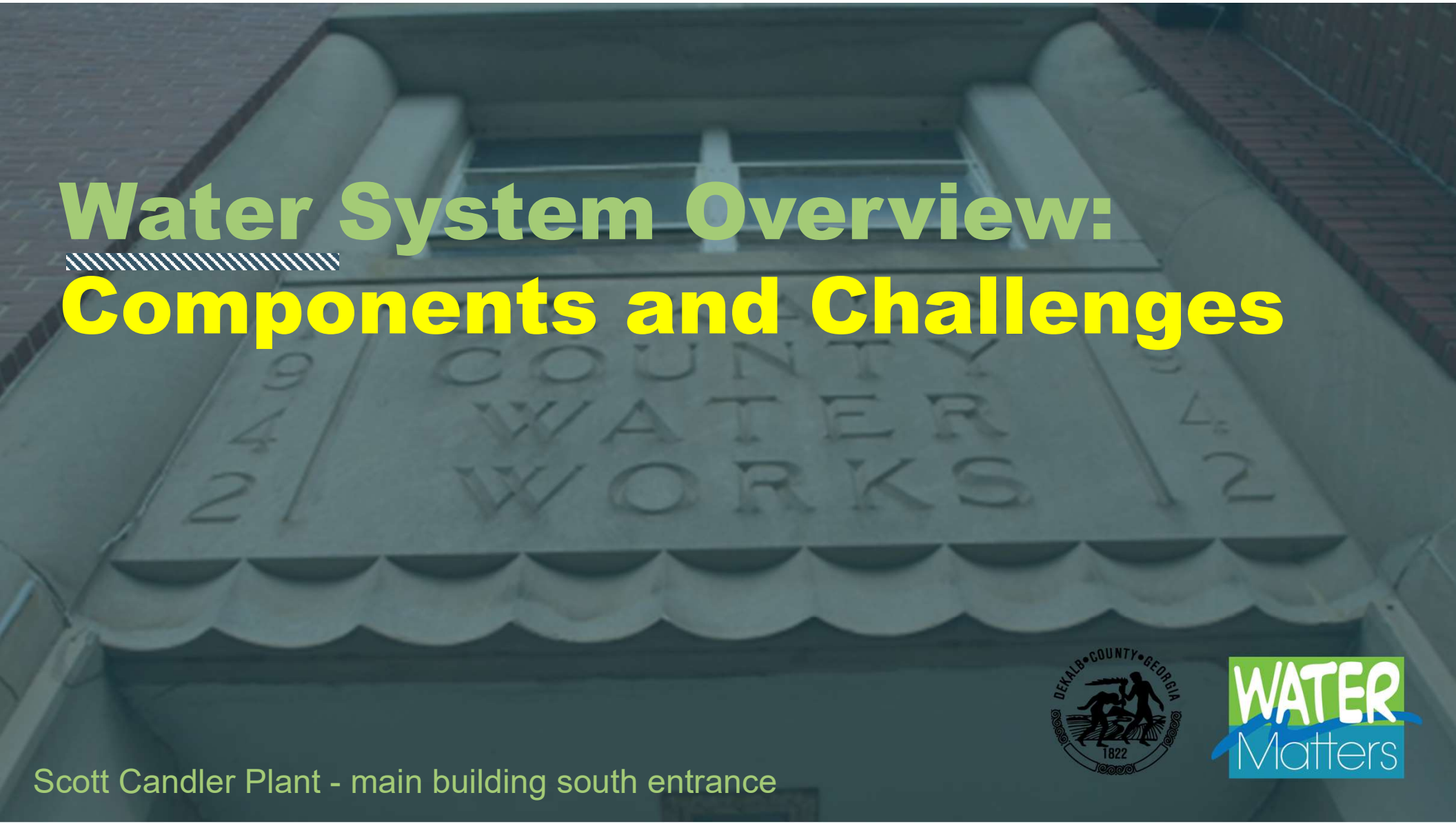
CIP 2024

Scott Candler Water Treatment Plant Improvements

Department of Watershed Management

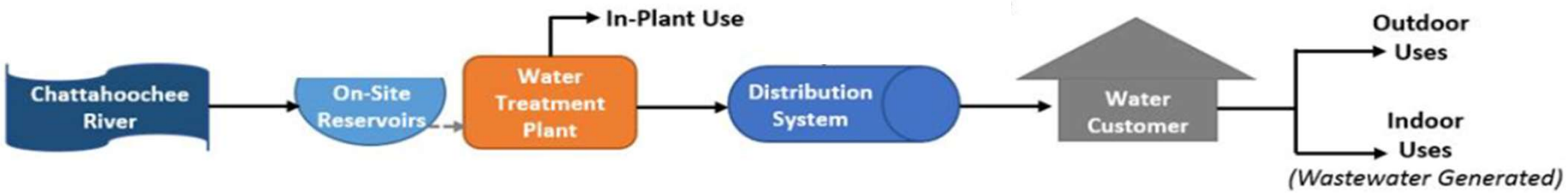
June 20, 2024



Water System Overview:
Components and Challenges

Scott Candler Plant - main building south entrance

County's Single Water Source/Supply

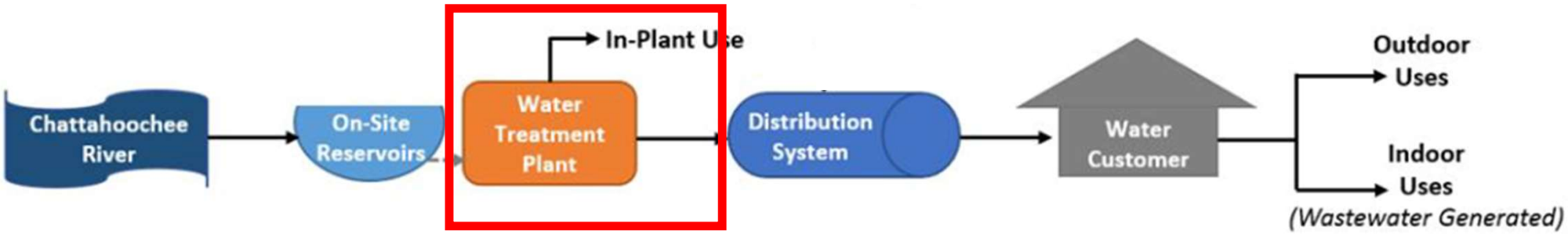


The Chattahoochee River is the County's sole water source.

DeKalb County is the only county in the metro Atlanta area of its size (population served) with one water supply source and one Water Treatment Plant (WTP)"

(Source: DeKalb Water Master Plan 2020)

