Total Maximum Daily Load

Evaluation

for

Nineteen Stream Segments

in the

Ocmulgee River Basin

for

Bacteria

Submitted to: The U.S. Environmental Protection Agency Region 4 Atlanta, Georgia

Submitted by: The Georgia Department of Natural Resources Environmental Protection Division Atlanta, Georgia

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EXECUTIVE SUMMARY

The State of Georgia Environmental Protection Division (GA EPD) assesses its waterbodies for compliance with water quality criteria established for their designated uses as required by the Federal Clean Water Act (CWA). Assessed waterbodies are placed into one of three categories, supporting designated use, not supporting designated use, or assessment pending, depending on water quality assessment results. These waterbodies are found on Georgia's 2022 305(b) list as required by that section of the CWA that defines the assessment process and are published in *Water Quality in Georgia 2020-2021* (GA EPD, 2022). This document is available on the Georgia Environmental Protection Division (GA EPD) website.

The subset of the waterbodies that do not meet designated uses on the 305(b) list are also assigned to Georgia's 303(d) list, named after that section of the CWA. Although the 305(b) and 303(d) lists are two distinct requirements under the CWA, Georgia reports both lists in one combined format called the Integrated 305(b)/303(d) List, which is found in Appendix A of *Water Quality in Georgia 2020-2021* (GA EPD, 2022). Waterbodies on the 303(d) list are denoted as Category 5, and are required to have a Total Maximum Daily Load (TMDL) evaluation for the water quality constituent(s) in violation of the <u>water quality standard(s)</u>.

The TMDL formulations in this document are based on impaired segments contained in the <u>2022</u> <u>305(b)/303(d) List</u>. The TMDL process establishes the allowable pollutant loadings or other quantifiable parameters for a waterbody based on the relationship between pollutant sources and instream water quality conditions. This allows water quality-based controls to be developed to reduce pollution and restore and maintain water quality.

Every waterbody in the State has one or more designated uses, and each designated use has water quality criteria established to protect it. Waterbodies in Georgia are assessed based on the <u>305(b)/303(d)</u> Listing Assessment Methodology included in Appendix A of *Water Quality in Georgia 2020-2021*, as such GA EPD has placed fourteen (14) stream segments in the Ocmulgee River Basin on the 303(d) list of impaired waters because it was assessed as "not supporting" its designated use of "Fishing" due to violation of the fecal coliform water quality criteria. The EPA approved water quality criteria in place when the 2022 Integrated 305(b)/303(d) List was developed and approved are as follows:

For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 counts per 100 mL in lakes and reservoirs and 500 counts per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 counts per 100 mL for any sample. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.

A waterbody is assessed as "not supporting" its use if more than ten percent of the geometric means are greater than their seasonal waterbody specific criteria or if more than ten percent of the samples exceed the single sample criteria.

In January 2022, the Georgia DNR Board adopted new bacteria criteria for "Fishing" and "Drinking Water" designated uses using the bacterial indicators *E. coli* and enterococci. These bacteria are better indicators for human health illnesses. The adopted criteria have the same estimated illness Georgia Environmental Protection Division v Atlanta, Georgia rate (8 per 1000 swimmers) as the previously established fecal coliform criteria. EPA approved the proposed criteria on August 31, 2022. Since this TMDL was written after EPA approved the new bacteria criteria, the TMDL will use both bacterial indicators. The current *E. coli* load cannot be determined, but the TMDL will use a 0.63 conversion factor to convert from fecal coliform standards to *E. coli* standards, based on the 30-day geometric mean water quality standard. The current water quality criteria approved August 31, 2022, are as follows:

For the months of May through October, when primary water contact recreation activities are expected to occur, culturable *E. coli* not to exceed a geometric mean of 126 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an *E. coli* statistical threshold value (STV) of 410 counts per 100 mL in the same 30-day interval. For the months of November through April, culturable *E. coli* not to exceed a geometric mean of 265 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an *E. coli* statistical threshold value (STV) of 861 counts per 100 mL in the same 30-day interval.

A waterbody is assessed as "not supporting" its use if more than ten percent of the geometric means are greater than their seasonal criteria or if more than ten percent of the samples exceeded the STV water quality criteria cited above. An important part of the TMDL analysis is the identification of potential source categories. Sources are broadly classified as either point or nonpoint sources. A point source is defined as a discernable, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters. Nonpoint sources are diffuse, and generally, but not always, involve accumulated fecal coliform bacteria that wash off land surfaces following storm events.

The process of developing fecal coliform bacteria TMDLs for listed segments in the Ocmulgee River Basin involved the determination of the following:

- The current critical bacterial load to the stream under existing conditions;
- The TMDL for similar conditions under which the current critical load was determined; and
- The percent reduction in the current critical bacterial load necessary to achieve the TMDL.

The calculation of the bacterial load at any point in a stream requires the bacterial concentration and stream flow. The availability of water quality and flow data varies considerably among the listed segments. The Loading Curve Approach was used to determine the current fecal coliform load and TMDL. The bacterial loads and required reductions for each of the listed segments are summarized in Table 1 below.

Point and nonpoint source management practices should be used to help reduce bacteria source loads. The amount of bacteria delivered to a stream is difficult to determine. However, the use of management practices should improve stream water quality, and future monitoring will provide a measurement of TMDL implementation.

Table 1: Bacterial Loads and Required Bacterial Load Reductions

| | | | | Current | | | | | | | |
|-----------------------------|--------------------|---|------------------------|------------------------------|--|-------------------------------|----------------------------|-----------------------------|------------------------------|-----------------------------|--|
| Assessment Unit ID | Stream Segment | Description | Bacterial Indicator | Load (counts/ 30 days) | WLA (counts/ 30 days) ⁽¹⁾ | WLAsw (counts/ 30 days) | LA (counts/ 30 days) | MOS (counts/ 30 days) | TMDL (counts/ 30 days) | Reduction Required | |
| 0400070400004 | De su Ora ala | Osithers Dranch to Labor Inchase | Fecal coliform | 3.78E+12 | | | 1.36E+11 | 1.51E+10 | 1.51E+11 | 80.0% | |
| GAR030701030804 | Bear Creek | Gaitners Branch to Lake Jackson | E. coli | (2) | | | 8.58E+10 | 9.54E+09 | 9.54E+10 | Undetermined (3) | |
| GAR030701031316 Berny Creek | | Pond at the headwaters to the | Fecal coliform | 2.38E+10 | | | 1.55E+10 | 1.72E+09 | 1.72E+10 | 27.7% | |
| GAR030701031316 | Berry Creek | Ocmulgee River | E. coli | (2) | | | 9.76E+09 | 1.08E+09 | 1.08E+10 | Undetermined (3) | |
| CAR020704020244 | Big Cotton Indian | Little Cotton Indian Creek to the | Fecal coliform | 7.02E+13 | 1.90E+11 | 1.38E+12 | 2.64E+12 | 4.68E+11 | 4.68E+12 | 66.7% | |
| GAR030701030214 | Creek | South River | E. coli | (2) | 1.20E+11 | 8.67E+11 | 1.67E+12 | 2.95E+11 | 2.95E+12 | Undetermined (3) | |
| CAR020704020747 | Corrich Crock | Headwaters to Upper Williams | Fecal coliform | 1.36E+11 | | 4.02E+08 | 3.69E+10 | 4.15E+09 | 4.15E+10 | 69.4% | |
| GAR030701030717 | Comish Creek | Lake | E. coli | (2) | | 2.54E+08 | 2.32E+10 | 2.61E+09 | 2.61E+10 | Undetermined (3) | |
| CAR020704024505 | Echeconnee | Rock Quarry Road to Knoxville | Fecal coliform | 9.58E+11 | | | 3.97E+11 | 4.41E+10 | 4.41E+11 | 53.9% | |
| GAR030701031505 | Creek | Road | E. coli | (2) | | | 2.50E+11 | 2.78E+10 | 2.78E+11 | Undetermined (3) | |
| CAR020704020200 | Garner Creek | Lleaduaters to Valley, Diver | Fecal coliform | 6.35E+10 | | 1.25E+10 | 1.06E+10 | 2.57E+09 | 2.57E+10 | 59.6% | |
| GAR030701030326 | | | E. coli | (2) | | 7.86E+09 | 6.70E+09 | 1.62E+09 | 1.62E+10 | Undetermined (3) | |
| 04000704000504 | Ourse Orse also | Tributary 0.25 miles upstream | Fecal coliform | 9.36E+10 | | 1.77E+09 | 3.64E+10 | 4.24E+09 | 4.24E+10 | 54.7% | |
| GAR030701030521 | Gum Creek | miles upstream Dial Mill Road | E. coli | (2) | | 1.11E+09 | 2.29E+10 | 2.67E+09 | 2.67E+10 | Undetermined (3) | |
| CAR020704020007 | Jaland Shaal Graak | Lieschusters te Meekeu Greek | Fecal coliform | 1.67E+11 | | 1.69E+09 | 3.10E+10 | 3.63E+09 | 3.63E+10 | 78.3% | |
| GAR030701030607 | Island Shoal Creek | Headwaters to Mackey Creek | E. coli | (2) | | 1.06E+09 | 1.95E+10 | 2.29E+09 | 2.29E+10 | Undetermined (3) | |
| CAR020704050400 | Little Ocmulgee | Little Ocmulgee State Park Lake | Fecal coliform | 3.51E+11 | 9.37E+09 | | 1.28E+11 | 1.52E+10 | 1.52E+11 | 56.5% | |
| GAR030701050406 | River | to Wilcox Creek | E. coli | (2) | 5.90E+09 | | 1.14E+10 | 1.92E+09 | 1.92E+10 | Undetermined (3) | |
| CAP020701020710 | Mountain Crook | Tributary at Ammons Bridge Road to tributary 0.7 miles | Fecal coliform | 7.35E+10 | | | 2.38E+10 | 2.65E+09 | 2.65E+10 | 64.0% | |
| GAR030701030719 | Mountain Creek | downstream Monroe Jersey Road SE | E. coli | (2) | | | 1.50E+10 | 1.67E+09 | 1.67E+10 | Undetermined ⁽³⁾ | |
| CAR020701020224 | Bughe Crook | Tributory to Vollow Piyor | Fecal coliform | 8.96E+10 | | 1.27E+10 | 9.90E+09 | 2.52E+09 | 2.52E+10 | 71.9% | |
| GAR030701030324 | | | E. coli | (2) | | 8.03E+09 | 6.24E+09 | 1.59E+09 | 1.59E+10 | Undetermined (3) | |
| CAR020701020802 | Pooks Crook | | Fecal coliform | 7.31E+10 | | | 1.19E+10 | 1.32E+09 | 1.32E+10 | 82.0% | |
| GARUSU/01030802 | RUCKY CIEEK | THEAUWALETS ID LAKE JACKSON | E. coli | (2) | | | 7.47E+09 | 8.30E+08 | 8.30E+09 | Undetermined (3) | |

| | | | | Current | | | | | | | | |
|-----------------------|-----------------|---------------------------------|------------------------|------------------------------|--|-------------------------------|----------------------------|-----------------------------|------------------------------|-----------------------------|--|--|
| Assessment Unit ID | Stream Segment | Description | Bacterial Indicator | Load (counts/ 30 days) | WLA (counts/ 30 days) ⁽¹⁾ | WLAsw (counts/ 30 days) | LA (counts/ 30 days) | MOS (counts/ 30 days) | TMDL (counts/ 30 days) | Reduction Required | | |
| CAR020701021217 | Tributary to | Handwatara ta Hurriaana Craak | Fecal coliform | 3.13E+09 | | | 3.08E+09 | 3.42E+08 | 3.42E+09 | 70.7% | | |
| GAR030701031317 | Hurricane Creek | neadwaters to numcane Creek | E. coli | (2) | | | 5.69E+08 | 6.32E+07 | 6.32E+08 | Undetermined (3) | | |
| CAD020701021116 | Tributary to | Headwaters to Thompson Crock | Fecal coliform | 1.55E+10 | | 1.34E+09 | 3.61E+09 | 5.50E+08 | 5.50E+09 | 64.4% | | |
| GAR030701031116 | Thompson Creek | Headwaters to Thompson Creek | E. coli | (2) | | 8.46E+08 | 2.28E+09 | 3.47E+08 | 3.47E+09 | Undetermined (3) | | |
| Revised TMDLs | | | | | | | | | | | | |
| | Boar Tusk Creek | Haadwatara ta Vallaw Divar | Fecal coliform | (4) | | 1.04E+10 | 1.02E+10 | 2.29E+09 | 2.29E+10 | Undetermined (3) | | |
| GAR030701030424 | | Headwaters to Yellow River | E. coli | (4) | | 6.57E+09 | 6.44E+09 | 1.45E+09 | 1.45E+10 | Undetermined (3) | | |
| 04000004004047 | | Beaverdam Creek to Walnut | Fecal coliform | (4) | 8.69E+10 | 4.56E+11 | 1.45E+13 | 1.67E+12 | 1.67E+13 | Undetermined (3) | | |
| GAR030701031617 | Ocmulgee River | Creek | E. coli | (4) | 5.47E+10 | 2.87E+11 | 9.14E+12 | 1.05E+12 | 1.05E+13 | Undetermined (3) | | |
| 04000704004045 | | Tobesofkee Creek to | Fecal coliform | (4) | 5.62E+11 | 1.37E+12 | 1.53E+13 | 1.92E+12 | 1.92E+13 | Undetermined (3) | | |
| GAR030701031615 | Ocmulgee River | Echeconnee Creek | E. coli | (4) | 3.54E+11 | 8.65E+11 | 9.64E+12 | 1.21E+12 | 1.21E+13 | Undetermined (3) | | |
| 04000704004040 | Yellow Water | 1 mile DS Stark Road (Rd S763), | Fecal coliform | (4) | 1.04E+10 | | 1.91E+11 | 2.23E+10 | 2.23E+11 | Undetermined (3) | | |
| GAR030701031016 | Creek | Jackson to Ocmulgee River | E. coli | (4) | 6.57E+09 | | 1.20E+11 | 1.41E+10 | 1.41E+11 | Undetermined (3) | | |
| CAD020704020004 | | Dam Pool (formerly Newton, | Fecal coliform | (4) | | 7.50E+11 | 9.27E+12 | 1.11E+12 | 1.11E+13 | Undetermined ⁽³⁾ | | |
| GAR030701030904 | Jackson Lake | Butts, Jasper Counties) | E. coli | (4) | | 4.73E+11 | 5.84E+12 | 7.01E+11 | 7.01E+12 | Undetermined (3) | | |

Notes:

(1) The assigned bacterial load from the NPDES permitted facility for WLA was determined as the product of the permitted flow and bacteria permit limit.

(2) Sample was 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.

(4) Critical loading could not be determined due to no samples collected.

1.0 INTRODUCTION

1.1 Background

The State of Georgia assesses its waterbodies for compliance with water quality standards criteria established for their designated uses as required by the Federal Clean Water Act (CWA). Assessed waterbodies are placed into one of three categories, supporting designated use, not supporting designated use, or assessment pending, depending on water quality assessment results. These waterbodies are found on Georgia's 2022 305(b) list as required by that section of the CWA that defines the assessment process and are published in *Water Quality in Georgia 2020-2021* (GA EPD, 2022). This document is available on the Georgia Environmental Protection Division (GA EPD) website.

The subset of the waterbodies that do not meet designated uses on the 305(b) list are also assigned to Georgia's 303(d) list, named after that section of the CWA. Although the 305(b) and 303(d) lists are two distinct requirements under the CWA, Georgia reports both lists in one combined format called the Integrated 305(b)/303(d) List, which is found in Appendix A of *Water Quality in Georgia 2020-2021* (GA EPD, 2022). Waterbodies on the 303(d) list are denoted as Category 5, and are required to have a Total Maximum Daily Load (TMDL) evaluation for the water quality constituent(s) in violation of the <u>water quality standard</u>.

The TMDL formulations in this document are based on impaired segments contained in the 2022 <u>305(b)/303(d) list</u>. The TMDL process establishes the allowable pollutant loadings or other quantifiable parameters for a waterbody based on the relationship between pollutant sources and instream water quality conditions. This allows water quality-based controls to be developed to reduce pollution and restore and maintain water quality.

The 303(d) list identifies the stream segments that are not supporting its designated use classification due to exceedances of water quality standards for bacteria. Fecal coliform and *E. coli* bacteria are used as indicators of the potential presence of pathogens in a stream. Table 2 presents the fourteen (14) stream segments in the Ocmulgee River Basin included on the 2022 303(d) list for exceedances of the fecal coliform water quality criteria. Table 3 lists the five (5) stream and waterbody segments in the Ocmulgee River Basin where the previously approved TMDLs are being revised.

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use |
|-------------------------|--|-----------------------|------------------------------|-------------------|
| Bear Creek | Gaithers Branch to Lake Jackson | GAR030701030804 | 3 | Fishing |
| Berry Creek | Pond at the headwaters to the Ocmulgee River | GAR030701031316 | 3 | Fishing |
| Big Cotton Indian Creek | Little Cotton Indian Creek to the South River | GAR030701030214 | 5 | Fishing |
| Cornish Creek | Headwaters to Upper Williams Lake | GAR030701030717 | 7 | Fishing |
| Echeconnee Creek | Rock Quarry Road to Knoxville Road | GAR030701031505 | 27 | Fishing |
| Garner Creek | Headwaters to Yellow River | GAR030701030326 | 4.7 | Fishing |

Table 2: Stream Segments Listed on the 2022 303(d) List for Bacteria in the Ocmulgee River Basin

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use |
|--------------------------------|---|-----------------------|------------------------------|-------------------|
| Gum Creek | Tributary 0.25 miles upstream Hightower Trail to tributary 0.16 miles upstream Dial Mill Road | GAR030701030521 | 2 | Fishing |
| Island Shoal Creek | Headwaters to Mackey Creek | GAR030701030607 | 5 | Fishing |
| Little Ocmulgee River | Little Ocmulgee State Park Lake to Wilcox Creek | GAR030701050406 | 2 | Fishing |
| Mountain Creek | Tributary at Ammons Bridge Road to tributary 0.7 miles downstream Monroe Jersey Road SE | GAR030701030719 | 2 | Fishing |
| Pughs Creek | Tributary to Yellow River | GAR030701030324 | 5 | Fishing |
| Rocky Creek | Headwaters to Lake Jackson | GAR030701030802 | 4.8 | Fishing |
| Tributary to Hurricane Creek | Headwaters to Hurricane Creek | GAR030701031317 | 3.2 | Fishing |
| Tributary to Thompson Creek | Headwaters to Thompson Creek | GAR030701031116 | 1 | Fishing |

Table 3: Stream Segments with Revised TMDLs for Bacteria in the Ocmulgee River Basin

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use | Original TMDL Action ID Number, Agency, and Year |
|-----------------------|---|-----------------------|------------------------------|----------------------------|---|
| Boar Tusk Creek | Headwaters to Yellow River | GAR030701030424 | 3 | Fishing | # 152 US EPA 1998 |
| Ocmulgee River | Beaverdam Creek to Walnut Creek | GAR030701031617 | 10 | Drinking Water, Fishing | # 3757 US EPA 2002 |
| Ocmulgee River | Tobesofkee Creek to Echeconnee Creek | GAR030701031615 | 7.3 | Fishing | # 3757 US EPA 2002 |
| Yellow Water Creek | 1 mile DS Stark Road (Rd S763), Jackson to Ocmulgee River | GAR030701031016 | 7 | Fishing | # 3757 US EPA 2002 |
| Jackson Lake | Dam Pool (formerly Newton, Butts, Jasper Counties) | GAR030701030904 | 650 acres | Recreation, Fishing | # 3757 US EPA 2002 |

1.2 Watershed Description

The Ocmulgee River Basin is located in central Georgia, occupying an area of 6,102 square miles, originating in the eastern edges of the City of Atlanta (EPD, 2003). The Upper Ocmulgee Basin is made up of the South River, Yellow River, and Alcovy River subwatersheds. These converge at Lake Jackson to form the Ocmulgee River. The Ocmulgee River flows south and southeast, runs

through the northeast side of the City of Macon, and then travels approximately 115 miles until it finally joins the Oconee River near the City of Hazlehurst, to form the Altamaha River. The Altamaha River then continues in a southeastern direction to the Atlantic Ocean.

The Ocmulgee River Basin falls within the Piedmont and Southeastern Plains Ecoregions. The Ocmulgee River Basin includes three United States Geologic Survey (USGS) eight-digit hydrologic units, HUC 03070103 (Upper Ocmulgee River watershed), HUC 03070104 (Lower Ocmulgee River watershed), and HUC 03070105 (Little Ocmulgee River watershed). Figure 1 shows the location of the Ocmulgee River Basin in the State of Georgia and Figure 2 shows the locations of the three hydrologic units within the Ocmulgee River Basin. Figures 3 through 20 indicate the locations of the nineteen (19) 303(d) listed stream segments in the Ocmulgee River Basin.

The land use characteristics of the Ocmulgee River Basin watersheds were determined using data from the Georgia Land Use Trends (GLUT) for Year 2015. This raster land use trend product was developed by the University of Georgia – Natural Resources Spatial Analysis Laboratory (NARSAL) and follows land use trends for years 1974, 1985, 1991, 1998, 2001, 2005, 2008 and 2015. Some of the NARSAL land use types were reclassified, aggregated into similar land use types, and used in the final watershed characterization. Table 4 lists the watershed land use distribution for the drainage areas of the listed stream segments.

1.3 State Water Planning

The Georgia Legislature enacted the Metropolitan North Georgia Water Planning District Act in 2001 to create the <u>Metropolitan North Georgia Water Planning District</u> (MNGWPD) to preserve and protect water resources in the 15-county metropolitan Atlanta area. The MNGWPD is charged with the development of comprehensive regional and watershed specific water resource management plans to be implemented by local governments in the metropolitan Atlanta area. The MNGWPD issued its first water resource management plan document in 2003.

In 2004, the Georgia Legislature enacted the Comprehensive State-wide Water Management Planning Act to ensure management of water resources in a sustainable manner to support the state's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens on a state-wide level. GA EPD later developed the 2008 Comprehensive Statewide Water Management Plan, which established Georgia's ten Regional Water Planning Councils (RWPCs) and laid the groundwork for the RWPCs to develop their own Regional Water Plans. The boundaries of these ten RWPCs, in addition to the MNGWPD, are shown in Figure 21. The fourteen listed waterbodies are located within the boundaries of the Middle Ocmulgee Regional Water Planning Council.

In 2011, each RWPC developed and adopted Regional Water Plans, which identify the ranges of actions or management practices to help meet the State's water quality challenges. Implementation of these plans is critical in meeting Georgia's water resource challenges. The Middle Ocmulgee RWPC updated its Water Plan in June 2017, which was adopted by GA EPD in July 2017. Their Water Plan is available <u>here</u>.



Figure 1: Location of the Ocmulgee River Basin in Georgia



Figure 2: Major Political Boundaries, Water Features, and U.S.G.S. 12-digit HUC



Figure 3: Impaired Stream Segment of Bear Creek



Figure 4: Impaired Stream Segment of Berry Creek



Figure 5: Impaired Stream Segment of Big Cotton Indian Creek



Figure 6: Impaired Stream Segment of Boar Tusk Creek



Figure 7: Impaired Stream Segments of Cornish Creek and Gum Creek



Figure 8: Impaired Stream Segment of Echeconnee Creek



Figure 9: Impaired Stream Segment of Garner Creek



Figure 10: Impaired Stream Segment of Island Shoal Creek



Figure 11: Impaired Stream Segment of Little Ocmulgee River



Figure 12: Impaired Stream Segment of Mountain Creek



Figure 13: Impaired Stream Segment of Ocmulgee River (GAR030701031615)



Figure 14: Impaired Stream Segment of Ocmulgee River (GAR030701031617)



Figure 15: Impaired Stream Segments of Pugh's Creek



Figure 16: Impaired Stream Segment of Rocky Creek



Figure 17: Impaired Stream Segment of Tributary to Hurricane Creek



Figure 18: Impaired Stream Segment of Tributary to Thompson Creek



Figure 19: Impaired Stream Segment of Yellow Water Creek



Figure 20: Impaired Stream Segment of Jackson Lake

1.4 Water Quality Standard

Every waterbody in the State has one or more designated uses, and each designated use has water quality criteria established to protect it. Waterbodies in Georgia are assessed based on the 305(b)/303(d) Listing Assessment Methodology, as such GA EPD placed fourteen (14) stream segments in the Ocmulgee River Basin on the 2022 303(d) list of impaired waters because it was assessed as "not supporting" its designated use of "Fishing" due to violations of the fecal coliform criteria. The potential causes listed include urban runoff and nonpoint sources. The fishing bacteria water quality standards as approved by US EPA Region 4 on January 20, 2021, and applicable at the time of listing was as follows:

(c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; primary contact recreation in and on the water for the months of May – October, secondary contact recreation in and on the water for the months of November – April; or for any other use requiring water of a lower quality.

- (i) Bacteria:
 - 1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water quality and sanitary studies show fecal coliform levels from non-human sources exceed 200 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 counts per 100 mL in lakes and reservoirs and 500 counts per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 counts per 100 mL for any sample. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
 - 2. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.



Figure 21: Boundaries of the Regional Water Planning Councils and the Metropolitan North Georgia Water Planning District

Table 4: Ocmulgee River Basin Land Coverage

| | Land Use Categories - Acres (Percent) | | | | | | | | | | | | | |
|------------------------------|---------------------------------------|------------|--------------------------|--------------------------------|---------------------------|-----------------------------------|---------|-----------|--------------|--|-------------------|---|---------------------------------------|---------|
| Stream/Segment | Beaches, Dunes, Mud | Open Water | Developed, Low Intensity | Developed, Medium Intensity | Developed, High Intensity | Transitional, Clearcut, Sparse | Forest | Row Crops | Pasture, Hay | Other Grasses (Developed Open Space, Utility Swaths, Golf Courses) | Forested Wetlands | Non-Forested Wetlands (Salt/Brackish | Non-Forested Wetlands (Freshwater) | Total |
| Bear Creek | 4.9 | 165.9 | 711.4 | 48.9 | 19.8 | 576.0 | 9330.1 | 436.1 | 8238.6 | 1385.7 | 1269.0 | 0.0 | 8.2 | 22194.8 |
| GAR030701030804 | 0.0% | 0.7% | 3.2% | 0.2% | 0.1% | 2.6% | 42.0% | 2.0% | 37.1% | 6.2% | 5.7% | 0.0% | 0.0% | 100% |
| Berry Creek | 90.5 | 307.8 | 125.0 | 140.6 | 117.9 | 139.4 | 2527.5 | 1.6 | 282.4 | 199.9 | 122.3 | 0.0 | 2.4 | 4057.4 |
| GAR030701031316 | 2.2% | 7.6% | 3.1% | 3.5% | 2.9% | 3.4% | 62.3% | 0.0% | 7.0% | 4.9% | 3.0% | 0.0% | 0.1% | 100% |
| Big Cotton Indian Creek | 54.0 | 1351.7 | 19285.2 | 7716.0 | 4244.0 | 2346.5 | 23210.9 | 3.8 | 7055.0 | 11978.2 | 3746.2 | 0.0 | 18.9 | 81270.9 |
| GAR030701030214 | 0.1% | 1.7% | 23.7% | 9.5% | 5.2% | 2.9% | 28.6% | 0.0% | 8.7% | 14.7% | 4.6% | 0.0% | 0.0% | 100% |
| Boar Tusk Creek | 0.0 | 2.9 | 525.1 | 409.4 | 197.3 | 72.3 | 382.7 | 0.0 | 45.6 | 197.9 | 13.3 | 0.0 | 0.0 | 1846.5 |
| GAR030701030424 | 0.0% | 0.2% | 28.4% | 22.2% | 10.7% | 3.9% | 20.7% | 0.0% | 2.5% | 10.7% | 0.7% | 0.0% | 0.0% | 100% |
| Cornish Creek | 0.0 | 20.0 | 345.4 | 43.6 | 17.3 | 282.2 | 3353.9 | 30.9 | 2463.5 | 679.4 | 554.9 | 0.0 | 10.5 | 7928.2 |
| GAR030701030717 | 0.0% | 0.3% | 4.4% | 0.5% | 0.2% | 3.6% | 42.3% | 0.4% | 31.1% | 8.6% | 7.0% | 0.0% | 0.1% | 100% |
| Echeconnee Creek | 63.6 | 488.4 | 1403.1 | 115.6 | 39.4 | 4185.5 | 62032.6 | 3123.3 | 10064.3 | 4938.7 | 5150.0 | 0.0 | 50.3 | 91692.1 |
| GAR030701031505 | 0.1% | 0.5% | 1.5% | 0.1% | 0.0% | 4.6% | 67.7% | 3.4% | 11.0% | 5.4% | 5.6% | 0.0% | 0.1% | 100% |
| Garner Creek | 0.9 | 2.2 | 1426.9 | 343.2 | 84.1 | 44.3 | 727.7 | 0.0 | 81.6 | 1028.6 | 4.0 | 0.0 | 0.0 | 3743.3 |
| GAR030701030326 | 0.0% | 0.1% | 38.1% | 9.2% | 2.2% | 1.2% | 19.4% | 0.0% | 2.2% | 27.5% | 0.1% | 0.0% | 0.0% | 100% |
| Gum Creek | 1.6 | 18.5 | 717.4 | 107.6 | 54.9 | 507.5 | 3217.8 | 21.6 | 2167.9 | 878.0 | 325.8 | 0.0 | 0.0 | 8116.5 |
| GAR030701030521 | 0.0% | 0.2% | 8.8% | 1.3% | 0.7% | 6.3% | 39.6% | 0.3% | 26.7% | 10.8% | 4.0% | 0.0% | 0.0% | 100% |
| Tributary to Hurricane Creek | 0.0 | 1.6 | 0.4 | 0.0 | 0.0 | 11.3 | 2023.3 | 0.0 | 19.1 | 98.7 | 9.3 | 0.0 | 0.0 | 2163.9 |
| GAR030701031317 | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.5% | 93.5% | 0.0% | 0.9% | 4.6% | 0.4% | 0.0% | 0.0% | 100% |

| | Land Use Categories - Acres (Percent) | | | | | | | | | | | | | |
|----------------------------|---------------------------------------|------------|--------------------------|--------------------------------|---------------------------|-----------------------------------|----------|-----------|--------------|--|-------------------|---|---------------------------------------|-----------|
| Stream/Segment | Beaches, Dunes, Mud | Open Water | Developed, Low Intensity | Developed, Medium Intensity | Developed, High Intensity | Transitional, Clearcut, Sparse | Forest | Row Crops | Pasture, Hay | Other Grasses (Developed Open Space, Utility Swaths, Golf Courses) | Forested Wetlands | Non-Forested Wetlands (Salt/Brackish | Non-Forested Wetlands (Freshwater) | Total |
| Island Shoal Creek | 2.2 | 2.2 | 226.6 | 32.5 | 11.1 | 228.0 | 1106.6 | 3.6 | 988.1 | 272.7 | 211.3 | 0.0 | 0.0 | 3084.8 |
| GAR030701030607 | 0.1% | 0.1% | 7.3% | 1.1% | 0.4% | 7.4% | 35.9% | 0.1% | 32.0% | 8.8% | 6.8% | 0.0% | 0.0% | 100% |
| Little Ocmulgee River | 321.8 | 1067.7 | 2602.5 | 614.5 | 395.6 | 10639.1 | 89364.7 | 25695.7 | 25245.8 | 8657.6 | 26943.1 | 29.6 | 163.0 | 191741.5 |
| GAR030701050406 | 0.2% | 0.6% | 1.4% | 0.3% | 0.2% | 5.5% | 46.6% | 13.4% | 13.2% | 4.5% | 14.1% | 0.0% | 0.1% | 100% |
| Mountain Creek | 7.8 | 16.0 | 860.2 | 281.1 | 218.2 | 185.7 | 1403.5 | 13.3 | 925.8 | 964.1 | 185.3 | 0.0 | 0.4 | 5061.5 |
| GAR030701030719 | 0.2% | 0.3% | 17.0% | 5.6% | 4.3% | 3.7% | 27.7% | 0.3% | 18.3% | 19.0% | 3.7% | 0.0% | 0.0% | 100% |
| Ocmulgee River | 1340.4 | 25882.8 | 201590.7 | 83644.0 | 52167.8 | 72394.9 | 781151.0 | 9917.3 | 196798.5 | 185012.9 | 88832.3 | 76.5 | 361.2 | 1705441.7 |
| GAR030701031615 | 0.1% | 1.5% | 11.8% | 4.9% | 3.1% | 4.2% | 45.8% | 0.6% | 11.5% | 10.8% | 5.2% | 0.0% | 0.0% | 100% |
| Ocmulgee River | 965.4 | 22098.9 | 185461.5 | 76848.5 | 46607.1 | 61067.8 | 646822.7 | 4411.6 | 166408.7 | 162047.1 | 63651.6 | 0.0 | 235.3 | 1441834.7 |
| GAR030701031617 | 0.1% | 1.5% | 12.9% | 5.3% | 3.2% | 4.2% | 44.9% | 0.3% | 11.5% | 11.2% | 4.4% | 0.0% | 0.0% | 100% |
| Pughs Creek | 4.0 | 8.7 | 1652.2 | 934.1 | 371.2 | 80.5 | 625.6 | 1.1 | 188.8 | 813.5 | 16.5 | 0.0 | 1.1 | 4697.2 |
| GAR030701030324 | 0.1% | 0.2% | 35.2% | 19.9% | 7.9% | 1.7% | 13.3% | 0.0% | 4.0% | 17.3% | 0.4% | 0.0% | 0.0% | 100% |
| Rocky Creek | 2.2 | 3.6 | 113.9 | 5.3 | 1.1 | 261.1 | 2920.0 | 10.7 | 1006.3 | 263.3 | 215.7 | 0.0 | 0.0 | 4803.3 |
| GAR030701030802 | 0.0% | 0.1% | 2.4% | 0.1% | 0.0% | 5.4% | 60.8% | 0.2% | 21.0% | 5.5% | 4.5% | 0.0% | 0.0% | 100% |
| Tributary to Thomson Creek | 0.0 | 0.0 | 76.9 | 0.4 | 0.0 | 24.2 | 158.3 | 0.0 | 18.7 | 54.9 | 8.0 | 0.0 | 0.0 | 341.6 |
| GAR030701031116 | 0.0% | 0.0% | 22.5% | 0.1% | 0.0% | 7.1% | 46.4% | 0.0% | 5.5% | 16.1% | 2.3% | 0.0% | 0.0% | 100% |
| Yellow Water Creek | 18.5 | 177.7 | 1335.7 | 370.5 | 263.3 | 757.3 | 9351.0 | 41.8 | 4862.4 | 1687.5 | 1120.2 | 0.0 | 4.2 | 19990.2 |
| GAR030701031016 | 0.1% | 0.9% | 6.7% | 1.9% | 1.3% | 3.8% | 46.8% | 0.2% | 24.3% | 8.4% | 5.6% | 0.0% | 0.0% | 100% |
| Jackson Lake | 526.0 | 12506.8 | 163459.3 | 68924.8 | 42179.2 | 31568.9 | 308935.6 | 1229.2 | 105325.3 | 123692.9 | 38861.3 | 0.0 | 156.1 | 902131.1 |
| GAR030701030904 | 0.1% | 1.4% | 18.1% | 7.6% | 4.7% | 3.5% | 34.2% | 0.1% | 11.7% | 13.7% | 4.3% | 0.0% | 0.0% | 100% |

In January 2022, the Georgia DNR Board adopted new bacteria criteria for "Fishing" and "Drinking Water" designated uses using the bacterial indicators *E. coli* and enterococci. These bacteria are better indicators for human health illnesses. The adopted criteria have the same estimated illness rate (8 per 1000 swimmers) as the previously established criteria. EPA approved the proposed standards August 31, 2022. Since this TMDL was written after EPA approved the new bacteria criteria, the TMDL will use both bacterial indicators. The use classification water quality standards for fecal coliform bacteria, as stated in <u>the State of Georgia's Rules and Regulations for Water Quality Control</u>, Chapter 391-3-6-.03(6)(c)(iii) (GA EPD, 2022), are:

- (c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; primary contact recreation in and on the water for the months of May October, secondary contact recreation in and on the water for the months of November April; or for any other use requiring water of a lower quality.
 - (i) Bacteria:
 - Estuarine waters: For the months of May through October, when primary water contact recreation activities are expected to occur, culturable enterococci not to exceed a geometric mean of 35 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 130 counts per 100 mL the same 30-day interval. For the months of November through April, culturable enterococci not to exceed a geometric mean of 74 equations.

mean of 74 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 273 counts per 100 mL in the same 30-day interval.

