

South Fulton Wastewater Capacity Study

Fulton County Board of Commissioners
February 17, 2021

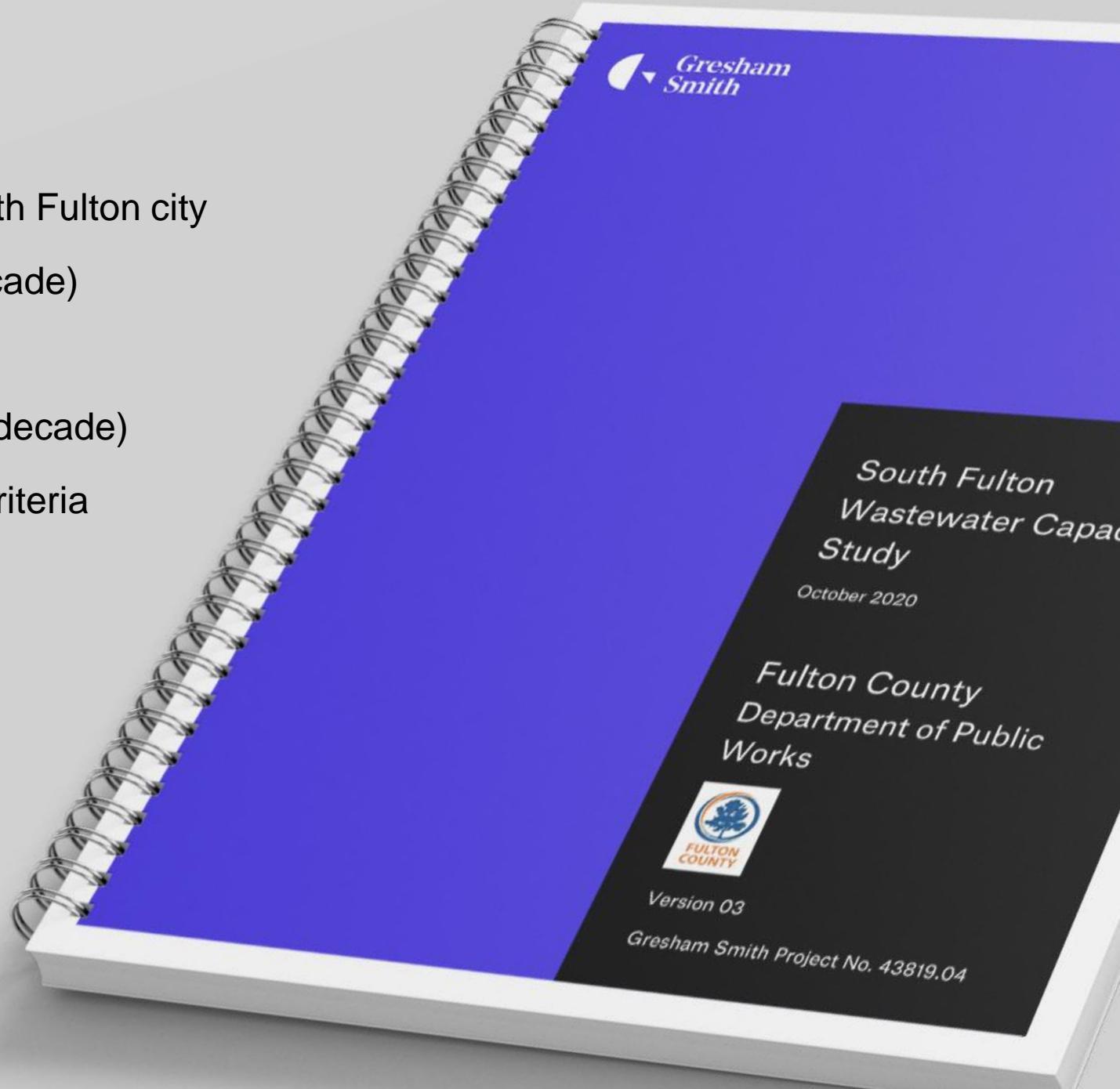


PROJECT GOAL: Working collaboratively with the cities of south Fulton County to utilize current wastewater capacities with planned economic growth and development to identify needed expansions and upgrades to the infrastructure.

