water and Sewer Authority.

•The three member cities have an intergovernmental agreement to purchase water from the Authority and had previously been told by GA EPD to pursue a water supply reservoir.

- During project development, the Authority considered several alternatives to obtain the desired water supply:
  - No-Action Alternative – Continue to rely solely on the existing purchase of water from Atlanta without a contract to assure supply or pricing .
  - Reservoir – Construction of a new water supply reservoir on a water source capable of maintaining the desired raw water storage with pump diversion. The Authority had previously pursued this alternative however changing circumstances resulted in this not being the least environmentally damaging alternative.
  - Elevated Storage Tanks – Construction of new elevated tanks capable of storing the desired amount of raw water. Based on the need for 20 days of storage, this would require 130-260 tanks

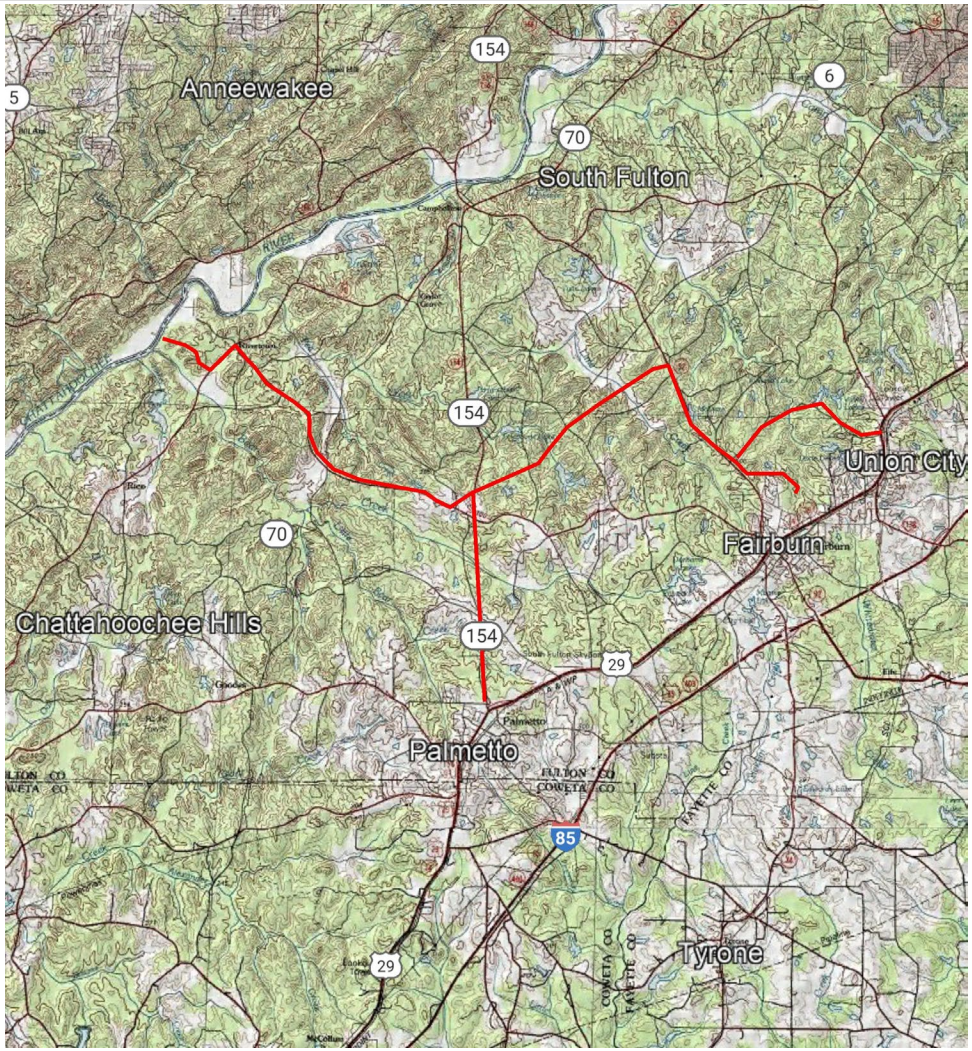
- Dismissed as not feasible: Purchase Water from Other Suppliers – There are no nearby suppliers that have sufficient and/or permitted supply to assure long-term supplies for the Authority and/or willing to contract long-term for the needed supply.

