GEORGIA SURFACE WATER AND GROUNDWATER QUALITY MONITORING AND ASSESSMENT STRATEGY

White County Georgia, Double Culvert Creek **PHOTO: Roy Burke**

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PREFACE

The Georgia Environmental Protection Division (GAEPD) of the Department of Natural Resources (DNR) developed this document entitled “Georgia Surface Water and Groundwater Quality Monitoring and Assessment Strategy”. As a part of the State’s Water Quality Management Program, this report focuses on GAEPD’s water quality monitoring efforts to address key elements identified by the U.S. Environmental Protection Agency (USEPA) monitoring strategy guidance entitled “Elements of a State Monitoring and Assessment Program, March 2003”.

This report updates the State’s water quality monitoring strategy as required by the USEPA’s regulations addressing water management plans of the Clean Water Act, Section 106(e)(1).

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TABLE OF CONTENTS

TABLE OF CONTENTS **1**

INTRODUCTION **1**

1. MONITORING PROGRAM STRATEGY OVERVIEW **3**
Assessment of Water Quality *5*
History of Georgia's Water Quality Monitoring Programs *5*
Data Management, Assessment, and Reporting *6*
Future Issues and Challenges *7*
Strategy Implementation Challenges *8*

2. MONITORING OBJECTIVES **9**

3. MONITORING DESIGN **11**
State-wide Trend Monitoring. *11*
Targeted Monitoring *11*
Probabilistic Monitoring *12*
Lake/Reservoir Monitoring *12*
Estuary Monitoring. *12*
DNR State Park Beach Monitoring *13*
Biological Monitoring *13*
Fish Tissue Monitoring *14*
Aquatic Toxicity Monitoring *14*
Toxic Substance Monitoring *15*
Intensive Surveys Monitoring *16*
Groundwater Well Monitoring *16*
Facility Compliance Monitoring *16*

4. CORE AND SUPPLEMENTAL WATER QUALITY INDICATORS **18**

5. QUALITY ASSURANCE **20**
Laboratory *20*
Quality Assurance *20*

6. DATA MANAGEMENT **21**

7. DATA ANALYSIS/ASSESSMENT **22**
Designated Uses and Water Quality Standards *22*

8. REPORTING **24**

9. PROGRAMMATIC EVALUATION **25**

10. GENERAL SUPPORT AND INFRASTRUCTURE PLANNING **26**
Resources *26*
Future Studies and Actions *27*

LIST OF TABLES

TABLE 1. GEORGIA WATER RESOURCES ATLAS……5
TABLE 2. WATER QUALITY INDICATORS.....……..19

APPENDICES

APPENDIX A: SURFACE WATER QUALITY MONITORING STATIONS AND GROUNDWATER WELLS

1a. Calendar Year 2025 Monitoring Stations – Rivers/Streams, Lakes/Reservoirs, Estuaries/Sounds
2. Coastal Beach Monitoring Stations.
3. DNR State Parks Lake Beach Monitoring Stations.
4. Mercury in Fish Trend Monitoring Stations.
5. Parameters For Fish Tissue Testing
6. Groundwater Monitoring Wells

APPENDIX B: WATER USE CLASSIFICATIONS AND WATER QUALITY STANDARDS APPROVED BY EPA

INTRODUCTION

The purpose of the Georgia Surface Water Quality Monitoring and Assessment Strategy (Strategy) is to outline the State's ambient water quality monitoring program, which addresses the 10 Elements recommended by the USEPA for a State Water Monitoring and Assessment Program. Currently, the Georgia water quality monitoring and assessment program includes a number of different aspects including: baseline or trend monitoring; planning monitoring or intensive surveys; effectiveness monitoring; probabilistic stream monitoring; lake monitoring; coastal monitoring; estuary monitoring; coastal and freshwater beach monitoring; toxic substance monitoring; fish tissue monitoring; periphyton, macroinvertebrate and fish community assessment; habitat assessment; and facilities monitoring. These monitoring tools provide Georgia with a comprehensive, long-term monitoring program that serves the water quality management needs and addresses all water body types designated as State waters, including rivers, streams, lakes, reservoirs, estuaries, wetlands, groundwater, and coastal areas.

Water Quality Monitoring and Assessment Strategy Vision, Mission Statement and Goals

Vision: To gather information essential to develop indicators and standards to protect human health, aquatic life, and the environment in Georgia.

Mission Statement: To implement a monitoring strategy that includes assessment of water quality conditions within Georgia, leads to the development of water quality standards and corrective actions to restore impacts identified through monitoring initiatives taken, and effectively communicates this information to both internal and external customers.

Goals:

- Measure the physical, chemical, and biological conditions of waters in all river basins within Georgia and identify causes responsible for water quality impairments.
- Assess the impact from human and other activities within the watersheds and the effects these activities are having on the overall ecosystem.
- Identify and recommend corrective action measures to restore waters to meet designated uses.
- Report water quality assessments in support of the management program to customers and stakeholders.

Challenges in fully implementing the Strategy include obtaining sufficient personnel to accomplish the monitoring and assessment goals of the program; refining our database system as needed in order to enhance its storage, retrieval, and analysis capabilities; and coordinating and managing internal and external information and data gathering and assessment.

Key environmental issues and challenges facing the State currently and in future years include: (1) controlling toxic substances in water; (2) ensuring a sustainable and safe supply of potable

water; (3) managing nutrient discharges; (4) reducing nonpoint source pollution; and, (5) increasing public involvement in water quality improvement projects.

1. MONITORING PROGRAM STRATEGY OVERVIEW

Surface water and groundwater resources are extremely important to the life, health, and economy of Georgia. According to USEPA estimates based on the U.S. Geological Survey 1:100,000 Digital Line Graph, the State has 44,056 miles of perennial streams, 23,906 miles of intermittent streams, and 603 miles of ditches and canals for a total of 70,150 stream miles. The State also has 4.8 million acres of wetlands (9% tidally affected), 425,582 acres of public lakes and reservoirs, 854 square miles of estuaries, and 100 miles of coastline. Water resources estimates for Georgia are summarized in Table 1.

TABLE 1. GEORGIA WATER RESOURCES ATLAS

State Population	10,097,340
State Surface Area	57,906 square miles
Number of Major River Basins	14
Number of Perennial River Miles	44,056 miles
Number of Intermittent River Miles	23,906 miles
Number of Ditches and Canals	603 miles
Total River Miles	70,150 miles
Number of Lakes Over 500 Acres	48
Acres of Lakes Over 500 Acres	265,365 acres
Number of Lakes Under 500 Acres	11,765
Acres of Lakes Under 500 Acres	160,017 acres
Total Number of Lakes & Reservoirs, Ponds	11,813
Total Acreage of Lakes, Reservoirs, Ponds	425,382 acres
Square Miles of Estuaries	854 square miles
Miles of Coastline	100
Acres of Freshwater Wetlands	4,500,000 acres
Acres of Tidal Wetlands	384,000 acres

Georgia has 14 major river basins within the State. These are the Altamaha, Chattahoochee, Coosa, Flint, Ochlockonee, Ocmulgee, Oconee, Ogeechee, St. Marys, Satilla, Savannah, Suwannee, Tallapoosa, and Tennessee River Basins. The rivers in Georgia provide the water needed by aquatic organisms, animals, and humans to sustain life. These waters also provide significant recreational opportunities, are used for industrial purposes, drive turbines to provide electricity, and assimilate wastes.

There are nine major aquifer systems in Georgia including the Cretaceous, Providence, Clayton, Clairborne, Jacksonian, Floridan, Miocene, Piedmont/Blue Ridge, and Valley and Ridge unconfined aquifer systems. Groundwater makes up 22 percent (based on 2015 estimates) of the public water supply, 100 percent of rural drinking water sources, 76 percent of the irrigation use, and 42 percent of the industrial and mining use. Total groundwater withdrawals in 2015 were approximately 1.15 billion gallons per day. For practical purposes, outside the larger cities of the Piedmont, groundwater is the dominant source of drinking water. Additional information on groundwater monitoring and management can be found in the *Georgia Groundwater Management Plan*.

Managing these resources requires up-to-date data and information to develop long-range planning strategies to safeguard water quality and quantity for future needs. The Watershed Protection Branch of GAEPD, in cooperation with many local, State, and Federal agencies, coordinates programs to address most aspects of water pollution control. These include: water quality modeling to develop wasteload allocations (WLAs) and total maximum daily loads (TMDLs); TMDL implementation planning; comprehensive water management planning; water quality standards development; local watershed assessment and watershed protection planning; nonpoint source management; erosion and sedimentation control; storm water controls; National Pollutant Discharge Elimination System (NPDES) permit and enforcement program administration for municipal and industrial point sources; industrial pretreatment permitting; and land application of treated wastewater permitting.

Water quality monitoring and assessment is the foundation for the measurement of success for the various water protection programs. The Monitoring and Assessment Strategy encompasses development of: (1) monitoring objectives; (2) assessment tools for attainment of water quality standards; (3) evaluation measures for state-wide water quality; (4) procedures for establishing, reviewing, and revising water quality standards; (5) measures to support water management programs; (6) Quality Assurance protocols and procedures; and, (7) programmatic data management and reporting procedures.

Georgia's comprehensive monitoring program and strategy is designed to serve the State's water quality management needs and to address all State waters including rivers, streams, lakes, reservoirs, estuaries, wetlands, groundwater, and coastal areas. The monitoring program includes baseline or trend monitoring; planning monitoring or intensive surveys; effectiveness monitoring; probabilistic stream monitoring; lake monitoring; coastal monitoring; estuary monitoring; coastal and freshwater beach monitoring; toxic substance monitoring; fish tissue monitoring; periphyton, macroinvertebrate and fish community assessment; habitat assessment; and facilities monitoring. The monitoring program is long-term in nature.

Monitoring program changes and enhancements occur throughout the year, as needed, to address specific acute issues. Larger programmatic changes are considered annually, along with available resources, and are implemented, as appropriate, in conjunction with the annual change in focus. These annual changes provide milestones or progress markers that are discussed in the State/EPA Performance Partnership Agreements (PPA). The annual planning process in preparing the PPA provides an opportunity for annual review of implementation priorities in-line with available resources to address the priorities. In addition, the overall strategy for monitoring and assessment is reviewed and updated every three to five years.

This strategy along with the biennial report, "Water Quality in Georgia" (CWA 305(b) Report), and annual State/EPA Performance Partnership Agreements provide a process for communication of monitoring priorities to other State and Federal organizations and the public. The strategy herein addresses goals, objectives, design, indicators, quality assurance, data management, data analysis, reporting, program evaluation, and general support and infrastructure needs.

Assessment of Water Quality

Assessment of water quality requires a baseline for comparison. Water quality data is collected and assessed against Georgia's water quality standards, which contain designates uses that establish the environmental use of the waterbody, narrative and numeric criteria for both general and chemical constituents, and anti-degradation policies for water quality. Georgia's waters are currently categorized as one of the following designated uses: drinking water, recreation, fishing, coastal fishing, wild river, or scenic river. Specific water quality standards are assigned to support each designated use. The quality of Georgia's waters is judged by the extent to which the waters support the uses (comply with standards set for the designated uses) for which they have been designated.

History of Georgia's Water Quality Monitoring Programs

In the 1960s, one of the first major efforts in Georgia to combat water pollution was the initiation of monitoring programs to document water quality conditions, assess compliance with water quality standards, and collect data for use in enforcement actions. In the 1970s, the monitoring programs focused on municipal and industrial point source issues and studies to determine the treatment levels required to meet water quality standards. In the 1980s, GAEPD intensified toxic substance monitoring across the State. The expanded toxic substance program included facility effluent, stream, sediment, and fish sampling at sites downstream of selected industrial and municipal discharges. Georgia also initiated biomonitoring or aquatic toxicity testing. All major industrial and municipal discharges were tested. Where toxic substances were identified in a treated discharge or impacts documented in a stream, GAEPD incorporated specific limitations in the NPDES permit.

The 1990s saw the initiation of a number of comprehensive lake studies performed in publicly owned lakes in excess of 1000 acres, which culminated in the establishment of water quality standards for pH, chlorophyll *a*, total nitrogen, and total phosphorus loadings for a number of lakes across Georgia. In addition, total phosphorus limits were also established for major tributary streams to these lakes. Fish tissue monitoring was significantly expanded. The first risk-based fish consumption guidance (*Georgia Freshwater and Saltwater Sport Fishing Regulations* and *Guidelines for Eating Fish for Georgia Waters*) was published in 1995. In the mid-1990s, Georgia implemented a rotating basin approach to chemical water quality monitoring. Georgia also intensified biological monitoring in the late 1990s with assessments of fish and macroinvertebrate communities on an ecoregion basis. Georgia completed one full river basin rotation cycle in 2000 with targeted monitoring in each of the five major river basin groups.

Since 1999, DNR's Coastal Resources Division (CRD) has conducted census bacteria monitoring of Georgia's popular swimming beaches on Tybee, St. Simons, Jekyll, and Sea Island. In response to EPA's Beaches Environmental Assessment and Coastal Health (BEACH) Act (PL 106-284), Georgia expanded its monitoring efforts with the development of the Coastal Beach Monitoring Program implemented by CRD in coordination with county health departments of each Georgia coastal county. CRD sampling teams began collecting of samples from Georgia beaches for bacterial analysis and developed a public notification system based on EPA's recommended levels of enterococcus for marine recreational waters.

In 2004, the Georgia General Assembly passed the Comprehensive State-wide Water Management Planning Act, which called for the preparation of a comprehensive state-wide water

plan and provided fundamental goals and guiding principles. This resulting Georgia Comprehensive State-wide Water Management Plan (State Water Plan) was adopted by the General Assembly in 2008. Part of this plan included expanding monitoring and information gathering including the acquisition of additional stream gages, personnel, and equipment for water quality monitoring. In November 2011, ten Regional Water Plans were officially adopted by GAEPD. Beginning in late 2015, the Councils began reviewing their plans based on updated water and wastewater demand forecasts for the Municipal, Agricultural and Energy sectors, as well as updated resource assessment information. Based on this review, the Councils updated their Regional Water Plans, which were adopted by EPD in July 2017. The plans were again revised in June 2023 based on new forecast and resource assessment information. All Regional Water Plans are subject to periodic review and revision on a 5-year cycle, and the Councils are currently scheduled to update their Plans again in 2027. These Regional Water Plans outlined management practices to meet future water needs, including calls for additional environmental monitoring. In the 2000s, GAEPD significantly expanded water monitoring efforts to support regional water planning efforts, including hiring 11 new monitoring staff and establishing field offices in Atlanta, Augusta, Brunswick, Tifton, and Cartersville.

Data Management, Assessment, and Reporting

Data collected by GAEPD and its cooperators are stored in a centralized database known as the Georgia EnvirOnmental Monitoring and Assessment System (GOMAS). GOMAS is a web-accessible repository of chemistry, physical, and biological data collected by GAEPD's Watershed Protection Branch, as well as outside entities under contract and/or agreement with GAEPD. GOMAS currently houses the following information: surface and ground water chemical and physical data collected by GAEPD's Ambient Monitoring and Facilities Monitoring Units; biological data collected by GAEPD's Ambient Monitoring Unit; visual assessment and other descriptive metadata (such as land use information) that contextualize conditions during GAEPD monitoring activities; surface water chemical and physical data collected by USGS, Columbus Water Works, and various counties and municipalities as specified via contract or terms contained within watershed protection plans; and information pertaining to waters on the 305(b) and 303 (d) lists. In addition, GOMAS contains an interactive map that allows users to quickly find active and historic monitoring locations using a multitude of search criteria. In 2019, a public portal to GOMAS was established to provide data access to the general public through GAEPD's website at https://gomaspublic.gaepd.org/Home/GOMAS_Home. Physical, chemical and biological data collected by GAEPD are uploaded to the USEPA Water Quality Exchange (WQX) database. The USEPA WQX database provides an alternative electronic Internet portal to GAEPD data. Some GAEPD data and data from outside sources are maintained in paper files and are available for public review at any time.

A number of monitoring programs provide data for assessing attainment of water quality standards in rivers, streams, lakes, estuaries, coastal waters, and beaches in Georgia. Existing and readily available data and information are reviewed every two years and the Georgia 305(b)/303(d) list of waters is updated and publicly noticed for comment. In addition to data collected by GAEPD and its cooperators, data from third parties (such as municipalities and environmental groups) are used as long as the quality control requirements found in Chapter 391-3-6-.03(13) are met. Data and information that does not meet quality control requirements are used as screening information and may be used during the process of selecting sites for GAEPD or cooperator monitoring.

Georgia produces reports and lists in accordance with CWA requirements in a timely and complete manner. The CWA [Section 305(b)] requires states to assess and characterize the condition and trends of all waters within the State. The CWA [Section 303(d)] requires states to identify impaired waters for which TMDLs are needed. Georgia has integrated the two reporting requirements since the late 1980s. The Section 305(b) Report and the Section 303(d) list are due in even numbered years. Assessment data is transferred from GOMAS to EPA's ATTAINS database via the Exchange Network. The most current integrated 305(b)/303(d) list of waters and report (also known as the "Water Quality in Georgia") is available on the GAEPD website along with an interactive Story Map of the report that can be found at: https://gaepd.maps.arcgis.com/apps/MapSeries/index.html?appid=dea4c9c319d4461c8d5cef8e68957b1b.

Future Issues and Challenges

The key issues and challenges to be addressed now and in future years include (1) the control of toxic substances including those currently not regulated; (2) a sustainable and safe supply of potable water; (3) the management of nutrient discharges; (4) the reduction of nonpoint source pollution; and (5) the need to increase public involvement in water quality improvement projects.

The reduction of toxic substances in rivers, lakes, sediment and fish tissue is extremely important in protecting both human health and aquatic life. The sources are widespread. The most effective method to reduce the releases of toxic substances into rivers is pollution prevention that consists primarily of eliminating or reducing the use of toxic materials or at least reducing the exposure of toxic materials to drinking water, wastewater, and storm water. It is very expensive and difficult to reduce low concentrations of toxic substances in wastewaters by treatment technologies. And it is virtually impossible to treat large quantities of storm water and reduce toxic substances. Therefore, toxic substances must be controlled at the source.

The dramatic increase in growth and population within Georgia is making considerable demands on Georgia's groundwater and surface water resources. The problems and issues are further complicated by the fact that surface water resources are limited in south Georgia and groundwater resources are limited in north Georgia. In some locations, resources are approaching their sustainable limits. Water management planning based on Georgia's Comprehensive State-Wide Water Plan provides for 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.