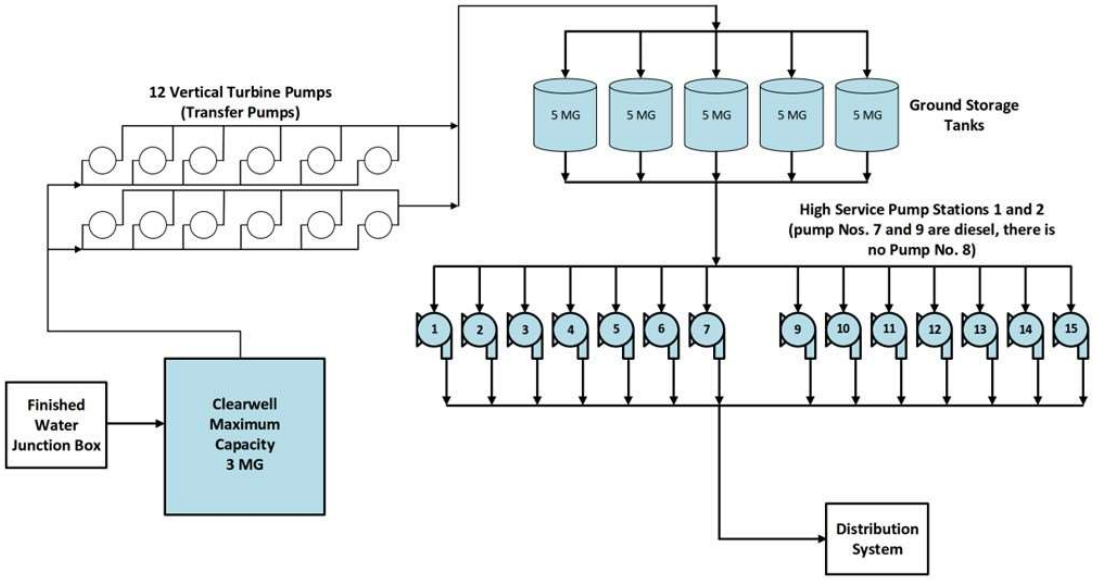
Water Treatment Overview



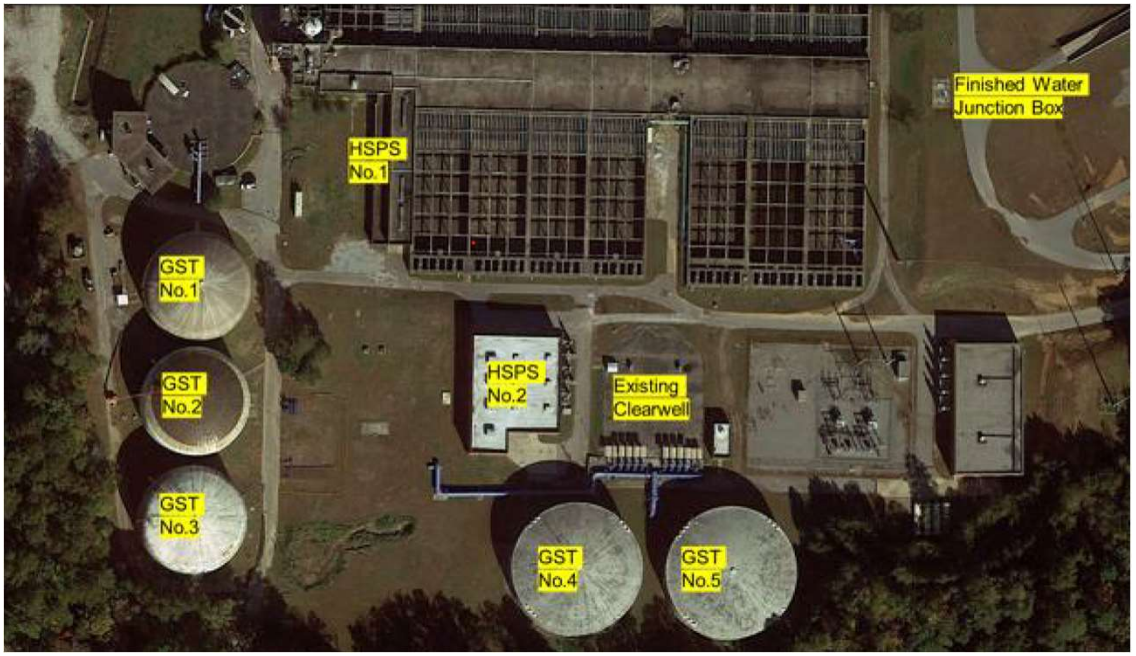
Scott Candler Water Treatment Plant

Scott Candler WTP Needs

- Originally built in 1942. New plant was constructed in 2007.
- Remnants of the old plant remain - especially for components used in pumping to the system.
- Existence of a double point of failure (no redundancy)
- Temporarily lost service at the plant on three previous occasions for different reasons



Remnant aging facilities



Electrical Building – structural issues – project in procurement

Transfer Pump #13 Starter Cabinet

Transfer Pumps

Scott Candler Water Treatment Plant

Solutions

Scott Candler Plant - main building south entrance

Root Cause Analysis and Recommendations

- AECOM root cause analysis
- Brown & Caldwell analysis
- Master Plan recommendations

- Federal and State Support
  - Secured support of US Army Corps of Engineers in grant application
  - Applied for FEMA grant in conjunction with GEMA to address some recommendations

Scott Candler WTP Projects

Recommended Projects (cost estimate $250M):

- Replace remnant portions of the old plant
- Create redundant clearwells
- Redundant primary power supply
- Upgrade transfer pumps
- Upgraded Supervisory Control and Data Acquisition (SCADA) to support remote operations.

