



Metropolitan North Georgia Water Planning District

International Tower | 229 Peachtree St., NE | Suite 100 | Atlanta, GA 30303

MEMORANDUM

Date: February 8, 2022

To: Governing Board, TCC, and BAC Members

From: Danny Johnson

RE: DRAFT 2022 Appendix B – County Level Summaries for Stakeholder Review

The Metropolitan North Georgia Water Planning District (the District) is seeking stakeholder input on the draft Appendix B – County Level Summaries as part of the five-year update process for the Water Resource Management Plan. Comments and/or questions related to these draft documents may be emailed to PlanUpdate@northgeorgiawater.com by **March 18, 2022**. This will allow time for further consideration and modifications to be made before the draft Plan is released for public comment. Ultimately, the District's Governing Board is scheduled to consider the final 2022 Plan for approval at its December 14, 2022, meeting.

Appendix B includes the forecasted water and wastewater treatment needs on a county basis and outlines the anticipated schedule for expanding hydraulic capacity and building new water and wastewater treatment facilities to meet the forecasted needs.

This memo highlights the proposed major changes to the Appendix B tables and planning notes and includes the full draft Appendix B for review. These revisions were informed through solicited data collection and targeted outreach to local water and wastewater providers during 2021. The District has provided each county group of water and wastewater providers with multiple rounds of review and feedback. The complete county summaries are now compiled for broader stakeholder review.

The attached draft Appendix B is provided along with the 2017 Appendix B (with amendments) for ease of comparison.

Structural Changes – The District shifted the forward-looking facility planning year from 2050 (2017 Plan) to 2040 to better align with how local facility master planning is performed in the region. This change provides for more accurate needs assessments in the short term and better aligns with the manner that Georgia EPD utilizes Appendix B during the permitting process for expanding withdrawal, treatment, and discharge requests. The Forsyth County, Gwinnett County, and Hall County wastewater tables include both the 2040 and a 2050 column to recognize infrastructure changes relevant to the long-term water storage sub-contracts with Georgia EPD from the US Army Corps of Engineers and related return flows to Lake Lanier.

Additionally, relevant notes under the 2017 headings of Capital Projects, Non-Capital Programs and Basin Considerations which have been consolidated into the numbered notes for each county.

County Highlights – The following list provides highlights of major changes to facility planning capacities and other planning notes compared to the 2017 Plan (including amendments). Minor modifications in capacities made to reflect the time shift from 2050 to 2040 are not included in the list of highlights. These changes can be seen by comparing the draft versions of Appendix B when compared to the current version, also included for reference. Similarly, changes to footnotes and text corrections can be seen when comparing against the prior versions and may not be presented in this summary. The existing permitted plant capacity column is based on the latest information provided by Georgia EPD.

Bartow County

Appendix B – Water

- Summary of Planned Sources Table
 - Bolivar Springs, Bartow County - Updated future withdrawal to 1.2 MGD (monthly and peak day) for 2040 based on input from Bartow County
 - Paleozoic Aquifer, Bartow County – Added new groundwater source with a withdrawal of 3 MGD (monthly) and 4.5 MGD (peak day) for 2040 based on input from Bartow County
- Phasing Plan Table
 - Bartow County WTP – Updated expansion to 1.2 MGD (peak day) based on input from Bartow County
 - Groundwater, Bartow County – Added new groundwater source capacity of 4.5 MGD (peak day) for 2040 based on input from Bartow County

Appendix B – Wastewater

- Phasing Plan Table
 - Adairsville South WPCP – Removed based on input from City of Adairsville

Cherokee County

Appendix B – Water

- Summary of Planned Sources Table
 - Etowah River at Riverbend, CCWSA – Added new surface water source with a current permitted withdrawal of 4.5 MGD (monthly) based on input from CCWSA
 - Etowah River, Canton – Added current permitted withdrawal of 18.7 MGD (monthly) based on input from City of Canton
 - Crystalline Rock Aquifer, Woodstock – Added new groundwater source with a current permitted withdrawal of 0.71 MGD (monthly/peak day) based on EPD database
 - Crystalline Rock Aquifer, Lake Arrowhead Utility – Added new groundwater source with a current permitted withdrawal of 0.5 MGD (monthly/peak day) based on EPD database
- Summary of Needs Table

- From CCMWA (to City of Woodstock) – Added water purchased based on input from CCMWA
- To Pickens/Dawson Counties - Updated water sold based on input from CCWSA
- Phasing Plan Table
 - Groundwater, Woodstock – Added a new groundwater source with a capacity of 0.71 MGD (peak day) for 2040
 - Groundwater, Lake Arrowhead Utility– Added a new groundwater source with a capacity of 0.5 MGD (peak day) for 2040

Appendix B – Wastewater

- Phasing Plan Table
 - Fulton County Little River WRF – This plant was moved into the Fulton County Phasing Plan table as it resides in Cherokee County but serves customers of Fulton County

Clayton County

Appendix B – Water

- Phasing Plan Table
 - Clayton J.W. Smith WPP – Modified capacity to 0 MGD (peak day) for 2040 based on input from CCWA
 - Clayton W.J. Hooper WPP – Updated expansion to 22 MGD (peak day) for 2040 based on input from CCWA

Appendix B – Wastewater

- Phasing Plan Table
 - Combined Clayton W.B. Case WRF and Shoal Creek WRF– Updated capacity to 14.6 MGD (monthly max) for 2040 based on input from CCWA. Shoal Creek WRF will be decommissioned by 2040
 - Clayton Northeast WRF – Revised existing capacity to 6 MGD (monthly max) based on input from CCWA

Cobb County

Appendix B – Water

- Summary of Planned Sources Table
 - Etowah River/Allatoona Lake – Updated future withdrawal to 78 MGD (monthly) and 86 MGD (peak day) for 2040 based on input from CCMWA
 - Chattahoochee River – Updated future withdrawal to 87 MGD (monthly and peak day) for 2040 based on input from CCMWA
- Summary of Needs Table
 - To Paulding County - Updated water sold based on input from CCMWA
 - To Cherokee County (City of Woodstock) – Updated water sold based on input from CCMWA
 - To Fulton County – Updated water sold based on input from CCMWA
- Phasing Plan Table
 - CCMWA Quarles WTP – Modified capacity to 87 MGD (peak day) for 2021 and 2040 based on input from CCMWA

- CCMWA Wyckoff WTP – Modified capacity to 86 MGD (peak day) for 2021 and 2040 based on input from CCMWA

Appendix B – Wastewater

- Phasing Plan Table
 - Cobb RL Sutton WRF – Revised existing capacity to 40 MGD (monthly max) based on input from CCWA

Coweta County

Appendix B – Water

- No major changes to highlight

Appendix B – Wastewater

- Phasing Plan Table
 - Sharpsburg WPCP - Removed this plant based on input from City of Senoia
 - Coweta Crossroads LAS - Removed this facility based on input from Coweta County
 - Combined Coweta Shenandoah WPCP and 12 Parks WPCP – Updated capacity to 8 MGD (monthly max) for 2040 based on input from Coweta County

DeKalb County

Appendix B – Water

- Phasing Plan Table
 - DeKalb Scott Candler WTP – Modified capacity to 128 MGD (peak day) for 2021 based on input from DeKalb County

Appendix B – Wastewater

- Phasing Plan Table
 - Combined DeKalb Pole Bridge AWTF and Snapfinger AWTF - Updated capacity to 74 MGD (monthly max) for 2040 based on input from DeKalb County

Douglas County

Appendix B – Water

- Summary of Planned Sources Table
 - Lake Paradise/Cowens Lake – Updated withdrawal to 2.4 MGD (monthly) and 3.2 MGD (peak day) for 2040 based on input from Villa Rica
- Summary of Needs Table
 - From CCWMA – Removed water purchased based on input from DDCWSA
- Phasing Plan Table
 - Villa Rica Franklin Smith WTP – Modified capacity to 3.2 MGD (peak day) for 2040 based on input from Villa Rica

Appendix B – Wastewater

- No major changes to highlight

Fayette County

Appendix B – Water

- Summary of Planned Sources Table

- Whitewater Creek – Removed this source per input from Fayette County
 - Flat Creek (Lake Kedron/Peachtree) – Updated current permitted withdrawal to 4.5 MGD (monthly) based on input from Fayette County
- Phasing Plan Table
 - Fayetteville WTP – Removed facility based on input from Fayetteville

Appendix B – Wastewater

- No major changes to highlight

Forsyth County

Appendix B – Water

- Summary of Needs Table
 - To Dawson County – Updated water sold based on input from Forsyth County

Appendix B – Wastewater

- Phasing Plan Table
 - Added phasing through 2050 for Forsyth, Gwinnett, and Hall Counties to demonstrate planned infrastructure improvements for return flows to Lake Lanier for the counties that border the lake
 - Added Notes 8, 9, and 10 to reflect return flow requirements for the City of Cumming and Forsyth County to discharge flows back to Lake Lanier while maintaining existing discharge capacities in the Chattahoochee River Basin to provide redundancy and resiliency for the year 2050
 - Forsyth Fowler LAS - Updated existing capacity to 1.28 MGD (monthly max) and decommissioning phase by the year 2050 based on input from Forsyth County
 - Settingdown PUD Hampton Creek WRF – Added this private facility to recognize Forsyth County’s 0.5 MGD (monthly max) purchased capacity through 2050

Fulton County

Appendix B – Water

- Summary of Planned Sources Table
 - Chattahoochee River, Middle Chattahoochee Regional Water & Sewer Authority (MCRWSA) – Added current permitted withdrawal of 8.55 MGD (monthly) and future withdrawal of 9 MGD (monthly) and 12 MGD (peak day) based on input from Cities of Fairburn, Palmetto, and Union City
 - Crystalline Rock Aquifer, College Park - Updated current permitted withdrawal to 0.6 MGD (monthly) based on input from College Park
- Summary of Needs Table
 - From CCMWA – Updated water purchased based on input from Mountain Park
- Phasing Plan Table
 - MCRWSA WTP – Added new facility with a capacity of 0 MGD (peak day) for 2021 and 12 MGD (peak day) for 2040 based on input from Cities of Fairburn, Palmetto, and Union City

Appendix B – Wastewater

- Phasing Plan Table
 - Fulton Little River WRF – Moved into the Fulton County Phasing Plan table as it resides in Cherokee County but serves customers of Fulton County
 - Fulton Cauley Creek WRF –No longer in operation and was removed from the table

Gwinnett County

Appendix B – Water

- Summary of Planned Sources Table
 - Lake Lanier, Gwinnett County – Updated future withdrawal to 186 MGD (monthly) and 248 MGD (peak day) based on input from Gwinnett County
 - Lake Lanier, Buford – Updated future withdrawal to 3.8 MGD (monthly) and 5 MGD (peak day) based on input from City of Buford
- Phasing Plan Table
 - Buford WTP –Modified capacity to 5 MGD (peak day) for 2040 based on input from City of Buford

Appendix B – Wastewater

- Summary of Needs Table
 - Added Note 7 to reflect Gwinnett County’s plans to convert septic tanks in the Ocmulgee River Basin to sewer which are incorporated into the calculation for Total Projected Flow to Plants
- Phasing Plan Table
 - Added phasing through 2050 for Forsyth, Gwinnett, and Hall Counties to demonstrate planned infrastructure improvements for return flows to Lake Lanier for the counties that border the lake
 - Gwinnett New WRF – Added this new facility based on input from Gwinnett County
 - Added Note 5 to reflect return flow requirements to discharge flows back to Lake Lanier
 - Added Note 7 to reference a conditional increase in the Yellow River WRF discharge capacity based on septic tank conversion documentation provided to and approved by the District

Hall County

Appendix B – Water

- Phasing Plan Table
 - Groundwater, Lula – Updated 2040 capacity to 1.2 MGD (peak day) based on input from the City of Lula

Appendix B – Wastewater

- Phasing Plan Table
 - Added phasing through 2050 for Forsyth, Gwinnett, and Hall Counties to demonstrate planned infrastructure improvements for return flows to Lake Lanier for the counties that border the lake

Henry County

Appendix B – Water

- Summary of Planned Sources Table
 - Towaliga River Reservoirs (Strickland and Cole), HCWA – Added current permitted withdrawal of 11 MGD (monthly) based on input from HCWA
 - Crystalline Rock Aquifer, Locust Grove - Updated current permitted withdrawal to 1.2 MGD (monthly) based on EPD database
 - Crystalline Rock Aquifer, Stockbridge - Updated current permitted withdrawal to 0.75 MGD (monthly) based on EPD database
- Phasing Plan Table
 - Groundwater, Stockbridge – Updated 2021 and 2040 capacity to 0.75 MGD (peak day) based on EPD database

Appendix B – Wastewater

- Phasing Plan Table
 - Henry Tussahaw Creek WRF – Added facility based on input from Henry County Water Authority
 - Henry Indian Creek WRF – Updated existing capacity to 3 MGD (monthly max) based on input from Henry County Water Authority

Paulding County

Appendix B – Water

- Summary of Planned Sources Table
 - Etowah River/ Richland Creek Reservoir, Paulding County – Updated current permitted withdrawal to 42 MGD (monthly) and withdrawal for 2040 to 27 MGD (monthly) and 36 MGD (peak day) based on input from Paulding County
- Summary of Needs Table
 - From CCMWA – Updated water purchased based on input from Paulding County

Appendix B – Wastewater

- No major changes to highlight

Rockdale County

Appendix B – Water

- No major changes to highlight

Appendix B – Wastewater

- No major changes to highlight

DRAFT

Appendix B

County-Level Summaries - DRAFT



Appendix B outlines the anticipated schedule for expanding existing water and wastewater treatment plant hydraulic capacity and as well as building new water and wastewater treatment facilities in the Metro Water District to meet 20540 forecasted demands. Actual timing of new or expanded facilities or supplies will occur when local growth and planning indicate the need for additional capacity. Water supply and sewer wastewater needs for 2040 are provided for each county and are further discussed in Section 4. The information in this Appendix was provided by utilities and local governments based on their local water and wastewater planning efforts.

For the counties surrounding Lake Lanier, this appendix also includes requirements for high-quality effluent to be returned to Lake Lanier for the year 2050. This return flow is a critical piece of the District Plan and the drinking water supply plan for the State of Georgia in the ACF Basin. non-capital programs, such as intergovernmental agreements for the joint use of water and wastewater facilities and other studies necessary to protect water resources and facilitate planned expansions. Water supply and sewer wastewater needs for 2040 are provided for each county and are further discussed in Section 4. The information in this Appendix was provided by utilities and local governments based on their local water and wastewater planning efforts.

Integration of the three water resources planning areas (water supply and water conservation management, watershed management and wastewater management) is reflected in the facility plans outlined in this appendix. Planning considerations influenced the county-level summaries. For example, the return of high-quality effluent to Lake Lanier, Allatoona Lake and the Upper Flint River basin promotes long term sustainability of water use and replenishes drinking water supplies, and the decommissioning of less efficient wastewater treatment facilities benefits water quality., influenced the county-level summaries.

This Appendix covers hydraulic capacity only, and it does not cover upgrades to the level of treatment at existing water and wastewater facilities. The level of treatment at wastewater treatment plants may in some cases be impacted by the effectiveness of nonpoint source pollution controls, including those outlined in this Plan, and changes in the assimilative capacity of receiving streams water bodies.

Water supply and sewer wastewater needs for 2025 and 2050 are depicted with two forecast scenarios as discussed in Section 4. These scenarios represent forecasted needs based on the following two foundations for population projections:

Scenario 1: ARC Population and Employment Projections (2020 to 2050)

Scenario 2: Georgia OPB Population Projections and OPB-Based Employment Projections (2020 to 2050)

When evaluating facility capacity for future years, the higher of Scenarios 1 or 2 was considered to confirm sufficient hydraulic capacity will be available to meet future needs.

Facility capacities listed in this appendix for each planning period are considered as maximums, and utilities may plan within and up to that capacity. All new facilities and facility expansions identified in Appendix B are subject to permitting by Georgia EPD and must meet all state standards associated with the necessary permits. Inclusion within this Plan does not guarantee a permit.

The tables in this appendix do not include private, public-agency, or industrial facilities, which are permitted by Georgia EPD and not part of the District's planning process. The tables in this appendix may not include some small public, private, and/or public-agency wastewater treatment facilities that are operating on an interim basis until such a time as growth allows for consolidation at major wastewater treatment facilities. Some local water and wastewater providers may elect to decommission some of these facilities during a prior period than what is shown. Small facilities that will be decommissioned earlier than shown in this appendix with their wastewater flows and consolidate flows at another facility in the Metro Water District will not require a plan amendment.

Summary of Planned Sources

A summary of water supply sources is provided for each county including the current permitted withdrawal and the planned 2045 withdrawal. The monthly average day peaking factor of 1.2 (maximum month average day/average annual day) was calculated for the 2003 Water Supply and Water Conservation Management Plan. It was reviewed and confirmed as appropriate for the 2017-2022 Plan during the plan update process.