Nutrient over-enrichment is defined as the accumulation of nutrients from human activities and natural sources that impairs the beneficial uses of a waterbody. Historically, Georgia has addressed nutrient issues on a site-specific basis in response to documented water quality impairments. The implementation of the supplemental lake water quality standards for the six major publicly owned lakes has led to nutrient control strategies in their respective watersheds. Georgia has also been proactive in managing nutrients discharged from permitted surface water discharges to potentially nutrient sensitive waters. In 2011, GAEPD developed a Strategy for Addressing Phosphorus in NPDES Permitting to limit phosphorus from new or expanding wastewater treatment plants that discharge phosphorus. This Strategy was updated in June 2025. As part of the strategy all POTWs have been given total phosphorus limits. In addition, GAEPD developed a Nutrient Roadmap outlines GAEPD's comprehensive Nutrient Reduction Strategy for point and nonpoint source discharges.

GAEPD will ultimately develop and adopt numeric nutrient criteria for all major lakes and estuaries in Georgia. Monitoring to provide the scientific basis for the development of these standards and quantifying biological response to nutrient over-enrichment is an on-going focus.

Nonpoint source pollution affects Georgia's streams and consists of sediment, litter, bacteria, pesticides, fertilizers, metals, oils, surfactants, and a variety of other pollutants discharged into rivers and lakes by storm water. As with toxic substance control, nonstructural techniques such as pollution prevention and best management practices must be significantly expanded. These include both watershed protection through planning, zoning, buffer zones, and appropriate building densities, as well as increased use of green infrastructure, storm water retention ponds, street cleaning, and limitations on pesticide and fertilizer usage.

GAEPD will continue to work aggressively to emphasize public involvement, not only in decision-making, but also in direct programs of water body improvement. Georgia has active public outreach programs within the Watershed Protection Branch. Staff within the Branch's Nonpoint Source Program promote Adopt-A-Stream programs, which includes providing extensive training to volunteer groups, and Project WET (Water Education for Teachers) a program for bringing water conservation and pollution prevention education to the classrooms.

Strategy Implementation Challenges

Challenges in implementing the Strategy are tied directly to funding. Georgia's monitoring programs are designed and operated to allow full implementation within the current GAEPD budget. The budget cycle for Georgia is one year. The budget may change from year to year and programs are increased or reduced, as appropriate.

To accomplish the monitoring and assessment goals of the program, obtaining sufficient personnel is a critical issue. Without sufficient personnel and resources, the program will be limited in the scope of evaluation and assessment that can be accomplished. In addition, to manage the data collected and to statistically analyze data for trends, an expanded database management system is essential. Coordination and management of internal and external information and data gathering and assessment also requires a staffing commitment by GAEPD to accomplish the goals and objectives of the project.

When additional resources become available, GAEPD expands the monitoring programs to include additions to the scope of work, adding sites for monitoring and/or implementing different types of monitoring to complement existing programs. At that time, equipment and other resource needs are evaluated and additions to the data management capabilities are considered.

2. MONITORING OBJECTIVES

The State's monitoring program integrates physical, chemical, and biological monitoring to provide information for water quality management needs and addresses all State waters and water body types. For the State to be efficient and effective in generating data that serve its management decision needs and to be consistent with the objectives of the Clean Water Act, Georgia has identified the following monitoring objectives:

- Establishing, reviewing, and revising water quality standards in accordance with Section 303(c) of the Clean Water Act.
- Determining water quality standards attainment in accordance with Section 305(b) of the Clean Water Act.
- Identifying impaired waters in accordance with Section 303(d) of the Clean Water Act.
- Identifying causes and sources of water quality impairments in accordance with Sections 303(d) and 305(b) of the Clean Water Act.
- Supporting the implementation of water management programs in accordance with Sections 303, 314 and 319 of the Clean Water Act.
- Supporting the evaluation of program effectiveness in accordance with Sections 303, 305, 402, 314, and 319 of the Clean Water Act.

GAEPD uses baseline, planning, and effectiveness monitoring to meet the objectives of the Strategy. To fulfill these monitoring objectives, GAEPD utilizes multiple monitoring programs including: state-wide trend monitoring, probabilistic monitoring, TMDL monitoring, intensive surveys monitoring, lake monitoring, coastal monitoring, biological monitoring, fish tissue monitoring, toxic substance monitoring, facility compliance sampling, and groundwater monitoring.

A brief description of the monitoring programs is provided below.

- **Baseline**: Probabilistic, targeted ambient, and long-term trend sampling of state-wide waterbodies at fixed stations. The data from these stations provide an historic record of water quality. Monitoring at these locations may be repeated annually. Monitoring state-wide allows for comparison of similar sites within basins during different hydrologic and climatological conditions (i.e. drought, normal, and high rain years).

- **Planning**: short-term, intensive surveys designed to gather data necessary for the development, calibration and/or refinement of water quality models, TMDLs, and wasteload allocations (WLAs).

- **Effectiveness**: focused sampling of a select group of sites located state-wide to measure the status of water quality. This targeted sampling is for waterbodies currently on the 303(d) list. Data is used to determine whether waterbodies meet their designated use once a TMDL has been completed and/or implemented. In addition, sampling may be conducted on a waterbody with prior monitoring data to determine whether it still meets its designated use or continues to be considered impaired (as applicable).

These monitoring programs are applied to all waters of the State in a manner that yields scientifically defensible results and meets the needs of the decision makers in GAEPD. Many of our monitoring efforts are long-term in nature and are expected to be used in the future to the extent that resources are available.

3. MONITORING DESIGN

Georgia has developed multiple monitoring designs for selecting sampling sites and gathering data that best serves the monitoring objectives. Each of the monitoring types described below are a component of the monitoring programs discussed in section 2.

State-wide Trend Monitoring. Trend monitoring collects baseline data to document existing conditions, determine water use impairment, and assess the environmental effectiveness of required pollution control programs and nonpoint source programs and projects.

The state-wide trend monitoring is long-term monitoring of streams at strategic locations throughout Georgia. Trend monitoring is conducted by GAEPD associates and through cooperative agreements with Federal, State, and local agencies, which collect samples from groups of stations at specific, fixed locations throughout the year. Although there have been a number of changes over the years, much of the trend monitoring is still accomplished through cooperative agreements. The lists of the sampling stations that make up the State's Trend monitoring network are presented in Appendix A.

In addition to monthly stream sampling, GAEPD and its contractors manage several continuous monitoring stations throughout the State in support of baseline and planning monitoring efforts. The list of continuous monitoring sites currently in operation is presented in Appendix A.

In recent years, GAEPD has incorporated a biological component to its trend monitoring program. Macroinvertebrates and periphyton are collected annually at specified locations to assess biological responses to various environmental changes over time.

***Targeted Monitoring*.** The targeted monitoring program collects data used for planning to develop TMDLs, WLAs, and study the impacts of specific discharges on water quality. Targeted monitoring measures effectiveness by collecting data used to determine improvements resulting from upgraded water pollution control plants and implementation of nonpoint source best management practices (BMPs).

Each year new or repeat monitoring stations are selected state-wide based on needs and priorities. State-wide selection allows for the collection of data during different climatic conditions in each basin. Selection of these sites tends to be targeted. Locations in minimally impacted areas, urban areas, agricultural and forested areas, along with stations downstream of wastewater treatment plant discharges are included each year as a part of the monitoring network to provide data and information on new locations and to extend the coverage of the monitoring program. Sites are often selected upstream and downstream from small publicly owned treatment works (POTWs) to determine compliance with the narrative toxicity criteria. Temperature and pH of the stream are monitored along with instream ammonia concentrations to determine if the ammonia chronic and acute criteria recommended by EPA are being met.

Targeted sampling stations are often located on 303(d) listed segments where TMDLs and TMDL implementation plans have been prepared and/or 319 projects have been implemented to determine if improvements in water quality have occurred. Often this monitoring is contracted through grants with the Regional Development Centers or through cooperative endeavors by local municipal governments assisted by University projects. Data obtained from TMDL monitoring

efforts is used to assess water quality conditions in 303(d) listed waters and to measure the success of local restoration efforts.

Probabilistic Monitoring. This type of monitoring design is used for making a statistically valid inference about the condition of various water types. The sampling sites are randomly selected and a sufficient number of data points are collected to make a statistically based assessment of water quality within a region with similar land use and population characteristics.

Lake/Reservoir Monitoring. Lake baseline monitoring is conducted to assess the compliance of the six major lakes with site specific water quality criteria. The six major lakes with established water quality standards are Lake Lanier, Lake Walter F. George, West Point Lake, Lake Jackson, Lake Allatoona, and Carters Lake. These lakes are monitored monthly during the growing season from April through October. Field measurements are taken and include secchi depth and depth profiles of dissolved oxygen, temperature, pH and conductivity. Composite water quality samples are collected within the photic zone and analyzed for chlorophyll *a*, nutrients, bacteria, and other standard chemical parameters. In addition, field measurements are collected, along with flow, and water quality samples in the major tributaries feeding these lakes. These data are to protect both public health and aquatic life.

GAEPD also conducts planning monitoring in 28 publicly owned lakes greater than 500 acres annually from April through October. Sufficient data needs to be collected for standard development of numeric nutrient and chlorophyll criteria for these 28 basin lakes. The data collected on these lakes includes: secchi disk transparency, Li-Cor photic zone measurements, chlorophyll *a*, total phosphorus, nitrogen compounds, and turbidity. Depth profiles for temperature, dissolved oxygen, pH, and specific conductance are also measured at each monitoring location.

If additional resources become available, the lake and reservoir monitoring network may be expanded to include assessment of smaller publicly owned lakes and reservoirs in the State.

Estuary Monitoring. GAEPD annually conducts planning monitoring of eight estuaries during the growing season to determine their water quality status. This monitoring supports the protection the public health and documents existing conditions. The data collected will be used to establish numeric nutrient criteria for the appropriate cause and response parameters and to determine appropriate dissolved oxygen criteria for these water bodies that have naturally low dissolved oxygen levels.

Coastal Monitoring**.** The CRD conducts baseline water quality monitoring in estuarine and near-shore coastal waters through its Public Health Water Quality Monitoring Program. This program includes the Shellfish Sanitation and Beach Water Quality Monitoring Programs that are concerned with public health. The CRD administers the Shellfish Sanitation Program under the guidance of the United States Food and Drug Administration's (FDA) National Shellfish Sanitation Program (NSSP) standards that requires States to show that shellfish harvest areas are "not subject to contamination from human and/or animal fecal matter." The CRD collects water samples and performs bacterial analysis to ensure that the area has fecal coliform levels below the established threshold of 14 MPN/100 mL. Currently, the CRD monitors 67 stations for fecal coliform bacteria with site selection focusing on monitoring around harvest areas. Chatham, Liberty, McIntosh, Glynn, and Camden counties all have waterbodies designed as potential shellfish harvest areas and stations that are monitored. These stations are monitored once a month at random tidal stages.

The CRD developed the Beach Monitoring Program to protect swimmer health. CRD does baseline beach monitoring and public notification based on EPA's recommended levels of enterococcus for marine recreational waters. CRD has worked in partnership with local governments, the Jekyll Island Authority, and the Public Health Districts to develop procedures to notify the public about elevated bacteria levels. Public advisory signage has been installed at beach access points on Jekyll, St. Simons, and Tybee Islands. The Health Districts have prepared templates for press releases to issue health advisories in the event of elevated bacteria levels. CRD has placed beach information on the DNR website https://coastalgadnr.org/HealthyBeaches and has partnered with Earth 911 to show current beach conditions on their web site. The CRD Coastal Beach Monitoring Program is ongoing and a list of beaches with Advisory Zones is provided in Appendix A.

***DNR State Park Beach Monitoring*.** The DNR Parks, Recreation and Historic Sites Division (PRHSD) conducts baseline bacteria monitoring of their freshwater beaches to support the protection of human health. The PRHSD operates public beaches on small lakes and reservoirs at several State parks in Georgia. State park beach monitoring of bacteria was conducted on a periodic park-by-park basis prior to 1996. Beginning in 1996, beach monitoring was conducted at the beginning of the season at the census State park freshwater inland beaches by DNR personnel. In 2020, the Georgia State Parks and Historic Sites Division began weekly E coli monitoring of the 33 State Park freshwater beaches during the recreational season from mid-April through Labor Day. A table of the DNR State Parks Lake Beach monitoring sites is provided in Appendix A.

***Biological Monitoring*.** Biological monitoring is performed to assess the biological integrity of the State's waters. Baseline, planning, and effectiveness biological monitoring is conducted by both GAEPD and the regulated communities. Regulated communities will report over time changes to the biological communities due to new development and/or reservoirs, and the effect of water quality protection measures.

Biological communities are sensitive to a wide array of direct stresses, including the effects of sedimentation, habitat loss, riparian zone disruption, flow modification and chemical pollution. An Index of Biotic Integrity (IBI) is used to assess fish and macroinvertebrate community health in individual ecoregions in Georgia. This index provides a direct and quantitative assessment of the biotic integrity of an aquatic community based on an overall evaluation of its fish and/or macroinvertebrate community in wadeable streams. In some cases, macroinvertebrates are a more sensitive community and reflect changes in stream quality before an impact of the fish community occurs.

In the 1990s, DNR's Wildlife Resources Division (WRD) developed a fish community assessment that identified waters for the State's 305(b)/303(d) listing, which ranked streams from very good to very poor as indicators of stream health. GAEPD has worked extensively for the last several years to develop a similar ranking assessment utilizing macroinvertebrates as an indicator organism. This ranking will provide a broader picture of what is happening within Georgia's waters and the resulting effects of pollution. Macroinvertebrate sampling is conducted in the fall/winter in wadeable rivers and streams. GAEPD conducts periphyton community sampling during spring/summer in wadeable rivers and streams. Zooplankton community sampling occurs during the growing season in lakes and reservoirs. Additional information collected along with the biological monitoring include habitat information, pebble counts, general reach and /watershed

characteristics, visual algae/aquatic vegetation surveys, and flow measurements. These data collected are primarily used in determining a biological response to nutrients and developing numeric nutrient criteria.

Approximately 100 stations are sampled once per year for fish, approximately 30 stations are sampled once per year for macroinvertebrate, and approximately 30 stations are sampled once per year for periphyton (diatoms). Historically GAEPD sampled approximately 50 stations for zooplankton. However, GAEPD ceased zooplankton sampling in 2017. In addition, targeted monitoring sites are also evaluated to assess waters undergoing restoration project improvements, and to correlate water chemistry with biological responses at trend monitored locations.

***Fish Tissue Monitoring*.** Baseline fish tissue monitoring supports the protection of public health. It allows for assessing the spatial impact from potential contaminant sources and supports water quality management programs.

GAEPD began their fish tissue monitoring in 1992, with collection of fish fromlarge lakes. The first risk-based consumption guidance for fish was published in 1995. Each year GAEPD increases its fish tissue sampling program to include small lakes, rivers, and estuaries. Sampling sites and fish species and size are selected based on fishing pressure and/or where more information is required for a particular species. The sampling is conducted by either WRD or CRD, depending on whether the site is freshwater (WRD), or estuarine/marine waters (CRD). In 2024, GAEPD, WRD, and CRD worked to revise the fish consumption sampling plan to ensure that fish from a given site were resampled at least every 10 years. Site-specific sampling in Georgia lakes and rivers occurs every spring and fall and site-specific sampling in estuaries occurs between the spring and fall. Samples are catalogued and transported to GAEPD or UGA laboratories. The list of the general contaminants analyzed for in the fish tissue is provided in Appendix A. Results are reported to GAEPD the following late summer or early fall. The data are assessed in the fall and winter and the consumption guidance is updated each spring. The data assessments are incorporated annually into the *Guidelines for Eating Fish for Georgia Waters* and ***Georgia's** Freshwater and Saltwater Sport Fishing Regulations,* which is available on the GAEPD website http://epd.georgia.gov/fish-consumption-guidelines.

As part of the Georgia Clean Air Mercury Rule (CAMR) development, it was recognized that a more rigorous monitoring program of mercury in fish tissue would be required to support trend analysis and the efficacy of future reductions in air mercury emissions. The Mercury in Fish Trend project was designed and implemented in 2006. The project consists of 22 fish mercury trend stations that are monitored annually. Fish from each location consist of a single species of similar age. Nineteen stations are freshwater and three are estuarine. The 22 fish mercury trend stations are listed in Appendix A. Sample collection for the Mercury in Fish Trend project was completed in the fall 2020.

***Aquatic Toxicity Monitoring*.** Aquatic toxicity monitoring supports protection of aquatic life, determines the impact of specific discharges, documents improvements resulting from upgraded water pollution control plants, supports enforcement actions, and verifies water pollution control plant compliance.

In the 1980s and 1990s, Georgia incorporated biomonitoring or aquatic toxicity testing in NPDES permits and initiated a comprehensive aquatic toxicity testing program. Over the course of the

decade from 1985 to 1995, GAEPD conducted (acute or chronic) aquatic toxicity tests on effluents from major municipal and industrial wastewater treatment facilities and minor facilities with a reasonable potential for having toxic substances. This work identified potential problem areas across the State and resulted in NPDES permit modifications to include monitoring requirements and facility upgrades to remove toxic substances. In January 1995, GAEPD issued approved NPDES Reasonable Potential Procedures that further delineated required conditions for conducting whole effluent toxicity (WET) biomonitoring for municipal and industrial discharges. As a result of funding and redirection issues, GAEPD laboratory testing was phased out in 1997. Currently, aquatic toxicity monitoring requirements are addressed in all municipal and industrial NPDES permits and WET testing is incorporated into permits where needed.

Toxic Substance Monitoring. The original objective of the toxic substance monitoring program was to identify potential problem areas across the State. This resulted in NPDES permit modifications, including monitoring requirements and facility upgrades, to remove toxic substances and ensure compliance with water quality standards. The current objective of the toxic monitoring program is to collect data to support 305(b)/303(d) listing assessments, TMDL development, and evaluation of point and nonpoint sources.

GAEPD targeted agricultural sites for legacy pesticide sampling. Pesticide samples were collected twice a year. However, GAEPD discontinued this sampling because no legacy pesticides were found. Each year a select number of stream sites are sampled quarterly for heavy metals, these include all probabilistic and trend sites. In addition, some targeted sampling is conducted.

Additional information is gathered through the NPDES permitting program where requirements are in place for periodic collection and analysis of effluent samples for toxic substances, including the State's list of priority pollutants contained in the Rules and Regulations for Water Quality Control, Chapter 391-3-6.

PFAS Monitoring. Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that have strong carbon-fluorine bonds, which cause them to be highly persistent in the environment and in animals, including fish and human beings. These chemicals do not break down and they can accumulate over time.

There is evidence that exposure to PFAS can lead to adverse human health effects. . PFOA and PFOS are part of a larger group of PFAS chemicals. Peer-reviewed studies of laboratory animals and epidemiological studies of human populations indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects. EPA has a MCL for PFAS of

In the winter of 2021, EPD initiated a targeted PFAS monitoring project to assess the level of PFAS in drinking water across Georgia. EPD started monitoring finished drinking water in the Coosa and neighboring Tennessee basins due to the documented presence of PFAS and PFAS sources in the Coosa basin. EPD sent sample kits to all surface water public drinking water systems and all groundwater public drinking water systems serving populations of 500 or more. This first round of monitoring identified no detectable GenX in finished drinking water. PFBS was found in 13 public water systems, all significantly below the health advisory. PFOA and PFOS were found in detectable levels in 10 public water systems.