Progress to Date

- Work is in progress at the WTP and a portion of the funding for capital projects has been identified, but more investment is needed
  - Completed feasibility study
  - Completed geotechnical to determine the water table
  - Completed historic preservation study
  - Selected the most viable cost-effective option
  - Completed phase 1 design (10% of design)
  - Working on phase 2 design (30% with additional HVAC and construction details)
- Additionally, there are 596 miles of small diameter water pipe to be replaced and 20 miles of transmission mains to be built
- Inflation-driven operational costs

Projects	2025
SCWTP Electrical Building No. 2 Repairs	$ 2,668,160
SCWTP Structural Roof Replacement	$ 2,570,000
SCWTP Transfer Pump Station Improvements	$ 15,000,000
Clearwell and High Service Pump Station Upgrades - Phase A	$ 20,532,000
SCWTP Detention Pond, Roof and Roadhaven	$ 1,500,000
SCWTP Power Resilience	$ 5,230,000
Emergency Drought Response Implementation Plan	$ 450,000
SCWTP Filter Assessment and Evaluation for Upcoming PFAS Regulations	$ 1,000,000
SCWTP Caustic Soda to Liquid Lime Conversion	$ 500,000
Miscellaneous SCWTP Improvement Projects	$ 2,000,000
	$ 51,452,185.00


QUESTIONS?
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