2. All other fishing waters: For the months of May through October, when primary water contact recreation activities are expected to occur, culturable E. coli not to exceed a geometric mean of 126 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an

not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 410 counts per 100 mL in the same 30-day interval.

For the months of November through April, culturable E. coli not to exceed a geometric mean of 265 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 861 counts per 100 mL in the same 30-day interval.

- The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
- 4. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.
2.0 WATER QUALITY ASSESSMENT

Stream segments are placed on the 303(d) list as not supporting their water use classification based on water quality sampling data. Currently, a stream is placed on this list if more than ten percent of the calculated geometric means exceed their water quality criteria or if more than ten percent of the samples exceed the single sample criteria. Water quality samples collected within a 30-day period that have a fecal coliform geometric mean in excess of 200 counts per 100 milliliters (mL) during the period May through October, or in excess of 1000 counts per 100 mL during the period November through April, are in violation of the bacteria water quality standard. There is also a single sample criterion (4000 counts per 100 mL) not to be exceeded at any given time.

Fecal coliform data used for development of the TMDL in this document were collected during calendar years 2014 through 2021 by GA EPD as part of the trend monitoring program. A summary of sampling station locations and sampling dates is given in Table 5. The raw data are presented in Appendix A. All the streams in which the TMDLs are being revised are currently meeting their water quality standards, and thus the streams are not included in the table below. These streams may have been listed on spill data, and that is no longer available. An alternative method for calculating the TMDL bacterial loading was developed and will be described in later sections with supporting information in Appendix A.

| Stream Segment | Location | GA EPD Monitoring Station No. | GPS Coordinates | Monitoring Station Description | Sample Date Range |
|---|---|-------------------------------------|--------------------------|---|-------------------------|
| Bear Creek GAR030701030804 | Gaithers Branch to Lake Jackson | RV_04_2058 | 33.445923, -83.812818 | Bear Creek at McDonald Road near Mansfield, GA | 2014 |
| Berry Creek GAR030701030804 | Pond at the headwaters to the Ocmulgee River | RV_05_17306 | 33.0843, -83.78901 | Berry Creek at Hwy 23 near Forsyth, GA | 2021 |
| Big Cotton Indian Creek GAR030701030214 | Little Cotton Indian Creek to the South River | RV_04_847 | 33.519842, -84.063377 | Big Cotton Indian at Hwy 20 near McDonough, GA | 2014 |
| Cornish Creek GAR030701030717 | Headwaters to Upper Williams Lake | RV_04_17516 | 33.72367, -83.81603 | Cornish Creek at Jersey Walnut Grove Rd near Jersey, GA | 2019 |
| Echeconnee Creek GAR030701031505 | Rock Quarry Road to Knoxville Road | RV_05_16777 | 32.92305, -84.11694 | Echeconnee Creek at Rock Quarry Rd near Yatesville, GA | 2017 |
| Garner Creek GAR030701030326 | Headwaters to Yellow River | RV_04_15916 | 33.861944, -84.097182 | Garner Creek at Five Forks Trickum Road nr Lawrenceville, GA | 2016 |
| Gum Creek GAR030701030521 | Tributary 0.25 miles upstream Hightower Trail to tributary 0.16 miles upstream Dial Mill Road | RV_04_936 | 33.716563, -83.898492 | Gum Creek at Hightower Trail | 2019 |
| Island Shoal Creek GAR030701030607 | Headwaters to Mackey Creek | RV_04_17796 | 33.45833, -84.00258 | Island Shoals Creek at Mt Bethel Rd near McDonough, GA | 2021 |
| Little Ocmulgee River GAR030701050406 | Little Ocmulgee State Park Lake to Wilcox Creek | RV_05_2230 | 32.080859, -82.888138 | Little Ocmulgee River - U.S. Hwy 280 / SR 30 | 2013 |

Table 5: Sampling Stations and Dates – Ocmulgee River Basin

| Stream Segment | Location | GA EPD Monitoring Station No. | GPS Coordinates | Monitoring Station Description | Sample Date Range |
|--|---|-------------------------------------|--------------------------|--|-------------------------|
| Mountain Creek GAR030701030719 | Tributary at Ammons Bridge Road to tributary 0.7 miles downstream Monroe Jersey Road SE | RV_04_17517 | 33.749684, -83.736188 | Mountain Creek at Monroe Jersey Rd near Monroe, GA | 2019 |
| Pughs Creek GAR030701030324 | Tributary to Yellow River | RV_04_2070 | 33.909982, -84.033464 | Tributary to Yellow River at Five Forks Trickum Rd, Lawrenceville, GA | 2019 |
| Rocky Creek GAR030701030802 | Headwaters to Lake Jackson | RV_04_889 | 33.431388, -83.779722 | Rocky Creek at Henderson Mill Road near Monticello, GA | 2014 |
| Tributary to Hurricane Creek GAR030701031317 | Headwaters to Hurricane Creek | RV_05_17697 | 33.03177, -83.665634 | Tributary to Hurricane Creek at Hawes Rd near Gray, GA | 2020 |
| Tributary to Thompson Creek GAR030701031116 | Headwaters to Thompson Creek | RV_05_5128 | 33.357, -84.282 | Tributary to Thompson Creek at Dillon Dr. near Hampton, GA | 2015 |

3.0 SOURCE ASSESSMENT

An important part of the TMDL development process is the identification of potential sources of pollutants causing the waterbody to be listed on the 303(d) list. A source assessment identifies the known and suspected sources and discharges of bacteria in the watershed. Sources are broadly classified as either point or nonpoint sources. The CWA defines a point source as any "discernable, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture." Nonpoint sources are diffuse, and generally, but not always, involve accumulation of bacteria on land surfaces that wash off due to storm events.

3.1 Point Source Assessment

Title IV of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program. Basically, there are two categories of NPDES permits: 1) wastewater treatment facilities, and 2) regulated stormwater discharges.

3.1.1 Wastewater Treatment Facilities

In general, NPDES point source discharge permits are issued to Publicly Owned Treatment Works (POTWs) and Non-Publicly Owned Treatment Works (Non-POTWs) authorizing the discharge of treated wastewater to surface waters. POTWs are commonly associated with city and county owned wastewater treatment facilities; whereas Non-POTWs are associated with industrial, private, and federal facilities. The permits include permit conditions, requirements, and numeric effluent limits developed using federal and state effluent guidelines (secondary treatment standards for POTWs and technology-based limits (TBELs) for Non-POTWs) or on water quality standards (water quality-based effluent limits, WQBELs).

The United States Environmental Protection Agency (USEPA) has developed technology-based standards and guidelines, which establish a minimum standard of pollution control for POTW and Non-POTW discharges without regard for the quality of the receiving waters. For POTWs, EPA has established Secondary Treatment Standards. For Non-POTW, the TBELs are based on Best Practical Control Technology Currently Available (BPT), Best Conventional Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards. The level of control required by each facility is dependent on the source of wastewater generated and the pollutants found in the discharge.

The USEPA and the States have also developed numeric and narrative water quality criteria to protect a stream's designated uses. Typically, these criteria are based on the results of aquatic toxicity tests and/or human health criteria and include a margin of safety. Wastewater NPDES permits also include WQBELs to protect these narrative and numeric water quality criteria and their designated uses. WQBELs ensuring water quality standards are met in the receiving water and downstream uses are protected.

For purposes of this TMDL, permitted wastewater treatment facilities are considered point sources, and include POTWs and Non-POTWs. Pollutants discharged from wastewater treatment plants can contribute bacteria to receiving waters. As of 2022, there are twelve (12) NPDES

permitted discharges identified in the watershed of the listed segments in the Ocmulgee River Basin that could potentially impact streams on the 2022 303(d) list for fecal coliform bacteria. Typically, the contributing watershed for a 303(d) listed segment is defined as the area upstream of the segment.

Table 6 provides the monthly average discharge flow and fecal coliform concentrations for these facilities that currently have bacteria permit limits. These data were obtained from calendar years 2015 through 2020 Discharge Monitoring Reports (DMR). The current permitted flow and fecal coliform concentrations are also included in this table. Table 7 provides a list of existing Non-POTW discharges without bacteria permit limits. It is possible these facilities could contribute bacteria to receiving water because the type of treatment processes they employ.

Another potential point source contribution may be a combined sewer system (CSS) that conveys a mixture of raw sewage and stormwater in the same conveyance structure to the wastewater treatment plant and may also have direct discharges (as authorized under a NPDES permit) to waters of the state. These are generally a component of POTWs. When the combined sewage exceeds the capacity of the wastewater treatment plant, the excess is diverted to a combined sewage overflow (CSO) discharge point. There is one permitted CSS in the Ocmulgee River Basin.

The City of Atlanta operates the East Area CSS under NPDES permit GA0037168. The East Area CSS facilities consist of the East Area Water Quality Control Facility (WQCF) and the Custer Avenue Combined Sewage Control Facility (CSCF), both of which discharge to Intrenchment Creek southeast of the City of Atlanta. Intrenchment Creek is a headwater tributary of the South River, which eventually flows into Jackson Lake near State Route 36. The outfall for the East Area WQCF is approximately sixty-four (64) miles upstream of the Jackson Lake dam forebay. Due to this considerable distance (greater than 25 miles), and the NPDES permit requirements to provide minimum treatment (including disinfection) before discharge at both approved outfalls, the East Area CSS is not included as a potential point source contribution to the Jackson Lake – Dam Pool segment (GAR030701030904).

3.1.2 Regulated Stormwater Discharges

Discharges of stormwater authorized under a NPDES permit are considered a point source. Unlike other wastewater NPDES permits that establish end-of-pipe effluent limits, storm water NPDES permits establish best management practices (BMPs) and controls that are intended to reduce the quantity of pollutants that storm water picks up and carries into storm sewer systems during rainfall events "to the maximum extent practicable." Currently, regulated stormwater discharges that may contain bacteria, consist of those associated with industrial activities and large, medium, and small municipal separate storm sewer systems (MS4s) that serve populations of 10,000 or more.

Table 6: NPDES Facilities Discharging Fecal Coliform in the Ocmulgee River Basin

| | | | | Actual Discharge (2015–2021) | | NPDES Permit Limits | | |
|---|---------------------|--|--|---|--|----------------------------------|---|-------------------------------------|
| Facility Name | NPDES Permit No. | Receiving Stream | 303(d) Listed Segment(s) | Avg. Monthly Flow (MGD) ^a | Avg. Monthly fecal coliform (#/100mL) ^b | Avg. Monthly Flow (MGD) | Avg. Monthly fecal coliform (#/100mL) | Number of Spills ^c |
| Bolingreen Nursing Center WPCP | GAG550152 | Unnamed Tributary of Beaver Dam Creek | Ocmulgee River GAR030701031617 | 0.005 0.003-0.007 | 41.85 0-170 | 0.007 | 200 | 0 |
| Clayton County Water Authority - Northeast WRF | GA0020575 | Panther Creek | Big Cotton Indian Creek GAR030701030214 | 4.25 3.22-6.55 | 3.1 1-16 | 6.0 | 200 | 9 |
| Clayton County Water Authority - W.B. Casey WRF & Huie Constructed Wetlands | GA0038423 | Shamrock Lake / Blalock Lake (Pates Creek) | Big Cotton Indian Creek GAR030701030214 | 16.24 (12.83-23.387) | 3.98 (2.0-13.0) | 17.4 | 100 | 254 |
| Forsyth - Northeast WPCP | GA0031801 | Town Creek | Ocmulgee River GAR030701031617 | 0.484 0.3-0.609 | 85.4 0-241 | 1.4 | 200 | 1 |
| Rumble Road BP Service Station WPCP | GA0034100 | Little Deer Creek Ocmulgee River | Ocmulgee River GAR030701031617 | 0.0015 0.001-0.0018 | 69.8 0-192 | 0.0046 | 200 | 0 |
| Jackson - Northeast WPCP | GA0032719 | Unnamed Tributary to Yellow Water Creek | Yellow Water Creek GAR030701031016 | 0.127 0.073-0.234 | 55.7 2-93 | 0.14 | 200 | 0 |
| Jackson - Yellow Water Creek WPCP | GA0021831 | Unnamed Tributary to Yellow Water Creek | Yellow Water Creek GAR030701031016 | 0.316 0.138-0.551 | 1.99 0.2-3 | 0.75 | 200 | 5 |
| Macon Water Authority - Lower Poplar WRF | GA0024538 | Ocmulgee River | Ocmulgee River GAR030701031615 | 13.67 9.67-25.76 | 16.42 1.7-128.2 | 20.0 | 200 | 28 |
| Macon Water Authority - Rocky Creek WRF | GA0024546 | Ocmulgee River | Ocmulgee River GAR030701031615 | 19.99 14.62-32.9 | 23.64 1.27-361.9 | 28.0 | 200 | 199 |
| McRae-Helena WPCP | GA0048674 | Unnamed Tributary to Little Ocmulgee River | Little Ocmulgee River GAR030701050406 | 0.731 0-7.82 | 16.3 5-139 | 0.8 | 200 | 22 |
| Rumble Road WPCP | GAG550145 | Little Deer Creek | Ocmulgee River GAR030701031617 | 0.0014 0.0014-0.0014 | d | 0.005 | 200 | 0 |
| Stockbridge - Stephen D. Peurifoy WPCP | GA0023337 | Brush Creek | Big Cotton Indian Creek GAR030701030214 | 0.666 0.469-1.031 | 4.653 2-33 | 1.5 | 200 | 29 |

Source: GA EPD – Discharge Monitoring Report (DMR data from ICIS-NPDES)

Notes: ^a Values shown are the average of the monthly average flows reported in DMRs, followed by the monthly average ranges, and range of dates.

^b - Values shown are the annual average of the monthly geometric means and the monthly average ranges.

^c – 2015-2020; From GAPDES self-reported spill monitoring system.

^d - Facility reported no discharge for most monthly monitoring periods. Otherwise, zero (0) was reported, or analysis was not conducted.

| Facility Name | NPDES Permit No. | Receiving Stream | 303(d) Listed Segment(s) |
|--|---------------------|--|---|
| Armstrong World Industries, Inc. | GA0003077 | Unnamed Tributary to Rock Creek | Ocmulgee River GAR030701031615 |
| Georgia Power Company (Plant Arkwright) | GA0050327 | Ocmulgee River | Ocmulgee River GAR030701031617 |
| Georgia Power Company (Plant Scherer) | GA0035564 | Berry Creek Lake Juliette Ocmulgee River | Berry Creek GAR030701031316 Ocmulgee River GAR030701031617 |
| Graphic Packaging International, Inc. (Macon Mill) | GA0003581 | Rocky Creek | Ocmulgee River GAR030701031615 |
| Hanson Aggregates Southeast, LLC (Monroe County Quarry) | GA0046558 | Little Deer Creek Ocmulgee River | Ocmulgee River GAR030701031617 |
| Norfolk Southern Railway Company (Brosnan Yard) | GA0002364 | Ocmulgee River | Ocmulgee River GAR030701031615 |
| Oglethorpe Power Corporation (Smarr Energy Facility) | GA0038059 | Unnamed Tributary to Little Deer Creek | Ocmulgee River GAR030701031617 |

Table 7: NPDES Non-POTW Facilities without Bacteria Permit Limits that Discharge to 303(d) Listed Stream Segments in the Ocmulgee River Basin

3.1.2.1 Industrial General Stormwater NPDES Permit

Storm water discharges associated with industrial activities are currently covered under the 2022 NPDES General Permit for Stormwater Discharges Associated with Industrial Activity (GAR050000) also called the Industrial General Permit (IGP). This permit requires visual monitoring of storm water discharges, site inspections, implementation of BMPs, preparation of a Storm Water Pollution Prevention Plan (SWPPP), and annual reporting. The IGP requires that stormwater discharging into an impaired stream segment or within one linear mile upstream of, and within the same watershed as, any portion of an impaired stream segment identified as "not supporting" its designated use(s), must satisfy the requirements of Appendix C of the 2022 IGP, if the pollutant(s) of concern for which the impaired stream segment has been listed may be exposed to stormwater as a result of industrial activity at the site. If a facility is covered under Appendix C of the IGP, then benchmark monitoring for the pollutant(s) of concern is required. Delineations of both supporting and not supporting waterbodies are provided on the GA EPD website, and are available in ESRI ArcGIS shapefile format or in KMZ format for use in Google Earth. Interested parties may evaluate their proximity to not supporting waterbodies by utilizing these geospatial files.

3.1.2.2 MS4 NPDES Permits

The collection, conveyance, and discharge of diffuse storm water to local waterbodies by a public entity are regulated in Georgia by the NPDES MS4 permits. These MS4 permits have been issued under two phases. Phase I MS4 permits cover medium and large cities, and counties with populations over 100,000. Each individual Phase I MS4 permit requires the prohibition of non-storm water discharges (i.e., illicit discharges) into the storm sewer systems and controls to reduce the discharge of pollutants to the maximum extent practicable, including the use of

management practices, control techniques and systems, as well as design and engineering methods (Federal Register, 1990). A site-specific Storm Water Management Plan (SWMP) outlining appropriate controls is required by and referenced in the permit. A program to monitor and control pollutants in storm water discharges from industrial facilities, construction sites, and highly visible pollutant sources that exist within the MS4 area must be implemented under the permit. Additionally, monitoring of not supporting streams, public education and involvement, post-construction storm water controls, low impact development, and annual reporting requirements must all be addressed by the permittee on an ongoing basis. As of 2022, fifty-seven (57) counties and municipalities are covered by Phase I MS4 permits in Georgia.

Small MS4s serving urbanized areas are required to obtain a storm water permit under the Phase II storm water regulations. An urbanized area is defined as an area with a residential population of at least 10,000 people and an overall population density of at least 1,000 people per square mile. As of 2022, Seventy-three (73) municipalities, thirty-five (35) counties, six (6) Department of Defense facilities, and the Georgia Department of Transportation (GDOT) are permitted under the Phase II storm water regulations in Georgia. All municipal Phase II permittees are authorized to discharge under Storm Water General Permit GAG610000. Department of Defense facilities are authorized to discharge under Storm Water General Permit GAG480000. GDOT owned or operated facilities are authorized to discharge under Storm Water General Permit GAG480000.

Under these general permits, each permittee must design and implement a SWMP that incorporates BMPs that focus on public education and involvement, illicit discharge detection and elimination, construction site runoff control, post-construction storm water management, and pollution prevention in municipal operations. Table 8 provides the counties, communities and other entities covered by MS4 Permits in the Ocmulgee River Basin. There are thirty-eight (38) permitted MS4 jurisdictions that discharge into or upstream of a stream segment not supporting its designated use for bacteria.

| Permit No. | MS4 Permittee | MS4 Phase | Impaired Stream Watershed |
|------------|------------------|---------------|--|
| GAS000107 | Clayton County | Phase 1 Large | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAS000111 | DeKalb County | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000117 | Fulton County | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000118 | Gwinnett County | Phase 1 Large | Garner Creek GAR030701030326, Pughs Creek GAR030701030324, Jackson Lake GAR030701030904 |
| GAS000100 | Atlanta | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000137 | Avondale Estates | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000106 | Clarkston | Phase 1 Large | Jackson Lake GAR030701030904 |

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| | - | | | | | | - | |

| Permit No. | MS4 Permittee | MS4 Phase | Impaired Stream Watershed |
|------------|-------------------|----------------|---|
| GAS000139 | Dacula | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000110 | Decatur | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000112 | Duluth | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000116 | Forest Park | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000140 | Grayson | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000119 | Hapeville | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000120 | Jonesboro | Phase 1 Large | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAS000141 | Lake City | Phase 1 Large | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAS000122 | Lawrenceville | Phase 1 Large | Pughs Creek GAR030701030324 |
| GAS000123 | Lilburn | Phase 1 Large | Garner Creek GAR030701030326 |
| GAS000124 | Lithonia | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000142 | Lovejoy | Phase 1 Large | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAS000126 | Morrow | Phase 1 Large | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAS000127 | Norcross | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000143 | Pine Lake | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000133 | Snellville | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000134 | Stone Mountain | Phase 1 Large | Jackson Lake GAR030701030904 |
| GAS000301 | Macon-Bibb County | Phase 1 Medium | Echeconnee Creek GAR030701031505, Ocmulgee River GAR030701031615, Ocmulgee River GAR030701031617 |

| Permit No. | MS4 Permittee | MS4 Phase | Impaired Stream Watershed |
|------------|---------------------------|-----------------|--|
| GAG610000 | Henry County | Phase 2 >10,000 | Big Cotton Indian Creek GAR030701030214, Island Shoal Creek GAR030701030607, Tributary to Thompson Creek GAR030701031116, Jackson Lake GAR030701030904 |
| GAG610000 | Houston County | Phase 2 >10,000 | n/a |
| GAG610000 | Jones County | Phase 2 >10,000 | Ocmulgee River GAR030701031615, Ocmulgee River GAR030701031617 |
| GAG610000 | Newton County | Phase 2 >10,000 | Bear Creek GAR030701030804, Gum Creek GAR030701030521, Jackson Lake GAR030701030904 |
| GAG610000 | Peach County | Phase 2 >10,000 | n/a |
| GAG610000 | Rockdale County | Phase 2 >10,000 | Boar Tusk Creek GAR030701030424, Jackson Lake GAR030701030904 |
| GAG610000 | Spalding County | Phase 2 >10,000 | n/a |
| GAG610000 | Walton County | Phase 2 >10,000 | Cornish Creek GAR030701030717, Gum Creek GAR030701030521, Mountain Creek GAR030701030719 |
| GAG610000 | Byron (Peach Co.) | Phase 2 <10,000 | n/a |
| GAG610000 | Centerville (Houston Co.) | Phase 2 <10,000 | n/a |
| GAG610000 | Conyers (Rockdale Co.) | Phase 2 >10,000 | Boar Tusk Creek GAR030701030424, Jackson Lake GAR030701030904 |
| GAG610000 | Covington (Newton Co.) | Phase 2 >10,000 | Jackson Lake GAR030701030904 |
| GAG610000 | Griffin (Spalding Co.) | Phase 2 >10,000 | n/a |
| GAG610000 | Hampton (Henry Co.) | Phase 2 <10,000 | n/a |
| GAG610000 | Locust Grove (Henry Co.) | Phase 2 <10,000 | Jackson Lake GAR030701030904 |
| GAG610000 | Loganville (Walton Co.) | Phase 2 >10,000 | n/a |
| GAG610000 | McDonough (Henry Co.) | Phase 2 >10,000 | Jackson Lake GAR030701030904 |
| GAG610000 | Oxford (Newton Co.) | Phase 2 <10,000 | n/a |

| Permit No. | MS4 Permittee | MS4 Phase | Impaired Stream Watershed |
|------------|---|-----------------|--|
| GAG610000 | Peachtree Corners (Gwinnett Co.) | Phase 2 >10,000 | n/a |
| GAG610000 | Perry (Houston Co.) | Phase 2 >10,000 | n/a |
| GAG610000 | Porterdale (Newton Co.) | Phase 2 <10,000 | Jackson Lake GAR030701030904 |
| GAG610000 | Stockbridge (Henry Co.) | Phase 2 >10,000 | Big Cotton Indian Creek GAR030701030214, Jackson Lake GAR030701030904 |
| GAG610000 | Walnut Grove (Walton Co.) | Phase 2 <10,000 | Cornish Creek GAR030701030717, Gum Creek GAR030701030521 |
| GAG610000 | Warner Robins (Houston Co.) | Phase 2 >10,000 | n/a |
| GAR041000 | Georgia Department of Transportation | Phase 2 | All segments related to other Phase 2 permittees in this table. |
| GAG480000 | Robins Air Force Base | Phase 2 | n/a |
| GAG480000 | US Army Garrison Gillem Enclave | Phase 2 | n/a |

Source: Nonpoint Source Program, GA DNR, 2022

For those listed segments whose contributing watersheds intersect with the jurisdiction of MS4 permit holders in the Ocmulgee River Basin, Table 9 provides the listed segment, total contributing watershed area and percentage of the watershed area that consists of urban land use types. Urbanized areas include land uses identified as residential, commercial, industrial, and transportation, as well as lawns, parks, and greenspace. These areas are quantified using the land use categories of low, medium, and high intensity developed, and other grasses as presented in Table 4.

| Table 9: Urban | Land Use Percentage | e for Listed Seament | s with MS4 Permit | t Contributions |
|----------------|----------------------|----------------------|-------------------|-----------------|
| | Lana 000 i or contag | | | |

| Stream Segment | Location | Reach AUID | Total Watershed Area (acres) | Urban Land Use Percentage |
|----------------------------|---|-----------------|---------------------------------------|---------------------------------|
| Big Cotton Indian Creek | Little Cotton Indian Creek to the South River | GAR030701030214 | 81270.9 | 48.9% |
| Boar Tusk Creek | Headwaters to Yellow River | GAR030701030424 | 1846.5 | 72.1% |
| Cornish Creek | Headwaters to Upper Williams Lake | GAR030701030717 | 7928.2 | 1.54% |
| Garner Creek | Headwaters to Yellow River | GAR030701030326 | 3743.3 | 77.13% |
| Gum Creek | Tributary 0.25 miles upstream Hightower Trail to tributary 0.16 miles upstream Dial Mill Road | GAR030701030521 | 8116.5 | 6.62% |

| Stream Segment | Location | Reach AUID | Total Watershed Area (acres) | Urban Land Use Percentage |
|--------------------------------|---|-----------------|---------------------------------------|---------------------------------|
| Island Shoal Creek | Headwaters to Mackey Creek | GAR030701030607 | 3084.8 | 7.38% |
| Ocmulgee River | Tobesofkee Creek to Echeconnee Creek | GAR030701031615 | 1705441.7 | 11.8% |
| Ocmulgee River | Beaverdam Creek to Walnut Creek | GAR030701031617 | 1441834.7 | 4.4% |
| Pughs Creek | Tributary to Yellow River | GAR030701030324 | 4697.2 | 80.4% |
| Tributary to Thompson Creek | Headwaters to Thompson Creek | GAR030701031116 | 341.6 | 38.7% |
| Jackson Lake | Dam Pool (formerly Newton, Butts, Jasper Counties) | GAR030701030904 | 902131.1 | 10.7% |

3.1.3 Concentrated Animal Feeding Operations

Under the CWA, Concentrated Animal Feeding Operations (CAFOs) are defined as point sources of pollution and are therefore subject to NPDES permit regulations. From 1999 through 2001, Georgia adopted rules for permitting swine and non-swine liquid manure animal feeding operations (AFOs). Georgia rules required medium size AFOs with more than 300 animal units (AU), but less than 1,000 AU, to apply for a non-discharge state land application system (LAS) waste disposal permit. Large operations with more than 1000 AU were required to apply for an NPDES permit (also non-discharge as a CAFO). The USEPA CAFO regulations were successfully appealed in 2005. They were revised to comply with the court's decision that NPDES permits only be required for actual discharges. Georgia's rules were amended on August 7, 2012, to reflect the USEPA revisions. The revised state rules will continue LAS permitting of medium size liquid manure AFOs and extend LAS permitting to large liquid manure AFOs with more than 1,000 AU, unless they elect to obtain an NPDES permit. There are two (2) known liquid manure CAFOs located in the watershed of a listed segment in the Ocmulgee River Basin that have NPDES or land application permits.

In 2002, the USEPA promulgated expanded NPDES permit regulations for CAFOs that added dry manure poultry operations larger than 125,000 broilers or 82,000 layers. In accordance with the Georgia rule amendment discussed above, the general permit covering these facilities has been terminated and they are no longer covered under any permit. Georgia is consistently among the top three states in the U.S. in terms of poultry operations. Most poultry farms are dry manure operations where the manure is stored for a time and then land applied. Freshly stored litter can be a nonpoint source of bacteria. However, land-applied litter previously stored for an extended length of time typically exhibits very low bacteria levels. Table 10 presents the current swine and non-swine (primarily dairies) CAFOs located in the Ocmulgee River Basin and indicates those that may impact the listed streams.

| Name | Permit No. | County | Animal Type | Total No. of Animals Units | Impaired Stream Watershed |
|----------------------|------------|---------|----------------|-------------------------------|------------------------------|
| Ocmulgee Dairy, Inc. | GAG920022 | Houston | Dairy | 300 to 1000 AU | |

Table 10: Permitted CAFOs in the Ocmulgee River Basin

| Name | Permit No. | County | Animal Type | Total No. of Animals Units | Impaired Stream Watershed |
|--------------------------|------------|--------|----------------|-------------------------------|-----------------------------------|
| R & D Dairy | GAG920075 | Lamar | Dairy | 300 to 1000 AU | Ocmulgee River GAR030701031615 |
| Walters Farms | GAG940007 | Lamar | Cattle | >1000 AU | Ocmulgee River GAR030701031615 |
| Schaapman Holsteins, LLC | GAG920035 | Wilcox | Dairy | 300 to 1000 AU | |

Source: Georgia Pollutant Discharge Elimination System, GA EPD, 2022

3.2 Nonpoint Source Assessment

In general, nonpoint sources cannot be identified as entering a waterbody through a discrete conveyance at a single location. Typical nonpoint sources of bacteria include:

- Wildlife
- Agricultural Livestock
 - Animal grazing
 - Animal access to streams
 - Application of manure to pastureland and cropland
- Urban Development
 - Leaking sanitary sewer lines
 - Leaking septic systems
 - Land Application Systems
 - o Landfills

In urban areas, a large portion of stormwater runoff may be collected in storm sewer systems and discharged through distinct outlet structures. For large urban areas, these storm sewer discharge points may be regulated as described in Section 3.1.2.