Plant Capacities

Plant capacities listed in this Appendix were determined to meet or exceed the projected 2050-2040 peak day water demand or maximum monthly flow wastewater facility treatment demand. It is recognized that plant capacity is added in increments based on design factors and economies of scale and not to match a specific projected flow on the date the additional capacity comes online. For example, if a water treatment plant or wastewater treatment plant with a 5-MGD capacity needs to handle a projected demand of 8 MGD, the most cost-efficient plan may be to double the current capacity to 10 MGD. The size of incremental expansions should be determined through local water and wastewater master plans based on the design of the facility, economies of scale and the community's needs.

The forecasts of water treatment plant capacity needs in this appendix were based on a District-wide average peaking factor of 1.6 (peak day/average annual day). This peaking factor was calculated for the 2003 Water Supply and Water Conservation Management Plan. It was reviewed and confirmed as appropriate for the 2022-27 Plan during the plan update process. The forecasts of wastewater treatment plant capacity in this appendix were based on a District-wide average peaking factor of 1.25 (maximum monthly average daily flow/average annual daily flow) for wastewater demands along with county infiltration/inflow factors. At a local level, these factors will vary for each utility due to variations in water distribution and collections system efficiency. Each utility must determine an appropriate peaking value and the impacts of water conservation measures on future flows in their local water and wastewater master plans (see Action Items INTEGRATED-2 and INTEGRATED-4).

Significant proposed changes in plant capacity will be evaluated against the essential elements of this Plan through the Plan Amendment process, as discussed in Section 6.5.1 and outlined in the most recent Adopted Plan Amendment Guidelines. Minor changes in phasing of capacity are considered consistent with this Plan and do not require an amendment.

Phasing

The capital improvement project phasing shown in this appendix was developed to provide adequate treatment capacity for the projected water and wastewater demands in that phase and to make steady progress toward implementing the essential elements of this Plan. Within this context, the timeframe for capital improvements in Appendix B is flexible unless otherwise noted. For example, delaying the date that a plant is decommissioned is generally acceptable. Expanding a plant in a different number of phases is also

generally acceptable. Local water and wastewater master plans are expected to define the timeframes for capital improvements in greater detail than this Plan (see Actions Items [INTEGRATED-2](#) and [INTEGRATED-4](#)).

The permitting, design, construction and start-up of additional treatment capacity is a lengthy process, generally taking several years at minimum. Although this plan uses the best population and economic numbers available, significant changes in population and/or economic growth can occur more rapidly than updates to this Plan. Utilities are encouraged to identify additional water capacities, especially those that are, by their nature, time sensitive for consideration in future amendments to this Plan.

Permitting

In several instances, planning for future water supplies, shared water supply allocations and local wastewater discharge locations are recommended for local water and wastewater providers within the same county. As such, the split shown in this Appendix between utilities within the same county is based on information available at the time this Plan was prepared and may change based on development and growth patterns in the county. In the case of such changes, an amendment to this Plan would be necessary.

~~Treatment capacity may not be expanded without the issuance of a new or amended water withdrawal or wastewater discharge permit if the proposed facility expansion will expand the treatment capacity beyond the currently permitted water withdrawal or discharge limits.~~

This page left intentionally blank.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Bartow County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Lewis Spring	Adairsville	4.1	4.5	6.0
Moss Spring	Emerson	0.5	1.5	1.5
Bolivar Springs	Bartow	0.8	1.2	1.2
Etowah River (Note 3)	Cartersville	23.0	37.5	50.0
Allatoona Lake		18.0		
Paleozoic Rock Aquifer	Bartow	0.0	3.0	4.5
Paleozoic Rock Aquifer	Emerson	0.0	1.0	1.0
Paleozoic Rock Aquifer	Kingston	0.15	0.15	0.15
Paleozoic Rock Aquifer	White	0.2	0.2	0.2
Total Withdrawal (MGD)		46.8	49.1	64.6

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The intake in the Etowah River is only permitted to Cartersville. A future intake may have a joint permit with Bartow County.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Bartow County Needs	45.7
Self Supplied	-0.7
Total Projected Demand from Facilities (PD-MGD)	44.9
Treatment Capacity	64.6
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	28.5

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.72 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Coosa Basin		
Adairsville WTP	4.0	6.0
Emerson WTP	0.5	1.5
Bartow County WTP	0.8	1.2
Cartersville Clarence B. Walker WTP	27.0	50.0
Groundwater		
Bartow County	0.0	4.5
Emerson	0.0	1.0
Kingston	0.15	0.15
White	0.2	0.2
Total Capacity (PD-MGD)	32.7	64.6

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain existing interconnections and water supply agreements with Cherokee and Polk Counties.

Bartow County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Bartow County Sewered Needs	16.8
To Cobb County	-0.09
Total Projected Sewered Flow to Plants	16.7

Septic Flows (AAD-MGD)	4.5
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Coosa Basin		
Adairsville North WPCP	2	5
Cartersville WPCP	15	15
Emerson Henry Jordan WWTP	0.45	1.5
Bartow Southeast WPCP	0.1	12.1
West Bartow WPCP (Note 4)		
Bartow Two Run WPCP	0.1	Decommission
Total Capacity (MMF-MGD)	17.7	33.6
Sewered Needs		16.7

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) West Bartow WPCP is estimated to be completed in the 2016-2025 timeframe with a capacity of 4.0 MGD.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Cherokee County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Etowah River / Hollis Q. Latham Reservoir (Note 3)	CCWSA	36.0	30.4	40.5
Etowah River at Riverbend		4.5		
Etowah River	Canton	18.7	7.5	10.0
Etowah River (Note 4)		Fills Hickory Log Creek Reservoir		
Crystalline Rock Aquifer	Ball Ground	0.25	0.25	0.25
Crystalline Rock Aquifer	Woodstock	0.71	0.71	0.71
Crystalline Rock Aquifer	Lake Arrowhead Utility	0.5	0.5	0.5
Total Withdrawal (MGD)		60.7	39.3	52.0

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) Hollis Q. Latham Reservoir provides stream flow augmentation during low-flow conditions on the Etowah River.
- 4) Hickory Log Creek Reservoir is a pump-storage reservoir for Canton and Cobb County-Marietta Water Authority (CCMWA). The intake on the Etowah River is permitted to pump at a peak day rate of 39 MGD. The Hickory Log Creek Reservoir provides stream flow augmentation for Canton during low-flow conditions on the Etowah River.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 5)
Cherokee County Needs	44.9
From CCMWA (to City of Woodstock)	-2.38
To Pickens/Dawson Counties (Note 6)	1.60
Self Supplied	-1.46
Total Projected Demand from Facilities (PD-MGD)	42.7
Treatment Capacity	52.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	28.1

Notes:

- 5) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.57 from 2011 to 2019 in this County.
- 6) Cherokee County Water and Sewerage Authority (CCWSA) sells water to outside-the-District counties of Pickens and Dawson Counties.
Such sales are not precluded by the Metro Water District plan.

Phasing Plan

Facilities (Note 7)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Coosa Basin		
Canton WTP	5.45	10.0
CCWSA Etowah River WTP	38.0	40.5
Groundwater		
Ball Ground	0.25	0.25
Woodstock	0.71	0.71
Lake Arrowhead Utility	0.5	0.5
Total Capacity (PD-MGD)	44.9	52.0

Notes:

- 7) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain existing interconnections and water supply agreements with Forsyth, Cobb and Bartow Counties.

Cherokee County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Cherokee County Sewered Needs	19.8
To Cobb County	-0.57
To Fulton County	-0.04
Total Projected Sewered Flow to Plants	19.2

Septic Flows (AAD-MGD)	6.1
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Coosa Basin		
Woodstock Rubes Creek WPCP	2.5	2.5
CCWSA Fitzgerald Creek WPCP	6	42.35
CCWSA Rose Creek WPCP	6	
CCWSA Northwest WPCP		
CCWSA River Bend Environmental Complex (Note 4)	1	
Canton WPCP	4	7
Total Capacity (MMF-MGD)	19.5	51.9
Sewered Needs		19.2

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) EPD will permit CCWSA to reposition wasteload capacity from the CCWSA Riverbend Complex to the CCWSA Northwest WPCP that is a planned facility which will discharge highly treated effluent into the Etowah River Basin through a separate outfall.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Clayton County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Flint River	CCWA	Fills Smith/Shoal Creek Reservoir	36.8	49.0
Smith/Shoal Creek Reservoir		17.0		
Hooper Reservoir (Little Cotton Indian Creek)		20.0		
Blalock Reservoir (Pates Creek)		10.0		
Crystalline Rock Aquifer		0.4	0.4	0.4
Total Withdrawal (MGD)		47.4	37.2	49.4

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
Clayton County Needs	52.0
Total Projected Demand from Facilities (PD-MGD)	52.0
Treatment Capacity	49.4
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	32.5

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.26 from 2011 to 2019 in this county.

Phasing Plan

Facilities (Note 4)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Flint Basin		
Clayton J.W. Smith WPP	12.0	0.0
Ocmulgee Basin		
Clayton W.J. Hooper WPP	20.0	22.0
Flint and Ocmulgee Basin		
Clayton Terry R. Hicks WPP	10.0	27.0
Groundwater		
Clayton County	0.4	0.4
Total Capacity (PD-MGD)	42.4	49.4

Notes:

- 4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Infrastructure should be kept in place to allow transfers from the City of Atlanta to meet peak demands on an emergency basis as needed. Maintain existing interconnections and water supply agreements with the Cities of Atlanta and College Park, DeKalb, Fayette, and Henry

Clayton County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Clayton County Sewered Needs	34.3
From Fulton County	4.00
From DeKalb County	0.13
From Henry County	0.02
To DeKalb County (Note 4)	-3.00
Total Projected Sewered Flow to Plants	35.5
Septic Flows (AAD-MGD)	2.2

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Flint Basin		
Clayton W.B. Casey WRF	6.6	14.6
Clayton Shoal Creek WRF (Note 5)	4.4	
Ocmulgee Basin		
Clayton W.B. Casey WRF	17.4	27.4
Clayton Northeast WRF	6.0	
Total Capacity (MMF-MGD)	34.4	42.0
Sewered Needs (Note 4)		35.5

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) Existing agreements to discharge wastewater to DeKalb Pole Bridge AWTP will remain in place until a determination is made as to exact timing to reduce or eliminate those discharges.
- 5) The Shoal Creek WRF will be decommissioned and will no longer discharge to the Flint River Basin via the wetlands treatment system.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Cobb County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Etowah River (Note 3)	CCMWA	Fills Hickory Log Creek Reservoir	78.0	86.0
Allatoona Lake (Note 4)		78.0		
Chattahoochee River		87.0	87.0	87.0
Total Withdrawal (MGD)		165.0	165.0	173.0

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) Hickory Log Creek Reservoir is a pump-storage reservoir for Cobb County-Marietta Water Authority (CCMWA) and Canton. The intake on the Etowah River is permitted to pump at a peak day rate of 39 MGD. Water released from Hickory Log Creek Reservoir for CCMWA will contribute to the storage allocation use and be a part of the withdrawal quantity for the Wyckoff WTP.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Cobb County Needs	149.3
To Paulding County	0.00
To Cherokee County (City of Woodstock)	2.38
To Fulton County	0.07
Total Projected Demand from Facilities (PD-MGD)	151.8
Treatment Capacity	173.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	93.3

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.38 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
CCMWA Quarles WTP	87.0	87.0
Coosa Basin		
CCMWA Wyckoff WTP	86.0	86.0
Hickory Log Creek Reservoir	0.0	0.0
Total Capacity (PD-MGD)	173.0	173.0

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain existing interconnections and water supply agreements with Cherokee, Douglas, and Paulding Counties.

Cobb County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Cobb County Sewered Needs	103.7
From Bartow County	0.09
From Cherokee County	0.57
From Douglas County	3.01
From Fulton County	12.2
From Paulding County	4.42
To Douglas County	-0.09
To Fulton County	-4.64
To Paulding County	-0.48
Total Projected Sewered Flow to Plants	118.8

Septic Flows (AAD-MGD)	4.9
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Coosa Basin		
Cobb Noonday Creek WRF	20	32
Cobb Northwest Cobb WRF	12	
Chattahoochee Basin		
Cobb RL Sutton WRF	50	100
Cobb South Cobb WRF	40	
Total Capacity (MMF-MGD)	122	132.0
Sewered Needs		118.8

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Coweta County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2040 Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
B.T. Brown Reservoir (Notes 3, 4, 5)	CCWSA	6.7	22.1	26.9
Chattahoochee River (Notes 3, 4, 5, 6)		Fills B.T. Brown Reservoir		
J.T. Haynes Reservoir	Newnan	14.0	14.0	18.6
Sandy Brown Creek		Fill J.T. Haynes Reservoir only		
White Oak Creek (Flint River)				
Line Creek (Flint River)				
Hutchins Lake (Keg Creek)	Senoia	0.3	0.34	0.45
Crystalline Rock Aquifer		0.233	0.233	0.233
Crystalline Rock Aquifer	CCWSA	0.504	0.504	0.504
Total Withdrawal (MGD)		21.7	37.1	46.7

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The B.T. Brown Reservoir and pumping system will be capable of providing 26.9 MGD at 2040. The water intake pump station and raw water transmission main from the Chattahoochee River will have the capacity to pump at a peak rate of 21.3 MGD at 2040. The buildout capacity will be constructed in phases as demands increase.
- 4) The withdrawal from the Chattahoochee River is to be pumped into B.T. Brown Reservoir for storage prior to treatment. The withdrawal from B.T. Brown Reservoir is taking water previously removed from the Chattahoochee River for treatment. As water demand continues to increase, CCWSA may seek additional storage to its reservoir system.
- 5) The withdrawals from the Chattahoochee River and B.T. Brown Reservoir are to serve as a replacement for an existing water source from a small tributary of the Chattahoochee River, which has proven its inability as a resilient water source in most recent droughts of record. This proposed Chattahoochee River withdrawal will allow the Authority to supply demands previously served by outside water providers and increase the resilience of its water supply.
- 6) The Chattahoochee River pump rate of 21.3 MGD for 2040 is required to help fill the B.T. Brown Reservoir. This withdrawal is not additive and is thus not included in the Total Withdrawal for Coweta County.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 7)
Coweta County Needs	33.1
Self Supplied	-1.6
From Fulton County (City of Atlanta) (Note 8)	0.0
From Griffin's Still Branch Reservoir (Note 8)	-5.0
Total Projected Demand from Facilities (PD-MGD)	26.4
Treatment Capacity	46.7
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	20.7

Notes:

- 7) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.56 from 2011 to 2019 in this County.
- 8) Coweta County Water and Sewer Authority (CCWSA) is seeking a permit from Georgia EPD to have a direct withdrawal from the Chattahoochee River. If that water withdrawal is permitted and constructed, CCWSA would no longer purchase from the City of Atlanta. In either scenario, total withdrawals from the Chattahoochee will not be affected. In the event that a withdrawal permit is obtained, the connection with the City of Atlanta will be maintained for emergency service.
- 9) The Still Branch Creek Reservoir is located outside of the District and is owned by the City of Griffin in Spalding County. The reservoir serves Pike and Spalding Counties as well as Coweta County. Coweta County has a purchase contract for 3.0 PDD-MGD of finished water (2012) from the City of Griffin which increases to 5.0 PDD-MGD on July 1, 2022.

Phasing Plan

Facilities (Note 10)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
CCWSA B.T. Brown WTP (Note 11)	6.4	26.9

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Chattahoochee/Flint Basins		
Newnan Hershall Norred WTP	14.0	18.6
Flint Basin		
Senoia WTP (Note 12)	0.45	0.45
Groundwater		
Senoia	0.233	0.233
CCWSA Murphy Well	0.504	0.504
Total Capacity (PD-MGD)	21.6	46.7

Notes:

- 10) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.
- 11) The B.T. Brown WTP should be expanded to 26.9 PD-MGD by 2040 to fully utilize the yield of B.T. Brown Reservoir.
- 12) The City of Senoia has a withdrawal permit with a monthly limit of 0.3 MGD from Hutchins Lake and a WTP with a total capacity of 0.45 PD-MGD. The City will need to increase their water withdrawal permit in order to fully utilize the plant capacity.

Interconnections

Maintain existing interconnections and water supply agreements with City of Atlanta, City of Griffin and additional interconnections as necessary.

Coweta County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Coweta County Sewered Needs	11.6
Total Projected Sewered Flow to Plants	11.6

Septic Flows (AAD-MGD)	6.4
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin		
Coweta Arnco WPCP	0.1	4.5
Coweta Arnall/Sargent WPCP	0.06	
Coweta Decentralized Systems		
Coweta Bridgeport WPCP		
Grantville Colley Street LAS	0.15	0.78
Grantville Ponds	0.12	
Grantville Yellow Jacket Creek WPCP		
Grantville New River WPCP		
Newnan Mineral Springs WPCP	1.2	6.5
Newnan Wahoo Creek WPCP	3	
Flint Basin		
Senoia LAS (Note 5)	0.49	3
Senoia Southeast WPCP		
Coweta Shenandoah WPCP	2	8
Coweta 12 Parks WPCP (Note 4)		
Total Capacity (MMF-MGD)	#REF!	22.8
Sewered Needs		11.6

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) Coweta 12 Parks WPCP is expected to have an initial capacity of 0.15 MGD to LAS. Additional capacity will be stream discharged once a point source discharge is determined.
- 5) Senoia may decommission the current LAS and send flow to future facilities.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

DeKalb County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Chattahoochee River	DeKalb	140.0	120.0	160.0
Total Withdrawal (MGD)		140.0	120.0	160.0

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
DeKalb County Needs	151.0
Total Projected Demand from Facilities (PD-MGD)	151.0
Treatment Capacity	160.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	94.4

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the 2020-2070 DeKalb County Water Master Plan contains data showing peaking factors that range from 1.38 to 1.42.

