



**Lamprey Rivers Advisory Committee (LRAC)**  
**Annual Report FY 2014 (Oct. 1, 2014 – Sept. 30, 2015)**



*Low water in the river looking upstream from Epping Town Hall.*

*photo by S. Petersen*

The Lamprey River is one of two rivers in New Hampshire Rivers Management and Protection Program (NHRMPP) that was chosen by the legislature in 2002 for a pilot instream flow management program. The goals of the pilot program were to develop a methodology to define and implement protected instream flows on “designated” rivers in New Hampshire and to meet clean water standards that are at least Class B “fishable and swimmable.” Each river was thoroughly studied and compared with similar rivers that have instream flow management plans elsewhere. In the Lamprey, the water management plan is crafted to mimic natural flows so that certain sensitive fish species can meet their basic needs during periods of drought. By protecting these fish, other species and other uses of the river are also protected. The plan has three mechanisms to ensure adequate water: instituting voluntary water conservation measures enacted by towns, regulating the amount of water that major water users can extract from the river, and managing releases of water at specified dams.

Despite record-breaking snowfall during the winter, the spring of 2015 was dry, summer was dry, and fall arrived with very low flows. Based on a complicated process of determining what flows are natural and what flows are abnormal, active management was enacted twice during 2015. For two 48 hour periods, water was released from Pawtuckaway Lake to provide the river with a relief pulse that mimicked a good rainfall. These releases helped to prevent fish from being dangerously stressed and resulted in a slight lowering, less than 1 inch, of Pawtuckaway Lake.

In addition to the protection of certain sensitive fish species, the instream flow management plan is numerically based and river-specific to ensure that water is available for people in times of drought, that major water users develop alternative supplies for low flows, and integrates the management of lakes and rivers to maintain good water supply and water purity.

The [Report of the Instream Flow Pilot Program](http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/report.htm) is available for review at <http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/report.htm> and at the Durham Public Library. Now that the test period for the plan is over, the legislature will begin the process of determining the future of the instream flow management program. Under current law, all rivers in the New Hampshire Rivers Management and Protection Program are required to have instream flow protection. The official end to the pilot program raises many questions for the future: Will the other designated rivers have management plans developed as is required by RSA 483:9-c? What process will determine which river(s) will be priorities? How will the program be funded? Will the recommendations brought forth by the pilot process be enacted for the Lamprey? Time will tell, but these issues and new ones warrant careful observation.



**LRAC Accomplishments:** The LRAC had another busy and productive year. Representatives from most of the fourteen towns in the Lamprey River watershed worked hard to implement the comprehensive rivers management plan with help from towns, planning commissions, land protection organizations, wildlife professionals, and citizens. The final plan was approved on Sept. 26, 2013 and is available at town offices and on [www.lampreyriver.org](http://www.lampreyriver.org).

#### **Land Protection:**

- Working with partners such as the Southeast Land Trust, the Natural Resource Conservation Service, The Nature Conservancy, town conservation commissions, and others, the Wild and Scenic Subcommittee continued to provide expertise toward protecting ecologically significant land along the river. The total protected since 1999 is 2803 acres and 9.98 miles of river frontage. In addition, 179.46 acres were protected in late September and another 81 acres for the same project will be added in early 2016. For every \$3 of LRAC money spent, an additional \$7 was leveraged from other sources.
- Because the infusion of new land protection money is difficult to secure, the land protection team began work on recognizing protective efforts by landowners that improve soils and water in and along the rivers.

#### **Education and Outreach:**

- The committee's website, [www.lampreyriver.org](http://www.lampreyriver.org), continued to be a public clearing house of Lamprey River information and resources.
- LRAC displays at town fairs and events at libraries invited local folks to learn about the river and gave them a chance to share concerns.
- In April, the workgroup partnered with New Hampshire Fish and Game to educate the public about river herring at the "Herring Aid" event at the McCallen Dam in Newmarket. Children and adults helped to count the fish and escort them from the fish ladder holding tank to the river where they were released. Participants also had the opportunity to see and learn about American eels and lampreys.
- For the sixth year, the Wild and Scenic Subcommittee funded small grants up to \$5000 each for creative and worthwhile projects. The Town of Lee used its Small Grant to eradicate invasive Japanese knotweed at the town's Rothwell conservation property on Route 152. The Lamprey River Watershed Association was awarded three Small Grants: 1. Coordinating a stream-side litter clean-up day in four Lamprey River towns; 2. Helping Newmarket and Epping explore potential stormwater pilot projects to help keep untreated stormwater from going directly to the Lamprey; 3. Documenting the process of mapping large woody obstacles and exploring the potential of relocating some of that wood to improve canoe passage between the Route 87 bridge in Epping and the Wadleigh Falls area in Lee.
- Four fourth grade classes from Mast Way School in Lee made extensive use of The Lamprey River Curriculum, culminating in a field trip to Mary Blair Park where they performed water quality tests, studied aquatic invertebrates, took the history tour, and



learned about the risks of building in a floodplain. Teachers and parents from Epping and Raymond joined in to help expand the program to those towns.