3.2.1 Wildlife

The significance of wildlife as a source of bacteria in streams varies considerably depending on the animal species present in the watershed. Based on information provided by the Wildlife Resources Division (WRD) of GA DNR, the greatest wildlife sources of bacteria are the animals that spend a large portion of their time in or around aquatic habitats. Of these, waterfowl, especially ducks and geese, are considered the most significant source, because when present, they are typically found in large numbers on the water surface. Other animals regularly found around aquatic environments include racoons, beavers, muskrats, and to a lesser extent, river otters and minks. Recently, rapidly expanding feral swine populations have become a substantial presence in the floodplain areas of the major rivers in Georgia.

White-tailed deer populations are also abundant throughout the Ocmulgee River Basin. Bacteria contributions to waterbodies from deer are generally considered to be less significant than that of waterfowl, racoons, and beavers. This is because a greater portion of their time is spent in terrestrial habitats. This also holds true for other terrestrial mammals such as squirrels and rabbits, and for terrestrial birds (GA WRD, 2007). However, feces deposited on the land surface can result in the introduction of bacteria to streams during runoff events. Between storm events, considerable decomposition of the fecal matter might occur, resulting in a decrease in the associated bacteria numbers.

3.2.2 Agricultural Livestock

Agricultural livestock are a potential source of bacteria to streams in the Ocmulgee River Basin. The animals grazing on pastureland deposit their feces onto land surfaces, where it can then be transported during storm events to nearby streams. Animal access to pastureland varies monthly, resulting in varying bacteria loading rates throughout the year. Beef cattle spend all their time in pastures, while dairy cattle and hogs are periodically confined. In addition, agricultural livestock will often have direct access to streams that pass through their pastures and can thus impact water quality in a more direct manner (USDA, 2002).

Commercial chickens are raised indoors, and their litter is periodically disposed of. The litter can be aged or composted. This results in a decomposition of the litter into a soil amendment that can be used as a fertilizer. The stockpiled manure should be kept in a sheltered area. Proper composting should generate temperatures of 140°F to 160°F, which destroys bacteria. Aging the manure and litter reduces populations of microbes by providing unfavorable growing conditions causing the bacteria to gradually die off due to changes in moisture content and temperature. Table 11 provides the estimated number of beef cattle, dairy cattle, goats, horses, swine, sheep, and chickens reported by county.

| | Livestock | | | | | | | | |
|------------|-----------|--------|--------|-------|--------|-------|------------|----------|---------|
| County | Beef | Dairy | Curine | Cheen | | Casta | | Chickens | |
| | Cattle | Cattle | Swine | Sneep | Horses | Goats | Broilers | Layers | Pullets |
| Ben Hill | 5,800 | - | - | 45 | - | 900 | 2,746,527 | - | - |
| Bibb | 2,406 | 283 | - | - | 407 | 176 | 938,438 | 38,104 | - |
| Bleckley | 2,951 | - | - | - | 300 | 250 | 545,921 | - | - |
| Butts | 4,588 | - | - | 150 | 220 | 700 | - | - | - |
| Clayton | 802 | - | - | 80 | 257 | 1,650 | - | - | - |
| Coffee | 25,053 | - | 12,471 | 50 | 1,232 | 2,001 | 37,247,072 | 112,593 | 483,649 |
| Crawford | 2,697 | - | - | - | 50 | - | 12,707,067 | - | - |
| DeKalb | - | - | - | - | 153 | - | - | - | - |
| Dodge | 15,912 | - | 301 | 50 | 150 | 450 | 1,965,314 | 38,104 | - |
| Dooly | 3,056 | - | - | - | 30 | 210 | 5,880,657 | 33,077 | - |
| Fulton | 1,489 | - | 20 | 250 | 2,286 | 450 | - | - | - |
| Gwinnett | - | - | - | 32 | 276 | 380 | - | - | - |
| Henry | 2,028 | 40 | - | - | 1,500 | 400 | - | - | - |
| Houston | 5,231 | 434 | - | 78 | 350 | 405 | 2,183,682 | 82,692 | - |
| Jasper | 14,734 | 1,250 | 125 | 250 | 2,600 | 1,001 | 436,736 | 851,393 | 229,770 |
| Jeff Davis | 2,528 | - | - | - | - | 700 | 9,113,599 | 146,629 | - |
| Jones | 8,160 | 460 | 50 | 130 | 100 | 600 | 1,419,394 | - | - |
| Lamar | 5,604 | 204 | - | 150 | 400 | 600 | 6,921,727 | - | - |
| Laurens | 9,982 | 100 | 200 | 300 | 250 | 1,001 | - | 97,378 | 42,091 |
| Macon | 2,310 | 5,500 | 150 | 80 | 300 | 1,776 | 23,643,156 | 243,775 | 193,873 |

 Table 11: Estimated Agricultural Livestock Populations in Counties Containing the 303(d) Listed

 Segment Watershed in the Ocmulgee River Basin

| | Livestock | | | | | | | | |
|----------|-----------|--------|-------|-------|--------|-------|------------|---------|---------|
| County | Beef | Dairy | Swine | Sheen | Herees | Casta | Chickens | | |
| | Cattle | Cattle | Swine | Sneep | Horses | Goats | Broilers | Layers | Pullets |
| Monroe | 6,789 | 167 | 50 | 1,350 | 500 | 450 | 8,225,932 | - | - |
| Newton | 13,086 | - | - | 75 | 1,850 | 325 | - | - | - |
| Peach | 433 | - | - | 50 | 250 | 100 | - | - | - |
| Pulaski | 1,550 | - | - | - | 400 | - | 13,277,515 | - | - |
| Rockdale | 129 | - | - | 55 | 1,974 | - | - | - | - |
| Spalding | 3,000 | 100 | - | 100 | 185 | 200 | 436,736 | - | - |
| Telfair | 5,435 | - | 20 | 75 | 320 | 3,702 | - | 127,147 | - |
| Twiggs | 3,138 | - | - | - | 121 | 250 | - | - | - |
| Upson | 6,277 | 72 | - | 350 | 350 | 2,001 | 6,491,542 | - | 21,046 |
| Walton | 12,080 | - | 100 | - | 1,544 | - | 4,983,163 | - | - |
| Wheeler | 4,912 | - | 175 | 5 | 210 | 140 | - | - | - |
| Wilcox | 6,299 | 800 | - | 20 | 120 | 1,101 | 24,577,341 | 49,615 | - |

Source: Center for Agribusiness and Economic Development, UGA 2022

3.2.3 Urban Development

Bacteria from urban areas are attributable to multiple sources, including: domestic animals, leaks and overflows from sanitary sewer systems, illicit discharges, leaking septic systems, runoff from improper disposal of waste materials, and leachate from both operational and closed landfills.

Urban runoff can contain high concentrations of bacteria from domestic animals and urban wildlife. Bacteria enter streams by direct wash off from the land surface, or the runoff may be diverted to a stormwater collection system and discharged through a discrete outlet structure. For large, medium, and small urban areas (populations greater than 10,000, the stormwater outlets are regulated under MS4 permits (see Section 3.1.2). For smaller urban areas, the stormwater discharge outlets currently remain unregulated.

In addition to urban animal sources of bacteria, there may be illicit connections to the storm sewer system. As part of the MS4 permitting program, municipalities are required to conduct dry-weather monitoring to identify and then eliminate these illicit discharges, but this may not occur in unpermitted storm sewer systems. Bacteria may also enter streams from leaky sewer pipes, or during storm events when inflow and infiltration can cause sewer overflows.

3.2.3.1 Leaking Septic Systems

A portion of the bacteria contributions in the Ocmulgee River Basin may be attributed to failure of septic systems and illicit discharges of raw sewage. Table 12 below presents the number of septic systems existing at the end of 2015 and the number existing at the end of 2020 in counties in the Ocmulgee River Basin. These data are based on data provided by the Georgia Department of Public Health and information obtained from the U.S. Census. In addition, an estimate of the number of septic systems installed and repaired during the period from 2015 through 2020 is given. These data show an increase in the number of septic systems in all counties. Often, this reflects population increases outpacing the expansion of sewage collection systems.

| County | Existing Septic Systems (2015) | Existing Septic Systems (2020) | Number of Septic Systems Installed (2015 to 2020) | Number of Septic Systems Repaired (2015 to 2020) |
|------------|---|---|---|--|
| Ben Hill | 5,122 | 5,207 | 85 | 110 |
| Bibb | 11,350 | 11,515 | 165 | 399 |
| Bleckley | 3,738 | 3,843 | 105 | 60 |
| Butts | 8,236 | 8,702 | 466 | 137 |
| Clayton | 14,239 | 14,311 | 72 | 303 |
| Coffee | 13,439 | 14,075 | 636 | 227 |
| Crawford | 4,573 | 4,730 | 157 | 119 |
| DeKalb | 22,659 | 22,686 | 27 | 721 |
| Dodge | 7,437 | 7,677 | 240 | 54 |
| Dooly | 2,616 | 2,671 | 55 | 35 |
| Fulton | 28,168 | 28,992 | 824 | 628 |
| Gwinnett | 65,405 | 66,333 | 928 | 3,005 |
| Henry | 38,997 | 40,226 | 1,229 | 699 |
| Houston | 19,112 | 19,926 | 814 | 628 |
| Jasper | 5,802 | 6,181 | 379 | 109 |
| Jeff Davis | 4,548 | 4,692 | 144 | 1 |
| Jones | 9,903 | 10,131 | 228 | 297 |
| Lamar | 5,889 | 6,279 | 390 | 142 |
| Laurens | 15,569 | 16,354 | 785 | 536 |
| Macon | 2,651 | 2,743 | 92 | 47 |
| Monroe | 10,007 | 10,738 | 731 | 261 |
| Newton | 27,404 | 28,335 | 931 | 428 |
| Peach | 6,721 | 6,931 | 210 | 132 |
| Pulaski | 2,831 | 2,893 | 62 | 39 |
| Rockdale | 15,382 | 15,728 | 346 | 238 |
| Spalding | 16,513 | 16,897 | 384 | 548 |
| Telfair | 3,371 | 3,522 | 151 | 73 |
| Twiggs | 4,057 | 4,140 | 83 | 32 |
| Upson | 8,496 | 8,659 | 163 | 230 |
| Walton | 24,143 | 25,947 | 1,804 | 666 |
| Wheeler | 2,416 | 2,520 | 104 | 52 |
| Wilcox | 2,463 | 2,526 | 63 | 7 |

Table 12: Estimated Number of Septic Systems in Counties within the Ocmulgee River Basin

Source: The Georgia Dept. of Public Health, Environmental Health Section, 2022

3.2.3.2 Land Application Systems

Some communities and industries use land treatment systems for wastewater disposal. These facilities are required through land application system (LAS) permits to dispose of their treated

wastewater by land application, and to operate as non-discharging systems that do not contribute wastewater effluent runoff to surface waters. However, sometimes the soil's percolation rate is exceeded when applying the wastewater, or encountering excess precipitation, resulting in runoff. This runoff could contribute bacteria to nearby surface waters. Runoff of storm water might also carry surface residual containing bacteria. Listed in Table 13 below are the LASs in the Ocmulgee River Basin and the LASs that could potentially impact the stream segments in this TMDL are identified.

| LAS Name | Permit No. | County | Туре | Flow (MGD) | Impaired Stream Watershed |
|---|------------|----------|--------------|---------------|---|
| Butts County - Bucksnort Ranch Land Application System | GAJ020038 | Butts | POTW | 0.80 | n/a |
| Diagnostic & Classification Prison WPCP | GAJ020245 | Butts | POTW | 0.40 | n/a |
| Flying J Travel Plaza | GAJ030799 | Butts | POTW | 0.06 | n/a |
| Unadilla WPCP | GAJ040041 | Dooly | POTW | 1.13 | n/a |
| New Hope Elementary School WPCP | GAJ030919 | Henry | POTW | 0.017 | Jackson Lake GAR030701030904 |
| Unity Grove Elementary School | GAJ030835 | Henry | POTW | 0.0132 | Jackson Lake GAR030701030904 |
| Henry County - Walnut Creek WRF | GAJ020137 | Henry | POTW | 8.0 | Jackson Lake GAR030701030904 |
| Melrose Subdivision WPCP | GAJ030832 | Henry | POTW | 0.0115 | n/a |
| Atlanta South RV Resort WPCP | GAJ030829 | Henry | POTW | 0.02 | n/a |
| Frito Lay, Inc. | GAJ010464 | Houston | Non- POTW | 2.0 | n/a |
| Winding River Development WPCP | GAJ030623 | Houston | POTW | 2.0 | n/a |
| Georgia Public Safety Training Center WPCP | GAJ020201 | Monroe | POTW | 0.12 | Ocmulgee River GAR030701031615 |
| Covington WRF | GAJ020055 | Newton | POTW | 5.6 | Jackson Lake GAR030701030904 |
| HY-Line North America, LLC | GAJ010461 | Newton | Non- POTW | 0.002 | n/a |
| Alcovy High School WPCP | GAJ020005 | Newton | POTW | 0.0264 | Jackson Lake GAR030701030904 |
| Newton County - Yellow River WPCP | GAJ020013 | Newton | POTW | 3.2 | Jackson Lake GAR030701030904 |
| Smyrna Crossing Shopping Center WPCP | GAJ030647 | Rockdale | POTW | 0.01 | n/a |
| General Ray Davis Middle School WPCP | GAJ030711 | Rockdale | POTW | 0.0264 | n/a |
| Telfair State Prison WPCP | GAJ030842 | Telfair | POTW | 0.045 | Little Ocmulgee River GAR030701050406 |
| McRae-Helena WPCP | GAJ020248 | Telfair | POTW | 1.75 | n/a |
| Loganville Middle School WPCP | GAJ040018 | Walton | POTW | 0.03 | n/a |
| Walnut Grove WPCP | GAJ040019 | Walton | POTW | 0.05 | Cornish Creek GAR030701030717 |

Table 13: Permitted Land Application Systems in the Ocmulgee River Basin

| LAS Name | Permit No. | County | Туре | Flow (MGD) | Impaired Stream Watershed |
|---|------------|--------|------|---------------|------------------------------|
| Walton County Youth Middle School WPCP | GAJ030776 | Walton | POTW | 0.0225 | Gum Creek GAR030701030521 |

Source: Georgia Pollutant Discharge Elimination System, GA EPD, Atlanta, Georgia, 2022

3.2.3.3 Landfills

Leachate from landfills may contain bacteria that could at some point reach surface waters. Sanitary (or municipal landfills are the most likely to serve as a source of bacteria. These types of landfills receive household wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, and other types of wastes. Older sanitary landfills were not lined, and most have been closed. Those that remain active and have not been lined operate as construction/demolition landfills. Currently active sanitary landfills are lined and have leachate collection systems. All landfills, excluding inert landfills, are now required to install environmental monitoring systems for groundwater and methane sampling. Table 14 provides the landfills located in the Ocmulgee River Basin.