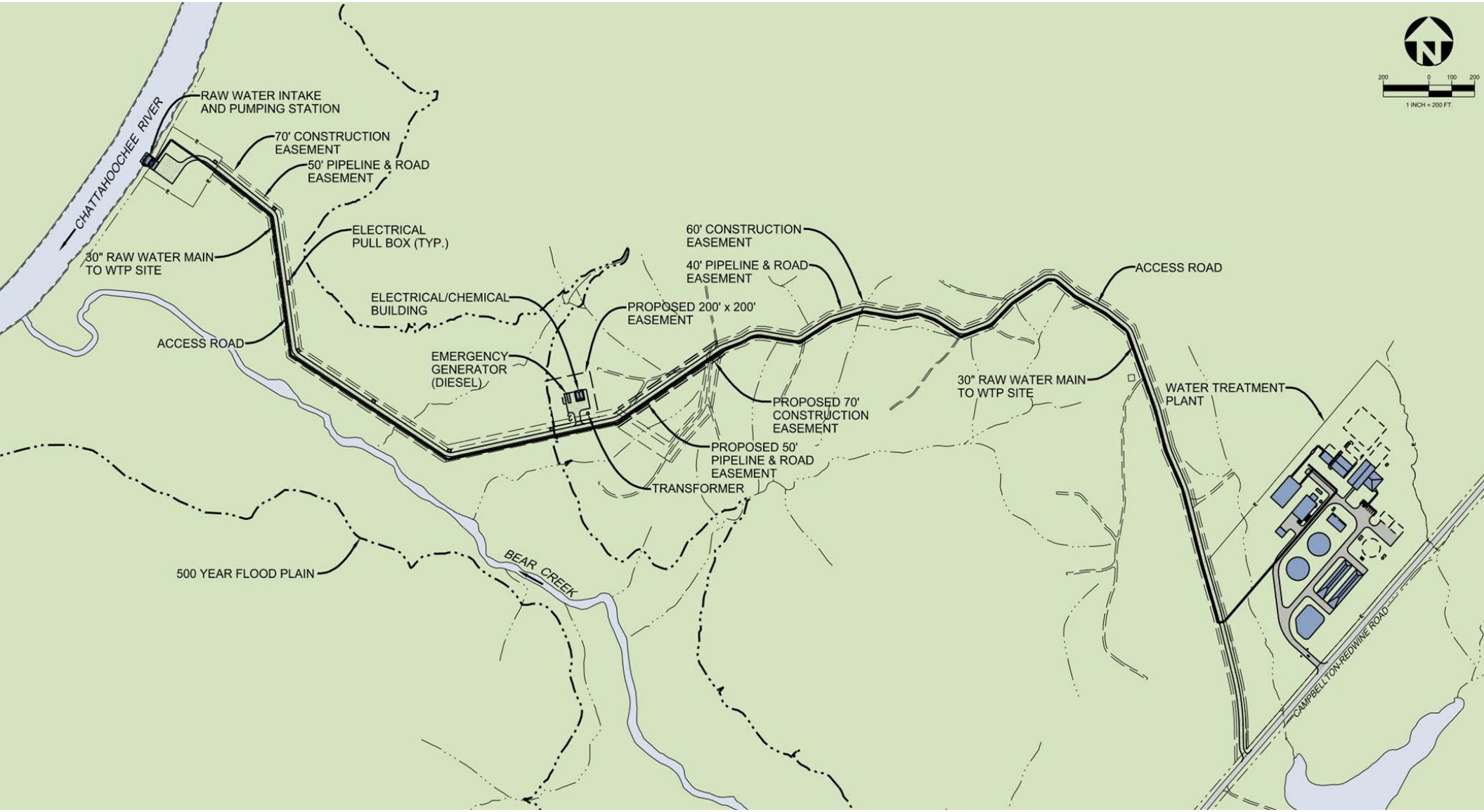
- Preferred Alternative – Direct Withdrawal from the Chattahoochee River.
  - Became a feasible alternative with the adoption of the ACF Water Control Manual by the US Army Corps of Engineers in how it would operate the system of its large reservoirs.

