SURFACE WATER QUALITY

MONITORING PROGRAM

(SWQMP)

CY2023 Plan of Study

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Rev. 0

Field Operations Division

Alabama Department of Environmental Management

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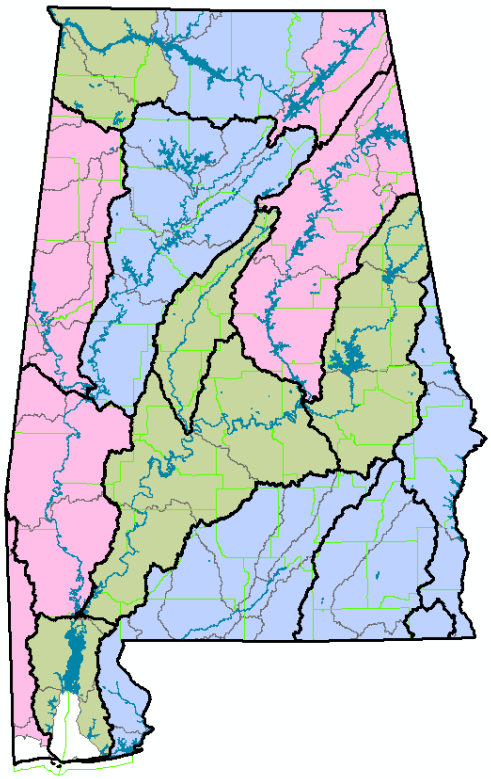
2023 SURFACE WATER QUALITY MONITORING PLAN

BACKGROUND

In 2023, the ADEM will sample 255 monitoring locations. To the extent possible, the 255 stations to be monitored are located within the target basins. This approach enables ADEM to provide intensive monitoring to stakeholders within each basin every three years. These data can be used to accurately measure trends in water quality over time, while maintaining level loading for ADEM's labs and field offices, making better use of ADEM's available resources.



Sampling Year	Basin Color		
	Green	Blue	Violet
	2017	2018	2019
	2020	2021	2022
	2023	2024	2025
	2026	2027	2028
	2029	2030	2031

Figure 1. ADEM 3-year basin rotation.

Basin Plans: A draft Basin Plan was developed for each basin during the Fall 2022 Basin Team meetings. Sample loading was carefully planned by EIS for all field offices to ensure a consistent weekly lab load within the 50 sample set lab limit established in 2022. Lisa Huff (X2752; esh@adem.alabama.gov), Ashley Lockwood (X2766; alockwood@adem.alabama.gov), Christina Hall (X2759; christina.hall@adem.alabama.gov), and the appropriate lab coordinators (BHM: Carla Snow; MGY: Tiffany Hamit; MOB: Samantha Connole) must be notified immediately of any necessary changes to the sampling schedule.

CONTACTS FOR QUESTIONS, MONITORING UPDATES, AND DATA REQUESTS

BASIN TEAMS

Basin Teams were developed to improve communication among project managers, field staff, and ADEM management within Field Operations (FO), the Water Quality Branch (WQB), and the Nonpoint Source Unit (NPS). Basin Teams are comprised of Basin Coordinators and project managers within FO, WQB, and the NPS, and field and laboratory staff from each field office conducting monitoring within that basin.

Participation in the Basin Teams provides opportunities for team members to become familiar with the data needs and issues within their basin. Responsibilities of the Basin Team include development of the annual basin plan for their respective basin group, tracking and documenting SWQMP decisions and revisions, basin team status summaries, data requests and reviews, reports and report reviews.

Appendix A lists the **members and contact information for each basin team**, as well as statewide facilitators of the Surface Water Planning process.

Appendix B lists **projects and project manager(s)** for which each station is being sampled.

- The ACCESS Database Coordinator for each basin sends monitoring status reports to their basin team to keep the team apprised of any monitoring issues that need to be addressed or decisions that need to be made during the sampling season.
- Requests for data and general questions can be directed to the statewide monitoring facilitators or crew leaders within the basin team.

Appendix C lists the **crew leaders monitoring each sampling location**. The crew leaders collecting data within each basin are not necessarily members of that basin team. It is very important that they be kept updated on any revisions to the annual monitoring plan for their stations.

Likewise, crew leaders need to notify project managers and SWQMP facilitators (Lisa Huff, Ashley Lockwood, Christina Hall) of any changes to or issues with monitoring planned at a site.

SWQMP PREPARATION:

The following activities are completed prior to any monitoring to ensure the integrity of all data collected:

- Equipment QAs: demonstrate ability to measure flow, operate data sondes and turbidimeters
    - Conducted for FO crew leaders and crew members from FO, WQB, and NPS scheduled to assist with field work during the sampling season.
- Wadeable field audits overview
- Wadeable and non-wadeable field audits
    - Wadeable audits are completed at the same location, the same way, by the same people.
    - Non-wadeable audits are completed at locations near each of the four field offices to allow crew leaders to use their own boats and equipment.
    - Crew leaders will be audited every year until they have three successful consecutive audits. Once a crew leader has three successful consecutive audits, audits will only be conducted once every third year. If there is a major equipment change, a crew leader could be audited sooner if needed.
- QA/QC workshop: review of projects and field activities

SUMMARY OF 2023 MONITORING

Statewide, a total of 255 stations will be monitored as part of the CY2023 Surface Water Quality Sampling Plan (SWQMP). All requested stations and sampling were incorporated into the final SWQMP. The trip activities and sampling frequency that will be conducted at each station are provided in Appendix C.

Wherever possible, sampling requests and locations were combined into one sampling routine that met the objectives of 46 individual requested projects (Appendix B). This coordination ensures that we meet the monitoring objectives of ADEM's Monitoring Strategy, Alabama's Water Quality Listing and Assessment Methodology, the Alabama Nonpoint Source Management Program, the Total Maximum Daily Load Program, and the Standards and Criteria Programs as efficiently as possible. There may be stations on the same waterbody requesting different parameters and different frequencies, so it is important for samplers to follow the monthly sampling list for each station.

The coordination among WQ, NPS, the field offices, and labs has increased the number of monitoring objectives ADEM has been able to meet with existing resources. This coordination allows for cost sharing among multiple programs.

The following table summarizes the sampling to be conducted during 2023 by each field office.

Field Office	Trip Activities										
	Water Quality Sampling	TOT/ Int Survey	Organics Sampling	Low Level Hg	Geomean E. coli	72-hr DO	Rain Event Sampling	Macro-invertebrate Survey	Fish IBI Survey	Siltation Survey	Periphyton Survey
Bham	18				3						
Dec	25				4						
Mob	42				3						
Mgy	146		13	20	17			47[a]/18[b]	50	TBD	TBD
WQ						10	5				

a. Number of intensive multi-habitat macroinvertebrate surveys to be lab-processed and identified to genus in the lab.
b. Number of screening-level EPT surveys processed and identified to family in the field.

CY2023 COC-LABEL-NOTIFICATION DATABASE

All of the information contained in this document is summarized in the CY2023 COC-Label-Notification Database. There are five important tables:

- *StationListByFieldOffice*: provides a complete list of stations, station descriptions, county, and latitude/longitude, as well as sampling purpose, sampling frequency, responsible field office/crew leader, and sampling protocol.
- *StationPlanningList (MASTER)*: a summary of the annual SWQMP since 2007.
- *STATION_PARAMETER_TABLE (MASTER)*: the parameters and frequencies requested for monitoring for each project since 2007.
- *AASampleListforCrewLeaders*: the 2023 SWQMP stations and parameters by month; it is used to generate the COCs, lab notifications, and labels.
- *EA_FinalLabAssignmentsforSWQMP*: lab assignments for each SWQMP parameter by month.

The "Using the 2023 COC_Label_Lab Notification Database" How to Document will be available for download at:

http://web-server/intranet/QA/Useful%20info/info.htm

If you have any questions, please contact Lisa Huff (X2752, esh@adem.alabama.gov), Ashley Lockwood (X2766, alockwood@adem.alabama.gov), Christina Hall (X2759; christina.hall@adem.alabama.gov), or the database coordinator for your basin team (see Appendix A).

STATION LIST

The station list for each field office is provided in Appendix C of this document. The same information can be found in a table named "StationListByFieldOffice" in the 2023 COC_Label_LabNotification ACCESS database. The table includes a complete list of stations, station descriptions, county, and latitude/longitude, as well as sampling purpose, sampling frequency, responsible field office/crew leader, and sampling protocol. The table reflects the 2023 SWQMP as of 2023 March 27.

RECONNAISSANCE

Basin Team Reconnaissance: Potential stations were selected for each project during the 2023 Basin Team meetings in September 2022. Most stations were reconned by the NPS, WQ, and FO project managers, and the assigned field office or crew leader, prior to the Basin Team meetings.

Crew Leader Reconnaissance: Despite best efforts, it was necessary to reassign trips to crew leaders, particularly in the Montgomery Field Office. ***Trips must be reconned by final crew leader by mid-March.***

- Review results in the Master Recon Database before conducting the crew leader recon.
- Contact the project manager or the Basin Team Coordinator to answer any questions.
- Latitude/Longitude are listed in Appendix C. ***Use location information to identify sampling stations on a map or GPS prior to sampling.***
- Any questions or issues should be discussed with the Project Manager, direct supervisor, Lisa Huff and Ashley Lockwood.

VERIFYING COMPLETION AND ACCURACY OF STATION INFORMATION

Basin Teams: The basin teams verified the completeness and accuracy of information for each selected station. Updates to the information were made during the SWQMP planning process.

Crew Leaders: Check the completeness and accuracy of station information for stations included in each of your trips. Incomplete or incorrect station information should be reported to the state SWQMP facilitators (Appendix A).

- Make sure that **BASIN** is complete and correct. This field is necessary for it to be included in the Basin Team's Sampling Plan.
- Make sure that the **LATITUDE** and **LONGITUDE** are carried out to 5 decimal places.
- Make sure that **ASSESSMENT UNIT** is complete.
    - Each station must be assigned to the correct assessment unit. This information is necessary for Table 5 and other evaluation tools to work correctly.
    - The assessment unit layer has also been added as a layer in the ALAWADR ArcIMS function.
    - For the 2022 SWQMP, please report any missing assessment units to Tel Schieler (X5662, tel.schieler@adem.alabama.gov) & David Thompson (X7958, dwt@adem.alabama.gov).
- Make sure that the **STATION DESCRIPTION** is an actual description that reflects current conditions, and the latitude/longitude listed for that station is as close to the sampling location as possible.
    - The station description should be written such that it can be downloaded with no edits needed. It should start with "[Locale name] at".
    - Do not use any # of symbols @ any place in the description!
    - And for all you grammar nerds out there: Please, I do not care what your 5th grade grammar teacher told you, do not use any punctuation in the description: no commas, no semi-colons, no exclamation points, etc., etc., etc.!
    - Abbreviations to use for consistency: AL: Alabama; Br: Branch; Ck: Creek; Cr Rd: County Road; Fk: Fork; Hwy: Highway; R: River
    - Do not use "." at the end of any abbreviation.
    - Please contact Christina Hall (X2759; christina.hall@adem.alabama.gov) if corrections are needed.

- Make sure that **SAMPLING PROTOCOL** is correct. The sampling protocol currently listed in ALAWADR is provided in Appendix D. It is essential that sampling protocol is correct because it is used to determine the appropriate sampling methods and assessment guidelines to use at the location. Recon the station and review the sampling protocol definitions listed below to ensure that the correct protocol is listed in ALAWADR.
- Send any comments concerning access, contact, and other helpful information to the access database coordinator for that basin group to add to ALAWADR. This was discussed during the final Basin Team meeting.

SAMPLING PROTOCOL

One of the key aspects of Alabama's Assessment and Listing Methodology is to define a given waterbody (as represented by the individual sampling station) as being either wadeable or nonwadeable. This is important because it helps ensure that the reach is typical/representative of the watershed. It is also important because monitoring, assessment, and listing protocols will vary accordingly.

The sampling conducted at each station is determined by its wadeability, tidal influence, and use classification. A summary of the minimum data requirements required to assess each waterbody type is listed in Appendix E. Minimum data requirements for each waterbody type and use classification are described in more detail in Alabama's Water Quality Assessment Methodology (AWQAM; Appendix A of http://www.adem.alabama.gov/programs/water/waterforms/2020AL-IWQMAR.pdf).

A summary of the general SWQMP parameters collected, measured, and analyzed to meet these requirements is listed by sampling protocol in Appendix F. The AWQAM lists the specific parameters collected and analyzed to assess waterbodies (Section 4. The Water Quality Assessment Process), as well as the standard operating procedures that describe how these parameters are collected, processed, and analyzed (Table 1, ADEM SOPs). Appendix G of this document lists the specific parameters collected, measured and analyzed for assessment of each waterbody type, as well as parameters used to develop TMDLs, evaluate trends in water quality, and parameters in development.

The sampling protocol currently listed in ALAWADR for each station is provided in Appendix D. Each crew leader should review the sampling protocol to determine if the listed protocol is correct.

Certain rivers and streams can be wadeable or nonwadeable depending on the time of year and hydrologic conditions encountered at a station. A decision needs to be made using site reconnaissance and best professional judgment (BPJ) for each individual station. Once it has been defined as wadeable or nonwadeable it must be sampled using the same protocol every time.

If there is any question concerning the protocol, it should be discussed with the project manager(s) requesting data from that station (Appendices B and C), crew leaders sampling that station (Appendix C), the ACCESS DB coordinator for that basin group and the statewide SWQMP facilitators (Appendix A).

There are four types of wadeable stations:

- **Wadeable-BIO (W-BIO)**: A station is classified as wadeable-bio if the 300 ft. sampling reach is completely wadeable (~≤3 ft) ***AND*** the 300 ft reach upstream and downstream of the sampling location are also completely wadeable (~≤3 ft). Based on historical data, this protocol is generally appropriate to use in watersheds ranging between 5-100 sq miles.
- **Wadeable-BIO-Coastal (W-BIO-Coastal)**: A Wadeable-Bio station that is tidally influenced. ADEM defines tidally influenced as any waterbody within the 10 ft. contour line.

- **Wadeable-Water (H20-W)**: A station is classified as wadeable-H20 if water samples can be collected within the sampling reach, but the sampling reach is not completely wadeable; and/or, the 300 ft reach upstream and downstream of the sampling location are not wadeable. Based on historical data, this protocol is generally appropriate to use in watersheds ranging between 100-800 sq miles, and ≥200 feet wide.
- **Wadeable-Water-Coastal (W-H20-Coastal)**: A Wadeable-Water station that is tidally influenced. ADEM defines tidally influenced as any waterbody within the 10 ft. contour line.

There are six types of nonwadeable stations, depending on accessibility and tidal influence:

- **Nonwadeable (reservoir, embayment) Boat Stations (NWB)**: Samples should be collected as photic zone composites. Full vertical profiles should be measured. Nonwadeable stations located in the coastal waters of Alabama (i.e., Mobile Bay, Intracoastal Waterway, Wolf Bay, etc.) should be sampled the same as non-coastal stations except they will also include salinity as a parameter to be collected with the vertical profile. Bacteriological samples for all nonwadeable stations are to be collected as sub-surface grabs. ***At NWB stations that are <10 ft in depth, full vertical profiles and a mid-depth reading should be taken. This is very important, as data from these shallow stations are assessed at mid-depth.***
- **Nonwadeable (reservoir, embayment) Boat-Coastal (NWB-Coastal)**: A NWB station that is tidally influenced. ADEM defines tidally influenced as any waterbody within the 10 ft. contour line.
- **Nonwadeable Bridge Stations (NWG)**: Sub-surface grab samples will be collected from a bridge if a nonwadeable station is not accessible by boat. A vertical profile of field parameters (temp., pH, cond., D.O.) will also be collected. This information will be used to document that the stream is well mixed and collection of a grab sample is appropriate.
- **NWG-Deep (NWG-D)**: These stations are ≥ 10 ft. in depth. If possible, full vertical profiles should be measured at these stations.
- **NWG-Deep-Coastal (NWG-D-Coastal)**: A NWG-Deep station that is tidally influenced. ADEM defines tidally influenced as any waterbody within the 10 ft. contour line.
- **NWG-Shallow (NWG-S)**: These stations are < 10 ft. in depth. A minimum of 3 measurements should be collected at the surface (0.2 m), mid-depth, and the bottom. More measurements should be taken if flow conditions allow.
- **NWG-Shallow-Coastal (NWG-S-Coastal)**: A NWG-S station that is tidally influenced. ADEM defines tidally influenced as any waterbody within the 10 ft. contour line.

Stations that are nonwadeable in March and April may be wadeable later in the sampling season. Samples should be collected in-stream if they can be safely waded. However, for consistency, a vertical profile (at least 3 measurements) must be collected during each sampling event.

Coastal Waters: Existing coastal stations are identified in ALAWADR as those within the 10 ft. contour line. If you are unsure whether a new station should be classified as coastal, contact Tel Schieler or David Thompson.

LABORATORY NOTIFICATION

Laboratory notification must be used. The Laboratory Notification Workbook for the laboratory and month is located on the Intranet at \\ADEM-PS\P&Setc\Laboratory Notification.

The 2023 COC_Label_LabNotification ACCESS database will generate the total number of samples to be brought into each lab during each trip.

Laboratory notification is very important for the 2023 sampling season.

Crew leaders must enter their draft trip dates, March-October by Apr 15th.
Once trip plans are finalized, update the dates in lab loading at least 2-4 weeks before collecting.

Enter collector name, cell phone number, and planned collection date.

FUND CODES

Six fund codes will be used during 2023. They are listed in Appendix D of this document and the 'StationListbyFieldOffice' table in the COC_Label_LabNotification ACCESS database.

SAMPLING FREQUENCY

Appendix C of this document provides the number of each sample type to be collected each month or sampling period. This information is also contained in the 2023 COC_Label_LabNotification ACCESS database.

2023 Sampling Frequency: Due to limited number of water quality crew leaders, seventy-seven RSMP water quality sampling stations monitored by the Montgomery Field Office will be sampled 4X (MarMayJulSep) or 4X (AprJunAugOct), to meet various grant commitments. All other stations are sampled Mar-Oct (RSMP, CWMP, WMP) or Apr-Oct (RRMP).

The Sampling Period for Intensive E. coli/Enterococci Studies, 72-hour DOs, Intensive Surveys, and or biological surveys, is listed as "SWQMP Sampling Period". This means that sampling is conducted within the sampling period listed in the appropriate ADEM SOP.

Seventeen intensive E. coli geomean studies are assigned to Montgomery Field Operations. The geomeans will be conducted during June and August at 4X monthly (MMJS) stations, and during July and September at 4X monthly (AJAO) stations. This will provide e. coli samples during six months, March-October.

STANDARD OPERATING PROCEDURES

All sampling conducted as part of this monitoring plan should be in accordance with ADEM's approved Quality Assurance Program Plan (QAPP) and appropriate standard operating procedure documents (SOPs), based on the type of sample being collected and the appropriate sampling protocol for use at that station.

It is the crew leader's responsibility to ensure that the appropriate SOP is being used. They are all available at: http://web-server/intranet/QA/default.htm.

CALIBRATION DATABASE

All calibrations must be recorded in the Calibration Database or on the printed datasheets from the database, if a computer is unavailable. Using the database will ensure all required information is recorded. Calibration instructions and guidelines can be found in SOP #2047.

SAMPLE CHAIN-OF-CUSTODY

Appropriate chain-of-custody forms must be completed for each station using the Single Location-Multiple Sample COC. This form can be downloaded from: http://web-server/intranet/QA/internalforms/category_type.htm#General_COC The 2023 COC_Label_LabNotification ACCESS database will also automatically generate them for each trip.

SAMPLE LABELS

Appropriate labels must be attached to each sample. The 2023 COC_Label_LabNotification ACCESS database will also automatically generate them for each trip.

DATA ENTRY

ALAWADR: All data, information, comments, and photos are entered into ALAWADR.

It is the crew leader's responsibility to create the station visit and field activity(ies) scheduled to be conducted at each station.

- *Within one week of the station visit, the station visit (SV) should be created in ALAWADR and all SV parameters completed: Geo-mean? Good reference reach? Evidence of nutrient enrichment? Evidence of sedimentation?*
- *Within one week of the station visit, each scheduled field activity should be created on the field activity page. Collectors and conducted/not conducted should be completed for each activity.*
- ***It is very important to enter this information within one week of collection because the information will be used to prioritize periphyton and siltation surveys at stations where nutrient and sedimentation impacts are most likely.***

Entry of all laboratory results into ALAWADR should be completed four weeks after all LIMS reports are received for QC from the laboratory. The station visit should be completed in ALAWADR within 30 days of receipt of the final laboratory data.

TRIP TYPES (PURPOSE)

The sampling to be conducted as part of the CY2023 SWQMP has been organized by **TRIP TYPE**. **TRIP TYPE** is listed in the "StationListbyFieldOffice" table in the CY2023 COC_Label_Notification database.

The following table summarizes how ALAWADR Field Activities are related to each **TRIP TYPE**.