Phasing Plan

Facilities (Note 4)	Existing (2021)	By 2040
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
DeKalb Scott Candler WTP	128.0	160.0
Total Capacity (PD-MGD)	128.0	160.0

Notes:

- 4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with Rockdale, Henry, and Clayton Counties and the City of Atlanta.

DeKalb County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
DeKalb County Sewered Needs	106.5
To Fulton (Fulton County + City of Atlanta)	-52.7
To Clayton County	-0.1
From Clayton County	3.0
From Fulton County	1.6
From Rockdale County	0.2
From Henry County	0.1
Total Projected Sewered Flow to Plants	58.6
Septic Flows (AAD-MGD)	3.0

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Ocmulgee Basin		
DeKalb Pole Bridge AWTF (Note 4)	20	74
DeKalb Snapfinger AWTF (Note 4)	36	
Total Capacity (MMF-MGD)	56	74
Sewered Needs		58.6

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) The treated flow from DeKalb Pole Bridge and Snapfinger AWTFs will be discharged to two rivers; combined plant discharges from the Snapfinger AWTF and the Pole Bridge AWTF in excess of that currently permitted (56 MGD) will be either (1) returned to the Chattahoochee River Basin in accordance with a wasteload allocation to be issued by Georgia EPD or (2) indirectly reused for drinking water in DeKalb County thus reducing the County's future withdrawals from the Chattahoochee River. The reuse option may consist of an increased discharge beyond 56 MGD into the South River with a corresponding downstream water withdrawal for drinking water.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Douglas County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Dog River Reservoir	DDCWSA	23.0	23.0	30.6
Bear Creek Reservoir (Note 3)				
Lake Paradise/Cowens Lake	Villa Rica	1.5	2.4	3.2
Total Withdrawal (MGD)		24.5	25.4	33.8

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) Bear Creek Reservoir is a supplemental source to Dog River Reservoir with a monthly withdrawal permit limit of 6.0 MGD.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Douglas County Needs	27.9
Total Projected Demand from Facilities (PD-MGD)	27.9
Treatment Capacity	33.8
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	17.4

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.46 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
DDCWSA Bear Creek WTP	23.9	30.6
Tallapoosa Basin		
Villa Rica Franklin Smith WTP (Note 6)	1.5	3.2
Total Capacity (PD-MGD)	25.4	33.8

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.
- 6) The Villa Rica Franklin Smith WTP also provides water to areas outside Douglas County.

Interconnections

Maintain interconnections and water supply agreements with CCMWA, Cobb County Water System and Carroll County Water Authority.

Douglas County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Douglas County Sewered Needs	12.3
From Cobb County	0.09
To Cobb County	-3.01
Total Projected Sewered Flow to Plants	9.4
Septic Flows (AAD-MGD)	3.1

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin		
DDCWSA Rebel Trails WPCP	0.04	Decommission
DDCWSA South Central UWRF	0.5	17.5
DDCWSA South Central WPCP	6	
DDCWSA Northside WPCP	0.6	
DDCWSA Sweetwater Creek WPCP	3	
Villa Rica North WPCP	0.52	1.0
Tallapoosa Basin		
Villa Rica West WPCP (Note 4)	2.15	2.75
Total Capacity (MMF-MGD)	12.8	21.3
Sewered Needs		9.4

Notes:

1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).

2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.

3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.

4) Villa Rica West WPCP is located within Carroll County; a portion of this facility flow was estimated to be generated in Douglas County.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Fayette County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Lake Horton (Horton Creek)	Fayette	14.0	20.3	27.0
Flint River		Fills Lake Horton		
Flat Creek (Lake Kedron/Peachtree)		4.5		
Lake McIntosh		12.5		
Crystalline Rock Aquifer	Fayetteville	1.3	2.0	2.0
Total Withdrawal (MGD)		32.3	22.3	29.0

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
Fayette County Needs	26.3
Self Supplied	-2.1
Total Projected Demand from Facilities (PD-MGD)	24.2
Treatment Capacity	29.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	16.4

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.59 from 2015 to 2019 in this County.

Phasing Plan

Facilities (Note 4)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Flint Basin		
Fayette County Crosstown WTP	13.5	27.0
South Fayette WTP	9.2	
Groundwater		
Fayetteville	1.3	2.0
Total Capacity (PD-MGD)	24.0	29.0

Notes:

- 4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with City of Atlanta and Clayton County.

Fayette County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Fayette County Sewered Needs	9.3
City of Tyrone to Fulton County	-0.4
Total Projected Sewered Flow to Plants	8.9
Septic Flows (AAD-MGD)	4.3

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Flint Basin		
Peachtree City Line Creek/Larry B. Turner WPCP	2.0	6.0
Peachtree City Rockaway WPCP (Note 4)	4.0	
Fayetteville Whitewater Creek WPCP	5.0	5.0
Total Capacity (MMF-MGD)	11.0	11.0
Sewered Needs		8.9

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) The Peachtree City Rockaway WPCP is also permitted for 1.0 MMF-MGD of discharge to LAS.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Forsyth County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Lake Lanier (Note 3)	Cumming	23.82	27.0	36.0
	Forsyth	38.64	36.0	48.0
Crystalline Rock Aquifer		0.7416	0.7416	0.7416
Total Withdrawal (MGD)		63.2	63.8	84.7

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The City of Cumming and Forsyth County will continue to operate with a single shared raw water intake structure in Lake Lanier, until a new raw water intake is constructed for the County's withdrawal in Lake Lanier and permitted accordingly. Lake Lanier may continue to be used as the main water source for Forsyth County and City of Cumming. Apportionment of the capacity between Forsyth County and City of Cumming should be based on the needs and growth of their respective service areas.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Forsyth County Needs	66.3
To Dawson County	0.008
Self Supplied	-0.8
Total Projected Demand from Facilities (PD-MGD)	65.4
Treatment Capacity	84.7
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	41.4

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.95 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
Cumming WTP	24.1	36.0
Forsyth County WTP	33.7	48.0
Groundwater		
Forsyth County	0.7416	0.7416
Total Capacity (PD-MGD)	58.6	84.7

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with Cherokee County, Fulton County, Dawson County and additional interconnections as necessary.

Forsyth County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)	2050 Maximum Month (Note 3) Average Daily Flow (MMF-MGD)
Forsyth County Sewered Needs	24.1	33.1
To Fulton County	-0.5	-0.5
Total Projected Sewered Flow to Plants	23.6	32.6

Septic Flows (AAD-MGD)	5.5	6
------------------------	-----	---

Phasing Plan

Facilities (Notes 1, 2, 5, and 6)	Existing (2020)	By 2040	By 2050 (Note 3)
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin (Lake Lanier)			
Cumming Habersham WPCP	0.11	12.61	Decommission
Cumming Bethelview Road WPCP (Notes 4, 9)			15.11
Cumming Lake Lanier WRF (Note 4)			
Forsyth Lake Lanier WRF (Note 4)		12.5	20
Forsyth Fowler WRF (Note 4, 10)			
Chattahoochee Basin (Downstream of Lake Lanier)			
Cumming Bethelview Road WPCP (Note 9)	8	8	8
Forsyth Fowler WRF - Big Creek (Note 10)	3.13	5	5
Forsyth Fowler LAS	1.28	14.59	Decommission
Forsyth Fowler WRF (Note 10)	4.75		8.55
Forsyth Shakerag WRF	1.25		
Forsyth James Creek WRF	2.55		
Forsyth Dick Creek WRF	0.76	Decommission	
Coosa Basin			
Forsyth Manor Water Reuse Facility	0.5	0.5	0.5
Forsyth Parkstone at the Bridges LAS	0.1	Decommission	
Settingdown PUD Hampton Ck WRF (Note 7)	0.5	0.5	0.5
Total Capacity (MMF-MGD)	18.52	53.7	57.7
Sewered Needs		15	32.6

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 3) The 2050 column is provided for Forsyth, Gwinnett, and Hall Counties in order to demonstrate planned infrastructure improvements for return flows to Lake Lanier for the counties that border the lake.
- 4) New treatment capacity will be provided by expanding existing facilities and/or constructing new individual or joint facilities. Apportionment of capacity between Forsyth County and the City of Cumming should be based on the needs and growth of their respective service areas. Allocation of proposed treatment capacity between Forsyth County and the City of Cumming will be agreed upon by both jurisdictions in accordance with local wastewater master plans and approved Service Delivery Strategy prior to requesting wasteload allocations or seeking permits.
- 5) The schedule shown is intended to be a general guideline to identify general capacity needs. Other than Lake Lanier returns as noted below, while the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 6) The City and County acquire private wastewater systems that result in minor changes and possible additions to discharge permits.
- 7) Forsyth County is currently maintaining 0.50 mgd capacity in the Hampton WRF, a private wastewater facility.
- 8) The construction of Lake Lanier discharge facilities is a critical piece of the District Plan and the drinking water supply plan for the State of Georgia in the ACF basin. Therefore, both Forsyth and Cumming shall construct the infrastructure to return flows to the Lake. These can be a combination of new facilities, joint facilities, or treated discharges piped to Lake Lanier from existing wastewater treatment facilities. To be in compliance with the District Plan, both Forsyth and Cumming must have capabilities to return flows to Lake Lanier by 2040 (whether constructed jointly or individually). In total, Forsyth and Cumming shall construct facilities with the capacity to return at least 22.4 mgd AAD in reclaimed water to Lake Lanier by 2050. This requirement is based on the assumption that county-wide water demands meet or exceed 59 mgd AAD. If water demands in future revisions to the District Plan are lower than 59 mgd, then the total return flow capacity requirement to return 22.4 mgd would also be proportionally lower.
- 9) Cumming Bethelview WPCP permit in Big Creek may be maintained for growth in Cumming beyond the loading included in the TMDL. The Bethelview plant may eventually pump treated wastewater back to Lake Lanier if future TMDL allows it or in conjunction with other discharges to the lake. The Phasing Plan represents Bethelview WPCP discharge flows to multiple locations that when combined may be greater than the treatment capacity of the facility itself.
- 10) The Forsyth Fowler WRF will discharge to the Chattahoochee Basin (downstream of Lake Lanier) until requiring expansion beyond the 7.5 mgd permitted capacity. The Fowler WRF may maintain a discharge of 5.0 MGD MMF to Big Creek for redundancy and resiliency for the year 2050. Upon requesting a permit capacity beyond 7.5 MGD, an additional new effluent discharge location for the Fowler WRF at Lake Lanier will be implemented. Additionally, the Fowler WRF will maintain its ability to send flow to the Chattahoochee River in order to maintain pressure in the reuse system. The Phasing Plan represents Fowler WRF discharge flows to multiple locations that when combined may be greater than the treatment capacity of the facility itself.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Fulton County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Chattahoochee River	Atlanta/Fulton	90.0	105.0	140.0
	Atlanta	180.0	180.0	240.0
	MCRWSA (Note 3)	8.55	9.0	12.0
Big Creek	Roswell	2.8	3.8	5.0
Sweetwater Creek	East Point	11.5	11.6	15.5
Cedar Creek Reservoirs	Palmetto	0.45	0.45	0.6
Crystalline Rock Aquifer	College Park	0.6	0.6	0.6
Crystalline Rock Aquifer	Roswell	0.167	0.167	0.167
Total Withdrawal (MGD)		294.1	310.7	413.9

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The Middle Chattahoochee Regional Water & Sewer Authority (MCRWSA) includes the Cities of Fairburn, Palmetto, and Union City.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Fulton County Needs (Note 5)	307.2
Self Supplied	-0.97
From CCMWA	-0.07
Total Projected Demand from Facilities (PD-MGD)	306.2
Treatment Capacity	413.9
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	192.0

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.40 from 2011 to 2019 in this County.
- 5) Demand and capacity are based on the combined total demand and capacity for Fulton County as a whole. No attempt was made to analyze demand by individual service provider within Fulton County or to consider existing service areas and previous bonding commitments associated with the development of the existing infrastructure.

Phasing Plan

Facilities (Note 6)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
Atlanta-Fulton County WTP	90.0	140.0
Atlanta Hemphill WTP	136.5	240.0
Atlanta Chattahoochee WTP	64.9	
MCRWSA WTP	0.0	12.0
Roswell Cecil Wood WTP (Note 7)	3.0	5.0
East Point WTP	13.9	15.5
Palmetto WTP	0.6	0.6
Groundwater		
Roswell	0.167	0.167
College Park	0.60	0.60
Total Capacity (PD-MGD)	309.7	413.9

- 6) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.
- 7) City of Roswell WTP expansion includes additional yield from Big Creek, offline storage, and augmenting supply with groundwater.

Interconnections

Maintain interconnections and water supply agreements with Clayton, Fayette, Coweta, DeKalb, Cobb, Forsyth, and Gwinnett Counties. The infrastructure to provide water to Fayette and Clayton Counties on a peak emergency basis should be maintained and expanded as necessary.

Fulton County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Fulton County Sewered Needs	215.6
From DeKalb County (To City of Atlanta RMC & South River)	51.2
From DeKalb County (To Fulton County)	1.5
From Cobb County (To Fulton County)	4.6
From Cherokee County (To Fulton County)	0.04
From Fayette (Tyrone) to Fulton	0.4
From Forsyth County	1.1
To Cobb County (From Fulton and Atlanta)	-12.9
To Clayton County (From College Park)	-4.0
Total Projected Sewered Flow to Plants	257.6

Septic Flows (AAD-MGD)	4.7
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3, 4)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Coosa Basin		
Fulton Little River WRF	2.6	2.6
Chattahoochee Basin		
Fulton Big Creek WRF	24	93
Fulton Johns Creek Environmental Campus	15	
Fulton Camp Creek WRF	24	
Fulton Little Bear WRF	0.1	Decommission
Atlanta RM Clayton WRC	100	188
Atlanta Utoy Creek WRC	40	
Atlanta South River WRC	48	
Flint Basin		
Fairburn LAS		1
Total Capacity (MMF-MGD)	253.7	284.6
Sewered Needs		257.6

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) Treated flow from WWTPs will be discharged to the Chattahoochee River. The Atlanta South River WRC will continue to pump its effluent from the Ocmulgee Basin to the Chattahoochee River. The City of Atlanta combined sewer overflow and treatment facilities will continue to discharge to the Chattahoochee or Ocmulgee Basin, according to the drainage areas they serve.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Gwinnett County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Lake Lanier	Gwinnett	150.0	186.0	248.0
	Buford	2.0	3.8	5.0
Raw Water Storage Pond (Note 3)	Auburn	0.0	1.91	2.54
Total Withdrawal (MGD)		152.0	191.7	255.5

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The Auburn Raw Water Storage Pond and pumping system will be capable of providing 1.59 MGD annual average day flow to meet the City's long term water supply needs. Two intakes on Rock Creek (tributary to Mulberry River) will have the transfer capacity of 15.6 MGD peak day to the Raw Water Storage Pond.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Gwinnett County Needs	194.6
Total Projected Demand from Facilities (PD-MGD)	194.6
Treatment Capacity	255.1
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	121.6

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.58 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
Gwinnett Lanier WTP	150.0	150.0
Gwinnett Shoal Creek WTP	98.0	98.0
Buford WTP	2.5	5.0
Oconee Basin		
Auburn WTP	0.0	2.07
Total Capacity (PD-MGD)	250.5	255.1

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with Hall, Fulton, DeKalb, Cobb, Forsyth, and Rockdale Counties and the City of Auburn.

Gwinnett County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)	2050 Maximum Month (Note 4,7) Average Daily Flow (MMF-MGD)
Gwinnett County Needs	105.3	122.6
From DeKalb County	0.1	0.1
Total Projected Flow to Plants	105.4	122.7
Septic Flows (AAD-MGD) (Note 7)	11.3	7.9

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2020)	By 2040	By 2050 (Note 4)
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin (Lake Lanier)			
Gwinnett F. Wayne Hill WRC (Note 5)	50 (maximum 60 MGD total discharge Lake Lanier + Chattahoochee)	60	60
Chattahoochee Basin (Downstream of Lake Lanier)			
Buford Southside WPCP	2	3.5	4.5
Buford Westside WPCP	0.25	Decommission	
Gwinnett F. Wayne Hill WRC (Note 6)	20 (maximum 60 MGD total discharge Lake Lanier + Chattahoochee)	45	56
Gwinnett Crooked Creek WRF	16		
Gwinnett New WRF (Note 6)			
Ocmulgee Basin			
Gwinnett Yellow River WRF	22	22	22 / 27 (Note 7)
Total Capacity (MMF-MGD)	100.25	130.5	147.5
Sewered Needs		105.4	122.7

Notes:

1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AADF).

2) The schedule shown is intended to be a general guideline to identify general capacity needs. Other than Lake Lanier returns as noted below, while the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.

3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.

4) The 2050 column is provided for Forsyth, Gwinnett, and Hall Counties in order to demonstrate planned infrastructure improvements for return flows to Lake Lanier for the counties that border the lake.

