

Metropolitan North Georgia Water Planning District

Amendments to the Wastewater Management Plan

(through December 4, 2013)

Amendment #1 (06/03/2010)

Page B-17 – Replace the Rockdale Quigg Branch WRF row with the following:

Facilities	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Rockdale Quigg Branch WRF	Expand	1.0	8.0	No expansions		8.0	Expand	2.0	10.0	No Expansions		10.0

Amendment #2 (06/02/2011)

Page B-17 – Replace the Rockdale County Phasing Plan with the following:

Facilities (Note 1)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Rockdale Quigg Branch WRF	Expand	1.0	8.0	No expansions		8.0	Expand	2.0	10.0	Expand	2	12.0
Rockdale Almand Branch WWTP	No expansions		1.25	No expansions		1.25	Expand	1.75	3.0	No expansions		3
Rockdale Honey Creek WWTP	No expansions		0.3	No expansions		0.3	Decommission					
Rockdale Scott Creek WWTP	No expansions		0.22	No expansions		0.22						
Rockdale Snapping Shoals WWTP	No expansions		0.45	No expansions		0.45						
Rockdale New Snapping Shoals WWTP							Initial Construction		3	No expansions		3
Rockdale Reuse Facility										Initial Construction		4.0
Total Capacity (MMF-MGD)			10.22			10.22			16.0			22.0

Amendment #3 (08/28/2013)

Page B-5 – Replace the Clayton County Basin Considerations and Phasing Plan with the following:

Basin Considerations

- The Clayton Northeast WRF will continue to discharge in the Ocmulgee River Basin.
- The WB Casey WRF will discharge 17.4 mgd to the Ocmulgee River Basin and the remaining flow, up to 6.6 mgd, will be discharged to the Flint River. With the expansion of the WRF, in the 2016-2025 time frame, 17.4 mgd will be discharged to the Ocmulgee River Basin via the wetlands treatment system and the remaining flow (6.6 mgd and the additional 6.0 mgd from the expansion) will be discharged to the Flint River.
- The Shoal Creek WRF will continue to discharge to the wetlands treatment system in the Flint River Basin.

Phasing Plan

Facilities (Note 1)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Clayton WB Casey WRF	No expansions		24.0	No expansions		24.0	Expand	6.0	30.0	No expansions		30.0
Clayton Shoal Creek WRF	No expansions		4.4	No expansions		4.4	No expansions		4.4	No expansions		4.4
Clayton Northeast WRF	No expansions		10.0	No expansions		10.0	No expansions		10.0	No expansions		10.0
Total Capacity (MMF-MGD)			38.4			38.4			44.4			44.4

Page B-15 – Replace the Henry County Basin Considerations and Phasing Plan with the following:

Basin Considerations

- Henry Indian Creek LAS will be converted into a discharge only facility. 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

Facilities (Note 1)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Hampton WPCP	Expand	1.25	1.75	No expansions		1.75	No expansions		1.75	No expansions		1.75
Henry Bear Creek WRF/LAS	Expand	1	1.25	No expansions		1.25	No expansions		1.25	No expansions		1.25
Henry Indian Creek LAS	No expansions		1.5	No expansions		1.5	Expand	1.5	3.0	Expand	4.0	7.0
Henry Springdale Road WPCP	No expansions		0.5	No expansions		0.5	No expansions		0.5	Decommission, Flow to Henry Walnut Creek WRF		-
Henry Springdale LAS	No expansions		1.1	No expansions		1.1	No expansions		1.1			
Henry Springdale/Walnut Creek WPCP	No expansions		0.4	No expansions		0.4	No expansions		0.4			
Henry Walnut Creek WRF	Expand; LAS	4.0	8.0	Expand; Discharge	10.0	18.0	Expand	9.0	27.0	No expansions		27.0
Locust Grove Indian Creek WPCP	Expand	1.5	3.0	No expansions		3.0	No expansions		3.0	No expansions		3.0
McDonough Walnut Creek WPCP	Expand	1.0	2.0	Expand	2.0	4.0	No expansions		4.0	No expansions		4.0
Stockbridge WPCP	Expand	0.75	2.25	No expansions		2.25	No expansions		2.25	No expansions		2.25
Henry Leguin Mill LAS	New	0.27	0.27	Decommission, Flow to Henry Leguin Mill WPCP		-						
Henry Leguin Mill WPCP				New	4.8	4.8	Expand	4.8	9.6	No expansions		9.6
Total Capacity (MMF-MGD)			22.02			38.55			53.85			55.85

Page B-16 – Replace the Paulding County Basin Considerations and Phasing Plan with the following:

Basin Considerations

- Treated flow from the Paulding Pumpkinvine WRF 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.

