

Quassaick Creek Watershed Alliance 2014 Activities Summary

Meetings at Newburgh Armory Unity Center

Beginning in 2014, our regular QCWA meetings were hosted by the Newburgh Armory Unity Center, continuing with our normal meeting date of the last Wednesday of the month, but with a new time of 4:30 PM.

City of Newburgh

In the spring of 2014 the QCWA, in partnership with the Hudson River Sloop Clearwater signed the contract for a \$49,539 DEC / Environmental Justice Grant focusing on the Quassaick Creek (QC) in the City of Newburgh.

Since then, in partnership with the Newburgh Amory Unity Center, Clearwater, LandArch Studios, The Orange County Water Authority, the QCWA has:

- designed a rain garden at the Armory using roof water;
- branded the urban stretch of the QC, "Newburgh's Other Waterfront";
- worked with the Trees for Tribes Team to maintain the north side of Muchattoes Lake and make it ready for public access;
- developed and presented a six-week educational program for youngsters at the Armory called "Waterworld", which covered topics relating to clean water, water testing to power generation, and drinking water, using an outdoor classroom at Muchattoes Lake;
- presented the "Reclaiming Newburgh's Other Waterfront" slide show to the City Council twice and to the Distressed Properties Task Force.

During the year the QCWA assisted E-Design Dynamics, the Hudson River Sloop Clearwater and the City of Newburgh in identifying potential sites in the City where installing green infrastructure practices would relieve the storm water burden on the City's Waste Water Treatment Facility, thus reducing the amount of raw sewage discharged into the Hudson River and saving the taxpayers the cost of unnecessarily treating storm water. This project was funded by a grant from the DEC Hudson River Estuary Program.

The QCWA participated with a working group creating a new zoning ordinance for the City of Newburgh which will include a Waterbodies Overlay Zone to protect and prevent inappropriate development along the City's waterbodies, including the QC.

QCWA is represented on a subcommittee of the City of Newburgh Conservation Advisory Council.

Members of the QCWA, the City's Conservation Advisory Council and Planning Board participated in a six-month long program to assess the biodiversity within the City of Newburgh and its nearby drinking watershed lands. The program was directed by Hudsonia and funded by the DEC Hudson River Estuary Program.

QC Watershed Management Plan

The QC Watershed Management Plan (QCWMP) was completed in cooperation with the Orange County Planning Department and other stakeholders. Meetings were held with each of the municipalities to discuss the plan and its recommendations for each municipality. We formed a QCWMP Implementation Committee with the function of choosing which of the many Plan recommendations we should first focus on.

Watershed Informational Kiosk

It was great to celebrate both the grand opening of our new QC Watershed informational kiosk at the Algonquin Orange County Park and at the same time the completion of the QCWMP (see comments above). The material for the kiosk was funded by a Sierra Club grant with NFA's Career Construction Academy providing the labor to assemble it and the County of Orange Park Commission granting us permission to install it alongside Bushfield Creek, one of the main QC tributaries. Thanks to the many hours of QCWA volunteers' time to install it.

Trees for Tribs (T4T)

The site at the north end of Muchattoes Lake, site #1, required the most maintenance during the year, and also benefited from a good effort provided by volunteers during the River Sweep clean up event. A trail was developed through the site with future access in mind. Beaver activity was discovered and wire cages were placed around several vulnerable trees and shrubs to prevent additional damage from gnawing. Black Rock Forest also donated nine trees and shrubs which were distributed across the site.

The site located on the west side of Muchattoes Lake, site #2, had several large dead trees, covered in bittersweet vines which we cut down, resulting in open views of the lake that was much appreciated by the residents of the nearby apartments. Brush was cut and a few shrubs were replaced.

At the Orange Lake Fire House light maintenance was performed. Twenty new shrubs were planted to replace previous plants found missing.