Table 14: Permitted Landfills in the Ocmulgee River Basin

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|----------|--|---------------------|
| City Of Fitzgerald Inert Landfill | PBR-009-04IL | Ben Hill | SW- Inert Landfill | Closed |
| Dorminy Medical Center | PBR-009-01OSTT | Ben Hill | SW- Other-PBR | Operating |
| Fitzgerald - Kiochee Church Rd Ph 1 (SL) | 009-004D(SL) | Ben Hill | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Fitzgerald Ben Hill Co. Reg. Sol. Waste Auth. Inert LF | PBR-009-06IL | Ben Hill | SW- Inert Landfill | Operating |
| Fitzgerald Ben Hill Co. Reg. SWM Authority Transfer Station | PBR-009-05TS | Ben Hill | SW- Transfer Station | Operating |
| Fitzgerald, Kiochee Church Rd, Ph.2 | 009-005D(SL) | Ben Hill | SW- Municipal Solid Waste Landfill | Operating |
| Fitzgerald-Ben Hill Co Regional Solid Waste Management Authority-Transfer Station | PBR-009-10TS | Ben Hill | SW- Transfer Station | Operating |
| P And R Waste Disposal | PBR-009-011COL | Ben Hill | SW- Collection | Operating |
| Pioneer Housing Systems | PBR-009-07COL | Ben Hill | SW- Collection | Operating |
| Refuse Removal Management Services | PBR-009-09COL | Ben Hill | SW- Collection | Operating |
| Ross Of Georgia Borrow Pit | PBR-009-08IL | Ben Hill | SW- Inert Landfill | Operating |
| Trans Waste Services Transfer Station | PBR-009-03TS | Ben Hill | SW- Transfer Station | Operating |
| VILS Railcar - Fitzgerald, LLC | 009-006P | Ben Hill | SW-Liquid Solidification Facility | Operating |
| A&W Mech & Fab | PBR-011-040IL | Bibb | SW- Inert Landfill | Closed |
| Advanced Disposal Services | PBR-011-45COL | Bibb | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|---------------|--------|--|---------------------|
| Advanced Disposal Services Macon Collection [Southland Waste Systems] | PBR-011-42COL | Bibb | SW- Collection | Operating |
| Advanced Disposal Services-Macon Transfer Station | PBR-011-39TS | Bibb | SW- Transfer Station | Operating |
| Alternative Waste Services, Inc. Collection | PBR-011-23COL | Bibb | SW- Collection | Operating |
| Anchor Marine Inc. | PBR-011-32IL | Bibb | SW- Inert Landfill | Closed |
| Anchor Marine Inert Landfill | PBR-011-19IL | Bibb | SW- Inert Landfill | Closed |
| A-Ok Portables, LLC | PBR-011-56COL | Bibb | SW- Collection | Operating |
| BFI Waste Systems Of North America | PBR-011-38COL | Bibb | SW- Collection | Operating |
| Bibb Co - Riverwood International, Mead Rd, PISWDF | 011-029D(C&D) | Bibb | SW- Construction & Demolition Landfill | Construction |
| Bibb Co - Riverwood International, Mead Rd, PISWDF | | Bibb | SW- Private Industrial Landfill | |
| Bibb Co- Macon Water Authority Wilson Field Wastewater Treatment Facility | PBR-011-46IL | Bibb | SW- Inert Landfill | Closed |
| Bibb Co-Macon Water Authority Wilson Field Wastewater Treatment Facility LF #2 | PBR-011-47IL | Bibb | SW- Inert Landfill | Closed |
| Bibb County Board Of Education | PBR-011-26COL | Bibb | SW- Collection | Operating |
| Bibb County Board Of Education | PBR-011-27IL | Bibb | SW- Inert Landfill | Closed |
| Bibb County- Fulton Mill Road Inert Landfill | PBR-011-52IL | Bibb | SW- Inert Landfill | Closed |
| Bickley Construction Company, Inc. | PBR-011-43COL | Bibb | SW- Collection | Operating |
| Brown's Mount Rd Inert Landfill | PBR-011-48IL | Bibb | SW- Inert Landfill | Closed |
| CB&T Bank Of Middle Georgia | PBR-011-30IL | Bibb | SW- Inert Landfill | Operating |
| City Of Macon Public Works Dept | PBR-011-37IL | Bibb | SW- Inert Landfill | Closed |
| Clarence H. Clay, Jr. | PBR-011-06IL | Bibb | SW- Inert Landfill | Closed |
| Columbia Coliseum Medical Centers | PBR-011-27COL | Bibb | SW- Collection | Operating |
| Cornell-Young Division, Blue Circle, Inc. Broadway Inert LF | PBR-011-04IL | Bibb | SW- Inert Landfill | Operating |
| David W. Thornton | PBR-011-29IL | Bibb | SW- Inert Landfill | Closed |
| Diamond Waste Disposal | PBR-011-11COL | Bibb | SW- Collection | Operating |
| Drag On Services Collection | PBR-011-22COL | Bibb | SW- Collection | Operating |
| Eberhardt Industries, Inc. Inert Landfill | PBR-011-14IL | Bibb | SW- Inert Landfill | Closed |
| Environmental Remedies, LLC | 011-027P | Bibb | SW-Liquid Solidification Facility | Operating |
| Fauconniere - Marion Rd Ph 1 (LI) | | Bibb | SW- Private Industrial Landfill | |
| Fauconniere - Marion Rd Ph 2 (LI) | | Bibb | SW- Private Industrial Landfill | |
| Ga Power Company Plant Arkwright Ash Pond No.3 Monofill | | Bibb | SW- Private Industrial Landfill | |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|--------|--|---------------------|
| General (Allied) Chemical - Mead Rd (LI) | | Bibb | SW- Private Industrial Landfill | |
| George R. Spooner | PBR-011-08IL | Bibb | SW- Inert Landfill | Closed |
| Georgia Power Plant Arkwright Ash Pond 1 | | Bibb | SW- Private Industrial Landfill | |
| Georgia Power Plant Arkwright Ash Pond 2 Dry Ash Stockpile | | Bibb | SW- Private Industrial Landfill | |
| J.W. Stokes Britt Road Inert LF | PBR-011-01IL | Bibb | SW- Inert Landfill | Closed |
| Jimmie Lamb Highway 49 N. Inert LF | PBR-011-03IL | Bibb | SW- Inert Landfill | Closed |
| Jim's Tire Salvage | PBR-011-12COL | Bibb | SW- Collection | Operating |
| John S. Warchak, Trustee for Warchak Trust | PBR-011-07IL | Bibb | SW- Inert Landfill | Closed |
| Johnny Morrison Debra Drive Inert LF | PBR-011-02IL | Bibb | SW- Inert Landfill | Closed |
| Knights Inn Of Macon | PBR-011-31IL | Bibb | SW- Inert Landfill | Operating |
| Lovett Environmental Services | PBR-011-41COL | Bibb | SW- Collection | Operating |
| Macon - 11th St Ph 1 (SL) | 011-007D(SL) | Bibb | SW- Municipal Solid Waste Landfill | Archived |
| Macon Kraft Inc Read Road (L) | | Bibb | SW- Private Industrial Landfill | |
| Macon Recycling, Inc | PBR-011-09COL | Bibb | SW- Collection | Operating |
| Macon Walker Road MSW Landfill | 011-017D(SL) | Bibb | SW- Municipal Solid Waste Landfill | Operating |
| Medical Center Of Central Georgia | PBR-011-05COL | Bibb | SW- Collection | Operating |
| Medical Center Of Central Georgia | 011-023P(INC)I | Bibb | SW- Thermal Treatment | Closed/PCC |
| Medical Disposal Systems Collection | PBR-011-15COL | Bibb | SW- Collection | Operating |
| Middle Ga Excavators | PBR-011-44COL | Bibb | SW- Collection | Operating |
| Mid-State Environmental, Inc Bibb Co. Transfer Station | PBR-011-18TS | Bibb | SW- Transfer Station | Closed |
| Mullis-Davis/Grisold Road Landfill | 011-026D(SL) | Bibb | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Prince Sheet Metal Works, Inc. | PBR-011-36IL | Bibb | SW- Inert Landfill | Closed |
| Quality Broadcasting, Inc. | PBR-011-33IL | Bibb | SW- Inert Landfill | Operating |
| Reeves Construction Company | PBR-011-34IL | Bibb | SW- Inert Landfill | In-Closure |
| Republic Services - Swift Creek Landfill | 011-018D(L) | Bibb | SW- Construction & Demolition Landfill | Closed/PCC |
| River Place Drive Outparcels-Development Inert Landfill | PBR-011-51IL | Bibb | SW- Inert Landfill | Closed |
| Riverwood International Ga, Inc. On-Site Processing | PBR-011-16OSP | Bibb | SW- Other-PBR | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|---------------|----------|--|---------------------|
| S. J. Adams | PBR-011-35IL | Bibb | SW- Inert Landfill | Operating |
| Sam Hall & Sons, Inc. | PBR-011-58OSP | Bibb | SW- Other-PBR | Operating |
| Southeast Timberlands, Inc. Inert Landfill | PBR-011-17IL | Bibb | SW- Inert Landfill | Closed |
| Southeast Timberlands, Inc. Inert Landfill | PBR-011-17IL | Bibb | SW- Inert Landfill | Closed |
| Southern Aggregates Company | PBR-011-28IL | Bibb | SW- Inert Landfill | Operating |
| Southern Equipment LLC | PBR-011-55COL | Bibb | SW- Collection | Operating |
| Stericycle Biomedical Waste Transfer Station | PBR-011-44TS | Bibb | SW- Transfer Station | Operating |
| Valerie Jean Fried Collection Operation | PBR-011-20COL | Bibb | SW- Collection | Operating |
| Vulture Roll-Off Disposal Co. | PBR-011-10COL | Bibb | SW- Collection | Operating |
| Waste Research And Recovery Of Macon, Inc. Collection | PBR-011-24COL | Bibb | SW- Collection | Operating |
| Waste Research And Recovery Of Macon, Inc. Transfer | PBR-011-25TS | Bibb | SW- Transfer Station | Operating |
| Weatherby Management Corporation | PBR-011-13COL | Bibb | SW- Collection | Operating |
| Willie Battle Inert Landfill | PBR-011-21IL | Bibb | SW- Inert Landfill | Operating |
| Bleckley Co - Cochran - SR 26 (SL) | 012-004D(SL) | Bleckley | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Bleckley Memorial Hospital | PBR-012-03COL | Bleckley | SW- Collection | Operating |
| City Of Cochran Inert Landfill | PBR-012-01IL | Bleckley | SW- Inert Landfill | Closed |
| Vandell And Jean Holland Inert Landfill | PBR-012-02IL | Bleckley | SW- Inert Landfill | Closed |
| 238 Mccoy Ave Inert Landfill | PBR-018-16IL | Butts | SW- Inert Landfill | Operating |
| Advanced Disposal Service | PBR-018-08TS | Butts | SW- Transfer Station | Operating |
| Advanced Disposal Service | PBR-018-07COL | Butts | SW- Collection | Operating |
| Advanced Disposal Services | PBR-018-15COL | Butts | SW- Collection | Operating |
| Butts Co. Inert Landfill | PBR-018-19IL | Butts | SW- Inert Landfill | Operating |
| Butts County Landfill | 018-004D(SL) | Butts | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Countywide Waste Systems | PBR-018-11COL | Butts | SW- Collection | Operating |
| Darla J. Williams Collection | PBR-018-02COL | Butts | SW- Collection | Operating |
| Embrock Farms | PBR-018-09IL | Butts | SW- Inert Landfill | Operating |
| Frank Peek, Inc. (C.W.I.) | PBR-018-05COL | Butts | SW- Collection | Operating |
| Georgia Diagnostic And Classification Center | PBR-018-01OSP | Butts | SW- Other-PBR | Operating |
| Green Star Services, Inc. | PBR-018-04COL | Butts | SW- Collection | Operating |
| Lester Peak Grading And Hauling | PBR-018-12COL | Butts | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|-----------------|---------|--|---------------------|
| P E P Inc. | PBR-018-06IL | Butts | SW- Inert Landfill | Operating |
| Republic Services - Pine Ridge Recycling (MSWL) | 018-008D(MSWL) | Butts | SW- Municipal Solid Waste Landfill | Operating |
| Seventh Transport, Inc | PBR-018-10COL | Butts | SW- Collection | Operating |
| Allwaste Field Services | PBR-031-02COL | Clayton | SW- Collection | Operating |
| Allwaste Services Of Atlanta, Inc. | PBR-031-03COL | Clayton | SW- Collection | Operating |
| Arthur Williams Inert Landfill | PBR-031-04IL | Clayton | SW- Inert Landfill | Operating |
| Atlanta Dirt And Landfill, Inc. Lake Mirror Rd. Inert LF | PBR-031-06IL | Clayton | SW- Inert Landfill | Operating |
| Atlanta-South Hauling | PBR-031-100COL | Clayton | SW- Collection | Operating |
| BFI-Medical Waste Systems (Southeast), Inc. | PBR-031-33COL | Clayton | SW- Collection | Operating |
| Bill & Christine Orr | PBR-031-95COL | Clayton | SW- Collection | Operating |
| Biomed Southeast, IncCollection | PBR-031-31COL | Clayton | SW- Collection | Operating |
| Biomed Southeast, IncTransfer Station | PBR-031-32TS | Clayton | SW- Transfer Station | Operating |
| Clayton Co - Trash-A Lot Sanitation | PBR-031-115COL | Clayton | SW- Collection | Operating |
| Clayton Co-SR 3 Lovejoy Site # 3 | 031-037D(SL) | Clayton | SW- Municipal Solid Waste Landfill | Operating |
| Clayton County Landfill Dba Clayton County Transportation And Development Dept. | 031-027D(SL) | Clayton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Coreslab Structures (Atlanta)Inc. Inert LF | PBR-031-08IL | Clayton | SW- Inert Landfill | Operating |
| Cpt Operating Partnership – SLR Boulevard-Sr3 | PBR-031-09IL | Clayton | SW- Inert Landfill | Closed |
| D. H. Griffin Wrecking Co. Inc. | PBR-031-75IL | Clayton | SW- Inert Landfill | Operating |
| D. H. Wrecking Co. Tanner Church Site | PBR-031-99IL | Clayton | SW- Inert Landfill | Operating |
| Dancing Waters, Inc. Inert Landfill | PBR-031-65IL | Clayton | SW- Inert Landfill | Operating |
| David T. Freeman East Conley Road Inert LF | PBR-031-07IL | Clayton | SW- Inert Landfill | Operating |
| DELTA AIRLINES, Inc. INTERNATIONAL WASTE FACILITY (Operated By WM Healthcare Solutions, Inc.) | PBR-031-107OSTT | Clayton | SW- Other-PBR | Operating |
| Dixie Waste Services | PBR-031-103COL | Clayton | SW- Collection | Operating |
| Donald K. Stover Collection | PBR-031-92COL | Clayton | SW- Collection | Operating |
| Eastman Chemical Company | PBR-031-83OSTT | Clayton | SW- Other-PBR | Closed |
| English Rose Sanitation | PBR-031-96COL | Clayton | SW- Collection | Operating |
| Forest Park - Jones Rd Ext (L) | 031-023D(L) | Clayton | SW- Construction & Demolition Landfill | Archived |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------|---------|--|---------------------|
| Forest Park - Jones Rd Ph 3 (L) | 031-031D(L) | Clayton | SW- Construction & Demolition Landfill | Closed/PCC |
| Granite Construction Company, Inc. | PBR-031-30IL | Clayton | SW- Inert Landfill | Operating |
| John Weiland Homes, Inc. Inert Landfill | PBR-031-46IL | Clayton | SW- Inert Landfill | Closed |
| John Wieland Homes Inert Landfill | PBR-031-71IL | Clayton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. | PBR-031-50IL | Clayton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-031-48IL | Clayton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-031-40IL | Clayton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-031-69IL | Clayton | SW- Inert Landfill | Closed |
| K & W Sanitation Collection | PBR-031-47COL | Clayton | SW- Collection | Operating |
| Mcf Environmental Services, Inc. | PBR-031-113COL | Clayton | SW- Collection | Operating |
| Piedmont Ridge Transfer Station | PBR-031-120TS | Clayton | SW- Transfer Station | Operating |
| Robert's Sanitation Service | PBR-031-10COL | Clayton | SW- Collection | Operating |
| S. P. Petroleum Transporters, Inc. | PBR-031-97COL | Clayton | SW- Collection | Operating |
| S.P. Petroleum Transporters Inc | PBR-031-11COL | Clayton | SW- Collection | Operating |
| S.P. Petroleum Transporters, Inc. | PBR-031-38TS | Clayton | SW- Transfer Station | Operating |
| Safety-Kleen Systems, Inc. | PBR-031-98COL | Clayton | SW- Collection | Operating |
| Smith's Grading Co. Inert Landfill | PBR-031-66IL | Clayton | SW- Inert Landfill | Operating |
| Southern Refuse Services, Inc. Transfer Station | PBR-031-93TS | Clayton | SW- Transfer Station | Operating |
| Southern Regional Medical Center | PBR-031-01OSTT | Clayton | SW- Other-PBR | Closed |
| Southside Disposal Company Collection | PBR-031-72COL | Clayton | SW- Collection | Operating |
| Southside Sanitation Company, Inc. | PBR-031-76COL | Clayton | SW- Collection | Operating |
| Speedy Disposal Services, Inc. Collection Operation | PBR-031-94COL | Clayton | SW- Collection | Operating |
| Stat Medical, Inc. Biomedical Waste Collections | PBR-031-73COL | Clayton | SW- Collection | Operating |
| Stat Medical, Inc. Transfer Station | PBR-031-74TS | Clayton | SW- Transfer Station | Operating |
| Stephens Industries LP | PBR-031-102IL | Clayton | SW- Inert Landfill | Closed |
| Stephens MDS, LP Processing Facility | 031-039D(C&D) | Clayton | SW- Construction & Demolition Landfill | Operating |
| Stericycle, Inc | 031-035P(INC) | Clayton | SW- Biomedical Processing | Operating |
| Stericycle, Inc Lake City Facility | 031-033P(INC) | Clayton | SW- Thermal Treatment | Released |
| T. K. Sanitation | PBR-031-101COL | Clayton | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|------------------|----------|--|---------------------|
| Technical Environmental Solutions & Recycling, LLC | 031-040P(MRF) | Clayton | SW- Material Recovery Facility | Permit Expired |
| Waste Eliminator, Inc. | 031-043P(MRF) | Clayton | SW- Material Recovery Facility | Construction |
| Whitford Real Estate | PBR-031-05IL | Clayton | SW- Inert Landfill | Operating |
| WMI- Rolling Hills (SL) | 031-017D(SL) | Clayton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| City Of Douglas | PBR-034-02IL | Coffee | SW- Inert Landfill | Operating |
| Coffee Co - Cr 129/17 Mile River (SL) | 034-005D(SL) | Coffee | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Coffee Co Transfer Station And Collection | PBR-034-05TS,COL | Coffee | SW- Collection | Operating |
| Coffee County Boc - Cr 129 Inert LF | PBR-034-01IL | Coffee | SW- Inert Landfill | Closed |
| Country Meadows | PBR-034-07IL | Coffee | SW- Inert Landfill | Operating |
| D & J Pallet, Inc. | PBR-034-06OSTT | Coffee | SW- Other-PBR | Closed |
| Douglas Railroad Depot | PBR-034-04IL | Coffee | SW- Inert Landfill | Operating |
| Louis Harper IR Landfill | PBR-034-03IL | Coffee | SW- Inert Landfill | Closed |
| Trans Tec Collection | PBR-034-03COL | Coffee | SW- Collection | Operating |
| Transwaste Services, Inc. C.R. 129/17 Mile River | 034-005D(C&D) | Coffee | SW- Construction & Demolition Landfill | Closed/PCC |
| Tri County Gin, Inc. OSP Composting | PBR-034-02OSP | Coffee | SW- Other-PBR | Operating |
| Atlanta Sand & Supply Co | PBR-039-01IL | Crawford | SW- Inert Landfill | Operating |
| Crawford Co - Cr 49 Roberta (SL) | 039-005D(SL) | Crawford | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Crawford Co - SR 341/Hopeville Rd (SL) | 039-006D(SL) | Crawford | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Crawford Co- Sterling Braswell Inert Landfill | PBR-039-05IL | Crawford | SW- Inert Landfill | Closed |
| Crawford County - Jackson Road Inert Waste Landfill | 039-007D(IN) | Crawford | SW- Inert Landfill | Operating |
| Crawford County Board Of Commissioners Jackson Rd. Inert LF | PBR-039-03IL | Crawford | SW- Inert Landfill | Closed |
| Michael Mcclendon Collection | PBR-039-04COL | Crawford | SW- Collection | Operating |
| Old Knoxville Road Inert LF | PBR-039-02IL | Crawford | SW- Inert Landfill | Operating |
| Syncorp Inc. (Monarch Wine Co.) (LI) | | Crawford | SW- Private Industrial Landfill | |
| Transfer Station SR 341 / Hopeville Road | PBR-039-06TS | Crawford | SW- Transfer Station | Operating |
| Ads - Lithonia C&D Transfer Station [Maddox Road Transfer] | PBR-044-144TS | DeKalb | SW- Transfer Station | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|-----------------|--------|--|---------------------|
| Akin Development Company, Inc. | PBR-044-023COL | DeKalb | SW- Collection | Operating |
| Amdecol Medical Waste Systems Collection | PBR-044-085COL | DeKalb | SW- Collection | Operating |
| Apac/Ga - Donzi Ln Ph 2 (L) | 044-029D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Apac/Ga - Donzi Ln Ph 3 (L) | 044-033D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Apac/Ga - Donzi Ln Ph 4 (L) | 044-040D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Apac/Ga - Donzi Ln Ph 5a (L) | 044-042D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Arrow Transfer Station | PBR-044-161TS | DeKalb | SW- Transfer Station | Operating |
| Barber Homes, Inc. Inert Landfill | PBR-044-055IL | DeKalb | SW- Inert Landfill | Closed |
| BFI-Hickory Ridge (MSWL) | 044-048D(SL) | DeKalb | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Bill Grant, Inc. Inert Landfill | PBR-044-119IL | DeKalb | SW- Inert Landfill | Operating |
| Biomedical Waste Services Of Georgia | PBR-044-149COL | DeKalb | SW- Collection | Operating |
| Bowen And Bowen | PBR-044-022IL | DeKalb | SW- Inert Landfill | Operating |
| CDC Chamblee Campus EPA Id # Ga6750911970 | PBR-044-154OSTT | DeKalb | SW- Other-PBR | Operating |
| CDC Clifton Road Campus EPA Id # 4750914679 | PBR-044-153OSTT | DeKalb | SW- Other-PBR | Operating |
| CDC Clifton Road Campus EPA Id #4750914679 | PBR-044-151OSTT | DeKalb | SW- Other-PBR | Operating |
| CDC Roybal Campus, EPA Id No. Ga4750914679 | PBR-044-152OSTT | DeKalb | SW- Other-PBR | Operating |
| Cfm Environmental Services, Inc | PBR-044-155TS | DeKalb | SW- Transfer Station | Closed |
| Cfm Environmental Services, Inc | PBR-044-155TS | DeKalb | SW- Transfer Station | Closed |
| Cfm Environmental Services, Inc | PBR-044-150TS | DeKalb | SW- Transfer Station | Operating |
| Chamblee - Keswick Dr (L) | 044-031D(L) | DeKalb | SW- Construction & Demolition Landfill | Archived |
| Chapman Road Inert Disposal | PBR-044-142IL | DeKalb | SW- Inert Landfill | Operating |
| Charles J. Buckley, Ridgewood Properties, Inc | PBR-044-117IL | DeKalb | SW- Inert Landfill | Closed |
| City- Wide Recycling Inc | PBR-044-030COL | DeKalb | SW- Collection | Operating |
| City-Wide Recycling, Inc | PBR-044-033COL | DeKalb | SW- Collection | Closed |
| City-Wide Recycling, Inc | PBR-044-031COL | DeKalb | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|-----------------|--------|--|---------------------|
| Clean Tech | PBR-044-145TS | DeKalb | SW- Transfer Station | Operating |
| Court Villa Apartments Inert Landfill | PBR-044-093IL | DeKalb | SW- Inert Landfill | Operating |
| Crystal Clean Cleaning Service | PBR-044-137COL | DeKalb | SW- Collection | Operating |
| Dekalb Co - Seminole Rd Ph 1 (SL) | 044-017D(SL) | DeKalb | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Dekalb CoBFI-East Dekalb Landfill | 044-049D(C&D) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Dekalb Co-Seminole Rd Ph 2 (SL) | 044-037D(SL) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Dekalb Medical Center | PBR-044-020OSTT | DeKalb | SW- Other-PBR | Closed |
| Dekalb Peachtree Airport Inert LF | PBR-044-007IL | DeKalb | SW- Inert Landfill | Operating |
| Dewey Morris-Moreland Avenue Inert LF | PBR-044-004IL | DeKalb | SW- Inert Landfill | Operating |
| Donzi Lane Landfill | 044-044D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Doraville Transfer Station Doraville Transfer Station | PBR-044-146TS | DeKalb | SW- Transfer Station | Operating |
| Driftwood Builders, Inc. Inert Landfill | PBR-044-050IL | DeKalb | SW- Inert Landfill | Operating |
| E And W Medical Technologies, Inc. | PBR-044-018COL | DeKalb | SW- Collection | Operating |
| EHE, L.L.C. Inert Landfill | PBR-044-099IL | DeKalb | SW- Inert Landfill | Operating |
| Emory - Old Briarcliff Rd L | 044-036D(L) | DeKalb | SW- Construction & Demolition Landfill | Archived |
| Emory University-Roads And Grounds Inert LF | PBR-044-009IL | DeKalb | SW- Inert Landfill | Operating |
| Environmental Products & Services, Inc. | PBR-044-138COL | DeKalb | SW- Collection | Operating |
| Environmental Products And Services Of Vermont, Inc. | PBR-044-166COL | DeKalb | SW- Collection | Operating |
| Evergreen Waste Inc | PBR-044-157COL | DeKalb | SW- Collection | Operating |
| F. T. C. Trucking Services | PBR-044-147COL | DeKalb | SW- Collection | Operating |
| Garner Properties, Inc. | PBR-044-028COL | DeKalb | SW- Collection | Operating |
| Garner Properties, Inc. Collection Operation | PBR-044-048COL | DeKalb | SW- Collection | Operating |
| Goodwill Industries Of Atlanta-Glenwood Inert LF | PBR-044-011IL | DeKalb | SW- Inert Landfill | Operating |
| Grady F. Butler Collection Operation | PBR-044-047COL | DeKalb | SW- Collection | Operating |
| Hairston Creek Inert Landfill | PBR-044-139IL | DeKalb | SW- Inert Landfill | Operating |
| Hoffman-South Cobb Drive Inert Landfill | PBR-044-005IL | DeKalb | SW- Inert Landfill | Operating |
| Incendrere, Inc. Collection | PBR-044-086COL | DeKalb | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|-----------------|--------|--|---------------------|
| Incendrere, Inc. Transfer Station | PBR-044-087TS | DeKalb | SW- Transfer Station | Operating |
| Jenkins Wreckers Service, Inc. | PBR-044-136COL | DeKalb | SW- Collection | Operating |
| Kelly Paving Company | PBR-044-134IL | DeKalb | SW- Inert Landfill | Operating |
| Leon Benton Inert Landfill | PBR-044-120IL | DeKalb | SW- Inert Landfill | Operating |
| Leonard B. Earp Collection | PBR-044-037COL | DeKalb | SW- Collection | Operating |
| Lifestyle Community Builders, Inc. Rose Arbor Sd Lt 94 | PBR-044-015IL | DeKalb | SW- Inert Landfill | Closed |
| Lifestyle Community Builders-Rose Arbor Sd-Lt#28 | PBR-044-016IL | DeKalb | SW- Inert Landfill | Closed |
| Maddox Road Recycling Center Inert Landfill | PBR-044-101IL | DeKalb | SW- Inert Landfill | Operating |
| Mark Tummillo Inert Landfill | PBR-044-132IL | DeKalb | SW- Inert Landfill | Operating |
| Mcf Systems Atlanta, Inc. | PBR-044-141COL | DeKalb | SW- Collection | Closed |
| Mercer University | PBR-044-174COL | DeKalb | SW- Collection | Operating |
| Mercer University | PBR-044-174OSTT | DeKalb | SW- Other-PBR | Operating |
| Michael A. Mueller | PBR-044-021COL | DeKalb | SW- Collection | Operating |
| Michael Mueller | PBR-044-064COL | DeKalb | SW- Collection | Operating |
| Mike Young Designs Inert LandfillDekalb | PBR-044-096IL | DeKalb | SW- Inert Landfill | Operating |
| Northlake Hospital | PBR-044-094OSP | DeKalb | SW- Other-PBR | Operating |
| Northlake Regional Medical Center | PBR-044-003OSTT | DeKalb | SW- Other-PBR | Operating |
| Oglethorpe University Windsor Pkwy- Hermance Dr. Inert | PBR-044-008IL | DeKalb | SW- Inert Landfill | Operating |
| Paper Recycling Inc | PBR-044-032COL | DeKalb | SW- Collection | Operating |
| Pattillo - Mtn Ind Blvd Ph 2 & 3 (L) | 044-032D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Phillips-Scales Rd C&D (L) | 044-046D(C&D) | DeKalb | SW- Construction & Demolition Landfill | Abandoned |
| Pittman Construction Company Inert Landfill | PBR-044-049IL | DeKalb | SW- Inert Landfill | Operating |
| R.W.F. Contractors Inert LF | PBR-044-051IL | DeKalb | SW- Inert Landfill | Operating |
| Red Bag Solutions, Inc. | PBR-044-158COL | DeKalb | SW- Collection | Operating |
| Roger's Lake Inert Landfill | PBR-044-107IL | DeKalb | SW- Inert Landfill | Closed |
| Rogers Lake Road C&D Landfill | 044-041D(L) | DeKalb | SW- Construction & Demolition Landfill | Closed/PCC |
| Safety Disposal Systems Of Georgia, Inc. | PBR-044-035COL | DeKalb | SW- Collection | Operating |
| Safety Disposal Systems Of Georgia, Inc. | PBR-044-045TS | DeKalb | SW- Transfer Station | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|-----------------|--------|--|---------------------|
| Safety Disposal Systems Of Georgia, Inc. | PBR-044-034TS | DeKalb | SW- Transfer Station | Operating |
| Seminole Road Landfill | 044-050D(SL) | DeKalb | SW- Municipal Solid Waste Landfill | Operating |
| Seminole Road Landfill | 044-039P(SH) | DeKalb | SW- Other- Processor/ Disposal | Closed/PCC |
| Seminole Road Landfill - Dekalb County Public Works | PBR-044-176COMP | DeKalb | SW- Other-PBR | Operating |
| Southeastern Research & Recovery / Environment Usa | PBR-044-156TS | DeKalb | SW- Transfer Station | Operating |
| Stephenson Development Co., ,Inc. | PBR-044-131IL | DeKalb | SW- Inert Landfill | Operating |
| Steve Kimble-Henry Road Inert LF | PBR-044-010IL | DeKalb | SW- Inert Landfill | Operating |
| Stone Mountain Development Co., Inc. | PBR-044-140IL | DeKalb | SW- Inert Landfill | Operating |
| Stone Mtn Dev. CoSalem Hills Inert Landfill | PBR-044-135IL | DeKalb | SW- Inert Landfill | Operating |
| T.G. Hauling And Roofing | PBR-044-029COL | DeKalb | SW- Collection | Operating |
| T.M. Sager Grading Co. | PBR-044-036COL | DeKalb | SW- Collection | Operating |
| Tommy Clack-Mcdaniel Mill Road Inert LF | PBR-044-012IL | DeKalb | SW- Inert Landfill | Operating |
| Va Medical Center (Atlanta) - Secondary Unit | PBR-044-002OSTT | DeKalb | SW- Other-PBR | Closed |
| Va Medical Center (Atlanta)-Primary | PBR-044-001OSTT | DeKalb | SW- Other-PBR | Closed |
| VAMC Atlanta | PBR-044-133COL | DeKalb | SW- Collection | Operating |
| VAMC Atlanta | PBR-044-148COL | DeKalb | SW- Collection | Operating |
| WMI-Live Oak #1 (SL) | 044-035D(SL) | DeKalb | SW- Municipal Solid Waste Landfill | Closed/PCC |
| WMI-Live Oak #2 (SL) | 044-047D(MSWL) | DeKalb | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Dodge Co - Bay Springs Church Rd (SL) | 045-005D(SL) | Dodge | SW- Municipal Solid Waste Landfill | Archived |
| Dodge Co - Cr 274 (Dodge Ave) Eastman (SL) | 045-007D(SL) | Dodge | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Dodge County-Us341 Inert LF | PBR-045-02IL | Dodge | SW- Inert Landfill | Operating |
| Mid-State Waste Management Collection Operation | PBR-045-03COL | Dodge | SW- Collection | Operating |
| Rhine - Mill Creek (L) | 045-006D(L) | Dodge | SW- Construction & Demolition Landfill | Archived |
| Sylvan Hardwoods, SR 341 N, PISWDF | | Dodge | SW- Private Industrial Landfill | |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|--------|--|---------------------|
| Town Of Chester-Rodgers Avenue Inert Landfill | PBR-045-01IL | Dodge | SW- Inert Landfill | Closed |
| City Of Unadilla | PBR-046-13TS | Dooly | SW- Transfer Station | Operating |
| Dooly Co - Cr 101 (SL) | 046-006D(SL) | Dooly | SW- Construction & Demolition Landfill | Closed/PCC |
| Dooly Co - Us 41 (SL) | 046-001D(SL) | Dooly | SW- Municipal Solid Waste Landfill | Archived |
| Dooly State Prison | PBR-046-0110SP | Dooly | SW- Other-PBR | Operating |
| Findlay Gin Co., Inc. Composting OSP | PBR-046-12OSP | Dooly | SW- Other-PBR | Operating |
| [Richard Harp Excavation] Roosevelt II, LLC Inert Landfill | PBR-060-2001L | Fulton | SW- Inert Landfill | Operating |
| A Ok Trash Service Collection Operation | PBR-060-033COL | Fulton | SW- Collection | Operating |
| Aaron Oil Company, Inc. | PBR-060-220COL | Fulton | SW- Collection | Operating |
| Aaron's Waste Service | PBR-060-055IL | Fulton | SW- Inert Landfill | Operating |
| Aaron's Waste Service Inert Landfill | PBR-060-053IL | Fulton | SW- Inert Landfill | Closed |
| Advanced Disposal Services | PBR-060-237COL | Fulton | SW- Collection | Operating |
| AEC, Inc. | PBR-060-102COL | Fulton | SW- Collection | Operating |
| Aftertragic Restoration Inc | PBR-060-230COL | Fulton | SW- Collection | Operating |
| Aj & M Refuse And Recycling, Inc. Collection Operation | PBR-060-051COL | Fulton | SW- Collection | Operating |
| All American Waste Management | PBR-060-224COL | Fulton | SW- Collection | Operating |
| All American Waste Management | PBR-060-103COL | Fulton | SW- Collection | Operating |
| Allstate Waste, Inc | PBR-060-215COL | Fulton | SW- Collection | Operating |
| Alpharetta Transfer Station | PBR-060-238TS | Fulton | SW- Transfer Station | Operating |
| American Recycling Of Georgia, LLC | 060-092P(MRF) | Fulton | SW- Material Recovery Facility | Operating |
| Amerihaul | PBR-060-116COL | Fulton | SW- Collection | Operating |
| Amrac, Inc. Highway 138 Inert LF | PBR-060-007IL | Fulton | SW- Inert Landfill | Operating |
| Apollo Waste Industries L.L.C | PBR-060-056COL | Fulton | SW- Collection | Operating |
| Apps Of Ga | PBR-060-204TS | Fulton | SW- Transfer Station | Operating |
| Atlanta - Cascade Rd (SL) | 060-046D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Atlanta - Confederate Ave (L) | 060-057D(L) | Fulton | SW- Construction & Demolition Landfill | Closed/PCC |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------|--------|--|---------------------|
| Atlanta - Gun Club Rd (SL) | 060-026D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Atlanta - Key Rd (SL) | 060-048D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Atlanta Disposal Systems, Inc | PBR-060-021COL | Fulton | SW- Collection | Operating |
| Atlanta Disposal Systems, Inc. Collection | PBR-060-006COL | Fulton | SW- Collection | Operating |
| Atlanta International Waste | PBR-060-206COL | Fulton | SW- Collection | Operating |
| Atlanta Transfer Station | PBR-060-208TS | Fulton | SW- Transfer Station | Closed |
| Atlanta Waste Industries | PBR-060-205COL | Fulton | SW- Collection | Operating |
| Atlas Disposal LLC | PBR-060-213COL | Fulton | SW- Collection | Operating |
| BFI - Watts Rd (SL) | 060-051D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| BFI Of Georgia, Inc. Atlanta Bfirst Fac. | 060-086P(RM) | Fulton | SW- Material Recovery Facility | Permit Expired |
| Big E Environmental, LLC (Oakdale Environmental, Inc) | PBR-060-239IL | Fulton | SW- Inert Landfill | Operating |
| Bobby Hendrix (LI) | | Fulton | SW- Private Industrial Landfill | |
| Brooks Hauling Co | PBR-060-228COL | Fulton | SW- Collection | Operating |
| Brooks Hauling Company Inc | PBR-060-235COL | Fulton | SW- Collection | Operating |
| Browning-Ferris Ind. Of Georgia, Inc. Collection | PBR-060-032COL | Fulton | SW- Collection | Operating |
| Building Contractor Integrity LLC (BCI) | PBR-060-100COL | Fulton | SW- Collection | Operating |
| C & D Disposal | PBR-060-023COL | Fulton | SW- Collection | Operating |
| Capital Waste Systems Inc | PBR-060-022COL | Fulton | SW- Collection | Operating |
| Chadwick Road Landfill | 060-072D(L) | Fulton | SW- Construction & Demolition Landfill | Operating |
| Chambers - Bolton Rd (SL) | 060-083D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Champion Atlanta, Inc. Collection Operation | PBR-060-068COL | Fulton | SW- Collection | Operating |
| Charles Will Frazier Brumbelow Rd. S. Inert LF | PBR-060-005IL | Fulton | SW- Inert Landfill | Closed |
| City - Wide Recycling, Inc. | PBR-060-011TS | Fulton | SW- Transfer Station | Operating |
| Crime Scene Service Transalliance Group (CSSTAG) | PBR-060-241COL | Fulton | SW- Collection | Operating |
| Community Waste Services, LLC | PBR-060-227COL | Fulton | SW- Collection | Operating |
| D&H Construction | PBR-060-229COL | Fulton | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|-----------------------|--------|--|---------------------|
| Dm Roosevelt li LLC Inert Landfill[Christopher Tire Co., Inc. Stonewall Tell Rd./Roosevelt Hwy. Inert LF] | PBR-060-014IL | Fulton | SW- Inert Landfill | Operating |
| Dykes Inert Landfill | PBR-060-268 | Fulton | SW- Inert Landfill | Operating |
| Edward Baker-Browns Mill Road Inert LF | PBR-060-003IL | Fulton | SW- Inert Landfill | Operating |
| Environmental Remedies, LLC D/B/A Mindis Treatment Ser | PBR-060-120TS | Fulton | SW- Transfer Station | Closed |
| Eq Industrial Services | PBR-060-221TS | Fulton | SW- Transfer Station | Operating |
| Eq Industrial Services, Inc. | 060-093(P) | Fulton | SW-Liquid Solidification Facility | Operating |
| Equis Atlanta T&P | PBR-060-202TS | Fulton | SW- Transfer Station | Operating |
| Equis Atlanta T&P Changed To Equis Industrial Services | PBR-060-203COL | Fulton | SW- Collection | Operating |
| Evergreen Waste MSW And Industrial Waste Collection And Transfer Station | PBR-060-252TS, COL | Fulton | SW- Collection | Operating |
| Evergreen Waste, LLC Biomedical Waste Collection And Transfer Station | PBR-060-254COL, TS | Fulton | SW- Collection | Operating |
| Excel Contracting Services, Inc. | PBR-060-218COL | Fulton | SW- Collection | Operating |
| Fulton Co - Merk Rd (SL) | 060-011D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Fulton Co - Morgan Falls (SL) | 060-007D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Fulton Co - Price & Sons, SR 14 (MRF) | 060-084P(RM) | Fulton | SW- Material Recovery Facility | Closed/PCC |
| Fulton Co Boe - Parsons Road High School | PBR-060-119IL | Fulton | SW- Inert Landfill | Operating |
| Fulton Co-Cardinal Waste Solutions | PBR-060-264COL | Fulton | SW- Collection | Operating |
| Fulton Co-Grier Brothers Enterprises Inc | PBR-060-262COL | Fulton | SW- Collection | Operating |
| Fulton Co-Trash-A Lot Sanitation | PBR-060-263COL | Fulton | SW- Collection | Operating |
| Fulton County Health Department | PBR-060-099COL | Fulton | SW- Collection | Operating |
| Garnett Trucking Co. Inc. Collection Operation | PBR-060-052COL | Fulton | SW- Collection | Operating |
| Garrett Brother's Demolition | PBR-060-118COL | Fulton | SW- Collection | Operating |
| Gateway Transfer Station | PBR-060-207TS | Fulton | SW- Transfer Station | Operating |
| General Chemical Corp | | Fulton | SW- Private Industrial Landfill | |
| Georgia Baptist Health Care System Collection | PBR-060-044COL | Fulton | SW- Collection | Operating |
| Georgia Baptist Healthcare System | PBR-060-057COL | Fulton | SW- Collection | Operating |
| Georgia Baptist Medical Center | PBR-060-017OSTT | Fulton | SW- Other-PBR | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|------------------|--------|--|---------------------|
| Georgia Power Company | PBR-060-012IL | Fulton | SW- Inert Landfill | Closed |
| GFL Environmental/Safeguard Landfill | 060-088D(C&D) | Fulton | SW- Construction & Demolition Landfill | Operating |
| Grady Hospital Autoclave 013349706/Steris | PBR-060-231OSTT | Fulton | SW- Other-PBR | Operating |
| Grady Hospital Autoclave 431/San-1-Pak | PBR-060-233OSTT | Fulton | SW- Other-PBR | Operating |
| Grady Hospital Autoclave 480/Sanipak | PBR-060-234OSTT | Fulton | SW- Other-PBR | Operating |
| Greenworks, Inc. | PBR-060-115COL | Fulton | SW- Collection | Operating |
| Greenworks, Inc. | PBR-060-115IL | Fulton | SW- Inert Landfill | Operating |
| Hamil - Brumbelow Rd (L) | 060-054D(L) | Fulton | SW- Construction & Demolition Landfill | In-Closure |
| Hartsfield Atlanta International Airport | PBR-060-013IL | Fulton | SW- Inert Landfill | Operating |
| Hedgewood Properties 12230 Stevens Ck Dr Lot 29 Stevens Creek | PBR-060-061IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties 12295 Stevens Ck Dr Lot 11 Stevens Ck | PBR-060-065IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties 12305 Stevens Ck Dr Lot 10 Stevens Ck | PBR-060-063IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties 30 Parkside | PBR-060-056IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot #7 Spalding Heights | PBR-060-108IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 10 Spalding Heights | PBR-060-109IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 108 Glenwood At Sugar Mill/735 Glenleigh Lane | PBR-060-077IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 17 Spalding Heights | PBR-060-110IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 20 Spalding Heights | PBR-060-111IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 21 Spalding Heights | PBR-060-112IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 24 Spalding Heights | PBR-060-113IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 25 Spalding Heights | PBR-060-114IL | Fulton | SW- Inert Landfill | Closed |
| Hedgewood Properties Lot 49 Stevens Creek/ 325 Stevens Creek Drive | PBR-060-088IL | Fulton | SW- Inert Landfill | Closed |
| HEDGEWOOD Properties Lot 10700 CAULEY CREEK, L0T 32 PARKSIDE | PBR-060-058IL | Fulton | SW- Inert Landfill | Closed |
| Heely-Brown Company, A Ga. Corporation | PBR-060-201COL | Fulton | SW- Collection | Operating |
| Honea- C & R Landfill Francis Rd (L) | 060-059D(L) | Fulton | SW- Construction & Demolition Landfill | Closed/PCC |
| Hudgins & Company, Inc | PBR-060-236COL-A | Fulton | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------------------------|--------|--|---------------------|
| Industrial Environmental Technologies Corporation | PBR-060-210TS | Fulton | SW- Transfer Station | Operating |
| Initial Healthcare, Inc. | PBR-060-096COL | Fulton | SW- Collection | Operating |
| International Packing Co., Inc. | PBR-060-221COL PBR-060-221COL | Fulton | SW- Collection | Operating |
| James Christoper Roosevelt Highway S. Inert LF | PBR-060-008IL | Fulton | SW- Inert Landfill | Operating |
| Joel C. Moore | PBR-060-015IL | Fulton | SW- Collection | Operating |
| John Wieland Homes Inert Landfill | PBR-060-042IL | Fulton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-060-039IL | Fulton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-060-050IL | Fulton | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-060-054IL | Fulton | SW- Inert Landfill | Closed |
| Land Services Inc. Inert Landfill | PBR-060-028IL | Fulton | SW- Inert Landfill | Operating |
| Latham Home Sanitation Co. Inc. | PBR-060-012TS | Fulton | SW- Transfer Station | Operating |
| Levie Satisfield III | PBR-060-020COL | Fulton | SW- Collection | Operating |
| Lucy K. Stephens-Thompson Road Inert LF | PBR-060-010IL | Fulton | SW- Inert Landfill | Operating |
| M & M Sanitation & Hauling | PBR-060-024COL | Fulton | SW- Collection | Operating |
| M & M Sanitation And Hauling, Inc | PBR-060-026COL | Fulton | SW- Collection | Operating |
| MBA Waste Services, LLC Dba Big Johns Portables | 060-094P(MRF) | Fulton | SW- Material Recovery Facility | Operating |
| Merk Rd Landfill | 060-064D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Metro Disposal Inc Dba Parker Sanitation Services | PBR-060-058COL | Fulton | SW- Collection | Operating |
| Metro Hauling Services, LLC | PBR-060-247COL | Fulton | SW- Collection | Operating |
| Nelson Collection | PBR-060-081COL | Fulton | SW- Collection | Operating |
| Northside Hospital | PBR-060-117OSTT | Fulton | SW- Other-PBR | Closed |
| Patriot Sanitation | PBR-060-217COL | Fulton | SW- Collection | Operating |
| Patriot Sanitation | PBR-060-121COL | Fulton | SW- Collection | Operating |
| Philip Services Corp/Allwaste Recovery System | PBR-060-212TS | Fulton | SW- Transfer Station | Closed |
| Philip Services Corp/Allwate Recovery System | PBR-060-211COL | Fulton | SW- Collection | Closed |
| Piedmont Hospital | PBR-060-018OSTT | Fulton | SW- Other-PBR | Closed |
| Preston R. Collett Collection Operation | PBR-060-034COL | Fulton | SW- Collection | Operating |
| Preston R. Collett Inert Landfill Operation | PBR-060-035IL | Fulton | SW- Inert Landfill | Operating |
| Price - Cleveland Ave (L) | 060-029D(L) | Fulton | SW- Construction & Demolition Landfill | Abandoned |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|-----------------------|--------|--|---------------------|
| Price - Roosevelt Hwy (L) | 060-075D(L) | Fulton | SW- Construction & Demolition Landfill | Released |
| Price & Sons | PBR-060-104COL | Fulton | SW- Collection | Operating |
| PSC Recovery Systems LLC Wastewater Treatment Plant Disposal | PBR-060-260IL | Fulton | SW- Inert Landfill | Operating |
| Pyramid Remedial Systems, Inc. | PBR-060-219COL | Fulton | SW- Collection | Operating |
| Quantum Environmental Solutions, LLC | PBR-060- 240COL,TS | Fulton | SW- Collection | Operating |
| Ranglin Biofeedstocks, LLC | PBR-060-269COL | Fulton | SW- Collection | Operating |
| Redidump, LLC | PBR-060-275COL | Fulton | SW- Collection | Operating |
| Remole Inert Landfill | PBR-060-016IL | Fulton | SW- Inert Landfill | In-Closure |
| Rubbish Run | PBR-060-098COL | Fulton | SW- Collection | Operating |
| Ryland Homes Inert Landfill | PBR-060-049IL | Fulton | SW- Inert Landfill | Closed |
| Soful, LLC Transfer Station | PBR-060-223TS | Fulton | SW- Transfer Station | Operating |
| Sonoco Products Co | | Fulton | SW- Private Industrial Landfill | |
| Southern Ems | PBR-060-214COL | Fulton | SW- Collection | Operating |
| Southern States - Bolton Rd (P-RM) | 060-076P(INC) | Fulton | SW- Material Recovery Facility | Closed/PCC |
| Southern States - Bolton Rd (SL) | 060-010D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Sovereign Board & Production Services | PBR-060-270COL | Fulton | SW- Collection | Operating |
| Sun Medical Technologies At Piedmont Hospital | PBR-060-019OSTT | Fulton | SW- Other-PBR | Operating |
| Superior Waste Services, LLC | PBR-060-226COL | Fulton | SW- Collection | Operating |
| Sweeping Corporation Of America, Inc. | PBR-060-025COL | Fulton | SW- Collection | Operating |
| Tall Pines Solid Waste Transfer Station | PBR-060-222TS | Fulton | SW- Transfer Station | Operating |
| Tall Pines Solid Waste Transfer Station | PBR-060-222TS | Fulton | SW- Transfer Station | Operating |
| Target Medical Waste Service, LLC | PBR-060-055COL | Fulton | SW- Collection | Operating |
| The Westview Cemetery, Inc. N. Lake Palmyra Inert LF | PBR-060-002IL | Fulton | SW- Inert Landfill | Operating |
| Truly Living Well Center For Natural Urban Agriculture | PBR-060-267COL | Fulton | SW- Collection | Operating |
| Truly Living Well Center For Natural Urban Agriculture | PBR-060-271COMP | Fulton | SW- Other-PBR | Operating |
| United Waste - Westview Ph 2 (SL) | 060-062D(SL) | Fulton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| United Waste Service | PBR-060-209COL | Fulton | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|------------------------|----------|--|---------------------|
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| United Waste Services, Inc. / City Of Roswell Transfer Station | PBR-060-118TS | Fulton | SW- Transfer Station | Operating |
| Waste Management - Bolton Road Landfill | PBR-060-107IL | Fulton | SW- Inert Landfill | In-Closure |
| Waste Management - Gateway Transfer Station | 060-091P(MRF) | Fulton | SW- Material Recovery Facility | Operating |
| Waste Recovery, Inc. | PBR-060-004COL | Fulton | SW- Collection | Operating |
| Welcome All Transfer Station | PBR-060-216TS | Fulton | SW- Transfer Station | Operating |
| Welcome All Transfer Station | 060-090P(MRF) | Fulton | SW- Material Recovery Facility | Operating |
| Wheat Street Garden | PBR-060-268COMP | Fulton | SW- Other-PBR | Operating |
| Willow Oak Landfill | 060-089D(C&D) | Fulton | SW- Construction & Demolition Landfill | Operating |
| Windward Properties Inert Landfill | PBR-060-009IL | Fulton | SW- Inert Landfill | Closed |
| Appalachee Farms, L.L.C., By Brooksland, Inc. | PBR-067-690OSP | Gwinnett | SW- Other-PBR | Operating |
| Astin-Russell Landscaping Langford Drive Inert LF | PBR-067-005IL | Gwinnett | SW- Inert Landfill | Operating |
| B J Landfill/Waste Mgmt | 067-027D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Barber Homes, Inc. Inert Landfill | PBR-067-250IL | Gwinnett | SW- Inert Landfill | Closed |
| Bd - Lee Labs | PBR-067-814OSTT | Gwinnett | SW- Other-PBR | Operating |