Following the completion of the first phase of monitoring, EPD conducted a second round of monitoring of finished drinking water, which focused on large public water systems that serve populations of 100,000 or more, as well as those systems located in close proximity to significant Department of Defense installations.

In 2023, EPA initiated monitoring under UCMR 5. This monitoring includes 29 species of PFAS, and all public water systems serving populations of 3,300 or more are required to participate. To complement this effort, EPD will initiate a third and final round of monitoring in finished drinking water. This third round of monitoring will focus on public water systems not included in UCMR 5. Specifically, EPD will conduct monitoring of finished drinking water from very small public water systems that rely on groundwater in areas where groundwater is highly susceptible to pollution . The results of this monitoring as well as historic surface water and dirinking water PFAS monitoring data can be found on the EPD's PFAS StoryMap, which can be found here: https://gaepd.maps.arcgis.com/apps/MapSeries/index.html?appid=e8f2c6a51c1c41088002350f1eabe598

Intensive Surveys Monitoring. The intensive survey planning monitoring is used to calibrate water quality models to develop TMDLs, establish wasteload allocations for new and existing facilities, study the impacts of specific discharges, and support enforcement actions.

Intensive surveys complement fixed station monitoring, as these studies focus intensive areal monitoring on a particular issue or problem over a shorter period of time. These surveys can be used to monitor and assess all waters of the State including rivers, streams, lakes, reservoirs, estuaries coastal areas, wetlands, and groundwater. Several types of intensive surveys are conducted, including model calibration surveys and impact studies. Models are used for wasteload allocations and/or TMDL development and as tools for making regulatory decisions. Impact studies are conducted where information on the cause and effect relationships between pollutant sources and receiving waters is needed.

Intensive surveys may include time of travel dye studies, flow measurements, bathymetry, long-term BOD studies, sediment oxygen demand measurements, photosynthesis respiration studies, water quality field measurements, continuous monitoring, and chemical analysis of water samples. In many cases, biological information is collected along with chemical data for use in assessing environmental impacts. Intensive survey locations are selected based on the needs and priorities of GAEPD.

Groundwater Well Monitoring. In January 2011, GAEPD's Regulatory Support Program reinstated a state-wide ambient groundwater monitoring network similar in design to that which existed within the Georgia Geologic Survey prior to 1998. The network consists of wells and springs located throughout the State such that broad characterizations may be drawn regarding the general water quality of all major aquifers found within Georgia. Water samples are analyzed for dissolved oxygen, pH, specific conductance, presence of radiation, VOCs, chloride, fluoride, sulfate, total phosphorus, nitrate/nitrite, and metals. Pesticide analyses are conducted on certain samples (mainly from the Coastal Plain), when and if possible. Monitoring personnel collect quarterly samples at 22 stations and single annual samples at approximately 143 well locations. The list of the ground water wells monitored is provided in Appendix A.

Facility Compliance Monitoring. GAEPD performs Compliance Sampling Inspections (CSIs) and Technical Evaluations of municipal, industrial, and private wastewater treatment facilities with

NPDES permits. CSIs are also performed at wastewater Land Application Systems and all State-permitted industrial wastewater pretreatment facilities (“industrial users”). During CSIs, 24-hour effluent composite and/or grab samples are collected and split with the facility’s laboratory as part of the self-monitoring program validation process. Permittee sampling and flow monitoring procedures are also evaluated for compliance with the NPDES permit.

GAEPD compliance specialists perform between 70 and 100 CSIs annually, depending on staff levels. Inspections are targeted based on input from compliance personnel and the District Offices. Compliance staff and District Office associates also perform Integrated Compliance Information System (ICIS) and Performance Partnership Agreement (PPA) reportable inspections including CSIs, Operation & Maintenance Inspections, Laboratory Audits, and Facility Reconnaissance. Findings of all types of inspections are used to assess facility treatment efficiency, NPDES permit compliance, and self-monitoring effectiveness, and are available for use in enforcement actions, if necessary.

4. CORE AND SUPPLEMENTAL WATER QUALITY INDICATORS

As described in the individual monitoring program designs above, a variety of indicators are used to assess compliance with water quality standards and support of designated uses. A common set of water quality criteria including pathogen indicators (enterococci, E. coli), dissolved oxygen, pH, temperature, and toxic substances apply to all water uses in Georgia including recreation, drinking water, fishing and aquatic life, wild river, scenic river, and coastal fishing. In assessing lake water quality, additional indicators such as nutrients, secchi depth, and chlorophyll *a* are included.

Core and supplemental indicators are shown in Table 2. Core indicators are those sampled in all water bodies of a given type every time that water body type is monitored. Supplemental indicators are parameters that are sampled as part of the targeted monitoring program. Those parameters that are marked with a "*" either have water quality criteria or are used for assessment purposes.

TABLE 2. WATER QUALITY INDICATORS

INDICATOR TYPE	FISHING - AQUATIC LIFE	DRINKING WATER	RECREATION
Core	Dissolved oxygen* pH* Water Temperature* Specific Conductance BOD_5 Alkalinity Hardness Suspended solids Ammonia (Narrative Toxicity)* Nitrate-nitrite Kjeldahl nitrogen Total nitrogen* Total phosphorus* Total Organic Carbon Lake trophic status	Turbidity VOCs, Chloride Sulfate Calcium Nitrate-nitrite Phosphorus Potassium Magnesium Manganese Sodium Chromium Nickel Copper Zinc Arsenic* Selenium Molybdenum Silver Cadmium Tin Antimony Barium Thallium Lead Uranium Aluminum Beryllium Cobalt Iron Titanium Vanadium Fluorine	pH* Chlorophyll *a** Secchi Disk Transparency Photic Zone Depth Algal blooms* Aesthetics* Objectionable scums* Objectionable sheens* Objectionable debris* Objectionable deposits* Color* Turbidity Water level

Supplemental	Toxic pollutants* (e.g., priority pollutants, pesticides) Metals (aquatic life)* Fish Tissue analysis* Macroinvertebrate community* Fish community * Periphyton/Phytoplankton Habitat Flow Sediment chemistry Organism condition factor Non-native species Land-use/% impervious cover Pollutant loadings Fish kills	Human Health Criteria* E. coli* Enterococci*	E. coli Enterococci Sediment quality Macrophyte density

The supplemental indicators may also be used when there is a reasonable expectation that a specific pollutant may be present in a watershed, when core indicators indicate impairment, or to support a special study such as screening for pollutants of concern. The process for identifying supplemental indicators to monitor is based on which type of designated use has not been met and then selecting the appropriate indicators to measure. Basic water chemistry including turbidity may be used as an initial screening tool prior to running more expensive analytical procedures.

5. QUALITY ASSURANCE

Laboratory

All samples collected by GAEPD and its cooperators, as part of the Surface Water Quality Monitoring Program, are sent to laboratories operating under formalized Quality Assurance Program Plans (QAPP) that are reviewed by GAEPD prior to sample submission. All laboratory tests are conducted in accordance with USEPA approved methods. These laboratories follow standard laboratory Quality Control procedures and participate in both internal and external blind proficiency sample programs. Accepted results reported are within the 95% confidence interval. Each laboratory is required to have a comprehensive QAPP document on file with GAEPD. Sample integrity, from time of collection to time of laboratory receipt, is maintained through use of Chain of Custody documentation. Sample integrity is maintained within the laboratories through extensive sample tracking and documentation procedures. All laboratory analyses are performed and reported in compliance with the comprehensive quality assurance plans of each laboratory.

Final sample results from each laboratory are maintained in validated database systems. These results are reported to GAEPD via electronic data transfer files. This data is ultimately combined and stored in a GAEPD database GOAMS and/or the USEPA WQX. A review and feedback system between GAEPD and the laboratories is maintained to ensure that data quality is maintained.

Quality Assurance

Georgia monitoring work is conducted in accordance with approved methods and documented in the Watershed Protection Branch QAPP and Standard Operating Procedures (SOPs). The QAPP provides the details of the quality assurance procedures employed by GAEPD. The standard quality assurance procedures used by GAEPD were developed to ensure and document the validity of measurements and analysis, and the representativeness of samples collected. Enforcement activities by GAEPD require full documentation of the particulars of data collection, including the equipment used. All GAEPD field personnel who collect samples or field data are trained to implement the procedures and have a full understanding of all sampling SOPs.

USEPA requirements pertaining to specifics of sample collection for States receiving grant funds are specified in federal regulations under the authority of the CWA and the NPDES permitting program. The most widely applicable guidance at this level is Title 40 of the Code of Federal Regulations (40 CFR). The procedures and techniques given in 40 CFR are periodically updated. In accordance with these regulations, state-wide water quality monitoring data collections are covered by an USEPA approved Quality Management Plan (QMP) and a QAPP. These plans along with SOPs are maintained in GAEPD files. Updates to the SOPs, QMP, and QAPP are submitted to the USEPA by GAEPD when any changes in the documents occur (for example, monitoring site list revised, use of new sampling equipment, changes in sampling parameters or analytical methods used, etc.).

6. DATA MANAGEMENT

Georgia uses GOMAS, an electronic accessible database, for storage of water quality, fish tissue, habitat, biological, and facility monitoring data collected by GAEPD and its cooperators. Data are entered into GOMAS in a timely manner and the data are available to the public through a public portal.

Additionally, these water quality data are uploaded to the USEPA's WQX database. The USEPA WQX database provides an electronic internet portal to GAEPD data and provides Georgia the opportunity to assess waters beyond state boundaries, as appropriate. All data are collected and stored using appropriate metadata and State/Federal geo-locational standards.

GAEPD's 305b/303d assessment information is also contained within GOMAS. The assessment data is transmitted to EPA's ATTAINS database every two years with the submitral of the Integrated Report. Supporting documentation such as our Listing Assessment Methodology, comments received and responses, and the GIS coverage of our assessed waters, is uploaded to ATTAINS via the web portal.

7. DATA ANALYSIS/ASSESSMENT

Designated Uses and Water Quality Standards

Georgia has a methodology for assessing attainment of water quality standards based on analyses of various types of data (chemical, physical, biological, land use) from various sources for all water body types in the State. Assessment of water quality requires a baseline for comparison. A state-wide baseline is provided by Georgia's water quality standards, which contain designated uses, numeric and narrative criteria, and an antidegradation policy. The GAEPD is responsible for setting and enforcing water quality standards.

The purposes and intent of the State in establishing water quality standards are to provide enhancement of water quality and prevention of pollutions; protect the public health and welfare in accordance with the public interest for drinking water supplies, conservation of fish, wildlife and other beneficial aquatic life, recreational, and other reasonable and necessary uses; and maintain and improve the biological integrity of the waters of the State. Georgia's waters are currently classified as one of the following designated uses: drinking water, recreation, fishing, coastal fishing, wild river, or scenic river.

Specific water quality criteria are assigned to support each designated use. The quality of Georgia's waters is judged by the extent to which the waters support the uses for which they have been designated. Appendix B provides a summary of designated uses and specific water quality criteria for each water use. Georgia also has general narrative water quality standards that apply to all waters. These narrative standards are also summarized in Appendix B.

In 1989, the Board of Natural Resources adopted 31 numeric standards for protection of aquatic life and 90 numeric standards for the protection of human health. In addition, during the early to mid-1990's, the DNR Board began adopting standards for six major lakes and tributaries. All general criteria for waters are outlined in Georgia's Rules and Regulations for Water Quality Control (Chapter 391-3-6-.03(5), lake criteria are given in Georgia's Rules and Regulations for Water Quality Control (Chapter 391-3-6-.03(17).

Different sections of the CWA require States to assess water quality [Section 305(b)], to list waters with water quality standards violations for which no actions have been initiated and therefore a TMDL is needed [Section 303(d)], and to document waters with nonpoint source problems (Section 319). All existing and readily available data is compiled and analyzed. In addition to data collected by GAEPD and its cooperators, data from third parties (such as municipalities and environmental groups) are used as long as the quality control requirements found in Chapter 391-3-6-.03(13) are met. Data and information that does not meet quality control requirements are used as screening information and may be used during the selection process regarding sites GAEPD or our cooperator will monitor.

GAEPD assesses water quality data to determine if water quality standards are met and if the water body supports its designated use. Waterbodies are placed in one of five tiers that were developed by EPA indicating whether it is supporting its designated use or not, if more information is needed to make a determination, and if a TMDL is required. This tiered approach provides a mechanism to track all waters of the State and the range of assessments made to determine if the waterbody meets its designated uses(s). Georgia's 305(b)/303(d) Listing Methodology is a

dynamic document that is updated with each listing cycle to reflect current guidance by the USEPA and to incorporate new information made available during the listing cycle. The assessment information is maintained in an electronic web-accessible database.

Other information is integrated with available data and a report prepared for the USEPA and the public every two years. These integrated reports are Georgia's 305(b)/303(d) list of waters and "Water Quality in Georgia Report." The list and report are updated and publicly noticed for comment prior to submittal to the USEPA for final approval. This is done to engage and secure public input on the listing, TMDL prioritization, and reporting process. Georgia assesses streams, coastal streams, lakes, freshwater beaches, marine beaches, and sounds/harbors as part of the 305(b)/303(d) process. The 305(b)/303(d) list of waters includes information about the waters designated use(s), whether use(s) are being met, and location information such as county and river basin. For waters assessed as impaired, the criterion violated and potential sources of pollution are also included along with information about when a TMDL will be drafted. If a TMDL has already been written, this information is also included. Georgia's current and historic 305(b)/303(d) lists and reports are available for public review on the GAEPD web page at: https://epd.georgia.gov/watershed-protection-branch/watershed-planning-and-monitoring-program/water-quality-georgia. Geographic Information System (GIS) coverages are also maintained that depict the waters on the lists and can be found on GAEPD's webpage at: https://epd.georgia.gov/geographic-information-systems-gis-databases-and-documentation.

8. REPORTING

Georgia produces reports and lists in accordance with CWA requirements in a timely and complete manner. The CWA [Section 305(b)] requires states to assess and characterize the condition and trends of waters within the State. The CWA [Section 303(d)] requires States to identify impaired waters for which TMDLs are needed. The Section 305(b) Report and the Section 303(d) list are due in even numbered years. Georgia integrates the two reporting requirements of Sections 305(b) and 303(d) of the CWA. Final reports are submitted to the USEPA by April 1st of every even numbered year for the State to remain eligible for Section 106 grant funding assistance for the water quality monitoring program. The integrated report is submitted to EPA's ATTAINS database. Annual updates of water quality data and information are provided to the USEPA during odd numbered years to provide a status of water quality monitoring efforts between 305(b)/303(d) listing cycles.

Georgia also prepares a GIS coverage to illustrate the location of the waters on the integrated list. The GIS coverage, lists, and reports are placed on the GAEPD website for easy access for the public. The GIS coverage is also uploaded to ATTAINS as part of the submittal of our Integrated report.

In addition, information required under Sections 314 and 319 are covered in the Georgia 305(b) Report (also known as the "Water Quality in Georgia" report). The CRD provides information on monitoring and notification programs for coastal recreation waters in accordance with CWA Section 406 (BEACHES Act). Georgia also provides a CWA Section 106 monitoring update (in odd numbered years) by uploading of monitoring data to the national STORET data warehouse. A Story Map of the 2020 "*Water Quality in Georgia" report* can be found on the GAEPD website at: https://gaepd.maps.arcgis.com/apps/MapSeries/index.html?appid=dea4c9c319d4461c8d5cef8e68957b1b.

9. PROGRAMMATIC EVALUATION

The Georgia Monitoring and Assessment Strategy as described in this document represents a comprehensive approach to address the goals and objectives of the water quality monitoring program. The monitoring program is long-term in nature.

Monitoring program evaluations occur throughout the year with enhancements implemented as needed to address specific acute issues. The Program Managers in the Watershed Protection Branch meet throughout the year and monitoring issues and needs are regularly discussed. Often needs arise, such as monitoring to support enforcement actions, impact studies, TMDL modeling, and/or monitoring in response to citizen input, that require changes to the monitoring programs. Minor program changes can be implemented quickly and efficiently in response to localized needs, at any time during the year. Larger programmatic changes are considered annually, along with available budgets, and implemented, as appropriate. The Watershed Planning and Monitoring Program (WPMP) monitoring staff works with the other Programs within the Watershed Protection Branch to determine the sites that should be monitored. Integration of monitoring activities between the Assessment Coordinator, TMDL Modeling and Development Unit, Wastewater Regulatory Program, Nonpoint Source Program, and the Ambient Monitoring Units allows GAEPD to effectively and systematically prioritize waters for assessment, restoration, and protection.

Any major annual changes provide milestones or progress markers that are negotiated and documented in the State/EPA PPA. The annual planning process in preparing the PPA provides an opportunity for annual review of implementation priorities, in line with available resources to address the priorities. This also provides for a periodic review of each aspect of the monitoring program to determine how well the program serves its water quality data and decision needs. In addition, this Monitoring and Assessment Strategy will be reviewed and updated every three to five years.

10. GENERAL SUPPORT AND INFRASTRUCTURE PLANNING

The Georgia monitoring program depends primarily on funds from the State budget with some funding from Federal sources. Georgia works closely with the USEPA and the USGS on a number of monitoring projects to maximize monitoring efficiencies. The USEPA provides some grant funding for monitoring projects in Georgia and the USGS provides some limited cooperative project matching funds for monitoring projects in Georgia. As a part of the ongoing planning process, monitoring needs are discussed with the USEPA during the negotiation process for the State/EPA PPA that includes CWA Section 106 funds. The USEPA also provides direct support for monitoring projects in Georgia through its Science and Ecosystem Support Division in Athens, Georgia. Each year, Georgia and other states in the Region provide the USEPA with a list of technical assistance needs for the following year. The USEPA reviews and prioritizes the state requests and supports the states, as resources allow.

Training is an important element of ongoing monitoring programs in Georgia. GAEPD takes advantage of USEPA sponsored training in all aspects of monitoring including: field techniques, laboratory analysis, and data management and analysis. In addition, GAEPD conducts an annual internal training for all monitoring personnel, to ensure that sampling standards and practices are accurate and consistent with established protocols.

Georgia will continue to review and assess monitoring programs and seek additional resources to enhance them, as needed.

Resources

The Watershed Protection Branch has identified the Watershed Planning and Monitoring Program (WPMP) as the lead program for implementing and maintaining the State's Surface Water and Ground Water Quality Monitoring and Assessment Strategy. This involves coordination with outside agencies and monitoring groups to assist in the collection of data needed to fulfill the management goals of the program. Staffing resources, within the WPMP to fulfill the responsibilities of data gathering, assessment, report preparations, and TMDL development, include eighteen (18) field staff positions within the WPMP for collection of physical, chemical, and biological data from rivers, streams, lakes, estuaries, and groundwater; three (3) field staff positions within the WPMP for conducting compliance evaluation inspections and sampling of permitted facility effluents; one (1) water quality standards coordinator; one (1) data management and QA/QC position; one (1) 305(b)/303(d) data assessment, report preparation and Sampling Quality Assurance Plan review position; and four (4) TMDL modeling and development positions. Additional resources are provided through contracted monitoring assistance from the USGS, Phinizy Center for Water Sciences, and Columbus Water Works.

