Impact Project Report

Master Naturalist helps to improve the Haw River's RiverWatch process

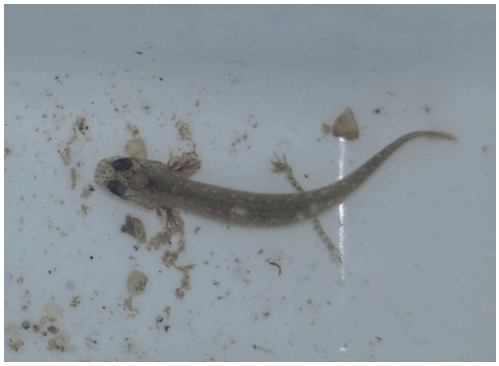
Issue

Protecting our rivers and streams against pollution from manufacturers, agricultural runoff, and construction helps to keep water pure for those who drink it, live near it, or use it for recreation. Careful monitoring of the watershed can identify regions in need of rehabilitation and enable proper advisories to be issued for public caution. Thorough monitoring requires a lot of personnel and funding, and the Haw River Assembly relies on volunteers via the RiverWatch program.

RiverWatch volunteers perform routine assessments that determine a baseline and can serve as an early warning system for when problems do arise. The river monitoring data are computationally processed and used for advocacy and state-level reporting. Some methods of data input were incompatible with the current processing pipeline, instead requiring inefficient manual processing.

Project

Master Naturalist Quinn Eberhard launched a new RiverWatch team which monitored two previously unsampled sites along the Haw. This fall, an additional volunteer team member was brought on and trained to assist in sampling and data collection. Water quality was assessed by pH, transparency, temperature, and macroinvertebrate populations over multiple seasons. Changes to stream beds and surrounding environment were also tracked. Additionally, Quinn consulted on improvements to the existing data analysis pipeline. Both the RiverWatch team and code updates will continue into the following year.



Presence of macroinvertebrates are an important indicator of water quality.

Student

This project is the work of Quinn Eberhard, with the help of Haw River Assembly's Water Quality Program Manager Kaitlyn Elliott and team member Susanna McIlwaine.

Impact Projects

Beyond classwork, a key feature of the Master Naturalist Volunteer program is the Impact Projects students develop. These projects integrate course concepts and benefit a Partner Organization.

Highlights

Partner Organization

Haw River Assembly

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