



Ms. Lisa McGreavy
c/o Rhode Island Rivers Council
c/o RI Water Resources Board
RI Department of Administration
One Capitol Hill
Providence, RI 02908

Re: Project report - final - June 30, 2014

Dear Ms. McGreavy:

This is the final project report for the Rhode Island Rivers Council grant that was awarded to the Buckeye Brook Coalition to monitor Parsonage (Knowles) Brook (water body ID R1000702R-02) through the University of Rhode Island Watershed Watch (URI WW) Program (May to October 2014).

This project is part of the larger URI WW Program in which volunteers throughout the state monitor our valuable ponds, rivers, estuaries and bays. The first monitoring date was on Saturday May 10th and the last monitoring date is to be Saturday October 18th. Knowles Brook is River Site #553. Volunteers are asked to monitor every other week but since Knowles Brook is a new site the BBC volunteer is attempting to monitor every week to garner a more accurate picture of the brook. Data collected in the field includes general weather conditions (levels of sunlight, wind and rain), water temperature, stream depth and dissolved oxygen. All collections occur between 6AM and 9AM to minimize temperature fluctuations due to sunlight. The specific site is on Route 117A (Warwick Avenue) in just one block from the corner of Route 117 (West Shore Road) in Warwick.

Linda Green, the director of the URI WW program, sent the Coalition an invoice totaling \$700 for the project, and a check in that amount was sent on May 27th by our treasurer Bill Aldrich. This is a flat fee and has paid for all monitoring supplies (dissolved oxygen kit, thermometer, and dedicated bottles for the testing of bacteria and nutrients) and all laboratory testing performed by the URI WW lab staff as it relates to the Parsonage (Knowles) Brook site. Those tests include the enumeration of fecal coliform and enterococci; the determination of nutrients such as total and dissolved phosphorous, ammonia, total and nitrate-nitrogen; and the determination of the water's pH and alkalinity. These tests will serve as indicators of possible bacterial contamination from either sewage or local wildlife and waterfowl; of the level of eutrophication; and of the acidification status of the brook, respectively.

Annual classroom training was held (March 23 and March 26, 2014) at the URI Coastal Institute in Kingston for new volunteers and for interested returning volunteers.

Field training was held on April 12 and April 19, 2014 at Yawgoo Pond in West Kingston. Equipment pickup occurred May 7, 2014 at the URI Coastal Institute and was accompanied by a brief monitoring review with a presentation of two new monitoring opportunities.

The first opportunity involved collection of one water sample and deployment of a passive sampling device on certain selected rivers and streams to monitor for perfluorinated compounds. This research, already underway in Narragansett Bay, is headed by Dr. Rainer Lohmann from the URI Graduate School of Oceanography (GSO). See <https://web.uri.edu/lohmannlab/> for information on his work. The lab contact is Dave Adelman.

This passive sampling device was deployed on May 26th and remained in Knowles Brook for one month. It was removed on June 21st. The device along with the GSO water sample was delivered to the URI WW lab later that morning.

The second opportunity is a marine jellyfish monitoring program through Brown University researcher Dr. Carolyn Karp. Watershed Watch volunteers will be enlisted to trial this brand new effort, which includes the use of a smartphone app to deliver observations regarding the abundance and distribution of jellyfish and other gelatinous zooplankton. Both salt and fresh water species are reportable but primary interest was for the comb jelly, *Mnemiopsis leidyii*. This project has not yet been applied to the Knowles Brook site as observations have not occurred.

These additional monitoring opportunities will not incur additional costs, just additional time of the volunteer.

Data from lab testing and from field collection is managed by the URI WW lab staff and is made available on the URI WW website.

Sincerely yours,
Elaine Papa

Board Member
Buckeye Brook Coalition

Attachment: 2014 URI WW Rivers monitoring schedule.