

All rivers legislatively designated as protected under the New Hampshire Rivers Management and Protection Program are currently mandated to have an Instream Flow Management Plan. In 2013, the main stem Lamprey River became one of the first to have such a plan ([Lamprey River Water Management Plan \(nh.gov\)](#)). In short, the management plan is designed to maintain natural flows in the river sufficient to sustain natural communities of aquatic animals in the event of a prolonged drought. The five designated tributaries are currently in the study phase as personnel at NHDES record flow data and water depth. Once data for these rivers have been collected and analyzed, a draft plan will be presented to the public for comment. Management of river flow is accomplished mainly by two strategies: restricting water users' ability to draw water from the river and supplementing water in the river through periodic releases of water from dam impoundments. The LRAC is not the body that makes these management decisions, but it can make recommendations to NHDES.

While the LRAC has a limited role in supporting a healthy *quantity* of water in the rivers, it plays a larger role in helping to support the *quality* of water in the rivers. In terms of river protection and management, “water quality” is defined by criteria that have been deemed essential to sustain life in the river. Some criteria are based on minimum standards (such as the concentration of dissolved oxygen gas), while others are based on maximum standards (such as the concentration of mercury). These criteria were developed by the EPA and NHDES. The goal in all cases is to have “fishable and swimmable waters.” Class A waters meet the most stringent criteria and are suitable for drinking with minimal treatment. The Piscassic River currently meets this standard. Class B waters are fishable and swimmable, but might have some minor issues that require stronger treatment to be considered safe for drinking. With few, site-specific exceptions, the other rivers in the Lamprey River watershed meet this standard.

Keeping the rivers’ waters clean and healthy is a long-term challenge. Almost everything that happens on land ultimately affects the water. The issues are many and often combine to create additional stresses. An increasing population and the accompanying development in the river corridor have resulted in a significant increase in paved and other impervious surfaces. (See Impervious Surfaces Map in Appendix B.) Natural streamside buffers are being lost. Climate change is leading to more numerous and more extreme storm events, which exacerbate issues with the addition of new development and outdated infrastructure. A key piece is finding ways to have stormwater soak into the soil for filtration and groundwater recharge rather than run across the surface and enter the river untreated.

Key Future Actions

- Study and track chemical and physical traits of river water in a consistent manner so that towns and other partners can protect the cleanest water and improve degraded water.
 - Continue to support volunteer water testing efforts and targeted scientific research, such as bacterial tracking.
 - Update previously completed trend analyses to determine whether the water is improving or worsening over time.
 - Compare data to New Hampshire benchmarks and identify which issues could be improved locally.
 - Regularly review water quality data and address action items.
 - Identify what critical data are missing and recommend steps to address the gaps.
 - Gather and collate data from historic water testing in the Lamprey River and its tributaries for use in administration, project review, and education activities performed by LRAC. Make data available to the public.
- Work with towns to protect and improve the “fishable and swimmable” water of the rivers.
 - Enlist local knowledge to identify problem areas that do not or would not appear on GIS maps and standard evaluations (such as broken or leaking pipes or undocumented erosion areas). Report these problems to town officials or agencies that might be able to provide help in correcting the problem.

- Encourage towns to enact consistent and effective regulations for stormwater, zoning, buffers, and floodplains.
- Encourage towns to reduce the amount of salt they apply to town roads. Recommend that town public works departments enroll in classes such as NH SnoPros, UNH Technology Transfer Center, and Road Scholars. Encourage towns to adopt salt application standards for private snow plow drivers as part of commercial and subdivision planning. Request NHDES to require SnoPro certification on all new commercial development and redevelopment projects.
- Provide towns with information on septic systems that can be distributed to residents.
- In fulfilling LRAC's permit review responsibility, help towns to assess development proposals relative to their effects on water resources.
- Plan river-based activities in each town to build awareness that all areas should and can have "fishable and swimmable" water.
- Identify emerging issues that affect the water in the rivers and help towns to plan accordingly.
- Work with town residents to protect and improve the water:
 - Expand outreach efforts to landowners about septic system care and maintenance.
 - Encourage residents to minimize or discontinue the use of pesticides and fertilizers.
 - Provide information about resources available to riparian landowners to encourage wide, naturally vegetated buffers and floodplains to minimize erosion and filter run-off.
 - Support community efforts to "soak in the rain" through LRAC Community Grants.
 - Recognize landowner efforts that protect clean water, both along the river and as part of the watershed.
- Promote water conservation:
 - Support town efforts to develop long-range water use plans and encourage exploration of alternate sources or storage.
 - Encourage strategies and regulations for low-impact development or retro-fits so that water soaks *into* the soil and does not flow *across* it where soil conditions are appropriate.
 - Engage towns and residents to identify and correct sources of water loss (broken pipes, leaky faucets, etc.). Offer Community Grants to towns or conservation groups to identify and quantify water loss. Develop incentives to conserve water.

To view past accomplishments in Water Resources, click [here](#) or go to Appendix C page 49.

Link to NHDES instream flow data and resources for Lamprey River and designated tributaries [NH Instream Flow Map](#).