Trip Type (Purpose)	ALAWADR Activities				Comments
	Data Logger	Sample Collection	Field Form	Biosurvey	
Water Quality Sampling	Discrete	X	X		Monthly water quality sampling, in situ field parameters, flow, water samples.
Organics (Pesticides, Semi-volatiles, Atrazine, Glysophate)	Discrete	X	X		Three sets of samples: water samples collected for analysis in April and June. Sediment samples collected for analysis in September or October. In situ field parameters and flow are also measured.
Intensive E. coli Geomean Study (Geomean Study)	Discrete	X	X		Two 5-sample collections, each within a 30-day period (May-Jul and Aug-Oct), at intervals not less than 24 hours, each set may include monthly and geomean pathogen samples; in situ field parameters and flow.
72-hour DOs	Continuous				Sonde is deployed for 4-5 days to measure dissolved oxygen concentrations over three diurnal cycles. Temperature, pH, conductivity, and turbidity are also measured. Results at the site are compared to a similar reference reach.
Macroinvertebrate Survey	Discrete		X	Macroinvertebrate	Habitat and macroinvertebrate surveys, in situ field parameters, and flow; intensive macroinvertebrate surveys collected and preserved in the field for laboratory processing and genus-level identifications; screening-level

					EPT family surveys are processed and identified in the field to family (EPT only).
Fish IBI Survey	Discrete		X	Fish	Habitat and fish community surveys, in situ field parameters, and flow
Periphyton Survey	Discrete		X	Periphyton	Rapid periphyton survey, habitat and diatom community surveys, in situ field parameters, and flow. Results at the site are compared to a similar reference reach.
Rain Event Sampling	Continuous	X	X		Collect continuous samples through a storm event to determine sediment loads. Results at the site are compared to a similar reference reach.
Siltation Survey	Continuous	X	X		Sonde with turbidity probe is deployed 4-6 weeks to measure turbidity at baseflow and during a rain event. DO, pH, conductivity, and temperature are also measured. Results at the site are compared to a similar reference reach.

Appendix C lists the trip types to be conducted at each station, the individual sampling frequency, and the assigned field office.

LIST OF SWQMP PARAMETERS

Appendix C lists the SWQMP parameters to be collected at each station during each station visit. A list of the individual parameters included in each SWQMP parameter is provided in Appendix G. Additional comments are provided below.

STREAM FLOW MEASUREMENTS

Stream flows should be conducted as requested AND as part of all wadeable biological, habitat, and siltation assessment site visits.

There are three ways in which a flow can be measured and reported:

- Flow-Wadeable;
- Flow-USGS Gage; and,
- ADCP Flow

Flow-Wadeable (SOP #2040)

- Stream flow should be measured by Acoustic Doppler Velocimeter (ADV). The Montgomery FO is also using an MF Pro meter when an ADV meter is not available. Use of both to conduct the "Abbreviated Stream Velocity Measurement" method is described in SOP#2040.
- For streams >200 ft wide, velocity and depth should be measured every 10-15 ft, particularly if the stream bottom and depth are variable.
- Download data immediately upon return to prevent data loss.
- If an ADV or MF Pro is unavailable, flow can be taken by using either an AA or pygmy meter following the same method. However, stream flow should be calculated using the Form 50-Sheet Stream Flow Calculation Workbook. The Abbreviated Stream Flow Measurement Datasheet can also be downloaded from: http://web-server/intranet/QA/internalforms/category_type.htm#General_COC.

USGS Gage

- Stream flow should be recorded from the corresponding USGS Gage website. Stream gage numbers can be obtained from the USGS website. Flow records are maintained on the USGS

Website and may be viewed/saved in table format. On the webpage select "00060 Discharge (DD01)" in the Available Parameters Box, "Table" in the Output Format Box, and as many Days as it takes to get back to the date of sampling. Click the "get data" button and record the flow for the same date and closest time to the time the sample was taken. If station Hyperlink has "**" in front of USGS # or more than 31 days has passed since sampling, then you must call/email the USGS office to get flow reading. If problems are encountered, contact David Thompson (X7958, dwt@adem.alabama.gov) of the Water Quality Branch.

Flow-ADCP (SOP #2050)

- Stream flow should be measured by using one of the Acoustic Doppler Current Profilers (ADCPs) when available. Stream flow measurements using the ADCP will follow the current USGS discharge measurement procedures.

FIELD PARAMETERS

Each month, field parameters should be collected as requested for each station. **Vertical profiles should be collected at NWB and NWG-Deep stations. Field parameters should be measured at the surface, mid-depth, and bottom at NWG-Shallow stations.**

The field parameters that should be collected are listed below.

Station visit information recorded on a field sheet:

- Station
- Date (Month, Day, Year)
- Time (24 hr)
- Collector - use Last Name, First Initial (or Logon Initials)
- Crew member – use Last Name, First Initial (or Logon Initials)
- **Geomean**: Yes/No/Both (E. coli/Enterococcus sample is/is not part of geo-mean or is part of geomean AND monthly sampling.
- **Reference Site Visit**: Conditions during site visit are high quality, and should be considered for reference status. Additional photos very helpful!
- **Evidence of nutrient impacts**: None/Slight/Moderate/High. Used to determine best locations for periphyton surveys. Look for dominance of undesireable filamentous algae and invasive aquatic plants. Additional photos very helpful!
- **Evidence of sedimentation**: None/Slight/Moderate/High. Used to determine best locations for siltation surveys. Additional photos very helpful!

Field parameters recorded on a field sheet include the following

- Air Temperature, °C
- Sample Collection Depth, feet/meters
- Turbidity, NTU (with Nephelometer, not multiprobe) (SOP #2042)
- Weather Conditions
- Flow cfs (SOP #2040 or SOP #2050)
- Salinity is measured at coastal stations
- Visual observations and notes

The appropriate field form to use at each station is listed in the Field Form Section of this document.

The field parameters measured using a data logger include:

- Water Temperature, °C (SOP #2041)
- Total Stream Depth at Sampling Point, feet/meters
- Field Measurement Depth, feet/meters
- Dissolved Oxygen (DO), mg/l (SOP #2047)
- Conductivity, µmhos/cm @ 25C (SOP #2047)
- pH, s.u. (SOP #2047)
- Salinity

- ***Photographs! Seriously, people! Take good photos!***
    - An upstream and downstream photo should be taken at each site during **each** station visit. Photos are currently uploaded to ALAWADR on the Stations page. Comments for each photograph must, at a minimum, include date and orientation of the photo (i.e., US, DS)
    - Take photos at sites/in conditions that are good examples of flow measurements, sonde measurements, water sampling, biological or siltation surveys
    - Take photos of sites that you think are high quality reference condition sites.
    - Take photos that are good documentation or examples of poor conditions at the site (e.g. eroded banks, trash, filamentous algae, etc).

FIELD FORMS

The appropriate form to use depends on the trip type (activity being conducted) and sampling protocol.

Protocol	Hard copy form name (http://web-server/intranet/QA/internalforms/SurfaceWater)	ALAWADR Form Name
TRIP TYPE: WATER QUALITY SAMPLING		
W-BIO	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	CY23 WADEABLE 1-PG W/DOWNLOAD
		CY23 WADEABLE 1-PG W/DOWNLOAD REP FM
		CY23 FIELD BLANK
W-H20	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	CY23 WADEABLE 1-PG W/DOWNLOAD
		CY23 WADEABLE 1-PG W/DOWNLOAD REP FM
		CY23 FIELD BLANK
NWG-Shallow (sampling in feet)	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	CY23 WADEABLE 1-PG W/DOWNLOAD
		CY23 WADEABLE 1-PG W/DOWNLOAD REP FM
		CY23 FIELD BLANK
NWG-Deep (sampling in feet)	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	CY23 WADEABLE 1-PG W/DOWNLOAD
		CY23 WADEABLE 1-PG W/DOWNLOAD REP FM
		CY23 FIELD BLANK
NWG-Shallow (sampling in meters)	Non-Wadeable Field Data Sheet (FOD I-Form 10)	CY23 NON-WADEABLE
		CY23 NON-WADEABLE REP FM
		CY23 FIELD BLANK
	Non-Wadeable Field Data Sheet (FOD I-Form 10)	CY23 NON-WADEABLE

Protocol	Hard copy form name (http://web-server/intranet/QA/internalforms/SurfaceWater)	ALAWADR Form Name
NWG-Deep (sampling in meters)		CY23 NON-WADEABLE REP FM
		CY23 FIELD BLANK
NWB	Non-Wadeable Field Data Sheet (FOD I-Form 10)	CY23 NON-WADEABLE
		CY23 NON-WADEABLE REP FM
		CY23 FIELD BLANK
	Coastal Non-Wadeable Field Data Sheet (FOD I-Form 12)	CY23 COASTAL-NW
		CY23 COASTAL-NW REP FM
		CY23 FIELD BLANK
TRIP TYPE: BIOLOGICALS		
W-BIO	Phys Char, Substrate, WQ & HA Field Data Sheet w/ Datalogger Import (FOD I-Form 13)	CY23 HABITAT ASSESSMENT FORM UPDATED
		CY23 PHYSICAL CHARACTERIZATION FIELD DATA W/IMPORT

CONVENTIONAL LABORATORY PARAMETERS

The parameters that should be collected are listed on the Chain-of-Custody sheets generated from the COC-Label-Lab Notification Database.

MONTHLY BACTERIOLOGICAL SAMPLES

Conventional parameters now include monthly **E. coli bacteria (mpn/100 mL)** or **Enterococci Bacteria (mpn/100 mL)** samples at non-coastal and coastal stations, respectively. E. coli are collected 4X Monthly at non-coastal NWB stations, and during each monthly station visit at all other station types.

HARDNESS

In addition to E. coli, conventional parameters-NWB includes 4X monthly **hardness** samples. If metals are not collected in conjunction with hardness, a separate 60 mL sample should be collected and preserved with HNO3.

BLACKWATER PARAMETERS

Blackwater parameters include only DOC and color. Other parameters that may be indicators of blackwater conditions (e.g., pH) are already collected as conventional parameters at every monitoring location. The primary purpose of these parameters is to identify blackwater systems in southern Alabama as a unique waterbody type within ecoregions 65 and 75. DOC and color samples should be collected as requested each month. (For appropriate sample container and preservative, please see http://web-server/intranet/QA/Useful%20info/info.htm).

METALS AND HARDNESS

Metals should be collected as requested in the final sampling list. Hardness should always be collected when metals are collected. Photic zone composite samples may be required at nonwadeable stations (See Sampling Protocol).

PESTICIDES, SEMI-VOLATILES, ATRAZINE, AND GLYPHOSATE

Pesticides, semi-volatiles, atrazine, and glyphosate will be collected by one dedicated crew out of the MGY office due the laboratory QC requirements. Sampling should be conducted in accordance with SOP #2067.

Ten stations were selected for analysis of pesticides, semi-volatiles, atrazine, and glyphosate. These stations had among the highest potential for impairment from these parameters, based on landuse and other factors. At each of these stations, water samples will be collected in April and June to analyze for these parameters.

In September, a sediment sample will be collected at each of these stations, and analyzed for total metals, pesticides, semi-volatiles, atrazine, and glyphosate.

Laboratory QC Requirements: Additional samples must be collected during each trip where pesticides, semi-volatiles, atrazine, and glyphosate are collected to meet Laboratory QC requirements.

Replicate Samples: Field replicates are collected at 5% of stations where pesticides, semi-volatiles, atrazine, and glyphosate are collected. Collection of replicates is coordinated by the MGY crew and the Montgomery Central laboratory. Replicate samples are collected in accordance with SOP #2067.

ATRAZINE*: ****Atrazine should be collected in a 60 mL plastic container**

ALGAL GROWTH POTENTIAL TESTING (AGPT)

Collection of AGPT samples is coordinated with Don Prempramot of the Montgomery microbiological lab @ 334-394-4319.

Sampling Containers
Samples are collected in a sterilized, acid-washed, 1L plastic jug. Prepared sampling jugs are sent to field offices via departmental shuttle.

Sample Collection
Wadeable and Non-Wadeable Grab: Samples are collected as grab samples at mid depth or using a sampler. Do not rinse jugs. Preserve on ice and transport to MGY.

Non-Wadeable Boat: Samples are collected as composite samples out of the photic zone composite bucket. Do not rinse jug. Preserve on ice and transport to MGY.

Attach a toe-tag label to bottle neck with a rubber band. Make sure the tag has the station and date information.

GEOMEAN SURVEYS

The sampling period for Geomean Surveys is listed as SWQMP Sampling Period. One Intensive Bacteriological Survey = 2 geomeans conducted as described below. ***Field parameters, Water Quality Field Data Sheet, and flows are conducted during each site visit.***

During 2023, twenty-seven E. coli geomean surveys and one enterococcus geomean survey will be completed. All 28 surveys were requested to complete pathogen Total Maximum Daily Load (TMDL) models for waters currently listed as impaired by pathogens from various sources.

Each E. coli or Enterococcus geomean survey will include:

Two separate E. coli or Enterococcus geomeans performed for each marked station. Any deviations from this must be coordinated with the Project Manager that requested the sampling.

Geomean Survey #1: conducted within a 30-day period between May 1 - Jul 31.

- For all E. coli geomean surveys to be completed by Montgomery Field Operations, geomean survey #1 will be conducted in June (WQS collected MMJS), or July (WQS collected AJAO)

Geomean Survey #2: conducted within a 30-day period between Aug 1 - Oct 31.

- For all E. coli geomean surveys to be completed by Montgomery Field Operations, geomean survey #2 will be conducted in August (WQS collected MMJS), or September (WQS collected AJAO)

Unless otherwise noted in the Comments, all samples should be collected during these sampling periods.

Geomean Survey #1 AND Geomean Survey #2 include:

- At least 5 E. coli bacteria samples
- All samples collected at each station within a 30-day period
- Samples collected with at least 24 hours between each sample.
- Samples must, if at all possible, be analyzed within holding time.
- Stream flows, and field parameter measurements must be taken **during each site visit**. (COMPLETE THE WATER QUALITY FIELD DATA SHEET DURING EACH SAMPLING SITE VISIT)

72-HOUR DOS (DIURNAL FIELD PARAMETERS)

72-hour Diurnal DO studies will be conducted at ten stations. Additional stations may be added by Kim Minton as needed.

Datasondes are used to conduct 72-hour **diurnal field parameters** at each station listed in the SWQMP sampling list. These surveys are conducted one time between Jun 1- Sep 30. *In situ* dissolved oxygen may be verified using Winklers or another data sonde at deployment and retrieval. Additional dissolved oxygen checks may be made once per day if possible.

All 72-hr studies will be completed by the Water Quality Branch (Kim Minton X7826; kminton@adem.alabama.gov). If additional resources are needed, please contact the nearest field office to the study at least 1 month before scheduling the sampling event.

MACROINVERTEBRATE AND FISH SURVEYS

Macroinvertebrate Surveys: Intensive macroinvertebrate surveys will be conducted at 47 monitoring locations. Nine stations with drainages <5 sq mi will be sampled in late March. Thirty-six stations with drainages >5 sq mi and <90 sq mi will be conducted between late-April and late-May. One station with a drainage >90 sq mi will be sampled using ADEM's Transitional Macroinvertebrate Survey Methods.

EPT Field Pick surveys will be conducted at 18 stations. The purpose of these screening-level surveys is to enable ADEM to conduct a biological survey at all wadeable-flowing stations, while still maintaining the current number of surveys for laboratory processing and genus-level identifications Ten stations with drainages >5 sq mi and <90 sq mi will be conducted between late-April and late-May. Eight stations with drainages >90 sq mi will be sampled using ADEM's Transitional Macroinvertebrate Survey Methods.

All macroinvertebrate surveys will be completed in accordance with SOP #6301 and SOP #6000. During each survey, field parameters, flow, the updated 2-pg Physical Characterization/Habitat Survey Form (SOP#6300 and SOP#6301), and photographs will also be completed.

Fish IBI Surveys: Fish surveys will be conducted at 50 monitoring locations in accordance with SOP #6301 and SOP #6100. The surveys will be conducted April through July. Field parameters, flows, photos, and the updated 2-pg wadeable or non-wadeable Physical Characterization/Habitat Survey Form (SOP #6300 and SOP#6301) will also be completed during these site visits.

PERIPHYTON AND SILTATION SURVEYS

Periphyton and siltation surveys are conducted at sites identified as potentially impaired by nutrient enrichment (Periphyton Surveys) and/or sedimentation (Siltation Surveys), based on visual observations and feedback from the macroinvertebrate and/or fish survey teams.

Feedback is provided by the macroinvertebrate and fish survey crews when they create the station visit in ALAWADR, which must be completed as part of the post-calibration process.

Periphyton Surveys: Periphyton surveys will be conducted at three requested stations in mid-April. Additional periphyton survey stations with a high potential for impairment from nutrient issues will be selected, based on feedback from biological crew leaders. Appropriate ecoregional reference reaches will be selected for comparison, and determination of final condition rating.

All periphyton surveys will be completed as outlined in SOP #6200, April through October. During each survey, field parameters, flow, the updated 2-pg Physical Characterization/Habitat Survey Form (SOP#6300 and SOP#6301), and photographs will also be completed.

Diatom samples will be processed, identified, and QA'ed by ADEM staff during training with Georgia State College and University.

Siltation Screening Surveys: Siltation surveys will be conducted at stations listed in the 2023 SWQMP, where feedback from the biological crew leaders indicate a high potential for sedimentation.

A datasonde will be deployed at the potentially impaired site and an appropriate ecoregional reference reach to monitor turbidity through a rain event. The purpose of these surveys is provide additional information with which to help verify sedimentation as a likely stressor affecting biological communities within the reach.

RESEARCH AND DEVELOPMENT PROJECTS

*Wetland Monitoring Program***:** Wetland monitoring will be conducted at five stations as part of the 2023 SWQMP. Monitoring activities will include monthly water quality sampling (March-October), a spring and summer vegetation survey, an amphibian survey, and a rapid wetland assessment (WRAP). Monitoring will focus on high-quality/least disturbed wetland/stream systems within the Tombigbee River Basin. Collected data will be used to define site classes with unique chemical, physical, and biological characteristics by identifying appropriate methods and indicators, as well as establishing baseline wetland reference conditions.

The methods used to conduct wetland monitoring are described in detail in ADEM's Wetland Monitoring Quality Assurance Program Plan (QAPP), available at:

https://aldem.sharepoint.com/sites/OEQ/QAPPs/Forms/AllItems.aspx

Rain Event Sampling: Rain-event sampling will be conducted at five stations as part of the 2023 SWQMP. The sampling period will consist of studies that are storm dependent, which will be performed between the

months of March 2023 and February 2024. Four sampling events will be conducted at each station. The intensive survey scope-of-study includes field parameters, flow measurements, rain gauges, ISCO automatic water samplers and datasonde deployment. ISCO samplers will collect 24 TSS samples. ADEM's Water Quality Branch will coordinate deployment of all instruments with assistance from FOD.

FIELD REPLICATES AND BLANKS

Field replicates and blanks are collected for 5% of the samples and should be collected in accordance with ADEM SOP #9021 (General Surface Water Sample Collection). Field replicates and laboratory QC samples for pesticide and semi-volatiles should be collected and labeled as described under the "*Pesticides, Semi-volatiles, Atrazine, and Glyphosate*" section of this document.

FILE NET

All data should be scanned and filed in accordance with SOP #8021, 8023, and 8024.

Crew Leaders are responsible for preparing their stations for inclusion into Laserfiche. Instruction documents for accomplishing this are provided on the server at Field-2 on 'Field-mgy':\ECOLSTD\CATEGORY\Laserfiche\Laserfiche For Electronic Files

Files set up for scanning into Laserfiche are organized by **Station ID** and **year.** Multiple sampling events at a given location during the sampling year are placed in the same file **in chronological order**.

The scanned file should include:

- Paper Datasheets
- Flowbooks/Excel Calc Worksheets/ADV Print-out/USGS Gage data
- Handwritten field notes
- Lab Reports
- COCs
- Calibration Records

- ☐ Use naming schema found in SOP
- ☐ All documents (electronic format and other) are to be printed directly to .pdf file. See instructions provided at above link.

A printed station visit report from ALAWADR does not need to be included.

CHANGE TRACKING

Date m/d/yyyy	Approved By: (Initials)	Summary of Modifications
3/28/2023	LH	Original Version

APPENDICES***	Title
A:	Basin Groups and Basin Team Members
B:	List of individual projects incorporated into the CY2023 SWQMP.
C:	List of field activities, parameters, and sampling frequencies conducted as part of the CY2023 SWQMP.
D:	List of 255 stations to be sampled as part of the CY2023 Surface Water Quality Sampling Plan (SWQMP).
E:	Relationship between waterbody types in the Consolidated Assessment and Listing Methodology (CALM), the SWQMP Sampling Protocols, and ALAWADR Station Types.
F:	Summary of minimum data/sampling requirements by sampling protocol.
G:	List of individual parameters included in each SWQMP Parameter request.

