

Volunteer Water Quality Monitoring: A How-to Guide for Coastal Alabama



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About This Manual

This manual provides information and documents to assist with planning and implementing a Volunteer Water Quality Monitoring Program. It is intended to serve as a trusted resource for establishing the program and as a point of reference thereafter. Additionally, this manual includes a number of resources to ease the process of developing a program so the focus can be directed on the primary objective – collecting and reporting water quality data. Because each watershed and monitoring program will have its own needs and challenges, readers are encouraged to use or edit any materials provided to best fit individual needs.

This manual was created with input from experienced volunteer monitors. Their input and wisdom is peppered throughout and greatly appreciated. Additionally, volunteer monitoring materials from the Environmental Protection Agency and Alabama Water Watch were valuable sources of information.

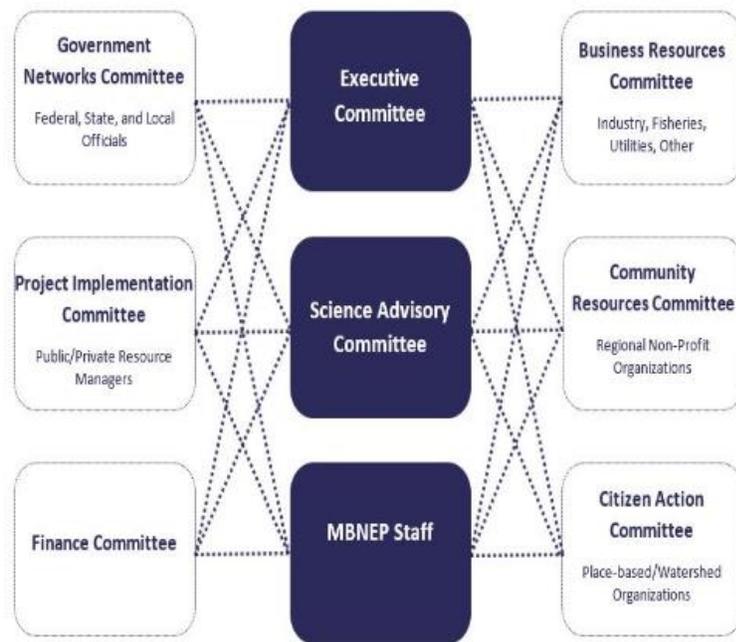
For questions, feedback, or more information regarding this manual or volunteer monitoring opportunities, please contact Mobile Bay National Estuary Program via phone at 251-431-6409 or via email at mbnep@mobilebaynep.com.

About the Mobile Bay National Estuary Program

Recognizing the importance of the Mobile Bay estuary and the threats posed to its health by local growth and development, a team led by the South Alabama Regional Planning Commission advocated for Mobile Bay’s inclusion into the National Estuary Program (NEP) in the 1990s. Established in 1995, the Mobile Bay National Estuary Program (MBNEP) is administered and funded by the U. S. Environmental Protection Agency (EPA) under provisions of a 1987 amendment to the Clean Water Act. The MBNEP is one of 28 National Estuary Programs, each considered vitally important to the environment, economy, and quality of life of the community surrounding its “Estuary of National Significance” and to the overall health of water and fishery resources nationwide.

The MBNEP works to implement a Comprehensive Conservation and Management Plan (CCMP) based on local input and supporting local priorities to protect six common values that are most important to our coastal quality of life: **Access** to open water/spaces for recreation and vistas; **Beaches and Shorelines**; **Fish and Wildlife**; **Heritage and Culture**; **Resiliency** (the

capacity of human and natural physical systems to rebound from unforeseen events); and **Water Quality**. The CCMP is a blueprint for conserving, protecting, and restoring the estuary through implementation in partnerships with citizens; local, state, and federal agencies; businesses and industries; conservation and environmental organizations; and academic institutions. We continue to engage these groups through a Management Conference of committees tasked with determining how to best implement the CCMP, treat our estuarine



waters, and manage their surrounding watersheds to ensure protection and conservation of the estuary for current and future generations.