5) The implementation of Lake Lanier discharge facilities is a critical piece of the District Plan and the drinking water supply plan for the State of Georgia in the ACF basin. Therefore, by 2050, Gwinnett County shall have facilities with the capacity to discharge 60 MGD on an average annual basis to Lake Lanier subject to EPD approvals and permits. This requirement is based on the assumption that county-wide water demands meet or exceed 143 mgd AAD. If water demands in future revisions to the District Plan are lower than 143 mgd, then the total return flow capacity requirement of 60 mgd would also be proportionally lower.

6) The 20 MGD currently permitted (F. Wayne Hill WRC) to be discharged to the Chattahoochee River (via Crooked Creek WRF outfall) may eventually come from a new plant instead of the F. Wayne Hill WRC. Alternatively, consideration will be given to other discharge locations.

7) Gwinnett County plans to convert septic tanks in the Ocmulgee River Basin to sewer, creating an estimated additional 5 mgd in flows to the Yellow River WRF. These septic systems are currently considered 100% consumptive in District planning efforts. When these septic-to-sewer conversions are completed, the District Plan includes an up to 5 mgd increase to the Yellow River WRF discharge capacity (to 27 mgd). This is considered part of the approved District facilities plan only if documented septic-to-sewer conversions within the Yellow River WRF are provided to the District and approved by the District prior to expansion. This expansion may be performed incrementally or as one 5 mgd expansion.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Hall County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (Note 1) (MGD)	
			Monthly (Note 2)	Peak Day
Lake Lanier	Gainesville	30.0	41.3	55.0
Cedar Creek Reservoir (North Oconee River)	Gainesville Hall	2.0	0.0	0.0
Crystalline Rock Aquifer	Flowery Branch	0.7	0.7	0.7
Crystalline Rock Aquifer	Lula	0.5	1.2	1.2
Total Withdrawal (MGD)		33.2	43.1	56.9

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
Hall County	48.1
Self Supplied	-1.9
Total Projected Demand from Facilities (PD-MGD)	46.2
Treatment Capacity (Note 3)	55.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	30.1

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.39 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 4)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin		
Gainesville Lakeside WTP	10.0	55.0
Gainesville Riverside WTP	25.0	
Groundwater		
Flowery Branch	0.7	0.7
Lula	0.5	1.2
Total Capacity (PD-MGD)	36.2	56.9

Notes:

- 4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with Gwinnett and White Counties.

Hall County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)	2050 Maximum Month (Note 4) Average Daily Flow (MMF-MGD)
Hall County Sewered Needs	22.6	26.4
Total Projected Sewered Flows to Plants	22.6	26.4

Septic Flows (AAD-MGD)	6.4	7.1
------------------------	-----	-----

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2020)	By 2040	By 2050 (Note 4)
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin (Lake Lanier)			
Flowery Branch WPCP	0.4	3	6
Gainesville Flat Creek WRF	12	25	25
Gainesville Linwood WRF	5		
Hall County Spout Springs (Note 5)		4.5	19
North Hall WWTP (Note 6)			
Lula WRF	0.375	3.8	3.8
Oconee Basin			
Hall County Spout Springs (Note 5)	0.75		
Total Capacity (MMF-MGD)	18.5	36.3	53.8
Sewered Needs		22.6	26.4

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) The 2050 column is provided for Forsyth, Gwinnett, and Hall Counties in order to demonstrate planned infrastructure improvements for return flows to Lake Lanier within the 2040-2050 time period for the counties that border the lake.
- 5) The Hall County Spout Springs facility currently discharges to Lollis Creek in the Oconee Basin. Provisions will be made by 2035 to return this flow to Lake Lanier.
- 6) This new facility must be in conformance with HB 489 negotiations and local wastewater master plans; the discharge may be to (1) To Flat Creek in North Hall above Lake Lanier, (2) To the City of Gainesville Flat Creek WRF, or (3) Other options that are defined by coordinated planning among Hall County, City of Gainesville, Flowery Branch, and Lula. The discharge location will be into the Chattahoochee/Lake Lanier Basin.
- 7) The implementation of Lake Lanier discharge facilities is a critical piece of the District Plan and the drinking water supply plan for the State of Georgia in the ACF basin. In addition to the requirements outlined in notes 5 & 6 above, Hall County and the cities, combined, shall have facilities with the capacity to discharge 16.6 MGD on an average annual basis to Lake Lanier by 2050, subject to EPD approvals and permits. This requirement is based on the assumption that county-wide water demands meet or exceed 32 mgd AAD. If water demands in future revisions to the District Plan are lower than 32 mgd, then the total return flow capacity requirement of 16.6 mgd would also be proportionally lower.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Henry County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Gardner Reservoir (Indian Creek)	HCWA	8.0	18.0	24.0
Rowland Reservoir (Long Creek)		10.0		
Towaliga River Reservoirs (Strickland and Cole)		11.0		
Tussahaw Creek Reservoir		24.0		
Fargason Reservoir (Walnut Creek)	McDonough	2.4	2.4	3.2
Brown Branch	Locust Grove	0.3	0.3	0.5
Crystalline Rock Aquifer	Hampton	0.369	0.369	0.369
Crystalline Rock Aquifer	Locust Grove	1.2	1.2	1.2
Crystalline Rock Aquifer	McDonough	0.3	0.3	0.3
Crystalline Rock Aquifer	Stockbridge	0.75	0.75	0.75
Total Withdrawal (MGD)		40.3	42.9	56.3

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
Henry County Needs	54.9
Self Supplied	-1.2
Total Projected Demand from Facilities (PD-MGD)	53.7
Treatment Capacity	56.3
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	34.3

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.48 from 2011 to 2019 in this county.

Phasing Plan

Facilities (Note 4)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Ocmulgee Basin		
Henry Towaliga River WTP	24.0	24.0
Henry Tussahaw WTP	16.1	26.0
McDonough WTP	2.4	3.2
Locust Grove WTP	0.5	0.5
Groundwater		
Hampton	0.369	0.369
Locust Grove	1.2	1.2
McDonough	0.3	0.3
Stockbridge	0.75	0.75
Total Capacity (PD-MGD)	45.6	56.3

Notes:

- (4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with DeKalb, Clayton, Newton, Butts, and Spalding Counties.

Henry County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Henry County Sewered Needs	19.1
To DeKalb County (Note 6)	-0.50
To Clayton County	-0.10
Total Projected Sewered Flow to Plants	18.5

Septic Flows (AAD-MGD)	6.1
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3, 4)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Flint Basin		
Hampton WPCP	1.75	1.75
Henry Bear Creek WRF/LAS	1.25	1.25
Ocmulgee Basin		
Henry Tussahaw Creek WRF (Note 5)		23.6
Henry Indian Creek WRF	3	
Henry Walnut Creek WRF	8	
Locust Grove Indian Creek WPCP	1.5	3
McDonough Walnut Creek WPCP	2	4
Stockbridge WPCP	1.5	2.25
Total Capacity (MMF-MGD)	19.0	35.9
Sewered Needs		18.5

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) The Henry Bear Creek LAS will serve all unincorporated areas of the County in the Flint Basin. The Henry Walnut Creek WRF and Tussahaw Creek WRF will discharge treated flow to surface water bodies in the Ocmulgee Basin.
- 5) Henry Tussahaw Creek WRF is estimated to be constructed in the 2025-2030 timeframe with a capacity of 0.6 MGD.
- 6) Maintain multi-jurisdictional agreement with DeKalb County to receive wastewater from the northern corner of the county at the DeKalb Pole Bridge AWTF.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Paulding County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Richland Creek Reservoir	Paulding	42.0	27.0	36.0
Etowah River (Note 3)		Fills Richland Creek Reservoir		
Crystalline Rock Aquifer	Dallas	0.202	0.202	0.202
Total Withdrawal (MGD)		42.2	27.2	36.2

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.
- 3) The intake in the Etowah River used to fill Richland Creek Reservoir has the capacity to pump at a peak rate of 47 MGD.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 4)
Paulding County Needs	34.1
Self Supplied	-0.4
From Cobb County-Marietta Water Authority	0.0
Total Projected Demand from Facilities (PD-MGD)	33.7
Treatment Capacity (Note 4)	36.2
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	21.3

Notes:

- 4) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.55 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 5)	Existing (2021) Permitted Plant Capacity (PD-MGD)	By 2040 Plant Capacity at End of Period (PD-MGD)
Coosa Basin		
Paulding County WTP	18.0	36.0
Groundwater		
Dallas	0.202	0.202
Total Capacity (PD-MGD)	18.2	36.2

Notes:

- 5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with Cobb County.

Paulding County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Paulding County Sewered Needs	10.3
From Cobb County	0.48
To Cobb County	-4.42
Total Projected Sewered Flow to Plants	6.4

Septic Flows (AAD-MGD)	5.9
------------------------	-----

Phasing Plan

Facilities (Notes 1, 2, 3, 4)	Existing (2021)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Chattahoochee Basin		
Paulding Coppermine WRF	1	4.3
Paulding Coppermine LAS	1.033	
Paulding Upper Sweetwater WRF	0.3	
Coosa Basin		
Dallas Pumpkinvine Creek WPCP	1.5	4.5
Paulding Pumpkinvine Creek WRF	1.5	7.0
Paulding Pumpkinvine Creek LAS	1	
Total Capacity (MMF-MGD)	6.3	15.8
Sewered Needs		6.4

Notes:

- 1) Max Month Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) Treated flow from the Paulding Pumpkinvine Creek WRF and the new Dallas Pumpkinvine Creek WPCP will be discharged to surface water bodies in the Coosa Basin, while flow discharged to Cobb County will eventually be discharged to the Chattahoochee River. More stringent phosphorus limits will likely be imposed as a result of the recent TMDL for Lake Allatoona. Treated flow from the Paulding Coppermine WRF will be discharged to surface water in the Chattahoochee Basin.

DRAFT - FEBRUARY 2022 STAKEHOLDER REVIEW

Rockdale County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	2040 Planned Withdrawal (MGD) (Note 1)	
			Monthly (Note 2)	Peak Day
Big Haynes Creek (Randy Poynter Lake)	Rockdale	32.8	20.3	27.0
Total Withdrawal (MGD)		32.8	20.3	27.0

Notes:

- 1) 2040 Planned Withdrawal reflects proposed plant capacities needed to accommodate projected water demands and incremental plant expansions.
- 2) Monthly is calculated by dividing Peak Day by 1.33, unless otherwise listed in current permits.

Summary of Needs

Water Demands & Capacities	2040 Peak Day Demand (PD-MGD) (Note 3)
Rockdale County Needs	26.9
Self Supplied	-0.9
Total Projected Demand from Facilities (PD-MGD)	26.0
Treatment Capacity	27.0
Total Projected Demand from Facilities (AAD-MGD)	2040 (AAD-MGD)
	16.8

Notes:

- 3) District-wide planning peak day factor is 1.6 times annual average day.
For local system planning, the highest peak day factor was 1.44 from 2011 to 2019 in this County.

Phasing Plan

Facilities (Note 4)	Existing (2021)	By 2040
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Ocmulgee Basin		
Rockdale WTP	22.1	27.0
Total Capacity (PD-MGD)	22.1	27.0

Notes:

- 4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Interconnections

Maintain interconnections and water supply agreements with DeKalb, Gwinnett and Newton Counties.

Infrastructure should be maintained to allow transfers from DeKalb and Gwinnett Counties to fill peak demands on an emergency basis.

Rockdale County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2040 Maximum Month Average Daily Flow (MMF-MGD)
Rockdale County Sewered Needs	10.2
To Fulton County	-0.2
Total Projected Sewered Flow to Plants	10.0

Septic Flows (AAD-MGD)	3.1
------------------------	-----

Phasing Plan

Facilities (Note 1, 2, 3)	Existing (2020)	By 2040
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Ocmulgee Basin		
Rockdale Quigg Branch WRF	7.0	15.5
Rockdale Almand Branch WWTP	1.25	
Rockdale Honey Creek WWTP	0.3	
Rockdale Scott Creek WWTP	0.22	
Rockdale Reuse Facility (Note 4)		
Rockdale New Snapping Shoals WRF (Note 5)		Decommission
Rockdale Snapping Shoals WWTP (Note 5)	0.45	
Total Capacity (MMF-MGD)	9.22	15.5
Sewered Needs		10.0

Notes:

- 1) Maximum Month Flow is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded.
- 4) The Rockdale Reuse Facility will be constructed by 2040 and have a capacity of 4.0 MGD.
- 5) Rockdale Snapping Shoals WWTP will be replaced with New Snapping Shoals WRF by 2040 at a 3.0 MGD capacity.

Existing Appendix B

County-Level Summaries



Appendix B outlines the anticipated schedule for expanding hydraulic capacity and building new water and wastewater treatment facilities in the Metro Water District to meet 2050 forecasted demands. Actual timing of new or expanded facilities or supplies will occur when local growth and planning indicate the need for additional capacity. This Appendix also includes non-capital programs, such as intergovernmental agreements for the joint use of water and wastewater facilities and other studies necessary to protect water resources and facilitate planned expansions. The information in this Appendix was provided by utilities and local governments based on their local water and wastewater planning efforts.

Integration of the three water resources planning areas (water supply and water conservation management, watershed management and wastewater management) is reflected in the facility plans outlined in this appendix. Planning considerations, such as the return of high-quality effluent to Lake Lanier, Allatoona Lake and the Upper Flint River basin to promote long term sustainability of water use and replenish drinking water supplies and the decommissioning of less efficient wastewater treatment facilities to benefit water quality, influenced the county-level summaries.

This Appendix covers hydraulic capacity only, and it does not cover upgrades to the level of treatment at existing water and wastewater facilities. The level of treatment at wastewater treatment plants may in some cases be impacted by the effectiveness of nonpoint source pollution controls, including those outlined in this Plan, and changes in the assimilative capacity of receiving streams.

Water supply and sewerage wastewater needs for 2025 and 2050 are depicted with two forecast scenarios as discussed in [Section 4](#). These scenarios represent forecasted needs based on the following two foundations for population projections:

Scenario 1: ARC Population and Employment Projections (2020 to 2050)

Scenario 2: Georgia OPB Population Projections and OPB-Based Employment Projections (2020 to 2050)

When evaluating facility capacity for future years, the higher of Scenarios 1 or 2 was considered to confirm sufficient hydraulic capacity will be available to meet future needs.

Facility capacities listed in this appendix for each planning period are considered as maximums, and utilities may plan within and up to that capacity. All new facilities and facility expansions identified in Appendix B are subject to permitting by Georgia EPD and must meet all state standards associated with the necessary permits. Inclusion within this Plan does not guarantee a permit.

The tables in this appendix may not include some small public, private, and/or public-agency wastewater treatment facilities that are operating on an interim basis until such a time as growth allows for consolidation at major wastewater treatment facilities. Some local wastewater providers may elect to decommission some of these facilities during a prior period than what is shown. Small facilities that will be decommissioned earlier than shown in this appendix with their wastewater flows consolidated at another facility in the Metro Water District will not require a plan amendment.

Summary of Planned Sources

A summary of water supply sources is provided for each county including the current permitted withdrawal and the planned 2050 withdrawal. The monthly average day peaking factor of 1.2 (maximum month average day/average annual day) was calculated for the 2003 Water Supply and Water Conservation Management Plan. It was reviewed and confirmed as appropriate for the 2017 Plan during the plan update process.

Plant Capacities

Plant capacities listed in this Appendix were determined to meet or exceed the projected 2050 peak day water demand or maximum monthly flow wastewater facility treatment demand. It is recognized that plant capacity is added in increments based on design factors and economies of scale and not to match a specific projected flow on the date the additional capacity comes online. For example, if a water treatment plant or wastewater treatment plant with a 5-MGD capacity needs to handle a projected demand of 8 MGD, the most cost efficient plan may be to double the current capacity to 10 MGD. The size of incremental expansions should be determined through local water and wastewater master plans based on the design of the facility, economies of scale and the community's needs.

The forecasts of water treatment plant capacity in this appendix were based on a District-wide average peaking factor of 1.6 (peak day/average annual day). This peaking factor was calculated for the 2003 Water Supply and Water Conservation Management Plan. It was reviewed and confirmed as appropriate for the 2017 Plan during the plan update process. The forecasts of wastewater treatment plant capacity in this appendix were based on a District-wide average peaking factor of 1.25 (maximum monthly average daily flow/average annual daily flow) for wastewater demands along with county infiltration/inflow factors. At a local level, these factors will vary for each utility due to variations in water distribution and collections system efficiency. Each utility must determine an appropriate peaking value and the impacts of water conservation measures on future flows in their local water and wastewater master plans (see Action Items [INTEGRATED-2](#) and [INTEGRATED-4](#)).

Significant proposed changes in plant capacity will be evaluated against the essential elements of this Plan through the Plan Amendment process, as discussed in [Section 6.5.1](#) and outlined in the most recent [Adopted Plan Amendment Guidelines](#). Minor changes in phasing of capacity are considered consistent with this Plan and do not require an amendment.

