Bacteria Indicator Supplement
Ocmulgee River Basin – 2007 Fecal Coliform TMDL
Action ID: GAR4_22_45_24

As part of the 2019 Water Quality Standards Triennial Review, Georgia proposed *E. coli* and enterococci criteria for waters designated as fishing, coastal fishing, and drinking water to protect recreators who may inadvertently ingest water. Enterococci is the bacterial indicator for estuarine water, while *E. coli* is the bacterial indicator for all other waters. E. coli and enterococci have a better correlation with gastrointestinal illness than fecal coliform, and the E. coli and enterococci criteria are as protective of the fecal coliform criterion. Georgia EPD adopted the primary contact criteria for the recreational months, May through October, when immersion is expected to occur, and there is a higher likelihood of water ingestion. For non-recreational months, November through April, EPD adopted secondary contact criteria based on the estimated incidental water consumption rate from the 2019 update to Chapter 3 of the EPA Exposure Factors Handbook, Ingestion of Water and Other Select Liquids. Prior to these changes, fecal coliform was the bacterial indicator for the designated uses described above.

This supplement was developed to document the translation of the fecal coliform calculations to the new bacteria indicator, either *E. coli* or enterococci, for segments listed in the existing approved Total Maximum Daily Load (TMDL) document. To the extent that the existing approved TMDL document makes specific permitting recommendations based on fecal coliform, those recommendations will be translated to the approved bacteria indicator in all permits.

The loading curve approach was used to determine the allowable summer and winter seasonal loads. For waterbodies designated as recreational waters, a single curve represents the TMDL and is the 30-day recreational geometric mean criteria for the various bacterial indicators. For waterbodies designated as fishing, coastal fishing, and drinking water, two curves represent the TMDL. One curve represents the summer TMDL for the period May through October when the 30-day geometric mean water quality criteria are equal to the primary contact recreation bacteria criteria for the various indicators, and the second curve represents the winter TMDL for the period November through April when the 30-day geometric mean criteria are higher and are equal to the secondary contact recreation bacteria criteria.

The TMDL also has a single sample maximum criterion for fecal coliform or a Statistical Threshold Value (STV) for *E. coli* and enterococci. The single sample maximum applies for the months of November through April; whereas, the STV applies year round. The STV shall not be exceeded more than 10% of the time in a 30-day period. If a single sample exceeds the maximum criterion or the STV and a geometric mean criterion was also exceeded, then the TMDL is based on the criteria exceedance requiring the largest load reduction. The difference between the critical load and the TMDL curve represented the load reduction required for the stream segment to meet the appropriate instream standard.

The TMDL calculation is given using the following equation:

$$TMDL = C_{standard} \times Q$$

Where: TMDL = Total Maximum Bacteria Load either as a 30-day geometric mean or a single sample maximum
$C_{standard}$ = applicable state water quality standard
Q = stream flow

The applicable water quality standard for fecal coliform was:

May-October 200 counts/100 mL (as a 30-day geometric mean)
November-April 1,000 counts/100 mL (as a 30-day geometric mean)
November-April 4,000 counts/100 mL (as a single sample maximum)

The applicable water quality standard for *E. coli* is:

May-October 126 counts/100 mL (as a 30-day geometric mean)
May-October 410 counts/100 mL (as a STV)
November-April 265 counts/100 mL (as a 30-day geometric mean)
November-April 861 counts/100 mL (as a STV)

The applicable water quality standard for enterococci is:

May-October 35 counts/100 mL (as a 30-day geometric mean)
May-October 130 counts/100 mL (as a STV)
November-April 74 counts/100 mL (as a 30-day geometric mean)
November-April 273 counts/100 mL (as a STV)

TMDLs are the sum of all wasteload allocations (WLA) plus load allocation (LA) plus a margin of safety (MOS), or, stated as an equation, TMDL = ∑WLA + ∑LA + MOS. The MOS can be either implicit or explicit. For bacteria TMDLs, the practice has been to allocate an explicit ten percent MOS. TMDLs have given WLAs for all point sources equivalent to the recreational 30-day geometric mean criteria. The LA has also been given as the appropriate seasonal 30-day geometric mean criteria.