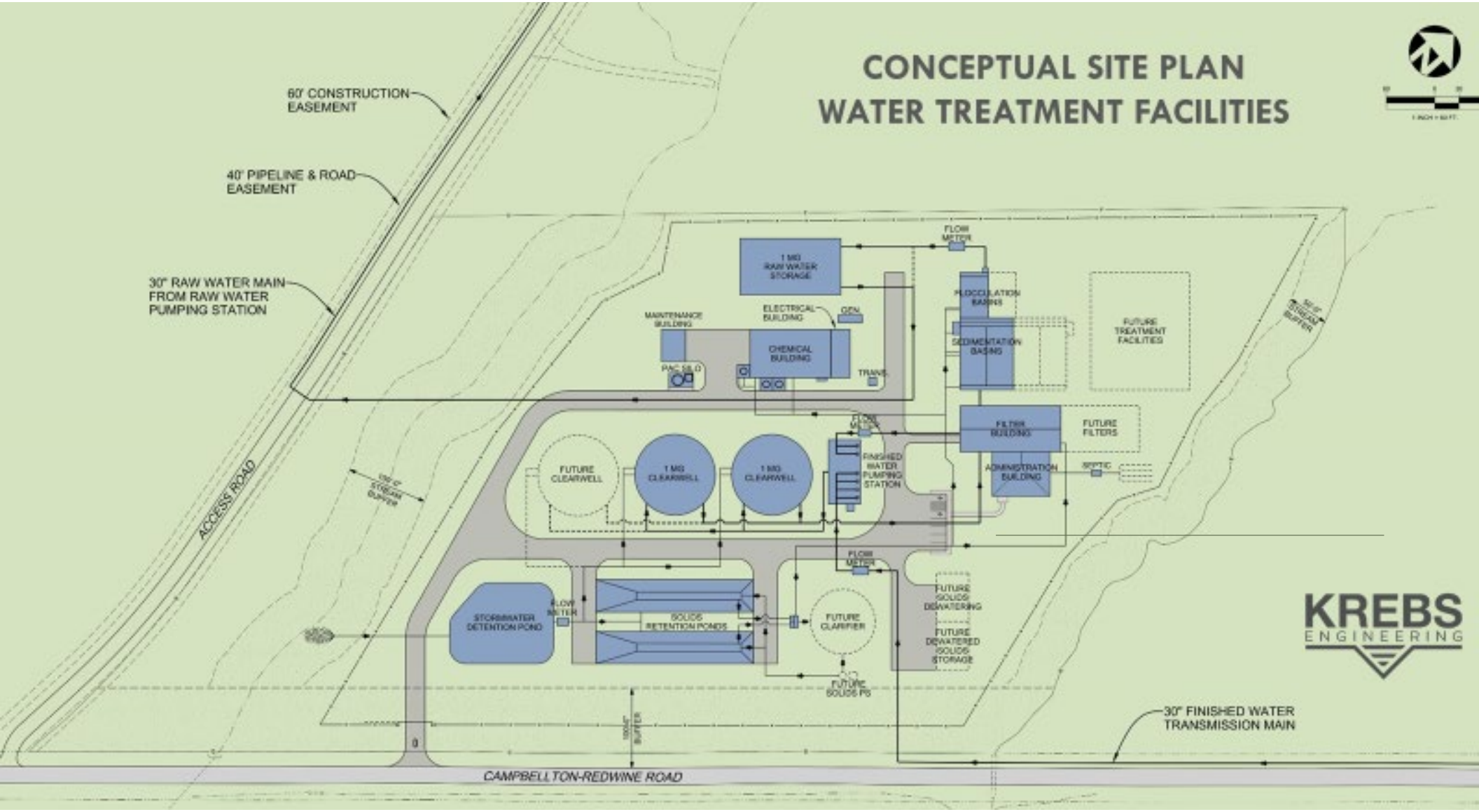
- Proposed raw water intake is located along the Chattahoochee River at the site of the prior intake associated with the Bear Creek Reservoir, ~1.5 miles from the proposed treatment plant in Chattahoochee Hills.