Phasing

The capital improvement project phasing shown in this appendix was developed to provide adequate treatment capacity for the projected water and wastewater demands in that phase and to make steady progress toward implementing the essential elements of this Plan. Within this context, the timeframe for capital improvements in Appendix B is flexible. For example, delaying the date that a plant is decommissioned is generally acceptable. Expanding a plant in a different number of phases is also generally acceptable. Local water and wastewater master plans are expected to define the timeframes for capital improvements in greater detail than this Plan (see Action Items [INTEGRATED-2](#) and [INTEGRATED-4](#)).

The permitting, design, construction and start-up of additional treatment capacity is a lengthy process, generally taking several years at minimum. Although this plan uses the best population and economic numbers available, significant changes in population and/or economic growth can occur more rapidly than updates to this Plan. Utilities are encouraged to identify additional water capacities, especially those that are, by their nature, time sensitive for consideration in future amendments to this Plan.

Permitting

In several instances, planning for future water supplies, shared water supply allocations and local wastewater discharge locations are recommended for local water and wastewater providers within the same county. As such, the split shown in this Appendix between utilities within the same county is based on information available at the time this Plan was prepared and may change based on development and growth patterns in the county. In the case of such changes, an amendment to this Plan would be necessary. Treatment capacity may not be expanded without the issuance of a new or amended water withdrawal or wastewater discharge permit if the proposed facility expansion will expand the treatment capacity beyond the currently permitted water withdrawal or discharge limits.

Bartow County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Lewis Spring	Adairsville	4.1	4.5	6.0
Moss Spring	Emerson	0.5	0.5	1.5
Bolivar Springs	Bartow	0.8	0.8	1.0
Etowah River	Cartersville (Note 2)	23.0	57.0	76.0
Allatoona Lake	Cartersville	18.0		
Paleozoic Rock Aquifer	Emerson	1.0	1.0	1.0
Paleozoic Rock Aquifer	Kingston	0.15	0.15	0.15
Paleozoic Rock Aquifer	White	0.2	0.2	0.2
Total Withdrawal (MGD)		47.8	64.1	85.9

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) The intake in the Etowah River is only permitted to Cartersville. A future intake may have a joint permit with Bartow County.

Summary of Needs

Water Demands & Capacities	2025 Peak Day Demand (Note 3) (PD-MGD)		2050 Peak Day Demand (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Bartow County Needs	58.2	50.3	83.2	64.7
Self Supplied	-1.2	-1.2	-1.1	-1.1
Total Projected Demand from Facilities (PD-MGD)	57.1	49.1	82.1	63.6
Treatment Capacity (Note 5)	59.2		85.7	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
Notes:	35.7	30.7	51.3	39.7

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Coosa Basin			
Adairsville WTP	4.0	6.0	6.0
Emerson WTP	0.5	1.0	1.5
Bartow County WTP	0.8	0.8	0.8
Cartersville Clarence B. Walker WTP	27.0	50.0	76.0
Groundwater			
Emerson	1.0	1.0	1.0
Kingston	0.15	0.15	0.15
White	0.2	0.2	0.2
Total Capacity (PD-MGD)	33.7	59.2	85.7

Notes:

5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

The Adairsville WTP is retained and expanded as necessary to serve its current service area.

Expand Cartersville WTP from 27 MGD to 76 PDD-MGD.

Expand Emerson WTP from 0.5 MGD to 1.5 PDD-MGD.

Non-Capital Programs

The following non-capital programs are specific to Bartow County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain existing interconnections and water supply agreements with Cherokee and Polk Counties.

Bartow County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Bartow County Sewered Needs	24.0	21.0	35.2	27.7
To Cobb County	-0.09	-0.09	-0.13	-0.13
Total Projected Sewered Flow to Plants	23.9	20.9	35.1	27.6
Septic Flows (AAD-MGD)	4.7	3.9	6.1	4.5

Capital Projects

- New treatment capacity will be provided by expanding the Adairsville, Cartersville, and Emerson facilities, as well as expanding the Bartow Southeast WPCP to serve the area of Bartow County South of the Etowah River. It will also be provided by building the new West Bartow WPCP. One existing facility will be phased-out, Bartow Two Run WPCP. Growth over the planning horizon will enlarge the service areas of the major facilities, leading to expansion of these larger facilities coupled with the decommissioning of Bartow Two Run WPCP.
- A planning study should be conducted by Bartow County and other jurisdictions, as needed, to decide among the options for the long-term plan for the Bartow Southeast WPCP.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Coosa Basin			
Adairsville North WPCP	1	5	5
Adairsville South WPCP	0.5		
Cartersville WPCP	15	15	20
Emerson Henry Jordan WWTP	0.45	1.5	2
Bartow Southeast WPCP	0.1	12.1	12.1
West Bartow WPCP (Note 4)			
Bartow Two Run WPCP	0.1	Decommission	
Total Capacity (MMF-MGD)	17.2	33.6	39.1
Sewered Needs (Note 5)		23.9	35.1

Notes:

- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- West Bartow WPCP is estimated to be completed in the 2016-2025 timeframe with a capacity of 4.0 MGD.
- The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Bartow County. These programs are in addition to those that apply to all counties within the Metro Water District.

Develop multi-jurisdiction agreements among the county and cities.

Cherokee County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Latham Reservoir (Yellow Creek)	CCWSA	36.0	39.8	53.0
Etowah River	Canton	5.5	7.5	10.0
Hickory Log Reservoir (Etowah River) (Note 2)	Canton CCMWA			
Crystalline Rock Aquifer	Ball Ground	0.25	0.25	0.25
Total Withdrawal (MGD)		41.7	47.5	63.3

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) Reservoir construction was completed in 2007. Cobb County-Marietta Water Authority (CCMWA) is entitled to 75% (33 MGD) and Canton to the remaining 25% (11 MGD). Intake for Canton is located in the Etowah River not in the reservoir. CCMWA's withdrawals are accounted for in the Cobb County Summary.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Cherokee County Needs	39.9	39.0	56.3	63.2
From CCMWA	-2.0	-2.0	-2.0	-2.0
Self Supplied	-1.8	-1.8	-1.6	-1.6
Total Projected Demand from Facilities (PD-MGD)	36.1	35.2	52.7	59.6
Treatment Capacity (Note 4)	48.3		63.3	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
Notes:	22.6	22.0	32.9	37.3

(3) Peak day is 1.6 times annual average day.

(4) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016) Permitted Plant Capacity (PD-MGD)	By 2025 Plant Capacity at End of Period (PD-MGD)	By 2050 Plant Capacity at End of Period (PD-MGD)
Coosa Basin			
Canton WTP	5.5	10.0	10.0
Cherokee Etowah River WTP	38.0	38.0	53.0
Groundwater			
Ball Ground	0.25	0.25	0.25
Total Capacity (PD-MGD)	43.7	48.3	63.3

Notes:

(5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Canton and CCWSA should expand their WTP.

CCWSA sells water to Pickens, Dawson, and Bartow Counties. These plans are not precluded by the Metro Water District plan, but expansion will need to be permitted by Georgia EPD. Therefore, if these counties are served from Cherokee County, it does not reduce water supplies from the Etowah River sub-basin available to the Metro Water District.

Non-Capital Programs

The following non-capital programs are specific to Cherokee County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain existing interconnections and water supply agreements with Pickens, Forsyth, Cobb and Bartow Counties.

Cherokee County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Cherokee County Sewered Needs	18.3	17.7	28.5	33.0
To Cobb County	-0.61	-0.59	-0.95	-1.10
To Fulton County	-0.03	-0.03	-0.05	-0.06
From Fulton County (To Little River WRF)	1.18	1.26	1.40	1.72
Total Projected Sewered Flow to Plants	18.8	18.3	28.9	33.5
Septic Flows (AAD-MGD)	4.8	4.8	4.8	4.8

Capital Projects

- New treatment capacity will be provided by expanding the Canton WPCP, Cherokee County Water and Sewerage Authority's (CCWSA) Fitzgerald Creek and Rose Creek WPCPs. The CCWSA River Bend Environmental Complex has an ultimate planned capacity of 15.6 MGD. The City of Woodstock WPCP will continue to treat sewage from the City of Woodstock.
- Regionalization with adjoining jurisdictions can only be achieved by combining assimilative capacity from a requesting jurisdiction contingent upon mutually agreeable negotiations between the parties.

Basin Considerations

- Treated flow will be discharged to surface water bodies in the Etowah River Basin.
- Little River WRF will continue to discharge to surface water bodies in the Etowah River Basin.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Coosa Basin			
Woodstock Rubes Creek WPCP	2.5	2.5	2.5
CCWSA Fitzgerald Creek WPCP	5	37.35	42.35
CCWSA Rose Creek WPCP (Note 4)	6		
CCWSA Northeast WPCP/River Bend Environmental Complex (Note 5)			
Canton WPCP (Note 6)	4	8.0	8.0
Fulton County Little River WRF (Note 7)	1	2.6	4.0
Total Capacity (MMF-MGD)	18.5	50.5	56.9
Sewered Needs (Note 8)		18.8	33.5

Notes:

- 1) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment process.
- 4) CCWSA Rose Creek WPCP must report effluent flow used for reuse according to its B2 permit.
- 5) EPD will permit CCWSA to reposition wasteload capacity from the CCWSA Riverbend Environmental Complex to an additional future facility discharging into the Etowah River Basin in a separate outfall if future wastewater capacity demands in other areas of Cherokee County warrant. The CCWSA Northwest WPCP was approved by the MNGWPD through its amendment process and remains on the planning horizon as an additional wastewater treatment facility in Cherokee County in this basin.
- 6) Canton WPCP has B2 permit limit for up to 0.5 MGD of flow for reuse.
- 7) Fulton County Little River WRF has a B2 permit limit for up to 0.2 MGD of flow for reuse.
- 8) The higher of Scenario 1 and Scenario 2 Sewered Flow Forecast is depicted.

Clayton County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Flint River	Clayton	Fills Smith/Shoal Creek Reservoir	47.0	62.6
Smith/Shoal Creek Reservoir	Clayton	17.0		
Hooper Reservoir (Little Cotton Indian Creek)	Clayton	20.0		
Blalock Reservoir (Pates Creek)	Clayton	10.0		
Crystalline Rock Aquifer	Clayton	0.4	0.4	0.4
Total Withdrawal (MGD)		47.4	47.4	63.0

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 2) (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Clayton County Needs	46.2	46.6	60.1	53.8
Total Projected Demand from Facilities (PD-MGD)	46.2	46.6	60.1	53.8
Treatment Capacity (Note 3)	47.4		63.0	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	28.9	29.1	37.6	33.6

Notes:

(2) Peak day is 1.6 times annual average day.

(3) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Flint Basin			
Clayton J.W. Smith WTP	12.0	12.0	12.0
Ocmulgee Basin			
Clayton W.J. Hooper WTP	20.0	20.0	20.0
Flint and Ocmulgee Basin			
Clayton Terry R. Hicks WTP	10.0	15.0	30.6
Groundwater			
Clayton County	0.4	0.4	0.4
Total Capacity (PD-MGD)	42.4	47.4	63.0

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Projection indicate that water sources should be adequate through 2050. Clayton County Water Authority (CCWA) would expand its three WTPs according to their local master plan. Infrastructure should be kept in place to allow transfers from the City of Atlanta to fill peak demands on an emergency basis.

Non-Capital Programs

The following non-capital programs are specific to Clayton County. These programs are in addition to those that apply to all counties within the Metro Water District.

Continue agreements with the Cities of Atlanta and College Park, DeKalb, Fayette, and Henry Counties.

Clayton County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Clayton County Sewered Needs	31.1	31.3	40.9	36.2
From Fulton County	0.05	0.06	0.06	0.08
From DeKalb County	0.11	0.12	0.14	0.12
From Henry County	0.02	0.02	0.02	0.02
To DeKalb County	-1.00	-1.00	-1.00	-1.00
Total Projected Sewered Flow to Plants	30.3	30.5	40.1	35.5
Septic Flows (AAD-MGD)	2.1	2.1	2.1	2.1

Capital Projects

New treatment capacity will be provided by expanding the W.B. Casey WRF.

Basin Considerations

The Clayton Northeast WRF will continue to discharge in the Ocmulgee River Basin. Currently the Clayton WB Casey WRF permit allows for 17.4 MGD discharge to the Ocmulgee River Basin via the wetlands treatment system and the remaining flow (up to 6.6 MGD and potentially an additional 8.0 MGD from plant expansion) will discharge into the Flint River. Flow from Clayton Shoal Creek WRF will also continue to discharge to the Flint Basin.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Flint Basin			
Clayton W.B. Casey WRF	6.6	19	19
Clayton Shoal Creek WRF	4.4		
Ocmulgee Basin			
Clayton W.B. Casey WRF	17.4	27.4	27.4
Clayton Northeast WRF	10		
Total Capacity (MMF-MGD)	38.4	46.4	46.4
Sewered Needs (Note 4)		30.5	40.1

Notes:

- 1) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- 4) The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Clayton County. These programs are in addition to those that apply to all counties within the Metro Water District.

Existing agreements to discharge wastewater to DeKalb Snapfinger WPCP will remain in place until a determination is made as to exact timing to reduce or eliminate those discharges.

Cobb County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Hickory Log Reservoir (Etowah River) (Note 2)	Cobb Canton	0.0	79.5	106.0
Allatoona Lake	Cobb	78.0		
Chattahoochee River	Cobb	87.0	87.0	116.0
Total Withdrawal (MGD)		165.0	166.5	222.0

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) Reservoir construction was completed in 2007. Cobb County-Marietta Water Authority (CCMWA) is entitled to 75% (33 MGD) and Canton to the remaining 25% (11 MGD). This reservoir provides a supplementary source of water to be withdrawn downstream in the Etowah River and Allatoona Lake. The City of Canton's withdrawals are accounted for in the Cherokee County Summary.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Cobb County Needs	123.4	129.0	156.9	153.5
To Paulding County	8.0		0.5	
To Douglas County	5.0		10.0	
To Cherokee County	2.0		2.0	
Total Projected Demand from Facilities (PD-MGD)	138.4	144.0	169.4	166.0
Treatment Capacity (Note 4)	159.0		222.0	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	86.5	90.0	105.9	103.8

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
CCMWA Quarles WTP (Note 6)	86.0	87.0	116.0
Coosa Basin			
CCMWA Wyckoff WTP (Note 7)	72.0	72.0	106.0
Hickory Log Reservoir	0.0	0.0	0.0
Total Capacity (PD-MGD)	158.0	159.0	222.0

Notes:

(5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(6) CCMWA is currently upgrading the Quarles WTP.

(7) Georgia EPD has granted to CCMWA the right to impound and withdraw certain made inflows to Allatoona Lake in accordance with DNR Rule 391-3-6-07(16)(a). Expansions of the Wyckoff WTP assume that CCMWA will be able to obtain additional yield from Allatoona Lake consistent with its permit (Georgia EPD Permit No. 008-1491-05, as modified Nov. 7, 2014). If, for any reason, CCMWA is not able to receive additional yield from Allatoona Lake under its permit, then supply would be from the Chattahoochee River, and the Quarles WTP would be expanded accordingly.

Capital Projects

CCMWA in conjunction with the City of Canton constructed the Hickory Log Creek Reservoir. The reservoir is a pump-storage facility that optimizes water use from the Etowah River and Allatoona Lake. It is permitted to yield 44 MGD.

Expand CCMWA Quarles WTP.

Non-Capital Programs

The following non-capital programs are specific to Cobb County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain existing interconnections and water supply agreements with Cherokee, DDCWSA and Paulding Counties.

Evaluate the required improvements to accommodate peak sale of 10 PD-MGD to DDCWSA.

Cobb County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Cobb County Sewered Needs	80.3	84.3	102.0	99.7
To Fulton County	-3.18	-3.34	-3.50	-3.50
From City of Atlanta	0.23	0.25	0.27	0.34
From Fulton County	7.38	7.92	8.80	10.79
From Fulton County (Big Creek)	3.50	3.50	3.50	3.50
To Paulding County	-0.07	-0.07	-0.09	-0.09
From Bartow County	0.09	0.09	0.13	0.13
From Cherokee County	0.61	0.59	0.95	1.10
From Douglas County	0.50	0.50	1.75	1.75
To Douglas County	-0.25	-0.25	-0.25	-0.25
From Paulding County	0.26	0.25	1.02	1.12
Total Projected Sewered Flow to Plants	89.4	93.7	114.6	114.6
Septic Flows (AAD-MGD)	4.7	4.7	4.7	4.7

Capital Projects

New treatment capacity will be provided by expanding the South Cobb WRF and an expected increase in permitted capacity at R.L. Sutton WRF.

Basin Considerations

The Cobb County Noonday Creek and Northwest WRFs will continue to discharge to the Coosa Basin, and the Cobb County RL Sutton and South Cobb WRFs will continue to discharge to the Chattahoochee River. Wastewater from within Cobb County will continue to be collected according to the natural drainage basin patterns for these two major basins.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Coosa Basin			
Cobb Noonday Creek WRF	20.0	32.0	32.0
Cobb Northwest Cobb WRF	12.0		
Chattahoochee Basin			
Cobb RL Sutton WRF	40.0	100.0	110.0
Cobb South Cobb WRF	40.0		
Total Capacity (MMF-MGD)	112.0	132.0	142.0
Sewered Needs (Note 4)		93.7	114.6

Notes:

- 1) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 2) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- 4) The higher of Scenario 1 and Scenario 2 sewer flow forecasts is depicted.

