



**New Hampshire Rivers Management and
Protection Program
Biennial Report**

**State Fiscal Years
2008-2009**



New Hampshire Rivers Management and Protection Program Biennial Report

2008-2009

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1. Executive Summary

In accordance with RSA 483:13 the Rivers Management and Protection Program (RMPP) must submit a biennial report to the General Court documenting RMPP activities and the use of the Rivers Management and Protection Fund. The purpose of the RMPP, established in 1988 by RSA 483, is to protect certain rivers, called designated rivers (Appendix A), for their outstanding natural and cultural resources. The program is administered by the New Hampshire Department of Environmental Services (DES) and uses a two-tier approach to manage and protect rivers at the state and local levels through the advisement of the state Rivers Management Advisory Committee (RMAC) and the Local River Management Advisory Committees (LACs).

For the 2008-2009 state fiscal biennium from July 1, 2007 to June 30, 2009, the RMPP achieved the following:

- The designation of the Ammonoosuc River in 2007, the upper reach of the Ammonoosuc River in 2009 and the designation of the Cochecho River in 2009.
- Coordinated the funding for the development of nominations for several rivers to become designated under the RMPP.
- Revised the RMPP statute, RSA 483, to allow for the designation of tidal rivers; the prioritization of the protection of water quality standards; and the creation of a dedicated, non-lapsing Rivers Management and Protection Fund.
- The RMAC continued to advise the state on river-related issues by providing testimony on 11 pieces of river-related legislation, serving on five legislative commissions or working groups, reviewing the disposal of 17 state-owned properties near or adjacent to a river, and providing approximately 470 hours in volunteer time towards river protection.
- The LACs developed or updated eight local river corridor management plans, commented on 153 actions requiring a state permit, and provided 21,372 hours in volunteer work towards river protection.
- Establishment of protected instream flows on the Souhegan River, the first in the state, and began finalizing the establishment of protected instream flows on the Lamprey River.
- Drafted the first, long-range management plan for state-owned lands to address the management and protection of instream values and the management of state-owned lands within the designated Exeter River Watershed in accordance with RSA 483:10-a.
- Coordinated funding and provided technical assistance on dozens of river protection projects throughout the state.
- Hosted the 2007 and 2008 New Hampshire Watershed Conferences which reached almost 400 individuals on environmental topics related to lakes, rivers and watersheds throughout the state.
- Worked with the RMAC and the Lakes Management Advisory Committee to develop *The Sustainability of New Hampshire's Surface Waters*, an initiative to address the long-term viability of the state's surface waters.

The RMPP is largely a volunteer-based program in that much of the achievements of the program would not have been possible without the volunteers of the RMAC and the LACs. The total volunteer time spent on river protection during the 2008-2009 biennium totals 21,842 hours, equivalent to \$409,974. The RMPP budget during this time period totaled \$470,319.

The RMPP's goal is to continue to manage, protect and promote the state's rivers, particularly its designated rivers by:

- Increasing outreach and education about designated rivers and river-related issues to state and local officials and the general public in order to promote potential protection measures.
- Promoting legislation and policies that protect the state's rivers water quality and quantity, natural characteristics, and use as an economic and social asset.
- Continuing to coordinate river protection activities and planning efforts at the state and local levels using a watershed-based approach.
- Maximizing data collection and research efforts towards information that will be most beneficial to monitor and protect the state's rivers.

The future projection of the RMPP is one of growing participation and demand. As more and more rivers become designated, land use change increases, and the regulations regarding environmental protection become more complex the need for technical assistance, funding, and outreach on river and watershed related issues will grow. The RMPP can provide the type of assistance needed at the state and local levels assuming adequate staffing resources, long-term funding for determining protected instream flows, and funds implementing local river management protection efforts.

2. Program Overview

The New Hampshire River Management and Protection Program (RMPP) was established in 1988 with the passage of RSA 483 to protect certain rivers, called designated rivers, for their outstanding natural and cultural resources. 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.

New Hampshire Designated Rivers ¹

Ammonoosuc River	Ashuelot River	Cold River
Connecticut River	Contoocook River	Exeter River
Lamprey River	Isinglass River	Merrimack River (Lower)
Merrimack River (Upper)	Pemigewasset River	Piscataquog River
Saco River	Souhegan River	Swift River

The Rivers Management and Protection Act of 1988 (RSA 483) established a statewide rivers program based on a two-tier approach to river management and protection: *state* designation of significant rivers and protection of instream values and *local* development and adoption of river corridor management plans to protect shorelines and adjacent lands. The RMPP is administered by the New Hampshire Department of Environmental Services (DES) and is staffed by a rivers coordinator. The act also established the statewide Rivers Management Advisory Committee (RMAC). The RMAC members represent a wide range of river interests and work closely with DES in an advisory capacity.

