

COMMUNITY GRANTS PROGRAM



CASE STUDY

Genesee RiverWatch Aquatic Education Network aims to Engage Students with the Genesee and Create Stewards of the River

The Center for Environmental Initiatives (CEI) has over 42 years of experience implementing successful initiatives to improve water quality in the Lake Ontario Basin, emphasizing positive energy usage, green business, reducing the use of toxic materials, and improving air quality. Looking forward, CEI's strategic plan outlines its ideas for their Genesee RiverWatch initiative, which endeavors to improve the water quality of the Genesee River and its tributaries to create environmental, recreational, and economic assets for its communities. Genesee RiverWatch aims to connect people to the river, encouraging them to explore, experience, and celebrate the river.

Challenge

The Genesee River is a fundamental part of the history and culture of the region; however, it remains polluted and suffers from current and legacy pollution, poor river access, and a general lack of advocacy. High levels of total phosphorus (TP) contribute to Impaired listings of the main stem and several tributaries of the river by the New York State Department of Environmental Conservation (NYSDEC). Excess phosphorus can cause algal blooms which limit recreational use. In addition, many tributaries suffer from severe streambank erosion contributing to excess sediment and nutrients in the river.

Genesee RiverWatch identified a substantial need for formal training in environmental issues, particularly those surrounding water quality in the region. Thus the programming explores the quality of surface waters in the watershed, the causes of the recognized impairments, and what can be done to restore and protect water quality.

Solution

The Genesee RiverWatch Aquatic Education Network (AEN) assembled a community of aquatic ecology educators and professionals creating a teacher network that draws upon the significant experience and enthusiasm of educators, non-profits, and municipal agencies in the region. Genesee RiverWatch developed, piloted, and disseminated river-based educational programming with emphasis on management practices that reduce the generation of pollutants, along with educational materials that included lesson plans. Additionally, Genesee RiverWatch offered the curriculum to teachers from the region and held a Genesee River Summit about the river's history and held various classes alongside the river for teachers and students.

Results

After assembling the AEN, two meetings were held with about 40 people in attendance at each. Genesee RiverWatch established a web-based clearing house for the network and developed six different lesson plans to be used for classroom pilots. They held a professional development session as well as the

CHALLENGE

- The Genesee River suffers from current and legacy pollution, poor river access, and a lack of advocacy

SOLUTION

- The Genesee RiverWatch Aquatic Education Network was developed to create and disseminate river-based educational programming

RESULTS

- Genesee RiverWatch developed the Aquatic Education Network and worked with teachers to create a curriculum based around the local watershed
- A Summit and professional development session was held by Genesee RiverWatch, educating 46 educational professionals
- Genesee RiverWatch created a web-based clearing house making the educational materials available to the public with a whitepaper on how they were implemented



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[http://geneseeRiverwatch.org/index/
php/aen/aquatic-education-network](http://geneseeRiverwatch.org/index/php/aen/aquatic-education-network)

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Genesee River Summit educating 46 educational professionals between the two programs.

The pilot was offered to two student classes from two separate schools. Overall the clearinghouse has received 230 unique views, over 40 educational providers/professionals were engaged, and 60 teachers have been engaged in the effort. In addition, 1,000 outreach materials were distributed.

Despite receiving favorable feedback from teachers that attended the Summit, when it came to implementing the program, most were not able to because of time constraints. Future considerations include having river-based educational programming and curricula included in school requirements.



Online Media:

- [Website](#)
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TESTIMONIAL

“This project has helped us establish a great collaboration with those in our region who are interested in aquatic education that has provided us with a good foundation for continued development of this initiative.”

–George Thomas
Executive Director; Genesee RiverWatch

NYSP2I PARTNERS



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