Non-Capital Programs

The following non-capital programs are specific to Cobb County. These programs are in addition to those that apply to all counties within the Metro Water District.

Continue regional cooperation on wastewater treatment issues.

Coweta County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
B.T. Brown Reservoir (Note 9, 10, 11)	CCWSA	6.7	22.1	26.9
Chattahoochee River to BT Brown Res. (Note 2, 11)	CCWSA	0	21.3	21.3
J.T. Haynes Reservoir	Newnan	14.0	14.0	18.6
Sandy Brown Creek	Newnan	Fill J.T. Haynes Reservoir only		
White Oak Creek (Flint River)	Newnan			
Line Creek (Flint River)	Newnan			
Hutchins' Lake (Keg Creek)	Senoia	0.3	0.34	0.45
Crystalline Rock Aquifer	CCWSA	0.504	0.504	0.504
Crystalline Rock Aquifer	Senoia	0.233	0.233	0.233
Total Withdrawal (MGD)		21.7	37.1	46.7

Notes:

- (1) Monthly average day is 1.2 times annual average day.
- (2) The Chattahoochee River pump rate of 21.3 MGD for 2050 is required to help fill the BT Brown Reservoir. This withdrawal is not additive and is thus not included in the Total Withdrawal for Coweta County.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Coweta County Needs	27.8	25.6	38.0	37.6
Self Supplied	-1.8	-1.8	-1.4	-1.4
From Fulton County (Note 4)	0.0		0.0	
From Griffin's Still Branch Reservoir (Note 5)	-5.0		0.0	
Total Projected Demand from Facilities (PD-MGD)	21.0	18.8	36.6	36.2
Treatment Capacity (Note 6)	32.7		46.7	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	13.1	11.8	22.9	22.6

Notes:

- (3) Peak day is 1.6 times annual average day.
- (4) Coweta County Water and Sewer Authority (CCWSA) is seeking a permit from Georgia EPD to have a direct withdrawal from the Chattahoochee River. If that water withdrawal is permitted and constructed, CCWSA would no longer purchase from the City of Atlanta. In either scenario, total withdrawals from the Chattahoochee will not be affected. In the event that a withdrawal permit is obtained, the connection with the City of Atlanta will be maintained for emergency service.
- (5) The Still Branch Creek Reservoir is located outside of the District and is owned by the City of Griffin in Spalding County. The reservoir serves Pike and Spalding Counties as well as Coweta County. Coweta County has a purchase contract for 3.0 PDD-MGD of finished water (2008) from the City of Griffin which increases to 5.0 PDD-MGD on July 1, 2022.
- (6) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 7)	Existing (2016) Permitted Plant Capacity (PD-MGD)	By 2025 Plant Capacity at End of Period (PD-MGD)	By 2050 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
Coweta B.T. Brown WTP	6.4	17.5	26.9
Chattahoochee/Flint Basins			
Newnan Hershall Norred WTP	14.0	14.0	18.6
Flint Basin			
Senoia WTP (Note 8)	0.45	0.45	0.45
Groundwater			
Coweta County	0.504	0.504	0.504
Senoia	0.233	0.233	0.233
Total Capacity (PD-MGD)	21.6	32.7	46.7

Notes:

- (7) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(8) The City of Senoia has a withdrawal permit with a monthly limit of 0.3 MGD from Hutchin's Lake and a WTP with a total capacity of 0.45 MGD-PD. The City will need to increase their water withdrawal permit in order to fully utilize the plant capacity.

(9) The BT Brown Reservoir and pumping system will be capable of providing 26.9 MGD at 2050. The intake in the Chattahoochee River will have the capacity to pump at a peak rate of 21.3 MGD at 2050. The buildout capacity will be constructed in phases as demands increase.”

(10) The withdrawal from the Chattahoochee River is to be pumped into BT Brown Reservoir for storage prior to treatment. The withdrawal from BT Brown Reservoir is taking water previously removed from the Chattahoochee River for treatment.

(11) The withdrawals from the Chattahoochee River and BT Brown are to serve as a replacement for an existing water source from a small tributary of the Chattahoochee River, which has proven its inability as a resilient water source in most recent droughts of record. This proposed Chattahoochee River withdrawal will allow the Authority to supply demands previously served by outside water providers and increase the resilience of its water supply.

Capital Projects

The B.T. Brown WTP should be expanded to 26.9 PDD-MGD by 2050 to fully utilize the yield of B.T. Brown Reservoir.

A water intake pump station and force main to convey water from the Chattahoochee River to the B.T. Brown Reservoir shall be constructed to carry 21.3 MGD by year 2050. The buildout will be completed in phases.

Non-Capital Programs

The following non-capital programs are specific to Coweta County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections with City of Atlanta and City of Griffin.

Coweta County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Coweta County Sewered Needs	9.2	8.4	13.5	13.4
Total Projected Sewered Flow to Plants	9.2	8.4	13.5	13.4
Septic Flows (AAD-MGD)	5.0	4.7	6.5	6.4

Capital Projects

Additional capacity will be provided by expanding the existing Coweta County and Newnan facilities and by the construction of new Coweta County, Grantville, Senoia, and Sharpsburg facilities. If opportunities become available, the following options may be exercised:

Option for Senoia to decommission the current LAS and send flow to future facilities.

Explore opportunities for beneficial effluent reuse with permits for wet weather discharge.

Basin Considerations

Coweta Shenandoah WPCP, Senoia LAS and the proposed Sharpsburg and Senoia WPCPs are located in the Flint Basin. All other Coweta facilities are located in the Chattahoochee Basin.

Phasing Plan

Facilities (Notes 1, 2, 3)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Chattahoochee Basin			
Coweta Arno WPCP	0.1	3.76	7.6
Coweta Arnall/Sargent WPCP	0.06		
Coweta Decentralized Systems			
Coweta Bridgeport WPCP			
Grantville Colley Street LAS (Note 6)	0.15	0.78	0.78
Grantville Ponds (Notes 5, 6)	0.12		
Grantville Yellow Jacket Creek WPCP (Notes 5, 6)			
Grantville New River WPCP (Notes 5, 6)			
Newnan Mineral Springs WPCP	0.75	6.5	10
Newnan Wahoo Creek WPCP	3		
Flint Basin			
Senoia LAS (Note 6)	0.49	3.3	7.5
Sharpsburg WPCP (Notes 4, 6)			
Senoia Southeast WPCP (Note 6)			
Coweta Crossroads LAS	0.23	4	6
Coweta Shenandoah WPCP	2		
Coweta 12 Parks WPCP			
Total Capacity (MMF-MGD)	6.9	18.3	31.9
Sewered Needs (Note 7)		9.2	13.5

Notes:

1) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.

2) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).

3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.

4) Sharpsburg WPCP is expected to have an initial capacity of 0.3 MGD by 2025. 0.15 MGD will be to LAS; an additional 0.15 MGD will either be to the LAS or new point source discharge.

5) Benefits of decommissioning these facilities will be investigated in the 2016 to 2025 time period.

6) Proposed capacity is to be shared between these facilities as determined by joint local wastewater master planning.

7) The higher of Scenario 1 and Scenario 2 sewer flow forecasts is depicted.

Non-Capital Programs

The following non-capital programs are specific to Coweta County. These programs are in addition to those that apply to all counties within the Metro Water District.

Undertake a joint planning study comprised of the county and local cities to develop a comprehensive, strategic plan for managing wastewater. The study should determine how to best utilize existing and proposed city and county treatment facilities to serve the whole area.

Develop multi-jurisdiction agreements among the county and cities, as needed.

Develop multi-jurisdictional agreements between the county, City of Senoia, Fayette County and Peachtree City, as needed, for regional plan.

Develop options for large industrial sites to be served by the County in the future.

DeKalb County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Chattahoochee River	DeKalb	140.0	120.0	160.0
Total Withdrawal (MGD)		140.0	120.0	160.0

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Annual Average Day (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
DeKalb County Needs	124.1	126.0	152.7	133.2
Total Projected Demand from Facilities (PD-MGD)	124.1	126.0	152.7	133.2
Treatment Capacity (Note 3)	150.0		160.0	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
Notes:	77.5	78.7	95.4	83.2

(2) Peak day is 1.6 times annual average day.

(3) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
DeKalb Scott Candler WTP	150.0	150.0	160.0
Total Capacity (PD-MGD)	150.0	150.0	160.0

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Expand Scott Candler WTP to meet future demands

Non-Capital Programs

The following non-capital programs are specific to DeKalb County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with Gwinnett, Rockdale, Henry, and Clayton Counties and the City of Atlanta.

DeKalb County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
DeKalb County Sewered Needs	93.8	95.3	114.3	99.2
To Fulton (Fulton County + City of Atlanta)	-47.6	-48.4	-58.0	-50.3
To Clayton County	-0.1	-0.1	-0.1	-0.1
To Gwinnett County	-0.5	-0.5	-0.6	-0.5
From Clayton County	1.0	1.0	1.0	1.0
From Henry County	0.1	0.1	0.1	0.1
Total Projected Sewered Flow to Plants	46.7	47.4	56.7	49.3
Septic Flows (AAD-MGD)	2.9	2.9	2.9	2.9

Capital Projects

The treated flow from DeKalb Polebridge and Snapfinger WPCP's will be discharged to two rivers; combined plant discharges from the Snapfinger WPCP and the Pole Bridge Creek WPCP in excess of that currently permitted (56 mgd) will be either (1) returned to the Chattahoochee River Basin in accordance with a wasteload allocation to be issued by Georgia EPD or (2) indirectly reused for drinking water in DeKalb County thus reducing the County's future withdrawals from the Chattahoochee River. The reuse option may consist of an increased discharge beyond 56 mgd into the South River with a corresponding downstream water withdrawal for drinking water.

Basin Considerations

The treated flow from the DeKalb Polebridge and Snapfinger WPCPs will be discharged to two rivers; all flow above 56 MGD in the Ocmulgee basin portion of the County will be returned following one of the two scenarios outlined in Capital Projects, above.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Permitted Plant Capacity at End of Period (MMF-MGD)	Permitted Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3, 4, 5)			
Ocmulgee Basin			
DeKalb Pole Bridge AWTF	20	56	93
DeKalb Snapfinger AWTF	36		
Total Capacity (MMF-MGD)	56	56	93
Sewered Needs (Note 6)		47.4	56.7

Notes:

- 1) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 3) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- 4) Discharge from Pole Bridge and Snapfinger is permitted by a combined discharge permit. New 54 MGD wastewater treatment plant adjacent to Snapfinger with an NPDES point discharge to South River in the Upper Ocmulgee River Basin. Demolition began in 2015 with expected completion in 2020.
- 5) Some small public, private, and/or public-agency WWTPs may be converted into pretreatment plants or transfer pump stations, while others could be retained, expanded, or modified to meet local conditions.
- 6) The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to DeKalb County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain existing agreement with the City of Atlanta for treating wastewater at the RM Clayton and Intrustment Creek WRCs.

Continue agreements to send/receive wastewater from Clayton, Fulton, Gwinnett, Henry, and Rockdale Counties.

Douglas County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Dog River Reservoir	DDCWSA	23.0	23.0	30.6
Bear Creek Reservoir (Note 2)	DDCWSA			
Lake Paradise/Cowens Lake	Villa Rica	1.5	0.5	0.6
Total Withdrawal (MGD)		24.5	23.4	31.2

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) Bear Creek Reservoir is a supplemental source to Dog River with a monthly permit limit of 6.4 MGD that is used to maintain in-stream flow.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Douglas County Needs	23.9	24.4	32.0	34.7
From CCMWA	-5.0		-10.0	
Total Projected Demand from Facilities (PD-MGD)	18.9	19.4	22.0	24.7
Treatment Capacity (Note 4)	24.0		31.2	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-	Scenario 2 2025 (AAD-	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	11.8	12.1	13.8	15.4

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
DDCWSA Bear Creek WTP	23.0	23.0	30.6
Tallapoosa Basin			
Villa Rica Franklin Smith WTP (Note 6)	1.5	1.0	0.6
Total Capacity (PD-MGD)	24.5	24.0	31.2

Notes:

(5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(6) The Villa Rica Franklin Smith WTP is located in Carrol County and provides water to areas outside Douglas County that are not included in these projections.

Capital Projects

N/A

Non-Capital Programs

The following non-capital programs are specific to Douglas County. These programs are in addition to those that apply to all counties within the Metro Water District.

Determine required improvements to accommodate routine purchase of 10 PD-MGD from CCMWA or expand existing plant capacity. Maintain interconnections and water supply agreements with Cobb County Water System.

Douglas County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Douglas County Sewered Needs	10.1	10.3	13.4	14.5
From Cobb County	0.25	0.25	0.25	0.25
To Cobb County	-0.50	-0.50	-1.75	-1.75
Total Projected Sewered Flow to Plants	9.9	10.1	11.9	13.0
Septic Flows (AAD-MGD)	3.0	3.1	4.0	4.3

Capital Projects

- Wastewater treatment plants within the County will be expanded as demanded by growth.
- The Douglasville-Douglas County Water & Sewer Authority has constructed an alternate discharge point downstream from the current for the existing 6.0 MGD South Central Water Pollution Control Plant. This included a flow Augmentation line to send treated effluent flows downstream of the Dog River Reservoir. This supplements the 7Q10 flows, required by permit, between the dam and the Chattahoochee River and allows water supply reservoir conservation during times of low flow. A Sidestream Plant at the Sweetwater Creek WPCP has been upgraded to provide additional reuse flow to a private industry of up to 3.0 mgd from the current 1.75 MGD.

Basin Considerations

DDCWSA and Villa Rica North facilities will be discharged to surface water bodies in the Chattahoochee Basin. Villa Rica West discharges to the Tallapoosa Basin.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Chattahoochee Basin			
DDCWSA Rebel Trails WPCP	0.04	Decommission	
DDCWSA South Central UWRF	0.5	0.5	Decommission
DDCWSA South Central WPCP	6	17.0	20.0
DDCWSA Northside WPCP	0.6		
DDCWSA Sweetwater Creek WPCP (Note 4)	3		
Villa Rica North WPCP	0.52	0.84	0.84
Tallapoosa Basin			
Villa Rica West WPCP (Note 5)	2.15	2.15	6.5
Total Capacity (MMF-MGD)	12.3	20.5	27.3
Sewered Needs (Note 6)		10.3	14.5

Notes:

- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan.
- DDCWSA may increase capacity either by expanding the Sweetwater Creek WPCP or by purchasing capacity from Cobb County Water System.
- Villa Rica West WPCP is located within Carroll County; half of this facility flow was estimated to be generated in Douglas County.
- The higher of Scenario 1 and Scenario 2 sewer flow Forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Douglas County. These programs are in addition to those that apply to all counties within the Metro Water District. Participate in joint planning study with Cobb and Paulding Counties to develop a regional approach to wastewater management for the portion of Paulding County in the Chattahoochee Basin.

Develop multi-jurisdiction agreement with Paulding County and Cobb County, as needed.

Fayette County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Lake Horton (Horton Creek)	Fayette	14.0	20.3	27.0
Flint River		Fills Lake Horton only		
Whitewater Creek				
Flat Creek (Lake Kedron/Peachtree)				
Lake McIntosh		12.5		
Whitewater Creek	Fayetteville	3.0	0.0	0.0
Crystalline Rock Aquifer	Fayetteville	0.937	2.0	2.0
Crystalline Rock Aquifer	Fayette	0.875	0.875	0.875
Total Withdrawal (MGD)		35.3	23.1	29.9

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 2) (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Fayette County Needs	20.6	20.5	26.7	22.5
Self Supplied	-2.1	-2.1	-1.6	-1.6
Total Projected Demand from Facilities (PD-MGD)	18.5	18.4	25.0	20.8
Treatment Capacity (Note 3)	24.9		29.9	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1	Scenario 2	Scenario 1	Scenario 2
	2025 (AAD-MGD)	2025 (AAD-MGD)	2050 (AAD-MGD)	2050 (AAD-MGD)
	11.6	11.5	15.6	13.0

Notes:

(2) Peak day is 1.6 times annual average day.

(3) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Flint Basin			
Fayette County Crosstown WTP	13.5	13.5	27.0
South Fayette WTP	9.2	9.2	
Fayetteville WTP	3.0	0.0	
Groundwater			
Fayetteville	0.937	1.300	2.000
Fayette County	0.875	0.875	0.875
Total Capacity (PD-MGD)	27.5	24.9	29.9

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

The Fayetteville WTP is currently rated to run a 4 PDD-MGD but is limited by its withdrawals permit of 3 PDD-MGD.

Non-Capital Programs

The following non-capital programs are specific to Fayette County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with City of Atlanta and Clayton County.

Fayette County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Fayette County Sewered Needs	7.4	7.4	8.9	7.6
City of Tyrone to Fulton County	-0.4	-0.4	-0.4	-0.4
Total Projected Sewered Flow to Plants	7.0	7.0	8.5	7.2
Septic Flows (AAD-MGD)	3.1	3.1	4.1	3.4

Capital Projects

Wastewater treatment in Fayette County will be provided at three existing facilities, two in Peachtree City and one in Fayetteville. The City of Fairburn and Fulton County will continue to provide wastewater treatment to Tyrone through agreements.