***Current, as of 2023 March 27.

Appendix A. SWQMP personnel by division and branch, basin team, and function in ADEM's assessment, listing, restoration and monitoring process.

First Name	Last Name	Div	Br	Phone Number	E mail	Alabama	Black Warrior	Blackwater	Cahaba	Chattahoochee	Chipola	Choctawhatchee	Coosa	Escambia	Escatawpa	Mobile	Perdido	Tallapoosa	Tennessee	Tombigbee	Yellow	SWQMP Facilitator	Database Coordinators	Lab Notification	TMDLs	WLAs	Assessment and 303d listing	Water Quality Standards	Trends	NPS Projects, BMPs	Rivers and streams monitoring	Rivers and reservoirs monitoring	Coastal Program-Wadeable	Coastal Program-Nonwadeable	Wetland monitoring	Macroinvertebrates	Fish Community	Fish Tissue	Periphyton	Siltation	Ecoref GLs	QA/QC	ALAWADR
Sarah	Buchanon	Field Ops	MGY	334-260-2744	sarah.buchanon@adem.alabama.gov	X	X																								X												
Ben	Darby	Field Ops	MGY	334-260-2708	bedarby@adem.alabama.gov			X		X	X	X		X							X											X							X				
Brien	Diggs	Field Ops	MGY	334-260-2750	lod@adem.alabama.gov			X		X	X	X		X	X	X	X				X										X					X						
Liberty	Dobbs	Field Ops	MGY	334-260-2727	liberty.dobbs@adem.alabama.gov				X									X												X					X			X			
Anna	Eastis	Field Ops	MGY	334-274-4193	anna.eastis@adem.alabama.gov	X	X																								X						X				X	
Christina	Hall	Field Ops	MGY	334-260-2759	christina.hall@adem.alabama.gov																																					
Scott	Hicks	Field Ops	MGY	334-260-2786	shicks@adem.alabama.gov	X	X		X																							X						X				
Lisa	Huff	Field Ops	MGY	334-260-2752	esh@adem.alabama.gov																																					
Sreeletha	Kumar	Field Ops	MGY	334-260-2782	skumar@adem.alabama.gov	X							X																								X					
Michael	Len	Field Ops	MGY	334-260-2787	mlen@adem.alabama.gov										X	X	X	X		X																						
Fred	Leslie	Field Ops	MGY	334-260-2748	fal@adem.alabama.gov																																					
Ashley	Lockwood	Field Ops	MGy	334-260-2766	alockwood@adem.alabama.gov																	X										X							X				X
Ruthie	Perez	Field Ops	MGY	334-260-2762	ryperez@adem.alabama.gov														X												X					X						
Alicia	Phillips	Field Ops	MGY	334-260-2797	akphillips@adem.alabama.gov	X							X																		X					X						
Don	Prepramot	Field Ops	MGY	334-394-4319	dp@adem.alabama.gov																																					
Anthony	Roberts	Field Ops	MGY	334-260-2749	anthony.roberts@adem.alabama.gov										X	X	X			X										X						X		X			
Jacob	Shirley	Field Ops	MGY	334-260-2737	jacob.shirley@adem.alabama.gov		X												X																						
Ron	Sparks	Field Ops	MGY	334-394-4303	rsparks@adem.alabama.gov				X				X																		X						X			X	
Ranse	Williams	Field Ops	MGY	334-260-2715	rw@adem.alabama.gov								X						X													X						X			
Seth	Wood	Field Ops	MGY	334-260-2703	seth.wood@adem.alabama.gov			X		X	X	X		X							X											X						X			
James	Worley	Field Ops	MGY	334-394-4343	jworley@adem.alabama.gov			X		X	X	X		X				X			X										X						X			X	
Scott	Brown	Field Ops	MOB	251-432-6533	jsb@adem.alabama.gov																																					
Samantha	Connole	Field Ops	MOB	251-450-3431	svj@adem.alabama.gov																			X																		
Clark	Gerken	Field Ops	MOB	251-450-3414	clark.gerken@adem.alabama.gov	X									X	X	X			X															X							

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Christopher	Harris	Field Ops	MOB	251-450-3419	hdc@adem.alabama.gov																																						
Joie	Horn	Field Ops	MOB	251-450-3418	mjhorn@adem.alabama.gov	X									X	X	X			X															X								
Nancy	Shaneyfelt	Field Ops	MOB	251-450-3417	nlv@adem.alabama.gov	X									X	X	X			X																							
Steve	Summersell	Field Ops	MOB	251-450-3412	ssummersell@adem.alabama.gov										X	X	X			X											X		X										
Scott	Hughes	Field Ops		334-394-4304	ASH@adem.alabama.gov																																						
Cleckler	Eric	P&S	IS	334-274-4345	ecleckler@adem.alabama.gov																																						
James	French	P&S	IS	334-394-4345	jfrench@adem.alabama.gov																																						
Kayren	Pittman	P&S	IS	334-274-4243	kpittman@adem.alabama.gov																																						
Jennifer	Barker	P&S	NPS	334-394-4397	jennifer.barker@adem.alabama.gov																									X													
Heather	Griffin	P&S	NPS	334-274-4197	hmgriffin@adem.alabama.gov	X		X				X		X					X		X									X												
Shannon	McGlynn	P&S	NPS	334-274-4196	smcglynn@adem.alabama.gov					X	X				X	X	X	X		X										X												
Amanda	McKenzie	P&S	NPS	334-394-4350	amanda.mckenzie@adem.alabama.gov		X		X				X																	X												
Susan	Summerlin	P&S	NPS	334-394-4354	susan.summerlin@adem.alabama.gov																									X												
Chris	Johnson	Water	WQ	334-271-7827	cljohnson@adem.alabama.gov																																					
Nicholas	Caraway	Water	WQ-MAS	334-274-4220	ncaraway@adem.alabama.gov				X									X							X	X															
Brian	Haigler	Water	WQ-MAS	334-394-4389	bch@adem.alabama.gov			X		X	X	X		X							X				X	X															
Shae	Holley	Water	MQ-MAS	334-279-3068	shae.holley@adem.alabama.gov								X												X	X															
Kimberly	Minton	Water	WQ-MAS	334-271-7826	kminton@adem.alabama.gov																				X	X															
James	Mooney	Water	WQ-MAS	334-394-4352	jjmooney@adem.alabama.gov														X						X	X															
Keosha	Powell	Water	WQ-MAS	334-274-4194	Keosha.Powell@adem.alabama.gov	X														X					X	X															
Justin	Rigdon	Water	WQ-MAS	334-274-4160	jbrigdon@adem.alabama.gov										X	X	X								X	X															
Jonathan	Straiton	Water	WQ-MAS	334-270-5611	jonathan.straiton@adem.alabama.gov		X																		X	X															
Trevor	Bates	Water	WQ-SPS	334-271-7842	trevor.bates@adem.alabama.gov		X		X																		X	X													X		
Carla	Crews	Water	WQ-SPS	334-271-7804	ccrews@adem.alabama.gov			X		X	X	X		X	X	X	X			X	X						X	X														

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Jennifer	Haslbauer	Water	WQ-SPS	334-274-4250	jhaslbauer@adem.alabama.gov																						X	X																
David	Moore	Water	WQ-SPS	334-274-4165	djmoore@adem.alabama.gov			X		X	X	X		X							X						X	X	X															
Joseph	Roy	Water	WQ-SPS	334-270-5635	jtr@adem.alabama.gov	X	X		X				X					X	X								X	X																
Tel	Schieler	Water	WQ-SPS	334-270-5662	tel.schieler@adem.alabama.gov										X	X	X			X							X	X																
David	Thompson	Water	WQ-SPS	334-271-7958	dwt@adem.alabama.gov														X								X	X	X															
Caitlin	Washington	Water	WQ-SPS	334-274-4207	caitlin.washington@adem.alabama.gov	X							X					X									X	X																
Autumn	Baughn		OEQ	334-274-4162	autumn.baughn@adem.alabama.gov																									X													X	
Vickie	Hulcher		OEQ	334-260-2747	vjh@adem.alabama.gov																																					X	
Sharon	Moses		OEQ	334-394-4355	smoses@adem.alabama.gov																																					X	
Meg	Sullivan		OEQ	334-260-2718	msullivan@adem.alabama.gov																																					X	

Appendix B. List of 2023 SWQMP projects by primary monitoring objective.

Project	Purpose	Manager
CY2023 SURFACE WATER QUALITY SAMPLING PLAN	Comprehensive plan of aR surface water quality monitoring conducted during 2023.	Lisa Huff
Development of reference conditions and ecoregional guidelines		
CY2023_REFERENCE_REACH_MONITORING	To identify reference reaches, to collect data for development of reference conditions, and to provide data for specific waterbodies where reference conditions have not yet been established.	Rebekah Taylor
CY2023_WETLAND_PROJECT	To monitor reference quality riverine wetlands in the Tallapoosa R Basin.	Ruthie Perez
Use Support Assessments		
CY2023_ACT_USA	To fully assess Cat 2 and 3 waters in AL or check post TMDL Water Quality Attainment	Caitlin Washington
CY2023_BWC_USA	For assessment of Buck Creek for use classification purposes. For assessment of Shoal Creek and Poarvine Creek (Cat. 5s). For assessment of Cane Creek (Cat. 2a). For assessment of Cahaba Valley Creek (Cat. 4a).	Trevor Bates
CY2023_EMPT_USA	To fully assess waterbodies. Mississippi DEQ have low pH values on Battahatchee River and we would like to verify.	Tel Schieber
CY2023_SEAL_USA	To fully assess Category 2 and Category 3 waters.	David J Moore
CY2023_TN_USA	To fully assess Category 2 and Category 3 waters or to check for Post TMDL WQ attainments	David Thompson
Development/calibration of restoration efforts		
CY2023_ACT_BEAR CREEK_TMDL	To collect data for the 2023 Bear Creek TMDL; Basis: Records at ADEM station BABD-1 from 2016 show that the E.coli criterion was exceeded in 2 out of 9 samples.	Keosha Powell
CY2023_ACT_BUGHALL_CREEK_TMDL	TO FURTHER EVALUATE THE PAHTOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_CALLAWAY CREEK_TMDL	To collect data for the 2023 Callaway Creek TMDL; Basis: Macroinvertebrate assessment at station CALE-1 had a very poor WMD-1 score.	Keosha Powell
CY2023_ACT_CHANNAHATCHEE_CREEK_TMDL	TO FURTHER EVALUATE THE OE/DO IMPAIRMENT DOWNSTREAM AND PATHOGENS	Nicholas Caraway
CY2023_ACT_CHANNAHATCHEE_CREEK_YATES_RESERVOIR_TMDL	TO FURTHER EVALUATE THE OE/DO IMPAIRMENT AS WELL AS THE PATHOGENS IMPAIRMENT UPSTREAM	Nicholas Caraway
CY2023_ACT_EMUCKFAW_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_HIGH_PINE_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_MILL_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_SOUGAHATCHEE_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_SWIFT CREEK_TMDL	To collect data for the 2023 TMDL for Swift Creek; Basis: Records from 2017 at ADEM station SWFA-1 show that the E.coli criterion was exceeded in 4 out of 8 samples, ADEM station SWFA-2 in 4 out of 8 samples, and SWFC-1 in 4 out of 8 samples.	Keosha Powell
CY2023_ACT_TALLAPOOSA_RIVER_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT FROM THE AL/GA LINE TO CANE CREEK	Nicholas Caraway
CY2023_ACT_UPHAPEE_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT	Nicholas Caraway
CY2023_ACT_WASHINGTON CREEK_TMDL	To collect data for the 2023 Washington Creek TMDL; Basis: Records at ADEM station WASP-1 from 2010-2013 show that the E.coli criterion was exceeded in 4 out of 11 samples.	Keosha Powell
CY2023_BWC_AFFONEE_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT IN AFFONEE CREEK	Nicholas Caraway
CY2023_BWC_MAHAN_CREEK_TMDL	Further evaluate the nathonens inmairment in Mahan Creek	Nicholas Caraway
CY2023_BWC_WALTON_CREEK_TMDL	TO FURTHER EVALUATE THE PATHOGENS IMPAIRMENT IN WALTON CREEK	Nicholas Caraway
CY2023_EMPT_BAYOU_SARA_POST_TMDL	Followup sampling to ensure compliance with a previously written TMDL.	Justin Rigdon
CY2023_EMPT_D'OLIVE_CREEK_TMDL	Develop a TMDL for this waterbody	Justin Rigdon
CY2023_EMPT_FLY_CREEK_TMDL	Develop a TMDL on this waterbody	Justin Rigdon
CY2023_EMPT_GUNNISON_CREEK_TMDL	TMDL DEVELOPEMENT FOR PATHOGINS ON GUNNISON CREEK	Justin Rigdon
CY2023_EMPT_TURKEY_BRANCH_TMDL	Develop a TMDL for this waterbody	Justin Rigdon
CY2023_TN_HARRIS_CREEK_TMDL	Purpose is to collect water quality data to assess the pathogen (E. coli) impairment on segment AL06030006-0201-900. Records at ADEM station HARF-1 from 2014 show that the E. coli criterion was exceeded in 3 out of 8 samples.	James Mooney
CY2023_TN_INDIANCAMP_CREEK_TMDL	Purpose is to collect water quality data to assess the pathogen (E. coli) impairment on segment AL06030005-0509-800. Records at ADEM station INCL-1 from 2013 and 2016-2017 show that the E. coli criterion was exceeded in 8 out of 20 samples.	James Mooney
CY2023_TN_LITTLE_BEAR_CREEK_TMDL	Purpose is to collect water quality data to assess the pathogen (E.coli) impairment on segment AL06030006-0206-101. Records at ADEM station LBRF-4 from 2017 show that the E. coli criterion was exceeded in 2 out of 8 samples.	James Mooney
CY2023_TN_PAYNE_CREEK_TMDL	Purpose is to collect water quality data to assess the pathogen (E. coli) impairment on segment AL06030006-0201-300. Records at ADEM station PYCF-1 from 2018 show that the E. coli criterion was exceeded in 4 out of 8 samples.	James Mooney
CY2023_TN_POND_CREEK_TMDL	Purpose is to collect water quality data to assess the following impairments on Pond Creek (AL06030005-0802-100): Organic Enrichment (BOD), Metals (Arsenic), Metals (Cyanide), and Metals (Mercury)	James Mooney
CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL	Purpose is to collect water quality data to assess the organic enrichment (CBOD, NBOD) impairment on segment AL06030006-0102-102. Segment was added to the 2016 303d list based on DO data collected at tributary embayment station PSYF-1.	James Mooney
CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM	This project provides data to assist with attainment of NOAA approval of the ACNPCP, identification of NPS stressors, and development of current and accurate watershed management plans. Sampling locations will be identified by the Coastal Basin Team	Lisa Huff
Evaluation of effectiveness of restoration efforts		
CY2023_NWQI_PRIORITY_WATERSHEDS	NWQI Priority Watershed Monitoring	Amanda D McKenzie
Estimate trends in water quality		
CY2023_TREND_MONITORING	Ambient trend sites are sampled to identify long term trends in water quality and to provide data to develop TMDLs and water quality criteria.	David Thompson
Baseline Monitoring		
CY2023_RIVERS_AND_STREAMS_MONITORING	To provide data to assess each monitoring location, to estimate overall water quality of wadeable rivers and streams within the state, to identify impaired and reference reaches, and to collect data for metric and index development.	Lisa Huff
CY2023_RIVERS_RESERVOIRS_EMBAYMENT	3-YEAR ROTATION OF RRMP SAMPLING	Ashley Lockwood
CY2023_RIVERS_RESERVOIRS_MAINSTEM	3-YEAR ROTATION OF RRMP STATIONS	Ashley Lockwood
CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY	Stations sampled on 3-year rotation. These stations may be sampled on a different rotation than the main RRMP stations, if necessary. The data collected for these stations will be used to develop nutrient criteria.	Ashley Lockwood
CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	To collect background trend LLHg data for use in models and compliance determination. Stations are sampled on a 2-yr rotation. This is rotation B	David Thompson
CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	3-YEAR ROTATION OF CWMP STATIONS	David Thompson
Research and Method Development		
CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	To provide data to evaluate the relationship between TSS and turbidity through rain events.	David Thompson

PROJECT_NAME	PURPOSE	MANAGER

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
AFFB-3	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_AFFONEE_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 2)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D2
AFFB-3	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_AFFONEE_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 2)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
AFFB-3	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_AFFONEE_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 2)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
ALRA-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
ALRC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Mobile	Joie Horn	JH1
ARMM-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
B-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	8X Monthly (Mar-Oct)	Birmingham	Clay James	2
BANT-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Birmingham	Clay James	7
BARD-1	Fish IBI Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BEAR CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	SWQMP Sampling Period	Montgomery	TBD	AL IBI
BARD-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BEAR CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D2
BARD-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BEAR CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2
BCRF-2	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
BCRF-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
BEC-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20
BERF-5	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
BERF-5	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
BERF-6	Fish IBI Survey	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
BERF-6	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Decatur	Ariel Holway-Jones	AHJ-1

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
BERM-3	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (a USGS flow gage will be installed for 2023 so this will be just new good data with continuous flow)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
BERM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (a USGS flow gage will be installed for 2023 so this will be just new good data with continuous flow)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
BERW-1	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL (Postponed from 2020 and 2021. To collect WQ data to asses the organic enrichment (CBOD, NBOD) on segment AL06030006-0102-102. Listed in 2016 based of PSYF-1)	SWQMP Sampling Period	WQ	David Thompson	DO 72
BERW-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL (Postponed from 2020 and 2021. To collect WQ data to asses the organic enrichment (CBOD, NBOD) on segment AL06030006-0102-102. Listed in 2016 based of PSYF-1)	7X Monthly (Apr-Oct)	Decatur	Tommy Milford	TMILFORD-3
BGEH-46A	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BGHM-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BUGHALL_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI (WDG 3)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
BGHM-1	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BUGHALL_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI (WDG 3)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
BGHM-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_BUGHALL_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS_MI (WDG 3)	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 9
BGNL-1	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (CAT 4a with TMDLs for Ammonia, CBOD, NBOD, Endosulfan, Fecal Coliform, Methyl Parathion, Siltation); CY2023_TREND_MONITORING_605 (trends)	SWQMP Sampling Period	WQ	David Thompson	DO 72
BGNL-1	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (CAT 4a with TMDLs for Ammonia, CBOD, NBOD, Endosulfan, Fecal Coliform, Methyl Parathion, Siltation); CY2023_TREND_MONITORING_605 (trends)	SWQMP Sampling Period	Montgomery	TBD	TN NW
BGNL-1	Organics Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (CAT 4a with TMDLs for Ammonia, CBOD, NBOD, Endosulfan, Fecal Coliform, Methyl Parathion, Siltation); CY2023_TREND_MONITORING_605 (trends)	8X Monthly (Mar-Oct)	Montgomery	James Worley	ORG 1
BGNL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (CAT 4a with TMDLs for Ammonia, CBOD, NBOD, Endosulfan, Fecal Coliform, Methyl Parathion, Siltation); CY2023_TREND_MONITORING_605 (trends)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-4
BKRE-1A	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
BLBW-6	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BLCT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
BLCT-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
BLUB-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Limited data)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
BLUB-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Limited data)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
BLWL-3	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 3 that needs assessed)	SWQMP Sampling Period	Montgomery	TBD	TN NW
BLWL-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 3 that needs assessed)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-2
BMBB-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY (basin rotation station)	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG1
BOB-3	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BPRH-44E	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BRSL-3	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (long term study)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
BRSL-3	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (long term study)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
BRSL-3	Periphyton Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (long term study)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
BRSL-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (long term study)	8X Monthly (Mar-Oct)	Decatur	Tommy Milford	TMILFORD-4
BRTC-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
BRTC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
BRU-2	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BRU-4	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BRWM-39	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only

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Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
BSAM-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_BAYOU_SARA_POST_TMDL (.)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS1
BSTC-5	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
BUCS-13	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Use Support Assessment)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
BUCS-13	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Use Support Assessment)	8X Monthly (Mar-Oct)	Birmingham	Clay James	2
BUCS-6	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Use Support Assessment)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
BUCS-6	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics North
BUCS-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Use Support Assessment)	8X Monthly (Mar-Oct)	Birmingham	Clay James	4
BYSM-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_BAYOU_SARA_POST_TMDL (.)	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH2
BYSM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_BAYOU_SARA_POST_TMDL (.)	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH2
BYSM-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_BAYOU_SARA_POST_TMDL (.)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS1
BYSM-7	Water Quality Sampling	210		8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS1
BZDC-1	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri
BZDC-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
C-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	1
C-3	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	2
CABB-1	Fish IBI Survey	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
CABB-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
CAHC-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (Recon needed to get accurate lat/long for sampling location)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 25
CAHD-1A	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CAHS-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics North
CAHS-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	3