The wasteload allocation (WLA) is the portion of the receiving water's loading capacity that is allocated to existing or future point sources. WLAs were provided to the point sources with municipal wastewater treatment systems and to point sources with sanitary waste streams. Industrial wastewater treatment systems may also receive a WLA if they discharge bacteria because of the type of treatment processes employed or due to commingled sanitary waste streams.

For permitted point sources identified in the original TMDL, the WLAs were calculated based on permitted or design flow and primary recreation season bacteria criteria and are expressed as an accumulated load over a 30-day period and presented in units of counts per 30 days. If a facility expands its capacity and the permitted flow increases, the WLA for the facility would increase in proportion to the flow. If there is a new facility, the WLA would be the design flow times the summertime bacteria criteria. The established WLAs will meet the applicable water quality criteria. In addition, the permits may include routine monitoring and reporting requirements.

The reasonable assurance language included in the original TMDL in Section 6.3 shall be considered superseded and replaced by the following language.

The GA EPD is responsible for administering and enforcing laws to protect the waters of the State. Reasonable assurance ensures that a TMDL's wasteload and load allocations are properly distributed to meet the applicable water quality standards. Without such distribution, a TMDL's ability to serve as an effective guidepost for water quality improvement is significantly diminished. Federal regulations implementing the CWA require that effluent limits in permits be consistent with "the assumptions and requirements of any available [WLA]" in an approved

TMDL [40 CFR 122.44(d)(1)(vii)(B)]. NPDES point source permits will be given effluent limits in the permit consistent with the individual WLAs specified in the TMDL.

The GA EPD is the lead agency for implementing the State's Nonpoint Source Management Program. Regulatory responsibilities that have a bearing on nonpoint source pollution include establishing water quality standards and use classifications, assessing and reporting water quality conditions, and regulating land use activities that may affect water quality. Georgia works with local governments, agricultural and forestry agencies, such as the Natural Resources Conservation Service, the Georgia Soil and Water Conservation Commission, and the Georgia Forestry Commission, to foster the implementation of best management practices to address nonpoint sources. In addition, public education efforts will be targeted to individual stakeholders to provide information regarding the use of best management practices to protect water quality.

Table 16a. *E. coli* WLAs Required

Facility Name	Permit No.	Receiving Stream	Listed Stream Segment	Bacteria Indicator	WLA (counts/ 30 days)
Alamo	GA0037753	Alligator Creek	Alligator Creek	*E. coli*	5.374E+10
Barnesville Gordon Rd	GA0021041	Tobesofkee Creek	Tobesofkee Creek - Barnesville to Cole Creek	*E. coli*	1.72E+11
DeKalb Co Polebridge Creek	GA0026816	South River	South River - Pole Bridge Creek to Hwy 20	*E. coli*	2.867E+12
DeKalb Co Snapfinger Creek	GA0024147	South River	Flakes Mill Road to Pole Bridge Creek	*E. coli*	5.16E+12
Fort Valley WPCP	GA0031046	Bay Creek	Bay Cr - Headwaters to Beaver Creek	*E. coli*	3.156E+11
Griffin Cabin Creek	GA0020214	Cabin Creek	Cabin Creek - Headwaters Griffin to Towaliga River	*E. coli*	2.148E+11
Gwinnett Co Beaver Ruin/Sweetwater Creek	GA0032841	Sweetwater Cr Tributary	Sweetwater Creek - Lee Daniel Creek To Yellow River	*E. coli*	6.426E+11
Gwinnett Co Jacks Creek	GA0047627	Yellow River	Yellow River - Sweetwater Creek To Centerville Creek	*E. coli*	1.436E+11
Gwinnett Co Jackson Creek	GA0030732	Jackson Creek	Jackson Creek – Gwinnett Co	*E. coli*	4.303E+11
Gwinnett Co No Business	GA0023973	No Business Creek	No Business Cr - Headwaters To Norris Lake	*E. coli*	1.436E+11
Gwinnett Co Yellow River	GA0047911	Yellow River	Sweetwater Creek To Centerville Creek	*E. coli*	2.243E+11
Jackson Southside	GA0023931	Town Branch Tributary	Town Branch - Head Waters To Aboothlacoosta Creek	*E. coli*	1.002E+11
Lakeview Utilities Inc	GA0035491	Yellow River	Yellow River - Hammock Creek To Big Haynes Creek	*E. coli*	2.262E+10
Loganville WPCP	GA0020788	Big Flat Creek Tributary	Big Flat Creek - Headwaters To Flat Creek	*E. coli*	2.507E+11
Perdue Farms	GA0002844	Big Indian Creek Tributary	Big Indian Creek - Mossy Creek To Ocmulgee River	*E. coli*	5.733E+11
Perry WPCP	GA0021334	Big Indian Creek	Big Indian Creek - Mossy Creek To Ocmulgee River	*E. coli*	4.303E+11
Rockdale Co Almand Branch	GA0021610	Almand Branch Tributary	Almand Branch - Tanyard Branch To Snapping Shoals	*E. coli*	1.789E+11
Rockdale Co Honey Creek	GA0022659	McClain Branch	McClain Branch - Headwaters To Honey Creek	*E. coli*	4.303E+10

