

Title:
Revision Number:
Date:

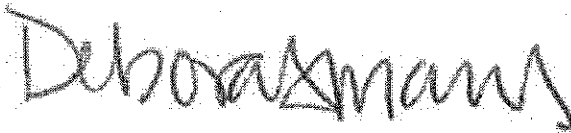
Citizen Science QAPP Template #1
Title and Approval Page

Raritan Bayshore Water Quality Project

NY/NJ Baykeeper

Effective Date of Plan:
April 2014

Project Leader:

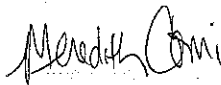


5/30/14

Signature/Date

Debbie Mans, Executive Director

Project QA/QC Manager:

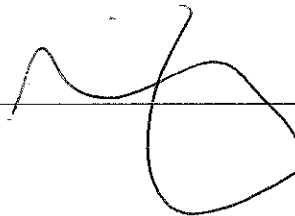


5/30/14

Signature/Date

Meredith Comi, Oyster Program Director

NEIWPC Project Officer:

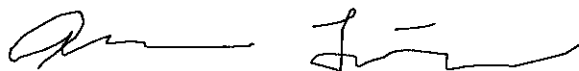


6/2/14

Signature/Date

Susy King

Lead Field Sampler:



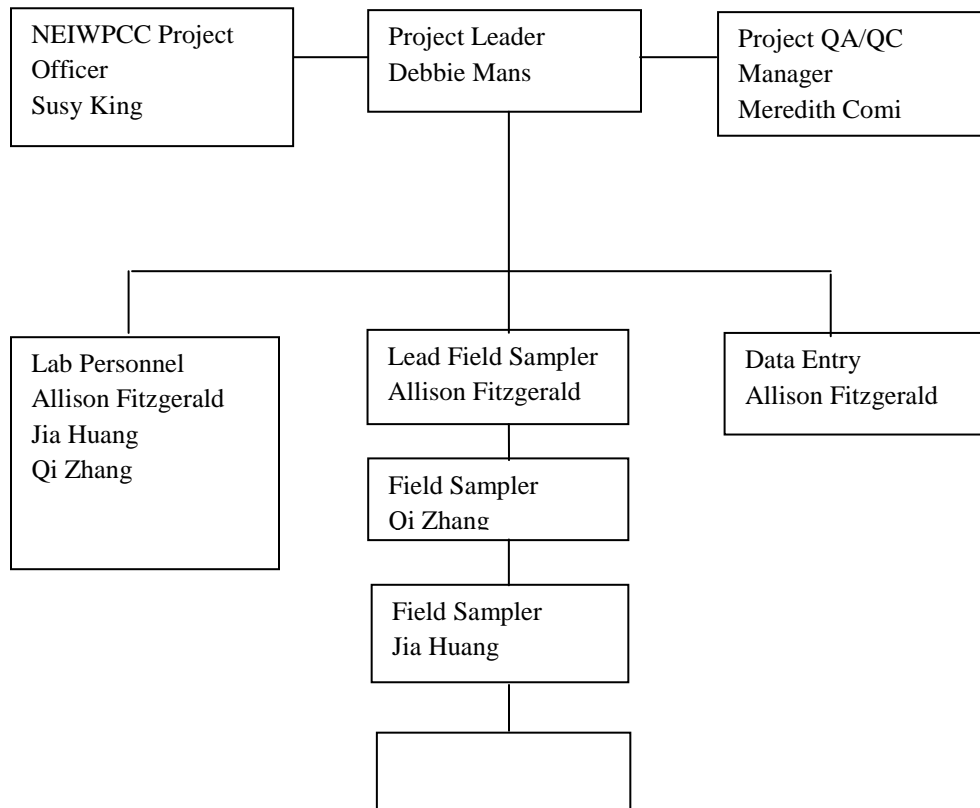
5/30/14

Signature/Date

Allison Fitzgerald, NY Oyster Program Coordinator

Citizen Science QAPP Template #2A Project Organization Chart

The organization chart shows the lines of communication and reporting for the project, similar to a chain of command. Fill in the names of the individuals and their titles (where applicable). If necessary add more boxes to accurately reflect the communication and reporting structure of the project.



