

Note from the Chair

It is a very exciting time to be involved in river management and protection. Watershed residents, local officials, and Exeter River Local Advisory Committee (ERLAC) members in Chester, Sandown, Danville, Raymond, Fremont, Kingston, East Kingston, Kensington, Brentwood, and Exeter are reaching out to our fellow watershed residents in Stratham and Newfields to discuss in earnest the nomination of the Squamscott River to the New Hampshire Rivers Management and Protection Program (RMPP). The purpose of this program is described in this report in greater detail, however, as ERLAC's Chairman for 10 years, I speak from experience when I state unequivocally that enrolling the Squamscott River in the RMPP will benefit riverfront landowners, river users, and most importantly, the river itself.

The Exeter River was enrolled in the RMPP in 1995, and ERLAC began meeting shortly thereafter. The RMPP has enabled ERLAC to access hundreds of thousands of dollars in grant funds to partner with the Rockingham Planning Commission, NH Department of Environmental Services, NH Coastal Program, Piscataqua Region Estuaries Partnership, and other groups on a wide variety of technical, educational, and science-based projects. All these projects have provided residents and watershed towns with an opportunity to talk directly with state policy makers and regulators about the specific needs, interests and concerns of local citizens. ERLAC envisions the towns of Newfields and Stratham will join the committee, requiring a name change, and complete ERLAC's long-held goal of working together to understand what it takes to improve, maintain, and enhance the quality of the Exeter/Squamscott watershed. Join us as we chart a course that will ensure a healthy and viable river system and watershed well into the future.

Donald Clement, Exeter
 ERLAC Chair

About the Exeter River Local Advisory Committee

In 1995, a group of watershed residents were successful in enrolling the Exeter River in New Hampshire's Rivers Management and Protection Program. The Exeter River Local Advisory Committee, known as ERLAC, was established in 1996 to oversee the development and implementation of a river management plan. Committee members are residents from watershed communities working to protect and maintain the river's natural character. ERLAC partners with watershed communities, state agencies, and other organizations to advocate for the protection of water quality and quantity, recreational opportunities, and wildlife habitat. ERLAC meets monthly and all meetings are open to the public. For more information, please visit our website, www.exeterriver.org, or contact ERLAC at 156 Water Street, Exeter, NH 03833; 603-778-0885.

Downtown Exeter and the Exeter/Squamscott River.

RALPH MORANG

State OF THE River

FROM THE EXETER RIVER LOCAL ADVISORY COMMITTEE

CHESTER · SANDOWN · DANVILLE · RAYMOND · FREMONT · KINGSTON · EAST KINGSTON · KENSINGTON · BRENTWOOD · EXETER

Celebrating 13 years of stewardship in the Exeter River watershed

Exeter/Squamscott – One River, Two Names

From Great Bridge in the heart of downtown Exeter, looking south up the Exeter River, it's hard to imagine this waterway starts in Chester from a spring thirty-three miles upstream. Looking north, the fresh river water crashes over the dam and rocks, splits in two around and through String Bridge and runs into the tidal waters of the Squamscott River. When the lower falls of the river were harnessed for power as early as the mid-17th century, the seemingly single-flowing river physically had been divided by the dams and mills built between its natural headwaters and ocean-borne course. It's not surprising, then, for what is essentially one river to end up with two distinct names.

Squamscott gets its name from the Algonquin sub-tribe, the Squamscott Indians, who called it *Msquam-s-kook*: "at the salmon place" or "big water place." The Wheelwright Deed of May 17, 1629 (Exeter Historical Society, reattributed to c.1714), described the falls of the river as "Squamsquot" as did Jeremy Belknap (*History of New Hampshire*, 1784): "Having engaged to make a settlement... on the lands he [John Wheelwright] had purchased of the Indians at Squamscot falls, he... began a plantation there."

Sailing from Portsmouth Harbor through Great Bay and into the port of Exeter, the river system was thought of as a continuation of "Piscataqua." A map from c.1670 titled *Pascataway River in New England* by I.S. (John Sellers) shows the river into Exeter with no name. In 1785 Joseph Hadfield visited town and called the falls "Piscataway Falls," and the following year George Washington noted that Exeter "stands at the head of the tide-water of the Piscataqua River." The wide tidal basin below the lower falls held the turn-around for seagoing vessels, and wharves and docks along what is now Swasey Parkway supported shipbuilding and inland commerce. Ships built in



The Exeter falls into the Squamscott.