Facility Name	Permit No.	Receiving Stream	Listed Stream Segment	Bacteria Indicator	WLA (counts/ 30 days)
Rockdale Co Quigg Branch	GA0047678	Yellow River	Yellow River – Hammock Creek To Big Haynes Creek	*E. coli*	4.303E+11
Rockdale Co Snapping Shoals	GA0023035	Snapping Shoals Cr	Snapping Shoals Cr - Almand Branch To South River	*E. coli*	6.426E+10
Springs Industries, Inc Griffin	GA0003409	Cabin Creek	Cabin Creek - Headwaters Griffin to Towaliga River	*E. coli*	2.867E+11

Table 17a. *E. coli* Loads Required

Stream Segment	Location	Bacteria Indicator	Current Load (counts/ 30 days)	TMDL Components					Percent Reduction
				WLA[1] (counts/ 30 days)	WLAsw (counts/ 30 days)	LA (counts/ 30 days)	MOS (counts/ 30 days)	TMDL (counts/ 30 days)	
Alcovy River GAR030701030701	Headwaters to Walton Co Line (Gwinnett Co.)	*E. coli*	[2]		4.31E+12	1.23E+12	6.16E+11	6.16E+12	Undetermined[3]
Alcovy River GAR030701030709	Cedar Creek to Bay Creek (Walton Co.)	*E. coli*	[2]		3.70E+12	1.47E+12	5.74E+11	5.74E+12	Undetermined[3]
Alcovy River GAR030701030711	Mountain Creek to Big Flat Creek (Walton/Newton Co.)	*E. coli*	[2]		3.72E+12	6.49E+12	1.13E+12	1.13E+13	Undetermined[3]
Alligator Creek GAR030701050206	Batson Creek to Lime Sink Creek (Dodge/Laurens Co.)	*E. coli*	[2]	1.49E+10		1.96E+11	2.34E+10	2.34E+11	Undetermined[3]
Almand Branch GAR030701030610	Tanyard Branch to Snapping Shoals (Rockdale Co.)	*E. coli*	[2]	9.32E+10	1.52E+12	3.43E+11	2.18E+11	2.18E+12	Undetermined[3]
Bay Creek GAR030701040201	Headwaters to Beaver Creek (Peach/Houston Co.)	*E. coli*	[2]	1.42E+11		3.28E+09	1.62E+10	1.62E+11	Undetermined[3]
Bay Creek GAR030701030712	Headwaters to Alcovy River (Gwinnett/Walton Co.)	*E. coli*	[2]		6.99E+11	6.62E+11	1.51E+11	1.51E+12	Undetermined[3]
Beaver Ruin Creek GAR030701030312	Gwinnett County	*E. coli*	[2]		2.26E+12	1.53E+12	4.21E+11	4.21E+12	Undetermined[3]
Big Flat Creek GAR030701030710	Headwaters to Flat Creek (Walton Co.)	*E. coli*	[2]	9.58E+10	7.06E+10	2.34E+12	2.79E+11	2.79E+12	Undetermined[3]
Big Haynes Creek GAR030701030423	Headwaters to Brushy Fork Creek (Gwinnett Co.)	*E. coli*	[2]		6.05E+11	1.12E+12	1.92E+11	1.92E+12	Undetermined[3]
Big Haynes Creek GAR030701030431	Brushy Fork Creek to Little Panther Creek (Rockdale Co.)	*E. coli*	[2]		1.26E+12	3.23E+12	4.98E+11	4.98E+12	Undetermined[3]
Big Haynes Creek GAR030701030434	Little Haynes Creek to Yellow River (Rockdale Co.)	*E. coli*	[2]		4.13E+12	3.57E+13	4.42E+12	4.42E+13	Undetermined[3]
Big Indian Creek GAR030701040210	Mossy Creek to Ocmulgee River (Houston Co.)	*E. coli*	[2]	5.79E+11	6.03E+11	1.03E+14	1.16E+13	1.16E+14	Undetermined[3]
Big Sandy Creek GAR030701031002	Aboothlacoosta Creek to Ocmulgee River (Butts, Monroe Co.)	*E. coli*	[2]			1.56E+12	1.74E+11	1.74E+12	Undetermined[3]
Bromolow Creek GAR030701030313	Headwaters to Beaver Ruin Creek (Gwinnett Co.)	*E. coli*	[2]		3.84E+12	2.58E+12	7.12E+11	7.12E+12	Undetermined[3]
Brushy Fork Creek GAR030701030425	Lake Carlton to Big Haynes Creek (Gwinnett Co.)	*E. coli*	[2]			8.38E+11	1.22E+11	1.22E+12	Undetermined[3]
Cabin Creek GAR030701031103	Headwaters, Griffin to Towaliga River (Spalding Co.)	*E. coli*	[2]	3.05E+11	3.79E+10	8.76E+11	1.35E+11	1.35E+12	Undetermined[3]
Camp Creek GAR030701030314	Headwaters to Jackson Creek (DeKalb/Gwinnett Co.)	*E. coli*	[2]		3.01E+11	3.07E+11	6.74E+10	6.74E+11	Undetermined[3]