- A summer recreational series, “Hike It, Bike It, Like It” offered guided tours of three of the Lamprey’s key historical and natural areas. The outreach group will work with town recreation and historic commissions in 2016 to make the program more accessible to the larger public.

#### **Wildlife and Ecology:**

- The McCallen Dam fish ladder passed nearly 70,000 river herring this spring and the Wiswall fish ladder passed 14,800. The next obstacle to full access is Wadleigh Falls in Lee. Despite significant effort at the state level, privately-owned Wadleigh Falls will remain an impassable obstacle to fish passage for the foreseeable future.
- As a follow-up to two previous studies on endangered brook floater mussels and other rare mussels, a final report was prepared. Data show that once-abundant brook floaters are critically imperiled and extirpation seems likely. No new adults were found and no juveniles were encountered. The cause of the decline appears to be burial from flooding events, but acidic conditions or unsuitable water quality have not been ruled out.
- Based on recommendations in a tributary fish survey from 2011, research was commissioned to study which culverts pose the greatest problems for fish migration. Results will serve as a starting point for partnerships with towns to address the problems.

#### **Recreation:**

- Paddling on the Lamprey is a key activity for many. Certain stretches are not navigable due to downed trees and other large woody material. The committee continued to partner with the Lamprey River Watershed Association and representatives from paddling and fish conservation groups to study the feasibility of relocating some of the material to improve passage and reduce the need to portage over sometimes steep slopes. The topic is complicated and often controversial. Care must be taken before any changes are made.
- The committee designed, funded, and installed a permanent sign for the Lee Public Canoe Launch on Route 152. The committee donated the land to the Town of Lee in 2008 and paid for the construction of the granite launch area in 2011.
- The Wild and Scenic Subcommittee was awarded a \$6000 grant from the National Park Service’s “Call to Action” centennial program. The grant was used to study the feasibility of creating a continuous walking path from Mary Blair Park in Epping to the Lubberland Creek Preserve in Newmarket. One map was produced to show the overall projected path and nine detailed maps representing the various segments supported the overall vision. Some sections will take a concerted effort to reach fruition, but other segments can be realized in the near future. The recreation group will be working with conservation commissions and recreations departments to start the process. The final report and maps are available at <http://www.lampreyriver.org/recreation-walking-trail-feasibility-study>.

#### **Water Quality and Quantity:**

- LRAC has long supported the volunteer monitoring efforts of the Lamprey River Watershed Association to test and report water quality data and that tradition was continued in 2015. With severe reductions in state support for water quality monitoring,

Wild and Scenic Subcommittee funding ensured that years of data were not interrupted by cuts to the state program.

- The water quality workgroup continued to collate years of data from multiple sources with the goal of making these data more accessible and understandable.

**Project Review:**

- The project review workgroup commented on seventeen projects that were submitted to the state for environmental permits.
- Several complaints or concerns about activities along the river were investigated. When appropriate, the committee notified NHDES and requested follow-up.

**Plans for 2016 and Issues to Watch:** The full committee will continue its main duties to work on issues identified in the 2013 Lamprey Rivers Management Plan and review projects proposed for the quarter mile corridor around the designated rivers. The LRAC will continue to support research, volunteer water quality monitoring, and outreach efforts. Changes at NHDES with the rivers and lakes management and protection programs might result in a more watershed-based approach to protecting designated waterways and water bodies. The legislature will be reviewing results from the pilot instream flow management programs and determining the future of the program for the Lamprey and other designated rivers.

Respectfully submitted,



Richard Snow, chair

2015 LRAC Members:

Barrington: vacant

Brentwood: Emily Schmalzer

Candia: Al Hall (secretary, treasurer), Richard Snow (chair)

Deerfield: Cynthia Kelsey

Durham: Anne Lightbody, Dick Lord, Ann Welsh

Epping: Joe Foley (vice chair)

Exeter: Todd Piskovitz

Fremont: Pat deBeer

Lee: Sharon Meeker, Kitty Miller, Preston Samuel

Newfields: vacant

Newmarket: Michelle Daley

Northwood: vacant

Nottingham: vacant

Raymond: Carolyn Matthews, Debbie McNelly

Associate Member: Dawn Genes, executive director, Lamprey River Watershed Association

Specialists/Staff:

Phil Auger, land conservation

Laurel Cox, land conservation administrator

David Viale, land conservation

Suzanne Petersen, outreach and education

National Park Service: Jim MacCartney

Contact: [www.lampreyriver.org](http://www.lampreyriver.org)