With a strategy based on developing and implementing watershed management plans throughout coastal Alabama, the Community Action Committee (CAC) of the MBNEP Management Conference has adopted a strategy of developing a comprehensive volunteer monitoring program to build local knowledge about water quality in our creeks, streams, rivers and bays. The goals of this strategy are to provide an ongoing quality data source for measuring the health of the waters flowing through our coastal watersheds; to grow the cadre of citizen scientists in coastal

Alabama; and build the capacity and contributions of grassroots groups related to informing and implementing watershed management plans. The CAC, in partnership with grassroots groups throughout Mobile and Baldwin counties, does this by educating citizens about water quality issues related to their local areas; supporting existing and preparing new volunteer water quality monitors; providing an online platform for reporting and viewing collected data; and providing technical assistance and broad support to anyone interested or actively engaged in water quality monitoring and reporting. The MBNEP provides the CAC with a stable resource for supplying the tools necessary to monitor water quality including chemicals, kits, technical assistance, a forum for engaging with other monitors, and general monitoring support.

Why Volunteer Monitoring?

Today's society boasts unprecedented marvels of technology and automation to make simple tasks even simpler, but often less personal, including how water quality data is gathered. Automatic data collection methods serve as effective means of monitoring water quality, especially in remote or dangerous locations. However, automated monitoring equipment can be expensive to purchase and maintain. More importantly, it cannot provide the personal relationship a volunteer monitor may develop with their local river, creek or stream, nor can it be its voice, appreciate its value, or attend to its needs.



Water quality monitoring empowers people to use data for education, restoration, protection, and advocacy. **The success of a volunteer water quality monitoring program is dependent on volunteers who willingly and conscientiously offer their time to better the quality of life for their entire community.** These volunteers build community awareness of pollution

problems, help identify and restore problem sites, advocate for healthy watersheds, and increase the availability and amount of needed water quality information.

Five reasons to be a volunteer monitor

1. Comprehensive watershed planning for 31 priority watersheds in Mobile and Baldwin counties is underway. A watershed management plan outlines strategies to improve the health of a receiving waters without regard for the geopolitical borders limiting management. Volunteer monitoring data collected before, during, and after the completion of a watershed management plan is important because:
 - a. Data is needed to establish baseline conditions to better understand the unique trends, characteristics, and threats facing a watershed.
 - b. Monitoring data can be used to track the success or failure of implemented watershed management plan strategies or guide where additional focus is needed.
2. Budget constraints and other limitations often prevent government agencies from monitoring local waterways to track changes in water quality. Volunteer monitoring programs provide a valuable supplement to existing monitoring efforts and can alert government agencies to changing water quality conditions.

3. A well-planned monitoring program may uncover previously unrecognized water quality problems and help answer important questions to drive solutions.
4. Water quality monitoring is a **fun** and **meaningful** way to connect to your favorite, local waterway and give back to your community through volunteerism.
5. A waterbody's best ally is an engaged citizenry. When monitors foster personal relationships with their local river, creek, or stream, they are more likely to see its value and take care of it.

Defining Goals and Objectives

The first step in planning a volunteer water quality monitoring program is to determine a goal or goals. Consider these questions during the process: "Is my waterbody getting better or worse, and why?" "Has a watershed management plan been completed in my watershed?" If so, use the watershed management plan to assist framing program goals and objectives. A watershed management plan will include information related to water quality issues or management priorities that need addressing. To view or find out if your watershed has a completed plan, visit: http://www.mobilebaynep.com/the_watersheds or contact the Mobile Bay National Estuary Program at 251-431-6409.

Common Goals of Citizen Monitoring Programs

- To determine water quality changes through time.
- To educate the public about water quality issues.
- To supplement data collected by government agencies and water quality professionals.
- To provide early detection of water quality issues in areas not actively monitored.



Whatever your goal(s), remember to periodically evaluate the program, and, if necessary, refine or alter program goals and objectives to ensure useful and high-quality data is being collected.

Alabama Water Watch

One major hurdle to overcome when establishing a volunteer monitoring program is ensuring collected data is credible and respected. Often, government agencies, universities, and others are hesitant to use volunteer data without an approved quality assurance project plan (QAPP). The purpose of a QAPP is to document protocols for collecting and analyzing environmental data and to provide a guide for the type and quality of data needed for a specific decision or use. A QAPP helps the data user and monitoring project leaders ensure that collected data meet their needs and

that the quality control steps needed to verify this are built into the project from the beginning.