Stream Segment	Location	Bacteria Indicator	Current Load (counts/ 30 days)	TMDL Components					Percent Reduction
				WLA[1] (counts/ 30 days)	WLAsw (counts/ 30 days)	LA (counts/ 30 days)	MOS (counts/ 30 days)	TMDL (counts/ 30 days)	
Cedar Creek GAR030701030708	Headwaters to Alcovy River (Gwinnett Co.)	*E. coli*	[2]		4.18E+11	3.02E+11	8.00E+10	8.00E+11	Undetermined[3]
Cobbs Creek GAR030701030101	Headwaters to Shoal Creek (DeKalb Co.)	*E. coli*	[2]		5.29E+11	3.21E+11	9.45E+10	9.45E+11	Undetermined[3]
Conley Creek GAR030701030102	Headwaters to South River (Clayton/DeKalb Co.)	*E. coli*	[2]		4.03E+11	5.72E+11	1.08E+11	1.08E+12	Undetermined[3]
Doless Creek GAR030701030116	Headwaters to Doolittle Creek (DeKalb Co.)	*E. coli*	[2]		9.32E+09	5.87E+09	1.69E+09	1.69E+10	Undetermined[3]
Doolittle Creek GAR030701030103	Headwaters to South River (DeKalb Co.)	*E. coli*	[2]		4.03E+11	2.64E+11	7.43E+10	7.43E+11	Undetermined[3]
Falling Creek GAR030701031303	Little Falling Creek to Ocmulgee River (Jones Co.)	*E. coli*	[2]			4.28E+12	4.76E+11	4.76E+12	Undetermined[3]
Gully Creek GAR030701040807	Rocky Branch to Ocmulgee River (Jeff Davis Co.)	*E. coli*	[2]			7.88E+10	8.76E+09	8.76E+10	Undetermined[3]
Honey Creek GAR030701030110	Headwaters to South River (DeKalb/Rockdale Co.)	*E. coli*	[2]		3.19E+11	1.39E+12	1.90E+11	1.90E+12	Undetermined[3]
Hopkins Creek GAR030701030702	Headwaters to Alcovy River (Gwinnett Co.)	*E. coli*	[2]		1.17E+11	2.79E+11	4.40E+10	4.40E+11	Undetermined[3]
House Creek GAR030701040601	Ball Creek to Little House Creek (Wilcox/Ben Hill Co.)	*E. coli*	[2]			6.87E+11	7.62E+10	7.62E+11	Undetermined[3]
Intrenchment Creek GAR030701030104	Headwaters to South River, Atlanta (Fulton/DeKalb Co.)	*E. coli*	[2]		6.30E+11	3.29E+11	1.06E+11	1.06E+12	Undetermined[3]
Jacks Creek GAR030701030308	Headwaters to Yellow River (Gwinnett Co.)	*E. coli*	[2]		3.92E+11	3.53E+11	8.25E+10	8.25E+11	Undetermined[3]
Jackson Creek GAR030701030315	Gwinnett County	*E. coli*	[2]	4.01E+11	1.86E+12	1.19E+12	3.84E+11	3.84E+12	Undetermined[3]
Little Haynes Creek GAR030701030426	Hwy 20 to Big Haynes Creek (Walton/Rockdale Co.)	*E. coli*	[2]		1.32E+11	2.97E+12	3.45E+11	3.45E+12	Undetermined[3]
Little Stone Mountain Creek GAR030701030316	Headwaters to Stone Mountain Lake (DeKalb Co.)	*E. coli*	[2]		1.24E+11	1.74E+11	3.31E+10	3.31E+11	Undetermined[3]
Little Suwannee Creek GAR030701030317	Lake Perrin to Yellow River (Gwinnett Co.)	*E. coli*	[2]		6.19E+11	6.99E+11	1.47E+11	1.47E+12	Undetermined[3]
McClain Branch GAR030701030111	Headwaters to Honey Creek (Rockdale Co.)	*E. coli*	[2]	4.30E+10	1.70E+11	2.84E+11	5.52E+10	5.52E+11	Undetermined[3]
Mosquito Creek GAR030701040507	Headwaters to Ocmulgee River (Dodge/Pulaski Co.)	*E. coli*	[2]			8.44E+11	9.39E+10	9.39E+11	Undetermined[3]

