



University of
New Hampshire



NEW HAMPSHIRE WATER RESOURCES RESEARCH CENTER



Projects funded in 2022-2023

- NH WRRC Information Transfer including update and redesign of NH WRRC website
- Water quality and the landscape: Long-term monitoring of rapidly developing sub-urban watersheds
- Development of open-source, low-cost environmental sensors
- Impact of PFAS contamination in water supplies on property values
- Uptake and bioaccumulation of PFAS in lake food webs
- Measuring the contribution of picocyanobacteria to harmful cyanobacteria blooms in New Hampshire lakes

NH WRRC

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History The New Hampshire Water Resources Research Center (NH WRRC) is located on New Hampshire's land grant university, the University of New Hampshire, and serves as a focal point for research, training and collaboration on water issues in the state and region. This Center was incorporated into the National Institutes for Water Resources program in 1965 as one of the original 14 state institutes.

Mission The primary charges of each institute are: **research, technology transfer and education of new professionals**. The institutes accomplish these charges through federal funding mechanisms which require matching from non-federally sourced funds from the state, public and private sector.

Research Annually, the NH WRRC supports several research projects that address state and regional water-related concerns. Previous projects have focused on water quality, hydrology, ecology or social science research in NH. One of the primary activities of the NH WRRC since 2003 has been to **document the water quality in sub-urban New Hampshire basins**. Although water

quality is good overall, and does not yet limit water supply, our results have shown that a number of important water supplies are threatened or impaired by arsenic, chloride and nitrate. Some waters have been listed as impaired based on our research, thereby allowing for planning to improve water quality and maintain a reliable water supply.

Technology and Information Transfer

Information transfer occurs through phone conversations and public presentations or discussions. The NH WRRC website (www.wrcc.unh.edu) provides access to NH WRRC projects, publications and news items regarding New Hampshire water issues. NH WRRC staff, researchers and students also make presentations at national and international meetings on a variety of scientific topics.

The NH WRRC has supported the **NH Water and Watershed Conference** which addressed current water resources issues in the state. It typically drew over 250 attendees, but has not been held in recent years due to the COVID pandemic. The NH WRRC also sponsors an **Annual Science Symposium** dedicated to exchanging research results



Lamprey River at Packers Falls, Durham, NH. Surface waters throughout the Lamprey River watershed (located in the most rapidly developing region of New Hampshire), are sampled regularly to monitor water chemistry in a changing landscape.

from a rapidly developing coastal watershed among scientists and local managers. The Great Bay Research Symposium was held in January 2024.

Education

Education plays a vital role at the NH WRRC. Most of the research projects funded by the NH WRRC involve graduate students, undergraduates and professors, creating learning opportunities for students with an interest in water research.

Water Quality Analysis Laboratory

The NH Water Quality Analysis Lab (WQAL) is affiliated with the NH WRRC and provides **high-quality, reasonably priced analyses** in support of research projects conducted by scientists and students in the state, and the nation.