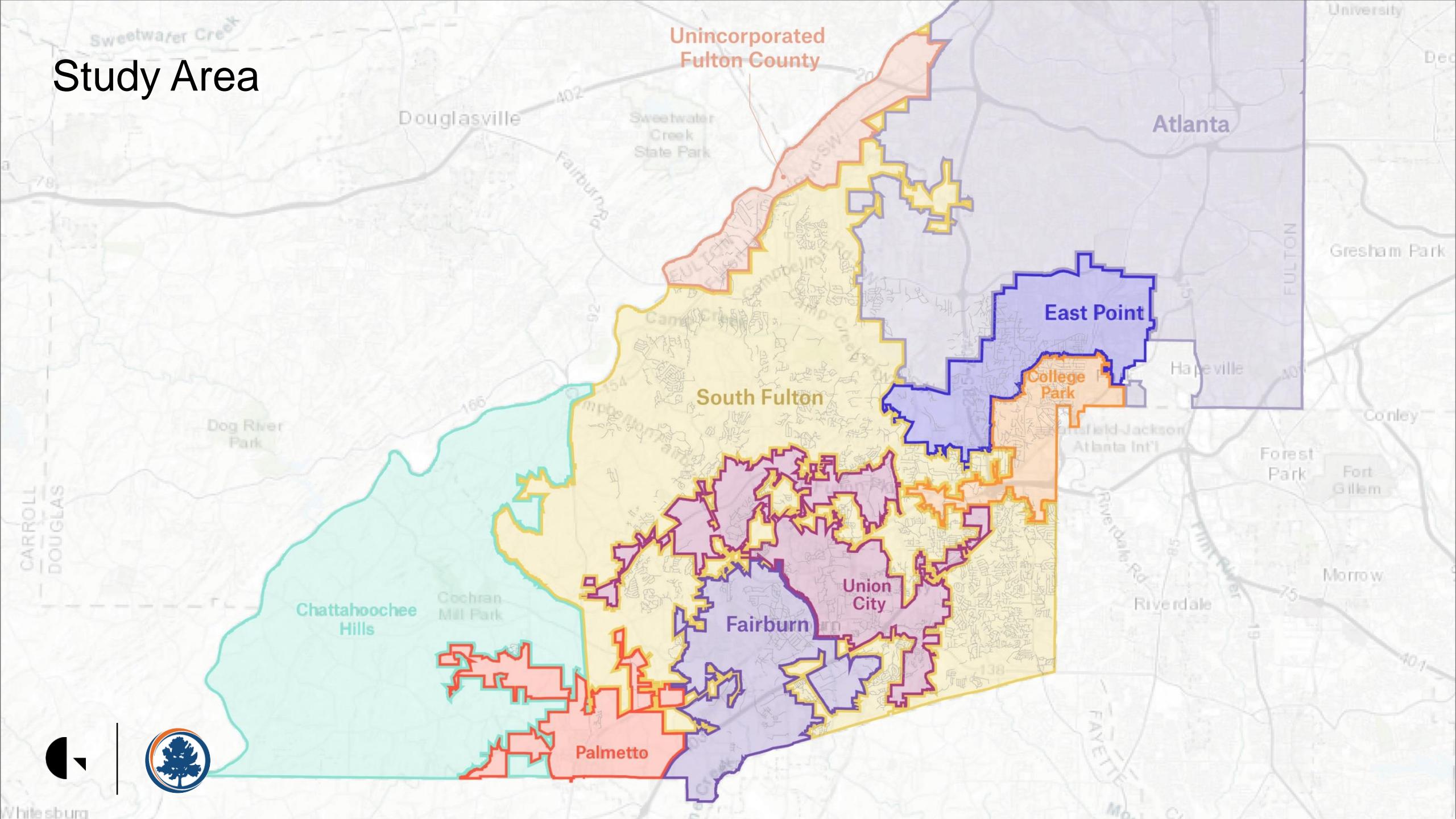


Overall Approach

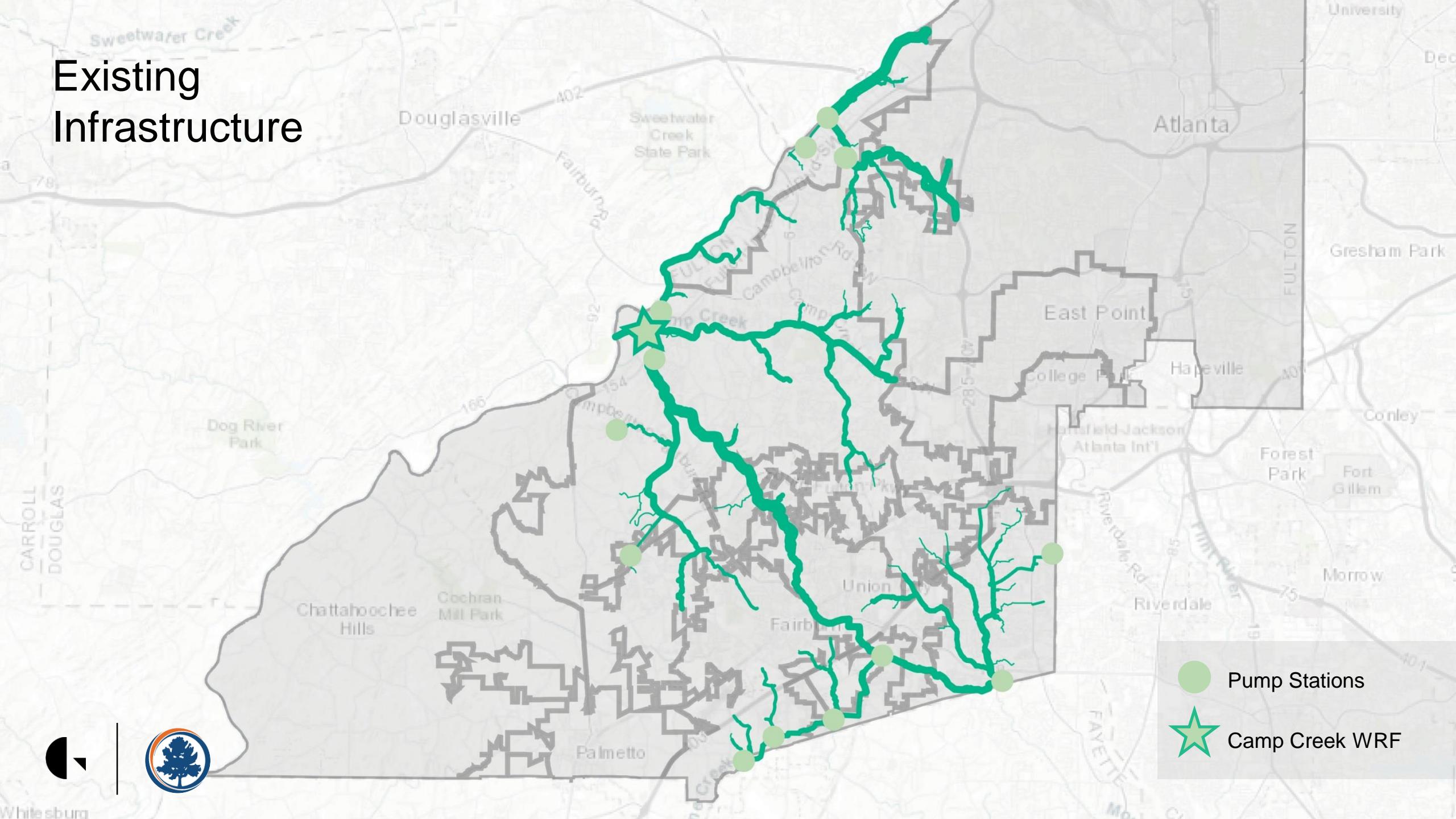
1. Conducted individual meetings with each South Fulton city
2. Coordinated on future flow projections (by decade)
3. Updated 2007 model's pipes/pump stations
4. Updated 2007 model flow disaggregation (by decade)
5. Examined system capacity against planning criteria
6. Modeled iterative upgrades to accommodate future flows (by decade)
7. Assembled planning level cost opinions for upgrades and improvements
8. Compiled all findings into a Capacity Evaluation Report