**Citizen Science QAPP Template #2B
Project Distribution List**

The distribution list ensures everyone involved with the project receives a copy of the QAPP and is aware/clear about the work being conducted. It also provides the contact information for those involved with the project. For this table, input the names and contact information for all individuals who will need to get a copy of the QAPP.

Name/Title	Contact Information
Debbie Mans Project Leader	Email:Debbie@nynjbaykeeper.org Phone:732- 888-9870
Meredith Comi Project Quality Assurance/Quality Control Manager	Email: Meredith@nynjbaykeeper.org Phone:732- 888-9870
Susy King NEIWPC Project Officer	Email: sking@neiwpc.org Phone: 978-349-2506
Allison Fitzgerald Field Sampler/ Data Entry	Email: Allison@nynjbaykeeper.org Phone:732- 888-9870
Qi Zhang Field Sampler	Email: qizhang714@gmail.com Phone: 908-635-3472
Jia Huang Field Sampler	Email: jiayanh7674@gmail.com Phone:848-565-5816
Danielle Donkersloot NJDEP Volunteer Monitoring Program Coordinator	Email: Danielle.Donkersloot@dep.nj.gov Phone: 609-633-9241

**Citizen Science QAPP Template #3
Project/Task Organization**

Fill in the name, title, organization affiliation and responsibilities sections of the table below. For the responsibilities section, state what work/task each individual will be doing throughout the project. The responsibilities section provides an outline of the work that will be done for the project. Project specific details will be addressed in later sections of the QAPP. **NOTE:** The names and titles should be consistent in Templates #1, #2A, #2B, and #3.

Name	Title	Organizational Affiliation	Responsibilities (specific to this project)
Debbie Mans	Project Leader	NY/NJ Baykeeper	Overseeing project management, reports
Meredith Comi	Project Quality Assurance/Quality Control Manager	NY/NJ Baykeeper	Responsible for making sure all QAPP guidelines are followed during all parts of the project
Allison Fitzgerald	Field Personnel	NY/NJ Baykeeper	Responsible for field collection of samples, and overseeing field tech interns (Jia Huang, Qi Zhang)
Allison Fitzgerald	Data Entry	NY/NJ Baykeeper	Entry of all data from field and lab collection into computer spreadsheets; QA/QC manager will double check
Allison Fitzgerald	Laboratory Personnel	NY/NJ Baykeeper	Overseeing all lab procedures and interns; QA/QC manager will double check

Citizen Science QAPP Template #6 Project Location

Project Location

Provide a description of the site and sampling locations and how they were chosen. Provide the rationale for selecting sample locations, how the locations will be reached (wading, boat, bridge access, etc, and how the locations will be sampled (weighted sampler, rod and clamp, collection by field sampler, etc). Provide a map showing the location and any other relevant information for the project such as GPS coordinates of sampling locations. Tie this information back to the goals and objectives of the project.

NY/NJ Baykeeper has chosen two local creeks, Matawan Creek and South River, as the sites for our Citizen Scientist monitoring. These creeks are important to our local watershed, as they drain Middlesex and Monmouth Counties, and take any associated run-off to Raritan Bay. Along the creek, we chose 4-6 sampling points, which will give an overview of the entire creek. These locations were chosen for their accessibility and physical properties (depth, current flow, bottom sediment characteristics). Both creeks run through a highly trafficked area, with many roadways and private properties inhibiting access.

At each creek (Matawan Creek and South River, Middlesex/Monmouth Counties, New Jersey), several locations along the length of the creek will be sampled. Locations are accessible either by wading, or inserting the sample bottle with a long-handled sampling pole. Samples will be taken from the middle of creek (width-wise) and in an area of flowing water if possible. Depth of the sampling areas ranges from 1-4 feet.