Creating an accepted QAPP can be a challenging and lengthy process. Fortunately, Alabama has a statewide, volunteer, water-quality-monitoring organization with an approved QAPP. Alabama Water Watch (AWW) is a statewide citizen volunteer program devoted to the development of water quality monitoring programs by:

- Educating citizens on water issues
- Training citizens to gather credible water data
- Empowering citizens to make a positive impact in their watershed

Alabama Water Watch's QAPP for collecting *Citizen Volunteer Water Chemistry Data* was approved most recently by the EPA in 2016. AWW addresses 24 elements of data collection and processing, database management, and approved certification procedures and test kits. AWW's experience and commitment to citizen involvement in watershed stewardship in Alabama began in 1992. The program also serves as a national and international model of volunteer water quality monitoring. The MBNEP supports and uses AWW programming to expand local volunteer water quality monitoring efforts. For more information about AWW or training opportunities visit: www.alabamawaterwatch.org.

Many AWW trainings are offered at no cost to potential volunteers. Trained AWW Water Chemistry Monitors should be re-certified after the first year and then every two years moving forward. Continuing Education Unit (CEU) credits can be obtained for workshop participation.

Developing a Monitoring Plan

With defined program goals in place, the next step is to develop a monitoring plan. AWW offers a “canned” volunteer monitoring program with approved testing kits, data forms, and data entry options to eliminate many steps of the plan development process. MBNEP recommends using the AWW approach for citizens organizing a volunteer monitoring program because:



1. AWW employs EPA-approved protocols,
2. AWW materials and training practices are well respected, and
3. AWW’s program model relieves much of the burden associated with creating a viable volunteer water quality monitoring program from scratch.

Furthermore, training workshops are free and several AWW trainers live in coastal Alabama. These trainers are willing to assist with program planning and training workshops, and provide guidance and technical support to new volunteer monitors.

Important Considerations

1. What to monitor?

Using the identified program goals and objectives, determine which testing parameters can be used to answer or address critical questions. AWW offers three certifications: Water Chemistry, Bacteriological, and Stream Biomonitoring. Consider program needs, budget, and participant capacity when determining your monitoring scope. For example, if you have a consistent problem with pathogens in your water of concern, perhaps only bacterial monitoring is necessary to meet your program goals and fit your budget.

2. Where to monitor?

- Getting to know your watershed is important. The better you know the watershed and its condition and needs, the better you can determine the number of locations and volunteers necessary to provide a representative picture of water quality over time. Check to see if your community has a current watershed management plan. Plans often include a map recommending citizen monitoring locations.
- Utilize both AWW and Water Rangers monitoring databases. Monitoring sites may already be established with substantial data sets, although currently inactive.

Consider locations with historic data first, if they fall within the area of concern. Here are the webpages for those two water quality monitoring databases.

- AWW - <http://www.alabamawaterwatch.org/water-data/>
- Water Rangers - <https://app.waterrangers.ca/>

3. Is an existing organization or group monitoring in your watershed?

Check to see if there is already an organization active in your watershed with a monitoring program. Check with AWW to see if any active monitors are in your watershed and with whom they are affiliated. If a group is active, avoid duplication! Work to efficiently combine efforts.

4. Other considerations for selecting monitoring sites.

- Conduct a stream walk. A great way to get to know your watershed is to walk or ride it to visually evaluate conditions and consider potential monitoring locations.
- Review maps of your watershed. Maps and aerial imagery can help you locate monitoring locations, tributaries, and hot spots of development in your watershed. Again, utilize watershed plans, AWW and Water Rangers, which have maps and functions to help you explore your watershed.
- The EPA offers several tools under the WATERS Program (Watershed Assessment, Tracking and Environmental Results System).
 - *How's My Waterway* allows users to quickly and clearly understand the conditions of a waterway, i.e., what is being checked, what was found, and what is being done. <https://watersgeo.epa.gov/mywaterway/>
 - MyWATERS Mapper allows users to inventory National Pollutant Discharge Elimination System permits, wetlands, and water quality assessments and impairments in a watershed. Data can also be accessed in detail or exported to Google Earth. <https://watersgeo.epa.gov/mwm/>
 - Surf Your Watershed helps you to identify your watershed and gather general information about water quality, impairments, and stream flow. <https://cfpub.epa.gov/surf/locate/index.cfm>
- Alabama Water Watch has a clever system for evaluating monitoring sites. They use the acronym, "CLASS" to ensure that a monitoring site is convenient, legal, accessible, safe, and strategic.

Recruiting and Retaining Monitors

You carefully planned and organized; now you have trained monitors out collecting monthly data. Great work! However, life and circumstances change - monitors move or some just lose enthusiasm or interest. One of the most common issues impacting volunteer water quality monitoring programs is retention.