Study Area



Existing Infrastructure



Planning Criteria

Upsized Pump Stations (*systemwide*)

- Firm pumping capacity increased to meet 2050 max flow

Force Mains (*systemwide*)

- Velocities maintained 2-10 fps

Gravity Sewers (*systemwide*)

- Maintained at less than 75% full

New Service to Chattahoochee Hills

- New regional pump stations (in “villages”)
- New force mains upgradient
- New gravity sewers downgradient

Extended Service in the City of South Fulton

- New gravity sewers, with manholes @ ~400 feet

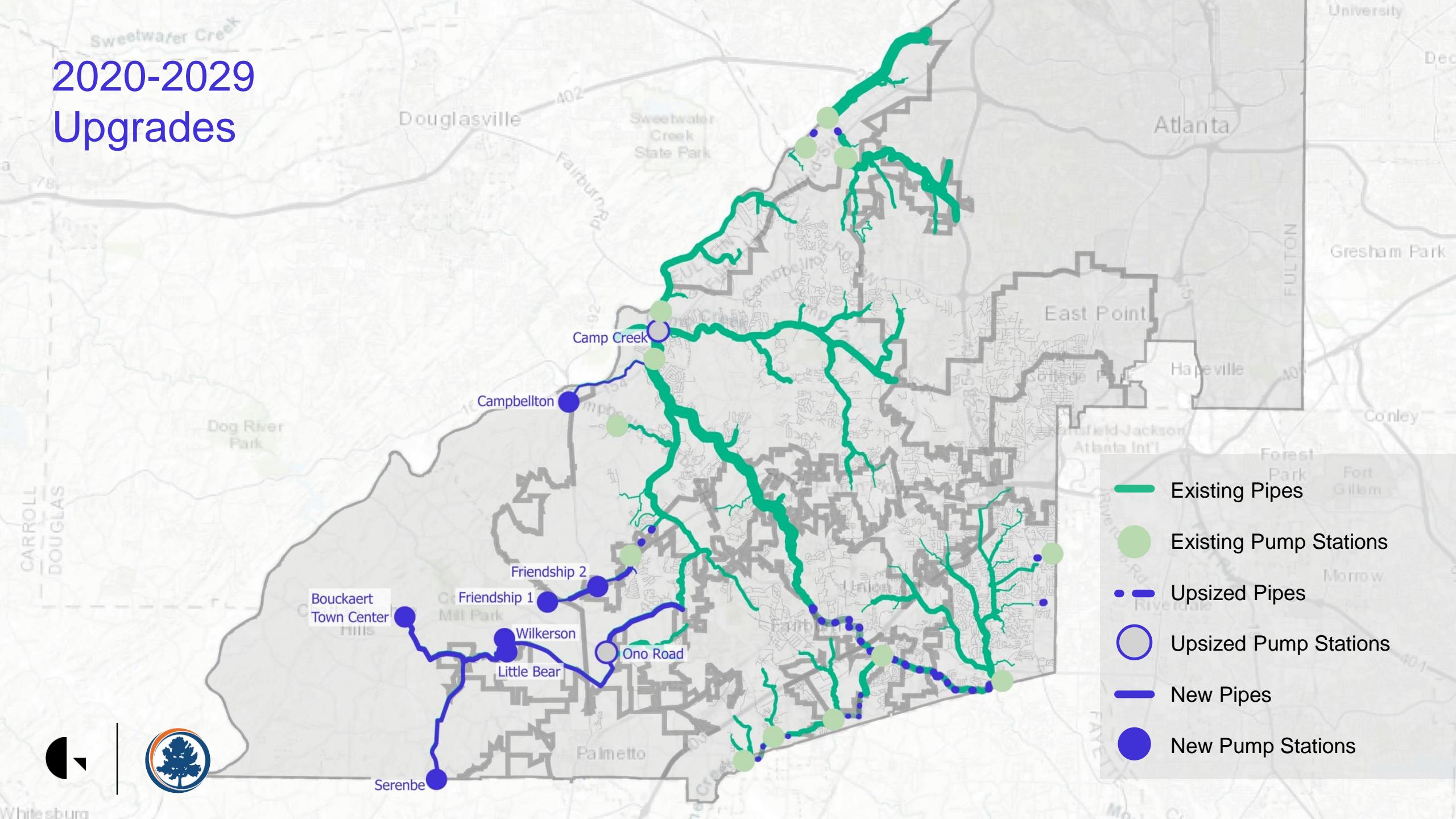


Future Flow Projections

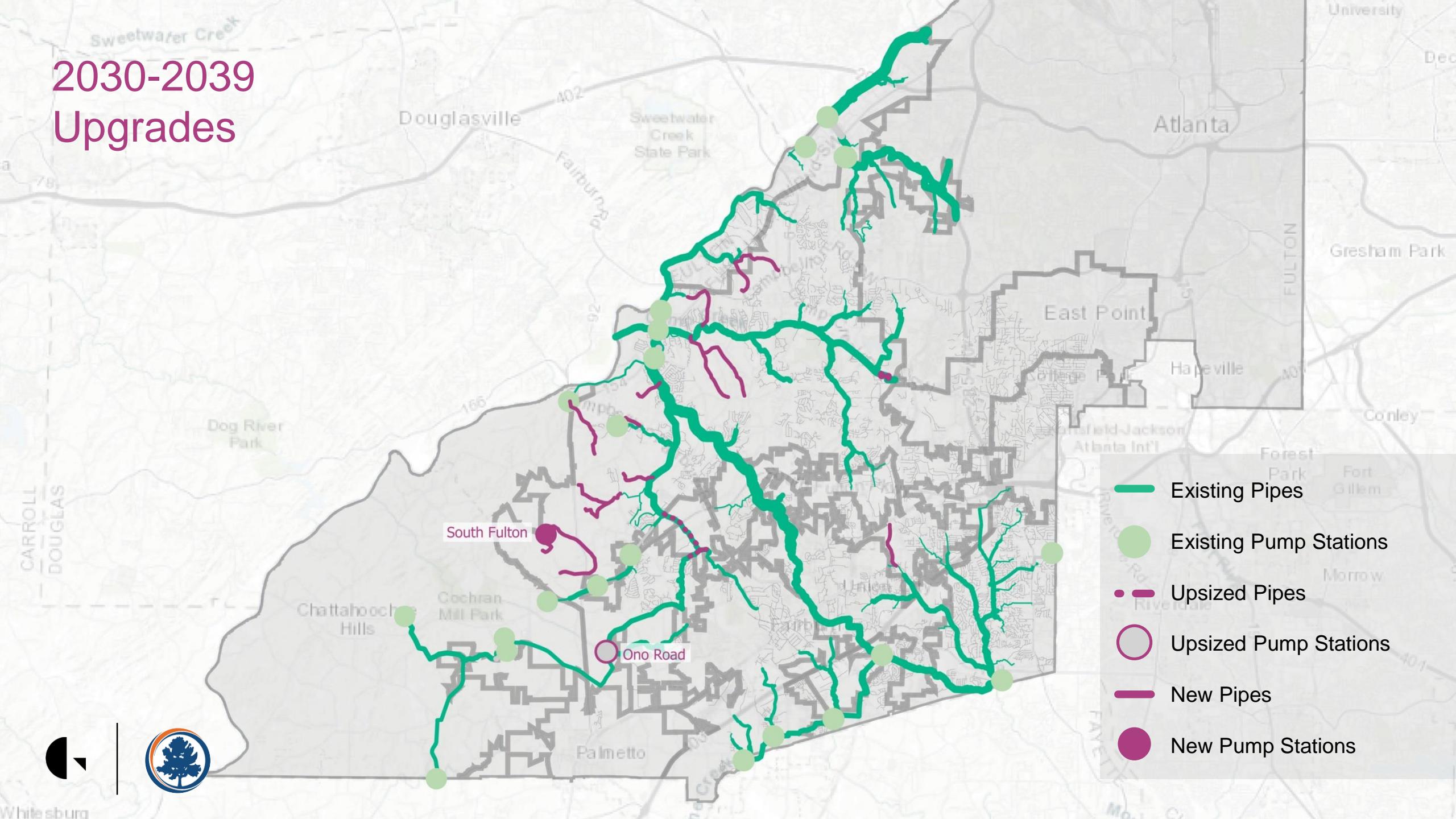
City	2019 Average (GPD)	2020-2029 (GPD)	2030-2039 (GPD)	2040-2049 (GPD)	2050-2059 (GPD)
Chattahoochee Hills	0	1,587,000	2,152,000	6,694,000	11,034,000
College Park	1,310,000	1,349,000	3,068,000	6,865,000	9,510,000
Fairburn	1,090,000	1,123,000	2,031,000	2,683,000	3,349,000
Palmetto	750,000	773,000	1,176,000	3,049,000	3,164,000
Union City	1,970,000	2,306,000	2,839,000	4,726,000	6,830,000
Atlanta	2,420,000	2,493,000	2,910,000	3,355,000	3,800,000
East Point	900,000	1,369,000	1,846,000	2,619,000	3,345,000
Tyrone	150,000	155,000	483,000	817,000	1,150,000
Fulton Direct Customers	7,360,000	12,018,000	14,512,000	17,872,000	22,230,000
Total ADDF	15,950,000	23,173,000	31,017,000	48,680,000	64,412,000