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
CALE-1	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CALLAWAY CREEK_TMDL (Data needed for 2023 TMDL developement)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
CALE-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CALLAWAY CREEK_TMDL (Data needed for 2023 TMDL developement)	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 1
CATM-3	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	NW Coastal
CATM-3	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 1
CDRM-38	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
CEDD-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	AL IBI
CEDD-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
CERC-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 3 that needs assessed)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
CERC-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 3 that needs assessed)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
CHAC-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Decatur	Tommy Milford	TMILFORD-1
CHANNEL-1A	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY (basin rotation station)	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH3
CHANNEL-2	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG4
CHANNEL-3	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH5
CHNE-18	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_TMDL (More stations to be added after recon of stream to select sample locations for 72 hr study); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	WQ	David Thompson	DO 72
CHNE-18	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_TMDL (More stations to be added after recon of stream to select sample locations for 72 hr study); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
CHNE-18	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_TMDL (More stations to be added after recon of stream to select sample locations for 72 hr study); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2

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Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
CHNE-18	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_TMDL (More stations to be added after recon of stream to select sample locations for 72 hr study); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
CHO-9	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20
CHTH-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20
CKSM-3	EPT Field Pick	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	SWQMP Sampling Period	Montgomery	TBD	NW COASTAL
CKSM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS1
CLAM-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CLAM-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CLAM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CLAM-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CLAM-5	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
CLCM-1	Macroinvertebrate Survey	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
CLCM-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics North
CLCM-1	Water Quality Sampling	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS2
CLDM-40	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
CNC-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Category 2a Waterbody Sampling)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
CNC-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Category 2a Waterbody Sampling)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
CONE-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20
CRWJ-3	Rain Event Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN; CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	SWQMP Sampling Period	WQ		
CS-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
CS-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY; CY2023_LOW LEVEL HG SAMPLING_ROTATIONB (LLHg only)	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG2
CS-2	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG2
CUBM-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens))	SWQMP Sampling Period	Montgomery	TBD	Tallapoosa IBI
CUBM-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens))	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
CUBM-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens))	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 9
CVPB-1	EPT Field Pick	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
CVPB-1	Fish IBI Survey	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
CVPB-1	Periphyton Survey	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
CVPB-1	Water Quality Sampling	251		4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 1
DANW-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DANW-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DANW-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DANW-4	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DANW-7	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DANW-8	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ben Darby	RRMP 21
DGRM-1A	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG3
DOCB-1	EPT Field Pick	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_D'OLIVE_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 8)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
DOCB-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_D'OLIVE_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 8)	SWQMP Sampling Period	Mobile	Gerald Ramos	GR1

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
DOCB-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_D'OLIVE_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 8)	8X Monthly (Mar-Oct)	Mobile	Gerald Ramos	GR1
DR-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG3
DRCD-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref- Sampled)	SWQMP Sampling Period	Montgomery	TBD	AL IBI
DRCD-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref- Sampled)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
E-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Mobile	Steve Summersell	SS1
EGLT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
EGLT-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
ELLF-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (Recon needed to verify lat/long is best sampling location)	7X Monthly (Apr-Oct)	Decatur	Tommy Milford	TMILFORD-1
EMIC-2	Geomean E. coli Study	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	SWQMP Sampling Period	Birmingham	Clay James	9
EMIC-2	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri
EMIC-2	Organics Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	3X Monthly (MayJulSep)	Montgomery	Ron Sparks	Organics North
EMIC-2	Periphyton Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	SWQMP Sampling Period	Montgomery	TBD	Peri
EMIC-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	8X Monthly (Mar-Oct)	Birmingham	Clay James	5
EMKT-14	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_EMUCKFAW_CREEK_TMDL (Sampled in 2016); CY2023_RIVERS_AND_STREAMS_MI (WDG 2)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
EMKT-14	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_EMUCKFAW_CREEK_TMDL (Sampled in 2016); CY2023_RIVERS_AND_STREAMS_MI (WDG 2)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
EMKT-14	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_EMUCKFAW_CREEK_TMDL (Sampled in 2016); CY2023_RIVERS_AND_STREAMS_MI (WDG 2)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
ESTL-2	Rain Event Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN; CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	SWQMP Sampling Period	WQ		

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
FI-1	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
FI-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics South
FI-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Mobile	Gerald Ramos	GR1
FLYB-96	EPT Field Pick	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_FLY_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
FLYB-96	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_FLY_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Mobile	Gerald Ramos	GR1
FLYB-96	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics South
FLYB-96	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_FLY_CREEK_TMDL (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	8X Monthly (Mar-Oct)	Mobile	Gerald Ramos	GR1
FNCC-1	Water Quality Sampling	210	CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 26
FR-1	Water Quality Sampling	591	CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG4
GNNM-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_GUNNISON_CREEK_TMDL (.); CY2023_REFERENCE_REACH_MONITORING (study specific ref reach; match parameters requested for FLYB-96 and TURB-1)	SWQMP Sampling Period	Mobile	Nancy Shaneyfelt	NS1
GNNM-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_GUNNISON_CREEK_TMDL (.); CY2023_REFERENCE_REACH_MONITORING (study specific ref reach; match parameters requested for FLYB-96 and TURB-1)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
GNNM-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics South
GNNM-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_GUNNISON_CREEK_TMDL (.); CY2023_REFERENCE_REACH_MONITORING (study specific ref reach; match parameters requested for FLYB-96 and TURB-1)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS1
GRVW-1	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 2A water. Could not be sampled in 2020 due to COVID-19 restrictions.); CY2023_RIVERS_AND_STREAMS (WDG 1)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS
GRVW-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 2A water. Could not be sampled in 2020 due to COVID-19 restrictions.); CY2023_RIVERS_AND_STREAMS (WDG 1)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
GRVW-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 2A water. Could not be sampled in 2020 due to COVID-19 restrictions.); CY2023_RIVERS_AND_STREAMS (WDG 1)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2
HARF-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_HARRIS_CREEK_TMDL (Listing was based on WQ data collected at this station in 2014)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
HARF-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_HARRIS_CREEK_TMDL (Listing was based on WQ data collected at this station in 2014)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
HARF-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_HARRIS_CREEK_TMDL (Listing was based on WQ data collected at this station in 2014)	SWQMP Sampling Period	Decatur	Tommy Milford	DECATUR-IE-1-2023
HARF-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_HARRIS_CREEK_TMDL (Listing was based on WQ data collected at this station in 2014)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
HATC-1	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	EPT NW Lily Run
HATC-1	Rain Event Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN; CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	SWQMP Sampling Period	WQ		
HATC-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	James Worley	MGY 1
HILT-2	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	NW TALLA
HILT-2	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
HIPR-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (Sampled in 2016)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D2
HIPR-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (Sampled in 2016)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
HIPR-3	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	Tallapoosa IBI
HIPR-3	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	Tallapoosa IBI

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
HIPR-3	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D2
HIPR-3	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
HIPR-3	Siltation Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
HIPR-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_HIGH_PINE_CREEK_TMDL (this location requested by Shannon for NPS stakeholder interest); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
HLB-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
HSEC-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
HSEC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
HURR-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
HURR-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
HURR-1	Periphyton Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
HURR-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	8X Monthly (Mar-Oct)	Decatur	Tommy Milford	TMILFORD-1
INCL-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 5); CY2023_TN_INDIANCAMP_CREEK_TMDL (Listing was based on WQ data collected from this station in 2013,2016-17)	SWQMP Sampling Period	Decatur	Ariel Holway-Jones	DECATUR-IE-2-2023
INCL-1	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 5); CY2023_TN_INDIANCAMP_CREEK_TMDL (Listing was based on WQ data collected from this station in 2013,2016-17)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
INCL-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 5); CY2023_TN_INDIANCAMP_CREEK_TMDL (Listing was based on WQ data collected from this station in 2013,2016-17)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-2
JBDT-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
JBDT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
JBDT-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
JBDT-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
JONT-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
JONT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
JONT-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
JONT-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
LBRF-1	Fish IBI Survey	239	CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
LBRF-1	Water Quality Sampling	239	CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
LBRF-4	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 4); CY2023_TN_LITTLE_BEAR_CREEK_TMDL (Listing was based on WQ data collected at this station in 2017)	SWQMP Sampling Period	Decatur	Tommy Milford	DECATUR-IE-1-2023
LBRF-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 4); CY2023_TN_LITTLE_BEAR_CREEK_TMDL (Listing was based on WQ data collected at this station in 2017)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
LC-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics South
LC-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	8X Monthly (Mar-Oct)	Birmingham	Clay James	1
LFKB-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	5

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
LMBA-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref- Sampled 65i)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
LMBA-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref- Sampled 65i)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
LMBC-2	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
LMBC-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
LNRM-75B	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 3 waterbody with WLA nearby)	SWQMP Sampling Period	Montgomery	TBD	Tom IBI
LNRM-75B	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 3 waterbody with WLA nearby)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
LSCT-1	Rain Event Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN; CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	SWQMP Sampling Period	WQ		
LTBF-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed changed from LBRF-1 to LTBF-1)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
LTBF-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (this is a CAT 2B that needs assessed changed from LBRF-1 to LTBF-1)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
LTLL-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
LTLL-1	Macroinvertebrate Survey	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
LTLL-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
LTLL-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
LTPR-1	EPT Field Pick	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	SWQMP Sampling Period	Montgomery	TBD	NW TALLA
LTPR-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
MAHB-1B	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_MAHAN_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS (use support)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
MAHB-1B	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_MAHAN_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS (use support)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D1
MAHB-1B	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_MAHAN_CREEK_TMDL (Sampled in 2015.); CY2023_RIVERS_AND_STREAMS (use support)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
MARE-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MARE-10	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MARE-11	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MARE-12	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	8X Monthly (Mar-Oct)	Montgomery	Ben Darby	RRMP 28
MARE-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MARE-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MARE-4	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 23
MARE-5	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 23
MARE-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 23
MARE-7	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 23
MARE-8	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 23
MARE-9	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 24
MB-2A	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH5
MB-3A	Water Quality Sampling	591	CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH5
MB-9	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG4
MBFB-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	5
MCNG-2	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
MFBN-2	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed and also additional data to assist in upgrade from A&I to F&W)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
MFBN-2	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed and also additional data to assist in upgrade from A&I to F&W)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
MFBN-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed and also additional data to assist in upgrade from A&I to F&W)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-4
MGRB-9	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH4
MILP-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Limited data)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
MILP-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Limited data)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
MILT-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_MILL_CREEK_TMDL (Sampled in 2016); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D2
MILT-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_MILL_CREEK_TMDL (Sampled in 2016); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
MLKM-1	Macroinvertebrate Survey	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
MLKM-1	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics South
MLKM-1	Water Quality Sampling	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS2
MLKM-2	Macroinvertebrate Survey	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
MLKM-2	Water Quality Sampling	nps_coastal	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ALABAMA COASTAL NONPOINT POLLUTION CONTROL PROGRAM (Pending Recon)	8X Monthly (Mar-Oct)	Mobile	Nancy Shaneyfelt	NS2
MO-1A	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG1

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
MO-2	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH3
MOBB-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH3
MOBM-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Mobile	Joie Horn	JH1
MSHC-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
MSHC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
MUDF-3	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 7); CY2023_TN_USA (this is a CAT 3 that needs assessed moved from MDCF-1 to MUDF-3)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
MUDF-3	Fish IBI Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 7); CY2023_TN_USA (this is a CAT 3 that needs assessed moved from MDCF-1 to MUDF-3)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
MUDF-3	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 7); CY2023_TN_USA (this is a CAT 3 that needs assessed moved from MDCF-1 to MUDF-3)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
MULD-1	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	NW AL
MULD-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
NEWM-2	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 2a waterbody)	SWQMP Sampling Period	Montgomery	TBD	Tom IBI
NEWM-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 2a waterbody)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
NUBC-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
NUBC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Talladega Natl Forest)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
OAKC-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (MONITOR AFTER CLEAR CUT)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
OAKC-1	Siltation Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (MONITOR AFTER CLEAR CUT)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
OAKC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (MONITOR AFTER CLEAR CUT)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
OGLL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (Per WQ-need key from Auburn Water Works in order to access station)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 26
OSTB-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
OSTB-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
OSTB-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
OSTB-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
PDBB-5	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Mobile	Gerald Ramos	GR3
PEAG-2	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20
PEVS-3	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Category 3 Waterbody Sampling)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
PEVS-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Category 3 Waterbody Sampling)	8X Monthly (Mar-Oct)	Birmingham	Clay James	4
PICL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
PICL-11	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-2
PICL-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
PICL-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
PICL-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
PNDC-10	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (follow up surveys); CY2023_TN_POND_CREEK_TMDL (Collect data to address exisitng impairments)	SWQMP Sampling Period	WQ	David Thompson	DO 72

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
PNDC-10	EPT Field Pick	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (follow up surveys); CY2023_TN_POND_CREEK_TMDL (Collect data to address exisitng impairments)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri
PNDC-10	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (follow up surveys); CY2023_TN_POND_CREEK_TMDL (Collect data to address exisitng impairments)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-3
PNDC-2	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to addres existing impairments)	SWQMP Sampling Period	WQ	David Thompson	DO 72
PNDC-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to addres existing impairments)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-3
PNDC-4A	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments.)	SWQMP Sampling Period	WQ	David Thompson	DO 72
PNDC-4A	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments.)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-3
PNDC-6	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments on Pond Creek)	SWQMP Sampling Period	WQ	David Thompson	DO 72
PNDC-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments on Pond Creek)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-3
PNDC-7	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments)	SWQMP Sampling Period	WQ	David Thompson	DO 72
PNDC-7	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_POND_CREEK_TMDL (Collect data to address existing impairments)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-3
PRRJ-5	EPT Field Pick	251		SWQMP Sampling Period	Montgomery		Tenn IBI Blitz
PRRJ-5	Fish IBI Survey	251		SWQMP Sampling Period	Montgomery		Tenn IBI Blitz
PRRJ-5	Periphyton Survey	251		SWQMP Sampling Period	Montgomery		Tenn IBI Blitz
PRRJ-5	Water Quality Sampling	251		4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 1
PSYF-1	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL (Postponed from 2020 and 2021. To collect WQ data to asses the organic enrichment (CBOD, NBOD) on segment AL06030006-0102-1	SWQMP Sampling Period	WQ	David Thompson	DO 72

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
PSYF-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL (Postponed from 2020 and 2021. To collect WQ data to asses the organic enrichment (CBOD, NBOD) on segment AL06030006-0102-1	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
PSYF-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_UPPER_BEAR_CREEK_LAKE_TMDL (Postponed from 2020 and 2021. To collect WQ data to asses the organic enrichment (CBOD, NBOD) on segment AL06030006-0102-1	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
PURS-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Birmingham	Clay James	8
PURS-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Birmingham	Clay James	8
PURW-3	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens)); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS
PURW-3	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens)); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS
PURW-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (Sampling to see if data supports a delisting (currently a Cat 4A for pathogens)); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2
PYCF-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_PAYNE_CREEK_TMDL (Listing was based on data collected from this station in 2018)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
PYCF-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_PAYNE_CREEK_TMDL (Listing was based on data collected from this station in 2018)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
PYCF-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_PAYNE_CREEK_TMDL (Listing was based on data collected from this station in 2018)	SWQMP Sampling Period	Decatur	Tommy Milford	DECATUR-IE-1-2023
PYCF-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_PAYNE_CREEK_TMDL (Listing was based on data collected from this station in 2018)	4X Monthly (AprJunAugOct)	Montgomery	Anthony Roberts	MGY 3
RLHR-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
RLHR-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23
RLHR-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23
RLHR-4	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23
RLHR-5	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23
RLHR-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Michael Len	RRMP 23
RNSB-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
RPCL-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
RPCL-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
SCRL-2	Geomean E. coli Study	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	SWQMP Sampling Period	Birmingham	Clay James	9
SCRL-2	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri
SCRL-2	Organics Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	3X Monthly (MayJulSep)	Montgomery	Ron Sparks	Organics North
SCRL-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_NWQI_PRIORITY_WATERSHEDS (NWQI Sampling)	8X Monthly (Mar-Oct)	Decatur	Tommy Milford	TMILFORD-1
SF-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
SF-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
SF-1	Periphyton Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	BIO BLITZ
SF-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	8X Monthly (Mar-Oct)	Decatur	Tommy Milford	TMILFORD-4
SH-1A	Fish IBI Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 8)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
SH-1A	Organics Sampling			3X Monthly (MayJulSep)		Ron Sparks	Organics North

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
SH-1A	Siltation Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 8)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
SH-1A	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS_MI; CY2023_RIVERS_AND_STREAMS_MI (WDG Cat 8)	8X Monthly (Mar-Oct)	Birmingham	Clay James	3
SHDJ-6	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	8X Monthly (Mar-Oct)	Birmingham	Clay James	3
SHLC-3	Rain Event Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN; CY2023_RAIN_EVENT_TSS_TURBIDITY_RELATIONSHIPS	SWQMP Sampling Period	WQ		
SHLL-2	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
SHLL-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-2
SHLS-4	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Replaced SHLS-2; Category 3 Waterbody Sampling)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
SHLS-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_USA (Replaced SHLS-2; Category 3 Waterbody Sampling)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
SINL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (.)	7X Monthly (Apr-Oct)	Decatur	Tommy Milford	TMILFORD-3
SLAM-22C	EPT Field Pick	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba BioBlitz
SLAM-22C	Fish IBI Survey	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
SLAM-22C	Periphyton Survey	251		SWQMP Sampling Period	Montgomery	TBD	Cahaba BioBlitz
SLAM-22C	Water Quality Sampling	251		4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 1
SLRL-1	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (Construction stormwater run-off complaint investigation)	SWQMP Sampling Period	Montgomery	TBD	Bugs Peri
SLRL-1	Siltation Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (Construction stormwater run-off complaint investigation)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
SLRL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TN_USA (Construction stormwater run-off complaint investigation)	8X Monthly (Mar-Oct)	Decatur	Tommy Milford	TMILFORD-2
SLTC-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
SNEG-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
SO-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 26

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
SOGL-1	EPT Field Pick	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SOUGAHATCHEE_CREEK_TMDL (Trend Station); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
SOGL-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SOUGAHATCHEE_CREEK_TMDL (Trend Station); CY2023_TREND_MONITORING_605 (.)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
SOGL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SOUGAHATCHEE_CREEK_TMDL (Trend Station); CY2023_TREND_MONITORING_605 (.)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
SPD-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS
SPD-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Continuing to monitor 2020 stations)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
SPGC-3	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed was sampled in 2018 had low DOs just need more data to help verify source)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
SPGC-3	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed was sampled in 2018 had low DOs just need more data to help verify source)	SWQMP Sampling Period	Montgomery	TBD	Tenn IBI Blitz
SPGC-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS); CY2023_TN_USA (this is a CAT 2A that needs assessed was sampled in 2018 had low DOs just need more data to help verify source)	8X Monthly (Mar-Oct)	Decatur	Ariel Holway-Jones	AHJ-4
SPYF-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Replaced SPYF-2)	SWQMP Sampling Period	Montgomery	TBD	Tom IBI
SPYF-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Replaced SPYF-2)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
SPYF-6	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Replaced SPYF-4/SPYF-5)	SWQMP Sampling Period	Montgomery	TBD	Tom IBI
SPYF-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Replaced SPYF-4/SPYF-5)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
SSTM-1	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
STVW-1	Macroinvertebrate Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 2A water. Could not be sampled in 2020 due to COVID-19 restrictions.)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
STVW-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 2A water. Could not be sampled in 2020 due to COVID-19 restrictions.)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2
STXB-3	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Mobile	Gerald Ramos	GR3
SWFA-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D1
SWFA-1	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
SWFA-1	Siltation Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
SWFA-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
SWFA-2	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D1
SWFA-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
SWFC-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D1
SWFC-1	Macroinvertebrate Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	TBD	UAL-LCA
SWFC-1	Siltation Survey	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	SWQMP Sampling Period	Montgomery	James Worley	Siltation
SWFC-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_SWIFT CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 4)	4X Monthly (AprJunAugOct)	Montgomery	Ron Sparks	MGY 8
TA-2	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	SWQMP Sampling Period	Montgomery	TBD	Tallapoosa IBI
TA-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
TARE-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 25
TART-1	Fish IBI Survey	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	SWQMP Sampling Period	Montgomery	TBD	Tallapoosa IBI
TART-1	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
TC-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG3
TC-2	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG3
TENB-2	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG2
TENR-215	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Decatur	Ariel Holway-Jones	AHJ-1
TENR-259	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
TENR-274	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
TENR-417	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Decatur	Tommy Milford	TMILFORD-1
THUE-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 27
TLCW-14	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
TLRC-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_TALLAPOOSA_RIVER_TMDL (Most downstream of impaired segment.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Birmingham	Clay James	9
TLRC-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_TALLAPOOSA_RIVER_TMDL (Most downstream of impaired segment.); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
TM-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Clark Gerken	CG2
TMCM-3	EPT Field Pick	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
TMCM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	4X Monthly (MarMayJulSep)	Mobile	Nancy Shaneyfelt	NS2
TN-4A	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Decatur	Tommy Milford	TMILFORD-2
TUKW-1	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 3 water. Could not be sampled in 2020 due to COVID-19 restrictions.)	SWQMP Sampling Period	Montgomery	TBD	AL IBI
TUKW-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_USA (To fully assess Category 3 water. Could not be sampled in 2020 due to COVID-19 restrictions.)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
TURB-1	Geomean Enterococcus Study	210		SWQMP Sampling Period	Mobile	Ron Sparks	Organics South
TURB-1	EPT Field Pick	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_TURKEY_BRANCH_TMDL (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 6)	SWQMP Sampling Period	Montgomery	TBD	COASTAL
TURB-1	Organics Sampling			3X Monthly (MayJulSep)	Montgomery	TBD	MOB GM
TURB-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_TURKEY_BRANCH_TMDL (.); CY2023_RIVERS_AND_STREAMS_MI (WDG 6)	8X Monthly (Mar-Oct)	Mobile	Gerald Ramos	GR2
UPHM-3	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_UPHAPEE_CREEK_TMDL (Sampled previously); CY2023_TREND_MONITORING_605 (.)	Jun/Aug	Montgomery	Brien Diggs	GEO-JA-D1
UPHM-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_UPHAPEE_CREEK_TMDL (Sampled previously); CY2023_TREND_MONITORING_605 (.)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
UTCB-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
UTCB-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
UTCB-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
UTCB-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Brien Diggs	MGY 10
UTET-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
UTET-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
UTJR-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_PUBLIC WATER SUPPLY (.)	7X Monthly (Apr-Oct)	Montgomery	Scott Hicks	RRMP 26
UTOT-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
UTOT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
UTOT-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
UTOT-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 9
UTOT-2	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
UTOT-2	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	LT 5 MAR
UTOT-2	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
UTOT-2	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (To monitor reference reaches.); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Sarah Buchanon	MGY 9
UTTT-1	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
UTTT-1	Macroinvertebrate Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS 2
UTTT-1	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
UTTT-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Jacob Shirley	MGY 6
VALJ-8	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	6
VI-3	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Birmingham	Clay James	6
WASP-1	EPT Field Pick	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_WASHINGTON CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	SWQMP Sampling Period	Montgomery	TBD	LA BUGS
WASP-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_WASHINGTON CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D2
WASP-1	Water Quality Sampling	239	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_WASHINGTON CREEK_TMDL (Data needed for TMDL development); CY2023_RIVERS_AND_STREAMS_MI (WDG 5)	4X Monthly (AprJunAugOct)	Montgomery	Ruthie Perez	MGY 2