- Distribution line is approximately 17.4 miles and proposed along S. Fulton Parkway.

- Each member city is responsible for having its own water storage tank and the Authority will have one to serve the system.




CHATTAHOOCHEE RIVER
RAW WATER INTAKE AND PUMPING STATION
70' CONSTRUCTION EASEMENT
50' PIPELINE & ROAD EASEMENT
ELECTRICAL PULL BOX (TYP.)
30" RAW WATER MAIN TO WTP SITE
ELECTRICAL/CHEMICAL BUILDING
ACCESS ROAD
EMERGENCY GENERATOR (DIESEL)
60' CONSTRUCTION EASEMENT
40' PIPELINE & ROAD EASEMENT
PROPOSED 200' x 200' EASEMENT
PROPOSED 70' CONSTRUCTION EASEMENT
PROPOSED 50' PIPELINE & ROAD EASEMENT
TRANSFORMER
ACCESS ROAD
30" RAW WATER MAIN TO WTP SITE
WATER TREATMENT PLANT
500 YEAR FLOOD PLAIN
BEAR CREEK
CAMPBELLTON-REDWINE ROAD
200 0 100 200
1 INCH = 200 FT.


CONCEPTUAL SITE PLAN
WATER TREATMENT FACILITIES
60' CONSTRUCTION EASEMENT
40' PIPELINE & ROAD EASEMENT
30" RAW WATER MAIN FROM RAW WATER PUMPING STATION
ACCESS ROAD
1 MG RAW WATER STORAGE
FLOW METER
MAINTENANCE BUILDING
ELECTRICAL BUILDING
GEN
CHEMICAL BUILDING
PAC SILO
TRANS
FLOCCULATION BASINS
SEDIMENTATION BASINS
FUTURE TREATMENT FACILITIES
FILTER BUILDING
FUTURE FILTERS
ADMINISTRATION BUILDING
SEPTIC
FUTURE CLEARWELL
1 MG CLEARWELL
1 MG CLEARWELL
FINISHED WATER PUMPING STATION
FLOW METER
FLOW METER
STORMWATER DETENTION POND
SOLIDS RETENTION PONDS
FUTURE CLARIFIER
FUTURE SOLIDS DEWATERING
FUTURE DEWATERED SOLIDS STORAGE
FUTURE SOLIDS PS
30" FINISHED WATER TRANSMISSION MAIN
CAMPBELLTON-REDWINE ROAD
KREBS ENGINEERING

Water Treatment Capacity and Treatment Considerations for Initial Phase

- 1 MG Raw Water Storage Tank
- Conventional Rapid Mixing and Flocculation Basins (with Vertical Turbine Flocculators)
- Two (2) Sedimentation Basins with Plate Settlers and Continuous Sludge Removal
- Four (4) Dual Media (Sand and Anthracite) Gravity Filters in a Filter Building.
- Chemical Storage and Feed Systems (chlorine dioxide, powder activated carbon, alum, bulk sodium hypochlorite, liquid lime, fluoride, phosphate, and polymer) in a Chemical Building
- Two (2) 1 MG Concrete Clearwells and Finished Water Pumping Station
- Solids Retention Ponds & Sludge Pumping Station
- Administrative Building and Maintenance Building
- SCADA System and Diesel Generator(s) for Standby Power

PLAN LEGEND

- RECEPTION
- OFFICE
- ADMINISTRATIVE
- LAB/CONTROL
- TOILETS/LOCKER ROOMS
- STORAGE
- MEP/SERVICE
- FILTER BUILDING
- CIRCULATION

STUDIO 2H DESIGN
Architecture • Interior Design • Planning

MIDDLE CHATTAHOOCHEE WTP

FIGURE 5.10 - ADMINISTRATION BUILDING FLOOR PLAN

0' 4'-0" 8'-0" 16'-0"
SCALE: 3/32" = 1'-0"

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STUDIO 2H DESIGN
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MIDDLE CHATTAHOOCHEE WTP