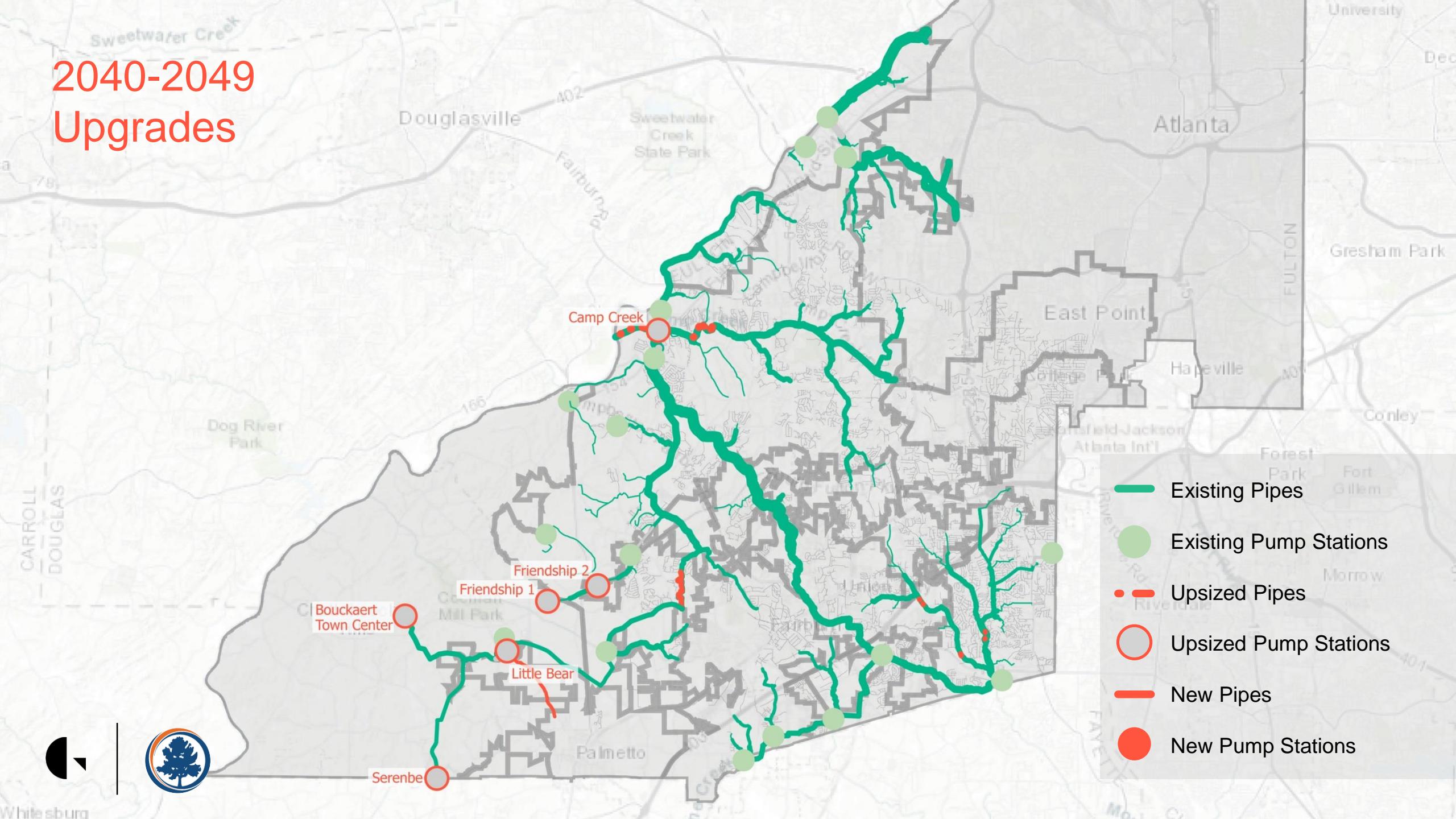
2020-2029 Upgrades



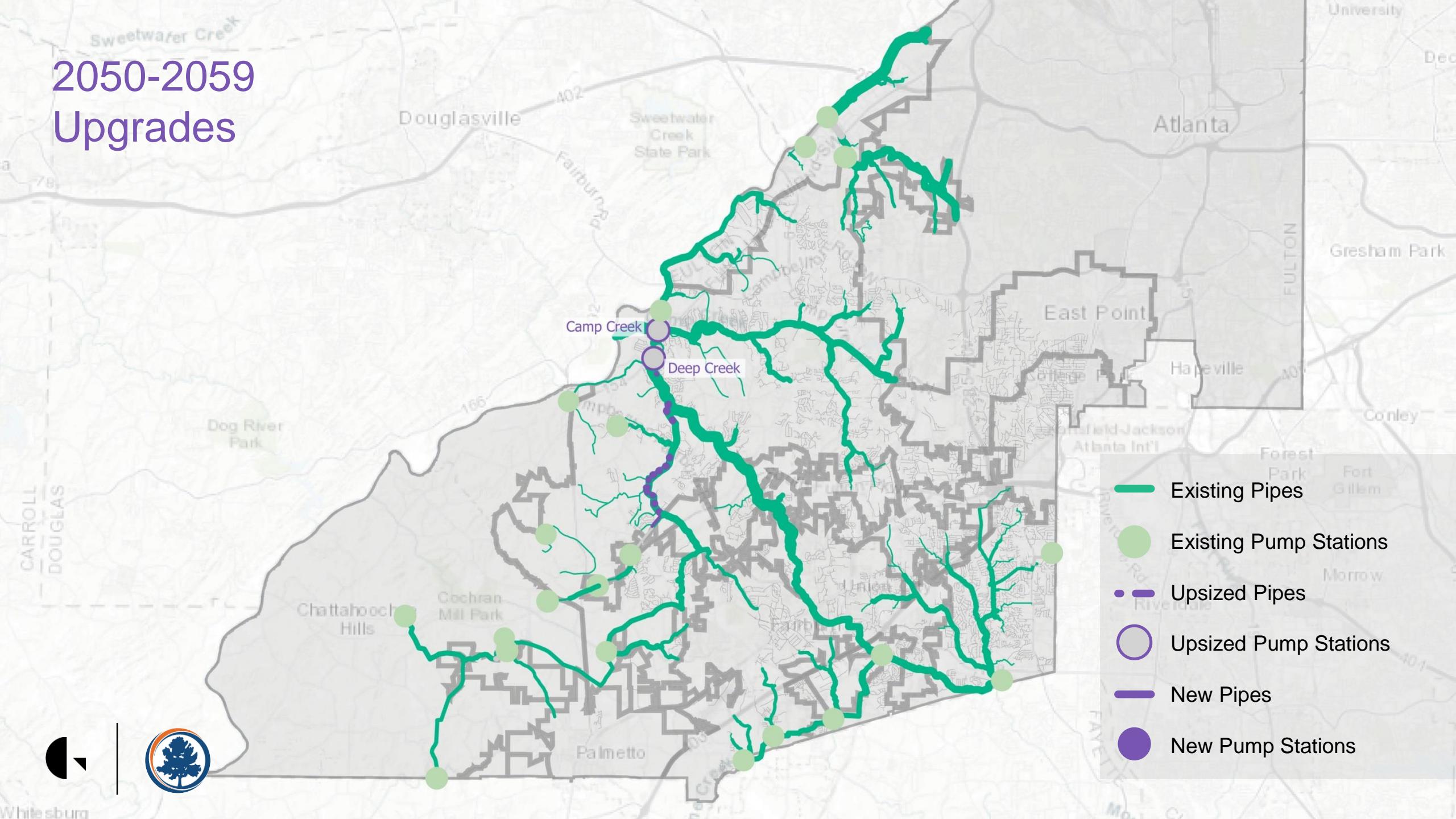
2030-2039 Upgrades



2040-2049 Upgrades



2050-2059 Upgrades



CIP Forecasts

Project Type	2020 – 2029	2030 – 2039 ¹	2040 – 2049 ¹	2050 – 2059 ¹
Upsized Gravity Sewer	\$-	\$20,755,000	\$49,530,000	\$36,735,000
New Gravity Sewer	\$16,720,000	\$109,630,000	\$18,975,000	\$-
New Force Main	\$68,120,000	\$6,160,000	\$-	\$-
New Pump Station	\$4,975,000	\$865,000	\$1,350,000	\$-
Upsized Pump Station	\$655,000	\$190,000	\$810,000	\$1,015,000
Camp Creek WRF Expansion ²	\$25,000,000	\$225,000,000	\$-	\$-