| Benny Grisham | PBR-067-651IL | Gwinnett | SW- Inert Landfill | Operating |
| Bill Browne Inert Landfill | PBR-067-044IL | Gwinnett | SW- Inert Landfill | Closed |
| Bill Browne Inert Landfill | PBR-067-046IL | Gwinnett | SW- Inert Landfill | Closed |
| Bill Browne Inert Landfill | PBR-067-051IL | Gwinnett | SW- Inert Landfill | Closed |
| Billy R. Seabolt Sycamore Road Inert LF | PBR-067-008IL | Gwinnett | SW- Inert Landfill | Operating |
| Blusky Restoration Contractors, LLC | PBR-067-808TS | Gwinnett | SW- Transfer Station | Operating |
| Blusky Restoraton Contractors, LLC | PBR-067-808COL- BIO | Gwinnett | SW- Collection | Operating |
| Buford - Mcever Rd Ph 1 (SL) | 067-008D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|-----------------|----------|--|---------------------|
| Buford - Peachtree Ind Blvd Ph 2 (SL) | 067-030D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Buford - Tuggle Greer Rd (L) | 067-019D(L) | Gwinnett | SW- Construction & Demolition Landfill | Closed/PCC |
| Button Gwinnett - Arnold Rd Ph 1 (SL) | 067-021D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Button Gwinnett Landfill | 067-037D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| C.A. Mueller Developers, Inc. Inert Landfill | PBR-067-077IL | Gwinnett | SW- Inert Landfill | Operating |
| CDC Lawrenceville Campus EPA Id # Gar000016709 | PBR-067-774OSTT | Gwinnett | SW- Other-PBR | Operating |
| CDC Lawrenceville Campus, EPA Id # Gar00001670914679 | PBR-067-773OSTT | Gwinnett | SW- Other-PBR | Operating |
| Charles E. Jones-Inert LF | PBR-067-006IL | Gwinnett | SW- Inert Landfill | Operating |
| Chattahoochee Run S/D, Lot 167c | PBR-067-538IL | Gwinnett | SW- Inert Landfill | Closed |
| Chattahoochee Run S/D, Lot 189c | PBR-067-539IL | Gwinnett | SW- Inert Landfill | Closed |
| Chattahoochee Run S/D, Lot 21a | PBR-067-533IL | Gwinnett | SW- Inert Landfill | Closed |
| Chattahoochee Run S/D, Lot 23a | PBR-067-534IL | Gwinnett | SW- Inert Landfill | Closed |
| Chattahoochee Run S/D, Lot 44a | PBR-067-535IL | Gwinnett | SW- Inert Landfill | Closed |
| Chattahoochee Run S/D, Lot 92b | PBR-067-536IL | Gwinnett | SW- Inert Landfill | Closed |
| College Hunks Hauling Junk & Moving | PBR-067-810COL | Gwinnett | SW- Collection | Operating |
| Countryside Investments, Inc. Inert Landfill | PBR-067-234IL | Gwinnett | SW- Inert Landfill | Operating |
| D. Gurley Homes, Inc. Inert Landfill | PBR-067-165IL | Gwinnett | SW- Inert Landfill | Operating |
| David Boland Inert Landfill | PBR-067-205IL | Gwinnett | SW- Inert Landfill | Operating |
| Davis Croy Inert Landfill | PBR-067-135IL | Gwinnett | SW- Inert Landfill | Operating |
| Detail Home Inc. | PBR-067-167IL | Gwinnett | SW- Inert Landfill | Operating |
| Detail Home Inc. Inert Landfill | PBR-067-169IL | Gwinnett | SW- Inert Landfill | Operating |
| Disposal Solutions L.L.C. | 067-038P | Gwinnett | SW-Liquid Solidification Facility | Operating |
| Diversified Shelter Group | PBR-067-489OSP | Gwinnett | SW- Other-PBR | Operating |
| Doug Hinton Doug Hinton | PBR-067-162IL | Gwinnett | SW- Inert Landfill | Operating |
| E.R. Snell Contractor, Inc. | PBR-067-040IL | Gwinnett | SW- Inert Landfill | Operating |
| Eastside Hospital-Isolyser | PBR-067-262OSP | Gwinnett | SW- Other-PBR | Operating |
| Emory Eastside Medical Center | PBR-067-001OSTT | Gwinnett | SW- Other-PBR | Closed |
| Finlon Grading | PBR-067-023IL | Gwinnett | SW- Inert Landfill | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|------------------------|----------|--|---------------------|
| Frank Chandler Inert Landfill | PBR-067-178IL | Gwinnett | SW- Inert Landfill | Operating |
| Frank Tate Inert Landfill | PBR-067-206IL | Gwinnett | SW- Inert Landfill | Operating |
| Gables Residential | PBR-067-759OSP | Gwinnett | SW- Other-PBR | Operating |
| Gables Residential | PBR-067-757IL | Gwinnett | SW- Inert Landfill | Operating |
| GDOT- Old Norcross Road Property | PBR-067-756IL | Gwinnett | SW- Inert Landfill | Operating |
| Georgia Moulding Corp. | PBR-067-014IL | Gwinnett | SW- Inert Landfill | Closed |
| Gwinnett Co - Yellow River Water Reclamation Facility Inert Landfills | PBR-067-801IL | Gwinnett | SW- Inert Landfill | Closed |
| Gwinnett Co - Yellow River Water Reclamation Facility Inert Landfills | PBR-067-801IL | Gwinnett | SW- Inert Landfill | Closed |
| Gwinnett Co- Beaver Ruin Water Reclamation Facility | PBR-067-802IL | Gwinnett | SW- Inert Landfill | Closed |
| Gwinnett Co. Board Of Education Inert Landfill | PBR-067-269IL | Gwinnett | SW- Inert Landfill | In-Closure |
| Gwinnett Co. Board Of Education Inert Landfill | PBR-067-268IL | Gwinnett | SW- Inert Landfill | In-Closure |
| Gwinnett County Construction | 067-024D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Gwinnett Hospital System-Isolyser OSP | PBR-067-261OSP | Gwinnett | SW- Other-PBR | Operating |
| Gwinnett Medical Center | PBR-067-002OSTT | Gwinnett | SW- Other-PBR | Operating |
| Gwinnettt Co - Firestar Inc Biomedical Waste Transfer Station | PBR-067-805TS | Gwinnett | SW- Transfer Station | Operating |
| Heavenly Paws Pet Aquamation, Inc. | PBR-067-809COL- BIO | Gwinnett | SW- Collection | Operating |
| Hedgewood Properties | PBR-067-633IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-634IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-638IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-637IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-663IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-661IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties | PBR-067-636IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-408IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-462IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-455IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-411IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-393IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-409IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-397IL | Gwinnett | SW- Inert Landfill | Closed |
| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|---------------|----------|--------------------|---------------------|
| Hedgewood Properties Inert Landfill | PBR-067-399IL | Gwinnett | SW- Inert Landfill | Closed |
| Hedgewood Properties Inert Landfill | PBR-067-412IL | Gwinnett | SW- Inert Landfill | Closed |
| Helen Spanhous Inert Landfill | PBR-067-430IL | Gwinnett | SW- Inert Landfill | Operating |
| Highland Lake Partners, L.L.C. | PBR-067-690IL | Gwinnett | SW- Inert Landfill | Operating |
| Highland Lake Partners, L.L.C. | PBR-067-684IL | Gwinnett | SW- Inert Landfill | Operating |
| Howard Grading & Landscaping Lk. | PBR-067-009IL | Gwinnett | SW- Inert Landfill | Operating |
| Jack Hall Builders, IncInert Landfill | PBR-067-020IL | Gwinnett | SW- Inert Landfill | Closed |
| Jackson Farms Assoc. LP Inert Landfill | PBR-067-133IL | Gwinnett | SW- Inert Landfill | Operating |
| Jay Bullock - Builder, Inc. | PBR-067-481IL | Gwinnett | SW- Inert Landfill | Operating |
| JDB Investors, Inc. Inert Landfill | PBR-067-024IL | Gwinnett | SW- Inert Landfill | Operating |
| Jerome Parker Inert Landfill | PBR-067-278IL | Gwinnett | SW- Inert Landfill | Operating |
| John Fleitz | PBR-067-491IL | Gwinnett | SW- Inert Landfill | Operating |
| John Weiland Homes, Inc. Inert Landfill Edgewater S/D, Lot 23I, Hidden Wood Lane | PBR-067-139IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Edgewater S/D, Lot 10n, 455 Silverthorne Point | PBR-067-128IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-067-179IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-067-163IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-067-233IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-067-181IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill 2570 Lockemeade Way - Edgewater S/D | PBR-067-098IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Edgewater S/D, 405 Silverthorne Point Lot 6n | PBR-067-149IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Edgewater S/D, 415 Silver Thorne Point | PBR-067-143IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Edgewater S/D, 492 Forrest Gate Circle Lot 16l | PBR-067-150IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Edgewater SD Lot 10n | PBR-067-111IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Edgewater SD Lot 28k | PBR-067-132IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill Lot 6q. 2555 Lockmeade Way, Edgewater S/D | PBR-067-081IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfills Edgewater S/D-Lot 29k, 570 Woodbrook Way | PBR-067-112IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfills Edgewater S/D-Lot 9n, 435 Silver Thorne Point | PBR-067-119IL | Gwinnett | SW- Inert Landfill | Closed |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|----------|--|---------------------|
| John Wieland Homes, Inc. Inert Landfill | PBR-067-198IL | Gwinnett | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-067-185IL | Gwinnett | SW- Inert Landfill | Closed |
| JSW Construction, Inc. Inert Landfill | PBR-067-142IL | Gwinnett | SW- Inert Landfill | Operating |
| Junk Patrol Hauling And Waste Removal, LLC | PBR-067-813COL | Gwinnett | SW- Collection | Operating |
| K R Y Investments, Inc. | PBR-067-719IL | Gwinnett | SW- Inert Landfill | Operating |
| Lasalle Company-Inert LF | PBR-067-007IL | Gwinnett | SW- Inert Landfill | Operating |
| Lawrenceville Transfer Center | PBR-067-780TS | Gwinnett | SW- Transfer Station | Operating |
| Meadow Trace, Inc. | PBR-067-691IL | Gwinnett | SW- Inert Landfill | Operating |
| Metro Green, LLC | 067-039P(MRF) | Gwinnett | SW- Material Recovery Facility | Operating |
| Michael L. Yearty Inert Landfill | PBR-067-277IL | Gwinnett | SW- Inert Landfill | Operating |
| Mike Young Designs Inert Landfill | PBR-067-279IL | Gwinnett | SW- Inert Landfill | Operating |
| Minear Group, Inc. Inert Landfill | PBR-067-144IL | Gwinnett | SW- Inert Landfill | Operating |
| Morgan Inert Landfill | PBR-067-004IL | Gwinnett | SW- Inert Landfill | Operating |
| Nolen Carter | PBR-067-483IL | Gwinnett | SW- Inert Landfill | Operating |
| Phillips State Prison | PBR-067-753OSP | Gwinnett | SW- Other-PBR | Operating |
| Randy F. Riser Inert Landfill | PBR-067-230IL | Gwinnett | SW- Inert Landfill | Operating |
| Rest Haven Transfer Station | PBR-067-059TS | Gwinnett | SW- Transfer Station | Operating |
| Richland Creek Road Sanitary Landfill | 067-032D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Operating |
| River Of Life Family Church | PBR-067-762IL | Gwinnett | SW- Inert Landfill | Operating |
| Robert D. Matthews Inert Landfill | PBR-067-354IL | Gwinnett | SW- Inert Landfill | Closed |
| Rts Lawrenceville Transfer Station | PBR-067-784TS | Gwinnett | SW- Transfer Station | Operating |
| Russ Watson Builders, Inc. Inert Landfill | PBR-067-076IL | Gwinnett | SW- Inert Landfill | Operating |
| Ryland Homes Inert Landfill | PBR-067-312IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-310IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-421IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-414IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-314IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-413IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-313IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-419IL | Gwinnett | SW- Inert Landfill | Closed |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|----------|--|---------------------|
| Ryland Homes Inert Landfill | PBR-067-418IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-415IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-424IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-229IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-311IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-315IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-417IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-422IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-425IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-423IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-420IL | Gwinnett | SW- Inert Landfill | Closed |
| Ryland Homes Inert Landfill | PBR-067-416IL | Gwinnett | SW- Inert Landfill | Closed |
| S & W Inert Landfill, Inc. | PBR-067-761IL | Gwinnett | SW- Inert Landfill | Operating |
| S & W Inert Landfill, Inc. | PBR-067-761IL | Gwinnett | SW- Inert Landfill | Operating |
| Sanifill Of Georgia, Inc. | PBR-067-593TS | Gwinnett | SW- Transfer Station | Operating |
| Simpro Homes Inc | PBR-067-664IL | Gwinnett | SW- Inert Landfill | Operating |
| SSM Enterprises, Inc. | PBR-067-032IL | Gwinnett | SW- Inert Landfill | Operating |
| Sugar Hill - Appling Rd Ph 1 (SL) | 067-016D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Travis Pruitt | PBR-067-748IL | Gwinnett | SW- Inert Landfill | Operating |
| Vulcan Materials Company Bioremediation Of Pcs | PBR-067-101OSP | Gwinnett | SW- Other-PBR | Operating |
| W J Enterprises, Inc | PBR-067-011IL | Gwinnett | SW- Inert Landfill | Operating |
| W.J. Enterprises, Inc. | PBR-067-042IL | Gwinnett | SW- Inert Landfill | Operating |
| Waste Tire Management LP On Site Processing | PBR-067-264OSP | Gwinnett | SW- Other-PBR | Operating |
| Waterford Homes Inert Landfill | PBR-067-242IL | Gwinnett | SW- Inert Landfill | Operating |
| William R. Hess | PBR-067-482IL | Gwinnett | SW- Inert Landfill | Operating |
| WJ Enterprises, IncLot 88 & 89 Inert LF | PBR-067-015IL | Gwinnett | SW- Inert Landfill | Operating |
| WMI - B J Landfill Expansion (SL) | 067-025D(SL) | Gwinnett | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Adm Recycling And Transfer Services | PBR-075-52TS | Henry | SW- Transfer Station | Operating |
| Adm Rolloff, LLC | PBR-075-55TS | Henry | SW- Transfer Station | Operating |
| Adm Sanitation Collection | PBR-075-11COL | Henry | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|--------|--|---------------------|
| Al Brannon, S.R. Inert Waste Disposal | PBR-075-26IL | Henry | SW- Inert Landfill | In-Closure |
| Alexander A. Anderson Inert Landfill | PBR-075-23IL | Henry | SW- Inert Landfill | Operating |
| American Bi-Products Collection (Company Name Change To Waste Co | PBR-075-12COL | Henry | SW- Collection | Operating |
| American Sanitation | PBR-075-32COL | Henry | SW- Collection | Operating |
| American Sanitation, Inc | PBR-075-16COL | Henry | SW- Collection | Operating |
| Atlanta Motor Speedway | PBR-075-16IL | Henry | SW- Inert Landfill | In-Closure |
| B&B Disposal & Company | PBR-075-35COL | Henry | SW- Collection | Operating |
| Bio-Medical Waste Service | PBR-075-08COL | Henry | SW- Collection | Operating |
| Carter Disposal | PBR-075-30COL | Henry | SW- Collection | Operating |
| CLM Sanitation | PBR-075-04COL | Henry | SW- Collection | Operating |
| CSR-Hydro Conduit Corporation Inert Landfill | PBR-075-21IL | Henry | SW- Inert Landfill | Operating |
| Curbside Sanitation | PBR-075-27COL | Henry | SW- Collection | Operating |
| Debbie Kelley Collection | PBR-075-22COL | Henry | SW- Collection | Operating |
| Deborah Owens Plat Collection Service | PBR-075-15COL | Henry | SW- Collection | Operating |
| Deltawash Inc. | PBR-075-09COL | Henry | SW- Collection | Operating |
| Deltawash Inc. | PBR-075-06COL | Henry | SW- Collection | Operating |
| Dispose-All, Inc | PBR-075-23COL | Henry | SW- Collection | Operating |
| E-Z Waste Disposal | PBR-075-34COL | Henry | SW- Collection | Operating |
| Ghi Waste Removal Service | PBR-075-31COL | Henry | SW- Collection | Operating |
| Henry Co - W Asbury Rd Ph 1 (SL) | 075-015D(SL) | Henry | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Henry Co - W Asbury Rd Ph 2 (SL) | 075-021D(SL) | Henry | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Henry Co - Windy Hill Road Landfill | 075-011D(SL) | Henry | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Henry Co- Adm Rolloff LLC (2) | PBR-075-50COL | Henry | SW- Collection | Operating |
| Henry Co- Adm Rolloff, LLC (1) | PBR-075-49COL | Henry | SW- Collection | Operating |
| Henry County Municipal Solid Waste Landfill | PBR-075-39OSP | Henry | SW- Other-PBR | Operating |
| Henry General Hospital | PBR-075-01OSTT | Henry | SW- Other-PBR | Operating |
| Jass Dba Coverall | PBR-075-37COL | Henry | SW- Collection | Operating |
| Landfills Of Georgia, Inc | PBR-075-24TS | Henry | SW- Transfer Station | Operating |
| Martin Sanitation Collection | PBR-075-13COL | Henry | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|------------------|---------|--|---------------------|
| Morgan Auto Parts, Inc. | PBR-075-05COL | Henry | SW- Collection | Operating |
| Morgan Auto Parts, Inc | PBR-075-07COL | Henry | SW- Collection | Operating |
| Paul Mitchell | PBR-075-14COL | Henry | SW- Collection | Operating |
| Peach State/Henry Co. Recycling Center | 075-024P(INC) | Henry | SW- Thermal Treatment | Closed/PCC |
| Red Roll Off, LLC | PBR-075-57COL | Henry | SW- Collection | Operating |
| Rover, Inc. Collection Operation | PBR-075-33COL | Henry | SW- Collection | Operating |
| S&B Rolloff, Inc | PBR-075-36COL;TS | Henry | SW- Collection | Operating |
| S.P. Petroleum Transporters, Inc. Inert LF | PBR-075-03IL | Henry | SW- Inert Landfill | Operating |
| Tom Norsworthy Trucking | PBR-075-29COL | Henry | SW- Collection | Operating |
| Twin Landscaping & Grading Lombard Road Inert LF | PBR-075-02IL | Henry | SW- Inert Landfill | Operating |
| Advanced Disposal Services - Kathleen Collection | PBR-076-30COL | Houston | SW- Collection | Operating |
| Alfred I. Willis Inert Landfill | PBR-076-16IL | Houston | SW- Inert Landfill | Closed |
| Ball Street Extension Inert Waste Transfer Station | PBR-076-33TS | Houston | SW- Transfer Station | Operating |
| Cemex {Medusa Cement Company} Inert Landfill | PBR-076-09IL | Houston | SW- Inert Landfill | Closed |
| Cemex Clinchfield Landfill | | Houston | SW- Private Industrial Landfill | |
| Central Georgia Waste Services, Inc. Collection | PBR-076-13COL | Houston | SW- Collection | Operating |
| Central Georgia Waste Services, Inc. Collection | PBR-076-12COL | Houston | SW- Collection | Operating |
| Charles Cheek | PBR-076-04COL | Houston | SW- Collection | Operating |
| City Of Perry Collection | PBR-076-14COL | Houston | SW- Collection | Operating |
| City Of Perry Inert Landfill | PBR-076-15IL | Houston | SW- Inert Landfill | Closed |
| Davis Excavating And Grading Old Hawkinsville Rd. Inert LF | PBR-076-03IL | Houston | SW- Inert Landfill | Closed |
| Department Of The Air Force-Robins AFB On Site Process | PBR-076-10OSP | Houston | SW- Other-PBR | Operating |
| Elberta Rd LLC Dirt Pit #2 Inert Landfill | PBR-076-29IL | Houston | SW- Inert Landfill | Operating |
| Elberta Road Inert Landfill | PBR-076-28IL | Houston | SW- Inert Landfill | Closed |
| Hidden Creek, Inc. | PBR-076-18IL | Houston | SW- Inert Landfill | Closed |
| Houston Co - Old Perry Rd Ph 1 (SL) | 076-005D(SL) | Houston | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Houston Co - Sr247 Klondike C/D Landfill | 076-024D(C&D) | Houston | SW- Construction & Demolition Landfill | Operating |
| Houston County Board Of Education | PBR-076-31COL | Houston | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|---------------|------------|--|---------------------|
| Houston County Fair Association | PBR-076-24IL | Houston | SW- Inert Landfill | Closed |
| Jerry C. Carpenter Dba Carpenter Const. Inert Landfill | PBR-076-19IL | Houston | SW- Inert Landfill | Operating |
| Jerry C. Carpenter Dba Carpenter Const. Inert Landfill | PBR-076-20IL | Houston | SW- Inert Landfill | Operating |
| Martin Construction Inert Landfill | PBR-076-07IL | Houston | SW- Inert Landfill | Operating |
| M-Cubed, Inc | PBR-076-05COL | Houston | SW- Collection | Operating |
| Midland Maintenance, IncHouston Co. Inert Landfill | PBR-076-01COL | Houston | SW- Collection | Operating |
| Peach State Sanitation Inert Landfill | PBR-076-08IL | Houston | SW- Inert Landfill | Closed |
| Perry - Chapel Rd/Ford Creek (L) | 076-022D(L) | Houston | SW- Construction & Demolition Landfill | Closed/PCC |
| Perry - Chapel Rd/Ford Creek (L) | 076-023P(INC) | Houston | SW- Thermal Treatment | Closed/PCC |
| Perry - Elko Rd (SL) | 076-009D(SL) | Houston | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Raymond Stewart, Sr. Inert Landfill | PBR-076-11IL | Houston | SW- Inert Landfill | Closed/PCC |
| Reeves Construction Co. | PBR-076-06IL | Houston | SW- Inert Landfill | Operating |
| Robert M. Cooper Inert Landfill #1 | PBR-076-21IL | Houston | SW- Inert Landfill | Operating |
| Robert Richards Inert Landfill | PBR-076-17IL | Houston | SW- Inert Landfill | Operating |
| Robins Air Force Base | PBR-076-22IL | Houston | SW- Inert Landfill | Closed |
| Unique Environmental | PBR-076-34COL | Houston | SW- Collection | Operating |
| Warner Robins Transfer Station | PBR-076-25TS | Houston | SW- Transfer Station | Operating |
| Wynn Place Extension | PBR-076-23IL | Houston | SW- Inert Landfill | Operating |
| Attaway Waste Services | PBR-079-02COL | Jasper | SW- Collection | Operating |
| Georgia Pacific Wood Products, Monticello | | Jasper | SW- Private Industrial Landfill | |
| Jasper Co | PBR-079-01IL | Jasper | SW- Inert Landfill | Operating |
| Jasper Co - SR 212 Monticello (SL) | 079-004D(SL) | Jasper | SW- Construction & Demolition Landfill | In-Closure |
| Jasper Co Landfill | PBR-079-03IL | Jasper | SW- Inert Landfill | Operating |
| Jasper County Landfill | 079-007D(C&D) | Jasper | SW- Construction & Demolition Landfill | Operating |
| Roy Kelly Landfill (LI) | | Jasper | SW- Private Industrial Landfill | |
| Worley - CR 151 (LI) | | Jasper | SW- Private Industrial Landfill | |
| Bank Of Hazlehurst Inert Landfill | PBR-080-02IL | Jeff Davis | SW- Inert Landfill | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|------------|--|---------------------|
| City Of Hazelhurst | PBR-080-01COL | Jeff Davis | SW- Collection | Operating |
| Jeff Davis Co - Cr 20 (SL) | 080-005D(SL) | Jeff Davis | SW- Construction & Demolition Landfill | Closed/PCC |
| Jeff Davis Co- Consolidated Governments Transfer Station | PBR-080-04TS | Jeff Davis | SW- Transfer Station | Operating |
| Jeff Davis Co- Consolidated Governments Transfer Station | PBR-080-04TS | Jeff Davis | SW- Transfer Station | Operating |
| Thompson Hardwoods, Inc. | PBR-080-03IL | Jeff Davis | SW- Inert Landfill | Operating |
| Allen C. Loyld, Inc. | PBR-084-05IL | Jones | SW- Inert Landfill | Operating |
| Andrews Paving Company | PBR-084-02IL | Jones | SW- Inert Landfill | Closed |
| Bill (William H.) Cecil Inert Landfill | PBR-085-08IL | Jones | SW- Inert Landfill | Operating |
| Gibson Garbage Services | PBR-084-06COL | Jones | SW- Collection | Operating |
| Jones Co - Cumslo Rd Ph 2 (SL) | 084-006D(SL) | Jones | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Jones Co - Cumslo Rd, Cr S1079, Gray | 084-002D(SL) | Jones | SW- Municipal Solid Waste Landfill | Archived |
| Jones Co - Honeycutt Inert Landfill | PBR-084-01IL | Jones | SW- Inert Landfill | Closed |
| K7e's Trash Service | PBR-084-07COL | Jones | SW- Collection | Operating |
| Southern Aggregates Company | PBR-084-03IL | Jones | SW- Inert Landfill | Operating |
| Southern Aggregates Company | PBR-084-04COL | Jones | SW- Collection | Operating |
| Bankston Roll-Off | PBR-085-06COL | Lamar | SW- Collection | Operating |
| Barnesville - Goggins Rd (L) | 085-005D(L) | Lamar | SW- Construction & Demolition Landfill | Archived |
| Barnesville - Goggins Rd (L) | 085-006D(SL) | Lamar | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Buice Inert Landfill | PBR-085-01IL | Lamar | SW- Inert Landfill | Operating |
| City Of Barnesville Inert Landfill | PBR-085-04IL | Lamar | SW- Inert Landfill | Closed |
| Greenco Environmental, LLC | 085-008P(CO) | Lamar | SW- Composting | Released |
| High Point Development | PBR-085-05COL | Lamar | SW- Collection | Operating |
| Lamar Co - Grove St Ext (Old Milner Rd) (SL) | 085-004D(SL) | Lamar | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Lamar County Regional Solid Waste Authority | 085-007D(MSWL) | Lamar | SW- Municipal Solid Waste Landfill | Operating |
| Silver Dollar Rd Inert Landfill | PBR-085-02IL | Lamar | SW- Inert Landfill | Operating |
| City Of East Dublin Holmes Road Inert LF | PBR-087-02IL | Laurens | SW- Inert Landfill | Closed |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|---------|--|---------------------|
| Dublin Construction Co. Inert Land | PBR-087-03IL | Laurens | SW- Inert Landfill | Closed |
| Dublin Motels Inert Landfill | PBR-087-09IL | Laurens | SW- Inert Landfill | Closed |
| East Dublin - Nathaniel Dr Rows 1&2 (SL) | 087-009D(SL) | Laurens | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Evans Disposal Service, Inc. | PBR-087-10COL | Laurens | SW- Collection | Operating |
| Jackie Rawls Inert Landfill | PBR-087-12IL | Laurens | SW- Inert Landfill | Closed |
| Laurens Co - Bethsaida Church Rd Inert Landfill | PBR-087-04IL | Laurens | SW- Inert Landfill | Closed |
| Laurens Co- Ryland Environmental, Inc | PBR-087-14COL | Laurens | SW- Collection | Operating |
| Laurens County | 087-008D(SL) | Laurens | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Laurens County Inert Landfill | PBR-087-06IL | Laurens | SW- Inert Landfill | Operating |
| Laurens County Old Macon Rd. Landfill | 087-015D(MSWL) | Laurens | SW- Municipal Solid Waste Landfill | Operating |
| Mclendon Enterrprises, Inc. Cr328 Inert LF | PBR-087-01IL | Laurens | SW- Inert Landfill | Closed |
| Melvin Hester Collection Operation | PBR-087-11COL | Laurens | SW- Collection | Operating |
| Paul R. Hamrick Inert Landfill | PBR-087-07IL | Laurens | SW- Inert Landfill | Closed |
| Se Paper Mfg-Shad Crk Rd Const 2 (LI) | | Laurens | SW- Private Industrial Landfill | |
| SKS Enterprises, Inc. Collection Operation | PBR-087-05COL | Laurens | SW- Collection | Operating |
| Timothy P. & Leslie L. Lentile, Property | PBR-087-08IL | Laurens | SW- Inert Landfill | Closed |
| Westrock Southeast - Shad Crk Rd Indl Ph #1 (LI) | | Laurens | SW- Private Industrial Landfill | |
| Westrock Southeast, LLC Papermill Road Private Industry Solid Waste Disposal Facility | | Laurens | SW- Private Industrial Landfill | |
| City Of Ideal Collection | PBR-094-O2COL | Macon | SW- Collection | Operating |
| City Of Montezuma Inert Landfill | PBR-094-08IL | Macon | SW- Inert Landfill | Closed |
| Flint River Hospital | PBR-094-01OSTT | Macon | SW- Other-PBR | Closed |
| International Paper - Flint River Mill | | Macon | SW- Private Industrial Landfill | |
| Macon Co - SR 49 N #3 (SL) | 094-005D(SL) | Macon | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Macon Co Middle Ga SWMA Regional MSWL | 094-009D(MSWL) | Macon | SW- Construction & Demolition Landfill | Operating |
| Walters Auto Recycling | PBR-094-08COL | Macon | SW- Collection | Operating |
| ABC Disposal Inc. | PBR-102-022COL | Monroe | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------|--------|--|---------------------|
| Alfred A. Abercrombie Route 1 Inert LF | PBR-102-04IL | Monroe | SW- Inert Landfill | Operating |
| C. J. Upright - Personal Property | PBR-102-18IL | Monroe | SW- Inert Landfill | Operating |
| City Forsyth Waste Collection Operation | PBR-102-026COL | Monroe | SW- Collection | Operating |
| Cutting Edge Environmental, LLC | PBR-102-030COL | Monroe | SW- Collection | Operating |
| Eco Friendly Waste Management | PBR-102-15COL | Monroe | SW- Collection | Operating |
| Forsyth, Old Brent Rd, Ph 1 & 2 | 102-002D(SL) | Monroe | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Ga Power - Plant Scherer Ph 3 (LI) | | Monroe | SW- Private Industrial Landfill | |
| Georgia Power - Plant Scherer | | Monroe | SW- Private Industrial Landfill | |
| Georgia Power Company | | Monroe | SW- Private Industrial Landfill | |
| John Pitts Inert Landfill | PBR-102-10IL | Monroe | SW- Inert Landfill | Closed |
| Mccausland's Inert Landfill | PBR-102-16IL | Monroe | SW- Inert Landfill | Operating |
| Monroe Co - Strickland Loop Rd | 102-008D(SL) | Monroe | SW- Municipal Solid Waste Landfill | Operating |
| Monroe Co- Strickland Loop Road MSW Inert Waste Disposal Area | PBR-102-24IL | Monroe | SW- Inert Landfill | Operating |
| Monroe County Board Of Commissioners | PBR-102-05COL | Monroe | SW- Collection | Operating |
| Monroe County Hospital | PBR-102-01OSTT | Monroe | SW- Other-PBR | Closed |
| Monroe County Road Department Inert Landfill | PBR-102-11IL | Monroe | SW- Inert Landfill | Closed |
| Monroe County Road Department Inert Landfill | PBR-102-08IL | Monroe | SW- Inert Landfill | Closed |
| Monroe County Road Department Inert Landfill | PBR-102-09IL | Monroe | SW- Inert Landfill | Closed |
| Rivoli Road | PBR-102-17IL | Monroe | SW- Inert Landfill | Closed |
| The Bibb Company-Plant Camellia Sr87 Inert LF | PBR-102-03IL | Monroe | SW- Inert Landfill | Closed |
| Whiting - SR 18 (SI) | | Monroe | SW- Private Industrial Landfill | |
| Willingham Farm Washout | PBR-102-19IL | Monroe | SW- Inert Landfill | Operating |
| A Class Containers Inc Dba A Class Sanitation | PBR-107-19COL | Newton | SW- Collection | Operating |
| Achundris | PBR-107-20COL | Newton | SW- Collection | Operating |
| Caleb Waste, Inc | PBR-107-05COL | Newton | SW- Collection | Operating |
| Dean Smith | PBR-107-14COL | Newton | SW- Collection | Operating |
| Dixie Waste Systems, Inc. | PBR-107-10COL | Newton | SW- Collection | Operating |
| Farmer Oil, Inc. | PBR-107-07OSP | Newton | SW- Other-PBR | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|-----------------------|---------|--|---------------------|
| Gilbert Southern Corp. | PBR-107-11IL | Newton | SW- Inert Landfill | Operating |
| Harris Transfer Station | PBR-107-17TS | Newton | SW- Transfer Station | Operating |
| J. Wayne Maddox Inert Landfill | PBR-107-06IL | Newton | SW- Inert Landfill | Operating |
| Jimmy Harris Trucking Inc | PBR-107-18COL | Newton | SW- Collection | Operating |
| Newton Co - Forest Tower/Lwr Rvr Rds (SL) | 107-015D(MSWL) | Newton | SW- Municipal Solid Waste Landfill | Operating |
| Newton Co - Forest Tower/Lwr Rvr Rds C&D Landfill | 107-013D(SL) | Newton | SW- Construction & Demolition Landfill | In-Closure |
| Newton Co - Lackey Rd Ph 3 (SL) | 107-011D(SL) | Newton | SW- Municipal Solid Waste Landfill | Archived |
| Newton Medical Center | PBR-107-04OSTT | Newton | SW- Other-PBR | Closed |
| Porterdale - SR 81 (L) | 107-010D(L) | Newton | SW- Construction & Demolition Landfill | Closed/PCC |
| Ram Waste | PBR-107-12COL | Newton | SW- Collection | Operating |
| Robert I. Day Highway 162 Inert LF | PBR-107-01IL | Newton | SW- Inert Landfill | Operating |
| Ronnie Owens Highway 212. Inert LF | PBR-107-03IL | Newton | SW- Inert Landfill | Operating |
| Waste Disposal, Inc. | PBR-107-09COL | Newton | SW- Collection | Operating |
| City Of Fort Valley Inert Landfill | PBR-111-04IL | Peach | SW- Inert Landfill | In-Closure |
| City Of Fort Valley Public Works | PBR-111- 012COL;TS | Peach | SW- Transfer Station | Operating |
| Fort Valley Public Works Department | PBR-111-07COL | Peach | SW- Collection | Closed |
| Kens Land Field | PBR-111-09IL | Peach | SW- Inert Landfill | Closed/PCC |
| Medway Transport | PBR-111-03COL | Peach | SW- Collection | Operating |
| Peach Co - Housers Mill Rd (SL) | 111-004D(SL) | Peach | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Peach County Hospital | PBR-111-02OSTT | Peach | SW- Other-PBR | Operating |
| S&S Recycling, Inc. | PBR-111-06COL | Peach | SW- Collection | Operating |
| Thomas Jenkins Private Inert Landfill | PBR-111-11IL | Peach | SW- Inert Landfill | Operating |
| B. D. Coley Common Fill Site | PBR-116-04IL | Pulaski | SW- Inert Landfill | Closed |
| City Of Hawkinsville | PBR-116-03COL | Pulaski | SW- Collection | Operating |
| City Of Hawkinsville | PBR-116-02IL | Pulaski | SW- Inert Landfill | Closed |
| City Of Hawkinsville Inert Landfill | PBR-116-06IL | Pulaski | SW- Inert Landfill | Operating |
| Jackie B. Sapp-Sr126 Inert LF | PBR-116-01IL | Pulaski | SW- Inert Landfill | Closed |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------------|----------|--|---------------------|
| Pulaski Co - Us 129 Hawkinsville (SL) | 116-002D(SL) | Pulaski | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Taylor Health Care Network | PBR-116-05COL | Pulaski | SW- Collection | Operating |
| Thompson Hardwoods, Inc Inert Landfill | PBR-116-07IL | Pulaski | SW- Inert Landfill | Closed |
| Allied Recycling Inc, And DBA Covington Hwy Transfer Station | PBR-122-29 COL,TS | Rockdale | SW- Collection | Operating |
| BFI Pharmaceutical Services | PBR-122-04COL | Rockdale | SW- Collection | Operating |
| City Of Conyers | 122-016D(SL) | Rockdale | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Conyers Renewable Power, LLC Anaerobic Digester | 122-021P(AD) | Rockdale | SW- Composting | Construction |
| John Wieland Homes Inert Landfill | PBR-122-19IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes Inert Landfill | PBR-122-20IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes Inert Landfill | PBR-122-15IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. | PBR-122-07IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-122-11IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-122-06IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-122-26IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-122-12IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill | PBR-122-21IL | Rockdale | SW- Inert Landfill | Closed |
| John Wieland Homes, Inc. Inert Landfill L0t 24 Block C Brentwood S/D | PBR-122-05 IL | Rockdale | SW- Inert Landfill | Closed |
| Johnny Bruce Inert Landfill | PBR-122-23IL | Rockdale | SW- Inert Landfill | Operating |
| Jonny Brown Grading Chandler Road Inert LF | PBR-122-01IL | Rockdale | SW- Inert Landfill | Closed/PCC |
| Pratt Specialty Sheets | 122-020P(MRF) | Rockdale | SW- Material Recovery Facility | Operating |
| Rebecca Horton Inert Landfill | PBR-122-09IL | Rockdale | SW- Inert Landfill | Operating |
| Rockdale County Public Works Sr138 Inert LF | PBR-122-03IL | Rockdale | SW- Inert Landfill | Operating |
| Rockdale County Public Works Inert LF | PBR-122-02IL | Rockdale | SW- Inert Landfill | Operating |
| Southern Built Homes, Inc. Collection | PBR-122-20COL | Rockdale | SW- Collection | Operating |
| Superior Waste Systems, Dba Conyers Waste Systems | PBR-122-08COL | Rockdale | SW- Collection | Operating |
| Town And Country Truck | PBR-122-31IL | Rockdale | SW- Inert Landfill | Closed |
| Waste Tire Management On-Site Processing Facility | PBR-122-270SP | Rockdale | SW- Other-PBR | Operating |
| Arthur C. Krepps, III Teamon Road Inert LF | PBR-126-01IL | Spalding | SW- Inert Landfill | Operating |
| Cardinal Sanitation | PBR-126-18COL | Spalding | SW- Collection | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------|----------|--|---------------------|
| Charles E. Jester | PBR-126-10COL | Spalding | SW- Collection | Operating |
| City Of Griffin | PBR-126-08IL | Spalding | SW- Inert Landfill | Operating |
| City Of Griffin Inert Landfill | PBR-126-14IL | Spalding | SW- Inert Landfill | Closed |
| City Of Griffin Old Shoal Creek WWTP Inert Landfill | PBR-126-15IL | Spalding | SW- Inert Landfill | Operating |
| Esary - Dundee Mills (COI) | 114-008P(COI) | Spalding | SW- Composting | Closed/PCC |
| Griffin - Shoal Creek Rd (SL) | 126-003D(SL) | Spalding | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Herman Biles-S. Pine Hill Road Inert Landfill | PBR-126-04IL | Spalding | SW- Inert Landfill | Operating |
| JASON MATTHEW HARKER (Harker Tree Service) | PBR-126-17IL | Spalding | SW- Inert Landfill | Operating |
| K And L Sanitation Collection Operation | PBR-126-11COL | Spalding | SW- Collection | Operating |
| Lewis Inert Landfill | PBR-126-02IL | Spalding | SW- Inert Landfill | Operating |
| Peach State Disposal | PBR-126-16COL | Spalding | SW- Collection | Operating |
| Sacred Heart Rectory Inert Landfill | PBR-126-13IL | Spalding | SW- Inert Landfill | Operating |
| Shoal Creek R0ad Inert Landfill | PBR-126-06IL | Spalding | SW- Inert Landfill | Operating |
| Slade Rd (Inert) | PBR-126-03IL | Spalding | SW- Inert Landfill | Operating |
| Spalding Co - Griffin/Shoal Creek Rd Ph 2 | 126-009D(C&D) | Spalding | SW- Construction & Demolition Landfill | Closed/PCC |
| Spalding Co - Yamacraw Rd Ph 1 Tct A (SL) | 126-001D(SL) | Spalding | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Spalding Co -Griffin Shoal Creek Rd Ph 3 Construction/Demolition Landfill | 126-010D(C&D) | Spalding | SW- Construction & Demolition Landfill | Operating |
| Spalding County Bd. Of Commissioners Transfer Station | PBR-126-12TS | Spalding | SW- Transfer Station | Closed |
| Spalding Regional Hospital | PBR-126-09OSTT | Spalding | SW- Other-PBR | Closed |
| Amercord Inc | | Telfair | SW- Private Industrial Landfill | |
| Champion International Corp | | Telfair | SW- Private Industrial Landfill | |
| City Of Mcrae Inert Landfill | PBR-134-03IL | Telfair | SW- Inert Landfill | Closed |
| Rayonier PIL (F.K.A. Champion Intl #3) | | Telfair | SW- Private Industrial Landfill | |
| Telfair Co - S 2316 (SL) | 134-009D(SL) | Telfair | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Telfair County Hospital | PBR-134-01OSTT | Telfair | SW- Other-PBR | Closed |
| Telfair County Landfill | 134-015D(MSWL) | Telfair | SW- Municipal Solid Waste Landfill | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|---------------|---------|--|---------------------|
| TelfairState Prison OSP Composting | PBR-134-02OSP | Telfair | SW- Other-PBR | Operating |
| Billy And Diane Neal Inert Landfill | PBR-143-02IL | Twiggs | SW- Inert Landfill | Operating |
| Imerys Clay - Dry Branch (LI) | | Twiggs | SW- Private Industrial Landfill | |
| Imerys Clay - Jeffersonville - Allfarm Rd (LI) | | Twiggs | SW- Private Industrial Landfill | |
| Imerys Pigments & Additives | | Twiggs | SW- Private Industrial Landfill | |
| James Emory, Inc. | PBR-143-01IL | Twiggs | SW- Inert Landfill | Operating |
| Kamin (LI) | | Twiggs | SW- Private Industrial Landfill | |
| Price Disposal | PBR-143-04COL | Twiggs | SW- Collection | Operating |
| Riggins Mill Rd Inert Landfill | PBR-143-ADIL | Twiggs | SW- Inert Landfill | Closed |
| Twiggs Co - Old MacCallum Pond Rd Ph 1&2(SL) | 143-005D(SL) | Twiggs | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Wolf Creek Landfill, LLC | 143-008D(SL) | Twiggs | SW- Municipal Solid Waste Landfill | Operating |
| City Of Thomaston | PBR-145-01IL | Upson | SW- Inert Landfill | Closed |
| EJ Hauling | PBR-145-16COL | Upson | SW- Collection | Operating |
| Hill Construction Co., Inc. | PBR-145-131IL | Upson | SW- Inert Landfill | Closed |
| Kersey - Firetower Rd/Jeff David Rd (L) | 145-007D(L) | Upson | SW- Other- Processor/ Disposal | Abandoned |
| Robinson Paving Company | PBR-145-12IL | Upson | SW- Inert Landfill | Closed/PCC |
| Skelton Rd Landfill | PBR-145-AUIL | Upson | SW- Inert Landfill | Closed |
| Southern States Environmental Services, Inc. Inert LF | PBR-145-10IL | Upson | SW- Inert Landfill | Closed |
| Southern States Environmental Services, Inc. Collection | PBR-145-08COL | Upson | SW- Collection | Operating |
| Thomaston - Zorn St Ph 2 &3 (SL) | 145-005D(SL) | Upson | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Thomaston City Barn | PBR-145-17OSP | Upson | SW- Other-PBR | Operating |
| Thomaston Mills, Inc. Inert Landfill | PBR-145-06IL | Upson | SW- Inert Landfill | Operating |
| Thomaston Mills, Inc. Inert Landfill | PBR-145-07IL | Upson | SW- Inert Landfill | Operating |
| Thomaston Mills, Inc. Inert Landfill #3 | PBR-145-11IL | Upson | SW- Inert Landfill | Closed |
| Transwaste Services - Thomaston Transfer Station | PBR-145-09TS | Upson | SW- Transfer Station | Operating |
| Truitt And Pitts Logging Company | PBR-145-18OSP | Upson | SW- Other-PBR | Operating |
| Tucker's Foods | PBR-145-19OSP | Upson | SW- Other-PBR | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|----------------|--------|--|---------------------|
| Upson Co - Worthy Elementary School | PBR-145-14IL | Upson | SW- Inert Landfill | Closed |
| Upson Co-Po Biddy Rd Inert Landfill | PBR-145-05IL | Upson | SW- Inert Landfill | Closed |
| Upson Co-Po Biddy Rd Inert Landfill | PBR-145-04IL | Upson | SW- Inert Landfill | Closed |
| Upson County Public Works Department | PBR-145-15OSP | Upson | SW- Other-PBR | Operating |
| Upson Regional Medical Center | PBR-145-20COL | Upson | SW- Collection | Operating |
| 81 Inert & Disposal Inc. | PBR-147-14IL | Walton | SW- Inert Landfill | Operating |
| Adair Hauling | PBR-147-33COL | Walton | SW- Collection | Operating |
| Brent N. Venable | PBR-147-01IL | Walton | SW- Inert Landfill | Operating |
| Caruthers Mill C&D Landfill | 147-014D(C&D) | Walton | SW- Construction & Demolition Landfill | Operating |
| Chris Hudgins Collection | PBR-147-12COL | Walton | SW- Collection | Operating |
| City Of Loganville Municipal Solid Waste Transfer Station | PBR-147-55TS | Walton | SW- Transfer Station | Operating |
| City Of Loganville Municipal Solid Waste Transfer Station | PBR-147-55COL | Walton | SW- Collection | Operating |
| City Of Monroe Inert Landfill | PBR-147-24IL | Walton | SW- Inert Landfill | In-Closure |
| City Of Monroe Transfer Station | PBR-147-39TS | Walton | SW- Transfer Station | Operating |
| Cody Lewis Trucking Company | PBR-147-10COL | Walton | SW- Collection | Operating |
| David Bruce Collection | PBR-147-11COL | Walton | SW- Collection | Operating |
| Donald Allgood | PBR-147-02IL | Walton | SW- Inert Landfill | Closed |
| Donald Allgood-Ozoru Road Inert LF | PBR-147-07IL | Walton | SW- Inert Landfill | Closed |
| Doug Clack | PBR-147-28IL | Walton | SW- Inert Landfill | Operating |
| Gene A. Ross, Jr. Collection | PBR-147-19COL | Walton | SW- Collection | Operating |
| George Russell Collection | PBR-147-18COL | Walton | SW- Collection | Operating |
| Georgia Waste And Recycling Service Collection | PBR-147-17COL | Walton | SW- Collection | Operating |
| Henry Marchell Inert Landfill | PBR-147-15IL | Walton | SW- Inert Landfill | Operating |
| Highway 78 C&D Landfill | 147-012D(C&D) | Walton | SW- Construction & Demolition Landfill | Operating |
| Holder Inert Landfills (Triple H Enterprises) | PBR-147-37IL | Walton | SW- Inert Landfill | Operating |
| Holder's Logging Equipment | PBR-147-36COL | Walton | SW- Collection | Operating |
| Kent Rock Road Inert LF | PBR-147-05IL | Walton | SW- Inert Landfill | In-Closure |
| L. C. Chriswell Inert Landfill | PBR-147-25IL | Walton | SW- Inert Landfill | Operating |
| L.L.J. Williams Properties Inert Landfill | PBR-147-21IL | Walton | SW- Inert Landfill | Operating |
| Leggett & Platt, Inc. | PBR-147-27OSTT | Walton | SW- Other-PBR | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|---|----------------|---------|--|---------------------|
| Melba J. Lindsey Inert Landfill | PBR-147-23IL | Walton | SW- Inert Landfill | Operating |
| Morris Disposal Service | PBR-147-32COL | Walton | SW- Collection | Operating |
| Preston Road Inert (Holder Inert Waste Landfill - Good Hope) | PBR-147-35IL | Walton | SW- Inert Landfill | Operating |
| Randall T. Lark Hauling, Inc. Collection Operation | PBR-147-16COL | Walton | SW- Collection | Operating |
| Sims Landfill Dba Walton County Landfill | PBR-147-42IL | Walton | SW- Inert Landfill | Operating |
| Smith And Company Restoration, Inc. | PBR-147-56COL | Walton | SW- Collection | Operating |
| Southern Sanitation, Inc. | PBR-147-40COL | Walton | SW- Collection | Operating |
| Superior Waste Disposal, Inc. | PBR-147-34COL | Walton | SW- Collection | Operating |
| Tara Club Estates Inert Landfill | PBR-147-22IL | Walton | SW- Inert Landfill | Operating |
| Thomas D. Moreland Alcovy River Inert LF | PBR-147-03IL | Walton | SW- Inert Landfill | Operating |
| Universal - Rundle PLSWLF | | Walton | SW- Private Industrial Landfill | |
| Walton C&D Landfill | 147-013D(C&D) | Walton | SW- Construction & Demolition Landfill | Operating |
| Walton Co - SR 11/Roscoe Davis Rd Ph 3 (SL) | 147-010D(SL) | Walton | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Walton Co- 81 Inert & Disposal, Inc | PBR-147-53COL | Walton | SW- Collection | Operating |
| Walton Co. Board Of Comm Sanitation & Recycling (II) | PBR-147-30IL | Walton | SW- Inert Landfill | Closed |
| Walton County Board Of Commissioners- Inert LF | PBR-147-06IL | Walton | SW- Inert Landfill | Operating |
| Cravey & Sons, Inc Inert Landfill | PBR-153-02IL | Wheeler | SW- Inert Landfill | Closed |
| Treutlen & Wheeler Cos - SR 46 Ph 2&3 (SL) | 153-005D(SL) | Wheeler | SW- Municipal Solid Waste Landfill | Closed/PCC |
| Treutlen-Wheeler Counties Inert Landfill | PBR-153-03IL | Wheeler | SW- Inert Landfill | Closed |
| Wheeler County Hospital | PBR-153-01OSTT | Wheeler | SW- Other-PBR | Operating |
| City Of Abbeville | PBR-156-07IL | Wilcox | SW- Inert Landfill | Closed |
| City Of Abbeville-Us280 Inert LF | PBR-156-01IL | Wilcox | SW- Inert Landfill | Closed |
| Pitts Gin Co., Inc. | PBR-156-08OSP | Wilcox | SW- Other-PBR | Operating |
| Southern Renewable Resources, Inc. Collection | PBR-156-06COL | Wilcox | SW- Collection | Operating |
| Stone Construction Company Inert Landfill | PBR-156-04IL | Wilcox | SW- Inert Landfill | Operating |
| Wilcox Co-County Farm Rd Inert Landfill | PBR-156-02IL | Wilcox | SW- Inert Landfill | Operating |
| Wilcox County Board Of Education Inert Landfill | PBR-156-03IL | Wilcox | SW- Inert Landfill | Operating |