The Town of Newburgh acquired property bordering Quassiack Creek along Mill Street and part of it became a new Trees for Tribs site. After plans were finalized between the Town Department of Parks and Conservation and DEC, over 120 trees and shrubs were planted. Expansion of the site is possible.

The Town of Newburgh Police parking area, at Town Hall, received 2 rain garden projects implemented by Orange County Soil and Water Conservation District. QCWA volunteers joined in the planting of the rain gardens.

Stream Clean-up

As in the previous year our QC clean-up day focused on Muchattoes Lake and was done in conjunction with the RiverKeeper's May RiverSweep. We had 18 volunteers that collected more than 700 pounds of trash and cleared invasive species at our T4Ts Muchattoes Lake site.

Stream Sampling

Thirteen QCWA volunteers did the spring count of the migration of the glass eel coming up the QC. We did counts on selected Saturdays and Sundays in April and May counting a total of around 2,230 eels.

Due to lack of Orange County funding, there were no macro-invertebrate samples taken to be analyzed for the OCWA sampling program.

Three sites were sampled for macro invertebrates and sent in to the DEC WAVE Program for analysis.

We initiated an enterococcus sampling program with the collaboration of, and training by, RiverKeeper. With the participation of 13 volunteers we sampled 14 sites in the QC watershed on intervals of every two weeks totaling more than 80 samples that were analyzed for enterococcus levels. This was privately funded by a generous grant of \$5,000. Most of the

enterococcus levels were above the “beach no swim” advisory level of 60 units per 100 ml. The pattern of result will be evaluated for conclusions and to determine what our sampling pattern will be for 2015.

Public watershed education

QCWA members assisted Columbia University Graduate Architecture and Urban Design students while working on an urban planning project in the City. One team of four students from India, Qatar, China and Brazil focused on water protection and the potential of the QC to enhance the City of Newburgh's neighborhoods.

In August the Hudson River Watershed Alliance, supported by the QCWA, hosted a sail aboard the Sloop Clearwater to bring together our many partners dedicated to protecting our water.

The QCWA participated in a tour of the historical industrial zone of the lower Quassaick Creek with the Orange County Historian, the Orange County Executive, the Historical Society of Newburgh Bay and the Highlands, the City of Newburgh officials and the Orange County Planning Department and other interested stakeholders, to explore the potential for this sector of the stream corridor.

Drinking Reservoir Protection

QCWA helped identify sites along Route 300 where green infrastructure practices might alleviate surface runoff from entering Washington Lake.

Members of QCWA have testified at several Town of Newburgh and City of Newburgh council meetings regarding the need to incorporate the protection of Washington Lake (reservoir) from polluted stormwater runoff in the design of new construction projects.

We had a large QCWA turnout for the tours, hosted by Continental Organics of their organic/hydroponic flowers and vegetables and fish farm and the City of Newburgh's Water Commissioner description of the details of the operation of the Brown's Pond Reservoir.

Stream Observations

On more than 20 occasions QCWA members did stream walks or made stream observations that focused on gathering information that could help identify possible sources of pollution being discharged into the QC watershed. These walks were informed by high enterococcus counts, detected off odors, discolored water in the stream or other observations which indicated possible illicit stream discharges or other threats to the quality of stream water. In several occasions suspected illicit discharges were reported to the municipal authorities, as well as to the RiverKeeper. This included photographing and reporting the questionable QC RR bridge's condition at River Road.

Area Water related conferences

Hudson River Watershed Alliance: Annual Conf., Watershed Roundtable meeting and various sessions of the “Omelet” series.

I want to thank all of our partners and volunteers for making our 2014 activities so productive and we look forward to 2015.

Plans for 2015 include:

Re-evaluating our stream sampling program and adjusting as appropriate

Completion of our EJ Grant

Continuing with our programs of T4T and invasive removal; stream clean-ups

Tour of Chadwick Lake/Reservoir system

Training of identification of illicit discharges and appropriate reporting of such

An improved reporting system for MS4 and illicit event reporting

Expand our outreach to municipal officials and to the QCW communities at large