Total	\$115,470,000	\$362,600,000	\$70,665,000	\$37,750,000

¹ Costs escalated 5% per year, and not compounded annually.

² Phasing of expansion to be considered in preliminary engineering.



Next Steps

- 1 Finalized Report (*Fall 2020*)
- 2 Present findings to City Mayors and Board of Commissioners (*Winter 2021*)
- 3 Conduct a wastewater Rate Study (*Spring 2021*)
- 4 Conduct meeting with City and County stakeholders to review proposed rate structure (*Summer 2021*)
- 5 City wastewater improvements and Camp Creek WRF capacity investments (*Ongoing beginning Fall 2021*)
- 6 Implement new rates (*Fall 2021*)
- 7 Incorporate system upgrades into County CIP (*Fall 2021*)
- 8 Perform detailed design of upgrades in phases as new developments progress (*Ongoing beginning 2022*)
- 9 Begin Camp Creek WRF expansion design process (*2025*)



Preliminary Rate Study Considerations

- 1** Rate increases estimated 5-15% annually (pending Rate Analysis)
- 2** Include regional comparison of average bills
- 3** Allocate future Camp Creek WRF capacity and costs to cities based on demands/needs
- 4** Rates exclude City-owned infrastructure (up to billing meter/pump station)
- 5** Consistent rates systemwide (all Fulton County)



Questions?