What can you do to retain experienced monitors or attract new one's year after year? Offering recognition, respect, appreciation, and a sense of accomplishment (**use the data!**) are good places to start. Consider how a monitor's participation will benefit them and their community. **Remember the success of a monitoring program is dependent on volunteers who willingly offer their time.**

- Fully utilize Water Rangers to engage your monitors.
 - The program offers fun and engaging opportunities and the ability to share milestones and testing results with family, friends, and partners through social media.
 - Advertise and recognize the efforts of your monitors. Spotlight the good work of monitors in community bulletins, organization newsletters, and email distributions.
- Partner with local groups to: provide test kits, chemical refills, mentoring for new monitors, etc.
- Offer educational opportunities.
- **Use the data volunteers collect! Don't let it sit on a "shelf." Share results.**
- Be flexible, open-minded and realistic to the needs of your volunteers.
- Target residents who often use or live near local waters. They may be interested because of a natural connection to the resource.
- Include a family member or child
 - Partnering with a family member or small child may ignite an interest in science and the outdoors, leading to lifelong stewardship of our natural resources. *A family that monitors together stays together.*
 - Target a younger audience to participate in monitoring. Youth are the future!



A remote sampler aids collecting samples from bridges and piers.

- Today, many students need community service hours to graduate. Monitors can acquire community service hours for their efforts.
 - Monitoring with a child exposes them to critical-thinking and problem-solving skills as well as the principles of the scientific method and following defined procedures.
 - Provide data to local students of all ages for school projects and science fair.
- Consider working with a local 4-H program
 - Continuing Education Units (CEUs) can be acquired through workshop participation.
 - Consider partnering with Master Gardener groups, since AWW workshops and monitoring count toward their required hours to maintain Master Gardener status.
 - Consider incentivizing monitors.
 - Consider using prizes, gifts, random drawings, parties, or paddling/boat trips.
 - Foster partnerships with businesses or partners for prizes for your volunteers or “special monitoring day” discounts or specials at businesses in the watershed (typical monitoring programs only have 10-20 people – It should not be a big deal. Ask!).
 - Feature monitors that have reached a significant program or participation goal in an article or blog.

Water Rangers



Many people, just like you, care about their waterways and want to contribute in some way. However, many lack resources or tools to stay engaged and easily share and make sense of monitoring data or field observations. Wanting to do something to resolve this dilemma, a team of web developers from Canada created Water Rangers. Water Rangers is an easy-to-use, visually-appealing web tool that allows anyone with a computer or mobile device to input and view citizen science data. Mobile Baykeeper and the MBNEP have invested to expand the tool’s capabilities, making it even more powerful and exciting. MBNEP recommends volunteer monitoring groups use Water Rangers to complement recruiting, engagement, and monitor retention.

Water Ranger features:

- “Gamification” – this feature includes badges, the ability to earn points to level up and compete against other monitors, and share accomplishments on social media. Points will be earned from submitting data and pollution reports.

- “Pollution Reporter” – While out in a watershed, users have the ability to use a smartphone to take a photo, geolocate an issue, and quickly report a pollution concern. Reports can then be seen by watershed groups to investigate.
- Groups – Volunteer monitoring programs can establish a group to track, analyze, and highlight the important data they selflessly collect.
- Filtering – Data can be filtered by watershed, group or sampling method. Examples: “Show me all observations in D’Olive Creek”; “Show me all observations for Dog River Clearwater Revival”; Show me all observations in the Fowl River Watershed with pH values less than five and dissolved oxygen above six.”



For more information about Water Rangers, visit www.waterrangers.ca. If you would like to have someone come talk about and/or train your group how to use Water Rangers contact Mobile Baykeeper at info@mobilebaykeeper.org or 251-433-4229.

Checklist for Establishing a Volunteer Water Quality Monitoring Program



Find a “champion.”

A champion is a volunteer committed to lead and coordinate the program. Having someone willing to recruit, organize, and stay engaged from the onset is critical to program success.



Study the watershed to identify threats to water quality and strategic sites to monitor.

If available, use a watershed management plan to assist these efforts. If a plan is not available, consult local residents and experts, as well as available maps and satellite imagery.



Set a program goal (or goals).

Understanding existing or anticipated issues impacting water quality should drive this discussion. A successful monitoring program should collect data to inform and achieve a program goal (or goals).



Acquire monitoring equipment.