CAROL WALKER ATEN

Exeter and Newfields carried tons of wood products south to Virginia, to the West Indies, and across the Atlantic, bringing back whale oil, rum, sugar, molasses, cloth, and manufactured goods. Town tradesfolk relied on the river's twice-daily tidal currents to bring in their merchandise and take out locally manufactured products. Rivers were the primary bulk cargo transit system: gundalows, packets and barges carried bricks,

continued on back

New Hampshire's Rivers Management and Protection Program

In 1988, the New Hampshire state legislature responded to the increasing and competing uses of our state's rivers by creating the New Hampshire Rivers Management and Protection Program (RMPP). The purpose of the program is to protect our state's significant river resources for the benefit of present and future generations through a unique combination of state and local resource management and protection.

To date, 16 rivers have been enrolled in the program. Rivers enrolled in our region include the Exeter, Lamprey, Cocheco, and Isinglass. Interested citizens in the Oyster River watershed are currently drafting a nomination for that river. A river or river segment may be nominated by any citizen or organization in the state. The nomination of the Squamscott River, if supported by residents and local officials in Exeter, Stratham and Newfields, will be made by ERLAC by June 2010. The nomination will be reviewed by the DES Commissioner and forwarded to the state legislature.

An important and unique feature of the RMPP is the opportunity for municipalities to participate, through local river management advisory committees, in multi-town river corridor planning and implementation efforts. A local management advisory committee (LAC) is appointed for each designated river. For the Squamscott River, ERLAC envisions changing the

LAC name and adding residents from Stratham and Newfields to the Committee, instead of creating a separate LAC. The LAC meets monthly and comments on activities affecting the river that require state or federal permits, discusses river related issues in each of the watershed towns, and designs and participates in a wide variety of science and education programs. LAC members come from a broad range of interests, including but not limited to riparian landowners, recreation, agriculture, conservation, business, and local government. This diversity helps to bring a variety of perspectives to bear on resource protection and development issues.

Designation of a river increases public awareness and creates a local planning and management effort centered specifically on the river and its resources. River designation can increase respect for property rights and heighten recognition of the valuable contribution which landowners already make in river protection. Designation can also promote greater public understanding and awareness of the unique problems and issues faced by landowners. Designation does not affect local land use control in the river corridor.

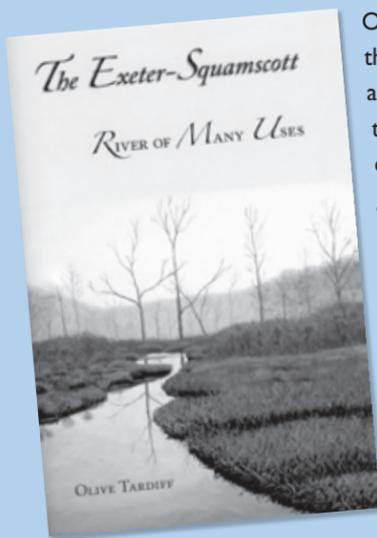
For more information on the RMPP, visit <http://des.nh.gov/organization/divisions/water/wmb/rivers/index.htm>

The Exeter-Squamscott, River of Many Uses

The Exeter-Squamscott River has shaped the landscape and economy of many New Hampshire communities for centuries. Exeter native and author, Olive Tardiff, traces the river's role in the lives of the plants, animals, and people lucky enough to live within its watershed.

Originally written in 1986, the text has been revised and reprinted with additional photographs and commentary under the guidance and sponsorship of the Exeter River Local Advisory Committee. Proceeds from the sale of the book are used to support ERLAC's outreach programs for children, adults, and local decision makers.

The book has many historical photos and can be purchased for \$15 from Water Street Books in downtown Exeter, or by calling ERLAC at 778-0885.



ERLAC member Patrick Seekamp of Brentwood guides a lucky young fisherman during ERLAC's annual fly fishing workshop, held in collaboration with Great Bay Trout Unlimited and the Brentwood Conservation Commission.

TERESA WALKER



Exeter River Geomorphic Assessment and Watershed-based Plan Tools for River Restoration and Protection

Rivers are Dynamic

The Exeter River continually adjusts in response to a variety of natural and human-built features as it flows over the land. Stable river channels move in their landscapes over time without causing serious damage to nearby property and infrastructure. Traditional river management and development practices such as channel straightening, floodplain encroachment, bank armoring, and other modifications can shift a river's natural balance resulting in damaging channel adjustment events including erosion and flooding. River equilibrium is a delicate balance, and resource managers increasingly seek tools for restoring and maintaining natural river stability.

Planning for Stable River Channels

The Exeter River Geomorphic Assessment and Watershed-based Plan provides information to help landowners, local decision makers and watershed managers understand how the river responds to the land over which it flows. The plan is based in the science of fluvial geomorphology, the study of how rivers and landforms interact over time through different climatic conditions. This method provides a holistic, watershed-scale approach to understanding stressors on river health. The science also helps resource managers identify stable and unstable river reaches, and provides site-specific recommendations for avoiding damage caused by flooding, erosion or river channel adjustment.