For wading entry: A field technician will enter the water downstream of the site, and wade upstream (to avoid introducing extra sediment into the samples). Clean, sterile sampling bottles will be placed under the surface of the water to collect the sample. (Method A)

For sampling pole: A sampling bottle will be secured to a Y-shaped PVC housing to hold the bottle upright. This will then be secured to either a long-handled pole, or long rope, and placed into the flow of water to collect the sample. (Method A)

For sampling rope: a weight will be secured to the bottom of the sampling apparatus (Y-shaped PVC; see above) to keep the bottle upright. This will be then be secured to a rope and lowered into the flow of water to collect the sample. (Method B)

At each location, a hand-held YSI will be used to take physio-chemical parameters of the site (salinity, temperature, pH, dissolved oxygen, etc.). Duplicate measurements will be taken to ensure accuracy.

		Location	Accessibility	Sampling Method
<i>Matawan Creek:</i>				
M1	40.4359 N/ -74.2131 W	Brown's Point Marina; Amboy Rd, Keyport NJ	Dock	Sampling pole
M2	40.43306 N/ -74.21708 W	Seaboard Marina; Rt 35S, Keyport NJ	Boat Ramp	Wade in
M3	40.42292 N/ -74.22845 W	Bridge; Aberdeen Rd, Matawan NJ	Bridge	Bottle suspended from rope
M4	40.41516 N/ -74.23397 W	Matawan Kayak Launch; Ravine Dr, Matawan NJ	Dock	Sampling pole
M5	40.41177 N/ -74.23981 W	Buttonwood Manor; Rt 34, Matawan NJ	Rocky shoreline	Wade in
M6	40.40823 N/-74.24873 W	Lake Ridge Park; Rt 516, Matawan NJ	Mud/marsh	Wade in/ sampling pole on lower tides
<i>South River:</i>				
S1	40.41225 N/ -74.36449 W	Bridge; Old Matawan Rd, Matawan NJ	Bridge	Bottle suspended from rope
S2	40.41675 N/ -74.36151 W	Bridge; Main St, Old Bridge NJ	Bridge	Bottle suspended from rope
S3	40.44766 N/ -74.36915 W	South River Boat Club; Whitehead Ave, South River NJ	Dock Boat	Sampling pole
S4	40.45399 N/ -74.37215 W	Park; Causeway St, South River NJ	Ramp/Marsh	Wade in