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
WB-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH4
WBTM-70	Fish IBI Survey	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 2b waterbody)	SWQMP Sampling Period	Montgomery	TBD	Tom IBI
WBTM-70	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_EMPT_USA (Fully assess 2b waterbody)	4X Monthly (AprJunAugOct)	Montgomery	Anna Eastis	MGY 4
WDFA-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-2	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-2A	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 22
WDFA-3	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-5	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-6	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WDFA-7	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Seth Wood	RRMP 22
WEBL-1	Macroinvertebrate Survey	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	SWQMP Sampling Period	Montgomery	TBD	TALLA BUGS
WEBL-1	Water Quality Sampling	235	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_REFERENCE_REACH_MONITORING (Cand Ref - Passed Recon); CY2023_WETLAND_MONITORING (To monitor wetlands in the Tallapoosa River Basin.)	4X Monthly (MarMayJulSep)	Montgomery	Liberty Dobbs	MGY 5
WEBL-1A	Amphibian Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Amphibian Surveys
WEBL-1A	Plant Survey	235	CY2023_WETLAND_MONITORING; To monitor wetlands in the Tallapoosa River Basin.	SWQMP Sampling Period	Montgomery	Ruthie Perez	Plant Surveys
WEIC-12	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_106 (trends)	12X Monthly (Jan-Dec)	Montgomery	Scott Hicks	RRMP 25
WILL-1	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
WILL-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
WILL-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23
WILL-4	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 23

Appendix C. Monitoring activities to be conducted at each sampling location, along with sampling frequency, field office, crew leader, and sampling trip.

Station	Trip Activity	Fund Code	Comments	Sampling Summary	Field Office	Crew Leader	TRIP
WKBB-1	Water Quality Sampling	591	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_COASTAL_WATERS_MONITORING_PROGRAM_MOBILE_BAY	8X Monthly (Mar-Oct)	Mobile	Joie Horn	JH4
WLTB-1	Fish IBI Survey	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_WALTON_CREEK_TMDL (Sampled in 2020. Need Geomean for TDML); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	SWQMP Sampling Period	Montgomery	TBD	Cahaba IBI Blitz
WLTB-1	Geomean E. coli Study	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_WALTON_CREEK_TMDL (Sampled in 2020. Need Geomean for TDML); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	Jul/Sep	Montgomery	Brien Diggs	GEO-JS-D2
WLTB-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_BWC_WALTON_CREEK_TMDL (Sampled in 2020. Need Geomean for TDML); CY2023_RIVERS_AND_STREAMS (FOLLOW UP SURVEYS)	4X Monthly (AprJunAugOct)	Montgomery	James Worley	MGY 7
YATE-1	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 27
YATE-2	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 27
YATE-3	72-hour DO	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_YATES_RESERVOIR_TMDL (N/A); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	SWQMP Sampling Period	WQ	David Thompson	DO 72
YATE-3	Water Quality Sampling	210	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_ACT_CHANNAHATCHEE_CREEK_YATES_RESERVOIR_TMDL (N/A); CY2023_RIVERS_RESERVOIRS_EMBAYMENT (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 27
YATE-4	Water Quality Sampling	251	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_RIVERS_RESERVOIRS_MAINSTEM (.)	7X Monthly (Apr-Oct)	Montgomery	Ranse Williams	RRMP 27
YELH-3B	Low level Hg Only	210	CY2023_LOW LEVEL HG SAMPLING_ROTATIONB	SWQMP Sampling Period	Montgomery	Ben Darby	LL Hg Only
YERC-3	Water Quality Sampling	605***	CY2023 SURFACE WATER QUALITY SAMPLING PLAN (.); CY2023_TREND_MONITORING_605 (.)	12X Monthly (Jan-Dec)	Montgomery	Seth Wood	RRMP 20

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
AFFB-3	Wadeable-Bioassessments	32.9224	-87.24988	Affonee Ck	N	Affonee Creek at Big Barn Road	Bibb	Cahaba	65I	29.85	River/Stream
ALRA-1	Nonwadeable Boat	31.541269	-87.526045	Alabama R	N	Downstream of Claiborne Reservoir. Deepest point, main river channel, approx. one mile downstream of US Hwy. 84.	Monroe	Alabama	65P	21982.31	River/Stream
ALRC-1	Nonwadeable Boat	31.212028	-87.876	Alabama R	N	ALABAMA RIVER AT RIVER MILE 10.0. APPROX 10 MILES UPSTREAM OF ALABAMA RIVER/TOMBIGBEE RIVER CONFLUENCE	Baldwin	Alabama	65P	22598.06	River/Stream
ARMM-1		31.42799283	-88.01067077	Armstrong Ck	N	@ Cortelyou Rd	Washington	Tombigbee	65P	32.44	River/Stream
B-1	Wadeable-Bioassessments	33.29694366	-86.842639	Buck Ck	N	Buck Creek below dam in Helena off Hwy 261 (RM2.4)	Shelby	Cahaba	67F	70.28	River/Stream
BANT-3	Nonwadeable Boat	33.544802	-87.174984	Bankhead Res	N	Locust Fork. Deepest point, main river channel, Locust Fork. Approx. 1.5 mi. upstream of Mulberry, Locust confluence.	Jefferson	Black Warrior	68F	1200.68	Reservoir
BARD-1	Wadeable-Bioassessments	32.28938	-87.30493	Bear Ck	N	Bear Ck at Dallas Co Rd 21.	Dallas	Alabama	65A	27.45	River/Stream
BCRF-2	Wadeable-Bioassessments	34.401156	-87.873247	Little Bear Ck	N	Little Bear Creek @ AL. Hwy 187	Franklin	Tennessee	65J	34.46	River/Stream
BEC-1	Wadeable-Bioassessments	31.0106	-87.2629	Big Escambia Ck	N	Big Escambia Creek @ US Hwy 31.	Escambia	Escambia	65F	332.35	River/Stream
BERF-5	Nonwadeable Grab-Shallow	34.339633337	-87.54731081	Bear Ck	N	Bear Cr @Franklin Co Rd 93.	Franklin	Tennessee	68E	19.01	River/Stream
BERF-6	Nonwadeable Grab-Shallow	34.655817	-88.1217001	Bear Ck	N	Bear Ck at Colbert CR1 (FTMP: BEAR CREEK APPROX 0.25 MILE DOWNSTREAM OF COLBERT CO. RD. 1 NEAR BURNSTOWN)	Colbert	Tennessee	65J	667	River/Stream
BERM-3	Nonwadeable Grab-Shallow	34.28425	-87.77467	Bear Ck	N	Bear Creek at Al Hwy 172	Marion	Tennessee	68E	143	River/Stream
BERW-1	Nonwadeable Boat	34.288639	-87.627799	U Bear Ck Res	N	Upper Bear Creek Lake (east fork) at Dime Road	Winston	Tennessee	68E	55.33	Reservoir
BGEH-46A		32.612486918	-87.68284571	Big German Ck	N	@Hale Co. Rd 16	Hale	Black Warrior	65A	29.22	River/Stream
BGHM-1	Wadeable-Bioassessments	32.161444017	-85.83484592	Bughall Ck	N	Bughall Cr @ Bullock CR 177	Bullock	Tallapoosa	65A	32.49	River/Stream
BGNL-1	Nonwadeable Grab-Shallow	34.67	-87.31722	Big Nance Ck	N	Big Nance Creek in the vicinity of Lawrence Co. Rd. 25/Jefferson St.	Lawrence	Tennessee	71G	163.24	River/Stream
BKRE-1A	Wadeable-Bioassessments	30.989529	-86.720308	Blackwater R	N	Blackwater River at Charles Booker Rd in Florida.	Okaloosa	Blackwater	65F	91.07	River/Stream
BLBW-6		31.23544	-88.02184	Bilbo Ck	N	Bilbo Ck @ AL HWY 43	Washington	Tombigbee	65F	73.98	River/Stream

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
BLCT-1	Wadeable-Bioassessments	32.738448 12	-85.74005868	Blue Ck	N	Blue Creek at North Thornton Road	Tallapoosa	Tallapoosa	45B	28.6	River/Stream
BLUB-1	Wadeable-Bioassessments	32.87965	-87.28692	Blue Girth Ck	N	Blue Girth Ck at CR 80	Bibb	Cahaba	65I	24.9	River/Stream
BLWL-3	Wadeable-Bioassessments	34.87486	-87.43226	Bluewater Ck	N	Bluewater Creek at Lauderdale County Road 33	Lauderdale	Tennessee	71F	109.31	River/Stream
BMBB-1	Nonwadeable Boat	30.6978	-87.9206	Bay Minette	N	Middle of Bay Minette Basin (widened portion of Bay Minette Creek just upstream of Blakely River).	Baldwin	Mobile	75A	113.9	Estuary
BOB-3		31.015693	-87.516472	Boggy Br	N	Boggy Branch Approx 150 ft downstream of Atmore WWTP discharge and 1.65 miles upstream of confluence with Brushy Creek	Escambia	Perdido	65F	1.49	River/Stream
BPRH-44E		32.54156	-87.6812	Big Prairie Ck	N	Big Prairie Creek @ AL Hwy 69 us of confluence with L. Prairie Creek	Hale	Black Warrior	65A	171.3	River/Stream
BRSL-3	Wadeable-Bioassessments	34.3307	-87.2862	Brushy Ck	N	Brushy Ck upstream of North Loop of Co Rd 73 (east of Co Rd 70), in Bankhead National Forest	Lawrence	Black Warrior	68E	8.9	River/Stream
BRTC-1	Wadeable-Bioassessments	33.69705	-85.51981	Burton Ck	N	Burton Ck at AL Hwy 78	Cleburne	Tallapoosa	45D	1.77	River/Stream
BRU-2		31.02117	-87.53887	Brushy Ck	N	Brushy Creek @ US Hwy 31 Service Road (Byrne Drive)	Escambia	Perdido	65F	15.15	River/Stream
BRU-4		30.97837	-87.52801	Brushy Ck	N	Brushy Creek in Escambia County Florida at Nokomis Road. USGS real-time gage #02376293 is located here. Creek is wadeable approx 150' upstream of bridge crossing but is not wadeable at bridge.	Escambia	Perdido	65F	26.7	River/Stream
BRWM-39		31.121497	-88.009888	Barrow Ck	N	Barrow Creek @ US Hwy 43 crossing.	Mobile	Mobile	65F	9.5	River/Stream
BSAM-1	Wadeable-Bioassessments	30.83043	-88.10554	Bayou Sara	N	Bayou Sara @ Mobile CR 41	Mobile	Mobile	75I	12.72	River/Stream
BSTC-5		31.49102	-87.890026	Bassett Ck	N	Bassett Ck at Clarke CR 27 S of Fulton (NE1/4, S12, T9N, R3E)	Clarke	Tombigbee	65P	260.51	River/Stream
BUCS-13	Wadeable-Bioassessments	33.29567	-86.8252	Buck Ck	N	Buck Creek approx. 50 yds. upstream of confluence with Cahaba Valley Creek	Shelby	Cahaba	67F	38.35	River/Stream
BUCS-6		33.27589	-86.81544	Buck Ck	N	Bridge located on Stonehaven Trail in Pelham approximately 50 feet from Walker Way.	Shelby	Cahaba	67F	18	River/Stream
BUCS-6	Wadeable-Bioassessments	33.27589	-86.81544	Buck Ck	N	Bridge located on Stonehaven Trail in Pelham approximately 50 feet from Walker Way.	Shelby	Cahaba	67F	18	River/Stream
BYSM-1	Nonwadeable Boat	30.8146	-88.0211	Bayou Sara	N	Bayou Sara at canal crossing approx. 1 mile upstream of mouth.	Mobile	Mobile	75I	78.57	Coastal River/Stream
BYSM-3	Nonwadeable Boat	30.8397	-88.0314	Bayou Sara	N	Bayou Sara approx. 200 yards upstream of Gunnison Creek.	Mobile	Mobile	75I	31.96	Coastal River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
BYSM-6	Nonwadeable Grab-Shallow	30.8253	-88.07	Bayou Sara	N	Bayou Sara at US Hwy 43.	Mobile	Mobile	75I	19.3	Coastal River/Stream
BYSM-7	Nonwadeable Grab-Shallow	30.8163	-88.0711	Norton Ck	N	Norton Creek at US Hwy 43.	Mobile	Mobile	75I	5.08	Coastal River/Stream
BZDC-1	Wadeable-Bioassessments	34.69831	-87.98914	Buzzard Roost Ck	N	@ Colbert Co. Rd. 21.	Colbert	Tennessee	65J	26.43	River/Stream
C-1	Wadeable-Bioassessments	33.60503	-86.54924	Cahaba R	N	Cahaba River at St. Clair Co Rd 10 (Roper Rd) at Whites Chapel	St Clair	Cahaba	67H	50.84	River/Stream
C-3	Wadeable-Bioassessments	33.284692	-86.882812	Cahaba R	N	Cahaba River at Shelby CR 52 Bridge west of Helena	Shelby	Cahaba	67H	353.39	River/Stream
CABB-1	Wadeable-Water Quality Sampling	32.946314	-87.140258	Cahaba R	N	Cahaba River at AL Hwy 219.	Bibb	Cahaba	65P	1025.78	River/Stream
CAHC-1	Nonwadeable Boat	33.65058	-85.60116	Cahulga Creek (Cahulga)	N	Deepest point, main channel, dam forebay	Cleburne	Tallapoosa	45D	1	Upland Impoundment
CAHD-1A	Nonwadeable Boat	32.32676986	-87.10463388	Cahaba R	N	Cahaba R	Dallas	Cahaba	65P	1820	River/Stream
CAHS-1		33.3635	-86.8132	Cahaba R	N	Cahaba River at Co Rd 175 Bains Bridge (Old Montomery Hwy)	Shelby	Cahaba	67H	229.16	River/Stream
CAHS-1	Wadeable-Bioassessments	33.3635	-86.8132	Cahaba R	N	Cahaba River at Co Rd 175 Bains Bridge (Old Montomery Hwy)	Shelby	Cahaba	67H	229.16	River/Stream
CALE-1	Wadeable-Water Quality Sampling	32.57965	-86.310387	Callaway Ck	N	Callaway Creek at Co Rd 23 crossing	Elmore	Alabama	65I	14.38	River/Stream
CATM-3	Wadeable-Bioassessments	32.3073	-86.3074	Catoma Ck	N	Catoma Creek @ US Hwy 331.	Montgomery	Alabama	65A	293.01	River/Stream
CDRM-38		31.07714	-88.024225	Cedar Ck	N	@ Williamson St just upstream of Hwy 43 bridge	Mobile	Mobile	65F	85.59	River/Stream
CEDD-1	Wadeable-Bioassessments	32.191558899	-87.0314207	Cedar Ck	N	Cedar Ck at AL Hwy 41	Dallas	Alabama	65B	378.11	River/Stream
CERC-1	Wadeable-Bioassessments	34.64431	-88.13068	Cedar Ck	N	Cedar Creek at Natchez Trace Pkwy	Colbert	Tennessee	65J	330	River/Stream
CHAC-1	Nonwadeable Grab-Shallow	34.290278	-85.509167	Chattooga R	N	Chattooga R at Cherokee CR 97 at gauge station	Cherokee	Coosa	67F	366.7	River/Stream
CHANNEL-1A	Nonwadeable Boat	30.62973	-88.03263	Mobile Bay	N	Mobile ship channel just south of Arlington ship channel at channel marker 76	Mobile	Mobile	9999		Estuary
CHANNEL-2	Nonwadeable Boat	30.46437	-88.01577	Mobile Bay	N	Mobile ship channel south of Galliard Island at channel marker 51	Mobile	Mobile	9999		Estuary
CHANNEL-3	Nonwadeable Boat	30.273	-88.036	Mobile Bay	N	Intersection of the Intracoastal Waterway and the Mobile Ship Channel	Mobile	Mobile	9999	42000	Estuary
CHNE-18	Wadeable-Bioassessments	32.65024	-85.95085	Channahatchee Ck	N	Channahatchee Cr at Deer Track Rd (Elmore Co Rd 357) near Eclectic	Elmore	Tallapoosa	45A	25.31	River/Stream
CHO-9	Nonwadeable Grab-Shallow	31.15917	-85.78472	Choctawhatchee R	N	Choctawhatchee R Co. Rd. 45 northeast of Geneva	Geneva	Choctawhatchee	65G	1281.45	River/Stream

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
CHTH-1	Nonwadeable Boat	31.038391837	-85.00861655	Chattahoochee R	N	Deepest point, main river channel, near Alabama/Florida state line.	Houston	Chattahoochee	65P	8448	River/Stream
CKSM-3	Wadeable-Bioassessments	30.80297	-88.14334	Chickasaw Ck	N	Chickasaw Creek at State Highway 158	Mobile	Mobile	65F	125.11	Coastal River/Stream
CLAM-1	Nonwadeable Boat	31.617413	-87.550579	Claiborne Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Monroe	Alabama	65P	21500	Reservoir
CLAM-2	Nonwadeable Boat	32.010645	-87.47435	Claiborne Res	N	Upper reservoir. Deepest point, main river channel, approx. 0.5 miles upstream of Beaver Creek confluence.	Wilcox	Alabama	65P	20700	Reservoir
CLAM-3	Nonwadeable Boat	32.002844	-87.480598	Beaver Ck (Claiborne)	N	Deepest point, main creek channel, Beaver Creek embayment, approximately 0.5 miles upstream of lake confluence.	Wilcox	Alabama	65P	257	Reservoir Embayment
CLAM-4	Nonwadeable Boat	31.915499	-87.370453	Pursley Ck (Claiborne)	N	Deepest point, main creek channel, Pursley Creek embayment, approx. 0.5 miles upstream of lake confluence.	Wilcox	Alabama	65P	105	Reservoir Embayment
CLAM-5	Nonwadeable Boat	31.802873	-87.42528	Tallatchee Ck (Claiborne)	N	Deepest point, main creek channel, Tallatchee Creek embayment, approx. 0.5 miles upstream of lake confluence.	Monroe	Alabama	65P	40.2	Reservoir Embayment
CLCM-1		30.74371	-88.18047	Clear Ck	N	Clear Ck upstream of US Hwy 98 crossing. County: MOBILE, Alabama Ecoregion: 65F Ichthyoregion: Southern Plains	Mobile	Mobile	65F	7.04	River/Stream
CLCM-1	Wadeable-Bioassessments	30.74371	-88.18047	Clear Ck	N	Clear Ck upstream of US Hwy 98 crossing. County: MOBILE, Alabama Ecoregion: 65F Ichthyoregion: Southern Plains	Mobile	Mobile	65F	7.04	River/Stream
CLDM-40		30.97626	-88.02725	Cold Ck	N	Cold Ck at US Hwy 43 bridge.	Mobile	Mobile	75I	17.4	River/Stream
CNC-1	Nonwadeable Grab-Shallow	33.1718	-87.0494	Cane Ck	N	Cane Creek @ Bibb Co. Rd. 21; approx. 2.5 miles upstream of confluence with Cahaba R.	Bibb	Cahaba	67H	12.29	River/Stream
CONE-1	Nonwadeable Boat	30.998654577	-87.163	Conecuh R	N	Deepest point, main river channel, at Alabama/Florida state line.	Escambia	Escambia	65P	3335.59	River/Stream
CRWJ-3	NONWADEABLE GRAB-SHALLOW	34.93424	-85.91705	Crow Ck	N	Crow Creek at Al Hwy 117	Jackson	Tennessee	68B	131	River/Stream
CS-1		30.78224	-88.072481	Chickasaw Ck	N	Chickasaw Ck at US Hwy 43 crossing.	Mobile	Mobile	75I	184	Coastal River/Stream
CS-1	Nonwadeable Boat	30.78224	-88.072481	Chickasaw Ck	N	Chickasaw Ck at US Hwy 43 crossing.	Mobile	Mobile	75I	184	Coastal River/Stream
CS-2	Nonwadeable Boat	30.73925	-88.04571	Chickasaw Ck	N	Chickasaw Ck @ CSX Railroad crossing bridge at confluence with Mobile River	Mobile	Mobile	75K	194	Coastal River/Stream
CUBM-1	Wadeable-Bioassessments	32.2622	-85.7593	Cubahatchee Ck	N	Cubahatchee Creek @ Macon Co. Rd. 2.	Macon	Tallapoosa	65B	49.23	River/Stream