Basin Considerations

Treated flow will be discharged to the Flint Basin except that the Town of Tyrone will continue to discharge to the Chattahoochee Basin in accordance with the existing intergovernmental agreement with Fulton County.

Phasing Plan

Facilities (Note 1)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Flint Basin			
Peachtree City Line Creek/Larry B. Turner WPCP	2.0	6.0	6.0
Peachtree City Rockaway WPCP (Note 2)	4.0		
Fayetteville Whitewater Creek WPCP	5.0	5.0	5.0
Total Capacity (MMF-MGD)	11.0	11.0	11.0
Sewered Needs (Note 2)		7.0	8.5

Notes:

- 1) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 2) The Peachtree City Rockaway WPCP is also permitted for 1.0 MMF-MGD of discharge to LAS.
- 3) The higher of Scenario 1 and Scenario 2 sewered flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Fayette County. These programs are in addition to those that apply to all counties within the Metro Water District.

Evaluate the need for additional wastewater treatment capacity in local wastewater master plans.

Forsyth County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Lake Lanier	Cumming	18.0	27.0	36.0
	Forsyth (Note 2)	14.0	45.0	60.0
Crystalline Rock Aquifer	Forsyth	0.7416	0.7416	0.7416
Total Withdrawal (MGD)		32.7	72.8	96.8

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) Forsyth County has an agreement with City of Cumming to share the raw water withdrawal intake on Lake Lanier. The current permit states that at no time will the total water withdrawal rate (sum of the Forsyth County and City of Cumming withdrawals) exceed 37 MGD on a daily basis or 32 MGD on a monthly basis.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Forsyth County Needs	50.4	47.3	76.6	95.3
Self Supplied	-1.0	-1.0	-0.8	-0.8
Total Projected Demand from Facilities (PD-MGD)	49.5	46.3	75.8	94.5
Treatment Capacity (Note 4)	57.0		96.8	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1	Scenario 2	Scenario 1	Scenario 2
	2025 (AAD-MGD)	2025 (AAD-MGD)	2050 (AAD-MGD)	2050 (AAD-MGD)
	30.9	28.9	47.4	59.0

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
Cumming WTP	24.0	24.0	36.0
Forsyth County WTP (Note 6)	28.73	32.2	60.0
Groundwater			
Forsyth County	0.7416	0.7416	0.7416
Total Capacity (PD-MGD)	53.5	57.0	96.8

Notes:

(5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(6) Forsyth County is considering options to withdraw water from the Chattahoochee River.

Capital Projects

Lake Lanier may continue to be used as the main water source for Forsyth County and City of Cumming. Both WTPs should be expanded.

Apportionment of the capacity between Forsyth County and City of Cumming should be based on the needs and growth of their respective service areas.

If water storage is not granted by the USACE, then Forsyth County may:

1. Apply for a water withdrawal permit from the Chattahoochee River which may need the construction of a new WTP near the intake location.
2. Apply for a combination water withdrawal from the Chattahoochee River and Lake Lanier. May need the construction of a new WTP near the intake location.

Non-Capital Programs

The following non-capital programs are specific to Forsyth County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with Cherokee, Fulton, and Dawson Counties.

Forsyth County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Forsyth County Sewered Needs	17.8	16.2	29.9	39.1
To Fulton County	-2.00	-2.00	-2.00	-2.00
Total Projected Sewered Flow to Plants	15.8	14.2	27.9	37.1
Septic Flows (AAD-MGD)	4.9	4.9	4.9	4.9

Capital Projects

New treatment capacity will be provided by constructing the new Shakerag facility and two new facilities discharging to Lake Lanier and expanding the Fowler WRF. Apportionment of capacity between the Forsyth County and City of Cumming should be based on the needs and growth of their respective service areas. Allocation of proposed treatment capacity between Forsyth County and the City of Cumming will be agreed upon by both jurisdictions in accordance with the local wastewater master plan prior to requesting wasteload allocations or seeking permits. The local wastewater master plan will also include an analysis of the feasibility of constructing a combined facility between the City and County.

Basin Considerations

- The City of Cumming will construct a new AWWRF that will discharge to Lake Lanier and return flow to the Lake.
- Forsyth County will construct a new AWWRF that will discharge to Lake Lanier (Note 4).

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 2,3 and 5)			
Chattahoochee Basin (Lake Lanier)			
Cumming Bethelview Road WPCP			8.0
Cumming Habersham WPCP (Note 6)	0.11	7.61	Decommission
Cumming Lake Lanier WRF (Note 4)			15.0
Forsyth Lake Lanier WRF (Note 4)		2.50	5.0
Forsyth Fowler WRF			15.00
Chattahoochee Basin (Downstream of Lake Lanier)			
Cumming Bethelview Road WPCP	8	8.0	
Forsyth Fowler WRF	1.75	15.31	8.55
Forsyth Shakerag WRF	1.25		
Forsyth James Creek WRF	1		
Forsyth Dick Creek WRF	0.76		Decommission
Forsyth Windermere Urban Reuse LAS (Seasonal Discharge)	0.55	Decommission	
Coosa Basin			
Forsyth Manor Water Reuse Facility	0.5	0.5	0.5
Forsyth Parkstone at the Bridges LAS	0.1	Decommission	
Total Capacity (MMF-MGD)	14.02	33.9	52.1
Sewered Needs (Note 8)		15.8	37.1

Notes:

- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- The proposed Cumming and Forsyth AWWRFs that will discharge to Lake Lanier may be built as separate facilities, or may be combined into one facility.
- The City and County may acquire private wastewater systems that result in minor changes and possible additions to discharge permits.
- The City of Cumming is currently in negotiations to acquire the private Habersham facility.
- Forsyth County is currently maintaining 0.5 mgd capacity in the Hamptons WRF, a private wastewater facility.
- The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Forsyth County. These programs are in addition to those that apply to all counties within the Metro Water District. Make provisions to return reclaimed water to Lake Lanier, the source of the area's drinking water, by 2050 with the exception of the permitted capacity for the Forsyth Shakerag WRF which will continue to discharge to the Chattahoochee River.

Fulton County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Chattahoochee River	Atlanta/Fulton	90.0	105.0	140.0
	Atlanta	180.0	180.0	240.0
Big Creek	Roswell	2.8	3.8	5.0
Sweetwater Creek	East Point	11.5	11.6	15.5
Cedar Creek Reservoirs	Palmetto	0.45	0.45	0.6
Crystalline Rock Aquifer	College Park	0.167	0.1670	0.1670
Crystalline Rock Aquifer	Roswell	0.167	0.1670	0.1670
Total Withdrawal (MGD)		285.1	301.2	401.4

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) The Bear Creek Reservoir is currently planned by the proposed South Fulton Municipal Regional Water and Sewer Authority, with an estimated yield of 16.44 AAD-MGD. It would withdraw from the Chattahoochee River below Peachtree Creek. If constructed, it would supplement and offset water supply needs for Fulton County.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Fulton County Needs (Note 4)	248.5	266.2	298.2	363.9
Self Supplied	-1.21	-1.21	-1.01	-1.01
Total Projected Demand from Facilities (PD-MGD)	247.3	265.0	297.2	362.9
Treatment Capacity (Note 5)	309.2		401.4	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	154.6	165.6	185.8	226.8

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Demand and capacity are based on the combined total demand and capacity for Fulton County as a whole. No attempt was made to analyze demand by individual service provider within Fulton County or to consider existing service areas and previous bonding commitments associated with the development of the existing infrastructure.

(5) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 6)	Existing (2016) Permitted Plant Capacity (PD-MGD)	By 2025 Plant Capacity at End of Period (PD-MGD)	By 2050 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
Atlanta-Fulton County WTP	90.0	90.0	140.0
Atlanta Hemphill WTP	136.5	136.5	240.0
Atlanta Chattahoochee WTP	64.9	64.9	
Roswell Cecil Wood WTP (Note 7)	3.0	3.0	5.0
East Point WTP	13.9	13.9	15.5
Palmetto WTP	0.6	0.6	0.6
Groundwater			
Roswell	0.167	0.167	0.167
College Park	0.167	0.167	0.167
Total Capacity (PD-MGD)	309.2	309.2	401.4

Notes:

(6) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(7) City of Roswell WTP expansion includes additional yield from Big Creek, offline storage, and augmenting supply with groundwater.

Capital Projects

Future expansion should be concentrated at the Atlanta-Fulton County WTP because the intake is located at an upstream location and has an off-line reservoir that improves its reliability.

The infrastructure to provide water to Fayette and Clayton Counties on a peak emergency basis should be maintained and expanded as necessary.

Non-Capital Programs

The following non-capital programs are specific to Fulton County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections with Clayton, Fayette, Coweta, DeKalb, Cobb, Forsyth, and Gwinnett Counties.

Fulton County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Fulton County Sewered Needs	184.2	197.7	219.4	269.1
From DeKalb County (To City of Atlanta RMC)	40.7	41.4	49.6	43.0
From DeKalb County (To Fulton County)	0.8	0.9	1.0	0.9
From DeKalb County (To City of Atlanta South River)	6.0	6.1	7.4	6.4
From Cobb County (To Fulton County)	3.2	3.3	3.5	3.5
From Cherokee County (To Fulton County)	0.03	0.03	0.05	0.06
From City of Tyrone (Fayette County) to Fulton County	0.40	0.40	0.40	0.40
From Forsyth County	2.00	2.00	2.00	2.00
To Cobb County (From City of Atlanta)	-0.2	-0.2	-0.3	-0.3
To Cobb County (From Fulton County)	-7.4	-7.9	-8.8	-10.8
To Cobb County (From Fulton County- Big Creek)	-3.5	-3.5	-3.5	-3.5
To Clayton County (From College Park)	-0.05	-0.06	-0.06	-0.08
To Cherokee Co (Little River WRF)	-1.18	-1.26	-1.40	-1.72
Total Projected Sewered Flow to Plants	225.0	238.8	269.3	308.9
Septic Flows (AAD-MGD)	4.1	4.1	4.1	4.1

Capital Projects

- Existing arrangements to receive wastewater from and send wastewater to adjoining counties will be continued or amended as required.
- The City of Atlanta will use the current design capacity at its WRCs to treat wastewater flows. Wastewater may need to be pumped within the City to fully utilize each WRC. It will continue to receive wastewater for treatment from DeKalb County, Sandy Springs, and southern Fulton County.
- Industrial WWTPs may be converted into pretreatment plants, while others could be retained, expanded or modified. It may be necessary to add some small public, private, and/or public-agency WWTPs on an interim basis in fringe areas of the county, until growth fills in sufficiently to allow consolidation at the major facility.

Basin Considerations

Treated flow from WWTPs will be discharged to the Chattahoochee River. The Atlanta South River WRC will continue to pump its effluent from the Ocmulgee Basin to the Chattahoochee River. The City of Atlanta combined sewer overflow and treatment facilities will continue to discharge to the Chattahoochee or Ocmulgee Basin, according to the drainage areas they serve. The City of Tyrone (in Fayette County) will continue to pump effluent from the Flint Basin to the Chattahoochee Basin.

Phasing Plan

Facilities (Notes 1, 2, 3, 4, 5, 6)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Coosa Basin			
Fulton Little River WRF (Note 6)	-	-	-
Chattahoochee Basin			
Fulton Big Creek WRF	24	82	103
Fulton Johns Creek Environmental Campus	15		
Fulton Camp Creek WRF	24		
Fulton Cauley Creek WRF (Note 7)	5		
Fulton Little Bear WRF	0.1	Decommission	
Atlanta RM Clayton WRC	100	188	220
Atlanta Uttoy Creek WRC	40		
Atlanta South River WRC	48		
Flint Basin			
Fairburn LAS		1	1
Total Capacity (MMF-MGD)	256.1	271.0	324.0
Sewered Needs (Note 8)		238.8	308.9

Notes:

- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- Some small public, private, and/or public-agency WWTPs may be converted into pretreatment plants or transfer pump stations, while others could be retained, expanded, or modified to meet local conditions.
- Fulton County may remove any of the above facilities from service at its discretion provided Fulton County continues to provide the needed capacity for wastewater treatment.
- Little River WRF treats flow generated in Fulton County and provides reuse water to Settingdown Creek golf course and discharges to the Little River in Cherokee County. The plant capacity of 2.6 mgd by 2025 and 4 mgd by 2050 are reflected in the Cherokee County facility phasing plan.
- This facility is not currently operational but still retains a permit. This facility may be decommissioned in the planning period.
- The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Fulton County. These programs are in addition to those that apply to all counties within the Metro Water District.

Continue or amend agreements between county and cities.

Existing agreements to receive wastewater from and send wastewater to adjoining counties will be continued or amended.

Gwinnett County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Lake Lanier	Gwinnett	150.0	169.15	225.48
	Buford	2.0	3.62	4.83
Crystalline Rock Aquifer	Lawrenceville	2.0	2.00	2.00
Raw Water Storage Pond	Auburn	0.0	1.91	2.54
Total Withdrawal (MGD)		154.0	176.68	234.85

Notes:

- (1) Monthly average day is 1.2 times annual average day.
 (2) The Auburn Raw Water Storage Pond and pumping system will be capable of providing 1.59 MGD annual average day flow to meet the City's long term water supply needs. Two intakes on Rock Creek (tributary to Mulberry River) will have the transfer capacity of 15.6 MGD peak day to the Raw Water Storage Pond.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Gwinnett County Needs	154.0	161.9	211.3	232.3
Total Projected Demand from Facilities (PD-MGD)	154.0	161.9	211.3	232.3
Treatment Capacity (Note 4)	256.1		256.9	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	96.2	101.2	132.1	145.2

Notes:

- (3) Peak day is 1.6 times annual average day.
 (4) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016) Permitted Plant Capacity (PD-MGD)	By 2025 Plant Capacity at End of Period (PD-MGD)	By 2050 Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
Gwinnett Lanier WTP	150.0	150.0	150.0
Gwinnett Shoal Creek WTP	98.0	98.0	98.0
Buford WTP	2.5	4.83	4.83
Oconee Basin			
Auburn WTP	0.0	1.3	2.07
Groundwater			
Lawrenceville	2.0	2.0	2.0
Total Capacity (PD-MGD)	252.5	256.1	256.9

Notes:

- (5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Expand Buford WTP
 Construct and expand Auburn WTP

Non-Capital Programs

The following non-capital programs are specific to Gwinnett County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections with Hall, Fulton, DeKalb, Cobb, Forsyth, and Rockdale Counties and the City of Auburn.

Gwinnett County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Gwinnett County Needs	82.2	87.1	116.6	129.7
From DeKalb County	0.5	0.5	0.6	0.5
Total Projected Flow to Plants	82.7	87.6	117.2	130.2
Septic Flows (AAD-MGD)	10.4	10.4	10.4	10.4

Capital Projects

New treatment capacity will be provided by expanding the Gwinnett Crooked Creek and F. Wayne Hill WRFs and Buford Southside WPCP.

Basin Considerations

- Discharge of reclaimed water to the Yellow River will remain at 22 MGD as is presently permitted.
- Reclaimed water produced by Gwinnett F. Wayne Hill WRC (40 MGD) is returned to Lake Lanier per NPDES permit GA0038130, with 20 MGD permitted for discharge to the Chattahoochee River.
- The reclaimed water that will be produced by the expansion of the F. Wayne Hill WRC (20 MGD) will be discharged to Lake Lanier subject to the EPD approvals and permits.
- The additional 9 MGD at the Gwinnett Crooked Creek WRF is to be discharged into the Chattahoochee River.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Chattahoochee Basin (Lake Lanier)			
Gwinnett F. Wayne Hill WRC (Note 4)	40	60	60
Chattahoochee Basin (Downstream of Lake Lanier)			
Buford Southside WPCP	2	3.5	4.5
Buford Westside WPCP	0.25	0.25	Decommission
Gwinnett Crooked Creek WRC	16	16	25
Gwinnett F. Wayne Hill WRC (Note 4)	20	0	20
Ocmulgee Basin			
Gwinnett Yellow River WRF	22	22	22
Total Capacity (MMF-MGD)	100.25	101.75	131.5
Sewered Needs (Note 5)		87.6	130.2

Notes:

- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- The current permitted capacity of the F. Wayne Hill WRC is 60 MGD with 40 MGD permitted to discharge to Lake Lanier and 20 MGD permitted to discharge to the Chattahoochee River as reflected in the "Existing" column. In 2025, the permitted capacity for F. Wayne Hill WRC is expected to remain 60 MGD but with the additional permitted flexibility to discharge up to 60 MGD to Lake Lanier and up to 20 MGD to the Chattahoochee River with a total discharge not to exceed 60 MGD. The increase in reclaimed water from the F. Wayne Hill WRC (20 MGD) discharged to Lake Lanier will be subject to the EPD approvals and permits. By 2050, the permitted capacity for F. Wayne Hill WRC will be increased to 80 MGD, with 60 MGD to Lake Lanier and 20 MGD to the Chattahoochee River.
- The higher of Scenario 1 and Scenario 2 Sewered Flow Forecast is depicted.