Assess equipment needs based on the program goal(s), the conditions of the watershed, and the expected number of monitors and sites needed.



Recruit and train monitors.

Work with an AWW trainer to schedule and promote a workshop.

Appendix

Sample Monitor Database (keep track of who has what)

Currently active AWW monitors in Dog River Watershed									
AWW Site	AWW code	Monitor	DRCR Kit#, equipment	Email	Phone	Address	City	State	Zip
Robinson Bayou	06005048	Joe Smith	#3 + Sampler	Smith@aol.com	(513) 523-7811	625 Old River Road	Mobile	AL	36605
Perch Creek	06005045	Susan Jones	#14 + Samp. + Refract.	SuzyQ@gmail.com	(228) 479-4731	5234 Marina Dr.	Mobile	AL	36605
Spring Creek	06005001	Summer Day	#2	JulyDay@gmail.com	(251) 605-7960	8904 Bayside Lane	Mobile	AL	36619
Halls Mill at Halls Mill	06005009	John White	#16, LaMotte Samp.	JW@south.com	(251) 456-2971	7905 Granada Dr.	Mobile	AL	36605

Equipment Checkout

Your Organization Name Here

Equipment Loan Agreement

I, _____, as a participant in the Alabama Water Watch Program, have received the following equipment on a temporary loan basis from _____. Unless otherwise noted, this equipment is in proper working condition. It is my understanding that if I do not submit data for two consecutive months without prior notification to the water quality monitoring coordinator that this equipment will be returned to _____.

Signature _____ Date _____

Phone number _____

Email _____

*Please print your
contact information*

Equipment received

_____ Water monitoring kit # _____

_____ Refractometer

_____ Secchi disk

_____ Water sampler

_____ Coliscan Easygel (how many?) _____

_____ Other (please specify) _____

Recruitment Letter

August 22, 20XX

Greetings,

My name is _____ and I am the Volunteer Monitoring Coordinator for the insert watershed/group. Do you enjoy spending time on the insert river? Are you interested in helping it remain healthy and protected? I wanted to let you know our group is recruiting interested parties in the community to become trained citizen water quality monitors. We cordially invite you to attend a free workshop on **March 10, 2017, 9am-2pm at insert location** where you will: receive training to be a certified Alabama Water Watch Water Chemistry Monitor/Bacteriological Monitor, connect with other watershed monitors, and be provided with all the necessary equipment to begin monitoring. Monitors are then asked to visit an assigned site once a month.

Why your participation in citizen monitoring is so important:

- Citizen monitoring provides valuable data to track the condition of water quality in our area.
- Water quality monitoring is a fun and meaningful way to connect with Fowl River and give back to your community through volunteerism.
- Our rivers best ally is an engaged citizenry monitoring and/or advocating for its well-being.

Our goal is to support citizen monitoring efforts and work with residents to organize a grassroots effort to preserve and protect this important coastal watershed. You **DO NOT** need to live on the river to participate. If you are interested in attending the workshop or have any questions, do not hesitate to contact me.

Regards,

Insert personal info

Monitoring Supplies Startup Budget

Item	Source	Price not including tax or shipping	Example: To supply 10 monitors for 1 year	
LaMotte AWW kit Item # 9844-02	LaMotte 1-800-344-3100	\$299	\$2,990	
Nalgene 8 oz. sample bottles Item # 6FAL6 (pkg of 12)	Grainger www.grainger.com	\$35	\$70	
Coliscan EasyGel (25001) & 3 ml Pipettes (DRP03)	Micrology Labs www.micrologylabs.com	\$250 for 100 tests \$0.25 each, order 40	\$1,000 \$40	Cheapest by ordering 10 sets (of 10) One pipette is used for all 3 replicates Need 3 per site per month,
The following items may also be necessary depending on site conditions			Assume 4 sites need these	
Remote sampler no line	Alabama Water Watch 334-844-4785	\$75	\$300	
Salinity Refractometer Pentaire SR5-AQ	Pentaire http://pentairaes.com	\$47.24	\$188.96	
Secchi disk no line	MBNEP ?	\$25	\$100	There are several available on Amazon from \$25-\$70
3/16" rope (500') for sampler/secchi disk Item # 12R269	Grainger www.grainger.com	\$66	\$66	
			\$4,755	

Alabama Water Watch Water Chemistry Data Form

**ALABAMA WATER WATCH
WATER CHEMISTRY MONITORING DATA FORM**

Group Name: _____ online
 Collector(s): _____ Address: _____
 City: _____ State: _____ Zip: _____ Phone N^o: _____
 Sample Date: _____ Sample Time: _____ AWW Site Code: _____
 Watershed: _____ Waterbody: _____ County & State: _____
 Sampling site location: _____

(Notify the AWW office about any changes in sampling site location.)