The monitoring programs in Georgia are supported by a full service GAEPD laboratory located in Norcross, Georgia. In addition, some laboratory work is contracted with EPA, the University of Georgia (UGA), and/or USGS. In some cases, in conjunction with technical assistance requests, the USEPA provides laboratory support at its facilities in Athens, Georgia. Biological work on macroinvertebrate identification is conducted at the Watershed Protection Branch laboratory facilities in Atlanta, Georgia, and fish identification work is conducted by the WRD in Social Circle, Georgia. Contractors also assist with these identification efforts.

In addition to staffing and analytical services, the contractual services provided by the USGS and Columbus Water Works for water quality sample collection and by UGA for water quality analyses amounts to over $1,500,000 per year. An assessment of current funding and staffing resources as opposed to the level of effort to achieve the goals of the State's monitoring strategy indicates the funding and staffing resources are minimal to what is needed to meet the goals and objectives of the strategy.

For approximately ten years, the Wetlands Unit has been engaged in various wetlands monitoring activities across the state, initially as a state-level participant in EPA's National Wetlands Condition Assessment (NWCA), and then conducting independent ecoregion focused wetland monitoring that employed the established NWCA field methodology. Recently, the wetland monitoring has focused on documenting wetland hydrology/hydric soils characteristics at selected wetland reference sites, as well as assessing the performance and condition of long-established GDOT wetland mitigation sites. GAEPD will need to

Additional monitoring programs or enhancement/expansion of already implemented programs requires additional resources in manpower and laboratory analytical services. Some of the new or enhanced monitoring projects to fully implement the State's Monitoring and Assessment Strategy include:

- In 2022, open office in Augusta to house two monitoring staff who will be responsible for monitoring the eastern portion of Georgia.
- Development and implementation of a probabilistic monitoring program for streams to increase the number of assessed waters over a 10-year monitoring period.
- Recruit and retain staff with expertise in wetland science and come up with a viable balance between wetland monitoring efforts and ongoing 401 Water Quality Certification obligations.
- Continue monitoring of groundwater well stations installed as part of wetland grant work.

Future Studies and Actions

The State's Monitoring and Assessment Strategy is a dynamic document and should be flexible to incorporate shifting priorities in monitoring goals and objectives. Some suggested future studies and actions are listed below as part of the Strategy review process. These suggestions will enhance or improve on the data quality, quantity and assessment strategies already in place requiring a relatively neutral budget change.

- Increase coordination and collaboration with other programs within GAEPD and GADNR.
- Expand working with citizen volunteer monitoring groups to provide technical assistance and training to ensure improved quality of data to build on the State's assessed water database.

There are benefits to be gained by using external data and promoting stewardship warranting the investment of resources on the part of GAEPD. Integrating other data is a process that requires enhanced program coordination (i.e. communication about sampling plans and goals, planning useful/equivalent measures, modeling/assessment procedures, QA and data sharing).

While State agencies are collecting water quality information to address specific needs, water quality monitoring efforts are being conducted by other agencies, universities, local governments, organizations and/or citizen volunteer groups. Although some of these efforts are implemented to address goals similar to the State, these efforts may also have a non-management focus, for example, addressing research, education and supporting other programs. Data and information provided by these outside programs can serve to fill gaps within the State's monitoring program.

Future success in making sound professional judgments about the quality of Georgia's waters depends on the proper direction and training to staff, providing the tools and skills to accomplish the tasks and the technical resources to support the assessment process.

APPENDIX A

SURFACE WATER MONITORING STATIONS AND GROUNDWATER WELLS

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1a. 2025 SURFACE WATER MONITORING STATIONS
Rivers/Streams, Lakes/Reservoirs, Estuaries/Sounds

Rivers and streams stations are sampled monthly for field and chemical parameters for one calendar. Bacterial samples are collected monthly Lakes, reservoirs, and estuaries are sampled once a month during the growing season (April-October).