Hall County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Lake Lanier	Gainesville	30.0	41.3	55.0
Cedar Creek Reservoir (North Oconee River)	Gainesville Hall	2.0	0.0	0.0
Crystalline Rock Aquifer	Flowery Branch	0.7	0.7	0.7
Crystalline Rock Aquifer	Lula	0.5	0.5	0.5
Total Withdrawal (MGD)		33.2	42.5	56.2

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 2) (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Hall County	40.0	36.3	54.3	49.7
Self Supplied	-2.4	-2.4	-1.9	-1.9
Total Projected Demand from Facilities (PD-MGD)	37.6	33.9	52.4	47.8
Treatment Capacity (Note 3)	41.2		56.2	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
Notes:	23.5	21.2	32.8	29.9

(2) Peak day is 1.6 times annual average day.

(3) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Chattahoochee Basin			
Gainesville Lakeside WTP (Note 5)	10.0	15.0	30.0
Gainesville Riverside WTP (Note 5)	25.0	25.0	25.0
Groundwater			
Flowery Branch	0.7	0.7	0.7
Lula	0.5	0.5	0.5
Total Capacity (PD-MGD)	36.2	41.2	56.2

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

(5) Gainesville should be given the flexibility to upgrade either plant, based on feasibility, property, cost, and other factors.

Capital Projects

N/A

Non-Capital Programs

The following non-capital programs are specific to Hall County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with Gwinnett and White Counties.

Hall County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Hall County Sewered Needs	16.5	14.9	22.5	20.5
Total Projected Sewered Flows to Plants	16.5	14.9	22.5	20.5
Septic Flows (AAD-MGD)	4.6	4.2	5.8	5.3

Capital Projects

- Lula Pond WPCP has been decommissioned and Lula WRF commissioned to serve the needs of the Lula area.
- The capital improvements are summarized in the following phasing plan for Hall County.

Basin Considerations

The Hall County Spout Springs facility currently discharges to Lollis Creek in the Oconee Basin. Provisions will be made by 2035 to return this flow to Lake Lanier. All other reclaimed water will be produced and discharged to Lake Lanier or its tributaries.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3)			
Chattahoochee Basin (Lake Lanier)			
Flowery Branch WPCP	0.4	3	6
Gainesville Flat Creek WRF	12	17	25
Gainesville Linwood WRF	5		
Hall County Spout Springs (Note 4)			19
North Hall WWTP (Note 5)		0.5	
Lula WRF	0.375	1.9	3.8
Oconee Basin			
Hall County Spout Springs (Note 4)	0.75	4	
Total Capacity (MMF-MGD)	18.5	26.4	53.8
Sewered Needs (Note 6)		16.5	22.5

Notes:

- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- The Hall County Spout Springs facility currently discharges to Lollis Creek in the Oconee Basin. Provisions will be made by 2035 to return this flow to Lake Lanier.
- This new facility must be in conformance with HB 489 negotiations and local wastewater master plans; the discharge may be to (1) To Flat Creek in North Hall, above Lake Lanier, (2) To the City of Gainesville Flat Creek WRF, or (3) Other options that are defined by coordinated planning among Hall County, City of Gainesville, Flowery Branch, and Lula.
- The higher of Scenario 1 and Scenario 2 Sewered Flow Forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Hall County. These programs are in addition to those that apply to all counties within the Metro Water District.

Make provisions to return reclaimed water to Lake Lanier or its tributaries.

Continue existing, and establish new agreements between the county and cities.

Henry County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Gardner Reservoir (Indian Creek)	Henry	8.0	18.0	24.0
Rowland Reservoir (Long Creek)	Henry	10.0		
Towaliga River Reservoirs	Henry	Fills Gardner and Rowland Reservoirs		
Tussahaw Creek Reservoir	Henry	32.0	30.0	40.0
Fargason Reservoir (Walnut Creek)	McDonough	2.4	2.4	3.2
Brown Branch	Locust Grove	0.3	0.3	0.5
Crystalline Rock Aquifer	Hampton	0.369	0.369	0.369
Crystalline Rock Aquifer	Locust Grove	1.0	1.0	1.0
Crystalline Rock Aquifer	McDonough	0.3	0.3	0.3
Crystalline Rock Aquifer	Stockbridge	0.52	0.52	0.52
Total Withdrawal (MGD)		54.9	52.9	69.8

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 2) (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Henry County Needs	47.3	44.9	63.0	66.5
Self Supplied	-1.5	-1.5	-1.3	-1.3
Total Projected Demand from Facilities (PD-MGD)	45.8	43.4	61.7	65.2
Treatment Capacity (Note 3)	47.0		69.8	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
Notes:	28.6	27.1	38.6	40.7

Notes:

(2) Peak day is 1.6 times annual average day.

(3) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Ocmulgee Basin			
Henry Towaliga River WTP	24.0	24.0	24.0
Henry Tussahaw WTP	13.0	18.0	40.0
McDonough WTP	2.4	2.4	3.2
Locust Grove WTP	0.5	0.5	0.5
Groundwater			
Hampton	0.369	0.369	0.369
Locust Grove	1.0	1.0	1.0
McDonough	0.3	0.3	0.3
Stockbridge	0.52	0.52	0.52
Total Capacity (PD-MGD)	42.0	47.0	69.8

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Expand the Henry County Tussahaw WTP to meet future demands.

Non-Capital Programs

The following non-capital programs are specific to Henry County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with DeKalb, Clayton, Newton, Butts, and Spalding Counties.

Reassess the safe yield of Towaliga, John Fargason, Gardner, and Long Branch Reservoirs using procedures outlined in the Statewide Water Plan.

Henry County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Henry County Sewered Needs	13.5	12.8	17.9	18.8
To DeKalb County	-0.10	-0.09	-0.13	-0.14
To Clayton County	-0.02	-0.02	-0.02	-0.02
Total Projected Sewered Flow to Plants	13.4	12.7	17.7	18.7
Septic Flows (AAD-MGD)	7.3	7.0	9.5	9.9

Capital Projects

Over the next 30 years, wastewater treatment will be consolidated. Several of the existing smaller facilities will be phased-out. Growth over the years will enlarge the service areas of the major facilities, leading to their expansion and the decommissioning of the existing smaller facilities.

Basin Considerations

- Henry Indian Creek LAS will become a direct discharge system by 2025. The Henry Bear Creek LAS will serve all unincorporated areas of the County in the Flint Basin. The Henry Walnut Creek WRF and Leguin Mill WPCP will discharge treated flow to surface water bodies in the Ocmulgee Basin.
- Provide LAS systems at two of the three WPCPs to be expanded if supported by consumptive use.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3, 4)			
Flint Basin			
Hampton WPCP	1.75	1.75	1.75
Henry Bear Creek WRF/LAS	1.25	1.25	1.25
Ocmulgee Basin			
Henry Leguin Mill WPCP (Note 5)		15.25	25
Henry Indian Creek LAS	1.5		
Henry Walnut Creek WRF	8		
Locust Grove Indian Creek WPCP	1.5	3	3
McDonough Walnut Creek WPCP	2	4	4
Stockbridge WPCP	1.5	2.25	2.25
Total Capacity (MMF-MGD)	17.5	27.5	37.25
Sewered Needs (Note 6)		13.4	18.7

Notes:

- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- Some small public, private, and/or public-agency WWTPs may be converted into pretreatment plants or transfer pump stations, while others could be retained, expanded, or modified to meet local conditions.
- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily flow (AAD).
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- Henry Leguin Mill WPCP is estimated to be constructed in the 2016-2025 timeframe with a capacity of 0.25 MGD.
- The higher of Scenario 1 and Scenario 2 sewer flow forecast is depicted.

Non-Capital Programs

The following non-capital programs are specific to Henry County. These programs are in addition to those that apply to all counties within the Metro Water District. Maintain multi-jurisdictional agreement with DeKalb County to receive wastewater from the northern corner of the county at the DeKalb Polebridge Creek WPCP. Evaluate participation between City of McDonough, and other cities within Henry County for regional development of new WPCPs and conveyance projects.

Paulding County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Richland Creek Reservoir (Note 2)	Paulding	0.0	30.0	40.0
Crystalline Rock Aquifer	Dallas	0.202	0.202	0.2
Total Withdrawal (MGD)		0.2	30.2	40.2

Notes:

(1) Monthly average day is 1.2 times annual average day.

(2) The Richland Creek reservoir and pumping system will be capable of providing 35 mgd to meet the County's long term water supply needs. The intake in the Etowah River will have the capacity to pump at a peak rate of 47 mgd.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 3) (PD-MGD)		2050 Peak Day (Note 3) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Paulding County Needs	24.9	24.8	36.9	38.4
Self Supplied	-0.4	-0.4	-0.4	-0.4
From CCMWA	-8.0		0.0	
Total Projected Demand from Facilities (PD-MGD)	16.5	16.3	36.5	38.0
Treatment Capacity (Note 4)	18.2		40.2	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	10.3	10.2	22.8	23.8

Notes:

(3) Peak day is 1.6 times annual average day.

(4) Scenario 2 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 5)	Existing (2016) Permitted Plant Capacity (PD-MGD)	By 2025 Plant Capacity at End of Period (PD-MGD)	By 2050 Plant Capacity at End of Period (PD-MGD)
Coosa Basin			
Paulding County WTP	0.0	18.0	40.0
Groundwater			
Dallas	0.202	0.202	0.202
Total Capacity (PD-MGD)	0.2	18.2	40.2

Notes:

(5) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Paulding County will continue to rely on CCMWA for a portion of its water supply until 2032.

Richland Creek Reservoir project is currently under construction.

Paulding County is constructing a WTP at the reservoir site.

Non-Capital Programs

The following non-capital programs are specific to Paulding County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with Cobb County.

Evaluate required improvements to accommodate shift from CCMWA being sole source of supply to Richland Creek Reservoir as primary source of supply.

Paulding County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Paulding County Sewered Needs	6.8	6.7	12.8	13.7
From Cobb County	0.07	0.07	0.09	0.09
To Cobb County	-0.26	-0.25	-1.02	-1.12
Total Projected Sewered Flow to Plants	6.6	6.6	11.9	12.7
Septic Flows (AAD-MGD)	4.9	4.9	5.1	5.1

Capital Projects

Dallas North WPCP and Dallas West WPCP will be replaced with Dallas Pumpkinvine Creek WPCP in the 2016-2025 timeframe. Paulding Coppermine WRF and Pumpkinvine Creek WRF will also be expanded.

Basin Considerations

Treated flow from the Paulding Pumpkinvine Creek WRF and the new Dallas Pumpkinvine Creek WPCP will be discharged to surface water bodies in the Coosa Basin as allowed by EPD permitting. Paulding County will have to work with EPD to return flows to surface water bodies to meet the intent of the District Plan. Treated flow from the Paulding Coppermine WRF, Upper Sweetwater WRF, and flow discharged to Cobb County will be discharged to surface water in the Chattahoochee Basin as allowed by EPD permitting. More stringent phosphorus limits will likely be imposed as a result of limited assimilative capacity in the receiving waters.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Notes 1, 2, 3, 4)			
Chattahoochee Basin			
Paulding Coppermine WRF	1	2.3	4.3
Paulding Coppermine LAS	1.033		
Paulding Upper Sweetwater WRF	0.3		
Coosa Basin			
Dallas Pumpkinvine Creek WPCP	1.5	3.0	4.5
Paulding Pumpkinvine Creek WRF	1.5	4.0	7.0
Paulding Pumpkinvine Creek LAS	1		
Total Capacity (MMF-MGD)	7.7	7.8	14.3
Sewered Needs (Note 5)		6.6	12.7

Notes:

- 1) The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- 2) Some small public, private, and/or public-agency WWTPs may be converted into pretreatment plants or transfer pump stations, while others could be retained, expanded, or modified to meet local conditions. It may be necessary to add some small public, private, and/or public-agency WWTPs on an interim basis in accordance with local wastewater management planning and ordinances, until growth fills in sufficiently to allow consolidation at the major facilities.
- 3) Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- 4) When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- 5) The higher of Scenario 1 and Scenario 2 sewer flow forecasts is depicted.

Non-Capital Programs

The following non-capital programs are specific to Paulding County. These programs are in addition to those that apply to all counties within the Metro Water District. Maintain multi-jurisdiction agreement with Cobb to receive wastewater generated in the Paulding Chattahoochee Basin.

Rockdale County - Water

Summary of Planned Sources

Source	Local Water Provider	Current Permitted Withdrawal Monthly Average (MGD)	Planned 2050 Withdrawal (MGD)	
			Monthly (Note 1)	Peak Day
Big Haynes Creek (Randy Poynter Lake)	Rockdale	32.8	32.8	43.7
Total Withdrawal (MGD)		32.8	32.8	43.7

Notes:

(1) Monthly average day is 1.2 times annual average day.

Summary of Needs

Water Demands & Capacities	2025 Peak Day (Note 2) (PD-MGD)		2050 Peak Day (Note 2) (PD-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Rockdale County Needs	24.6	23.7	33.7	29.4
Self Supplied	-1.2	-1.2	-0.9	-0.9
Total Projected Demand from Facilities (PD-MGD)	23.4	22.5	32.8	28.4
Treatment Capacity (Note 3)	27.1		43.7	
Total Projected Demand from Facilities (AAD-MGD)	Scenario 1 2025 (AAD-MGD)	Scenario 2 2025 (AAD-MGD)	Scenario 1 2050 (AAD-MGD)	Scenario 2 2050 (AAD-MGD)
	14.6	14.1	20.5	17.8

Notes:

(2) Peak day is 1.6 times annual average day.

(3) Scenario 1 is being used for the phasing plan below.

Phasing Plan

Facilities (Note 4)	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (PD-MGD)	Plant Capacity at End of Period (PD-MGD)	Plant Capacity at End of Period (PD-MGD)
Ocmulgee Basin			
Rockdale WTP	22.1	27.1	43.7
Total Capacity (PD-MGD)	22.1	27.1	43.7

Notes:

(4) The schedule shown above is intended to be a general guideline to identify general expansion needs. Expansion capacity may be required sooner or later than indicated depending on local population and employment growth, water service extensions and other planning variables. Specific conditions for withdrawal and operation permits will be determined by Georgia EPD.

Capital Projects

Projections indicate the Randy Poynter Lake should provide adjusted supply through 2050.

Infrastructure should be kept to allow transfers from DeKalb and Gwinnett Counties to fill peak demands on an emergency basis.

Non-Capital Programs

The following non-capital programs are specific to Rockdale County. These programs are in addition to those that apply to all counties within the Metro Water District.

Maintain interconnections and water supply agreements with DeKalb, Gwinnett and Newton Counties.

Rockdale County - Wastewater

Summary of Needs

Wastewater Flows & Capacities	2025 Maximum Month Average Daily Flow (MMF-MGD)		2050 Maximum Month Average Daily Flow (MMF-MGD)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
Rockdale County Sewered Needs	9.4	9.1	12.5	10.9
Total Projected Sewered Flow to Plants	9.4	9.1	12.5	10.9
Septic Flows (AAD-MGD)	2.9	2.8	4.0	3.5

Capital Projects

WWTP.

- Pumping wastewater flow to DeKalb County for treatment at its Polebridge WPCP for a small portion of the Upper Yellow River basin will be discontinued in 2016.

Basin Considerations

Treated flow will be discharged to surface water bodies in the Ocmulgee Basin.

Phasing Plan

	Existing (2016)	By 2025	By 2050
	Permitted Plant Capacity (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)	Plant Capacity at End of Period (MMF-MGD)
Facilities (Note 1, 2, 3)			
Ocmulgee Basin			
Rockdale Quigg Branch WRF	8	15.5	22.5
Rockdale Almand Branch WWTP	1.25		
Rockdale Honey Creek WWTP	0.3		
Rockdale Scott Creek WWTP	0.22		
Rockdale Reuse Facility (Note 5)			
Rockdale New Snapping Shoals WWTP (Note 6)		Decommission	
Rockdale Snapping Shoals WWTP (Note 6)	0.45		
Total Capacity (MMF-MGD)	10.22	15.5	22.5
Sewered Needs (Note 7)		9.4	12.5

Notes:

- Maximum Month Average Daily Flow (MMF) is 1.25 times the Average Annual Daily Flow (AAD).
- The schedule shown is intended to be a general guideline to identify general capacity needs. While the expansion capacities are intended to be in operation before the end of the period shown, exact timing of expansions should be determined by local wastewater master plans.
- Some small public, private, and/or public-agency WWTPs may be converted into pretreatment plants or transfer pump stations, while others could be retained, expanded, or modified to meet local conditions. It may be necessary to add some small public, private, and/or public-agency WWTPs on an interim basis in accordance with local wastewater management planning and ordinances, until growth fills in sufficiently to allow consolidation at the major facilities.
- When applying to Georgia EPD for wasteload allocations or wastewater discharge permits, individual jurisdictions are responsible for documenting that the request is consistent with this plan and that the plant capacities specified above are not exceeded unless such exceedance has been approved through the Metro Water District's plan amendment.
- The Rockdale Reuse Facility will be constructed in the 2025-2050 time frame and have a capacity of 4.0 MGD.
- Rockdale Snapping Shoals WWTP will be replaced with New Snapping Shoals WWTP in the 2016-2025 timeframe at a 3 MGD capacity.
- The higher of Scenario 1 and Scenario 2 sewered flow forecast is depicted.

This page left intentionally blank.