Waterbody condition: <input type="checkbox"/> Adequate Depth <input type="checkbox"/> Inadequate Depth <input type="checkbox"/> Dry <input type="checkbox"/> No Access		
Tidally influenced rivers: <input type="checkbox"/> Rising Tide <input type="checkbox"/> Falling Tide <input type="checkbox"/> Uncertain <input type="checkbox"/> Not Applicable		
Variable	Value	Comments
Air Temperature	_____ °C	Measure air temperature before water temperature.
Water Temperature	_____ °C	Read with bulb submerged if possible.
pH	_____ Standard international units	Record to nearest 0.5 unit.
Dissolved Oxygen (DO)	Rep 1: _____ ppm Rep 2: _____ ppm	Make sure two readings are within 0.6 ppm.
Specific Gravity / Salinity	S. G. _____ Salinity: _____ ppt	If salinity is present do not test for hardness.
% Oxygen Saturation	_____ Avg DO _____ % DO Sat	Estimate from chart found in the AWW manual.
Total Alkalinity	_____ # drops x 5 = _____ mg/L	Add drops until no more color change. Record number of drops that produced final change.
Total Hardness	_____ # drops x 10 = _____ mg/L	
Turbidity	_____ # 0.5 mL x 5 (50mL) = _____ JTU _____ # 0.5 mL x 10 (25mL) = _____ JTU	Enter zero (0) mL and 2 JTU if one addition of reagent surpassed the turbidity of the sample. Use bottom line ONLY if 25 mL sample volume was used.
Secchi Depth	_____ meters	Do not record depth if disk hits bottom while visible.
Comments: Note evidence of rainfall, runoff within previous 24 hours, unusual smell, unusual color, cows or other animals in creek, etc.		AWW Office Use
Other Chemistry Tests		YSI Meter data, Nitrates, Phosphate, etc.
I hereby declare that at the time of this water sampling my AWW Water Chemistry Certification was current and that I confirmed the freshness of each reagent used for these tests. All data entered above the Comments section were obtained using AWW techniques. <input type="checkbox"/> Check for electronic signature. _____		
		Monitor signature _____ Toll Free: 1-888-844-4783 Email: awwprog@auburn.edu Website: www.alabamawaterwatch.org

Alabama Water Watch Bacteriological Data Form

**ALABAMA WATER WATCH
BACTERIOLOGICAL MONITORING DATA FORM**

Group Name: _____ online
 Collector(s): _____ Address: _____
 City: _____ State: _____ Zip: _____ Phone N^o: _____
 Sample Date: _____ Sample Time: _____ AWW Site Code: _____
 Watershed: _____ Waterbody: _____ County & State: _____
 Sampling site location: _____

(Notify the AWW office about any changes in sampling site location.)

Waterbody condition: <input type="checkbox"/> Adequate Depth <input type="checkbox"/> Inadequate Depth <input type="checkbox"/> Dry <input type="checkbox"/> No Access			
Tidally influenced rivers: <input type="checkbox"/> Rising Tide <input type="checkbox"/> Falling Tide <input type="checkbox"/> Uncertain <input type="checkbox"/> No Applicable			
Variable	Value	Comments	
Temperature	Air: _____ Water: _____ °C	Measure air temp before water temp. Read with bulb submerged if possible. Don't touch bulb.	
Sample Volume	_____ mL	Use same volume for all replicates.	
Plating Time	_____ : _____ 24-hr format	Incubation begins when samples are plated.	
Incubation Temperature	_____ °C	Keep incubation temperature between 29 and 37 °C.	
Incubation Period	_____ hrs	Count bacteria within 30 - 48 hrs of incubation.	
Media Expiration Date	_____ - _____	Use short date format e.g. May - 13.	
Plated on Site	<input type="checkbox"/> Yes <input type="checkbox"/> No	Plate off sampling site, within 3 hours if possible. Always transport samples on Ice.	
Replicate No.	No. of E. coli colonies on plate (blue green to dark blue-purple) *	No. of Other coliform (pink to dark red) colonies on plate *	Code for estimated Other coliform colonies on plate **
1			
2			
3			
* If colonies are too numerous to count, report as 250 colonies. ** Code for Other coliform: None (0), Rare (1-9), Common (10-100), Abundant (101-200), Too Numerous To Count (>200).			
Comments: Note evidence of rainfall, runoff within previous 24 hours, unusual smell, unusual color, cows or other animals in creek, etc.		AWW Office Use	
Other Bacteria Tests		IDEXX, Coliscan MF, etc.	
I hereby declare that at the time of this water testing my AWW Bacteriological Monitoring Certification was current and that I confirmed the freshness of the media used for these tests. All data entered above the Comments section were obtained using AWW techniques. <input type="checkbox"/> Check for electronic signature. _____			
		Alabama Water Watch 559 Devall Dr. Auburn, AL 36849-5124	
		Toll Free: 1-888-844-4783 Email: awwprog@suburn.edu Website: www.alabamawaterwatch.org	