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphate s	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
LK_01_10	Lake Rabun - Dampool (aka Tallulah River - Upstream From Mathis Dam)	Savannah	Cartersville AMU	Lake Trend Monitoring	34.764722	-83.417778	X		X						X
LK_01_11	Lake Hartwell at Interstate 85	Savannah	Augusta AMU	Lake Trend Monitoring	34.484167	-83.029833	X		X						X
LK_01_22	Lake Hartwell - Dam Forebay	Savannah	Augusta AMU	Lake Trend Monitoring	34.358733	-82.824417	X		X						X
LK_01_27	Lake Russell Between Markers 42 and 44 (Mid Lake)	Savannah	Augusta AMU	Lake Trend Monitoring	34.127778	-82.673611	X		X						X
LK_01_29	Lake Richard B. Russell - Dam Forebay	Savannah	Augusta AMU	Lake Trend Monitoring	34.026333	-82.594167	X		X						X
LK_01_38	Clarks Hill Lake- Savannah River At U.S. Highway 378	Savannah	Augusta AMU	Lake Trend Monitoring	33.857861	-82.399583	X		X						X
LK_01_39	Clarks Hill Lake- Savannah River At Dordon Crk.	Savannah	Augusta AMU	Lake Trend Monitoring	33.765861	-82.271778	X		X						X
LK_01_40	Clarks Hill Lake - Dam Forebay	Savannah	Augusta AMU	Lake Trend Monitoring	33.662694	-82.198528	X		X						X
LK_01_67	Lake Tugalo - u/s Tugalo Lake Rd (aka Bull Sluice Rd.)	Savannah	Atlanta AMU	Lake Trend Monitoring	34.737805	-83.340555	X		X						X
LK_01_68	Lake Tugalo - Upstream From Tugaloo Dam	Savannah	Atlanta AMU	Lake Trend Monitoring	34.715	-83.351694	X		X						X
LK_01_7	Lake Burton - 1/4 mile South of Burton Island (aka Tallulah River)	Savannah	Cartersville AMU	Lake Trend Monitoring	34.835233	-83.553817	X		X						X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
LK_01_71	Clarks Hill Lake - Little River At Highway 47	Savannah	Augusta AMU	Lake Trend Monitoring	33.692722	-82.338805	X		X						X
LK_01_8	Lake Burton - Dampool (aka Tallulah River u/s Lake Burton Dam)	Savannah	Cartersville AMU	Lake Trend Monitoring	34.795317	-83.5401	X		X						X
LK_01_9	Lake Rabun - Approx. 4.5 mi u/s Dam (Mid Lake)	Savannah	Cartersville AMU	Lake Trend Monitoring	34.763533	-83.455817	X		X						X
LK_03_17700	Lake Oconee - Lick Creek Cove near Old Phoenix Rd.	Oconee	Augusta AMU	Lake Trend Monitoring	33.403819	-83.272422	X		X						
LK_03_520	Lake Oconee At Highway 44, Oconee River Arm	Oconee	Augusta AMU	Lake Trend Monitoring	33.431394	-83.265734	X		X						X
LK_03_525	Lake Sinclair - Little River & Murder Creek Arm, U/S U.S. Hwy 441	Oconee	Augusta AMU	Lake Trend Monitoring	33.189	-83.2953	X		X						X
LK_03_526	Lake Sinclair - 300 Meters U/S Dam (Dam Forebay)	Oconee	Augusta AMU	Lake Trend Monitoring	33.142817	-83.202617	X		X						X
LK_03_530	Lake Sinclair - Midlake, Oconee River Arm	Oconee	Augusta AMU	Lake Trend Monitoring	33.1968	-83.2742	X		X						X
LK_03_538	Lake Oconee 300 Meters U/S Wallace Dam (Dam Forebay)	Oconee	Augusta AMU	Lake Trend Monitoring	33.351667	-83.160833	X		X						X
LK_03_545	Lake Oconee - Richland Creek Arm	Oconee	Augusta AMU	Lake Trend Monitoring	33.3947	-83.1767	X		X						X
LK_03_600	Lake Sinclair- Little River/Oconee River Confluence	Oconee	Augusta AMU	Lake Trend Monitoring	33.1875	-83.275	X		X						X
LK_04_893	Lake Jackson at confluence of Alcovy River and Yellow/South River Branch	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.36314	-83.86131	X		X						X
LK_04_897	Lake Jackson - Dam Forebay	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.322	-83.8409	X		X						X
LK_05_2076	High Falls Lake - Midlake	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.1973	-84.031	X		X						X
LK_05_2078	High Falls Lake - Dam Forebay	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.1799	-84.0209	X		X						X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
LK_05_2131	Lake Juliette - Midlake	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.0464	-83.8106	X		X						X
LK_05_2132	Lake Juliette - Dam Forebay	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	33.0338	-83.7572	X		X						X
LK_05_2144	Lake Tobesofkee - Midlake	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	32.8346	-83.8161	X		X						X
LK_05_2146	Lake Tobesofkee - Dam Forebay	Ocmulgee	Atlanta AMU	Lake Trend Monitoring	32.8215	-83.7706	X		X						X
LK_09_3199	Banks Lake - Near Lakeland, GA	Suwannee	Tifton AMU	Lake Trend Monitoring	31.026667	-83.105555	X		X						X
LK_11_3467	Lake Blackshear - Midlake	Flint	Tifton AMU	Lake Trend Monitoring	31.9665	-83.9342	X		X						X
LK_11_3520	Lake Blackshear - Dam Forebay	Flint	Tifton AMU	Lake Trend Monitoring	31.8479	-83.9394	X		X						X
LK_11_3534	Flint River Reservoir - Midlake, Flint River Arm	Flint	Tifton AMU	Lake Trend Monitoring	31.6085	-84.119	X		X						X
LK_11_3535	Flint River Reservoir (Lake Worth) - Dam Forebay	Flint	Tifton AMU	Lake Trend Monitoring	31.6033	-84.1365	X		X						X
LK_11_3551	Lake Worth (original) - Above Hwy 91 Bridge / Diversion Dam (aka Lake Chehaw)	Flint	Tifton AMU	Lake Trend Monitoring	31.6109	-84.15	X		X						X
LK_11_3569	Lake Seminole - Flint River Arm at Spring Creek	Flint	Tifton AMU	Lake Trend Monitoring	30.7627	-84.8171	X		X						X
LK_12_3913	Lake Sidney Lanier - Little River Embayment, Betw M1WC & 3LR	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.355	-83.8427	X		X						X
LK_12_3995	Lake Sidney Lanier at Boling Bridge (State Road 53) on Chestatee River	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.31235	-83.950103	X		X						X
LK_12_3998	Lake Sidney Lanier at Lanier Bridge (State Road 53) on Chattahoochee River	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.32195	-83.880171	X		X						X
LK_12_4001	Lake Sidney Lanier at Browns Bridge Road (State Road 369)	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.261666	-83.950662	X		X						X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
LK_12_4005	Lake Sidney Lanier - Flat Creek Embayment, 100' U/S M7FC	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.2587	-83.9198	X		X						X
LK_12_4007	Lake Sidney Lanier - Balus Creek Embayment, 0.34m SE M6FC	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.2504	-83.9244	X		X						X
LK_12_4010	Lake Sidney Lanier - Mud Crk Embayment, Betw Marina & Ramp	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.2333	-83.9373	X		X						X
LK_12_4012	Lake Lanier upstream from Flowery Branch Confluence (Midlake)	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.200278	-83.982869	X		X						X
LK_12_4019	Lake Sidney Lanier - Six Mile Creek Embayment, 300' E M9SM	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.2335	-84.0287	X		X						X
LK_12_4028	Lake Sidney Lanier upstream of Buford Dam Forebay	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	34.162778	-84.067108	X		X						X
LK_12_4048	West Point Lake at LaGrange Water Intake near LaGrange, Ga.	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	33.0783	-85.110833	X		X						X
LK_12_4060	West Point Lake - Dam Forebay	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	32.9208	-85.1834	X		X						X
LK_12_4072	Lake Harding - Midlake, Main Body	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	32.7379	-85.1125	X		X						X
LK_12_4074	Lake Harding - Dam Forebay (aka Chatt. River US Bartletts Ferry Dam)	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	32.6633	-85.090278	X		X						X
LK_12_4078	Goat Rock Lake - Dam Forebay	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	32.6112	-85.0794	X		X						X
LK_12_4080	Lake Oliver - Dam Forebay	Chattahoochee	Atlanta AMU	Lake Trend Monitoring	32.516	-85.0009	X		X						X
LK_12_4097	Lake Walter F. George at U.S. Highway 82 (aka Chatt. River at Hwy 82)	Chattahoochee	Tifton AMU	Lake Trend Monitoring	31.891944	-85.120833	X		X						X
LK_12_4103	Lake Walter F. George at Dam Forebay	Chattahoochee	Tifton AMU	Lake Trend Monitoring	31.629167	-85.0725	X		X						X
LK_12_4107	Lake Andrews - Dam Forebay	Chattahoochee	Tifton AMU	Lake Trend Monitoring	31.2632	-85.113	X		X						X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
LK_12_4113	Lake Seminole - Chattahoochee Arm, Lower	Chattahoochee	Tifton AMU	Lake Trend Monitoring	30.7662	-84.9201	X		X	X	X				X
LK_12_4115	Lake Seminole - Dam Forebay	Chattahoochee	Tifton AMU	Lake Trend Monitoring	30.7115	-84.8647	X		X						X
LK_14_4494	Lake Allatoona Upstream from Dam	Coosa	Cartersville AMU	Lake Trend Monitoring	34.160833	-84.725845	X		X						X
LK_14_4497	Lake Allatoona at Allatoona Creek Upstream from Interstate 75	Coosa	Cartersville AMU	Lake Trend Monitoring	34.085833	-84.711389	X		X						X
LK_14_4502	Lake Allatoona at Etowah River upsteam from Sweetwater Creek	Coosa	Cartersville AMU	Lake Trend Monitoring	34.19	-84.577778	X		X						X
LK_14_4523	Carters Lake (CR1) - Upper Lake, Coosawattee Arm	Coosa	Cartersville AMU	Lake Trend Monitoring	34.62087	-84.6212	X		X						X
LK_14_4524	Carters Lake - Midlake (upstream from Woodring Branch)	Coosa	Cartersville AMU	Lake Trend Monitoring	34.6076	-84.638	X		X						X
LK_14_4553	Lake Allatoona at Little River upstream from Highway 205	Coosa	Cartersville AMU	Lake Trend Monitoring	34.158611	-84.577222	X		X						X
LK_14_4556	Lake Allatoona downstream from Kellogg Creek	Coosa	Cartersville AMU	Lake Trend Monitoring	34.138611	-84.639167	X		X						X
LK_15_4895	Lake Chatuge LMP 12 at State Line (aka Hiawassee River)	Tennessee	Cartersville AMU	Lake Trend Monitoring	34.983333	-83.788611	X		X						X
LK_15_4899	Lake Nottely (LMP15A) at Reece Creek	Tennessee	Cartersville AMU	Lake Trend Monitoring	34.91152	-84.0506	X		X						X
LK_15_4900	Lake Nottely - Dam Forebay (aka Nottely River - Upstream From Nottley Dam)	Tennessee	Cartersville AMU	Lake Trend Monitoring	34.957778	-84.092222	X		X						X
LK_15_4907	Lake Blue Ridge (LMP18) - 300 Meter Upstream Of Dam	Tennessee	Cartersville AMU	Lake Trend Monitoring	34.881667	-84.28	X		X						X
LK_15_4908	Lake Blue Ridge (LMP18A) - 4 miles upsteam Dam	Tennessee	Cartersville AMU	Lake Trend Monitoring	34.84017	-84.2731	X		X						X
SH_02_317	Little Ogeechee River at Green Island	Ogeechee	Brunswick AMU	Lake/Estuary Site	31.88823	-81.08798	X	X							X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
SH_02_364	St Catherines Sound at Medway River near Midway, GA	Ogeechee	Brunswick AMU	Lake/Estuary Site	31.715469	-81.156798	X	X							X
SH_02_372	Sapelo Sound at South Newport River near Barbour Island	Ogeechee	Brunswick AMU	Lake/Estuary Site	31.554108	-81.200361	X	X							X
SH_02_374	Sapelo River - Mouth of Broro River - 1.4 miles South of Shellman's Bluff	Ogeechee	Brunswick AMU	Lake/Estuary Site	31.544861	-81.316027	X	X							X
SH_02_56	Mouth of Wilmington River - Marker #19 Wassaw Sound	Ogeechee	Brunswick AMU	Lake/Estuary Site	31.932416	-80.977111	X	X							X
SH_06_15212	Doboy Sound	Altamaha	Brunswick AMU	Lake/Estuary Site	31.394942	-81.29435	X	X							X
SH_06_2857	Altamaha River - channel marker #201 off Wolf Island	Altamaha	Brunswick AMU	Lake/Estuary Site	31.319166	-81.325	X	X							X
SH_07_15209	St. Simons Sound	Satilla	Brunswick AMU	Lake/Estuary Site	31.12568	-81.411953	X	X							X
SH_07_3008	St. Andrews Sound at Satilla Riv near	Satilla	Brunswick AMU	Lake/Estuary Site	30.983162	-81.453238	X	X							X
SH_07_3029	Turtle River off Hermitage Island	Satilla	Brunswick AMU	Trend Monitoring	31.220278	-81.564167	X								
SH_07_3032	Turtle River - Georgia Highway 303	Satilla	Brunswick AMU	Trend Monitoring	31.186944	-81.531389	X								
SH_07_3035	Brunswick Harbor (off East River) - 0.83 miles SW of Brunswick	Satilla	Brunswick AMU	Trend Monitoring	31.143611	-81.4975	X								
SH_07_3036	Brunswick River - U.S. Highway 17	Satilla	Brunswick AMU	Trend Monitoring	31.1164	-81.4858	X				X			X	
SH_07_3049	Cumberland Sound at St. Marys Riv nr St Marys, GA	Satilla	Brunswick AMU	Lake/Estuary Site	30.728073	-81.489794	X	X							X
RV_01_109	Savannah River - Seaboard Coast Line Railway, North of Clyo	Savannah	Brunswick AMU	Trend Monitoring (USGS)	32.525	-81.263978	X		X	X					
RV_01_12	Reed Creek at County Road 301 near Hartwell, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.45377	-82.94018	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_01_120	Savannah River - US Highway 17 (Houlihan Bridge)	Savannah	Brunswick AMU	Trend Monitoring (USGS)	32.165833	-81.1539	X		X	X					
RV_01_14	Eastanollee Creek At Rose Lane In Toccoa, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli, pH)	34.54393	-83.3029	X		X						
RV_01_144	Kettle Creek at Stone Bridge Rd	Savannah	Augusta AMU	Trend Monitoring	33.68301	-82.85747	X		X	X		X	X	X	
RV_01_16	Eastanollee Creek - Yow Mill Road Near Avalon, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.52774	-83.19733	X		X						
RV_01_17	Eastanolle Creek at Tower Road nr Avalon, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.52633	-83.1853	X		X						
RV_01_175	Broad River at US Hwy 29	Savannah	Augusta AMU	Targeted Monitoring (Additional data)	34.24722	-83.17328	X			X	X				
RV_01_18166	Trib to Van Creek at Amberly Rd near Elberton, GA	Savannah	Augusta AMU	Probabilistic Monitoring	34.18538	-82.79846	X		X	X	X				
RV_01_18167	Dicks Creek at Guard Camp Rd in Lake Russell WMA near Ayersville, GA	Savannah	Augusta AMU	Targeted Monitoring (Tetrachloroetyhlene, vinyl chloride)	34.52974	-83.41875	X			X					
RV_01_19	Crawford Creek at County Road 118 near Lavonia, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.48206	-83.12227	X		X						
RV_01_244	Charlies Creek at Charlies Creek Rd East of Hiawassee, GA	Savannah	Atlanta AMU	Trend Monitoring (SEMN)	34.95895	-83.57158	X			X	X	X	X	X	
RV_01_248	Coleman River at Coleman River Rd near Clayton, GA	Savannah	Atlanta AMU	Trend Monitoring (SEMN)	34.95203324	-83.51659881	X			X	X	X	X	X	
RV_01_266	Shoal Creek at State Road 77 (Providence Church Rd) at Parkertown, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.45261	-83.04182	X		X						
RV_01_44	Hudson River at State Road 15 near Homer, GA	Savannah	Atlanta AMU	Targeted Monitoring (E coli)	34.337312	-83.487836	X		X						
RV_01_53	Clark Creek at County Road 113 near Tignal, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	33.92666	-82.81003	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_01_57	Falling Creek at Sam Tate Rd / Co. Rd 50 near Fortsonia, GA	Savannah	Augusta AMU	Targeted Monitoring (E coli)	34.00311	-82.80827	X		X						
RV_01_66	Chattooga River - U.S. Highway 76 near Clayton, GA	Savannah	Atlanta AMU	Trend Monitoring (USGS)	34.813983	-83.306433	X		X	X					
RV_01_87	Savannah R BL Spirit Cr nr Augusta, GA	Savannah	Augusta AMU	Trend Monitoring (USGS)	33.3306	-81.9153	X		X	X	X				
RV_01_87	Savannah River - 0.5 Mile Downstream from Spirit Creek	Savannah	Augusta AMU	Trend Monitoring (USGS)	33.3306	-81.9153	X		X	X					
RV_02_15770	Ogeechee River at RM 5 at Middle Marsh Islands near Richmond Hill, GA	Ogeechee	Brunswick AMU	Estuary Trend Site	31.856992	-81.110452	X	X							X
RV_02_17701	North Fork Ogeechee at Brooks Rd	Ogeechee	Augusta AMU	Trend Monitoring	33.58844	-83.00938	X		X	X		X	X	X	
RV_02_18164	Duhart Creek at Sand Valley Rd near Edgehill, GA	Ogeechee	Augusta AMU	Probabilistic Monitoring	33.10931	-82.49084	X		X	X	X				
RV_02_287	Williamson Swamp Creek - Georgia Highway 231	Ogeechee	Augusta AMU	Targeted Monitoring (E coli)	32.97573	-82.60997	X		X						
RV_02_296	Ogeechee Creek at State Road 17 at Oliver, GA	Ogeechee	Brunswick AMU	Targeted Monitoring (E coli)	32.524444	-81.539722	X		X						
RV_02_298	Ogeechee River - Georgia Highway 24 near Oliver, GA	Ogeechee	Brunswick AMU	Trend Monitoring (USGS)	32.49475	-81.555833	X		X	X					
RV_02_349	Wateringhole Branch at Country Club Road	Ogeechee	Brunswick AMU	Targeted Monitoring (E coli)	32.41486	-81.84817	X		X						
RV_02_350	Lotts Creek and State Road 250 (Nevils-Daisy Road) near Nevils, GA	Ogeechee	Brunswick AMU	Targeted Monitoring (E coli)	32.264417	-81.80835	X		X						
RV_02_457	Little Lotts Creek at SR46 near Stateboro, GA	Ogeechee	Brunswick AMU	Trend Monitoring	32.32603	-81.8024	X		X					X	
RV_03_16356	Kimbro Creek at Lanier Road	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.43653	-83.12807	X		X						
RV_03_16783	Pearson Creek at College Street near Monticello, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.32556	-83.69175	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_03_17292	Whitten Creek at SR 15 near White Plains, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.38682	-83.02516	X		X						
RV_03_17706	Little Bear Creek at Fowler Mill Rd near Athens, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.96587	-83.51485	X		X						
RV_03_17797	Pearson Creek at Maddux Street near Monticello, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.32164	-83.69867	X		X						
RV_03_17813	Turkey Creek at MLK Jr Dr near Eatonton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.28477	-83.32305	X		X						
RV_03_17817	Trib to White Oak Creek at Jordan Rd near Monticello, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.29575	-83.66833	X		X						
RV_03_18130	Little River at Glades Rd near Eatonton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.37281	-83.4773	X		X						
RV_03_18136	Flat Creek at US Highway 221 near Mount Vernon, GA	Oconee	Brunswick AMU	Probabilistic Monitoring	32.207194	-82.598359	X		X	X	X				
RV_03_18163	Trib to Beaverdam Creek at Leslie Mill Rd near Greensboro, GA	Oconee	Augusta AMU	Probabilistic Monitoring	33.49969	-83.17106	X		X	X	X				
RV_03_18165	Little Buckeye Creek at New Buckeye Rd near Oconee, GA	Oconee	Augusta AMU	Probabilistic Monitoring	32.76997	-82.86158	X		X	X	X				
RV_03_489	North Oconee River at Georgia Highway 82 near Maysville, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.213983	-83.546917	X		X						
RV_03_490	North Oconee River at State Highway 335 Near Nicholson, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.117667	-83.474367	X		X						
RV_03_500	North Oconee River at Whitehall Road near Whitehall, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.90724	-83.35999	X		X						
RV_03_501	Cedar Creek at Barnett Shoals Drive near Athens, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.89561	-83.33238	X		X						
RV_03_502	Oconee River at Barnett Shoals Road near Athens, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli, USGS)	33.85561	-83.32684	X		X						
RV_03_508	Town Creek at Cold Springs Road near Greensboro, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.61309	-83.23891	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_03_5121	Trib to Pittman Branch at Brook Hollow Way near Mansfield, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.506	-83.718	X		X						
RV_03_541	Town Creek at Old Covington Road County Road 39 near Greensboro,	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.54953	-83.20865	X		X						
RV_03_542	Richland Creek at Shelby Dreyer Road near Greensboro, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.54688	-83.22103	X		X						
RV_03_543	Richland Creek At Interstate 20 Near Greensboro	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.542222	-83.223611	X		X						
RV_03_553	Little River at Little River Road (Ga. 213) near Godfrey, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.451167	-83.536633	X		X						
RV_03_559	Little River Tributary 2 CR 212 (Glenwood Springs Rd) near Eatonton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.295283	-83.41675	X		X						
RV_03_567	Big Cedar Creek at U.S. Highway 129 near Eatonton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.186111	-83.437222	X		X						
RV_03_570	Pond Fork at Wayne Poultry Road near Pendergrass, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.18073	-83.66086	X		X						
RV_03_572	Allen Creek at Wayne Poultry Road near Pendergrass, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.17358	-83.674	X		X						
RV_03_576	Middle Oconee River at Etheridge Road near Arcade, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.04175	-83.587759	X		X						
RV_03_585	McNutt Creek at Jennings Mill Road, Athens, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.92665	-83.46092	X		X						
RV_03_589	Middle Oconee River at Macon Hwy near Athens, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.91859	-83.3901	X		X						
RV_03_591	Middle Oconee River at Whitehall Road at Athens, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.89064	-83.37647	X		X						
RV_03_592	Calls Creek at Hickory Hill Drive near Watkinsville, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.881454	-83.3895	X		X						
RV_03_596	North Oconee River at Diamond Hill Church Road (CR266) near Maysville ,GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.259888	-83.645699	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_03_597	Chandler Creek at Deadwyler Road near Maysville, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.24542	-83.59101	X		X						
RV_03_599	Rooty Creek at Martin Luther King Jr. Drive (County Road 90) near Eatonton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	33.315278	-83.365556	X		X						
RV_03_640	Oconee River at Interstate Highway 16 near Dublin, GA	Oconee	Tifton AMU	Trend Monitoring (USGS)	32.480367	-82.858217	X		X	X					
RV_03_704	Wolf Creek at Turner Woods Rd	Oconee	Atlanta AMU	Probabilistic Monitoring	32.995263	-83.495836	X		X	X	X				
RV_03_763	Wheeler Creek at Bill Cheek Rd	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.082469	-83.854552	X		X						
RV_03_784	Beaverdam Creek at County Road 66 near Veazey, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.50471	-83.15567	X		X						
RV_03_796	E.T. Creek near Chicopee, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.26	-83.837222	X		X						
RV_03_799	Mulberry River at Old Covered Bridge Road near Hoschton, GA	Oconee	Atlanta AMU	Targeted Monitoring (E coli)	34.07832	-83.7766	X		X						
RV_03_803	Richland Creek at U.S. Hwy 278 / SR 12 near Greensboro ,GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.57682	-83.21038	X		X						
RV_03_807	Town Creek at Ga. Hwy 44 near Greensboro, GA	Oconee	Augusta AMU	Targeted Monitoring (E coli)	33.551717	-83.200433	X		X						
RV_04_15916	Garner Creek at Five Forks Trickum Road nr Lawrenceville, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.861944	-84.097182	X		X						
RV_04_15918	Beaver Ruin Creek at Hillcrest Road near Norcross, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.928212	-84.167021	X		X						
RV_04_18017	Tributary to Doolitte Creek at Fontaine Circle in Atlanta, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (Tetrachloroethylene)	33.72412	-84.2857	X								
RV_04_18169	Shetley Creek at Castlerock Drive near Norcross, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.9623	-84.165804	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_04_2009	Upton Creek at SR 42 / Moreland Ave	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.607103	-84.302357	X		X						
RV_04_2058	Bear Creek at McDonald Road near Mansfield ,GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.445923	-83.812818	X		X						
RV_04_2059	Doless Creek at Flat Shoals Road near Decatur, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.705898	-84.27743	X		X						
RV_04_816	Bromolow Creek at Shackleford Road	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.943056	-84.143056	X		X						
RV_04_817	Jackson Creek at Arcado Road near Luxomni, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.894417	-84.114883	X		X						
RV_04_848	South River - Georgia Highway 81 at Snapping Shoals	Ocmulgee	Atlanta AMU	Trend Monitoring (USGS)	33.45265	-83.927083	X			X					
RV_04_853	South River at Island Shoals Road near Snapping Shoals, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.45265	-83.927083	X		X						
RV_04_863	Jacks Creek at State Road 264 near Centerville, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.820833	-84.063889	X		X						
RV_04_869	Yellow River at Pleasant Hill Road near Lithonia ,GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.733822	-84.061609	X		X						
RV_04_873	Brushy Creek at Rock Bridge Road near Rosebud, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (Special Request)	33.798889	-83.97	X			X	X				
RV_04_876	Yellow River - Georgia Highway 212 near Stewart, GA	Ocmulgee	Atlanta AMU	Trend Monitoring (USGS)	33.454267	-83.881333	X		X	X					
RV_04_888	Alcovy River - Newton Factory Bridge Road near Stewart	Ocmulgee	Atlanta AMU	Trend Monitoring (USGS)	33.4494	-83.8283	X		X	X					
RV_04_889	Rocky Creek at Henderson Mill Road near Monticello, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.431388	-83.779722	X		X						
RV_04_892	Tussahaw Creek at Fincherville Road near Jackson, GA	Ocmulgee	Atlanta AMU	Trend Monitoring (USGS)	33.378867	-83.9634	X			X					
RV_04_899	Walnut Creek at Elliot Road nr McDonough, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.4823	-84.1188	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_04_937	Big Haynes Creek at Bald Rock Rd / Costley Mill Rd	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.661772	-83.928042	X		X						
RV_04_985	Big Cotton Indian Creek at Homestead Rd	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.584363	-84.260691	X		X						
RV_04_994	Panther Creek at SR42/US23	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.569167	-84.262206	X		X						
RV_05_16777	Echeconnee Creek at Rock Quarry Rd nr Yatesville	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	32.92305	-84.11694	X		X						
RV_05_18159	Brushy Creek at Pecan Orchard Rd. near Empire, GA	Ocmulgee	Tifton AMU	Probabilistic Monitoring	32.299963	-83.341652	X		X	X	X				
RV_05_18160	Unnamed Trib to Gum Swamp Creek at Lister Cemetery Rd. near Yonkers, GA	Ocmulgee	Tifton AMU	Probabilistic Monitoring	32.355434	-83.208814	X		X	X	X				
RV_05_2105	Wise Creek at Concord Road (County Road 141) near Monticello, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.256389	-83.799722	X		X						
RV_05_2112	Big Sandy Creek at State Road 87 near Sandy, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.195278	-83.850556	X		X						
RV_05_2135	Tobesofkee Creek at Ramah Church Road near Barnesville, GA	Ocmulgee	Atlanta AMU	Targeted Monitoring (E coli)	33.0307	-84.0768	X		X						
RV_05_2165	Ocmulgee River - New Macon Water Intake	Ocmulgee	Atlanta AMU	Trend Monitoring (USGS)	32.899247	-83.664064	X		X	X					
RV_05_2203	Ocmulgee River at Hawkinsville, GA	Ocmulgee	Tifton AMU	Trend Monitoring (USGS)	32.281759	-83.462773	X		X	X					
RV_05_2217	House Creek at Walker Road near Forest Glen, GA	Ocmulgee	Tifton AMU	Targeted Monitoring (E coli)	31.848783	-83.2533	X		X						
RV_05_2223	Ocmulgee River - US Highway 341 at Lumber City, GA	Ocmulgee	Brunswick AMU	Trend Monitoring (USGS)	31.919933	-82.674267	X		X	X					
RV_05_2224	Gully Creek at Liberty Church Road (CR244) near Hazelhurst, GA	Ocmulgee	Brunswick AMU	Targeted Monitoring (E coli)	31.91386	-82.55355	X		X						
RV_05_2230	Little Ocmulgee River - U.S. Hwy 280 / SR 30	Ocmulgee	Tifton AMU	Targeted Monitoring (E coli)	32.080859	-82.888138	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_05_2232	Alligator Creek at State Road 46 near McRae, GA	Ocmulgee	Tifton AMU	Targeted Monitoring (E coli)	32.228611	-82.984722	X		X						
RV_05_2238	Sugar Creek at State Road 27 near Lumber City, GA	Ocmulgee	Brunswick AMU	Targeted Monitoring (DOC, Color)	31.959722	-82.727222	X								
RV_06_16760	Big Cedar Creek at Bartow Dublin Hwy near Wrightsville, Ga.	Altamaha	Augusta AMU	Targeted Monitoring (E coli)	32.73294	-82.70701	X		X						
RV_06_18134	Brazells Creek at Lynntown Road near Reidsville, GA	Altamaha	Brunswick AMU	Targeted Monitoring (pH)	32.095962	-82.13335	X								
RV_06_18135	Trib to Rocky Creek at Rodney Stanley Road near Lyons, GA	Altamaha	Brunswick AMU	Probabilistic Monitoring	32.102219	-82.281576	X		X	X	X				
RV_06_2840	Altamaha River at State Road 121 near Surrency, GA	Altamaha	Brunswick AMU	Probabilistic Monitoring	31.583889	-82.094167	X		X	X	X				
RV_06_2846	Altamaha River - 6 Miles Downstream From Doctortown	Altamaha	Brunswick AMU	Trend Monitoring (USGS)	31.6233	-81.7653	X		X	X					
RV_06_2860	Ohoopee River at Harts Ford Road (County Road 239) near Harrison, GA	Altamaha	Augusta AMU	Targeted Monitoring (E coli)	32.81111	-82.80645	X		X						
RV_06_2864	Big Cedar Crk at Liberty Grove Church Rd (CR 175) near Wrightsville, GA	Altamaha	Augusta AMU	Targeted Monitoring (E coli)	32.68103	-82.68735	X		X						
RV_06_2887	Ohoopee River at State Road 292 near Lyons, GA	Altamaha	Brunswick AMU	Probabilistic Monitoring	32.194167	-82.192222	X		X	X	X				
RV_06_2906	Brazells Creek at Brazell Street west of Reidsville, GA	Altamaha	Brunswick AMU	Targeted Monitoring (pH)	32.091318	-82.148621	X								
RV_07_16397	Trib to Trib to Seventeen Mile River at 10th Street near Douglas, GA	Satilla	Brunswick AMU	Targeted Monitoring (Req-NH3)	31.501813	-82.841701	X			X					
RV_07_16398	Trib to Trib to Seventeen Mile River at Gaskin Avenue near Douglas, GA	Satilla	Brunswick AMU	Targeted Monitoring (Req-NH3)	31.502071	-82.845428	X			X					
RV_07_17554	Trib to Trib to Seventeen Mile River 100 m downstream of McDonald Rd near Douglas, GA	Satilla	Brunswick AMU	Targeted Monitoring (Req-NH3)	31.501623	-82.842639	X			X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_07_17660	Satilla Creek at Pine Level Church Rd. near Fitzgerald, Ga	Satilla	Tifton AMU	Targeted Monitoring (E coli)	31.69609	-83.16842	X		X						
RV_07_18068	Big Satilla Creek at US Highway 84 near Screven, GA	Satilla	Brunswick AMU	Trend Monitoring	31.457226	-82.056476	X		X	X	X	X		X	
RV_07_18137	Trib to Twenty Mile Creek at Church Street near Douglas, GA	Satilla	Brunswick AMU	Targeted Monitoring (Chrysene and Benzo(a)anthracene)	31.52079	-82.8522	X								
RV_07_2892	Swift Creek at State Road 152 near Lyons, GA (Special Project see comments)	Satilla	Brunswick AMU	Targeted Monitoring (Additional data)	32.222222	-82.298889	X								
RV_07_2986	Satilla River Georgia Highways 15 and 121	Satilla	Brunswick AMU	Trend Monitoring (USGS)	31.2167	-82.1625	X		X	X					
RV_07_2993	Little Hurricane Creek at Highway 1 near Waycross, GA	Satilla	Brunswick AMU	Targeted Monitoring (E coli)	31.423477	-82.432838	X		X						
RV_07_2997	Alabaha River - SR 203	Satilla	Brunswick AMU	Targeted Monitoring (E coli)	31.37547	-82.28867	X		X						
RV_07_3001	Satilla River at US Highway 82 near Atkinson, GA	Satilla	Brunswick AMU	Probabilistic Monitoring	31.221111	-81.8675	X		X	X	X				
RV_07_3013	Big Satilla Creek at State Road 203 near Baxley, GA	Satilla	Brunswick AMU	Probabilistic Monitoring	31.590833	-82.311667	X		X	X	X				
RV_09_17661	Reedy Creek at Bethlehem Church Rd near Ocilla, Ga	Suwannee	Tifton AMU	Targeted Monitoring (E coli)	31.48904	-83.17775	X		X						
RV_09_17673	Woodyard Creek at Bypass Road near Homerville, GA	Suwannee	Brunswick AMU	Targeted Monitoring (E coli)	31.03621	-82.7288	X		X						
RV_09_18161	Alapaha River at SR 107 near Rebecca, GA	Suwannee	Tifton AMU	Probabilistic Monitoring	31.721059	-83.455564	X		X	X	X				
RV_09_18162	Pindar Creek at Mayday Rd. near Fruitland, GA	Suwannee	Tifton AMU	Probabilistic Monitoring	30.826176	-83.00755	X		X	X	X				
RV_09_3181	Suwannee River at US Highway 441 near Fargo, GA	Suwannee	Brunswick AMU	Trend Monitoring (USGS)	30.6806	-82.5606	X		X	X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_09_3182	Tatum Creek at CR 37 (Clarence Smith Rd) near Homerville, GA	Suwannee	Brunswick AMU	Targeted Monitoring (E coli)	30.99342	-82.71747	X		X						
RV_09_3183	Tatum Creek at US Highway 441 near Homerville, GA	Suwannee	Brunswick AMU	Targeted Monitoring (E coli)	30.896389	-82.665833	X		X						
RV_09_3190	Little Brushy Creek at County Road 63 (Harrell Road) near Ocilla, GA	Suwannee	Tifton AMU	Targeted Monitoring (E coli)	31.5075	-83.208889	X		X						
RV_09_3236	Withlacoochee River at Clyattsville-Nankin Road near Clyattsville, GA	Suwannee	Tifton AMU	Trend Monitoring (USGS)	30.674722	-83.394722	X		X	X					
RV_09_3242	Little River at Upper Ty Ty Road near Tifton	Suwannee	Tifton AMU	Probabilistic Monitoring	31.481667	-83.584167	X		X	X	X				
RV_10_16316	Pine Creek at SR3 near Ochlocknee, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Req-NH3)	30.963491	-84.045693	X								
RV_10_17558	Pine Creek U/S Ochlockonnee WPCP near Ochlockonee, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Req-NH3)	30.964723	-84.048281	X								
RV_10_3384	Tired Creek at County Road 151 near Reno, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Florida Stateline)	30.763611	-84.229444	X			X					
RV_10_3386	Ochlockonee River @ Hadley Ferry Rd. nr Calvary, GA	Ochlockonee	Tifton AMU	Trend Monitoring (USGS)	30.731717	-84.235533	X		X	X					
RV_10_3388	Aucilla River at Twelve Mile Post Rd. near Boston, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (E coli)	30.712452	-83.744396	X		X						
RV_10_3389	Attapulgus Creek at U.S. Hwy 27 near Attapulgus, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Florida Stateline)	30.732778	-84.453611	X			X					
RV_10_3390	Swamp Creek at US Hwy 27 near Attapulgus, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Florida Stateline)	30.719444	-84.411389	X			X					
RV_10_3422	Little Attapulgus Creek at Faceville-Attapulgus Rd. near Attapulgus, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Florida Stateline)	30.750046	-84.501333	X			X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_10_3423	Little Attapulgus Creek at State Rd 241 near Attapulgus, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (Florida Stateline)	30.718056	-84.49	X			X					
RV_10_4989	Olive Creek at Cone Rd nr Thomasville, GA	Ochlockonee	Tifton AMU	Targeted Monitoring (E coli)	30.795108	-83.904104	X		X						
RV_11_15907	Keg Creek at Stallings Road/McIntosh Trail near Senoia, GA	Flint	Atlanta AMU	Probabilistic Monitoring	33.332198	-84.56699	X		X	X	X				
RV_11_16473	Spring Hill Creek at South Street (D/S Marshallville WPCP) near Marshallville, GA	Flint	Tifton AMU	Targeted Monitoring (Additional data)	32.439369	-83.94293	X								
RV_11_16474	Spring Hill Creek at South Street (U/S Marshallville WPCP) near Marshallville, GA	Flint	Tifton AMU	Targeted Monitoring (Additional data)	32.44107	-83.942959	X								
RV_11_16802	Sand Creek at Railroad St. (D/S Ideal WPCP) near Ideal, GA	Flint	Tifton AMU	Targeted Monitoring (Req-NH3)	32.378023	-84.188619	X								
RV_11_17565	Sand Creek at Martin Luther King Ave (U/S Ideal WPCP) near Ideal, GA	Flint	Tifton AMU	Targeted Monitoring (Req-NH3)	32.38202	-84.1992	X								
RV_11_18018	Sullivan Creek at Edison Dr in Atlanta, GA	Flint	Atlanta AMU	Targeted Monitoring (Dieldrin)	33.62976	-84.46552	X								
RV_11_18127	Trib to Shoal Creek at Brady Road	Flint	Atlanta AMU	Probabilistic Monitoring	32.410761	-84.470708	X		X	X	X				
RV_11_3485	Flint River at State Road 92 near Griffin, GA	Flint	Atlanta AMU	Trend Monitoring (USGS)	33.3089	-84.393056	X		X	X					
RV_11_3507	Flint River at State Road 26/49 near Montezuma, GA	Flint	Tifton AMU	Trend Monitoring (USGS)	32.2981	-84.043889	X		X	X					
RV_11_3511	Flint River at SR 26 near Montezuma	Flint	Tifton AMU	Trend Monitoring (USGS)	32.29295	-84.044067	X		X	X					
RV_11_3553	Flint River at State Road 234 near Albany, GA	Flint	Tifton AMU	Trend Monitoring (USGS)	31.5524	-84.1463	X		X	X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_11_3558	Flint River at State Road 37 at Newton, GA	Flint	Tifton AMU	Trend Monitoring (USGS)	31.309444	-84.335	X		X	X					
RV_11_3563	Flint River at U.S. Highway 27-B near Bainbridge, GA	Flint	Tifton AMU	Trend Monitoring (USGS)	30.910946	-84.580514	X		X	X					
RV_11_3605	Line Creek at Rockaway Rd	Flint	Atlanta AMU	Targeted Monitoring (Additional data)	33.335716	-84.536739	X								
RV_11_3610	Bear Creek at Wildwood Rd./ Bear Creek Rd	Flint	Atlanta AMU	Targeted Monitoring (Additional data)	33.352347	-84.359427	X								
RV_11_3789	Flint River at Sprewell Bluff Sprewell Bluff State Park	Flint	Atlanta AMU	Trend Monitoring	32.855988	-84.476812	X		X	X	X	X	X		
RV_11_3804	Lime Creek at Springhill Church Road east of Americus, Ga	Flint	Tifton AMU	Trend Monitoring	32.035	-83.9925	X		X				X	X	
RV_11_3807	Little Ichawaynochaway Creek at CR 3 near Shellman, Ga	Flint	Tifton AMU	Trend Monitoring	31.803532	-84.640013	X		X	X	X	X	X	X	
RV_12_17578	Sweetwater Creek at Blairs Bridge Rd near Lithia Springs, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.77454	-84.61455	X		X	X	X	X	X		
RV_12_17688	Trib to Snake Creek near Newnan, GA	Chattahoochee	Atlanta AMU	Targeted Monitoring (Trichlorethylene, pH)	33.393887	-84.81949	X								
RV_12_18085	Camp Creek at Cascade-Palmetto Hwy (Hwy 70), near Campbellton	Chattahoochee	Atlanta AMU	Targeted Monitoring (Revisit)	33.675528	-84.630941	X		X	X	X				
RV_12_18103	Big Creek at Grimes Bridge Rd (Roswell, GA)	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	34.018996	-84.345133	X		X	X	X	X	X		
RV_12_18122	Foe Killer Creek at Mansell Rd	Chattahoochee	Atlanta AMU	Targeted Monitoring (E coli)	34.041	-84.31709	X		X						
RV_12_18123	North Utoy Creek at Falls Dr SW	Chattahoochee	Atlanta AMU	Targeted Monitoring (E coli)	33.74052	-84.50464	X		X						
RV_12_18124	Pepperell Creek at Darden Meadows Dr	Chattahoochee	Atlanta AMU	Targeted Monitoring (E coli)	33.05916	-84.99649	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_12_18125	Lee Branch at Forrest Avenue	Chattahoochee	Atlanta AMU	Targeted Monitoring (E coli)	33.01574	-85.04728	X		X						
RV_12_18126	Trib to Sulphur Creek at Old Durand road/Winter Road	Chattahoochee	Atlanta AMU	Probabilistic Monitoring	32.940977	-84.765901	X		X	X	X				
RV_12_18128	Fort Creek at J street U/S of Koch Discharge near Pine Mountain Valley	Chattahoochee	Atlanta AMU	Targeted Monitoring (Req-NH3)	32.808062	-84.807744	X		X						
RV_12_18129	North Fork Balus Creek at Tumbling Creek Road	Chattahoochee	Atlanta AMU	Targeted Monitoring (E coli)	34.24274	-83.85935	X		X						
RV_12_18131	Woodall Creek at Chattahoochee Ave NW in Atlanta	Chattahoochee	Atlanta AMU	Targeted Monitoring (Tetrachloroetyhlene, PCBs)	33.80279	-84.43166	X								
RV_12_18132	Woodall Creek at Collier Rd NW in Atlanta	Chattahoochee	Atlanta AMU	Targeted Monitoring (B-BHC)	33.809371	-84.434465	X								
RV_12_18133	Tributary to Woodall creek at Marietta Blvd NW in Atlanta	Chattahoochee	Atlanta AMU	Targeted Monitoring (alpha BHC, beta BHC, copper, zinc)	33.79586	-84.43269	X								
RV_12_18158	Chattahoochee River near Odom Creek Rd. near Blakely, GA	Chattahoochee	Tifton AMU	Probabilistic Monitoring	31.38688762	-85.08113213	X		X	X	X				
RV_12_3841	Chattahoochee River at McGinnis Ferry Road	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	34.050556	-84.097701	X		X		X				
RV_12_3859	Chattahoochee River - DeKalb County Water Intake	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.9731	-84.2631	X		X						
RV_12_3870	Chattahoochee River at Cobb County Water Intake near Roswell, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.9443	-84.405	X		X						
RV_12_3891	Chattahoochee River - Atlanta Water Intake	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.8278	-84.455	X		X		X				
RV_12_3902	Chattahoochee River at Belton Bridge Road near Lula, GA	Chattahoochee	Cartersville AMU	Trend Monitoring (USGS)	34.445145	-83.68423	X		X	X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_12_3925	Chestatee River at State Road 400 near Dahlonega, GA	Chattahoochee	Cartersville AMU	Trend Monitoring (USGS)	34.466667	-83.968889	X		X	X					
RV_12_3934	Chattahoochee River at Bankhead Highway	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.795278	-84.507778	X		X		X				
RV_12_3939	Prob - Chattahoochee River - Georgia Highway 139	Chattahoochee	Atlanta AMU	Probabilistic Monitoring	33.779167	-84.533611	X		X	X	X				
RV_12_3960	Chattahoochee River at Capps Ferry Road near Rico, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.5778	-84.808611	X		X						
RV_12_4003	Flat Creek at McEver Road near Gainesville, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (USGS)	34.265833	-83.885	X		X	X					
RV_12_4039	New River at State Road 100 near Corinth, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (USGS)	33.235278	-84.987778	X		X	X					
RV_12_4041	Chattahoochee River at GA 100 at Franklin, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (USGS)	33.2897	-85.088512	X		X	X					
RV_12_4049	Yellow Jacket Creek at Hammet Road near Hogansville, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (USGS)	33.139167	-84.975278	X		X	X					
RV_12_4094	Chattahoochee River at Spur 39 near Omaha, Ga.	Chattahoochee	Tifton AMU	Trend Monitoring (USGS)	32.1436	-85.045278	X		X	X					
RV_12_4110	Chattahoochee River at State Road 91 near Steam Mill, GA	Chattahoochee	Tifton AMU	Trend Monitoring (USGS)	30.9775	-85.005278	X		X	X					
RV_12_4123	Hillabahatchee Creek at CR 210 near Frolona, GA	Chattahoochee	Atlanta AMU	Trend Monitoring	33.311218	-85.187675	X		X	X	X	X	X	X	
RV_12_4218	Town Branch at Brewer Rd	Chattahoochee	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.75386	-84.86242	X		X						
RV_12_4219	Town Branch at Mirror Lake Pkwy	Chattahoochee	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.743194	-84.881337	X		X						
RV_12_4220	Town Branch Creek d/s of North WPCP	Chattahoochee	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.743781	-84.87916	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_12_4292	Dicks Creek at Forest Service Road 144-1 near Neels Gap, GA	Chattahoochee	Cartersville AMU	Trend Monitoring (USGS)	34.6797	-83.937222	X			X					
RV_12_4316	Peachtree Creek at Northside Dr in Atlanta, GA	Chattahoochee	Atlanta AMU	Trend Monitoring (AWW)	33.8194	-84.407778	X		X	X	X	X	X		
RV_12_4317	Pine Knot Creek at SR 355 near Box Springs, GA	Chattahoochee	Atlanta AMU	Probabilistic Monitoring	32.439831	-84.648404	X		X	X	X				
RV_12_5130	Fort Creek at Hwy 116 D/S of Koch Discharge near Pine Mountain Valley	Chattahoochee	Atlanta AMU	Targeted Monitoring (Req-NH3)	32.793924	-84.802056	X		X						
RV_13_18138	Baxter Creek at Old Hamilton Mill Road near Bremen, GA	Tallapoosa	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.74371	-85.12827	X		X						
RV_13_18139	Baxter Creek at Baxter Road near Bremen, GA	Tallapoosa	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.7489	-85.1208	X		X						
RV_13_18140	Baxter Creek at Hoke Golden Road near Bremen, GA	Tallapoosa	Cartersville AMU	Targeted Monitoring (Req-NH3)	33.7722	-85.115	X		X						
RV_13_4349	Little Tallapoosa River - Georgia Highway 100 near Bowden, GA	Tallapoosa	Atlanta AMU	Trend Monitoring (USGS)	33.4927778	-85.279167	X		X	X					
RV_13_4353	Tallapoosa River - Georgia Highway 8 below Tallapoosa, GA	Tallapoosa	Cartersville AMU	Trend Monitoring (USGS)	33.740833	-85.336389	X		X	X					
RV_14_15870	Pinhook Creek at Hwy 411	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.467173	-84.700669	X								
RV_14_17273	Woodward Creek at Gaines Loop near Rome, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.364356	-85.07319	X								
RV_14_17477	Ninetynine Branch at Irwin Mill Rd near Fairmount, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.42014	-84.67966	X								
RV_14_18141	Lawrence Creek at Head Place near Dallas, GA	Coosa	Cartersville AMU	Probabilistic Monitoring	33.931605	-84.835658	X		X	X	X				
RV_14_18142	Buzzard Flapper Creek at Hube Turner Rd	Coosa	Cartersville AMU	Targeted Monitoring (Additional data)	34.254045	-84.290755	X		X						