River Designation

A river or river segment may be nominated for state designation by any citizen or organization in the state. Sponsors must submit a description of the river's values and characteristics to the Commissioner of DES. The rivers coordinator and the RMAC review the nomination, hold a public hearing for comment and forward their recommendations to the DES Commissioner for consideration. Each river nomination is evaluated by the DES Commissioner to ensure that the river's designation would be consistent with the purpose of RSA 483, the Rivers Management and Protection Act. If the Commissioner determines that the river or river segment meets the criteria in RSA 483:6, the nomination is forwarded to the state legislature.

The final step in the designation process is the state legislature's consideration of a bill to designate the nominated river. When the bill gets passed and signed by the governor, this formally designates the river into the RMPP. Each designated river is protected and managed to maintain and enhance instream river values such as water quality and instream flows.

Local Implementation

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

¹ As of June 30, 2009, the last day of the 2008-2009 biennium there were 15 rivers designated under RSA 483. The Cochecho River became the 16th designated river in July 2009 at the start of the 2010-2011 biennium.

efforts. A local river management advisory committee (LAC) is appointed for each designated river. Each LAC is comprised of representatives from each riverfront municipality and is responsible for developing a local river corridor management plan and commenting on activities affecting the river that require state or federal permits would alter the resource values and characteristics for which the river was designated. In addition to advising DES, the LAC is also responsible for advising the RMAC, and the municipalities through which the designated river flows on matters pertaining to the management of the river and its tributary drainage area. Representatives come from a broad range of interests, including but not limited to local government, business, conservation, recreation, agriculture, and riparian landowners. This diversity helps bring a variety of perspectives to bear on resource protection and development issues.

While state designation requires development of instream flow protection, the local plan addresses the management and protection of the shoreline and adjacent lands that make up the river corridor. Because the plan is locally developed, adopted and implemented, it reflects the specific needs, interests and concerns of local citizens. What is a local decision before a river is designated is a local decision after a river is designated. DES provides technical assistance to the local river management advisory committee and other interested local and regional groups and officials on corridor management planning and other issues.

Due to the unique approach to river and watershed management in New Hampshire, there are many opportunities for collaboration and integration of state and local decisions. Many of the duties and activities of the RMAC, LACs and certain DES projects are coordinated by RMPP staff.

3. Program Activities

3.1 River Nominations (RSA 483:6)

In accordance with RSA 483:6, an individual, group or organization can nominate a river for designation into the Rivers Management and Protection Program (RMPP). RMPP staff is responsible for implementing the nomination process per RSA 483:6 and Env-WQ 1800. This includes the rivers coordinator's review of the nomination for completeness, a public hearing held in conjunction with the Rivers Management Advisory Committee (RMAC), and drafting a recommendation to the Department of Environmental Services (DES) Commissioner on whether the nomination should be recommended for designation by the General Court. Once the DES Commissioner has recommended the river for nomination it is forwarded to the legislature for review and approval. Before a river can be protected and managed under the program, the legislature must adopt a bill that designates the river into the program and the governor must sign it into law. A map of all designated rivers can be found in Appendix A.

3.1.1 Ammonoosuc River, Upper Reach

The lower portion of the Ammonoosuc River was designated in August 2007, and in January 2008 the newly formed Local River Management Advisory Committee (LAC) voted to seek designation of the upper portion of the river. Adding the 12 mile upstream portion of river into the RMPP from Lakes in the Clouds in Sargents Purchase on Mount Washington down to the Lower Falls, the boundary of the White Mountain National Forest, in the town of Carroll would, in the words of the LAC, "make the river truly 'whole' and consistent with the intentions of the [RMPP]." This was the first LAC to seek an extension of an existing designated river.

After submittal of the nomination of the Upper Reach of the Ammonoosuc River, the RMAC held a public hearing in August 2008 in the town of Carroll where the public testimony and subsequent letters of support were overwhelmingly supportive of the nomination. The legislation for designating the Upper Reach of the Ammonoosuc River passed the New Hampshire Legislature and was signed into law by Governor John Lynch on September 13, 2009.

3.1.2 Cocheco River

In 1999, the Cocheco River Watershed Coalition (CRWC) began monitoring the water quality in the Cocheco River through the DES Volunteer River Assessment Program (VRAP). Participation in VRAP lead CRWC members to become aware of the RMPP and the benefits designation can have on coordinated river management and protection. In 2007, the CRWC worked with Strafford Regional Planning Commission to secure funds through the DES Coastal Program and the New Hampshire Charitable Foundation to develop the nomination, which was submitted in May 2008.

The river nomination and public comments were then reviewed by the rivers coordinator, RMAC and DES Commissioner Thomas Burack, who recommended the river for designation based upon the strong public support for the nomination. The legislation for the designation passed both the New Hampshire House and Senate during the 2009 legislative session. The river designation was signed into law by Governor Lynch on July 21, 2009, making the Cocheco River the 16th designated river in the state.