Alabama Water Watch New Site Form

**ALABAMA WATER WATCH
SAMPLING SITE DATA**

Sampling Sites: Remember the general factors to consider when selecting a water monitoring site: to be safe, convenient and accessible, to have legal access and to be strategic. Optimal water monitoring sites are those that provide the best information to satisfy objectives with the least amount of effort. Choose a site that is not too difficult or dangerous to access and is strategically located to be tested in an efficient manner. It is essential to know the precise location of a monitoring site for full use of the data. Please carefully describe your site information, and submit this form with your first set of data taken at the site.

Monitor(s): _____

Contact Phone Number: _____

AWW Group Affiliation (e.g. Little River Watch) _____

Waterbody: _____

Watershed: _____

County and State Where Site Is Located: _____

Site Location Description: Be very detailed. Include information such as the name or number of the nearest road. Indicate if it is upstream or downstream of a bridge, etc. Please submit a map, a photo (optional) and a geo-reference. Call the AWW Office for assistance.

Latitude: _____ **Longitude** _____

*****Do not write below this line. AWW Office use only.*****

AWW Site Code Number* _____ **HUC12 Number** _____

* An 8-digit number will be assigned by the Alabama Water Watch office when the above information is submitted along with the first water monitoring data form. This Site Code is based on the watershed, group and specific location of the site.



Alabama Water Watch
559 Devall Drive
Auburn, AL 36849-5124

Toll Free: 1-888-844-4785
Email: awwprog@auburn.edu
Website: www.alabamawaterwatch.org

Monitoring Supplies Reimbursement Form

Reimbursement Approval Request Form

Submit your order approval request below. After you are approved, place your order and submit an invoice to MBNEP for reimbursement. Invoices should be sent to Kelley Barfoot, kbarfoot@mobilebaynep.com. If you have questions please contact us at (251) 431-6409.

****All reimbursements must be pre-approved****

Organization *

Name *
First Name Last Name

Address *
Street

Street 2

City State

Zip Code Country

Phone Number *
Area Code Phone Number

E-mail *

Purchase Type *
Chemical Refills for Kits
Testing Kits
Bulk Chemicals
Hold Ctrl when making multiple selections

Brief summary of item description and reason for purchase *

Contact and Partner Information

- Mobile Bay National Estuary Program
 - www.mobilebaynep.com; mbnep@mobilebaynep.com; 251-459-8872; Jason Kudulis (monitoring coordinator)
- Alabama Water Watch
 - www.alabamawaterwatch.org; info@alabamawaterwatch.org; 1-888-844-4785
- Weeks Bay Reserve
 - www.weeksbay.org; 251-928-9792; Mike Shelton (monitoring coordinator)
- Dog River Clearwater Revival
 - www.dogriver.org; info@dogriver.org; Mimi Fearn (monitoring coordinator)
- Mobile Baykeeper
 - www.mobilebaykeeper.org; 251-433-4229; Cade Kistler (monitoring coordinator)
- Fowl River Area Civic Association
 - www.fowlriver.org; info@fowlriver.org; Jenni Zimlich (monitoring coordinator)
- Wolf Bay Watershed Watch
 - www.wolfbaywatershedwatch.org; jtrimble@cityoffoley.org; Homer Singleton (monitoring coordinator)
- Little Lagoon Preservation Society
 - www.littlelagoon.org; scoopsinc@gulftel.com; 251-942-2233; Dennis Hatfield (monitoring coordinator)