Stream Segment	Location	Bacteria Indicator	Current Load (counts/ 30 days)	TMDL Components					Percent Reduction
				WLA[1] (counts/ 30 days)	WLAsw (counts/ 30 days)	LA (counts/ 30 days)	MOS (counts/ 30 days)	TMDL (counts/ 30 days)	
No Business Creek GAR030701030427	Headwaters to Norris Lake (Gwinnett Co.)	*E. coli*	[2]	1.29E+11	3.47E+11	3.74E+11	9.45E+10	9.45E+11	Undetermined[3]
North Branch South River GAR030701030112	Atlanta (Fulton Co.)	*E. coli*	[2]				No Data	No Data	Undetermined[3]
Ocmulgee River GAR030701040110	Sandy Run Creek to Big Indian Creek (Houston/Twiggs/Bleckley Co.)	*E. coli*	[2]		4.57E+12	1.88E+14	2.15E+13	2.15E+14	Undetermined[3]
Pew Creek GAR030701030309	Gwinnett County	*E. coli*	[2]		6.62E+11	4.76E+11	1.26E+11	1.26E+12	Undetermined[3]
Rocky Creek GAR030701031414	1 mile u/s Rocky Creek Road to Tobesofkee Creek, Macon (Bibb Co.)	*E. coli*	[2]		1.30E+11	3.36E+11	5.18E+10	5.18E+11	Undetermined[3]
Rum Creek GAR030701031306	Rum and Town Creeks, U/S Lake Juliette (Monroe Co.)	*E. coli*	[2]			2.17E+13	2.41E+12	2.41E+13	Undetermined[3]
Shetley Creek GAR030701030319	Headwaters to Bromolow Creek (Gwinnett Co.)	*E. coli*	[2]		1.23E+11	7.81E+10	2.23E+10	2.23E+11	Undetermined[3]
Shoal Creek GAR030701030704	Headwaters to Alcovy River, Lawrenceville (Gwinnett Co.)	*E. coli*	[2]		3.08E+11	3.84E+11	7.69E+10	7.69E+11	Undetermined[3]
Shoal Creek GAR030701030105	Headwaters to South River (DeKalb Co.)	*E. coli*	[2]		4.17E+11	2.90E+11	7.88E+10	7.88E+11	Undetermined[3]
Snapfinger Creek GAR030701030106	Headwaters to South River (DeKalb Co.)	*E. coli*	[2]		1.83E+12	1.44E+12	3.63E+11	3.63E+12	Undetermined[3]
Snapping Shoals Creek GAR030701030603	Almand Branch to South River (Rockdale/Newton Co.)	*E. coli*	[2]	3.01E+10	2.31E+11	2.12E+12	2.65E+11	2.65E+12	Undetermined[3]
South River GAR030701030120	Atlanta to Flakes Mill Road (Fulton/DeKalb Co.)	*E. coli*	[2]		4.83E+12	3.82E+12	9.58E+11	9.58E+12	Undetermined[3]
South River GAR030701030108	Flakes Mill Road to Pole Bridge Creek (DeKalb Co.)	*E. coli*	[2]	3.76E+12	5.10E+12	3.43E+12	1.37E+12	1.37E+13	Undetermined[3]
South River GAR030701030113	Pole Bridge Creek to Hwy 20 (Rockdale/Henry Co.)	*E. coli*	[2]	1.68E+12	1.06E+13	1.77E+13	3.33E+12	3.33E+13	Undetermined[3]
South River GAR030701030604	Hwy 20 to Snapping Shoals Creek (Henry/Newton Co.)	*E. coli*	[2]		7.18E+12	2.10E+13	3.13E+12	3.13E+13	Undetermined[3]
South River GAR030701030606	Snapping Shoals to Jackson Lake (Newton Co.)	*E. coli*	[2]			1.81E+14	2.56E+13	2.56E+14	Undetermined[3]