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_14_18143	Holly Creek at Sweetwater Juno Rd	Coosa	Cartersville AMU	Targeted Monitoring (E coli)	34.446	-84.20173	X		X						
RV_14_18144	Little Amicacola Creek at Afton Rd	Coosa	Cartersville AMU	Targeted Monitoring (E coli)	34.50133	-84.23446	X		X						
RV_14_18145	Jacks Creek at Farmville Road	Coosa	Cartersville AMU	Probabilistic Monitoring	34.45307	-84.84482	X		X	X	X				
RV_14_18148	Dick Creek at Manning Mill Road	Coosa	Cartersville AMU	New	34.60115	-85.15187	X			X					
RV_14_18149	West Armurchee Creek at Manning Mill Road	Coosa	Cartersville AMU	New	34.60861	-85.16283	X			X					
RV_14_18150	Armurchee Creek at Haywood Valley Road	Coosa	Cartersville AMU	New	34.45687	-85.18748	X			X					
RV_14_18151	Rocky Creek at Battle Road SW	Coosa	Cartersville AMU	New	34.43827	-85.08807	X			X					
RV_14_18157	Mount Hope Creek @ Old River Road	Coosa	Cartersville AMU	Targeted Monitoring (E coli)	34.24883	-85.40736	X		X						
RV_14_18168	Etowah River at Boling Park Kayak Launch	Coosa	Cartersville AMU	Targeted Monitoring (Additional data)	34.23369	-84.50594	X								
RV_14_4438	Conasauga at U.S. Highway 76 near Dalton, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.783	-84.873014	X		X	X					
RV_14_4460	Conasauga River at Tilton Bridge near Tilton, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.6667	-84.9283	X		X	X					
RV_14_4467	Tickanetley Creek at Roy Road east of Ellijay, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.644444	-84.331389	X								
RV_14_4518	Mountaintown Creek at State Road 282 (US Hwy 76) near Ellijay, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.703378	-84.539793	X		X	X					
RV_14_4520	Coosawattee River at Georgia Highway 5 near Ellijay, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.6717	-84.500164	X		X	X					
RV_14_4534	Oostanaula River at Rome Water Intake near Rome, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.2703	-85.1733	X		X	X					

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_14_4549	Etowah River at State Road 5 spur near Canton, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.239722	-84.494423	X			X					
RV_14_4550	Shoal Creek at State Road 108 (Fincher Rd.) near Waleska, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.263333	-84.595556	X		X	X					
RV_14_4555	Little River at Georgia Highway 5 near Woodstock, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.1222	-84.504254	X		X	X					
RV_14_4586	Etowah River at Hardin Bridge (FAS 829) near Euharlee, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.188859	-84.925104	X		X	X					
RV_14_4594	Etowah River at SR1 Loop near Rome, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.232222	-85.116944	X								
RV_14_4599	Coosa River at Heritage Park at Rome, GA	Coosa	Cartersville AMU	Probabilistic Monitoring	34.255278	-85.179444	X		X	X	X				
RV_14_4622	Coosa River - Georgia/Alabama State Line Monitor near Cave Springs, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.1983	-85.443928	X			X					
RV_14_4640	Chattooga River at Holland-Chattoogaville Road (FAS1363) near Lyerly, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.3356	-85.4453	X		X	X					
RV_14_4735	Cedar Creek on Littlefield Rd	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.393946	-84.835649	X								
RV_14_4748	Little Pine Log Creek at Perry Rd	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.39445	-84.7845	X								
RV_14_4754	Sugar Hill Creek at Knuckelsville Rd	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.360448	-84.711863	X								
RV_14_4819	Clarks Creek nr Taliaferro Springs Rd nr Lyerly, GA	Coosa	Cartersville AMU	Targeted Monitoring (Additional data)	34.377127	-85.393541	X		X						
RV_14_4820	Clear Creek at Blackberry Mountain Rd nr East Ellijay, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.619589	-84.436956	X								
RV_14_4825	Dozier Creek at Bells Ferry Road near Rome, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.320833	-85.110278	X								
RV_14_4829	Dykes Creek at Dykes Creek Crossing	Coosa	Cartersville AMU	Trend Monitoring	34.29357	-85.0855	X		X	X	X	X		X	X