Phasing Plan

Facilities (Note 1)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Paulding Coppermine WRF	Expand	2.5	4	Expand	0.5	4.5	Expand	2.0	6.5	No expansions		6.5
Dallas North WPCP	No expansions		0.5	Expand and merge into new facility	1.5	3.0	No expansions		3.0	No expansions		3
Dallas West WPCP	No expansions		1.0				No expansions		3.0	No expansions		3
Paulding West/Airport WRF				Initial Construction		0.5	Expand	0.5	1.0	Expand	0.5	1.5
Paulding Pumpkinvine Creek WRF	Expand	2.3	3.0	Expand	9.0	12.0	Expand	5.0	17.0	Expand	10.0	27.0
Paulding Upper Sweetwater WRF	Expand	0.7	1.0	Expand	0.5	1.5	Expand	1.0	2.5	No expansions		2.5
Total Capacity (MMF-MGD)			9.5			21.5			30.0			40.5

Amendment #4 (12/4/2013)

Page B-11 – Replace the Forsyth County Summary of Needs, Basin Considerations, Capital Projects and Phasing Plan with the following:

Summary of Needs

Wastewater Flows & Capacities	2010 Maximum Month Average Daily Flow (MMF-MGD)	2015 Maximum Month Average Daily Flow (MMF-MGD)	2025 Maximum Month Average Daily Flow (MMF-MGD)	2035 Maximum Month Average Daily Flow (MMF-MGD)
Forsyth County Needs	22	29	42	52
Total Projected Flow to Plants	22	29	42	52
Treatment Capacity	19.56	37.41	44.41	60.81

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 AWRF that will discharge to Lake Lanier and return flow to the Lake. Forsyth County will construct a new AWRF that will discharge to Lake Lanier (Note 1). Treated flow from the New South Forsyth WWTP / Fowler Reuse System will be land applied and/or discharged into the Chattahoochee River.

Phasing Plan

Facilities (Notes 1, 4)	By 2010			2011 to 2015			2016 to 2025			2026 to 2035		
	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)	Proposed Projects		Plant Capacity at End of Period (MMF-MGD)
	Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)		Project Type	Project Capacity (MMF-MGD)	
Cumming Bethelview Road WPCP	No expansions		8.0	No expansions		8.0	No expansions		8.0	No expansions		8.0
Cumming Lake Lanier WRF (Note 2)				Initial construction		7.5	No expansions		7.5	Expand	7.5	15
Forsyth Lake Lanier WRF (Note 2)				Initial construction		3.0	Expand	2	5	Expand	5	10
Forsyth Shakerag/Fowler WRF (Note 3)	Expand	4.5	8.5	Expand	7.5	16	Expand	4	20	Expand	4	24
Forsyth Dick Creek WRF	No expansions		0.76	No expansions		0.76	No expansions		0.76	No expansions		0.76
Cumming Lanier Beach South	No expansions		0.04	Decommission		-						
Cumming Habersham WPCP (Note 5)	No expansions		0.11	Decommission		-						
Forsyth Windemere Urban Reuse LAS	No expansions		0.55	No expansions		0.55	No expansions		0.55	No expansions		0.55
Forsyth Manor Water Reuse Facility	No expansions		0.50	No expansions		0.50	No expansions		0.50	No expansions		0.50
Forsyth Parkstone at the Bridges LAS	No expansions		0.10	No expansions		0.10	No expansions		0.10	Decommission		-
James Creek WRF	No expansions		1.0	No expansions		1.0	Expand	1	2.0	No expansions		2.0
Total Capacity (MMF-MGD)			19.56			37.41			44.41			60.81

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.
- The proposed Cumming and Forsyth AWRFs that will discharge to Lake Lanier may be built as separate facilities, or may be combined into one facility.
- The Shakerag / Fowler reuse system consist of two and potentially more facilities pumping into one reuse system with combined flows being land applied and discharged into the river.
- 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.

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.

Replace Forsyth County Information in TABLE 2-3 with the following:

2006 Permitted Treatment Facilities by County

County	Wastewater Treatment Plants	Basin	Receiving Water Body	2006 Permitted Treatment Capacity (MMF-MGD)
Forsyth	Cumming Bethelview Road WPCP	Chattahoochee	Big Creek	8.00
	Cumming Lanier Beach South	Chattahoochee	Lake Lanier	0.04
	Cumming Habersham WPCP	Chattahoochee		0.11
	Forsyth Windermere Urban Reuse LAS (Note 9)	Chattahoochee	Land Application	0.55
	Forsyth Fowler Water Reclamation Facility (Note 9)	Chattahoochee	Reuse	4.0
	Forsyth Manor Water Reuse Facility (Note 9)	Coosa	Chicken Creek	0.50
	Forsyth Dick Creek WRF	Chattahoochee	Dick Creek	0.76
	Forsyth Parkstone at the Bridges LAS	Coosa	Land Application	0.10
	James Creek WRF	Chattahoochee	James Creek	1.0
	Private WWTPs	Various	Various	1.5
				County Total