

Section 8: PLANNED WATER SUPPLY FACILITIES

In order to maintain reliable water supply within the Metro Water District, the following action items are needed to further maximize existing sources, secure additional water supply sources and build additional treatment capacity. The facilities included in this Section were selected to utilize the sources identified in Section 6, which are based on the water supply evaluation criteria outlined on pages 6-2 and 6-3.

- Construct three water supply reservoirs that are in the planning stages plus continue to investigate three additional water supply reservoirs needed within the planning horizon.
- Support permitting and construction of local water supply reservoirs to supplement major water supply sources.
- Expand treatment capacity based on the phased approach provided in Appendix B.

Appendix B: County Level Summaries, presents a more detailed phasing plan for water supply and treatment capital improvement projects, many of which are associated with action items in this Section. It is important to note that treatment capacity may not be expanded without the issuance of a new or amended water withdrawal permit from Georgia EPD if the proposed expansion will expand the treatment capacity beyond the currently permitted water withdrawal limits.

ACTION ITEM 8.1 – SUPPORT CONSTRUCTION OF 6 PLANNED WATER SUPPLY RESERVOIRS

The Water Supply and Water Conservation Management Plan includes three new water supply reservoirs that are planned and in various stages of the permitting process, presented in Table 8-1. Three additional reservoirs included in Table 8-1 have not initiated the permitting process, but are needed within the planning horizon. Since reservoir planning, permitting and development can take 5 years or more, initial planning for the three reservoirs that are not in the permitting process should begin soon. The Metro Water District supports the permitting and timely construction of these projects, as these reservoirs are of critical importance to the jurisdictions that will benefit directly from these new sources.

Other new reservoirs, if proven locally feasible, will be supported if they are consistent with the Water Supply and Water Conservation Management Plan. Potential reservoir projects, beyond the six included, may be investigated, and if possible constructed.

**TABLE 8-1
Planned Water Supply Reservoirs in the Metro Water District**

Reservoir	Owner/Operator Utilizing Resource	Basin	Estimated Size and Yield
Glades Reservoir	Hall County	Chattahoochee	The 733-acre reservoir with an estimated yield of 6.4 MGD will release water to Lake Lanier. Currently in the permitting process.
Bear Creek Reservoir	Proposed South Fulton Water Authority	Chattahoochee	Impoundment on Bear Creek, a tributary of the Chattahoochee River. Estimated yield is 15 MGD.
Richland Creek Reservoir	Paulding County	Coosa	A 305-acre reservoir with an estimated yield of 35 MGD is in the permitting process on Richland Creek.
Etowah Reservoir	Fulton County	Coosa	A reservoir is being considered by Fulton County with a proposed 30 MGD yield.
Ocmulgee Reservoir	Henry County Water and Sewer Authority	Ocmulgee	A new reservoir is being considered in the Ocmulgee basin with a proposed 13 MGD yield.
Cedar Creek Reservoir	Gainesville-Hall County	Oconee	The Cedar Creek reservoir is expected to have a yield of 9 MGD and be supplemented with water from the North Oconee River.

Note: Reservoirs that do not require 404 permits, off-line reservoirs, and reservoirs whose primary purpose is to facilitate water treatment plant operations are not included herein.

ACTION ITEM 8.2 – CONSTRUCT 6 NEW WATER TREATMENT PLANTS

Six new water treatment plants are proposed to treat water from planned and existing reservoirs; Table 8-2 provides a summary of the proposed facilities. The capital improvements phasing plan associated with this action is presented in Appendix B, County Level Summaries.

TABLE 8-2
Planned New Water Treatment Plants in the Metro Water District

Planned Water Treatment Plants	Source
Bartow North End WTP (Note 1)	Allatoona Lake
Bartow South End WTP (Note 1)	Allatoona Lake
Fulton County Etowah WTP	Reservoir on Etowah River
Bear Creek WTP (in South Fulton)	Bear Creek Reservoir
Gainesville-Hall County Cedar Creek WTP	Cedar Creek Reservoir
Paulding County WTP	Richland Creek Reservoir

Notes:

1. Represents Option 2 of Bartow County's Phasing Plan, described in Appendix B of this Plan. If these plants are not built, the County will continue to meet water needs exclusively through Adairsville and Cartersville WTPs.

ACTION ITEM 8.3 – EXPAND 28 EXISTING WATER TREATMENT PLANTS

Many existing water treatment facilities will require capacity expansions and upgrades before 2035; the capital improvements phasing plan for expansions are presented in Appendix B. The 28 water treatment plants identified for expansion are listed in Table 8-3. Because treatment process upgrades may be triggered by future regulatory requirements, the date and scope of process upgrades are not provided in Appendix B. The non-capital tasks associated with water treatment plant expansions include financing, inter-jurisdictional agreements and State permitting.

