

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

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)
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 sewered 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.