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_14_4837	Jones Creek near Jones Creek Rd, Dahlonega, GA	Coosa	Atlanta AMU	Trend Monitoring (SEMN)	34.602401	-84.150559	X			X	X	X	X	X	
RV_14_4841	Lick Creek nr Langford Rd NE, Fairmount, GA	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.534829	-84.796003	X								
RV_14_4851	Noonday Creek at Georgia Highway 92 near Woodstock, GA	Coosa	Cartersville AMU	Trend Monitoring (USGS)	34.08547	-84.529354	X		X	X					
RV_14_5136	Lick Log Creek at SR 52	Coosa	Cartersville AMU	Targeted Monitoring (NWQI)	34.6418	-84.38727	X								
RV_15_18146	East Chickamauga Creek at Houston Valley Road	Tennessee	Cartersville AMU	New	34.795832	-85.07418	X			X					
RV_15_18147	Hopkins Branch at Lafeyette Road	Tennessee	Cartersville AMU	New	34.77998	-85.06388	X			X					
RV_15_18152	Mulky Creek at Mulky Gap Road	Tennessee	Cartersville AMU	Probabilistic Monitoring	34.790926	-84.049298	X		X	X	X				
RV_15_18153	Suches Creek at Hwy 60	Tennessee	Cartersville AMU	New	34.70393	-84.05555	X			X					
RV_15_18154	Davis Creek at Hwy 60	Tennessee	Cartersville AMU	New	34.73036	-84.081006	X			X					
RV_15_18155	Grizzle Creek at Hwy 60	Tennessee	Cartersville AMU	New	34.71895	-84.06667	X			X					
RV_15_18156	Cooper Creek at Cooper Creek Recreation Area	Tennessee	Cartersville AMU	New	34.76319	-84.06878	X			X					
RV_15_4903	Toccoa River - County Road 165 Near Gaddistown	Tennessee	Cartersville AMU	Targeted Monitoring (Additional data)	34.711111	-84.072222	X								
RV_15_4918	West Chickamauga Creek - Georgia Highway 146 near Ringgold, GA	Tennessee	Cartersville AMU	Trend Monitoring (USGS)	34.9572	-85.2056	X		X	X					
RV_15_4957	Cooper Creek at State Road 60 near Suches, GA	Tennessee	Cartersville AMU	Targeted Monitoring (Additional data)	34.743241	-84.124627	X								

Georgia Station Number	Sampling Site	River Basin	Sampling Organization[1]	Waterbody Type/Project	Latitude	Longitude	Routine[2]	Enterococcus	*E. coli*	Orthophosphates	Metals	Macroinvertebrates	Periphyton[3]	Discharge	Chlorophyll
RV_15_4961	E. Chickamauga Creek at Lower Gordon Springs Rd	Tennessee	Cartersville AMU	Trend Monitoring	34.74717	-85.1243	X		X	X	X	X		X	X

Routine field and chemical parameters include: gage height / tape down or discharge measurement, air temperature, water temperature, dissolved oxygen, pH, specific conductance, turbidity, 5-day BOD, alkalinity, hardness, suspended solids, ammonia, nitrate-nitrite, Kjeldahl nitrogen, total phosphorus, and total organic carbon.

Lakes/estuaries field, chemical and biological parameters include: water depth, secchi disk transparency, photic zone depth, air temperature, depth profiles for dissolved oxygen, temperature, pH, and specific conductance, and chemical analyses for turbidity, specific conductance, 5-day BOD, pH, alkalinity, hardness, suspended solids, ammonia, nitrate-nitrite, Kjeldahl nitrogen, total phosphorus, total organic carbon, and chlorophyll *a.*

[1] **Sampling Organization:** Atlanta AMU = GAEPD Atlanta office; Augusta AMU = GAEPD Phinizy Center for Water Sciences; Brunswick AMU = GAEPD Brunswick Regional Office; Cartersville AMU = GAEPD Cartersville Regional Office; Tifton AMU = GAEPD Tifton Regional office.

[2] **Routine field and chemical parameters include:** gage height/tape down or discharge measurement, air temperature, water temperature, dissolved oxygen, pH, specific conductance, turbidity, 5-day BOD, alkalinity, hardness, suspended solids, ammonia, nitrate-nitrite, Kjeldahl nitrogen, total phosphorus, total organic carbon, and E. coli.

[3] **Biomonitoring:** conducted for invertebrates and periphyton using Georgia EPD protocols.

2. COASTAL BEACH MONITORING STATIONS

List of Beaches with Advisory Zones

Glynn County Tier 1 Beaches. Monitored Weekly March-November. Every other week Dec-Feb.

St. Simons Island Beaches		
CRD ID	**Beach Name**	**Advisory Area**
SIN	North Beach at Goulds Inlet	Fifteenth to Tenth St.
SIM	East Beach Old Coast Guard Station	Tenth St to Driftwood Drive
SIMA	Massengale Park Beach	Driftwood Dr. to Cedar St.
SIF	5th St. Crossover Beach	Cedar St. to 9th St.
SIS	South Beach at Lighthouse	9th St. to Pier
Jekyll Island Beaches		
CRD ID	**Beach Name**	**Advisory Area**
JIDW	Driftwood Beach	Beach Kilometer Marker 1 to Tallu Fish Lane
JIN	North Beach at Dexter Lane	Tallu Fish Ln. to Brice Ln.
JIWY	Capt. Wylly Rd Crossover Beach	Brice Ln. to Beach Pavilion
JIM	Middle Beach at Convention Center	Beach Pavilion to Corsair Beach Park
JISD	South Dunes Picnic Area Beach	Corsair Beach Park to South Water Tower
JIS	South Beach at 4H Camp	South Water Tower to Macy Ln.

Glynn County Tier 2 Beaches. Monitored Monthly April – October

CRD ID	Beach Name	Advisory Area
BIRP	Blythe Island Sandbar	South Brunswick River from Hwy 303 Bridge to Blythe Island Regional Park
REIM	Reimolds Pasture	Eastern Shore of Buttermilk Sound
SEN	Sea Island North	Plantation Golf Course to Canzo Lane
SES	Sea Island South	Goulds Inlet to Canzo Lane

McIntosh County Tier 2 Beaches. Monitored Monthly April – October

CRD ID	Beach Name	Advisory Area
CNBF	Contentment Bluff Sandbar	Julienton River from confluence of Broad and Julienton Rivers to 1 mile upriver.
DALL	Dallas Bluff Sandbar	Julenton River from ½ mile upriver of Dallas Bluff Marina to ½ mile downriver of Dallas Bluff Marina

Chatham County Tier 1 Beaches. Monitored Weekly March - November. Every other week Dec-Feb

Tybee Island Beaches		
CRD ID	**Beach Name**	**Advisory Area**
TYP	Polk St. Beach	End of beach to Jetty
TYN	North Beach at Gulick St.	Jetty to Lovell St.
TYM	Middle Beach at Center Terrace	Lovell St. to 11th St.
TYST	Strand Beach at Pier	11th St. to 18th St.
TYS	South Beach at Chatham St.	18th St. to Inlet Ave.

Chatham County Tier 2 Beaches. Monitored Monthly April – October

CRD ID	Beach Name	Advisory Area
SKID	Skidaway Narrows County Park Beach	Entire beach (Also known as Butterbean beach)
BOSS	Ossabaw Island - Bradley Point	Entire beach
SOSS	Ossabaw Island – South Beach	Entire beach

Chatham County Beaches Under Permanent Advisory. Monitored Quarterly

CRD ID	Beach Name	Advisory Area
JICC	Clam Creek Beach	Pier to Beach Kilometer Marker 1
JISA	St. Andrews Beach	St. Andrews Picnic Area to Macy Lane
KING	Kings Ferry County Park Beach	Entire beach

Tier 3 Beaches. Not monitored regularly

CRD ID	Beach Name	County
LCUM	Little Cumberland Island	Camden
PSPT	Pelican Spit	Glynn
RBOW	Rainbow Bar	Glynn
LSSI	Little St. Simons Island	Glynn
SAPN	Nanny Goat on Sapelo Island	McIntosh
SAPC	Cabretta on Sapelo Island	McIntosh
CATH	St. Catherines Island	Liberty
WILL	Williamson Island	Chatham
LTYB	Little Tybee Island	Chatham

3. DNR STATE PARKS LAKE BEACH MONITORING STATIONS

The following park beaches are sampled weekly from mid-April until Labor Day (Monday preceding Labor Day) each calendar year for E coli bacteria to calculate a geometric mean. If the 30-day geometric mean exceeds 126 or a single sample exceeds 252, a beach swim advisory is issued. The beach will be sampled further until the water quality standards are met.

A.H. Stephens State Park Group Camp Beach	Little Ocmulgee State Lodge Park
Don Carter State Park	Mistletoe State Park
Elijah Clark State Park	Red Top Mountain State Park and Lodge
Fort Mountain State Park	Reed Bingham State Park
Fort Yargo State Park: Day Use Beach	Richard B. Russell State Park
George T. Bagby State Park and Lodge	Rocky Mountain PFA
Georgia Veterans State Park	Seminole State Park
Hard Labor Creek State Park: Camp Rutledge Beach	Tallulah Gorge State Park
Hard Labor Cr. State Park: Camp Daniel Morgan Beach	Tugaloo State Park
Hard Labor Creek State Park: Day Use Camp Beach	Unicoi State Park Day Use Beach
Kolomoki Mound State Park	Vogel State Park
Laura S. Walker State Park	

4. MERCURY IN FISH TREND MONITORING STATIONS

Antioch Lake at Rocky Mtn. PFA	Flint River below Ichawaynochaway Creek
Oostanaula River at Georgia Hwy. 140	Lake Kolomoki at Kolomoki State Park
Lake Acworth	Satilla River below U.S. Hwy. 82
Lake Tugalo	Okefenokee Swamp National Wildlife Refuge
Bear Creek Reservoir	Banks Lake National Wildlife Refuge
Randy Pointer Lake (Black Shoals Reservoir)	Savannah River at U.S. Hwy. 301
Chattahoochee River below Morgan Falls	Savannah River at I-95
Chattahoochee River Below Franklin	Ogeechee River at GA Hwy. 204
Lake Tobesofkee	Wassaw Sound
Ocmulgee River below Macon at GA Hwy. 96	Altamaha Delta and Sound
Lake Andrews	St. Andrews Sound

Parameters tested in the general contaminant program:

5. PARAMETERS FOR FISH TISSUE TESTING

Antimony	a-BHC	Heptachlor
Arsenic	b-BHC	Heptachlor Epoxide
Beryllium	d-BHC	Toxaphene
Cadmium	g-BHC (Lindane)	PCB-1016
Chromium, Total	Chlordane	PCB-1221
Copper	4,4-DDD	PCB-1232
Lead	4,4-DDE	PCB-1242
Mercury	4,4-DDT	PCB-1248
Nickel	Dieldrin	PCB-1254
Selenium	Endosulfan I	PCB-1260
Silver	Endosulfan II	Methoxychlor
Thallium	Endosulfan Sulfate	HCB
Zinc	Endrin	Mirex
Aldrin	Endrin Aldehyde	Pentachloroanisole
		Chlorpyrifos