Table 1: Location IDs and sampling methods

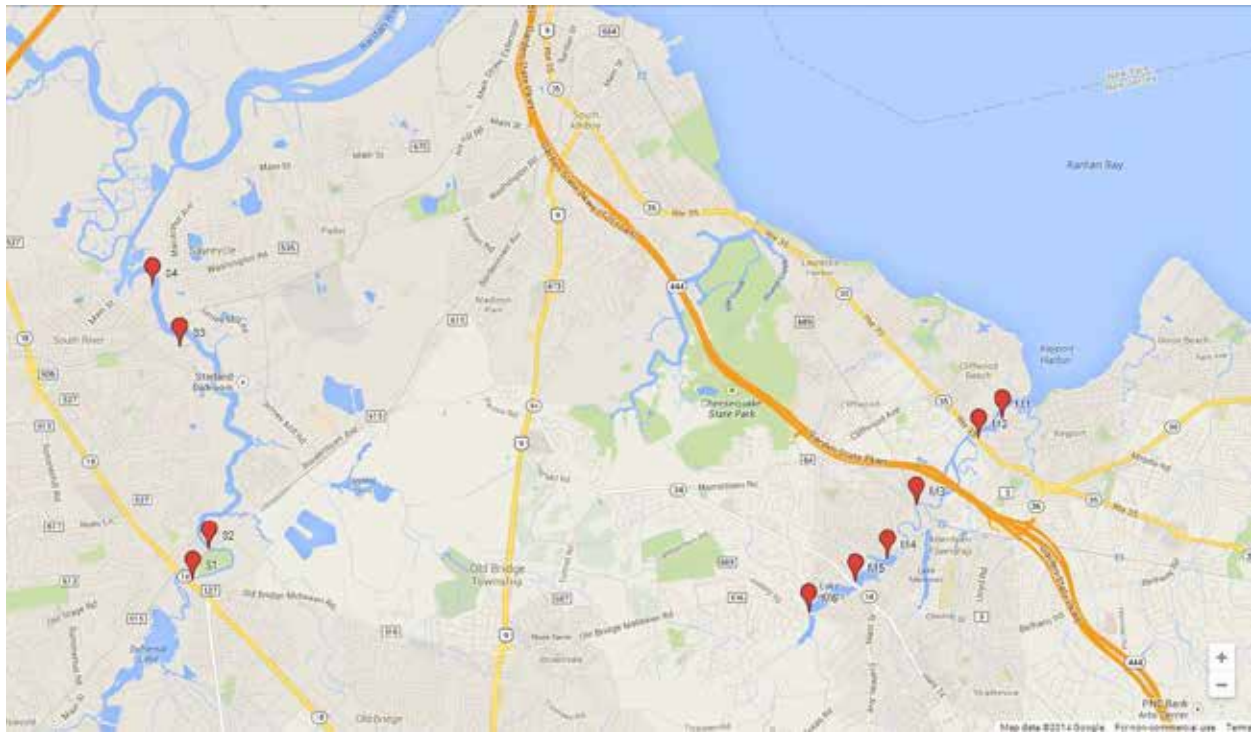


Figure 1: Map of locations in Matawan Creek (M1-M6) and South River (S1-S4). See Table 1 for station IDs and exact coordinates.

Citizen Science QAPP Template #10B Equipment List

Equipment List

Generate a list of all field equipment, supplies and personal protective equipment that will be supplied by the contractor for the project.

Waders/ boots
Rubber gloves (field collection)
Cooler
Rope
Sampling pole
Sampling apparatus (Y shaped PVC)

Citizen Science QAPP Template #13 Training and Specialized Experience

Training

In this section, state any required training that an individual involved with the project would need. Also include any refresher trainings that may be conducted.

- In the **Personnel/Group to Be Trained** section, state who will need the specific training and how many people will be trained.
- In the **Description of Training** section, state who will perform the training and what kind of information the trainee will learn.
- In the **Frequency of Training** section, state how many times the training will be conducted during the project.

Personnel/Group to be Trained	Description of Training	Frequency of Training
All NY/NJ Baykeeper	Proper use of YSI 556 MPS, GPS unit and water sampling equipment. Instruction on lab analyses	Session at the beginning of the sampling season
All NY/NJ Baykeeper	Data Management and upload of data to WQX/STORET	Session at the beginning of the sampling season, STORET upload training after data collection is complete

Specialized Experience

If any individuals have specialized experience that will be utilized by the project please complete the specialized experience table. State who the individual is, what specialized experience they have related to the project and their years of experience.

Person	Specialized Experience	# of Years of Experience
Allison Fitzgerald	Laboratory controls and procedures	7

Citizen Science QAPP Template #16 Data Review and Usability Determination

Describe the process used to determine the usability of your project data. If your data review does not uncover any issues and all of your QC criteria are satisfied, then your data will be assumed to be usable for the intended project objective. However, this is not always the case and so you will need to lay out a process for determining data usability in the event that all QC criteria are not met.

The objective of this project is to determine the bacterial levels in two local creeks near NY/NJ Baykeeper. There are many recreational uses to these creeks and it is important for the public to be able to have access to the health status of the waters. This data will be used to assess the methodology and protocol of sampling so that we may evaluate more creeks in the future and increase the project's availability.

In the event that an error in data management is uncovered, and the quality of the data lends it to be unusable, this project will serve two other purposes: (1) as a training exercise for future citizen scientists, and (2) a survey of future stream clean-up projects for Baykeeper.

- (1) For this project, Baykeeper has hired two college interns. This is the start to a new training program at Baykeeper, allowing future citizen scientists the opportunity to work alongside trained scientists to learn usable job skills to help in their future endeavors.
- (2) Baykeeper is actively involved in stream clean-up, restoration, and protection throughout the NY-NJ Harbor Estuary. The two streams chosen for this project, Matawan Creek and South River, are two that Baykeeper has not done extensive work in; therefore this project will serve to integrate Baykeeper into these bodies of water and allow for future projects to be planned using them.

If the data is compromised, the QA/QC manager will review the data on a case-by-case basis to determine if any of the data is useable. All data limitations will be documented and reviewed by the QA/QC manager.