Working Together

The Exeter River watershed contains some of the fastest growing towns in New Hampshire, which has led to pressure from development on the health of the river. Increases in impervious cover, forest fragmentation, and ground water withdrawals have led to efforts to protect water quality and quantity in the watershed. A 2008 watershed analysis indicates that several Exeter River subwatersheds are vulnerable to water quality impacts from land use activities. Additionally, towns are concerned about flooding, erosion, and loss of

infrastructure during high river flow events.

In response to local concerns, the Exeter River Local Advisory Committee (ERLAC), the New Hampshire Department of Environmental Services (NHDES), and other project partners initiated a comprehensive watershed-wide assessment and planning effort to gather scientific information about river functions.

The Geomorphic Assessment Process

The project team assessed forty-eight river and tributary miles to characterize the current physical condition of the river and identify stressors on the river in order to develop regional and local recommendations for projects to restore and protect river equilibrium. The assessment data were used to develop recommendations to identify and guide local and watershed-wide protection and restoration projects. Types of projects identified in the Plan include river corridor protection, riparian buffer restoration, channel restoration, stream crossing improvements, aquatic organism barrier removal, and stormwater runoff mitigation. Twenty-one high-priority projects were identified within the study area. At the watershed scale, fluvial erosion hazard (FEH) zones were delineated and mapped. An FEH model ordinance was developed to help communities minimize human/river conflicts in the FEH zone.

Next Steps

ERLAC and NHDES are working with watershed communities to use the Plan to guide future efforts to restore and protect the river. The Plan will also be used to educate watershed communities and residents about the importance and benefits of maintaining and restoring stable river channels.

To download the Plan and its appendices go to: http://des.nh.gov/organization/divisions/water/wmb/was/watershed_based_plans.htm

For questions and more information about the Plan, please contact Sally Soule, NHDES – Watershed Assistance Section, at 603-559-0032 or ssoule@des.state.nh.us

Bell Avenue, Exeter: The loss of vegetation along the shore and runoff from the road has caused the riverbank to erode. Planting native vegetation would help stabilize the bank.

Upper Exeter River, Chester: The Plan recommends conserving undeveloped land along the river corridor to protect stable river reaches.

SALLY SOULE (BOTH)



Join ERLAC and See the Watershed!

ERLAC needs representatives from every community in the watershed. The committee meets once per month and is actively involved in research and education programs. For more information, please contact Theresa Walker of the Rockingham Planning Commission at 778-0885.

EXETER RIVER
LOCAL ADVISORY COMMITTEE

For more information please contact us at 603-778-0885.
156 Water Street, Exeter, NH 03833 • www.exeterriver.org



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MASTHEAD PHOTO: FALLS AT CAVIL MILL, FREMONT, CAMILLA LOCKWOOD

Exeter/Squamscott – One River, Two Names, continued...

coal, and goods in and out of Exeter until the swinging bridges were locked shut in the mid-1950s.

Timothy Dwight, in 1796 remarked, "Exeter is a considerable town, situated on the falls of Squamscut, or Exeter river, a branch of the Piscataqua... At a small distance above the town the Squamscut is joined by another stream, called Little river." Dwight was the first to use Squamscott and Exeter interchangeably. When Phineas Merrill's map was engraved in 1802: *A Plan of the Town of Exeter, at the head of the southerly branch of Piscataqua River*, the Exeter River was called the "Fresh River." An 1832 Exeter map has the river labeled "Squamscott or Exeter River - branch of the Piscataqua." Maps of Exeter published in 1845 and 1874 illustrate the river ultimately divided into

two names: "Exeter River" and "Sw[qu]amscott River." Piscataqua or Squamscott, Fresh or Exeter: from south to north, this one river will keep flowing towards the Atlantic Ocean no matter the name.

Carol Walker Aten with research from Barbara Rimkunas, Curator, Exeter Historical Society and Olive Tardiff

Accounts of Exeter (1750-1800), Exeter Historical Society, 1938; Cross-Grained & Wiley Waters: A Guide to the Piscataqua Maritime Region, Jeffrey W. Bolster, Editor, Peter Randall Publisher, Portsmouth, 2001; Charles H. Bell, History of Exeter, New Hampshire, Exeter NH, 1888; Olive Tardiff, The Exeter-Squamscott: River of Many Uses, Peter E. Randall, Publisher, Exeter, NH 1986, 2004; Edward C. Echols, "The Phillips Exeter Academy A Pictorial History," Phillips Exeter Academy Press, 1970