6. GROUNDWATER MONITORING WELLS

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_05_2766	Unadilla #3	City of Unadilla	P.O. Box 307 Unadilla, GA 31091	Claiborne	315	2025
GW_11_2466	Flint River Nursery Office Well	Flint River State Nursery	9850 River Road Byromville, GA 31007	Claiborne	90	2025
GW_11_2673	Plains Well #8	Water and Sewer City of Plains	P.O. Box 190 Plains, GA 31780	Claiborne	230	2025
GW_11_2791	Weathersby house well	Randy & Judi Weathersby		Clayton	80	2025
GW_11_5032	Briar Patch MHP Well	David Miller		Clayton	Currently Unknown	2025
GW_11_5033	City of Andersonville Well #1	Jim Copeland		Clayton	230	2025
GW_11_17617	Dawson Crawford Street Well	City of Dawson	PO Box 190 Dawson, GA 39842	Clayton	367	2025
GW_11_17618	Cuthbert Well #3	City of Cuthbert	PO Box 100 Cithbert, GA 39840	Clayton	355	2025
GW_01_2523	Hephzibah/Murphy Street Well	City of Hephzibah	Hephzibah City Hall P.O. Box 250 Hephzibah, GA 30815-0250	Cretaceous	484	2025
GW_01_15178	City of Keysville Well #1	City of Keysville	P.O. Box 159 Keysville, GA 30816-0159	Cretaceous	Currently Unknown	2025
GW_02_2704	Sandersville Well #7B	City of Sandersville	Sandersville Annex Building 110 South Hospital Rd. Sandersville, GA 31082	Cretaceous	697	2025
GW_02_15200	Town of Mitchell Municipal Well #3	Town of Mitchell	P.O. Box 32 Mitchell, GA 30820	Cretaceous	Currently Unknown	2025
GW_03_17616	Irwinton Well #4	City of Irwinton	PO Box 359 Irwin, GA 31042	Cretaceous	400	2025
GW_05_2474	Fort Valley Well #6	Fort Valley Utility Commission	P.O. Box 1529 Fort Valley, GA 31030	Cretaceous	600	2025
GW_05_2560	Jones County #4	Jones County Water System	Jones County Water System 270 Highway 49 Macon, GA 31211	Cretaceous	128	2025
GW_05_2669	Perry/Holiday Inn Well	City of Perry	ESG, Inc. P.O. Box 2030 Perry, GA 31069	Cretaceous	550	2025
GW_05_2778	Warner Robins #2	City of Warner Robins	ESG, Inc. 202 North Davis Dr., PMB 718 Warner Robins, GA 31093	Cretaceous	~540	2025
GW_11_2607	Marshallville Well #2	Marshallville Water and Sewer Dept.	111 Main Street West Marshallville, GA 31057	Cretaceous	550	2025
GW_11_2672	Plains Well #7	Water and Sewer City of Plains	P.O. Box 190 Plains, GA 31780	Cretaceous	1000	2025
GW_11_5030	Unimin Well #1	Unimin Georgia Co., LLC	1333 Sandpit Rd. Mauk, GA 31058	Cretaceous	150	2025
GW_11_5031	Whitewater Creek Well	Whitewater Creek Park	165 Whitewater Rd. Oglethorpe, GA 31068	Cretaceous	Currently Unknown	2025
GW_12_5037	Camp Darby Well near Cussetta, GA	Columbus Water Works	P.O. Box 1600 Columbus, GA 31902-1600	Cretaceous	Currently Unknown	2025
GW_12_5046	Louvale Community Well	Stewart County. Water. & Sewer Authority	P.O. Box 157 Lumpkin, GA 31815-0157	Cretaceous	Currently Unknown	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_12_17615	Georgetown Well #3	Quitman County	Georgetown Public Works PO Box 297 Georgetown, GA 31754	Cretaceous	Currently Unknown	2025
GW_01_2763	Tybee Island #1	City of Tybee Island	City of Tybee Island Water & Sewer Dept. Tybee Island, GA 31328	Floridan	402	2025
GW_02_2546	Interstate Paper #1	Interstate Paper, LLC	Interstate Paper, LLC 2366 Interstate Road Riceboro, GA 31323-3933	Floridan	810	2025
GW_02_2526	Hinesville #5	City of Hinesville	CH2MHILL-OMI/Hinesville 613 E.G. Miles Parkway Hinesville, GA 31313	Floridan	806	2025
GW_02_2615	Metter #2	City of Metter	Metter Public Works Dept P.O. Box 74 Metter, GA 30439	Floridan	540	2025
GW_02_2620	Millen #1	City of Millen	919 College Ave. Millen, GA 30442-1633	Floridan	500	2025
GW_02_2707	Savannah #13	City of Savannah	208 Agonic Rd. Savannah, GA 31406	Floridan	1004	2025
GW_02_2736	Statesboro #4	City of Statesboro	Hill St. at Mulberry St. (office/shop) P.O. Box 348 Statesboro, GA 30459	Floridan	413	2025
GW_02_2741	Swainsboro #7	City of Swainsboro	(ofc) CH2M Hill 574 Industrial Way Swainsboro, GA 30401	Floridan	260	2025
GW_02_5005	Sapelo Gardens S/D #1	South Atlantic Utilities, Inc.	P.O. Box 13705 Savannah, GA 31416-3705	Floridan	660	2025
GW_02_5006	Hampton River Marina	Hampton River Marina	1000 Hampton Pointe Drive St Simons Island GA 31522	Floridan	750	2025
GW_05_2450	Eastman #4	City of Eastman	Eastman City Hall 410 Main Street Eastman, GA 31023	Floridan	410	2025
GW_05_2611	McRae Well #3	City of McRae	McRae City Hall P.O. Box 157 McRae, GA 31055-0157	Floridan	600+	2025
GW_05_17478	McRae Well #1	City of McRae	McRae City Hall P.O. Box 157 McRae, GA 31055-0157	Floridan	Currently Unknown	2025
GW_05_17479	McRae Well #2	City of McRae	McRae City Hall P.O. Box 157 McRae, GA 31055-0157	Floridan	Currently Unknown	2025
GW_05_17480	McRae Well #4	City of McRae	McRae City Hall P.O. Box 157 McRae, GA 31055-0157	Floridan	Currently Unknown	2025
GW_06_2772	Vidalia #1	City of Vidalia	ESG, Inc., 111 Brinson Rd. Vidalia, GA 30474	Floridan	808	2025
GW_07_2561	Jowers Crossing (Well #2)	City of Ambrose	96 Curtis Vickers Road Ambrose, GA 31512	Floridan	600	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_07_2623	Miller Ball Park North East Well	Glynn County Board of Education	200 Emory Dawson Road Brunswick, GA 31520	Floridan	1211	2025
GW_07_2785	Waycross #3	City of Waycross	ESG, Inc. P.O. Drawer 99/512 Alice Street. Waycross, GA 31502-0099	Floridan	775	2025
GW_07_5024	Hofwyl-Broadfield Well	Hofwyl-Broadfield Plantation Historic Site	5556 US Highway 17N Brunswick, GA 31525	Floridan	Currently Unknown	2025
GW_07_5025	Jekyll Island	City of Jekyll Island	100 James Road Jekyll Island GA 31527	Floridan	850	2025
GW_07_5026	Ft. Morris Well	Ft. Morris Historic Site	2559 Fort Morris Road Midway, GA 31320	Floridan	500	2025
GW_09_2308	Adel #6	City of Adel	City of Adel Water & Sewer Dept. 404 Poplar St. Adel, GA 31620	Floridan	405	2025
GW_09_2580	Lakeland #2	City of Lakeland	Lakeland City Hall 64 South Valdosta Road Lakeland, Georgia 31635	Floridan	340	2025
GW_09_2639	Moultrie #1	City of Moultrie	2701 1st Ave. SE P.O. Box 3368	Floridan	750	2025
GW_09_2653	Ocilla #3	City of Ocilla	P.O. Box 626 Ocilla, GA 31774-0626	Floridan	637	2025
GW_09_2743	Sycamore #2	City of Sycamore	Sycamore City Hall 2529 US Highway 41 Sycamore, GA 31790-2201	Floridan	501	2025
GW_09_2746	Sylvester #1	City of Sylvester	Sylvester Water, Gas, & Light Dept. P.O. Box 370 Sylvester, GA 31791-0370	Floridan	196	2025
GW_09_2756	Tifton #6	City of Tifton	80 Old Brookfield Rd P.O. Box 229 Tifton, GA 31793	Floridan	652	2025
GW_09_5015	Ashburn #4	City of Ashburn	Ashburn Water Department 291 Mill St. Ashburn, GA 31714	Floridan	600	2025
GW_10_2425	Davis Ave. (Well #1)	City of Whigham	P.O. Box 71 Whigham, GA 39897	Floridan	604	2025
GW_10_2753	Thomasville #6	City of Thomasville	Mr. Bill Gerber 411 W. Jackson Street Thomasville, GA 31792	Floridan	400	2025
GW_10_5029	Waverly/Four Corners #1	City of Thomasville	P.O. Box 1540 Thomasville, GA 31799-1540	Floridan	900	2025
GW-10_17585	Cairo #11	City of Cario	Cairo City Hall P.O. Box 29 Cairo, GA 39828	Floridan	450	2025
GW_11_2376	Camilla Ind. Pk. Well	City of Camilla	P.O. Box 328 Camilla, GA 31730	Floridan	360	2025
GW_11_2433	Donalsonville / 7th St. Well	City of Donalsonville	P.O. Box 308 Donalsonville, GA 31745	Floridan	174	2025
GW_11_16636	Smith House Well	Gerald Smith	7983 Malone Drive Donalsonville, GA 31745	Floridan	Currently Unknown	2025
GW_11_16637	Radium Spring	City of Albany	2501 Radium Springs Rd Albany, GA 31705	Floridan	Currently Unknown	2025
GW_01_2384	Cecchini Deep Well	Mr. Charles Cecchini		Piedmont/ Blue Ridge	400	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_01_2465	Fizer well	Mr. Alan Fizer	1079 Oak Ct. Lincolnton, GA 30817	Piedmont/ Blue Ridge	220	2025
GW_01_2627	Mistletoe SP Cottage Area Well	Ga. DNR Parks & Historic Sites	Mistletoe State Park 3725 Mistletoe Road Appling, GA 30802	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_01_2645	Mt Airy City Hall Well	City of Mt Airy	P.O. Box 257 Mt Airy, GA 30563-0257	Piedmont/ Blue Ridge	500	2025
GW_01_2655	O'Connor house well	Dr. Bruce O'Connor		Piedmont/ Blue Ridge	150	2025
GW_01_4993	Beaverdam MHP #1	Mr. Tom Cleveland		Piedmont/ Blue Ridge	250	2025
GW_01_4994	Victoria Bryant SP #101	Victoria Bryant State Park	1105 Bryant Park Road Royston, GA 30662	Piedmont/ Blue Ridge	320	2025
GW_01_4997	City of Ila Well #1	City of Ila	P.O. Box 46 Ila, GA 30647-0046	Piedmont/ Blue Ridge	650	2025
GW_01_4999	Windy Acres MHP #1	Windy Acres Mobile Home Park	630 South Old Belair Rd. Lot 30 Grovetown, GA 30813	Piedmont/ Blue Ridge	180	2025
GW_01_5000	Lake Harbor Shores #4	Lake Harbor Shores	433 Seminole Trail Martin, GA 30557	Piedmont/ Blue Ridge	380	2025
GW_01_5003	City of Rayle Well #1	Town of Rayle	PO Box 67, Rayle GA 30660-0067	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_01_15196	Grovetown Municipal Well #1	City of Grovetown	PO Box 120 Grovetown, GA 30813-0120	Piedmont/ Blue Ridge	600	2025
GW_01_15198	Tradewinds Marina well	Tradewinds Marina	5577 Marina Parkway Appling, GA 30802	Piedmont/Blue Ridge	60	2025
GW_01_15732	Wilson Family Well	Roger Wilson		Piedmont/ Blue Ridge	80	2025
GW_01_17637	Gold Mine Landing Well	Gold Mine Landing	Clayton, GA 30525	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_02_5008	Hamburg State Park	Hamburg State Park	6071 Hamburg State Park Road Mitchell, GA 30820	Piedmont/ Blue Ridge	340	2025
GW_03_2357	Bragg Well	City of Gray	Gray City Hall P.O. Box 443 Gray, GA 31032-0443	Piedmont/ Blue Ridge	405	2025
GW_04_2047	Siloam #2	City of Siloam	P.O. Box 9 Siloam, GA 30665	Piedmont/ Blue Ridge	300	2025
GW_05_2540	Indian Spring	Ga. DNR Parks & Historic Sites	Indian Springs State Park 678 Lake Clark Road Flovilla , GA 30216	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_05_2541	Indian Springs New Main Well	Ga. DNR Parks & Historic Sites	Indian Springs State Park 678 Lake Clark Road Flovilla , GA 30216	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_05_5017	Jarrell Plantation Staff House Well	Ga. DNR Parks & Historic Sites	695 Jarrell Plantation Road Juliette, GA 31046	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_05_17465	Reeves House Well	Ms. Collie Reeves	1129 Crawford Road Barnesville, GA 30204	Piedmont/ Blue Ridge	445	2025
GW_11_2487	Gay #1	City of Gay	18762 Highway 85 P.O. Box 257 Gay, GA 30218-0257	Piedmont/ Blue Ridge	600	2025
GW_11_2600	Well #3	City of Luthersville	104 Wortham Rd. P.O. Box 10 Luthersville, GA 30251-0010	Piedmont/ Blue Ridge	185	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_11_2748	The Gates #1	Mr. Derek Bunch		Piedmont/ Blue Ridge	705	2025
GW_11_5035	Country Village SD Well#13	SOS Enterprises	205 East Gordon Street Thomaston GA 30266	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_11_16635	Lone Oak Well	Mr. Derek Bunch		Piedmont/ Blue Ridge	Currently Unknown	2025
GW_11_17619	Warm Spring at FD Roosevelt SP	Ga. DNR Parks & Historic Sites	FD Roosevelt State Park BOX 2970 Hwy 190 East Pine Mountain, GA 31822	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_12_2468	Flowery Branch Well #1	City of Flowery Branch	Flowery Branch Water & Sewer Dept. P. O. Box 757 Flowery Branch, GA 30542	Piedmont/ Blue Ridge	240	2025
GW_12_2532	Rahbar house well	Mr. Bijan Rahbar		Piedmont/ Blue Ridge	200	2025
GW_12_2700	Roopville #1	City of Roopville	284 S. Old Highway 27 P.O. Box 165 Roopville, GA 30170	Piedmont/ Blue Ridge	230	2025
GW_12_2740	Suwanee #1	Suwanee Public Works Division	330 Town Center Avenue Suwanee, GA 30024	Piedmont/ Blue Ridge	600	2025
GW_12_5041	Well #1 Leisure Lake Village	Leisure Lake Condo Association	PO Box 1706 Gainesville, GA 30503-1706	Piedmont/ Blue Ridge	380	2025
GW_12_5042	Valley Inn and RV Park Well	VIOH, LLC	524 South Main Avenue Pine Mountain, GA 31822	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_12_5043	FD Roosevelt Spring	FD Roosevelt State Park	2970 Highway 190 East Pine Mountain, GA 31822	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_12_5049	Sweetwater Coffeehouse	Sweetwater Coffeehouse	P.O. Box 381 Sautee Nacoochee, GA 30571	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_14_2650	Nix Spring	Chatsworth Water Works Commission	P.O. Box 100 Chatsworth, GA 30705	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_14_5050	Willow Court Well	Mr. Derek Bunch		Piedmont/ Blue Ridge	220	2025
GW_14_17589	Jasper Spring	Public		Piedmont/ Blue Ridge	Currently Unknown	2025
GW_14_17638	Jacobs House Well	Tommy Jacobs		Piedmont/ Blue Ridge	Currently Unknown	2025
GW_14_17739	Voudy House Well	Christine Voudy	335 Bethesda Trail Ball Ground GA 30107	Piedmont/ Blue Ridge	525	2025
GW_15_2806	Young Harris Swanson Road Well	Young Harris Water Department	P.O. Box 122 Young Harris, GA 30582	Piedmont/ Blue Ridge	265	2025
GW_15_5052	Brasstown Bald Spring	USFS Brasstown Ranger District	2042 Highway. 515 W, Blairsville, GA 30512	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_15_5053	Bryant Cove SD Well #2	Appalachian Water Inc	PO Box 2381 Blairsville GA 30514	Piedmont/ Blue Ridge	605	2025
GW_15_17462	Young Harris College Well	Young Harris Water Department	P.O. Box 122 Young Harris, GA 30582	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_15_17742	Young Harris Main St. Well	City of Young Harris	PO Box 122 Young Harris, GA 305	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_15_17759	Willer House Well	Gary Willer	81 Dallas Collins Rd Blairsville, GA 30512	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_15_18043	Willer House Well	Gary Willer	81 Dallas Collins Rd Blairsville, GA 30512	Piedmont/ Blue Ridge	Currently Unknown	2025
GW_01_2801	Wrens #4	City of Wrens	415 W. Walker Street Wrens, GA 30833	Jacksonian	200	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
GW_01_2803	Wrightsville #4	City of Wrightsville	2566 East Elm Street Wrightsville, GA 31096	Jacksonian	520	2025
GW_02_2562	Kahn House Well	Lee and Thelma Kahn		Jacksonian	40	2025
GW_02_2610	McNair House Well	Bob and Ann McNair		Jacksonian	~90	2025
GW_02_15202	City of Bartow Municipal Well #1	City of Bartow	PO Box 248 Bartow, GA 30413	Jacksonian	345	2025
GW_02_17261	Henley 1 Louisville	Geneda Henley	1082 Darisaw Circle Louisville, GA 30434	Jacksonian	~90	2025
GW_02_17262	Henley 2 Bartow	Geneda Henley	1082 Darisaw Circle Louisville, GA 30434	Jacksonian	~90	2025
GW_05_2398	Cochran #3	City of Cochran	Cochran City Hall 108 NE Dyke Street Cochran, Georgia 31014	Jacksonian	307	2025
GW_06_5019	City of Harrison Well #1	Town of Harrison	P.O. Box 31 Harrison, GA 31035-0031	Jacksonian	Currently Unknown	2025
GW_06_5020	City of Riddleville Well #1	City of Riddleville	9019 Highway 242 Harrison, GA 31035	Jacksonian	330	2025
GW_01_2730	Springfield Egypt Road Test Well	Ga. DNR & Effingham County Engineer	601 North Laurel Street Springfield, GA 31329	Miocene	120	2025
GW_06_5021	Raintree TP Main Well	Raintree Trailer Park	669 Spring Grove Rd. Jesup, GA 31545	Miocene	400	2025
GW_09_2310	McMillan House Well	Mr. Willie McMillan		Miocene	220	2025
GW_09_2354	Boutwell House Well	Mr. Stacey Boutwell		Miocene	70	2025
GW_10_2373	Calhoun House Well	Ms. LaRue Calhoun		Miocene	150	2025
GW_11_2350	Blakely Well #4	City of Blakely	Blakely Water Treatment Dept. P.O. Box 350 Blakely, GA 39823	Providence	1025	2025
GW_11_2676	Preston Well #4	Unified Government of Webster County	P.O. Box 29 Preston, GA 31824	Providence	205	2025
GW_11_5036	Weston Well #1	Chris Shannon		Providence	Currently Unknown	2025
GW_12_2473	Fort Gaines Well #2	City of Ft. Gaines	Fort Gaines City Hall P.O. Box 251 Fort Gaines, GA 39851-0251	Providence	456	2025
GW_12_5047	Providence Canyon SP well	Providence Canyon State Park	218 Florence Rd. Omaha, GA 31821	Providence	Currently Unknown	2025
GW_14_2385	Cedartown Spring	Cedartown Water/Wastewater Dept.	P.O. Box 65 Cedartown, GA 30125-0065	Ridge & Valley	Currently Unknown	2025
GW_14_2460	Eton Spring	Chatsworth Water Works Commission	P.O. Box 100 Chatsworth, GA 30705	Ridge & Valley	Currently Unknown	2025
GW_14_2570	Kingston Rd. Well	Floyd County Water Dept.	Floyd County Water Dept. P.O. Box 1169 Rome, GA 30162-1169	Ridge & Valley	280	2025
GW_14_2576	LaFayette Lower Big Spring	Lafayette Water Department	Lafayette Water Department P.O. Box 89 Lafayette, GA 30728	Ridge & Valley	Currently Unknown	2025
GW_14_2725	South Well	Chemical Products Corp.	Chemical Products Corp. P.O. Box 2470 Cartersville, GA 30120	Ridge & Valley	300	2025
GW_14_17588	Cave Spring	City of Cave Spring	PO Box 365	Ridge & Valley	Currently Unknown	2025

Well ID	Well Name	Owner	Address	Aquifer	Well Depth (ft.)	Year Monitored
			Cave Springs, GA 30124			
GW_15_2414	Crawfish Spring	City of Chickmauga	Water Dept., City of Chickamauga P.O. Box 369 Chickamauga, GA 30707	Ridge & Valley	Currently Unknown	2025

Standard field parameters include: water temperature, dissolved oxygen, pH, specific conductance.
Standard chemical parameters include: VOCs, chloride, sulfate, nitrate-nitrite, phosphorus, chromium, nickel, copper, zinc, arsenic, selenium, molybdenum, silver, cadmium, tin, antimony, barium, thallium, lead, uranium, aluminum, beryllium, calcium, cobalt, iron, potassium, magnesium, manganese, sodium, titanium, vanadium, fluorine.
*Sampled in 2021

Appendix B

WATER USE CLASSIFICATIONS AND WATER QUALITY STANDARDS APPROVED BY EPA

FOR SPECIFIC DETAILS – REFER TO THE LASTEST EPA APPROVED VERSION OF GEORIGA'S WATER QUALITY STANDARDS ON THE GAEPD WEBSITE (https://epd.georgia.gov/watershed-protection-branch/georgia-water-quality-standards)

DESIGNATED USES

	Bacteria		**Dissolved Oxygen[1] (other than trout streams)[2]**		**pH**	**Temperature (other than trout streams)[2]**	
Designated Use	30-Day Geometric Mean[2] (#/100 mL)	Maximum (#/100 mL)	Daily Average (mg/L)	Minimum (mg/L)	Std. Units	Maximum Rise (°F)	Maximum (°F)
Drinking Water	126 (May-Oct) 265 (Nov-Apr) Freshwater- E coli	STV 410 (May-Oct) STV 811 (Nov-Apr Freshwater- E coli	5.0	4.0	6.0-8.5	5	90
Recreation	126 Freshwater- E coli 35 Coastal-Enterococci	STV 410 Freshwater- E coli STV 130 Coastal-Enterococci	5.0	4.0	6.0-8.5	5	90
Fishing	126 (May-Oct) 265 (Nov-Apr) Freshwater- E coli 35 (May-Oct) 74 (Nov-Apr) Coastal-Enterococci	STV 410 (May-Oct) STV 811 (Nov-Apr Freshwater- E coli STV 130(May-Oct) STV 273 (Nov-Apr Coastal-Enterococci	5.0	4.0	6.0-8.5	5	90
Coastal Fishing[4]	126 (May-Oct) 265 (Nov-Apr) Freshwater- E coli 35 (May-Oct) 74 (Nov-Apr) Coastal-Enterococci	STV 410 (May-Oct) STV 811 (Nov-Apr Freshwater- E coli STV 130(May-Oct) STV 273 (Nov-Apr Coastal-Enterococci	5.0 If it is determined that the "natural condition" in the waterbody is less than the values stated above, then the criteria will revert to the "natural condition" and the water quality standard will allow for a 0.1 mg/L deficit from the "natural" dissolved oxygen value. Up to a 10% deficit will be allowed if it is demonstrated that resident aquatic species shall not be adversely affected.	4.0	6.0-8.5	5	90
Wild River	No alteration of natural water quality						
Scenic River	No alteration of natural water quality						

1. The dissolved oxygen criteria as specified in individual water use classifications shall be applicable at a depth of one meter below the water surface; in those instances where depth is less than two meters, the dissolved oxygen criterion shall be applied at a mid-depth. On a case specific basis, alternative depths may be specified.
2. Standards for Trout Streams for dissolved oxygen are an average of 6.0 mg/L and a minimum of 5.0 mg/L. No temperature alteration is allowed in Primary Trout Streams, and a temperature change of 2 deg. F is allowed in Secondary Trout Streams.
3. Geometric means should be "based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours." The geometric mean of a series of N terms is the Nth root of their product. Example: the geometric mean of 2 and 18 is the square root of 36.
4. Standards are the same as fishing with the exception of dissolved oxygen, which is site specific.

NARRATIVE WATER QUALITY STANDARDS (excerpt from Georgia Rules and Regulations for Water Quality Control Chapter 391-3-6-.03 - Water Use Classifications and Water Quality Standards)

(5) General Criteria for All Waters. The following criteria are deemed to be necessary and applicable to all waters of the State:

(a) All waters shall be free from materials associated with municipal or domestic sewage, industrial waste or any other waste which will settle to form sludge deposits that become putrescent, unsightly or otherwise objectionable.

(b) All waters shall be free from oil, scum and floating debris associated with municipal or domestic sewage, industrial waste or other discharges in amounts sufficient to be unsightly or to interfere with legitimate water uses.

(c) All waters shall be free from material related to municipal, industrial or other discharges, which produce turbidity, color, odor or other objectionable conditions, which interfere with legitimate water uses.

(d) All waters shall be free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries or other sources, such as nonpoint sources, in amounts, concentrations or combinations which are harmful to humans, animals or aquatic life.

(e) All waters shall be free from turbidity, which results in a substantial visual contrast in a water body due to man-made activity. The upstream appearance of a body of water shall be observed at a point immediately upstream of a turbidity-causing man-made activity. The upstream appearance shall be compared to a point, which is located sufficiently downstream from the activity so as to provide an appropriate mixing zone. For land disturbing activities, proper design, installation and maintenance of best management practices and compliance with issued permits shall constitute compliance with [this] Paragraph...