FIGURE 5.11 - ADMINISTRATION BUILDING & FILTER BUILDING PERSPECTIVE RENDERING

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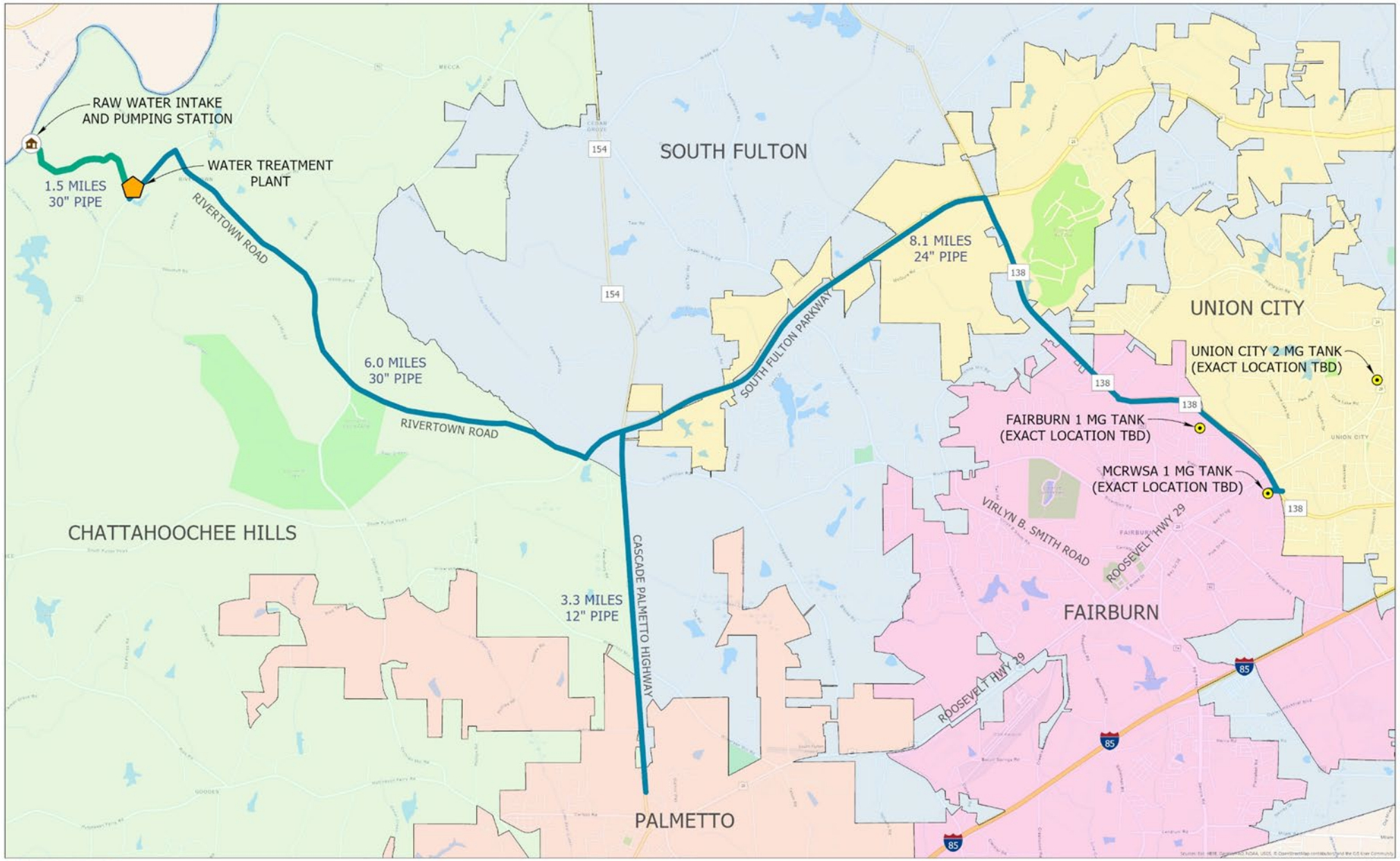
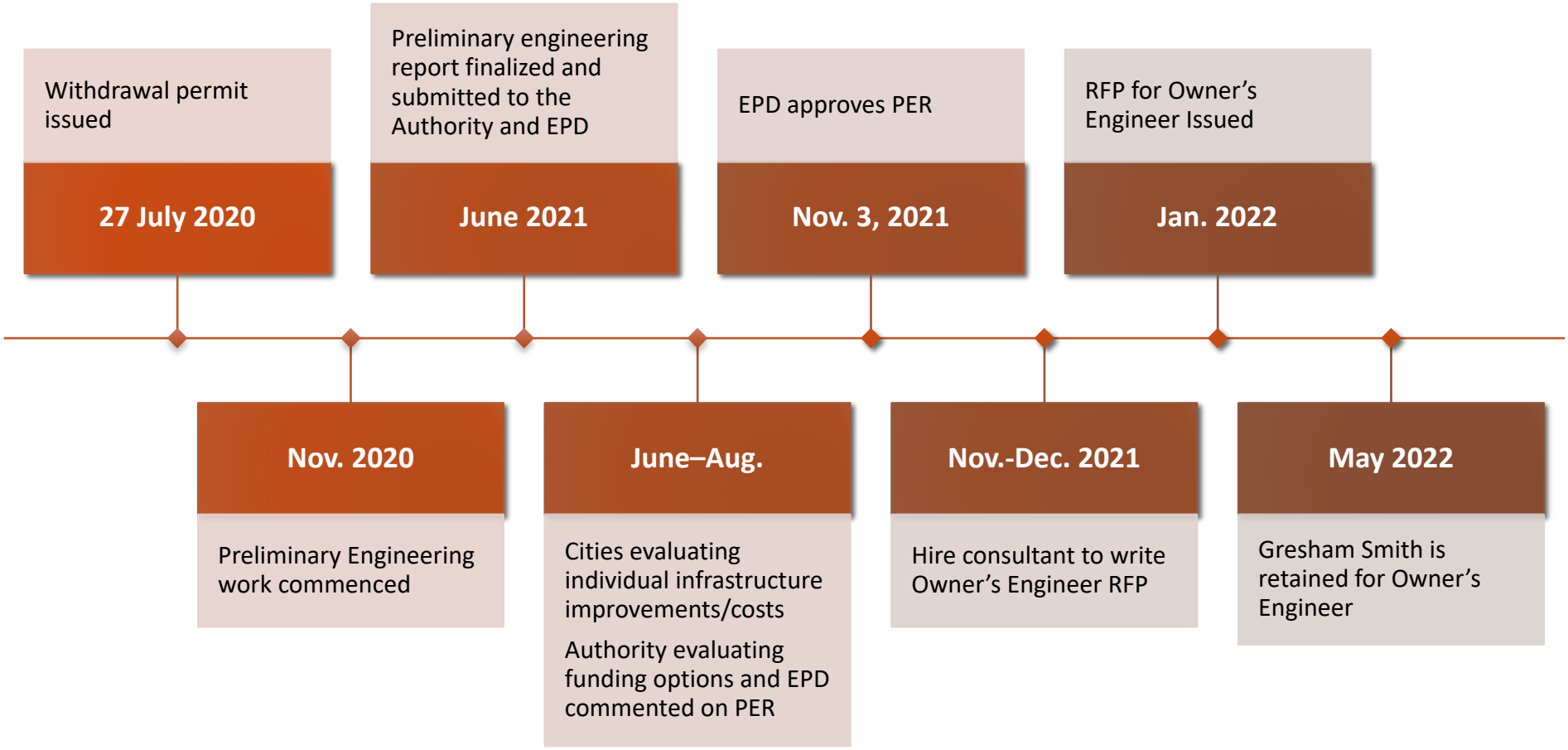