TABLE 8-3
Water Treatment Plants Planned to be Expanded before 2035

Location by County	Water Treatment Plant
Bartow	Adairsville WTP
	Cartersville WTP
Cherokee	Canton WTP
	Cherokee Etowah River WTP
Clayton (Note 1)	Clayton Hicks WTP
	Clayton Hooper WTP
	Clayton Smith WTP
Cobb	CCMWA Quarles WTP
	CCMWA Wyckoff WTP
Coweta	Coweta BT Brown WTP
	Newnan Hershall Norred WTP
	Senoia WTP
DeKalb	DeKalb Scott Candler WTP
Douglas	DDCWSA Bear Creek WTP
	Villa Rica Franklin Smith WTP (Note 2)
Fayette	Fayette Crosstown WTP
	South Fayette WTP
	Fayetteville WTP
Forsyth	Cumming WTP
	Forsyth WTP
Fulton	Atlanta-Fulton County WTP
	Roswell WTP
Gwinnett	Buford WTP
Hall	Gainesville Lakeside WTP
Henry	Henry Towaliga River WTP
	Henry Tussahaw WTP
	McDonough WTP
Rockdale	Rockdale Big Haynes Creek WTP

Notes:

1. One or more of Clayton County Water Authority's WTPs to be expanded.
2. Located in Carroll County

2035 PROPOSED METRO WATER DISTRICT TREATMENT FACILITIES AND CAPACITIES

Table 8-4 summarizes the proposed surface water treatment plants in the Metro Water District, including capacities based upon the County Level Summaries in Appendix B. Treatment facilities are permitted based on a peak day basis (PD-MGD).

TABLE 8-4
Proposed Surface Water Treatment Plants

County	WTP	Entity	Source Stream / Reservoir	2035 WTP Planned Capacity (PD-MGD)
Bartow (Note 2)	Lewis Spring WTP	City of Adairsville	Lewis Spring (Note 3)	6
	Clarence B. Walker WTP	City of Cartersville	Allatoona Lake	40
	Bartow North End (Note 1)	Bartow County	Etowah River	30
	Bartow South End (Note 1)	Bartow County	Etowah River	
	Emerson WTP	Bartow County	Moss Springs	0.5
	Bartow County WTP	Bartow County	Bolivar Springs	0.8
Cherokee	Canton WTP	City of Canton	Etowah River	18
	Etowah River WTP	Cherokee County Water and Sewerage Authority	Yellow Creek Reservoir and Etowah River	53
Clayton	Terry R. Hicks WTP	Clayton County Water Authority	Blalock Reservoir (Note 3)	79
	W.J. Hooper WTP		W.J. Hooper Reservoir (Note 3)	
	J.W. Smith WTP		J.W. Smith Reservoir (Note 3)	
Cobb	James E. Quarles WTP	Cobb County-Marietta Water Authority	Chattahoochee River	106
	Hugh A. Wyckoff WTP		Allatoona Lake	142
Coweta (Note 4)	B.T. Brown WTP	Coweta County	Cedar Creek (B.T. Brown) Reservoir	10
	Hershall Norred WTP	City of Newnan	J.T. Haynes Reservoir	21
	Senoia WTP	City of Senoia	Hutchins' Lake	0.6
DeKalb	Scott Candler WTP	DeKalb County	Chattahoochee River	175
Douglas	Bear Creek WTP	Douglasville-Douglas County Water and Sewer Authority	Bear Creek Reservoir	23
			Dog River Reservoirs	
	Franklin Smith WTP	City of Villa Rica	Lake Fashion, Cowan Lake	3
Fayette	Crosstown WTP	Fayette County (Note 3)	Lake Horton, Lake Kedron, Lake Peachtree, groundwater	35
	South Fayette WTP			
	Fayetteville WTP	City of Fayetteville	Whitewater Creek	4
Forsyth	Cumming WTP	City of Cumming	Lake Lanier	36
	Forsyth County WTP	Forsyth County	Lake Lanier	68

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County	WTP	Entity	Source Stream / Reservoir	2035 WTP Planned Capacity (PD-MGD)
Fulton	Atlanta-Fulton County WTP	Atlanta-Fulton County Water Resources Commission	Chattahoochee River	155
	Fulton Etowah WTP (Note 1)	Fulton County	Etowah River	20
	Hemphill WTP	City of Atlanta	Chattahoochee River	136.5
	Chattahoochee WTP			64.9
	Roswell Cecil Wood WTP	City of Roswell	Big Creek	5
	East Point WTP	City of East Point	Sweetwater Creek	13.9
	Bear Creek WTP (Note 1)	(Note 5)	Bear Creek Reservoir	15
	Palmetto WTP	City of Palmetto	Cedar Creek	0.6
Gwinnett	Lake Lanier WTP	Gwinnett County Public Utilities	Lake Lanier	150
	Shoal Creek WTP			75
	Buford WTP	City of Buford	Lake Lanier	4.83
Hall	Lakeside WTP	City of Gainesville	Lake Lanier	46
	Riverside WTP	City of Gainesville		25
	Cedar Creek WTP (Note 1)	Gainesville-Hall County	Cedar Creek Reservoir / North Oconee River	12
Henry	Towaliga River WTP	Henry County Water and Sewerage Authority	S. Howell Gardner (Indian Creek) and Rowland Reservoirs (Long Branch), Strickland and Cole Reservoirs	29
	Tussahaw WTP		Tussahaw Creek Reservoir	52
	McDonough WTP	City of McDonough	John Fargason (Walnut Creek) Reservoir	3.1
	Locust Grove WTP	City of Locust Grove	Brown Branch	0.45
Paulding	Paulding County WTP (Note 1)	Paulding County	Etowah River / Richland Creek Reservoir	40
Rockdale	Big Haynes Creek WTP	Rockdale County	Big Haynes Creek (Randy Poynter Lake)	27.1
Metro Water District Total (PD-MGD)				1,726
Metro Water District Total (AAD-MGD) (Note 6)				1,079

Notes:

1. New facility to be built by 2035.
2. Facilities reflect Option 2 for Bartow County.
3. Local water provider should expand its WTPs according to a local plan.
4. This represents Option 1 for Coweta County.
5. The service provider for Bear Creek WTP will be determined through the Fulton County HB489 renegotiation process.
6. Annual average day equals peak day divided by 1.6.