| Facility Name | Permit Number | County | Interest Type | Operating Status |
|--|---------------|--------|--|---------------------|
| Wilcox County Sanitary Landfill Dba. Public Works | 156-001D(SL) | Wilcox | SW- Municipal Solid Waste Landfill | Closed/PCC |

Source: Land Protection Branch, GA EPD, 2022

4.0 ANALYTICAL APPROACH

The process of developing bacteria TMDLs for the Ocmulgee River Basin listed segments includes the determination of the following:

- The current critical bacteria load to the stream under existing conditions;
- The TMDL for similar conditions under which the current load was determined; and
- The percent reduction in the current critical bacteria load necessary to achieve the TMDL.

The calculation of the bacteria load at any point in a stream requires the bacteria concentration and stream flow. The Loading Curve Approach was used to determine the current bacteria load and the TMDL. For the listed segments, fecal coliform sampling data were sufficient to calculate at least one 30-day geometric mean to compare with the regulatory criteria (see Appendix A).

4.1 Loading Curve Approach

For segments with revised TMDLs, original 303(d) listings of certain segments were based on spill data that is no longer available. Therefore, a current critical load and percent reduction cannot be calculated. However, the annual average flow was determined using <u>USGS StreamStats</u>, (USGS, 2017) and then used to calculate the TMDL. The StreamStats annual average flow for each stream with a revised TMDL is given in Table A-1 in Appendix A.

For those segments in which sufficient water quality data were collected to calculate at least one 30-day geometric mean above the regulatory standard, the loading curve approach was used to calculate the current critical load.

The TMDLs for this document were calculated using data from nearby USGS gages and the applicable water quality criterion. These nearby stream gages have relatively similar watershed characteristics, including land use, slope, and drainage area. The stream flows were estimated by multiplying the measured stream flow by the ratio of the listed stream drainage area to the gaged stream drainage area. Table 15 provides the USGS stream gage used to estimate the flow for the listed stream segments. For each listed segment, the drainage areas and USGS gages used to estimate the steam flow are given in Table A-2 in Appendix A. The current critical load was compared to summer and winter seasonal TMDL curves to determine the required percent reduction.

| Table 15: USGS Flow Gages Used to Estimate Stream Flow in the 303(d) Listed Segments in the |
|---|
| Ocmulgee River Basin |

| Waterbody Name | Location | USGS Station No. | USGS Station Name | Flow Gage Drainage Area (sq miles) |
|-------------------|------------------------|---------------------|--|--|
| East Bear Creek | 33.50725, -83.77025 | 02209360 | East Bear Creek at Poplar Road near Mansfield, GA | 6.89 |
| Towaliga River | 33.11485, -83.87046 | 02211800 | Towaliga River at GA 83 near Juliette, GA | 338 |

| Waterbody Name | Location | USGS Station No. | USGS Station Name | Flow Gage Drainage Area (sq miles) |
|--------------------------------|---------------------------|---------------------|--|--|
| Pates Creek | 33.492890, -84.245476 | 02204285 | Pates Creek near Flippen, GA | 11.9 |
| Cornish Creek | 33.710833, - 83.811111 | 02208485 | Cornish Creek at Lower Jersey Road near Covington, GA | 14.2 |
| Echoconnee Creek | 32.69188, - 83.70097 | 02214075 | Echeconnee Creek at Houston Road near Byron, GA | 228 |
| Little Stone Mountain Creek | 33.83066, - 84.13936 | 02207135 | Little Stone Mountain Creek near Stone Mountain, GA | 2.2 |
| Cabin Creek | 32.27166, - 84.23639 | 02211375 | Cabin Creek at North Second Street near Griffin, GA | 4.39 |
| Little Ocmulgee River | 32.0524, - 82.8157 | 02215900 | Little Ocmulgee River at GA 149 at Scotland, GA | 316 |
| Falling Creek | 33.09985, - 83.723510 | 02212600 | Falling Creek near Juliette, GA | 72.2 |

The current critical loads were determined using fecal coliform data collected within a 30-day period to calculate the geometric means and multiplying these values by the arithmetic means of the flows measured at the time the water quality samples were collected. Georgia's instream bacteria standards are based on a geometric mean of samples collected over a 30-day period, with samples collected at least 24 hours apart. To reflect this in the load calculation, the bacteria loads are expressed as 30-day accumulated loads with units of counts per 30 days. This is described by the equation below:

$$L_{critical} = C_{geomean} \times Q_{mean}$$

Where:

L_{critical} = current critical bacteria load

C_{geomean} = bacteria concentration as a 30-day geometric mean

Q_{mean} = stream flow as an arithmetic mean

The current estimated critical load is dependent on the fecal coliform concentrations and stream flows measured during the sampling events. The number of events sampled is usually 16 per year. Thus, these loads do not represent the full range of flow conditions or loading rates that can occur. Therefore, it must be kept in mind that the current critical loads used only represent the worst-case scenario that occurred during the sampling period.

The maximum bacteria load at which the instream bacteria criteria will be met can be determined using a variation of the equation above. By setting C equal to the seasonal, instream bacteria standard, the load will equal the TMDL. However, the TMDL is dependent on stream flow. Figures in Appendix A graphically illustrate that the TMDL is a continuum for the range of flows (Q that can occur in the stream over time. There are two TMDL curves shown in these figures. One represents the summer TMDL for the period May through October when the 30-day geometric mean standard is 200 counts/100 mL. The second curve represents the winter TMDL for the period November through April when the 30-day geometric mean standard is 1,000 counts/100 mL. The equations for these two TMDL curves are:

TMDL_{summer} = 200 counts/100 mL (as a 30-day geometric mean) x Q

TMDL_{winter} = 1,000 counts/100 mL (as a 30-day geometric mean) x Q

The graphs show the relationship between the current critical load ($L_{critical}$ and the TMDL. The TMDL for a given stream segment is the load for the mean flow corresponding to the current critical load. This is the point where the current load exceeds the TMDL curve by the greatest amount. This critical TMDL can be represented by the following equation:

$$TMDL_{critical} = C_{standard} \times Q_{mean}$$

Where:

TMDL_critical= critical bacteria TMDL loadC_standard= seasonal bacteria standard (as a 30-day geometric mean
summer - 200 counts/100 mL as fecal coliform
winter - 1,000 counts/ 100 mL as fecal coliformQ_mean= stream flow as an arithmetic mean

A 30-day geometric mean load that plots above the respective seasonal TMDL curve represents an exceedance of the instream bacteria standard. The difference between the current critical load and the TMDL curve represents the load reduction required for the stream segment to meet the appropriate instream bacteria standard. There is also a single sample maximum criterion of 4,000 counts per 100 mL for fecal coliform. If a single sample exceeds the maximum criterion, and the seasonal geometric mean criteria is also exceeded, then the TMDL is based on the criteria exceedance requiring the largest load reduction.

For future *E. coli* TMDLs, one curve will represent the summer TMDL for the period May through October when the 30-day geometric mean standard is 126 counts/100 mL. The second curve will represent the winter TMDL for the period November through April when the 30-day geometric mean standard is 265 counts/100 mL. The equations for these two TMDL curves are:

TMDL_{summer} = 126 counts/100 mL (as a 30-day geometric mean) x Q

TMDL_{winter} = 265 counts/100 mL (as a 30-day geometric mean) x Q

The TMDL for a given stream segment is the load for the mean flow corresponding to the current critical fecal coliform load. This is the point where the current fecal coliform load exceeds the fecal coliform TMDL curve by the greatest amount. This critical TMDL can be represented by the following equation:

TMDL_{critical} = C_{standard} x Q_{mean}

Where:

TMDLcritical= critical bacteria TMDL loadC_standard= seasonal bacteria standard (as a 30-day geometric mean)
summer - 126 counts/100 mL as *E. coli*
winter - 265 counts/ 100 mL as *E. coli*Q_mean= stream flow as an arithmetic mean

There is also a statistical threshold value (STV) maximum criterion for the months of May through October (410 counts per 100 mL for *E. coli*) and November through April (861 counts per 100 mL for *E. coli*). If a single sample exceeds the STV maximum criterion, and the seasonal geometric mean criteria is also exceeded, then the TMDL is based on the criteria exceedance requiring the largest load reduction.

For a TMDL, the percent load reduction can be expressed as follows:

Percent Load Reduction = $\frac{L_{critical} - TMDL_{critical}}{L_{critical}} \times 100$

The current critical loads and the TMDLs are expressed as equations that show the loads as a function of the total flow at any given time. The general equations for the critical load and the TMDL are:

$$L_{critical} = Q_{total} \times C_{geomean}$$

Where:

 $\begin{array}{ll} L_{critical} & = current \ critical \ bacteria \ load \\ C_{geomean} & = bacteria \ concentration \ as \ a \ 30\mbox{-}day \ geometric \ mean \\ Q_{total} & = stream \ flow \end{array}$

 $\mathsf{TMDL} = \mathsf{C}_{\mathsf{criterion}} \times \mathsf{Q}_{\mathsf{total}}$

Where:

TMDL= total maximum daily loadC_{criterion}= criterionQ_{total}= estimated instantaneous flow

5.0 TOTAL MAXIMUM DAILY LOAD

A Total Maximum Daily Load (TMDL) is the amount of a pollutant that can be assimilated by the receiving waterbody without exceeding the applicable water quality standard. In this case, it is the seasonal bacteria standard. A TMDL is the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources, as well as natural background (40 CFR 130.2) for a given waterbody. The TMDL must also include a margin of safety (MOS), either implicitly or explicitly, that accounts for the uncertainty in the relationship between pollutant loads and the water quality response of the receiving waterbody. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measures. For bacteria, the TMDLs are expressed as counts per 30 days as a geometric mean.

A TMDL is expressed as follows:

$\mathsf{TMDL} = \Sigma \mathsf{WLAs} + \Sigma \mathsf{LAs} + \mathsf{MOS}$

The TMDL calculates the WLAs and LAs with a margin of safety to meet the stream's water quality standards. The allocations are based on estimates that use the best available data and provide the basis to establish or modify existing controls so that water quality standards can be achieved. In developing a TMDL, it is important to consider whether adequate data are available to identify the sources, and to understand the fate and transport of the pollutant(s) to be controlled.

TMDLs may be developed using a phased approach. Under a phased approach, the TMDL includes: 1) WLAs that confirm existing limits and controls or lead to new limits, and 2) LAs that confirm existing controls or include implementing new controls (USEPA, 1991). A phased TMDL requires additional data be collected to determine if load reductions required by the TMDL are leading to the attainment of water quality standards.

Watershed-based plans may be developed to address and assess both point and nonpoint sources. These plans establish a schedule or timetable for the installation and evaluation of source control measures, data collection, and assessment of water quality standard attainment. Future monitoring of the listed segments water quality may be used to evaluate this phase of the TMDL, and if necessary, to reallocate the loads.

The existing fecal coliform loads calculated for each listed stream segment are based on sampling data and measured or estimated flows and represent the sum of the total loads from all point and nonpoint sources for the segment. In situations where two or more adjacent segments are listed, the fecal coliform loads to each segment are individually evaluated on a localized watershed basis. The following sections describe the various bacteria TMDL components.

5.1 Wasteload Allocations

5.1.1 Wastewater Treatment Facilities

The wasteload allocation (WLA) is the portion of the receiving water's loading capacity that is allocated to existing or future point sources. WLAs are provided to the point sources from POTW and Non-POTW wastewater treatment systems with NPDES end-of-pipe effluent limits established to meet the applicable water quality standard. In addition, the permits include routine monitoring and reporting requirements.