KREBS ENGINEERING

FIGURE 6.2 WHOLESALE WATER SYSTEM IMPROVEMENTS
SOUTH FULTON PARKWAY ROUTE

- The proposed project is located such that there will be minimal impacts to Waters of the United States (i.e., streams/wetlands).
- There are currently no records of high priority federally listed or state protected species within the proposed project site.
- The proposed project site is currently undeveloped and contains no existing historical structures.
- Review of currently available information indicated that there are no indications of archeological resources located within the proposed project site.
- The proposed project is located such that there will be no adverse impacts related to environmental justice.

Recent Project Activity



Preliminary Schedule

Milestone	Date
Perform Wholesale Rate Study and Secure Project Funding	September-December 2022
Issue RFQ for detailed design	November 2022
Begin Search/Hiring for Key Staff	Fall 2023
Begin Pipeline Construction	January 2024
Begin Construction of Water Treatment Facilities	September 2024
Begin Raw Water Intake/Pump Station Construction	January 2024
Begin Construction of Water Storage Tank	February 2024
Start-up and Commissioning of Improvements	Fall 2024

- Construction of the intake, treatment plant and distribution system are estimated to take approximately 24 months.

- Construction will be monitored by Owner's Engineer Gresham Smith representatives to ensure compliance with construction plans and specifications.

Preliminary Cost Estimates

Description of Improvements	Opinion of Cost
Raw Water Intake, Pump Station, and Raw Water Piping to WTP Site	$11,800,000
6 MGD Water Treatment Facility	$38,900,000
30” FW Piping from WTP to Highway 154 (6 Miles)	$10,500,000
24” FW Piping from Highway 154 Along South Fulton Parkway and Highway 138 to New Water Storage Tank (8.1 miles)	$12,100,000
12” FW Piping from Rivertown Road to Palmetto (3.3 miles)	$2,900,000
1 MG Elevated Water Storage Tank	$2,700,000
Administrative Costs	$425,000
Total	$79,325,000

REVISED ESTIMATED FUNDING SOURCES

- The project has been (by Krebs) estimated to cost **$79.325 million** in total. This figure includes a 13% contingency.

- The Authority expects to raise **funds from three sources**.

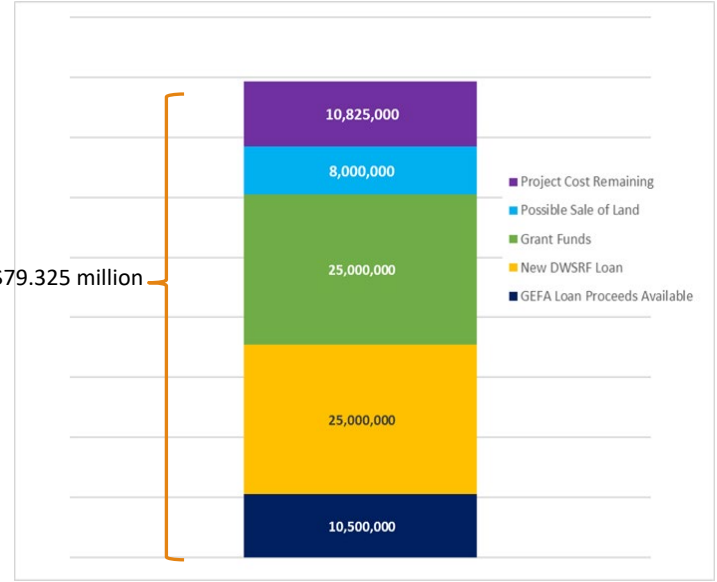
1) **$8 million** from the sale of unneeded property

2) Awarded **$10.5 million** GEFA loan

3) New **$25 million** DWSRF GEFA Loan

4) **$25 million** from Grant Funds, additional GEFA Loans, or revenue bonds

5) **$10.825 Million** from the sale of revenue bonds



- **The project costs, proceeds from sale of land, and bond funding need are all estimated at this point.**

- Additionally, among other factors, the timing of the construction starting and finishing and interest rates will affect the affordability of the project.

Project Cost Information Source: Krebs Preliminary Engineering Report

Resolution to support GEFA application

Supports Authority's submission of the application for a $25 mill loan and acknowledges requirement that Cities back the loan with their full faith and credit and agree to execute documents to this effect if the Authority is awarded the loan

Fairburn adopted on August 23, 2021

Palmetto adopted on August 2, 2021

Union City adopted on August 12, 2021

Questions

Comments must be submitted prior to August 1, 2022.
Please submit comments via email to:

middlechattahoocheeregional@outlook.com