

Instructions

QUINNIPIAC RIVER FUND GRANT AWARD - FINAL REPORT QUESTIONS

This form is to be completed by all nonprofit organizations that received a grant through the Quinnipiac River Fund.

Grant Details

Grant Details

Organization Name

Quinnipiac University

Grant Description

to support the study of pollutants and other water quality parameters along the Quinnipiac River from Meriden (Hanover Pond) through North Haven.

Total Grant Amount

18,000.00

Report Questions

1. List the specific objectives/outcomes of the project and tell how they were met during the grant period. Also, provide an update on any special conditions of the grant (if applicable).

Objective #1: Collect and analyze water samples from chemical pollutants and water quality parameters from established sampling locations along the Quinnipiac River from Hanover Pond (Meriden, CT) to Universal Drive (North Haven, CT) throughout the year.

- To meet this objective water sampling was conducted at least three times during each quarter of the year (April-June; July-September; October-December; January-March). Thirteen different sampling locations along the Quinnipiac River from Hanover Pond in Meriden to the southern border of North Haven were sampled on each date. Samples were analyzed within 24 hours of collection and samples were not collected within 48 hours of precipitation. Water quality parameters were measured at each location, samples were analyzed for both total and fecal coliform in the laboratory, as well as assessed via gas chromatography-mass spectrophotometry (GC-MS) for the presence of phthalates, plasticizers, and other known chemicals.

- There were no major findings on the GC-MS, with 94% of the samples had no evidence of phthalates or plasticizers. Additionally, 62.5% of the samples collected and assayed from April-June did not have fecal coliform present, only total coliform was detected, while 71.4% of the July-Sept samples, 83% of samples in the fall and only 90% of samples collected in the winter did not have fecal coliform present.

Objective #2: Work alongside various stakeholders to remove bulk trash from two specific locations in North Haven, along Valley Service Road and behind the shopping complex on Universal Drive.

- With the support of the Connecticut Department of Energy and Environmental Protection (DEEP) and the Town of North Haven, we organized and host three clean-up events along a section of Valley Service Road. In total we removed over 30-yards of bulk trash, everything from building materials, furniture, mattresses to car tires and used oil. This work prevented pollution, which could leach from these materials into the Quinnipiac River. Our work would not have been possible without the QU River Foundation, the collaboration with the Town of North Haven, who is continuing to address the illegal dumping in this area

by adding street lighting, and all our volunteers. Unfortunately, we were not able to plan and execute a clean-up event on Universal Drive but would like to in the future.

Objective #3: Communicate findings to the community-at-large. Our results will be disseminated by the Public Relations Department at Quinnipiac University to local newspapers like the New Haven Independent, and local municipalities. Additionally, in the past we have presented our findings at several professional scientific venues at both the regional and national levels and will continue to do so as appropriate.

- Quinnipiac's public relations team publicized receiving this grant through their social media and mainstream platforms. In addition, the North Haven News and the New Haven Register covered the clean-up event and research in articles on May 25, 2025, and June 11, 2024, respectively. Results will continue to be shared with the QU community and the surrounding communities. These results in combination with previous findings are be used to form the basis for a scientific manuscript and conference presentation for the 2026 Society of Toxicology conference being held in San Diego in March 2026.

2. Please share your successes, challenges and any lessons learned through the implementation of your project. Were there any unintended consequences or lessons learned that may affect how you operate your program moving forward?

During this grant period, the laboratory trained new research students, streamlined the collection and processing of samples collected. This grant cycle include sampling the QU river throughout the entire year, to determine if there are changes to the water quality results outside the time when the wastewater is disinfected. This seasonal sampling was challenging this year, as the water at Hanover Pond froze and could not be sampled safely in the winter and we could not access some areas of the river in late winter because of ice and snow. Additionally, during this grant period we successfully built relationships with the town of North Haven, a local new haven school and other volunteers and DEEP, who are responsible for maintaining the state land where we conducted the three clean-up events.

3. What are the opportunities and needs of your organization as it continues to move forward with its work to positively impact the Quinnipiac River?

Continuously monitor the Quinnipiac River for point source and non-point source pollutants throughout the entire calendar year, provides us with a comprehensive understanding of chemical components in the river. It is also important to understand how a change in our rain events the river. This will afford us the opportunity to work with municipalities or engineers at Quinnipiac to implement best practices to have a positive impact on the Quinnipiac River. Moving forward, we would like to continue the seasonal sampling to better understand and tract the source of the E.coli, and continue to reduce and work towards eliminate the bulk trash that is illegally dumped along the banks of the river.

Attachments

Financial information (required): Please provide a detailed accounting of how the specific grant dollars were spent based on the budget submitted in the grant application.

Detailed Accounting

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Pictures (optional): Please attach one to three pictures in JPEG format, in the highest resolution possible, of activities that have occurred throughout the grant period as a result of grant funding. By providing pictures, your organization is consenting to unlimited use of the pictures by The Community Foundation for Greater New Haven and/or the Valley Community Foundation in publications in print and online (including www.thequinnipiacriver.com). Please include a description of each photo and, when known, the photographer to be credited.

Picture 1

IMG_3520 2.JPG

Description and Photo Credit

research student collecting Q River water samples

Picture 2

IMG_3263.JPG

Description and Photo Credit

QU Students help clean up the Quinnipiac River

Picture 3

IMG_3261.JPG

Description and Photo Credit

Hopkins students participate in Quinnipiac River cleanup event.