Stream Segment	Location	Bacteria Indicator	Current Load (counts/ 30 days)	TMDL Components					Percent Reduction
				WLA[1] (counts/ 30 days)	WLAsw (counts/ 30 days)	LA (counts/ 30 days)	MOS (counts/ 30 days)	TMDL (counts/ 30 days)	
Stone Mountain Creek GAR030701030320	Headwaters to Stone Mountain Lake (DeKalb Co.)	*E. coli*	[2]			2.42E+11	5.35E+10	5.35E+11	Undetermined[3]
Sugar Creek GAR030701030109	u/s Memorial Drive to South River (DeKalb Co.)	*E. coli*	[2]		3.33E+11	2.27E+11	6.23E+10	6.23E+11	Undetermined[3]
Sugar Creek GAR030701050304	Turnpike Creek to Little Ocmulgee River (Telfair Co.)	*E. coli*	[2]			5.76E+13	6.43E+12	6.43E+13	Undetermined[3]
Sweetwater Creek GAR030701030310	Lee Daniel Creek to Yellow River (Gwinnett Co.)	*E. coli*	[2]	4.01E+11	4.03E+12	2.72E+12	7.94E+11	7.94E+12	Undetermined[3]
Swift Creek GAR030701030428	Headwaters to Yellow River (DeKalb Co.)	*E. coli*	[2]		2.63E+12	8.69E+12	1.26E+12	1.26E+13	Undetermined[3]
Tobesofkee Creek GAR030701031416	Barnesville to Cole Creek (Lamar/Monroe Co.)	*E. coli*	[2]	1.10E+11		8.44E+11	1.06E+11	1.06E+12	Undetermined[3]
Tobesofkee Creek GAR030701031415	Cole Creek to Todd Creek (Monroe Co.)	*E. coli*	[2]			1.09E+12	1.22E+11	1.22E+12	Undetermined[3]
Tobesofkee Creek GAR030701031417	Lake Tobesofkee to Rocky Creek (Bibb Co.)	*E. coli*	[2]		1.49E+12	9.95E+12	1.27E+12	1.27E+13	Undetermined[3]
Towaliga River GAR030701031114	Indian Creek to High Falls Lake (Butt Co.)	*E. coli*	[2]		5.06E+10	5.30E+12	5.95E+11	5.95E+12	Undetermined[3]
Town Branch GAR030701031024	Headwaters (Jackson) to Aboothlacoosta Creek (Butts Co.)	*E. coli*	[2]	1.78E+10		1.01E+11	1.32E+10	1.32E+11	Undetermined[3]
Turkey Creek GAR030701030321	Headwaters to Yellow River (Gwinnett Co.)	*E. coli*	[2]		1.15E+11	9.89E+10	2.38E+10	2.38E+11	Undetermined[3]
Turnpike Creek GAR030701050303	Hwy 280 to Sugar Creek (Telfair Co.)	*E. coli*	[2]			2.51E+13	2.79E+12	2.79E+13	Undetermined[3]
Tussahaw Creek GAR030701030901	Wolf Creek to Lake Jackson (Butts Co.)	*E. coli*	[2]		5.89E+09	5.01E+12	5.58E+11	5.58E+12	Undetermined[3]