For facilities that currently have a bacteria effluent limit, the permit information, receiving stream, impaired stream and WLAs are provided in Table 16. This information is provided for facilities that discharge into or within 25 miles upstream of the listed segment. In most cases, the WLAs are calculated based on permitted or design flow and permitted bacteria concentration. However, for those facilities whose wastewater is reused, the bacteria limit to discharge into surface waters may be overly restrictive and for these facilities the WLA is calculated using the permitted flow and permitted bacteria concentration. This was expressed as an accumulated load over a 30-day period and presented in units of counts per 30 days. If there is a new facility or a facility expands its capacity and the permitted flow increases, the wasteload allocation for the facility will be the permitted flow times the appropriate water quality criteria, either 200 counts/100 mL for fecal coliform or 126 counts/100 mL for *E. coli* as a 30-day geometric mean.

| Table 16: WLAs for the Facilities that Current | y have Bacteria Limits i | n the Ocmulgee River Basin |
|--|--------------------------|----------------------------|
|--|--------------------------|----------------------------|

| Facility Name | NPDES Permit No. | Receiving Stream | Listed Stream Segment | Bacterial Indictor | WLA (counts/ 30 days) | 30 Day Geometric Mean Concentration (counts/100mL |
|--|---------------------|-------------------------|--------------------------|-----------------------|-----------------------------|--|
| Bolingreen Nursing | 040550152 | Unnamed Tributary of | Ocmulgee River | Fecal coliform | 8.20E+07 | 200 |
| Center WPCP | GAG550152 | Beaver Dam Creek | GAR030701031617 | E. coli | 5.17E+07 | 126 |
| Clayton County - | CA0020575 | Ponthor Crook | Ocmulgee River | Fecal coliform | 7.03E+10 | 200 |
| Northeast WRF | GA0020575 | Paniner Creek | GAR030701031617 | E. coli | 4.43E+10 | 126 |
| Clayton County Water Authority - W.B. Casey | CA0028422 | Shamrock Lake / | Big Cotton Indian | Fecal coliform | 1.02E+11 | 100ª |
| WRF & Huie Constructed Wetlands | GA0036423 | (Pates Creek) | GAR030701030214 | E. coli | 6.42E+10 | 63ª |
| Forsyth - Northeast | GA0031801 | Town Crook | Ocmulgee River | Fecal coliform | 1.64E+10 | 200 |
| WPCP | | Town Creek | GAR030701031617 | E. coli | 1.03E+10 | 126 |
| Rumble Road BP | Rumble Road BP | | Ocmulgee River | Fecal coliform | 5.39E+07 | 200 |
| Service Station WPCP | GA0034100 | Ocmulgee River | GAR030701031617 | E. coli | 3.39E+07 | 126 |
| Jackson - Northeast | CA0022710 | Unnamed Tributary to | Yellow Water Creek | Fecal coliform | 1.64E+09 | 200 |
| WPCP | GA0032719 | Yellow Water Creek | GAR030701031016 | E. coli | 1.03E+09 | 126 |
| Jackson - Yellow Water | 040004004 | Unnamed Tributary to | Yellow Water Creek | Fecal coliform | 8.78E+09 | 200 |
| Creek WPCP | GA0021831 | Yellow Water Creek | GAR030701031016 | E. coli | 5.53E+09 | 126 |
| Macon Water Authority | 010004500 | | Ocmulgee River | Fecal coliform | 2.34E+11 | 200 |
| - Lower Poplar WRF | GAU024538 | Ocmulgee River | GAR030701031615 | E. coli | 1.48E+11 | 126 |
| Macon Water Authority | 010004540 | | Ocmulgee River | Fecal coliform | 3.28E+11 | 200 |
| - Rocky Creek WRF | GAUU24546 | | GAR030701031615 | E. coli | 2.07E+11 | 126 |

| Facility Name | NPDES Permit No. | Receiving Stream | Listed Stream Segment | Bacterial Indictor | WLA (counts/ 30 days) | 30 Day Geometric Mean Concentration (counts/100mL |
|---|---------------------|---------------------|----------------------------------|-----------------------|-----------------------------|--|
| MaRaa Halana W/RCR | CA0049674 | Unnamed | Unnamed Little Ocmulgee River | | 9.37E+09 | 200 |
| | GA0048074 | Ocmulgee River | GAR030701050406 | E. coli | 5.90E+09 | 126 |
| Rumble Road WPCP | GAG550145 | Little Deer Creek | Ocmulgee River | Fecal coliform | 5.86E+07 | 200 |
| | | | GAR030701031617 | E. coli | 3.69E+07 | 126 |
| Stockbridge - Stephen D. Peurifoy WPCP | | | Big Cotton Indian | Fecal coliform | 1.76E+10 | 200 |
| | GA0023337 | Brush Creek | Creek GAR030701030214 | E. coli | 1.11E+10 | 126 |

a - Permit limits are reduced to account for the natural reproduction of bacteria in constructed wetlands

Non-POTW facilities that discharge sanitary wastewater directly or sanitary waste streams commingled with other waste streams will be given a bacteria effluent limit in their permit.

Potential WLAs for existing Non-POTW discharges without bacteria permit limits would be the facility design flow multiplied by the appropriate bacteria criterion, either 200 counts/100 mL for fecal coliform or 126 counts/100 mL for *E. coli* as a 30-day geometric mean. For these facilities, it is not known if their discharge contains any bacteria at levels that would exceed the instream water quality criteria because the type of treatment processes employed. Therefore, existing Non-POTW facilities may be required to submit bacteria data with their NPDES permit renewal application. Non-POTW discharges must collect, analyze, and submit appropriate bacteria data from at least 4 samples collected 24 hours apart within a 30-day period. GA EPD will evaluate these data and determine if a permit limit for bacteria is needed. There are currently seven (7) known existing Non-POTW discharges without bacteria permit limits in the contributing watersheds, as noted in Table 7.

5.1.2 Regulated Stormwater Discharges

State and Federal Rules define stormwater discharges covered by NPDES permits as point sources. However, stormwater discharges are from diffuse sources and there are multiple stormwater outfalls. Stormwater sources (point and nonpoint) are different than traditional NPDES permitted sources in four respects: 1) they do not produce a continuous (pollutant loading) discharge; 2) their pollutant loading depends on the intensity, duration, and frequency of rainfall events, over which the permittee has no control; 3) the activities contributing to the pollutant loading may include the various allowable activities of others, and control of these activities is not solely within the discretion of the permittee; and 4) they do not have wastewater treatment plants that control specific pollutants to meet numerical limits.

The intent of stormwater NPDES permits is not to treat the water after collection, but to reduce the exposure of stormwater to pollutants by implementing various controls. It would be infeasible and prohibitively expensive to control pollutant discharges from each stormwater outfall. Therefore, stormwater NPDES permits require the establishment of controls or BMPs to reduce the pollutants entering the environment.

The wasteload allocations from stormwater discharges (WLAsw) associated with MS4s are estimated based on the percentage of urban area in each watershed covered by the MS4 stormwater permit. At this time, the portion of each watershed that goes directly to a permitted storm sewer or is non-permitted sheet flow or diffuse runoff has not been clearly defined. Thus, it is assumed that approximately 70 percent of stormwater runoff from the regulated urban area is collected by the MS4s. This can be represented by the following equation:

 $WLA_{SW} = Q_{WLAsw} \times C_{standard}$

where: WLA_{SW} = Wasteload Allocation for permitted storm water runoff from all MS4 urban areas Q_{WLAsw} = Runoff from all MS4 urban areas conveyed through permitted storm water structures Q_{WLAsw} = $\Sigma Q_{urban} \times 0.7$ ΣQ_{urban} = Sum of all storm water runoff from MS4 urban $C_{standard}$ = seasonal fecal coliform standard (as a 30-day geometric mean) summer – 200 counts/100 mL as fecal coliform winter – 1000 counts/ 100 mL as fecal coliform summer – 126 counts/100 mL as *E. coli* winter – 265 counts/ 100 mL as *E. coli*

For stormwater permits, compliance with the terms and conditions of the permit is effective implementation of the WLA to the Maximum Extent Practicable (MEP) and demonstrates consistency with the assumptions and requirements of the TMDL. GA EPD acknowledges that progress with the assumptions and requirements of the TMDL by stormwater permittees may take one or more permit iterations. Achieving the TMDL reductions may constitute compliance with a SWMP or a SWPPP, provided the MEP definition is met, even where the numeric percent reduction may not be achieved so long as reasonable progress is made toward attainment of water quality standards using an iterative BMP process.

5.1.3 Concentrated Animal Feeding Operations

Wet manure facilities are either included under a State-issued LAS General Permit or an NPDES General Permit. A small number of wet manure operations have an individual NPDES permit. Dry manure facilities are not required to obtain permits. None of the wet manure or dry manure facilities have discharges. Presently, there are four (4) wet or dry manure CAFOs located in the watersheds of the listed segments in the Ocmulgee River Basin, but they were not provided an explicit WLA as they do not have a discharge.

5.2 Load Allocations

The load allocation is the portion of the receiving water's loading capacity that is attributed to existing or future nonpoint sources or to natural background sources. Nonpoint sources are identified in 40 CFR 130.6 as follows:

- Residual waste;
- Land disposal;
- Agricultural and silvicultural;
- Mines;
- Construction;

- Saltwater intrusion; and
- Urban stormwater (non-permitted).

The LA is calculated as the remaining portion of the TMDL load available, after allocating the WLA, WLAsw, and the MOS, using the following equation:

LA = TMDL - (Σ WLA + Σ WLAsw + MOS)

As described above, there are two types of load allocations: loads to the stream independent of precipitation, including sources such as failing septic systems, leachate from landfills, animals in the stream, leaking sewer system collection lines, and background loads; and loads associated with bacteria accumulation on land surfaces that is washed off during storm events, including runoff from saturated LAS fields. Currently, it is not possible to partition the various sources of load allocations. In the future, after additional data has been collected, it may be possible to partition the load allocation by source.

5.3 Seasonal Variation

The Georgia bacteria criteria are seasonal. One set of criteria applies to the summer season, while a different set applies to the winter season. To account for seasonal variations, the critical loads for each listed segment were determined from sampling data obtained during both summer and winter seasons, when possible. The TMDL and percent reduction for each listed segment is based on the season in which the critical load occurred. The TMDLs for each season, for any given flow, are presented as equations in Section 5.5.

5.4 Margin of Safety

The MOS is a required component of TMDL development. There are two basic methods for incorporating the MOS: 1) implicitly incorporate the MOS using conservative modeling assumptions to develop allocations; or 2) explicitly specify a portion of the TMDL as the MOS and use the remainder for allocations. For this TMDL, an explicit MOS of 10 percent of the TMDL was used.

5.5 Total Bacteria Load

The bacteria TMDL for the listed stream segment is dependent on the time of year, the stream flow, and the applicable state water quality standard. In January 2022, the Georgia DNR Board adopted new bacteria criteria for "Fishing" and "Drinking Water" designated uses using the bacterial indicators *E. coli* and enterococci. These bacteria are better indicators for human health illnesses. The adopted criteria have the same estimated illness rate (8 per 1000 swimmers) as the previously established fecal coliform criteria. Since this TMDL is based on fecal coliform data, but the current bacteria criterion is *E. coli*, this TMDL will use both fecal coliform and *E. coli* as the bacterial indicators.

The total maximum daily seasonal fecal coliform loads for Georgia are given below:

TMDL_summer= 200 counts/100 mL (as a 30-day geometric mean) x QTMDL_winter= 1000 counts/100 mL (as a 30-day geometric mean) x Q

TMDL = 4000 counts/100 mL (instantaneous) x Q

The total maximum daily seasonal *E. coli* loads for Georgia are given below:

TMDL_summer= 126 counts/100 mL (as a 30-day geometric mean) x QTMDL_winter= 265 counts/100 mL (as a 30-day geometric mean) x QTMDL= 410 counts/100 mL (instantaneous) x Q

For purposes of determining necessary load reductions required to meet the instream water quality criteria, the current critical TMDL was determined. This load is the product of the applicable seasonal bacteria standard and the mean flow used to calculate the current fecal coliform critical load. It represents the sum of the allocated loads from point (WLA and WLA_{sw}) and nonpoint (LA) sources located within the immediate drainage area of the listed segment, and a margin of safety (MOS). For these calculations, the bacteria contributed by a permitted facility to the WLA was the product of the bacteria permitted limit and the monthly permitted discharge. The current critical loads and corresponding TMDLs, WLAs (WLA and WLA_{sw}), LAs, MOSs, and percent load reductions for the Ocmulgee River Basin listed stream segments are presented in Table 17.

The relationships of the current critical loads to the TMDLs are shown graphically in Appendix A. The vertical distance between the two values represents the load reductions necessary to achieve the TMDLs. Because of the localized nature of the load evaluations, the calculated bacterial load reductions pertain to point and nonpoint sources occurring within the immediate drainage area of the listed segment. The current critical values represent a worst-case scenario for the limited set of data. Thus, the load reductions required are conservative estimates, and should be sufficient to prevent exceedances of the instream bacteria standard for a wide range of conditions.

Evaluation of the relationship between instream water quality and the potential sources of pollutant loading is an important component of TMDL development and is the basis for later implementation of corrective measures and BMPs. For the current TMDLs, the association between bacterial loads and the potential sources occurring within the sub-watershed of each segment was examined on a qualitative basis.

| Table 17: Bacteria | Loads and Re | quired Load | Reductions |
|--------------------|--------------|-------------|------------|
|--------------------|--------------|-------------|------------|

| | | | | Current | TMDL Components | | | | | |
|-----------------------|--------------------------------|---|------------------------|------------------------------|--|-------------------------------|----------------------------|-----------------------------|------------------------------|-----------------------------|
| Assessment Unit ID | Stream Segment | Description | Bacterial Indicator | Load (counts/ 30 days) | WLA (counts/ 30 days) ⁽¹⁾ | WLAsw (counts/ 30 days) | LA (counts/ 30 days) | MOS (counts/ 30 days) | TMDL (counts/ 30 days) | Reduction Required |
| CAP020701020804 | Boar Crook | Caithara Branch to Laka Jackson | Fecal coliform | 3.78E+12 | | | 1.36E+11 | 1.51E+10 | 1.51E+11 | 80.0% |
| GAR030701030804 | Deal Cleek | | E. coli | (2) | | | 8.58E+10 | 9.54E+09 | 9.54E+10 | Undetermined ⁽³⁾ |
| GAR030701031316 | Berry Creek | Pond at the headwaters to the | Fecal coliform | 2.38E+10 | | | 1.55E+10 | 1.72E+09 | 1.72E+10 | 27.7% |
| GAR050701031310 | Delly Cleek | Ocmulgee River | E. coli | (2) | | | 9.76E+09 | 1.08E+09 | 1.08E+10 | Undetermined ⁽³⁾ |
| CAP030701030214 | Big Cotton Indian | Little Cotton Indian Creek to the | Fecal coliform | 7.02E+13 | 1.90E+11 | 1.38E+12 | 2.64E+12 | 4.68E+11 | 4.68E+12 | 66.7% |
| GAR030701030214 | Creek | South River | E. coli | (2) | 1.20E+11 | 8.67E+11 | 1.67E+12 | 2.95E+11 | 2.95E+12 | Undetermined (3) |
| CAP030701030717 | Cornish Creek | Headwaters to Upper Williams | Fecal coliform | 1.36E+11 | | 4.02E+08 | 3.69E+10 | 4.15E+09 | 4.15E+10 | 69.4% |
| GAR050701050717 | Comisti Creek | Lake | E. coli | (2) | | 2.54E+08 | 2.32E+10 | 2.61E+09 | 2.61E+10 | Undetermined ⁽³⁾ |
| CAP020701021505 | Echeconnee | Rock Quarry Road to Knoxville Road | Fecal coliform | 9.58E+11 | | | 3.97E+11 | 4.41E+10 | 4.41E+11 | 53.9% |
| GAR030701031505 | Creek | | E. coli | (2) | | | 2.50E+11 | 2.78E+10 | 2.78E+11 | Undetermined ⁽³⁾ |
| CAP020701020226 | Carpor Crook | Hoodwaters to Vellow River | Fecal coliform | 6.35E+10 | | 1.25E+10 | 1.06E+10 | 2.57E+09 | 2.57E+10 | 59.6% |
| GAR030701030320 | Gainer Creek | | E. coli | (2) | | 7.86E+09 | 6.70E+09 | 1.62E+09 | 1.62E+10 | Undetermined ⁽³⁾ |
| CAR020701020521 | Cum Crook | Tributary 0.25 miles upstream | Fecal coliform | 9.36E+10 | | 1.77E+09 | 3.64E+10 | 4.24E+09 | 4.24E+10 | 54.7% |
| GAR030701030521 | Guill Cleek | miles upstream Dial Mill Road | E. coli | (2) | | 1.11E+09 | 2.29E+10 | 2.67E+09 | 2.67E+10 | Undetermined ⁽³⁾ |
| CAR020701020607 | Joland Shaol Crook | Headwaters to Maskey Creak | Fecal coliform | 1.67E+11 | | 1.69E+09 | 3.10E+10 | 3.63E+09 | 3.63E+10 | 78.3% |
| GAR030701030607 | Island Shoal Creek | Headwalers to Mackey Creek | E. coli | (2) | | 1.06E+09 | 1.95E+10 | 2.29E+09 | 2.29E+10 | Undetermined ⁽³⁾ |
| CAR020701050406 | Little Ocmulgee | Little Ocmulgee State Park Lake | Fecal coliform | 3.51E+11 | 9.37E+09 | | 1.28E+11 | 1.52E+10 | 1.52E+11 | 56.5% |
| GAR030701050400 | River | to Wilcox Creek | E. coli | (2) | 5.90E+09 | | 1.14E+10 | 1.92E+09 | 1.92E+10 | Undetermined (3) |
| GAR030701030719 | Mountain Creek | Tributary at Ammons Bridge Road to tributary 0.7 miles | Fecal coliform | 7.35E+10 | | | 2.38E+10 | 2.65E+09 | 2.65E+10 | 64.0% |
| | GARUSU/UTUSU/19 Mountain Creek | downstream Monroe Jersey Road SE | E. coli | (2) | | | 1.50E+10 | 1.67E+09 | 1.67E+10 | Undetermined ⁽³⁾ |
| GAR030701030324 | Pughs Creek | Tributary to Yellow River | Fecal coliform | 8.96E+10 | | 1.27E+10 | 9.90E+09 | 2.52E+09 | 2.52E+10 | 71.9% |
| 07.11000701000024 | i ugiis Oleek | | E. coli | (2) | | 8.03E+09 | 6.24E+09 | 1.59E+09 | 1.59E+10 | Undetermined (3) |

| | Stream Segment | Description | Bacterial Indicator | Current | TMDL Components | | | | | |
|-----------------------|---------------------------------|--|------------------------|------------------------------|--|-------------------------------|----------------------------|-----------------------------|------------------------------|-----------------------|
| Assessment Unit ID | | | | Load (counts/ 30 days) | WLA (counts/ 30 days) ⁽¹⁾ | WLAsw (counts/ 30 days) | LA (counts/ 30 days) | MOS (counts/ 30 days) | TMDL (counts/ 30 days) | Reduction Required |
| GAR030701030802 | Rocky Creek | Headwaters to Lake Jackson | Fecal coliform | 7.31E+10 | | | 1.19E+10 | 1.32E+09 | 1.32E+10 | 82.0% |
| | | | E. coli | (2) | | | 7.47E+09 | 8.30E+08 | 8.30E+09 | Undetermined (3) |
| GAR030701031317 | Tributary to Hurricane Creek | Headwaters to Hurricane Creek | Fecal coliform | 3.13E+09 | | | 3.08E+09 | 3.42E+08 | 3.42E+09 | 70.7% |
| | | | E. coli | (2) | | | 5.69E+08 | 6.32E+07 | 6.32E+08 | Undetermined (3) |
| GAR030701031116 | Tributary to Thompson Creek | Headwaters to Thompson Creek | Fecal coliform | 1.55E+10 | | 1.34E+09 | 3.61E+09 | 5.50E+08 | 5.50E+09 | 64.4% |
| | | | E. coli | (2) | | 8.46E+08 | 2.28E+09 | 3.47E+08 | 3.47E+09 | Undetermined (3) |
| Revised TMDLs | | | | | | | | | | |
| GAR030701030424 | Boar Tusk Creek | Headwaters to Yellow River | Fecal coliform | (4) | | 1.04E+10 | 1.02E+10 | 2.29E+09 | 2.29E+10 | Undetermined (3) |
| | | | E. coli | (4) | | 6.57E+09 | 6.44E+09 | 1.45E+09 | 1.45E+10 | Undetermined (3) |
| GAR030701031617 | Ocmulgee River | Beaverdam Creek to Walnut Creek | Fecal coliform | (4) | 8.69E+10 | 4.56E+11 | 1.45E+13 | 1.67E+12 | 1.67E+13 | Undetermined (3) |
| | | | E. coli | (4) | 5.47E+10 | 2.87E+11 | 9.14E+12 | 1.05E+12 | 1.05E+13 | Undetermined (3) |
| GAR030701031615 | Ocmulgee River | Tobesofkee Creek to Echeconnee Creek | Fecal coliform | (4) | 5.62E+11 | 1.37E+12 | 1.53E+13 | 1.92E+12 | 1.92E+13 | Undetermined (3) |
| | | | E. coli | (4) | 3.54E+11 | 8.65E+11 | 9.64E+12 | 1.21E+12 | 1.21E+13 | Undetermined (3) |
| GAR030701031016 | Yellow Water Creek | 1 mile DS Stark Road (Rd S763), Jackson to Ocmulgee River | Fecal coliform | (4) | 1.04E+10 | | 1.91E+11 | 2.23E+10 | 2.23E+11 | Undetermined (3) |
| | | | E. coli | (4) | 6.57E+09 | | 1.20E+11 | 1.41E+10 | 1.41E+11 | Undetermined (3) |
| CAR020701020004 | Jackson Lake | Dam Pool (formerly Newton, Butts, Jasper Counties) | Fecal coliform | (4) | | 7.50E+11 | 9.27E+12 | 1.11E+12 | 1.11E+13 | Undetermined (3) |
| GARU30701030904 | | | E. coli | (4) | | 4.73E+11 | 5.84E+12 | 7.01E+11 | 7.01E+12 | Undetermined (3) |

Notes:

(1) The assigned bacterial load from the NPDES permitted facility for WLA was determined as the product of the permitted flow and bacteria permit limit.

(2) Sample was 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.

(4) Critical loading could not be determined due to no samples collected.

6.0 RECOMMENDATIONS

The TMDL process consists of an evaluation of the sub-watersheds for each 303(d) listed stream segment to identify, as best as possible, the sources of the bacteria loads causing the stream to exceed instream standards. The TMDL analysis was performed using the best available data to specify WLAs and LAs that will meet bacteria water quality criteria to support the use classification specified for the listed segment.

This TMDL represents part of a long-term process to reduce bacteria loading to meet water quality standards in the Ocmulgee River Basin. Implementation strategies will be reviewed and the TMDL will be refined, as necessary, in the next phase (next five-year cycle). The phased approach will support progress toward water quality standards attainment in the future. In accordance with USEPA TMDL guidance, the TMDL may be revised based on the results of future monitoring and source characterization data efforts. The following recommendations emphasize further source identification and involve the collection of data to support the current allocations and subsequent source reductions.

6.1 Monitoring

Water quality monitoring is conducted at several locations across the State each year. Sampling is conducted statewide by GA EPD personnel in Atlanta, Augusta, Brunswick, Cartersville, and Tifton. Additional monitoring sites are added as necessary.

In the case where a watershed-based plan has been developed for a listed stream segment, an appropriate water quality monitoring program will be outlined. The monitoring program will be developed to help identify the various bacteria sources. The monitoring program may be used to verify the 303(d) stream segment listings. This will be especially valuable for those segments where limited data resulted in the listing.

6.2 Bacteria Management Practices

Based on the findings of the source assessment, NPDES point source bacteria loads from wastewater treatment facilities usually do not significantly contribute to the impairment of the listed stream segments. This is because most facilities are required to treat to levels corresponding to instream water quality criteria. Sources of bacteria in urban areas include wastes that are attributable to domestic animals, leaks and overflows from sanitary sewer systems, illicit discharges of sanitary waste, leaking septic systems, runoff from improper disposal of waste materials, and leachate from both operational and closed landfills. In agricultural areas, potential sources of bacteria may include CAFOs, animals grazing in pastures, dry manure storage facilities and lagoons, chicken litter storage areas, and direct access of livestock to streams. Wildlife, especially waterfowl and mammals living close to or in water environments, can be a significant source of bacteria.

Management practices are recommended to reduce bacteria source loads to the listed 303(d) stream segments, with the result of achieving the instream bacteria standard criteria. These recommended management practices include:

 Compliance with NPDES (wastewater, construction, industrial stormwater, and/or MS4) permit limits and requirements;

- Ensure storm water management plans are in place and being implemented by the local governments located in the watershed;
- Implementation of Georgia's *Statewide Nonpoint Source Management Plan* (GA EPD, 2019);
- Implementation of recommended Water Quality management practices in the *Middle Ocmulgee Water Planning Region*;
- Implementation of *Georgia's Best Management Practices for Forestry* (GFC, 2009);
- Implementation of *Best Management Practices for Georgia Agriculture* (GSWCC, 2013) and Adoption of National Resource Conservation Service (NRCS) Conservation Practices for agriculture;
- Adoption and implementation of the *Georgia Stormwater Management Manual* (ARC, 2016) and the *Coastal Stormwater Supplement to the Georgia Stormwater Management Manual* (CWP, 2009) to facilitate water quality treatment of stormwater runoff, including bacteria removal, through structural stormwater BMP installation.

6.2.1 Point Source Approaches

The NPDES permit program provides a basis for municipal, industrial, and stormwater permits, monitoring and compliance with permit limitations, and appropriate enforcement actions for violations. In accordance with GA EPD rules and regulations, all discharges from point source facilities are required to follow the conditions of their NPDES permit at all times. Wastewater treatment plants with the potential for bacteria in their discharge are given end-of-pipe limits to meet the applicable water quality standard. In addition, the permits include routine monitoring and reporting requirements.

Achieving the TMDL reductions may constitute compliance with a SWMP or SWPPP, provided the MEP definition is met, even where the numeric percent reduction may not be achieved so long as reasonable progress is made toward attainment of water quality standards using an iterative BMP process.

6.2.2 Nonpoint Source Approaches

GA EPD is the lead agency for implementing the State's Nonpoint Source Management Program, as described in Georgia's *Statewide Nonpoint Source Management Plan* (GA EPD, 2019). GA EPD will continue to work with local governments, agricultural, and forestry agencies such as the Natural Resources Conservation Service (NRCS), the Georgia Soil and Water Conservation Commission (GSWCC), and the Georgia Forestry Commission (GFC) to foster the implementation of BMPs that address nonpoint source pollution. The following sections describe programs in place and recommendations which should result in reducing nonpoint source loads of bacteria in Georgia's surface waters.

6.2.2.1 Agricultural Sources

GA EPD should coordinate with other agencies that are responsible for agricultural activities in the state to address issues concerning bacteria loading from agricultural lands. It is recommended that information such as livestock populations by sub-watershed, animal access to streams, manure storage and application practices be periodically reviewed so that watershed evaluations can be updated to reflect current conditions. It is also recommended that BMPs be utilized to

reduce the number of bacteria transported to surface waters from agricultural sources to the maximum extent practicable.

The following three organizations have primary responsibility for working with farmers to promote soil and water conservation, and to protect water quality:

- University of Georgia (UGA Cooperative Extension Service);
- Georgia Soil and Water Conservation Commission (GSWCC); and
- Natural Resources Conservation Service (NRCS).

UGA has faculty, County Cooperative Extension Agents, and technical specialists who provide services in several key areas relating to agricultural impacts on water quality. GA EPD designated the GSWCC as the lead agency for agricultural Nonpoint Source Management in the State. The GSWCC develops nonpoint source management programs and conducts educational activities to promote conservation and protection of land and water devoted to agricultural uses.

The NRCS works with federal, state, and local governments to provide financial and technical assistance to farmers. The NRCS develops standards and specifications for BMPs that are to be used to improve, protect, and/or maintain our state's natural resources. In addition, every five years, the NRCS conducts the National Resources Inventory (NRI). The NRI is a statistically-based sample of land use and natural resource conditions and trends that covers non-federal land in the United States.

The NRCS is also providing technical assistance to the GSWCC and the GA EPD with the Georgia River Basin Planning Program. Planning activities associated with this program will describe conditions of the agricultural natural resource base once every five years. It is recommended that the GSWCC and the NRCS continue to encourage BMP implementation, education efforts, and river basin surveys with regard to river basin planning.

6.2.2.2 Urban Sources

Both point and nonpoint sources of bacteria can be significant in the Ocmulgee River Basin urban areas. Urban sources of bacteria can best be addressed using a strategy that involves stormwater management, public participation, and intergovernmental coordination to reduce the discharge of pollutants to the maximum extent practicable. Management practices, control techniques, public education, and other appropriate methods and provisions may be employed. The following activities and programs conducted by cities, counties, and state agencies are recommended:

- Implement stormwater BMPs that incorporate water quality treatment and/or pollutant removal
- Uphold requirements that all new and replacement sanitary sewerage systems be designed to minimize discharges into storm sewer systems;
- Further develop and streamline mechanisms for reporting and correcting illicit connections, breaks, surcharges, and general sanitary sewer system problems;
- Continue efforts to increase public awareness and education towards the impact of human activities in urban settings on water quality, ranging from the

consequences of industrial and municipal discharges to the activities of individuals in residential neighborhoods.

6.3 Reasonable Assurance

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 is working with local governments, agricultural and forestry agencies, such as the NRCS the GSWCC, and the GFC, to foster the implementation of BMPs to address nonpoint sources. In addition, public education efforts will be targeted to individual stakeholders to provide information regarding the use of BMPs to protect water quality.

6.4 Public Participation

A thirty-day public notice is being provided for this TMDL. During that time, the TMDL will be available on the GA EPD website, a copy of the TMDL will be provided on request, and the public will be invited to provide comments on the TMDL.

7.0 INITIAL TMDL IMPLEMENTATION PLAN

This plan identifies applicable State-wide programs and activities that may be employed to manage point and nonpoint sources of bacteria loads for the segment in the Ocmulgee River Basin. Local watershed planning and management initiatives will be fostered, supported, or developed through a variety of mechanisms. Implementation may be addressed by Watershed-Based Plans or other assessments funded by Section 319(h) grants, the local development of watershed protection plans, or "Targeted Outreach" initiated by GA EPD. These initiatives will supplement or possibly replace this initial implementation plan. Implementation actions should also be guided by the recommended management practices and actions contained within each applicable Regional Water Plan developed as part of *Georgia's Comprehensive State-wide Water Management Plan* implementation (Georgia Water Council, 2008).

7.1 Impaired Segments

This initial plan is applicable to the following waterbody that was added to Georgia's 2022 Integrated 305(b)/303(d) List of not supporting waters in *Water Quality in Georgia 2020-2021* (GA EPD, 2022) available on the GA EPD <u>website</u>. The following tables summarizes the descriptive information provided in the 303(d) list.

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use |
|-------------------------|---|--------------------|------------------------------|-------------------|
| Bear Creek | Gaithers Branch to Lake Jackson | GAR030701030804 | 3 | Fishing |
| Berry Creek | Pond at the headwaters to the Ocmulgee River | GAR030701031316 | 3 | Fishing |
| Big Cotton Indian Creek | Little Cotton Indian Creek to the South River | GAR030701030214 | 5 | Fishing |
| Cornish Creek | Headwaters to Upper Williams Lake | GAR030701030717 | 7 | Fishing |
| Echeconnee Creek | Rock Quarry Road to Knoxville Road | GAR030701031505 | 27 | Fishing |
| Garner Creek | Headwaters to Yellow River | GAR030701030326 | 4.7 | Fishing |
| Gum Creek | Tributary 0.25 miles upstream Hightower Trail to tributary 0.16 miles upstream Dial Mill Road | GAR030701030521 | 2 | Fishing |
| Island Shoal Creek | Headwaters to Mackey Creek | GAR030701030607 | 5 | Fishing |
| Little Ocmulgee River | Little Ocmulgee State Park Lake to Wilcox Creek | GAR030701050406 | 2 | Fishing |

Table 18: Stream Segments Listed on the 2022 303(d) List for Bacteria in the Ocmulgee RiverBasin

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use |
|--------------------------------|--|--------------------|------------------------------|-------------------|
| Mountain Creek | Tributary at Ammons Bridge Road to tributary 0.7 miles downstream Monroe Jersey Road SE | GAR030701030719 | 2 | Fishing |
| Pughs Creek | Tributary to Yellow River | GAR030701030324 | 5 | Fishing |
| Rocky Creek | Headwaters to Lake Jackson | GAR030701030802 | 4.8 | Fishing |
| Tributary to Hurricane Creek | Headwaters to Hurricane Creek | GAR030701031317 | 3.2 | Fishing |
| Tributary to Thompson Creek | Headwaters to Thompson Creek | GAR030701031116 | 1 | Fishing |

Table 19: Stream Segments with Revised TMDLs for Bacteria in the Ocmulgee River Basin

| Stream Segment | Location | Assessment Unit ID | Segment Length (miles) | Designated Use | |
|--------------------|--|-----------------------|------------------------------|-------------------------------|--|
| Boar Tusk Creek | Headwaters to Yellow River | GAR030701030424 | 3 | Fishing | |
| Ocmulgee River | Beaverdam Creek to Walnut Creek | GAR030701031617 | 10 | Drinking Water, Fishing | |
| Ocmulgee River | Tobesofkee Creek to Echeconnee Creek | GAR030701031615 | 7.3 | Fishing | |
| Yellow Water Creek | 1 mile D/S Stark Road (Rd S763), Jackson to Ocmulgee River | GAR030701031016 | 7 | Fishing | |
| Jackson Lake | Dam Pool (formerly Newton, Butts, Jasper Counties) | GAR030701030904 | 650 acres | Recreation, Fishing | |

The water use classification for the listed stream segments in the Ocmulgee River Basin is "Fishing." The criterion violated is listed as fecal coliform. The potential cause listed include urban runoff and nonpoint sources. The "Fishing" bacteria water quality standards as approved by US EPA Region 4 on January 20, 2021, is as follows:

- (c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; primary contact recreation in and on the water for the months of May October, secondary contact recreation in and on the water for the months of November April; or for any other use requiring water of a lower quality.
 - (i) Bacteria:
 - 1. For the months of May through October, when water contact recreation activities are expected to occur, fecal coliform not to exceed a geometric mean of 200 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. Should water

quality and sanitary studies show fecal coliform levels from non-human sources exceed 200 counts per 100 mL (geometric mean) occasionally, then the allowable geometric mean fecal coliform shall not exceed 300 counts per 100 mL in lakes and reservoirs and 500 counts per 100 mL in free flowing freshwater streams. For the months of November through April, fecal coliform not to exceed a geometric mean of 1,000 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours and not to exceed a maximum of 4,000 counts per 100 mL for any sample. The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.

2. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.

In January 2022, the Georgia DNR Board adopted new bacteria criteria for "Fishing" and "Drinking Water" designated uses using the bacterial indicators *E. coli* and enterococci. These bacteria are better indicators for human health illnesses. The adopted criteria have the same estimated illness rate (8 per 1000 swimmers) as the previously established criteria. EPA approved the proposed standards August 31, 2022. Since this TMDL was written after EPA approved the new bacteria criteria, the TMDL will use both bacterial indicators. The use classification water quality standards for fecal coliform bacteria, as stated in <u>the State of Georgia's Rules and Regulations for Water Quality Control</u>, Chapter 391-3-6-.03(6)(c)(iii) (GA EPD, 2022), are:

- (c) Fishing: Propagation of Fish, Shellfish, Game and Other Aquatic Life; primary contact recreation in and on the water for the months of May October, secondary contact recreation in and on the water for the months of November April; or for any other use requiring water of a lower quality.
 - (i) Bacteria:
 - 1. Estuarine waters: For the months of May through October, when primary water contact recreation activities are expected to occur, culturable enterococci not to exceed a geometric mean of 35 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 130 counts per 100 mL the same 30-day interval.

For the months of November through April, culturable enterococci not to exceed a geometric mean of 74 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an enterococci statistical threshold value (STV) of 273 counts per 100 mL in the same 30-day interval.

2. All other fishing waters: For the months of May through October, when primary water contact recreation activities are expected to occur, culturable E. coli not to exceed a geometric mean of 126 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 410 counts per 100 mL in the same 30-day interval.

For the months of November through April, culturable E. coli not to exceed a geometric mean of 265 counts per 100 mL based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. There shall be no greater than a ten percent excursion frequency of an E. coli statistical threshold value (STV) of 861 counts per 100 mL in the same 30-day interval.

- The State does not encourage swimming in these surface waters since a number of factors which are beyond the control of any State regulatory agency contribute to elevated levels of bacteria.
- 4. For waters designated as shellfish growing areas by the Georgia DNR Coastal Resources Division, the requirements will be consistent with those established by the State and Federal agencies responsible for the National Shellfish Sanitation Program. The requirements are found in National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish, 2007 Revision (or most recent version), Interstate Shellfish Sanitation Conference, U.S. Food and Drug Administration.

7.2 Potential Sources

An important part of the TMDL analysis is the identification of potential source categories. A source assessment characterizes the known and suspected bacteria sources in the watershed. Sources are broadly classified as either point or nonpoint sources. A point source is defined as a discernable, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters. Point sources of bacteria include NPDES permittees discharging treated wastewater and storm water. Nonpoint sources of bacteria are diffuse sources that cannot be identified as entering the waterbody at a single location. These sources generally involve land use activities that contribute bacteria to streams during a rainfall runoff event.

NPDES point source bacteria loads from wastewater treatment facilities usually do not contribute to impairments. This is because these facilities are required to treat to levels corresponding to instream water quality criteria. However, point sources can and do fail, which may contribute to bacteria loads through leaks and overflows from sanitary sewer systems, CAFOs, or leachate from operational landfills.

Nonpoint sources of bacteria in urban areas include wastes that are attributable to domestic animals, illicit discharges of sanitary waste, leaking septic systems, runoff from improper disposal of waste materials, and leachate from closed landfills. In non-urban areas, potential sources of bacteria may include animals grazing in pastures, dry manure storage facilities and lagoons, chicken litter storage areas, and direct access of livestock to streams. Wildlife, especially waterfowl and mammals living close to or in water environments, can be a significant source of bacteria.

7.3 Management Practices and Activities

GA EPD is responsible for administering and enforcing laws to protect the waters of the State and is the lead agency for implementing the State's Nonpoint Source Management Program. Georgia is working with local governments, agricultural and forestry agencies such as the Georgia Department of Agriculture, NRCS, GSWCC, and GFC to foster implementation of BMPs that address nonpoint source pollution. The following management practices are recommended to reduce bacteria loads to stream segments:

- Sustain compliance with NPDES treated wastewater permit requirements;
- Sustain compliance with NPDES MS4 permit requirements, where applicable;
- Compliance with future NPDES Industrial General Permit requirements, including where applicable, achieving benchmark levels for monitored constituents;
- Ensure storm water management plans are in place and being implemented by the local governments, and by the industrial facilities located in the watershed;
- Implementation of Georgia's Statewide Nonpoint Source Management Plan (GA
EPD, 2019);

- Adoption and implementation of the *Georgia Stormwater Management Manual* (ARC, 2016) to facilitate water quality treatment of stormwater runoff, including bacteria removal, through structural stormwater BMP installation;
- Further develop and streamline mechanisms for reporting and correcting illicit discharges, breaks, surcharges, and general sanitary sewer system problems;
- Uphold requirements that all new and replacement sanitary sewage systems be designed to minimize discharges into storm sewer systems;
- Adoption of local ordinances (i.e., septic tanks, storm water, etc.) that address local water quality;
- Continue efforts to increase public awareness and education regarding the impact of human activities on water quality, ranging from industrial and municipal discharges to individual's activities in residential neighborhoods;
- Continue working with Federal, State, and local agencies and owners of sites where cleanup measures are necessary, and in developing control measures to prevent future releases of constituents of concern;
- Implementation of recommended Water Quality management practices in the *Middle Ocmulgee Regional Water Plan* (GA EPD, 2017);
- Adoption of NRCS Conservation Practices for primarily agricultural lands;
- Application of BMPs appropriate to both urban and rural land uses, where applicable; and
- Ongoing public education efforts on the sources of bacteria and common-sense approaches to lessen the impact of this contaminant on surface waters.

7.4 Monitoring

GA EPD encourages local governments and municipalities to develop and continue water quality monitoring programs. These programs can help pinpoint various bacteria sources, as well as verify the 303(d) stream segment listings. This will be particularly valuable for those segments where listing was based on limited data. In addition, regularly scheduled sampling will determine if there has been some improvement in the water quality of the listed stream segments. GA EPD would like to particularly commend and encourage downgradient sampling on the LAS system and supports expanding monitoring to quarterly or monthly sampling schedules. GA EPD is available to assist in providing technical guidance regarding the preparation of monitoring plans and Sampling Quality Assurance Plans (SQAP).

7.5 Future Action

This Initial TMDL Implementation Plan includes a general approach to pollutant source identification, as well as management practices to address pollutants. In the future, GA EPD will continue to determine and assess the appropriate point and non-point source management measures needed to achieve the TMDLs and to protect and restore water quality in impaired waterbodies.

For point sources, any wasteload allocations for wastewater treatment plant facilities will be implemented in the form of water quality-based effluent limitations in NPDES permits. Any wasteload allocations for regulated stormwater will be implemented in the form of BMPs in the NPDES permits. Contributions of bacteria from regulated communities may also be managed using permit requirements such as watershed assessments, watershed protection plans, and long-term monitoring. These measures will be directed through current point source management programs.

GA EPD will work to support watershed restoration, improvement and protection projects that address nonpoint source pollution. This is a process whereby GA EPD and/or Regional Commissions or other agencies or local governments, under a contract with GA EPD, will develop a Watershed Management Plan intended to address water quality at the small watershed level (HUC 10 or smaller). These plans will be developed as resources and willing partners become available. The development of these plans may be funded via several grant sources, including, but not limited to: CWA Section 319(h), Section 604(b), and/or Section 106 grant funds. These plans are intended for implementation upon completion.

Any Watershed Management Plan that specifically addresses a waterbody contained within this TMDL will supersede this Initial TMDL Implementation Plan for that waterbody once GA EPD accepts and/or approves the plan. Watershed Management Plans intended to address this TMDL and other water quality concerns, prepared for GA EPD, and for which GA EPD and/or the GA EPD Contractor are responsible, will contain at a minimum the US EPA's 9 Elements of Watershed Planning:

- An identification of the sources or groups of similar sources contributing to nonpoint source pollution to be controlled to implement load allocations or achieve water quality standards. Sources should be identified at the subcategory level with estimates of the extent to which they are present in the watershed (e.g., X numbers of cattle feedlots needing upgrading, Y acres of row crops needing improved bacteria control, or Z linear miles of eroded streambank needing remediation);
- 2) An estimate of the load reductions expected for the management measures;
- A description of the NPS management measures that will need to be implemented to achieve the load reductions established in the TMDL or to achieve water quality standards;
- 4) An estimate of the sources of funding needed, and/or authorities that will be relied upon, to implement the plan;
- 5) An information/education component that will be used to enhance public understanding of and participation in implementing the plan;
- 6) A schedule for implementing the management measures that is reasonably expeditious;
- 7) A description of interim, measurable milestones (e.g., amount of load reductions, improvement in biological or habitat parameters) for determining whether management measures or other control actions are being implemented;
- 8) A set of criteria that can be used to determine whether substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether the plan needs to be revised; and;
- 9) A monitoring component to evaluate the effectiveness of the implementation efforts, measured against the criteria established under item 8.

The public will be provided an opportunity to participate in the development of Watershed Management Plans that address impaired waters and to comment on them before they are finalized.

GA EPD will continue to offer technical and financial assistance (when and where available) to complete Watershed Management Plans that address the impaired waterbodies listed in this and other TMDL documents. Assistance may include but will not be limited to:

- Assessments of pollutant sources within watersheds;
- Determinations of appropriate management practices to address impairments;
- Identification of potential stakeholders and other partners;
- Developing a plan for outreach to the public and other groups;
- Assessing the resources needed to implement the plan upon completion; and
- Other needs determined by the lead organization responsible for plan development.

GA EPD will also make this same assistance available, if needed, to proactively address water quality concerns. This assistance may be in the way of financial, technical, or other aid and may be requested and provided outside of the TMDL process or schedule.

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Appendix A

30-day Geometric Mean Fecal Coliform Monitoring Data

Table A-1: Drainage Areas and Annual Average flow values for segments with revised TMDLs

| Revised 303(d) Listed Stream Segment | Segment Location | Annual Average Stream Flow (ft ³ /s) | Watershed Area (sq miles) |
|---|--|---|---------------------------------|
| Boar Tusk Creek | Headwaters to Yellow River | 3.03 | 2.86 |
| Ocmulgee River | Beaverdam Creek to Walnut Creek | 2210 | 2250 |
| Ocmulgee River | Tobesofkee Creek to Echeconnee Creek | 2530 | 2660 |
| Yellow Water Creek Creek Yellow Water Creek Creek Creek Creek Creek | | 29.5 | 31.2 |
| Jackson Lake Jasper Counties) | | 1470 | 1410 |

Table A-2: Drainage Areas and USGS Flow Gages used to Estimate Stream Flow in 303(d) Listed Streams

| 303(d) Listed Stream Segment | Segment Location | Impaired Stream Drainage Area (sq miles) | USGS Station ID | USGS Description | USGS Drainage Area (sq miles) |
|---|---|---|--------------------|--|--|
| Bear Creek GAR030701030804 | Gaithers Branch to Lake Jackson | 34.7 | 02200260 | East Bear Creek at | 6 80 |
| Rocky Creek GAR030701030802 | Headwaters to Lake Jackson | 7.5 | 02209360 | Mansfield, GA | 0.89 |
| Berry Creek GAR030701030804 | Pond at the headwaters to the Ocmulgee River | 6.33 | 02211800 | Towaliga River at GA 83 near Juliette, GA | 338 |
| Big Cotton Indian Creek GAR030701030214 | Little Cotton Indian Creek to the South River | 126.8 | 02204285 | Pates Creek near Flippen, GA | 11.9 |

Total Maximum Daily Load Evaluation Ocmulgee River Basin (Bacteria)

| 303(d) Listed Stream Segment | Segment Location | Impaired Stream Drainage Area (sq miles) | USGS Station ID | USGS Description | USGS Drainage Area (sq miles) |
|---|--|---|--------------------|---|--|
| Cornish Creek GAR030701030717 | Headwaters to Upper Williams Lake | 12.38 | | | |
| Gum Creek GAR030701030521 | Tributary 0.25 miles upstream Hightower Trail to tributary 0.16 miles upstream Dial Mill Road | 12.67 | 02208485 | Cornish Creek at Lower Jersey Road near Covington, GA | 14.2 |
| Mountain Creek GAR030701030719 | Tributary at Ammons Bridge Road to tributary 0.7 miles downstream Monroe Jersey Road SE | 7.9 | | | |
| Echeconnee Creek GAR030701031505 | Rock Quarry Road to Knoxville Road | 143.1 | 02214075 | Echeconnee Creek at Houston Road near Byron, GA | 228 |
| Garner Creek GAR030701030326 | Headwaters to Yellow River | 5.84 | 02207135 | Little Stone Mountain | 2.2 |
| Pughs Creek GAR030701030324 | Tributary to Yellow River | 7.33 | 02207133 | Mountain, GA | 2.2 |
| Island Shoal Creek GAR030701030607 | Island Shoal Creek Headwaters to Mackey GAR030701030607 Creek | | 02211375 | Cabin Creek at North Second Street near Griffin, GA | 4.39 |
| Tributary to Thompson Creek GAR030701031116 Headwaters to Thompson Creek | | 0.534 | 02211375 | Cabin Creek at North Second Street near Griffin, GA | 4.39 |
| Little Ocmulgee River GAR030701050406 | Comulgee River 30701050406 Little Ocmulgee State Park Lake to Wilcox Creek | | 02215900 | Little Ocmulgee River at GA 149 at Scotland, GA | 316 |
| Tributary to Hurricane Creek GAR030701031317 | Headwaters to Hurricane Creek | 3.38 | 02212600 | Falling Creek near Juliette, GA | 72.2 |

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 02/20/2014 | 210 | 43.26 | | | | |
| 02/26/2014 | 170 | 47.09 | | | | |
| 03/04/2014 | 300 | 37.42 | 303 | 48 | 5.53E+11 | 1.82E+12 |
| 03/06/2014 | 800 | 42.51 | | | | |
| 03/19/2014 | 300 | 70.51 | | | | |
| 05/19/2014 | 800 | 33.14 | | 22 | 2.99E+11 | 1.64E+11 |
| 05/29/2014 | 130 | 21.50 | 264 | | | |
| 06/03/2014 | 1300 | 18.38 | 504 | 22 | | |
| 06/17/2014 | 130 | 13.65 | | | | |
| 09/08/2014 | 300 | 2.01 | | | | |
| 09/15/2014 | 230 | 1.46 | | | | |
| 11/17/2014 | 3000 | 12.14 | | | 1.38E+12 | 9.19E+10 |
| 11/24/2014 | 5000 | 19.99 | 738 | 11 77 | 3.78E+12 | 1.51E+11 |
| 12/09/2014 | 180 | 7.60 | 100 | 11.77 | | |
| 12/16/2014 | 110 | 7.35 | | | | |

Table A-3: RV_04_2058: Bear Creek at McDonald Road near Mansfield, GA Water Quality Monitoring Data



Figure A-1: Bear Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Table A-4: RV_05_17306 - Berry Creek at Hwy 23 near Forsyth, GA |
|---|
| Water Quality Monitoring Data |

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 03/14/2018 | 40 | 5.36 | | | | |
| 08/21/2018 | 170 | 2.43 | | | | |
| 08/21/2018 | 750 | 2.43 | | | | |
| 10/04/2018 | 700 | 0.65 | | | | |
| 01/07/2021 | 260 | 9.23 | | | | |
| 02/24/2021 | 80 | 7.68 | | | | |
| 03/10/2021 | 70 | 3.82 | | | | |
| 05/17/2021 | 170 | 3.75 | | | | |
| 05/26/2021 | 500 | 2.13 | 277 | 2.27 | 2 20E 10 | 1 725,10 |
| 06/02/2021 | 230 | 1.62 | 211 | 2.21 | 2.30E+10 | 1.720+10 |
| 06/07/2021 | 300 | 1.59 | | | | |



Figure A-2: Berry Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 02/20/2014 | 80 | 343.11 | | | | |
| 02/26/2014 | 40 | 343.11 | | | | |
| 03/04/2014 | 20 | 297.29 | 65 | 383 | | |
| 03/06/2014 | 80 | 310.07 | | | | |
| 03/19/2014 | 240 | 625.48 | | | | |
| 05/19/2014 | 380 | 306.88 | | | | |
| 05/29/2014 | 80 | 221.63 | 100 | 220 | | |
| 06/03/2014 | 130 | 207.78 | 100 | 239 | | |
| 06/17/2014 | 270 | 220.57 | | | | |
| 09/08/2014 | 500 | 344.17 | | | | |
| 11/17/2014 | 2400 | 299.42 | | | 2.72E+13 | 2.27E+12 |
| 11/24/2014 | 3000 | 618.02 | 050 | 250 | 7.02E+13 | 4.68E+12 |
| 12/09/2014 | 110 | 238.68 | 003 | 338 | | |
| 12/16/2014 | 230 | 274.91 | | | | |

Table A-5: RV_04_847 - Big Cotton Indian Creek at Hwy 20 near McDonough, GA Water Quality Monitoring Data



Figure A-3: Big Cotton Indian Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves for both Sampling Stations

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 03/07/2019 | 40 | 19.18 | | | | |
| 03/26/2019 | 300 | 11.94 | 150 | 10 | 7 00E 10 | 9 02E 10 |
| 04/01/2019 | 230 | 8.32 | 159 | 12 | 7.09E+10 | 0.950+10 |
| 04/03/2019 | 230 | 7.74 | | | | |
| 06/11/2019 | 1300 | 11.77 | | 5 | 1.36E+11 | |
| 06/19/2019 | 800 | 4.12 | 664 | | | 4.15E+10 |
| 06/27/2019 | 800 | 3.47 | 034 | | | |
| 07/01/2019 | 220 | 2.55 | | | | |
| 08/13/2019 | 2300 | 1.64 | | | | |
| 08/15/2019 | 130 | 2.12 | 405 | 1 | 2 24 - 10 | 1.10E+10 |
| 08/20/2019 | 500 | 1.64 | 405 | 1 | 2.240+10 | |
| 09/10/2019 | 180 | 0.44 | | | | |
| 11/04/2019 | 300 | 2.21 | | | | |
| 11/06/2019 | 300 | 2.17 | 225 | 2 | 2 90 - 10 | 2 29 5 10 |
| 11/14/2019 | 260 | 4.13 | 235 | 3 | 2.00E+10 | 2.300+10 |
| 12/03/2019 | 130 | 4.08 | | | | |

Table A-6: RV_04_17516 - Cornish Creek at Jersey Walnut Grove Rd near Jersey, GA Water Quality Monitoring Data



Figure A-4: Cornish Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves for both Sampling Stations

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 05/25/2017 | 300 | 531.60 | | | | |
| 05/30/2017 | 300 | 87.24 | 245 | 239 | 2.22E+12 | 1 01 - 12 |
| 06/08/2017 | 500 | 251.05 | 245 | | | 1.010+12 |
| 06/12/2017 | 80 | 87.87 | | | | |
| 08/15/2017 | 210 | 84.10 | | | | |
| 08/28/2017 | 300 | 33.45 | 434 | 58 | 9.58E+11 | 4.41E+11 |
| 09/05/2017 | 1300 | 57.30 | | | | |
| 11/02/2017 | 500 | 54.86 | | | | 4.50E+11 |
| 11/08/2017 | 180 | 53.16 | 457 | 50 | 2 545,11 | |
| 11/16/2017 | 170 | 66.53 | 107 | | 3.04E+11 | |
| 11/21/2017 | 40 | 63.39 | | | | |

Table A-7: RV_05_16777 - Echeconnee Creek at Rock Quarry Rd near Yatesville, GA Water Quality Monitoring Data



Figure A-5: Echeconnee Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves for both Sampling Stations

Table A-8: RV_04_15916 - Garner Creek at Five Forks Trickum Road near Lawrenceville, GA Water Quality Monitoring Data

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 01/19/2016 | 80 | 7.91 | | | 4.70E+10 | 6.19E+10 |
| 01/25/2016 | 170 | 9.95 | 150 | 152 8 | | |
| 02/02/2016 | 130 | 7.51 | 152 | | | |
| 02/10/2016 | 300 | 7.33 | | | | |
| 07/21/2016 | 500 | 6.16 | | | | 2.57E+10 |
| 07/28/2016 | 300 | 2.04 | 495 | 2 | 6.35E+10 | |
| 08/02/2016 | 500 | 3.29 | | 3 | | |
| 08/16/2016 | 800 | 2.07 | | | | |



Figure A-6: Garner Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves for both Sampling Stations

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 03/07/2019 | 20 | 19.63 | | | | |
| 03/26/2019 | 130 | 12.22 | 85 | 12 | 3.88⊑⊥10 | 0 1/E+10 |
| 04/01/2019 | 500 | 8.51 | 00 | 12 | 3.002+10 | 9.142+10 |
| 04/03/2019 | 40 | 7.92 | | | | |
| 06/11/2019 | 800 | 12.05 | | 6 | 9.36E+10 | 4.24E+10 |
| 06/19/2019 | 500 | 4.21 | 112 | | | |
| 06/27/2019 | 190 | 3.55 | 772 | | | |
| 07/01/2019 | 500 | 2.61 | | | | |
| 08/13/2019 | 170 | 1.68 | | | | |
| 08/15/2019 | 200 | 2.17 | 250 | 15 | 1 /1 = 10 | 1 13⊑⊥10 |
| 08/20/2019 | 500 | 1.68 | 230 | 1.5 | 1.412+10 | 1.132+10 |
| 09/10/2019 | 230 | 0.45 | | | | |
| 11/04/2019 | 170 | 2.27 | | | | |
| 11/06/2019 | 230 | 2.22 | 128 | 3 | 1 56E±10 | 2 11 E+10 |
| 11/14/2019 | 170 | 4.23 | 128 | 3 | 1.000+10 | 2.446710 |
| 12/03/2019 | 40 | 4.18 | | | | |

Table A-9: RV_09_3183 – Gum Creek at Hightower Trail Water Quality Monitoring Data



Figure A-7: Gum Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

Table A-10: RV_04_ 17796 - Island Shoals Creek at Mt Bethel Road near McDonough, GA Water Quality Monitoring Data

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 01/07/2021 | 300 | 7.55 | | | | |
| 02/24/2021 | 40 | 8.04 | | | | |
| 03/10/2021 | 40 | 6.06 | | | | |
| 05/17/2021 | 230 | 6.41 | | | 1 675 11 | 2 625 10 |
| 05/26/2021 | 800 | 4.45 | 0.21 | F | 1.07 = +11 | 3.03E+10 |
| 06/02/2021 | 2300 | 4.08 | 3 21 | 5 | 3.56E+11 | 3.09E+10 |
| 06/07/2021 | 1700 | 4.23 | | | 2.72E+11 | 3.20E+10 |



Figure A-8: Island Shoals Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 02/11/2009 | 110 | 0.001 | 115 | 847 | | |
| 02/18/2009 | 500 | 0.001 | | | | |
| 02/13/2013 | 1300 | 535.50 | | | 2.64E+13 | 4.05E+12 |
| 02/19/2013 | 40 | 774.34 | | | | |
| 02/21/2013 | 80 | 671.03 | | | | |
| 02/28/2013 | 10 | 3099.26 | | | | |
| 05/06/2013 | 260 | 525.07 | 37 | 169 | | |
| 05/16/2013 | 70 | 87.39 | | | | |
| 05/20/2013 | 10 | 45.78 | | | | |
| 05/28/2013 | 10 | 17.25 | | | | |
| 08/01/2013 | 300 | 269.17 | | 1644 | | |
| 08/20/2013 | 500 | 2483.20 | 294 | | 1.83E+13 | 1.24E+13 |
| 08/21/2013 | 170 | 2179.91 | | | | |
| 11/05/2013 | 300 | 9.76 | | 9 | | |
| 11/07/2013 | 500 | 12.98 | 644 | | | |
| 11/12/2013 | 500 | 7.41 | | | | |
| 11/18/2013 | 2300 | 4.03 | | | 3.51E+11 | 1.52E+11 |

Table A-11: RV_05_2230 – Little Ocmulgee River at US Highway 280 / State Road 30 Water Quality Monitoring Data



Figure A-9: Little Ocmulgee River Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 03/07/2019 | 130 | 12.24 | | 8 | 2.34E+10 | 5.70E+10 |
| 03/26/2019 | 20 | 7.62 | 00 | | | |
| 04/01/2019 | 220 | 5.31 | 02 | | | |
| 04/03/2019 | 80 | 4.94 | | | | |
| 06/11/2019 | 1700 | 7.51 | 556 | 3 | 4.83E+11 | 9.94E+10 |
| 06/19/2019 | 1700 | 2.63 | | | 1.69E+11 | 9.94E+10 |
| 06/27/2019 | 300 | 2.21 | | | 7.35E+10 | 2.65E+10 |
| 07/01/2019 | 110 | 1.62 | | | | |
| 08/13/2019 | 220 | 1.05 | | 1 | 9.43E+09 | 7.04E+09 |
| 08/15/2019 | 260 | 1.35 | 269 | | | |
| 08/20/2019 | 300 | 1.05 | 200 | | | |
| 09/10/2019 | 300 | 0.28 | | | | |
| 11/04/2019 | 20 | 1.41 | | | 6.19E+09 | 1.52E+10 |
| 11/06/2019 | 130 | 1.39 | 81 | 2 | | |
| 11/14/2019 | 130 | 2.64 | | | | |
| 12/03/2019 | 130 | 2.60 | | | | |

Table A-12: RV_04_17517 - Mountain Creek at Monroe Jersey Rd near Monroe, GA Water Quality Monitoring Data



Figure A-10: Mountain Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 03/07/2019 | 230 | 47.98 | | | | 1.65E+12 |
| 03/26/2019 | 400 | 36.65 | 207 | 43 | 4.015.11 | |
| 04/01/2019 | 170 | 24.49 | 297 | | 4.910+11 | |
| 04/03/2019 | 500 | 65.30 | | | | |
| 06/11/2019 | 2300 | 150.27 | | 51 | 1.31E+13 | 1.06E+12 |
| 06/19/2019 | 500 | 28.02 | 506 | | 1.16E+12 | 3.89E+11 |
| 06/27/2019 | 220 | 16.19 | 590 | | | |
| 07/01/2019 | 500 | 10.96 | | | | |
| 08/13/2019 | 800 | 2.20 | | 3 | | |
| 08/15/2019 | 2800 | 9.93 | 710 | | 1.05E+12 | 3.76E+11 |
| 08/20/2019 | 230 | 1.17 | /12 | | 9 06E 10 | |
| 09/10/2019 | 500 | 0.001 | | | 0.900+10 | 2.52E+10 |
| 11/04/2019 | 80 | 13.49 | | 24 | 1.27E+11 | 1.84E+11 |
| 11/06/2019 | 500 | 9.90 | 139 | | | |
| 11/14/2019 | 230 | 12.26 | | | | |
| 12/03/2019 | 40 | 61.31 | | | | |

Table A-13: RV_04_2070 - Tributary to Yellow River at Five Forks Trickum Road, Lawrenceville, GA Water Quality Monitoring Data



Figure A-11: Pugh's Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 02/20/2014 | 700 | 3.23 | | | | |
| 02/26/2014 | 1100 | 2.58 | | 3 | 1.07E+11 | 9.77E+10 |
| 03/04/2014 | 1300 | 2.16 | 649 | | 1.06E+11 | 8.16E+10 |
| 03/06/2014 | 230 | 2.82 | | | | |
| 03/19/2014 | 500 | 3.07 | | | | |
| 05/19/2014 | 1300 | 2.62 | 1111 | 2 | 1.29E+11 | 9.93E+10 |
| 05/29/2014 | 500 | 1.62 | | | 7.31E+10 | 1.32E+10 |
| 06/03/2014 | 1700 | 1.47 | | | 9.46E+10 | 5.56E+10 |
| 06/17/2014 | 900 | 1.49 | | | | |
| 06/17/2014 | 1700 | 1.49 | | | 9.60E+10 | 5.65E+10 |
| 09/08/2014 | 800 | 2.58 | | | | |
| 09/15/2014 | 260 | 1.18 | | | | |
| 11/17/2014 | 500 | 11.21 | | 5 | | |
| 11/24/2014 | 2300 | 4.06 | 523 | | 3.54E+11 | 1.54E+11 |
| 12/09/2014 | 130 | 1.45 | | | | |
| 12/16/2014 | 500 | 1.68 | | | | |

Table A-14: RV_04_889 – Rocky Creek at Henderson Mill Road near Monticello, GA Water Quality Monitoring Data



Figure A-12: Rocky Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 02/17/2020 | 70 | 0.55 | | | | |
| 02/26/2020 | 10 | 2.96 | 129 | 4 | | |
| 03/03/2020 | 1300 | 4.20 | | | 2.07E+11 | 1.59E+11 |
| 03/05/2020 | 300 | 9.08 | | | | |
| 07/22/2020 | 8000 | 0.13 | 683 | 0.12 | 4.01E+10 | 3.42E+09 |
| 07/27/2020 | 300 | 0.09 | | | 3.13E+09 | 9.15E+08 |
| 08/03/2020 | 1300 | 0.10 | | | 5.14E+09 | 3.95E+09 |
| 08/11/2020 | 70 | 0.16 | | | | |
| 09/22/2020 | 300 | 0.16 | | 0.11 | | |
| 10/05/2020 | 130 | 0.08 | 182 | | | |
| 10/08/2020 | 220 | 0.08 | | | | |
| 10/13/2020 | 130 | 0.11 | | | | |
| 11/19/2020 | 500 | 0.13 | | | | |

Table A-15: RV_05_17697 - Tributary to Hurricane Creek at Hawes Road near Gray, GA Water Quality Monitoring Data



Figure A-13: Tributary to Hurricane Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves

| Date | Observed Fecal coliform (Count/100 mL) | Estimated Instantaneous Flow on Sample Day (cfs) | Geometric Mean (counts/100 mL) | Mean Flow (cfs) | Geometric Mean Fecal Coliform Loading (counts/30 days) | Geometric Mean TMDL Fecal Coliform Loading (counts/30 days) |
|------------|--|--|-----------------------------------|--------------------|---|--|
| 01/12/2015 | 70 | 0.95 | | | | |
| 02/19/2015 | 20 | 1.17 | | 3 | | |
| 02/26/2015 | 40 | 2.43 | 16 | | | |
| 03/09/2015 | 80 | 4.17 | 46 | | | |
| 03/11/2015 | 70 | 4.71 | | | | |
| 07/20/2015 | 500 | 0.15 | | 0.12 | 0.625.09 | |
| 07/27/2015 | 230 | 0.08 | 214 | | | |
| 08/10/2015 | 80 | 0.13 | | | 9.032+00 | 0.900+00 |
| 08/06/2015 | 230 | 0.12 | | | | |
| 09/28/2015 | 300 | 0.43 | | 0.73 | 1.55E+10 | 5.50E+09 |
| 10/06/2015 | 1300 | 1.08 | 560 | | 5.33E+10 | 4.10E+10 |
| 10/26/2015 | 1500 | 0.57 | 562 | | 3.25E+10 | 2.17E+10 |
| 10/28/2015 | 170 | 0.82 | | | | |
| 12/01/2015 | 20 | 2.14 | | | | |
| 12/07/2015 | 40 | 1.96 | 26 | 2 | | |
| 12/15/2015 | 110 | 1.89 | 30 | | | |
| 12/21/2015 | 20 | 1.24 | | | | |

Table A-16: RV_05_5128 – Tributary to Thompson Creek at Dillon Drive near Hampton, GA Water Quality Monitoring Data



Figure A-14: Tributary to Thompson Creek Fecal Coliform Geometric Mean Loads and Summer and Winter TMDL Curves