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
CVPB-1	Wadeable-Bioassessments	33.92845	-86.59461	Calvert Prong	N	Calvert Prong @ Baty Road.	Blount	Black Warrior	68B	82.6	River/Stream
DANW-1	Nonwadeable Boat	32.103495	-87.398606	Dannelly Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Wilcox	Alabama	65P	20700	Reservoir
DANW-2	Nonwadeable Boat	32.061887	-87.24572	Dannelly Res	N	Mid reservoir. Deepest point, main river channel, immed. upstream of Roland Cooper State Park.	Wilcox	Alabama	65P	20600	Reservoir
DANW-3	Nonwadeable Boat	32.167992	-87.113579	Dannelly Res	N	Upper reservoir. Deepest point, main river channel, immed. upstream of Elm Bluff Park.	Dallas	Alabama	65P	19600	Reservoir
DANW-4	Nonwadeable Boat	32.423994	-86.851393	Dannelly Res	N	ARM 220. Deepest point, main river channel, upstream of paper mill discharge.	Dallas	Alabama	65P	17000	Reservoir
DANW-7	Nonwadeable Boat	32.171327	-87.225716	Bogue Chitto Ck (Dannelly)	N	Deepest point, main creek channel, Bogue Chitto Creek embayment, approx. 0.5 miles upstream of lake confluence.	Dallas	Alabama	65P	363	Reservoir Embayment
DANW-8	Nonwadeable Boat	32.123053	-87.254782	Pine Barren Ck (Dannelly)	N	Deepest point, main creek channel, Pine Barrens Creek embayment, approx. 0.5 miles upstream of lake confluence.	Dallas	Alabama	65P	361	Reservoir Embayment
DGRM-1A	Nonwadeable Boat	30.5868	-88.1098	Dog R	N	Dog R at 0.19 miles from Riverforest Drive.	Mobile	Mobile	75A	82.91	Coastal River/Stream
DOCB-1	Wadeable-Bioassessments	30.65212	-87.89328	D'Olive Ck	N	D'Olive Creek at Bayview Drive.	Baldwin	Mobile	65F	5.34	River/Stream
DR-1	Nonwadeable Boat	30.62845	-88.10166	Dog R	N	Dog River at Luscher (Creek) Park Boat Launch near I-10.	Mobile	Mobile	75A	11.5	Coastal River/Stream
DRCD-1	Wadeable-Bioassessments	32.116890444	-86.96026569	Dry Cedar Ck	N	Dry Cedar Cr @ Dallas Co Rd 85.	Dallas	Alabama	65B	120.11	River/Stream
E-1	Nonwadeable Grab-Shallow	30.8627405	-88.4178675	Escatawpa R	N	Escatawpa River in the vicinity of US Hwy 98 bridge west of Wilmer, AL.	Mobile	Escatawpa	65F	508.6	River/Stream
EGLT-1	Wadeable-Bioassessments	32.9534	-85.71642	Eagle Ck	N	Eagle Creek at Ida Russell Road	Tallapoosa	Tallapoosa	45A	4.86	River/Stream
ELLF-1	Nonwadeable Boat	34.513833	-87.808299	Duncan Ck (Elliott Lake)	N	Deepest point, main channel, dam forebay	Franklin	Tennessee	65J	10.91	Reservoir
EMIC-2	Wadeable-Water Quality Sampling	34.165920733	-86.81179268	Eightmile Ck	N	Eightmile Creek at Cullman WWTP UPSTREAM of outfall.	Cullman	Black Warrior	68D	44.29	River/Stream
EMKT-14	Wadeable-Bioassessments	33.0553	-85.6946	Emuckfaw Ck	N	Emuckfaw Ck at Bill Price Rd.	Tallapoosa	Tallapoosa	45A	27.33	River/Stream
ESTL-2		34.91034	-86.1682	Estill Fk	N	Freedom bridge at CR 9 near the Freedom Baptist Church	Jackson	Tennessee	68C	44.91	River/Stream
FI-1		30.5458	-87.7983	Fish R	N	Fish River at AL Hwy 104.	Baldwin	Mobile	65F	56.11	River/Stream
FI-1	Wadeable-Bioassessments	30.5458	-87.7983	Fish R	N	Fish River at AL Hwy 104.	Baldwin	Mobile	65F	56.11	River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
FLYB-96		30.55245	-87.89166	Fly Ck	N	Fly Ck at US Hwy 98 crossing.	Baldwin	Mobile	75A	7.01	River/Stream
FLYB-96	Wadeable-Bioassessments	30.55245	-87.89166	Fly Ck	N	Fly Ck at US Hwy 98 crossing.	Baldwin	Mobile	75A	7.01	River/Stream
FNCC-1	Nonwadeable Boat	32.89487	-85.46166	Finley Ck	N	Lafayette Reservoir off of Chambers CR 48	Chambers	Tallapoosa	45B	10.85	River/Stream
FR-1	Nonwadeable Boat	30.44416618	-88.113056	Fowl R	N	Fowl River @ AL Hwy 193 at Dauphin Island Parkway Bridge	Mobile	Mobile	75A	60.8	Coastal River/Stream
GNNM-1		30.89785	-88.04787	Gunnison Ck	N	Gunnison Ck at Radcliff Rd	Mobile	Mobile	75I	11.46	River/Stream
GNNM-1	Wadeable-Bioassessments	30.89785	-88.04787	Gunnison Ck	N	Gunnison Ck at Radcliff Rd	Mobile	Mobile	75I	11.46	River/Stream
GRVW-1	Wadeable-Bioassessments	31.918038116	-87.35910925	Gravel Ck	N	Gravel Creek at Alabama Highway 41, upstream side of bridge to 400 feet	Wilcox	Alabama	65D	28.54	River/Stream
HARF-1	Wadeable-Bioassessments	34.469167	-87.723889	Harris Ck	N	Harris Ck at Herrington Cr Rd above confluence with Payne Ck	Franklin	Tennessee	71G	9.91	River/Stream
HATC-1	NONWADEABLE GRAB-SHALLOW	32.91821	-86.26938	Hatchet Ck	N	Hatchet @ CR 18 @ USGS continous Gage (02408540)	Coosa	Coosa	45A	262.02	River/Stream
HATC-1	Wadeable-Bioassessments	32.91821	-86.26938	Hatchet Ck	N	Hatchet @ CR 18 @ USGS continous Gage (02408540)	Coosa	Coosa	45A	262.02	River/Stream
HILT-2	Wadeable-Bioassessments	33.06635	-85.87993	Hillabee Ck	N	Hillabee Creek at Tallapoosa County Rd. 5 (near Hackneyville)	Tallapoosa	Tallapoosa	45A	189.55	River/Stream
HIPR-1	Wadeable-Water Quality Sampling	33.161012774	-85.40357002	High Pine Ck	N	High Pine Cr @ Randolph Co Rd 855.	Randolph	Tallapoosa	45A	21.92	River/Stream
HIPR-3	Wadeable-Bioassessments	33.124869	-85.46979	High Pine Ck	N	HIgh Pine Creek at Randolph County Road 3	Randolph	Tallapoosa	45A	49.5	River/Stream
HLB-1		31.052638002	-87.83700608	Halls Ck	N	Halls Ck at AL. Hwy 59. North of Stockton just upstream of bridge	Baldwin	Mobile	65F	19.58	River/Stream
HSEC-1	Wadeable-Bioassessments	33.43368	-85.78692	Horse Ck	N	Horse Ck at Nubbin Ck Rd	Clay	Tallapoosa	45D	3.18	River/Stream
HURR-1	Wadeable-Bioassessments	34.91799	-86.133	Hurricane Ck	N	Hurricane Ck just off Jackson Co. Rd. 9	Jackson	Tennessee	68C	44.38	River/Stream
INCL-1	Wadeable-Bioassessments	34.9222	-87.6208	Indiancamp Ck	N	Indiancamp Ck upstream of Lauderdale Co. Rd. 135 crossing at Indian Camp Festival Park North of Florence	Lauderdale	Tennessee	71F	8.38	River/Stream
JBDT-1	Wadeable-Bioassessments	32.94491	-85.78918	Jay Bird Ck	N	Jay Bird Ck at Tallapoosa CR 57	Tallapoosa	Tallapoosa	45A	7.05	River/Stream
JBDT-1	W-Bioassessment	32.94491	-85.78918	Jay Bird Ck	N	Jay Bird Ck at Tallapoosa CR 57	Tallapoosa	Tallapoosa	45A	7.05	River/Stream
JONT-1	Wadeable-Bioassessments	33.087681	-85.840726	Jones Ck	N	Jones Creek at Cook Road	Tallapoosa	Tallapoosa	45A	3.19	River/Stream
JONT-1	W-Bioassessment	33.087681	-85.840726	Jones Ck	N	Jones Creek at Cook Road	Tallapoosa	Tallapoosa	45A	3.19	River/Stream

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
LBRF-1	Wadeable-Bioassessments	34.38555	-87.63891	Little Bear Ck	N	@ AL Hwy 243.	Franklin	Tennessee	68E	10.99	River/Stream
LBRF-4	Wadeable-Water Quality Sampling	34.48833	-88.03556	Little Bear Ck	N	Franklin Co. Rd. 23 NE of Red Bay (NW 1/4)	Franklin	Tennessee	65I	78.19	River/Stream
LC-1		33.52444	-86.575277	Little Cahaba R	N	Little Cahaba River south of Leeds ~1 mile below leeds WWTP	Jefferson	Cahaba	67F	18.63	River/Stream
LC-1	Wadeable-Bioassessments	33.52444	-86.575277	Little Cahaba R	N	Little Cahaba River south of Leeds ~1 mile below leeds WWTP	Jefferson	Cahaba	67F	18.63	River/Stream
LFKB-1	Wadeable-Bioassessments	34.023696	-86.573336	Locust Fk	N	Locust Fork @ ALA HWY 231	Blount	Black Warrior	68D	302.82	River/Stream
LMBA-1	Wadeable-Bioassessments	32.58247315	-86.77757286	Little Mulberry Ck	N	Little Mulberry Cr @ Autauga Co Rd 8.	Autauga	Alabama	65I	70.85	River/Stream
LMBC-2	Wadeable-Bioassessments	32.74315	-86.76003	Little Mulberry Ck	N	Little Mulberry Creek @ Chilton County Rd. 16	Chilton	Alabama	65I	14.02	River/Stream
LNRM-75B	Wadeable-Bioassessments	33.933551	-87.736408	Little New R	N	Little New River @ US Hwy 78	Marion	Tombigbee	65I	43.1	River/Stream
LSCT-1	WADEABLE-BIOASSESSMENTS	32.78549	-85.6428	Little Sandy Ck	N	Little Sandy Creek at M L King Street near Camp Hill	Tallapoosa	Tallapoosa	45B	33.67	River/Stream
LTBF-1	Wadeable-Bioassessments	34.39948214	-87.62651255	Little Bear Ck	N	Little Bear Cr @ Co Rd 34	Franklin	Tennessee	68E	6.91	River/Stream
LTLL-1	Wadeable-Bioassessments	32.68528	-85.56038	Little Loblockee Ck	N	LobLockee Creek at Co Rd 86	Lee	Tallapoosa	45B	15.38	River/Stream
LTLL-1	W-Bioassessment	32.68528	-85.56038	Little Loblockee Ck	N	LobLockee Creek at Co Rd 86	Lee	Tallapoosa	45B	15.38	River/Stream
LTPR-1	Nonwadeable Grab-Shallow	33.43722	-85.39917	Little Tallapoosa R	N	Randolph Co. Rd. 82	Randolph	Tallapoosa	45A	405.81	River/Stream
MAHB-1B	Wadeable-Bioassessments	33.05634	-86.93634	Mahan Ck	N	Mahan Creek at AL HWY 25 (Montevallo Rd)	Bibb	Cahaba	67F	65.73	River/Stream
MARE-1	Nonwadeable Boat	32.686471	-85.910729	Martin Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Tallapoosa	Tallapoosa	45A	2980	Reservoir
MARE-10	Nonwadeable Boat	32.803889	-85.853889	Sandy Ck (Martin)	N	Deepest point, main creek channel, Sandy Creek embayment, approximately 1.0 mile upstream of lake confluence.	Tallapoosa	Tallapoosa	45A	191	Reservoir Embayment
MARE-11	Nonwadeable Boat	32.741944444	-85.85305556	Blue Ck (Martin)	N	Deepest point, main creek channel, Blue Creek embayment, approx. 2.0 miles upstream of lake confluence.	Tallapoosa	Tallapoosa	45A	58.9	Reservoir Embayment
MARE-12	Nonwadeable Grab-Deep	33.25787	-85.61571	Harris Res	N	Deepest point, main river channel, dam tailrace. Below Harris Dam; samples should only be collected when dam is generating.	Randolph	Tallapoosa	45A	1450	Reservoir
MARE-2	Nonwadeable Boat	32.734371	-85.887404	Martin Res	N	Mid reservoir. Deepest point, main river channel, immed. upstream of Blue Creek embayment.	Elmore	Tallapoosa	45A	2860	Reservoir
MARE-3	Nonwadeable Boat	32.742778	-85.964902	Martin Res	N	Kowaliga. Deepest point, main creek channel, immed. upstream of Alabama Hwy 63 bridge.	Elmore	Tallapoosa	45A	98.9	Reservoir

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
MARE-4	Nonwadeable Boat	32.877468	-85.901349	Martin Res	N	Upper reservoir. Deepest point, main river channel, upstream of Wind Creek State Park.	Tallapoosa	Tallapoosa	45A	2480	Reservoir
MARE-5	Nonwadeable Boat	32.933611	-85.866944	Martin Res	N	Upstream 280. Deepest point, main river channel, approx. 0.5 miles upstream of Coley Creek embayment.	Tallapoosa	Tallapoosa	45A	2460	Reservoir
MARE-6	Nonwadeable Boat	32.965	-85.844444	Hillabee Ck (Martin)	N	Deepest point, main creek channel, Hillabee Creek embayment, approx. 0.5 miles upstream of lake confluence.	Tallapoosa	Tallapoosa	45A	280	Reservoir Embayment
MARE-7	Nonwadeable Boat	32.926389	-85.877778	Coley Ck (Martin)	N	Deepest point, main creek channel, Coley Creek embayment, approx. 0.5 miles upstream of lake confluence.	Tallapoosa	Tallapoosa	45A	9.26	Reservoir Embayment
MARE-8	Nonwadeable Boat	32.878056	-85.943611	Elkahatchee Ck (Martin)	N	Deepest point, main creek channel, Elkahatchee Creek embayment, approximately 0.5 miles downstream of Elkahatchee/Sugar Creek confluence.	Tallapoosa	Tallapoosa	45A	50	Reservoir Embayment
MARE-9	Nonwadeable Boat	32.833889	-85.841389	Manoy Ck (Martin)	N	Deepest point, main creek channel, Manoy Creek embayment, approx. 1.0 mile upstream of lake confluence.	Tallapoosa	Tallapoosa	45A	13.1	Reservoir Embayment
MB-2A	Nonwadeable Boat	30.1718	-88.04895	Gulf Of Mexico	N	Mobile ship channel just south of Sand Island Light in the Gulf of Mexico at buoy 10	Baldwin	Mobile	9999		Ocean
MB-3A	Nonwadeable Boat	30.28407	-87.85137	Bon Secour Bay	N	Intracoastal Waterway in Bon Secour Bay at channel marker 127.	Baldwin	Mobile	9999		Estuary
MB-9	Nonwadeable Boat	30.40598	-88.06662	Mobile Bay	N	Southwest Mobile Bay South of Denton Reef	Mobile	Mobile	9999		Estuary
MBFB-1	Wadeable-Bioassessments	33.872403	-86.923778	Mulberry Fk	N	Mulberry Fork at CR 17	Blount	Black Warrior	68E	488.13	River/Stream
MCNG-2		32.64003	-87.92246	McConnico Ck	N	McConnico Creek at CR 69	Greene	Tombigbee	65B	18.5	River/Stream
MFBN-2	Wadeable-Bioassessments	34.541	-87.3571	Muddy Fk	N	Muddy Fork of Big Nance Creek @ Lawrence Co. Rd. 236.	Lawrence	Tennessee	71G	49.34	River/Stream
MGRB-9	Nonwadeable Boat	30.3902	-87.8082	Magnolia R	N	Magnolia River downstream of Noltie Creek.	Baldwin	Mobile	75A	39.4	Coastal River/Stream
MILP-1	Wadeable-Bioassessments	32.68851	-87.21752	Mill Ck	N	Mill Ck @ AL Hwy 183	Perry	Cahaba	65I	23.45	River/Stream
MILT-1	Wadeable-Bioassessments	32.49542	-85.86883	Mill Ck	N	Mill Creek at Co Rd 51 crossing near Tallapoosa/Macon Co line	Tallapoosa	Tallapoosa	65I	8.05	River/Stream
MLKM-1		30.64021	-88.20101	Milkhouse Ck	N	Milkhouse Ck @ Cottage Hill Rd.County: MOBILE, Alabama Ecoregion: 65F Ichthyoregion: Southern Plains	Mobile	Mobile	65F	6.53	River/Stream
MLKM-1	Wadeable-Bioassessments	30.64021	-88.20101	Milkhouse Ck	N	Milkhouse Ck @ Cottage Hill Rd.County: MOBILE, Alabama Ecoregion: 65F Ichthyoregion: Southern Plains	Mobile	Mobile	65F	6.53	River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
MLKM-2	Wadeable-Bioassessments	30.6751	-88.20938	Milkhouse Ck	N	Milkhouse Creek @ Pine Run Rd. County: MOBILE, Alabama Ecoregion: 65F Ichthyoregion: Southern Plains	Mobile	Mobile	65F	2.16	River/Stream
MO-1A	Nonwadeable Boat	30.8364	-87.94406	Mobile R	N	Mobile River at L&N Railroad crossing.	Baldwin	Mobile	75I	43400	Coastal River/Stream
MO-2	Nonwadeable Boat	30.69137	-88.03646	Mobile R	N	Mobile River at Government Street (Bankhead Tunnel) in Mobile at Alabama State Docks.	Mobile	Mobile	75K	43700	Coastal River/Stream
MOBB-1	Nonwadeable Boat	30.6276	-87.9548	Mobile Bay	N	North east Mobile Bay.	Baldwin	Mobile	9999		Estuary
MOBM-1	Nonwadeable Boat	31.0137	-88.01853	Mobile R	N	Mobile River at Bucks near the MAWSS water intake	Mobile	Mobile	75I	43293.2	River/Stream
MSHC-1	Wadeable-Bioassessments	33.41635	-85.80271	Mill Shoal Ck	N	Mill Shoal Ck at Nubbin Ck Rd	Clay	Tallapoosa	45D	1.18	River/Stream
MUDF-3	Wadeable-Bioassessments	34.466587	-87.740965	Mud Ck	N	Mud Ck at Franklin CR 63	Franklin	Tennessee	71G	24.1	River/Stream
MULD-1	Wadeable-Bioassessments	32.58278	-86.90361	Mulberry Ck	N	Dallas Co. Road 52 Bridge	Dallas	Alabama	65I	203.51	River/Stream
NEWM-2	Wadeable-Bioassessments	33.932472	-87.679778	New R	N	New River @ US Hwy 78	Marion	Tombigbee	68F	58.66	River/Stream
NUBC-1	Wadeable-Bioassessments	33.39607	-85.81711	Nubbin Ck	N	Nubbin Creek at Nubbin Creek Road	Clay	Tallapoosa	45A	1.13	River/Stream
OAKC-1	Wadeable-Bioassessments	32.83413228	-86.04024679	Oakachoy Ck	N	Oakachoy Creek at highway 259 crossing	Coosa	Tallapoosa	45A	16.64	River/Stream
OGLL-1	Nonwadeable Boat	32.552167	-85.443	Lake Ogletree Res	N	Deepest point, main channel, dam forebay	Lee	Tallapoosa	45B	31.58	Reservoir
OSTB-1	Wadeable-Bioassessments	33.096922	-85.798929	Osborn Ck	N	Osborn Creek at Bluff Springs Road	Tallapoosa	Tallapoosa	45A	10.5	River/Stream
OSTB-1	W-Bioassessment	33.096922	-85.798929	Osborn Ck	N	Osborn Creek at Bluff Springs Road	Tallapoosa	Tallapoosa	45A	10.5	River/Stream
PDBB-5	Nonwadeable Grab-Shallow	30.69047	-87.44026	Perdido R	N	Perdido River at Barrineau Park Rd. on AL/FL line (off State Highway 112)	Baldwin	Perdido	65F	393.31	River/Stream
PEAG-2	Nonwadeable Grab-Shallow	31.112002	-86.09937	Pea R	N	Pea River at State Highway 52 (near Samson)	Geneva	Choctawhatchee	65G	1181.59	River/Stream
PEVS-3	Wadeable-Bioassessments	33.2612668	-86.79531696	Peavine Ck	N	Peavine Ck @ Simmsville Rd	Shelby	Cahaba	67H	10.2	River/Stream
PICL-1	Nonwadeable Boat	34.78814247	-87.69708993	Cypress Ck (Pickwick)	N	Deepest point, main creek channel, Cypress Creek embayment, approximately 0.5 mile upstream of AL Hwy 20.	Lauderdale	Tennessee	71G	212.79	Reservoir Embayment
PICL-11	Wadeable-Water Quality Sampling	34.80806	-87.70056	Cypress Ck	N	Lauderdale Co. Rd. 14	Lauderdale	Tennessee	71F	209.9	River/Stream
PICL-2	Nonwadeable Boat	34.739444444	-87.73083333	Spring Ck (Pickwick)	N	Spring Creek embayment approximately 1 mile upstream of Pickwick Reservoir confluence.	Colbert	Tennessee	71G	107	Reservoir Embayment