Walnut Creek GAR030701031607	Headwaters to Ocmulgee River (Jones/Bibb Co.)	*E. coli*	[2]	1.22E+11	4.13E+10	2.15E+12	2.56E+11	2.56E+12	Undetermined[3]
Watson Creek GAR030701030322	Headwaters to Yellow River (Gwinnett Co.)	*E. coli*	[2]		2.67E+11	2.62E+11	5.88E+10	5.88E+11	Undetermined[3]
Wise Creek GAR030701031015	Headwaters to Ocmulgee River (Jasper Co.)	*E. coli*	[2]			1.80E+12	1.99E+11	1.99E+12	Undetermined[3]
Yellow River GAR030701030327	Headwaters to Harris Lake (Gwinnett Co.)	*E. coli*	[2]		6.23E+11	6.27E+11	1.39E+11	1.39E+12	Undetermined[3]
Yellow River GAR030701030328	Harris Lake to Pew Creek (Gwinnett Co.)	*E. coli*	[2]		3.43E+12	3.21E+12	7.37E+11	7.37E+12	Undetermined[3]

Stream Segment	Location	Bacteria Indicator	Current Load (counts/ 30 days)	TMDL Components					Percent Reduction
				WLA[1] (counts/ 30 days)	WLAsw (counts/ 30 days)	LA (counts/ 30 days)	MOS (counts/ 30 days)	TMDL (counts/ 30 days)	
Yellow River GAR030701030311	Sweetwater Creek to Centerville Creek (Gwinnett Co.)	*E. coli*	[2]	1.12E+12	1.20E+13	9.77E+12	2.55E+12	2.55E+13	Undetermined[3]
Yellow River GAR030701030433	Centerville Creek to Hammock Creek (Gwinnett/DeKalb/Rockdale Co.)	*E. coli*	[2]		6.11E+12	1.07E+13	1.87E+12	1.87E+13	Undetermined[3]
Yellow River GAR030701030432	Hammock Creek to Big Haynes Creek (Rockdale Co.)	*E. coli*	[2]	6.68E+11	5.74E+12	1.68E+13	2.58E+12	2.58E+13	Undetermined[3]
Yellow River GAR030701030518	Big Haynes Creek to Jackson Lake (Newton Co.)	*E. coli*	[2]		9.39E+12	5.13E+13	6.74E+12	6.74E+13	Undetermined[3]

Notes:

(1) The assigned bacteria load from the NPDES permitted facility for WLA was determined as the product of the *E. coli* permit limit and the facility average monthly discharge at the time of the critical load.
(2) Samples were not analyzed for E. coli, therefore critical load calculation not possible
(3) Percent reduction could not be determined due to absence of current load calculation