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
PICL-3	Nonwadeable Boat	34.746944 4	-87.86388889	Cane Ck (Pickwick)	N	Cane Creek embayment approximately 1 mile upstream of confluence with Tennessee River.	Colbert	Tennessee	71G	58.9	Reservoir Embayment
PICL-4	Nonwadeable Boat	34.926244 7	-88.04679798	Second Ck (Pickwick)	N	Deepest point, main creek channel, Second Creek embayment, approximately one mile upstream of CR 14 bridge.	Lauderdale	Tennessee	65J	71.3	Reservoir Embayment
PNDC-10	Wadeable-Bioassessments	34.789578 41	-87.64391695	Pond Ck	N	Pond Creek at mouth upstream of TVA trail bridge	Colbert	Tennessee	71G	32.86	River/Stream
PNDC-2	Nonwadeable Grab-Shallow	34.748351 93	-87.58233723	Pond Ck	N	Pond Creek upstream of Wise Alloys (Reynolds) process and stormwater outfall #004.	Colbert	Tennessee	71G	16.5	River/Stream
PNDC-4A	Wadeable-Bioassessments	34.76196	-87.63191	Pond Ck	N	County: COLBERT, Alabama Ecoregion: 71g Ichthyoregion: Tennessee Valley	Colbert	Tennessee	71G	21.4	River/Stream
PNDC-6	Wadeable-Water Quality Sampling	34.773279	-87.636037	Pond Ck	N	Pond Creek at Franklin D Roosevelt Drive	Colbert	Tennessee	71G	30.3	River/Stream
PNDC-7	Wadeable-Bioassessments	34.736072	-87.529519	Pond Ck	N	Pond Creek at County Line Rd	Colbert	Tennessee	71G	7.22	River/Stream
PRRJ-5	Wadeable-Bioassessments	34.71325	-86.30333	Paint Rock R	N	Paint Rock River on private property east of AL Hwy 65.	Jackson	Tennessee	71G	272.41	River/Stream
PSYF-1	Nonwadeable Grab-Shallow	34.306695 37	-87.59186275	Posey Ck	N	Posey Cr @ Franklin Co Rd 11.	Franklin	Tennessee	68E	11.23	River/Stream
PURS-1	Nonwadeable Boat	33.459449	-86.667274	Purdy Res	N	Lower reservoir. Deepest point, main river channel, dam forebay .	Shelby	Cahaba	67F	42.1	Reservoir
PURS-2	Nonwadeable Boat	33.481067	-86.628783	Purdy Res	N	Upper reservoir. Deepest point, main river channel, immed. before Irondale Bridge.	Jefferson	Cahaba	67F	29.1	Reservoir
PURW-3	Wadeable-Bioassessments	31.9559	-87.3375	Pursley Ck	N	Pursley Creek At Alabama Highway 41	Wilcox	Alabama	65D	64.19	River/Stream
PYCF-1	Wadeable-Bioassessments	34.46985	-87.72415	Payne Ck	N	Payne Creek at Herrington Cr Rd downstream of confluence with Harris Creek	Franklin	Tennessee	71G	8.74	River/Stream
RLHR-1	Nonwadeable Boat	33.264059	-85.61267	Harris Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Randolph	Tallapoosa	45A	1450	Reservoir
RLHR-2	Nonwadeable Boat	33.318433	-85.581052	Harris Res	N	Mid reservoir. Deepest point, main river channel, immed. upstream of Tallapoosa River/Little Tallapoosa River confluence.	Randolph	Tallapoosa	45A	794	Reservoir
RLHR-3	Nonwadeable Boat	33.41002	-85.593897	Harris Res	N	Upper reservoir. Deepest point, main river channel, immed. downstream of Randolph Co. Hwy 82 bridge.	Randolph	Tallapoosa	45A	740	Reservoir
RLHR-4	Nonwadeable Boat	33.343141	-85.544351	Little Tallapoosa R (RL Harris)	N	Deepest point, Little Tallapoosa River channel, immediately downstream of Randolph Co. Hwy 29.	Randolph	Tallapoosa	45A	591	Reservoir Embayment
RLHR-5	Nonwadeable Boat	33.340833	-85.509722	Wedowee Ck (RL Harris)	N	Deepest point, main creek channel, Wedowee Creek embayment, approx. 0.5 miles upstream of lake confluence.	Randolph	Tallapoosa	45A	50.8	Reservoir Embayment

Appendix D. Description of each sampling location.

Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
RLHR-6	Nonwadeable Boat	33.341389	-85.606389	Mad Indian Ck (RL Harris)	N	Deepest point, main creek channel, Mad Indian Creek embayment, approx. 0.5 miles upstream of lake confluence.	Randolph	Tallapoosa	45A	30.9	Reservoir Embayment
RNSB-1		30.95813	-87.82673	Rains Ck	N	Rains Ck @ AL Hwy 59	Baldwin	Mobile	65F	11.96	River/Stream
RPCL-1	Wadeable-Bioassessments	32.656848	-85.662171	Ropes Ck	N	Ropes Creek at Lee County Road 066	Lee	Tallapoosa	45B	3.56	River/Stream
SCRL-2	Wadeable-Bioassessments	34.29843	-86.11664	Scarham Ck	N	Scarham Creek at Marshall County Rd. 372 (McVille Rd.)	Marshall	Tennessee	68D	54.51	River/Stream
SF-1	Wadeable-Bioassessments	34.285583	-87.399056	Sipsey Fk	N	Sipsey Fork at Winston Co. Rd. 60 (Cranal Rd.)	Winston	Black Warrior	68E	89.19	River/Stream
SH-1A		33.35527802	-86.890556	Shades Ck	N	Shades Creek @ Jefferson CR 6 (Parkwood Dr)	Jefferson	Cahaba	67G	44.28	River/Stream
SH-1A	Wadeable-Bioassessments	33.35527802	-86.890556	Shades Ck	N	Shades Creek @ Jefferson CR 6 (Parkwood Dr)	Jefferson	Cahaba	67G	44.28	River/Stream
SHDJ-6	Wadeable-Bioassessments	33.32586	-86.94863	Shades Ck	N	Shades Creek at Dickey Springs Road	Jefferson	Cahaba	67G	71.3	River/Stream
SHLC-3	Wadeable-Water Quality Sampling	33.72529	-85.60115	Shoal Ck	N	Shoal Ck at Forest Service Rd 500, in Talladega National Forest	Cleburne	Coosa	45D	17.9	River/Stream
SHLL-2	Wadeable-Water Quality Sampling	35.02403	-87.57899	Shoal Ck	N	Shoal Creek at Iron City Road in Iron City, Tennessee, at USGS gage # 03588500	Lawrence	Tennessee	71F	348	River/Stream
SHLS-4	Wadeable-Bioassessments	33.12390925	-86.84431385	Shoal Ck	N	Shoal Ck @ Montevallo Rd (Hwy 119)	Shelby	Cahaba	67F	11.5	River/Stream
SINL-1	Nonwadeable Boat	34.563491466	-87.28256026	Sinking Ck	N	Sinking Cr @ Co Rd 249. Deepest point, main channel	Lawrence	Tennessee	71J	3.39	River/Stream
SLAM-22C	Wadeable-Bioassessment	34.212260666	-86.27231858	Slab Ck	N	@ unnamed Marshall Co Rd nr Douglas	Marshall	Black Warrior	68D	23.48	River/Stream
SLAM-22C	Wadeable-Bioassessments	34.212260666	-86.27231858	Slab Ck	N	@ unnamed Marshall Co Rd nr Douglas	Marshall	Black Warrior	68D	23.48	River/Stream
SLRL-1	Wadeable-Bioassessments	34.9083	-87.0298	Sulphur Ck	N	Sulphur Cr at unnamed Limestone Co. Rd. (Easter Ferry Road Bridge)	Limestone	Tennessee	71H	17.53	River/Stream
SLTC-1		31.44222	-87.87157	Salt Ck	N	Salt Cr at Clarke CR 15	Clarke	Tombigbee	65F	11.31	River/Stream
SNEG-1		32.6676	-87.81313	S Needham Ck	N	S. Needham Cr at Greene CR 25	Greene	Black Warrior	65B	7	River/Stream
SO-2	Nonwadeable Boat	32.666171	-85.437855	Sougahatchee Lake Res	N	Deepest point, main channel, dam forebay; Opelika Water Treatment Plant-Sougahatchee Lake.	Lee	Tallapoosa	45B	18.8	Reservoir
SOGL-1	Wadeable-Bioassessments	32.6267	-85.588	Sougahatchee Ck	N	Sougahatchee Creek @ Lee Co. Rd. 188. at USGS gaging station	Lee	Tallapoosa	45B	70.05	River/Stream
SPD-1	Wadeable-Bioassessments	32.3222	-86.9063	Soapstone Ck	N	Soapstone Ck at US 80 east of Selma	Dallas	Alabama	65B	20.89	River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
SPGC-3	Wadeable-Bioassessments	34.620154377	-87.62227983	Spring Ck	N	Spring Cr @ Co Rd 77.	Colbert	Tennessee	71J	27.4	River/Stream
SPYF-1	Wadeable-Bioassessments	33.76405	-87.76046	Sipsey R	N	Sipsey River at Alabama Highway 102	Fayette	Tombigbee	65I	225	River/Stream
SPYF-6	Nonwadeable Grab-Shallow	33.846296144	-87.72418944	Sipsey R	N	Sipsey R @ Co Rd 95	Fayette	Tombigbee	65I	155	River/Stream
SSTM-1		30.99354	-88.02583	Sisters Ck	N	Sisters Ck @ AL HWY 43	Mobile	Mobile	75I	3.49	River/Stream
STVW-1	Wadeable-Bioassessments	31.838031555	-86.90902773	Sturdivant Ck	N	Sturdivant Cr @ AL Hwy 10.	Wilcox	Alabama	65D	52.11	River/Stream
STXB-3	Wadeable-Water Quality Sampling	30.60532	-87.547	Styx R	N	Styx River at Baldwin County Rd. 87 (near Elsanor)	Baldwin	Perdido	65F	190.67	River/Stream
SWFA-1	Wadeable-Bioassessments	32.670577	-86.679862	Swift Ck	N	Swift Creek at Autauga CR 24	Autauga	Alabama	65I	41.71	River/Stream
SWFA-2	Wadeable-Bioassessments	32.681722	-86.68471	Swift Ck	N	Swift Creek at Autauga CR 67	Autauga	Alabama	65I	32.18	River/Stream
SWFC-1	Wadeable-Bioassessments	32.721466	-86.691608	Swift Ck	N	Swift Creek at Chilton Co.Rd. 24 nr Billingsley	Chilton	Alabama	65I	24.51	River/Stream
TA-2	Wadeable-Bioassessments	33.732723274	-85.372167	Tallapoosa R	N	Tallapoosa River @ bridge crossing east of Muscadine	Cleburne	Tallapoosa	45D	315.21	River/Stream
TARE-1	Nonwadeable Boat	32.43972	-86.19556	Tallapoosa R	N	Tallapoosa River, deepest point, main river channel. Montgomery Water Intake, approximately 3 miles upstream of HWY 231.	Montgomery	Tallapoosa	65P	4659.64	River/Stream
TART-1	Nonwadeable Grab-Shallow	32.97734	-85.73968	Tallapoosa R	N	Tallapoosa R. at Horseshoe Bend Rd. (AL Hwy 49). Talked to David Garrett. Gates open from 6:30-2:45 but call if different hours is needed.	Tallapoosa	Tallapoosa	45A	2057.6	River/Stream
TC-1	Nonwadeable Boat	30.533333	-88.123889	M Fk Deer R	N	Theodore Industrial Canal at AL Hwy 193 at Rangeline Rd.	Mobile	Mobile	75A	3.57	Coastal River/Stream
TC-2	Nonwadeable Boat	30.526495	-88.098243	Deer R	N	@ mouth of canal	Mobile	Mobile	75A	5.47	Coastal River/Stream
TENB-2	Nonwadeable Boat	30.760688	-87.923883	Tensaw R	N	Tensaw River approx. 0.3 miles ds of power line (near Blakely Park and Steam Mill Landing)	Baldwin	Mobile	75I	108	Coastal River/Stream
TENR-215	Nonwadeable Boat	34.9983	-88.1989	Tennessee R	N	Pickwick Reservoir on the Tennessee River at mile 215.1	Lauderdale	Tennessee	65J	32800	River/Stream
TENR-259	Nonwadeable Boat	34.79493	-87.63524	Pickwick Res	N	CLOSE TO WILSON DAM TAILRACE AT TRM 259.0	Lauderdale	Tennessee	71G	30700	Reservoir
TENR-274	Nonwadeable Boat	34.801491722	-87.39749046	Tennessee R	N	Tennessee River below Wheeler Dam	Lawrence	Tennessee	71F	199	River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
TENR-417	Nonwadeable Boat	34.994013 87	-85.69832686	Tennessee R	N	At AL/TN stateline just upstream of Long Island at RM 417.	Jackson	Tennessee	68B	22700	River/Stream
THUE-1	Nonwadeable Boat	32.537629	-85.88931	Thurlow Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Elmore	Tallapoosa	65I	3310	Reservoir
TLCW-14		31.55314	-88.10193	Tauler Ck	N	@ Washington Co. Rd. 34 crossing.	Washington	Tombigbee	65F	19.3	River/Stream
TLRC-1	Wadeable-Water Quality Sampling	33.62278	-85.51333	Tallapoosa R	N	Cleburne Co. Rd. 18	Cleburne	Tallapoosa	45D	447.87	River/Stream
TM-1	Nonwadeable Boat	30.723983	-88.059119	Threemile Ck	N	Three Mile Creek between US Hwy 43 & railroad crossing	Mobile	Mobile	75A	27.6	Coastal River/Stream
TMCM-3	Wadeable-Water Quality Sampling	30.7063	-88.15111	Threemile Ck	N	Three Mile Creek at Spring Hill Ave.	Mobile	Mobile	65F	10.03	River/Stream
TN-4A	Nonwadeable Boat	35.01415	-86.99465	Elk R	N	Elk River at Veto Rd. (near Prospect TN)	Giles	Tennessee	71H	1805	River/Stream
TUKW-1	Wadeable-Bioassessments	32.03694	-87.605	Turkey Ck	N	Wilcox Co. Road 3 north of Pine Hill	Wilcox	Alabama	65D	74.66	River/Stream
TURB-1		30.42191	-87.84393	Turkey Br	N	Turkey Branch at Baldwin Co. Rd. 181	Baldwin	Mobile	75A	5.79	River/Stream
TURB-1	Wadeable-Bioassessments	30.42191	-87.84393	Turkey Br	N	Turkey Branch at Baldwin Co. Rd. 181	Baldwin	Mobile	75A	5.79	River/Stream
UPHM-3	Wadeable-Bioassessments	32.47751	-85.69554	Uphapee Ck	N	Uphapee Creek at State Highway 81 (near Tuskegee)	Macon	Tallapoosa	65I	332.68	River/Stream
UTCB-1	Wadeable-Bioassessments	32.14955	-85.6417	Old Town Ck	N	Old Town Creek at County Road 30.	Bullock	Tallapoosa	65D	9.07	River/Stream
UTCB-1	W-Bioassessment	32.14955	-85.6417	Old Town Ck	N	Old Town Creek at County Road 30.	Bullock	Tallapoosa	65D	9.07	River/Stream
UTET-1	Wadeable-Bioassessments	33.023868	-85.679021	Emuckfaw Ck	Y	Unnamed Trib to Emuckfaw Creek east of Zana at Germany Ferry Road	Tallapoosa	Tallapoosa	45A	1.2	River/Stream
UTJR-2	Nonwadeable Boat	33.18632	-85.40629	Jones Ck (Crystal Lake)	Y	Crystal Lake near Roanoke in Randolph County off of Hwy 431. Deepest point, main channel, dam forebay	Randolph	Tallapoosa	45A	3.21	Upland Impoundment
UTOT-1	Wadeable-Bioassessments	32.31234	-85.89582	Old Town Ck	Y	Unnamed trib to Old Town Creek at County Road 2.	Macon	Tallapoosa	65B	0.86	River/Stream
UTOT-1	W-Bioassessment	32.31234	-85.89582	Old Town Ck	Y	Unnamed trib to Old Town Creek at County Road 2.	Macon	Tallapoosa	65B	0.86	River/Stream
UTOT-2	Wadeable-Bioassessments	32.290282	-85.869581	Old Town Ck	Y	Unnamed trib to Old Town Creek at County Road 2.	Macon	Tallapoosa	65B	0.62	River/Stream
UTOT-2	W-Bioassessment	32.290282	-85.869581	Old Town Ck	Y	Unnamed trib to Old Town Creek at County Road 2.	Macon	Tallapoosa	65B	0.62	River/Stream
UTTT-1	Wadeable-Bioassessments	32.953001	-85.683906	Tallapoosa R	Y	Unnamed trib to the Tallapoosa River at Buttston Road	Tallapoosa	Tallapoosa	45A	11.3	River/Stream
UTTT-1	W-Bioassessment	32.953001	-85.683906	Tallapoosa R	Y	Unnamed trib to the Tallapoosa River at Buttston Road	Tallapoosa	Tallapoosa	45A	11.3	River/Stream
VALJ-8	Wadeable-Bioassessments	33.44742	-87.12187	Valley Ck	N	Jefferson Co. Rd. near Oak Grove	Jefferson	Black Warrior	68F	148.49	River/Stream

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
VI-3	Nonwadeable Grab-Shallow	33.54797363	-86.925667	Village Ck	N	Village Creek at Jefferson Co Rd 65.	Jefferson	Black Warrior	68F	52.22	River/Stream
WASP-1	Wadeable-Bioassessments	32.569972 2	-87.39136111	Washington Ck	N	Upstream of Hwy 183 bridge SW of Marion, AL;Validated Ecoregional Reference Site	Perry	Alabama	65A	15.78	River/Stream
WB-1	Nonwadeable Boat	30.41469	-87.82583	Fish R	N	Weeks Bay at US Hwy 98 (Marina).	Baldwin	Mobile	75A	153	Coastal River/Stream
WBTM-70	Wadeable-Water Quality Sampling	34.12742	-87.7378	W Br Buttahatchee R	N	West Branch of Buttahatchee R @ US Hwy 278	Marion	Tombigbee	68E	38.25	River/Stream
WDFA-1	Nonwadeable Boat	32.327311	-86.781961	Woodruff Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Autauga	Alabama	65P	16200	Reservoir
WDFA-2	Nonwadeable Boat	32.344313	-86.539721	Woodruff Res	N	Deepest point, main river channel, immed. downstream of Tallawassee Creek confluence.	Lowndes	Alabama	65P	15900	Reservoir
WDFA-2A	Nonwadeable Boat	32.41142	-86.40836	Woodruff Res	N	Deepest point, main river channel, immediately upstream of Hwy 31 bridge.	Elmore	Alabama	65P	15099.17	Reservoir
WDFA-3	Nonwadeable Boat	32.441435	-86.32512	Woodruff Res	N	Deepest point, main river channel, immed. downstream of Jackson Lake.	Montgomery	Alabama	65P	15000	Reservoir
WDFA-4	Nonwadeable Boat	32.371148	-86.4584	Catoma Ck (Woodruff)	N	Deepest point, main creek channel, Catoma Creek embayment, approx. 0.5 miles upstream of lake confluence.	Montgomery	Alabama	65P	359	Reservoir Embayment
WDFA-5	Nonwadeable Boat	32.340166	-86.499168	Pintlala Ck (Woodruff)	N	Deepest point, main creek channel, Pintlalla Creek embayment, approx. 0.5 miles upstream of lake confluence.	Lowndes	Alabama	65P	265	Reservoir Embayment
WDFA-6	Nonwadeable Boat	32.411077	-86.632113	Swift Ck (Woodruff)	N	Deepest point, main creek channel, Swift Creek embayment, approx. 0.5 miles upstream of lake confluence.	Autauga	Alabama	65P	155	Reservoir Embayment
WDFA-7	Nonwadeable Boat	32.351177	-86.673437	Cypress Ck (Woodruff)	N	Deepest point, main creek channel, Cypress Creek embayment, approx. 0.5 miles upstream of lake confluence.	Lowndes	Alabama	65P	11.2	Reservoir Embayment
WEBL-1	Wadeable-Bioassessments	32.67968	-85.5827	Webb Br	N	Webb Branch at Lee County Road 188	Lee	Tallapoosa	45B	7.89	River/Stream
WEBL-1A	W-Bioassessment	32.689494	-85.585099	Webb Br	N	Webb Branch at Lee County Road 72.	Lee	Tallapoosa	45B	9.74	River/Stream
WEIC-12	Nonwadeable Boat	34.202441	-85.452402	Weiss Res	N	Deepest point, main river channel, Alabama/Georgia state line.	Cherokee	Coosa	67G	4294.98	Reservoir
WILL-1	Nonwadeable Boat	34.77935	-87.39315	Big Nance Ck (Wilson)	N	Deepest point, main creek channel, Big Nance Creek embayment, immediately upstream of AL Hwy 101 bridge.	Lawrence	Tennessee	71G	194	Reservoir Embayment
WILL-2	Nonwadeable Boat	34.8227293	-87.40888241	Bluewater Ck (Wilson)	N	Deepest point, main creek channel, Bluewater Creek embayment, approximately one mile upstream of lake confluence.	Lauderdale	Tennessee	71F	139	Reservoir Embayment
WILL-3	Nonwadeable Boat	34.77305556	-87.43027778	Town Ck (Wilson)	N	Deepest point, main creek channel, Town Creek embayment, approximately on mile downstream of CR 314 bridge.	Colbert	Tennessee	71G	235	Reservoir Embayment

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Station	Sampling Protocol	Latitude	Longitude	Waterbody Name	UT	Location	County	Basin	Eco	Sq Mi	Station Type
WILL-4	Nonwadeable Boat	34.851826944	-87.56931843	Shoal Ck (Wilson)	N	Deepest point, main creek channel, Shoal Creek embayment, immediately upstream of US Hwy 72 bridge.	Lauderdale	Tennessee	71F	490	Reservoir Embayment
WKBB-1	Nonwadeable Boat	30.3975	-87.833611	Weeks Bay	N	Central Weeks Bay about 1.4 miles north of the mouth.	Baldwin	Mobile	75A	154	Estuary
WLTB-1	Wadeable-Bioassessments	32.83971	-87.18488	Walton Br	N	Walton Ck @ CR 51	Bibb	Cahaba	65I	11.31	River/Stream
YATE-1	Nonwadeable Boat	32.576679	-85.889675	Yates Res	N	Lower reservoir. Deepest point, main river channel, dam forebay.	Tallapoosa	Tallapoosa	45B	3290	Reservoir
YATE-2	Nonwadeable Boat	32.60766	-85.88221	Sougahatchee Ck (Yates)	N	Deepest point, main creek channel, Sougahatchee Creek embayment. Approximately 0.8 miles upstream from the Tallapoosa River confluence.	Tallapoosa	Tallapoosa	45B	217	Reservoir Embayment
YATE-3	Nonwadeable Boat	32.6432	-85.8969	Channahatchee Ck (Yates)	N	Deepest point, main creek channel, Channahatchee Creek embayment, approx. 0.5 miles upstream of lake confluence.	Elmore	Tallapoosa	45B	44.4	Reservoir Embayment
YATE-4	Nonwadeable Boat	32.67943	-85.91125	Yates Res	N	Martin Dam Tailrace	Tallapoosa	Tallapoosa	45A	2980	Reservoir
YELH-3B		32.53918	-87.77667	Yellow Ck	N	Yellow Creek @ unnamed CR approx. 1 mi us of Arcola Public Use Area	Hale	Black Warrior	65A	6.92	River/Stream
YERC-3	Nonwadeable Grab-Shallow	31.0107	-86.5375	Yellow R	N	Deepest point, main river channel, at Covington Co. Rd. 4 bridge.	Covington	Yellow	65F	461.23	River/Stream

Appendix E. Relationship between waterbody types in the Consolidated Assessment and Listing Methodology (CALM), the SWQMP Sampling Protocols, and ALAWADR Station Types. Mimimum data requirements by CALM Waterbody Type and ALAWADR Station Type, based on OAW, PWS, S, and F&W use classification requirements.

CALM Waterbody Type	SWQMP Sampling Protocol	ALAWADR Station Type	Required Minimum Parameters			
			HA[a]	Conv Paras[b]	Bacteriological Samples[c]	Inorganic (Metals)
Wadeable River or Stream	Wadeable-Bio (BIO-W)	River/Stream	1	8	8[d]	3[h]
	Wadeable-Water (H2O-W)					
	Nonwadeable Grab-Shallow (NWG-Shallow)					
Non-wadeable River or Stream	Nonwadeable Boat Stations (NWB)	River/Stream		8	8[d]	3[h]
	Nonwadeable Grab-Deep (NWG-Deep)					
Reservoirs and Embayments	Nonwadeable Boat Stations (NWB)	Reservoir; Reservoir Embayment		7[e]	7[d, f]	
	Nonwadeable Grab-Shallow (NWG-Shallow)					
Wadeable Estuary or Coastal Water	Wadeable-Coastal (W-Coastal)	Coastal River/Stream; Ocean		8	8[g]	
Nonwadeable Estuary or Coastal Water	Nonwadeable Boat-Coastal (NWB-Coastal)	Coastal River/Stream; Ocean		8[e]	8[g]	

a. Habitat Assessment: Generally conducted during a macroinvertebrate or fish bioassessment

b. Conventional Parameter Samples

c. Samples collected in waters classified for shellfish harvesting are analyzed for Fecal coliform, in addition to other required pathogen analysis.

d. Samples analyzed for E. coli

e. Conv parameters include two Chl a-growing season means

f. 4 samples collected, in reservoir embayments only

g. Samples analyzed for Enterococcus

h. four samples generally collected at Category 2 and 3 waters as part of SWQMP

Appendix F. Summary of minimum data/sampling requirements by sampling protocol.

Minimum data / sampling requirements and wadeable-bio rivers and streams: W-BIO

Sampling Protocol	**W-BIO**		
Protocol Definition	A station is classified as wadeable-bio if the 300 ft. sampling reach is completely wadeable (~≤3 ft) ***AND*** the 300 ft reach upstream and downstream of the sampling location are also completely wadeable (~≤3 ft). Based on historical data, this protocol is generally appropriate to use in watersheds ranging between 5-70 sq miles.		
SWQMP Parameter	**SWQMP Parameter**	**Sampling Frequency**	**Comments**
FLOW	**Flow: USGS Gage**	8X monthly (Mar-Oct)	measured during ALL STATION VISITS; parameter is selected separately
	Flow: Wadeable		
Conventional Parameters	**Conventional Parameters-W**		Conventional and Bacteriological paras listed in CALM to SWQMP Para
	Conventional Parameters-Reference W		CALM Conv Paras PLUS TOC and COD
	Blackwater Parameters		For sites located in ecoregion 65 or 75; Blackwater Paras (DOC and Color)
	Metals and Hardness	4X monthly (Mar-Oct)	Inorganic (Metals) listed in CALM to SWQMP Paras
Bioassessment	**Macroinvertebrate Bioassessment**	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	generally in non-SHU watersheds, or to compliment study sites where inverts collected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	generally in SHU watersheds, or to compliment study sites where IBIs conducted

Minimum data / sampling requirements and wadeable-bio rivers and streams: W-H2O

Sampling Protocol	**W-H2O**		
Protocol Definition	A station is classified as wadeable-H20 if water samples can be collected within the sampling reach, but the sampling reach is not completely wadeable; and/or, the 300 ft reach upstream and downstream of the sampling location are not wadeable. Based on historical data, this protocol is generally appropriate to use in watersheds ranging between 70-600 sq miles.		
SWQMP Parameter	**SWQMP Parameter**	**Sampling Frequency**	**Comments**
FLOW	**Flow: USGS Gage**	8X monthly (Mar-Oct)	measured during ALL STATION VISITS; parameter is selected separately
	Flow: Wadeable		
Conventional Parameters	**Conventional Parameters-W**		Conventional and Bacteriological paras listed in CALM to SWQMP Para
	Conventional Parameters-Reference W		Conv and bacteriological Paras PLUS TOC and COD
	Blackwater Parameters		for streams and rivers in ecoregions 65 and 75; COD and color
	Metals and Hardness	4X monthly (Mar-Oct)	
Bioassessment	**Macroinvertebrate Bioassessment**	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Appendix F. Summary of minimum data/sampling requirements by sampling protocol.

Minimum data / sampling requirements and wadeable-bio rivers and streams: NWG-S

Sampling Protocol	NWG-S		
Protocol Definition	NWG-S stations are < 10 ft. in depth, and sampled from a bridge or small boat. A minimum of 3 measurements		
SWQMP Parameter	SWQMP Parameter	Sampling Frequency	Comments
FLOW	Flow: USGS Gage Flow: ADCP	8X Monthly (Mar-Oct)	If gage present, flow downloaded and recorded on datasheet; ADCP Flow conducted on small number of stations; must be requested.
Conventional Parameters	Conventional Parameters NW-Grab		Conventional and Bacteriological paras listed in CALM to SWQMP Para; mid-depth or surface samples collected
	Conventional Parameters-Ref NW Grab		Conv and bacteriological Paras PLUS TOC and COD
	Blackwater Parameters		for streams and rivers in ecoregions 65 and 75; COD and color
	Metals and Hardness	4X Monthly (Mar-Oct)	
Bioassessment	Macroinvertebrate Bioassessment	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Minimum data / sampling requirements and wadeable-bio rivers and streams: NWG-D

Sampling Protocol	NWG-D		
Protocol Definition	NWG-D stations are ≥ 10 ft. in depth, and sampled from a bridge or small boat. If possible, full vertical profiles		
SWQMP Parameter	SWQMP Parameter	Sampling Frequency	Comments
FLOW	Flow: USGS Gage Flow: ADCP	8X Monthly (Mar-Oct)	If gage present, flow downloaded and recorded on datasheet; ADCP Flow conducted on small number of stations; must be requested.
Conventional Parameters	Conventional Parameters-NW Grab		Conventional and Bacteriological paras listed in CALM to SWQMP Para; mid-depth or surface samples collected
	Conventional Parameters-Ref NW Grab		as above plus ref reach paras (TOC and COD)
	Blackwater Parameters		for streams and rivers in ecoregions 65 and 75; COD and color
	Metals and Hardness	4X monthly (Mar-Oct)	Inorganic (Metals) listed in CALM to SWQMP Paras
Bioassessment	Macroinvertebrate Bioassessment	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Appendix F. Summary of minimum data/sampling requirements by sampling protocol.

Minimum data / sampling requirements and wadeable-bio rivers and streams: NWB

Sampling Protocol	NWB		
Protocol Definition	Samples should be collected as photic zone composites. Full vertical profiles should be measured. Nonwadeable		
SWQMP Parameter	SWQMP Parameter	Sampling Frequency	Comments
FLOW	Flow: USGS Gage Flow: ADCP	7X Monthly (Apr-Oct); E. coli and hardness (4X Monthly (Apr-Oct))	If gage present, flow downloaded and recorded on datasheet; ADCP Flow conducted on small number of stations; must be requested.
Conventional Parameters	Conventional Parameters-NWB		Full profile data logger measurements, photic zone composite water samples;
	Blackwater Parameters		for streams in 65 and 75; DOC and color
	AGPT	1X (generally Aug)	
Bioassessment	Macroinvertebrate Bioassessment	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Minimum data / sampling requirements and wadeable-bio rivers and streams: W-H2O-Coastal

Sampling Protocol	W-H2O-Coastal		
Protocol Definition	A station is classified as wadeable-H20-Coastal if it is tidally-influenced and meets the definition of W-H2O.		
SWQMP Parameter	SWQMP Parameter	Sampling Frequency	Comments
FLOW	Flow: USGS Gage Flow: Wadeable	8X Monthly (Mar-Oct)	measured during ALL STATION VISITS; parameter is selected
Conventional Parameters	Conventional Parameters Coastal-W		Conventional and Bacteriological paras listed in CALM to SWQMP Para: salinity is added as a data logger measurement; Enterococcus replaces E. coli
	Blackwater Parameters		For streams and rivers in ecoregions 65 and 75; COD and color
	Metals and Hardness	4X Monthly (Mar-Oct)	
Bioassessment	Macroinvertebrate Bioassessment	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Appendix F. Summary of minimum data/sampling requirements by sampling protocol.

Minimum data / sampling requirements and wadeable-bio rivers and streams: NWB-Coastal

Sampling Protocol	**NWB-Coastal**		
Protocol Definition	A station is classified as NWB-Coastal if it is tidally-influenced and meets the definition of NWB. ADEM defines		
SWQMP Parameter	**SWQMP Parameter**	**Frequency**	**Comments**
FLOW	**Flow: USGS Gage** **Flow: ADCP**	8X Monthly (Mar-Oct)	If gage present, flow downloaded and recorded on datasheet; ADCP Flow conducted on small number of stations; must be requested.
Conventional Parameters	**Conventional Parameters-NWB-Coastal**		Full profile data logger measurements, photic zone composite water samples
	Blackwater Parameters		for streams in 65 and 75; DOC and color
	Fecal Coliform		**Shellfish harvesting waters ONLY**
	Metals and Hardness	1X monthly (May or Jun)	**TBD**
Bioassessment	**Macroinvertebrate Bioassessment**	SWQMP Sampling Period; Habitat and macroinvert community assessments, in situ field parameters, and flow	Bioassessments are only routinely conducted in freshwater, single-channel, W-BIO (5-70 sq mi) streams; bioassessments outside of this range need to be discussed, and a study-specific reference reach may need to be selected
	Fish IBI Assessment	SWQMP Sampling Period; Habitat and fish community assessments, in situ field parameters, and flow	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
Conventional Lab Parameters - NWB	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	DRP/Ortho-P	
	E. coli	
	Hardness	
	NH3-N	
	NO3+NO2-N	
	Non-wadeable Field Data Sheet (FOD I Form 10)	
	Phosphorus, Total	
	TDS	
	TKN	
	TSS	
Conventional Parameters Coastal-W	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	Data logger (Dep, Temp-H2O, DO, pH, Cond, Salinity)	
	DRP/Ortho-P	
	Enterococcus	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	
	Sulfate	
	TDS	
	TKN	
	TSS	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	
Conventional Parameters NW-Grab	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	DRP/Ortho-P	
	E. coli	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	
	Sulfate	
	TDS	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
	TKN	
	TSS	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
Conventional Parameters-NWB-Coastal	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	Coastal Non-wadeable Field Data Sheet (FOD I-Form 12)	
	Data logger (Dep, Temp-H2O, DO, pH, Cond, Salinity)	
	DRP/Ortho-P	
	Enterococcus	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	
	TDS	
	TKN	
	TSS	
Conventional Parameters-Ref NW Grab	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	COD	
	DRP/Ortho-P	
	E. coli	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	
	Sulfate	
	TDS	
	TKN	
	Total Organic Carbon (TOC)	
	TSS	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	
Conventional Parameters-Reference W	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	COD	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	DRP/Ortho-P	
	E. coli	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
	Sulfate	
	TDS	
	TKN	
	Total Organic Carbon (TOC)	
	TSS	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	
Conventional Parameters-W	Alkalinity	
	CBOD-5/BOD-5	
	Chl a	
	Chloride	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	DRP/Ortho-P	
	E. coli	
	NH3-N	
	NO3+NO2-N	
	Phosphorus, Total	
	Sulfate	
	TDS	
	TKN	
	TSS	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	
Hardness	Hardness, mg/L	
Metals and Hardness	Total and Dissolved Aluminum (Al), µg/L	
	Total and Dissolved Antimony (Sb), µg/L	
	Total and Dissolved Arsenic^{+3} (As^{+3}), µg/L	
	Total and Dissolved Cadmium (Cd), µg/L	
	Total and Dissolved Chromium^{+3} (Cr^{+3}), µg/L	
	Total and Dissolved Copper (Cu), µg/L	
	Total and Dissolved Iron (Fe), µg/L	
	Total and Dissolved Lead (Pb), µg/L	
	Total and Dissolved Manganese (Mn), µg/L	
	Total and Dissolved Nickel (Ni), µg/L	
	Total and Dissolved Selenium (Se), µg/L	
	Total and Dissolved Silver (Ag), µg/Lug/l	
	Total and Dissolved Thallium (Tl), µg/L	
	Total and Dissolved Zinc (Zn), µg/L	
	Hardness, mg/L	
Flow-NW (ADCP)	Flow-NW (ADCP)	
Flow-USGS Gage	Flow-USGS Gage	
Flow-Wadeable (ADV)	Flow-Wadeable (ADV)	
Blackwater_Parameters	Color	
	Dissolved Organic Carbon (DOC)	
Habitat Survey Only	Appropriate flow (generally USGS or wadeable)	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	Phys Char, Substrate, WQ & HA Field Data Sheet w/ Datalogger Import (W or NW)	

Appendix G. List of individual parameters included in each SWQMP Parameter request.

SWQMP Parameter	Individual Parameters	Comments
Macroinvertebrate Assessment	Appropriate flow (generally USGS gage or wadeable)	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	Macroinvertebrate Assessment	
	Phys Char, Substrate, WQ & HA Field Data Sheet w/ Datalogger Import (W or NW)	includes habitat assessment
Fish IBI Survey	Appropriate flow	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	Fish IBI Survey	
	Phys Char, Substrate, WQ & HA Field Data Sheet w/ Datalogger Import	includes habitat assessment
72-hour DO	Continuous Data Logger Reading	
	Flow	
AGPT	AGPT	
Geomean E. coli Study	Appropriate Flow	2 sets of 5 SVs; total of 10 SVs
	Appropriate Form	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	Ecoli	
Intensive TSS-Rain Event Sampling	Continuous Data Logger Reading	
	Set of multiple TSS samples	
Low level Hg Only (Method 1631)	Low Level Mercury (EPA 1631E)	
Periphyton Survey	Appropriate Flow	
	Data logger (Dep, Temp-H2O, DO, pH, Cond)	
	Periphyton Bioassessment	
	Phys Char, Substrate, WQ & HA Field Data Sheet w/ Datalogger Import	includes habitat assessment
Pesticides, Semi-volatiles, Atrazine, Glyphosate	Appropriate flow (USGS gage or wadeable)	3 SVs, 1 each SV
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	3 SVs, 1 each SV
	Atrazine (Immunoassay)	3 SVs, 1 each SV
	Glyphosate (EPA547)	3 SVs, 1 each SV
	Organochlorine Pesticides (SW8081A)	3 SVs, 1 each SV
	Organophosphorus Cmpds (SW8141A)	3 SVs, 1 each SV
	Semivolatile Organics (SW8270C)	3 SVs, 1 each SV
Siltation Survey	Appropriate flow (USGS gage or wadeable)	
	Continuous Data logger (Dep, Turbidity, Temp-H2O, DO, pH, Cond)	
	Water Quality Field Data Sheet w/ Datalogger import (FOD I Form 8-DL)	
	Siltation Assessment	
Ultimate-BOD	CBOD/BOD - Ultimate	