3.1.3 Future River Nominations

One of the main goals of the RMPP is to help individuals, groups and towns interested in seeking river designation by providing both technical assistance and financial support for the development and outreach coordination for a river nomination. During the 2008-2009 biennium, the RMPP helped secure funding for the development of three future river nominations, with expected nomination submittals in 2010, including:

- The Oyster River with funding provided through a RMPP administered federal Clean Water Act Section 604(b) grant. See section 3.8.3.1 for more information.
- The Mascoma River with funding provided through a DES Drinking Water and Groundwater Bureau Local Source Water Protection Grant. See section 3.8.3.3 for more information.
- The Squamscott River, the downstream, tidal reach of the designated Exeter River, with funding provided through the American Recovery and Reinvestment Act (ARRA). See section 3.8.3.2 for more information.

The RMPP also began to provide technical assistance, including identifying potential funding sources, to a group interested in nominating portions of the Lamprey River and its tributaries not already designated.

3.2 Rivers Management Advisory Committee (RSA 483:8)

The New Hampshire Legislature established the statewide Rivers Management Advisory Committee (RMAC) to assist DES in administering the RMPP with the passage of RSA 483:8. There are sixteen committee members, eleven voting and five non-voting. At least three members must represent the North Country and all must be New Hampshire residents. The voting members of the RMAC are appointed by the Governor and Executive Council for three-year terms. They represent public water suppliers, municipal officials, the fish and game commission, business and industry, hydropower, conservation commissions, the conservation community, recreation interests, historic/archaeological interests, local river management advisory committees and the agriculture community. The non-voting members represent the Office of Energy and Planning, the Fish and Game Department, the Department of Resources and Economic Development, the Department of Transportation, and the Department of Agriculture, Markets and Food.

During the 2009 legislative session the passage of House Bill 102 called for two changes to the RMAC membership to go into effect on July 15, 2009. These changes included the removal of the requirement that the RMAC must contain three representatives from the North Country; the committee must now be made of members from diverse geographic areas of the state. Additionally, a representative from the Department of Safety was also added, bringing the total number of members to 17, with eleven voting and six non-voting members.

All RMAC voting members are either strictly volunteers or their time is donated by the interests they represent. Over the 2008-2009 biennium the voting members of the RMAC contributed approximately 470 hours towards RMAC duties. Using the 2008 Federal Volunteer Match Rate of \$18.77 per hour, this translates to \$8,822 in river protection efforts. This amount is likely an underestimation because only time spent in RMAC meetings, meeting travel and preparation was counted; subcommittee meetings and time voting members spent on other RMAC activities is not tracked. Additionally, many of the voting members' time is donated by the entity they represent and they are likely paid at a higher rate than the volunteer match rate.

3.2.1 River Management Advisory Committee Duties

The principle duty of the RMAC is to advise DES in implementing the RMPP. Among its advisory duties, the RMAC is responsible for reviewing nominations to designate additional rivers into the RMPP and for preparing a recommendation to the DES Commissioner on the merits of the nomination. Another important responsibility of the RMAC is to advise DES on the adoption of rules for the protection of instream flow. The RMAC is also responsible for reviewing and making recommendations on plans to dispose of state-owned property along or providing access to a river.

During the 2008-2009 biennium, the RMAC accomplished the following tasks with support from RMPP staff:

- Reviewed and submitted recommendations to the DES Commissioner for the nomination of two rivers (Upper Reach of the Ammonoosuc River and the Cocheco River) into the RMPP. This involved reviewing nomination documents, participating in river tours and attending public hearings. See section 3.1.1 for more information.
- Continued to advise DES on the Instream Flow Program and pilot studies on the Lamprey and Souhegan Rivers. See section 3.4 for more information.
- Testified or submitted letters of testimony on 11 pieces of river-related legislation during the 2008 and 2009 legislative:
 - House Bill 2 - sunset all non-regulatory boards, commissions, councils, advisory. (Oppose)
 - House Bill 58 - designating segments of the Cocheco River protected under the RMPP.(Support)
 - House Bill 102 - relative to the rivers management programs, establishment of VRAP and naming of Alstead, NH bridge. (Support)
 - House Bill 290 - authorizing fluvial erosion hazard ordinances.(Support)
 - House Bill 452 - designating segments of the Ammonoosuc River under the RMPP, relative to the consideration of riparian rights in the establishment of instream flows, and relative to an exemption from terrain alteration permitting requirements.(Support)
 - House Bill 607-FN - relative to residential pharmaceutical waste.(support)
 - Senate Bill 44 - establishing a commission to review all fees charged by the department of environmental services.(Support)
 - Senate Bill 60 - establishing a commission to study water infrastructure sustainability funding. (Support)
 - Senate Bill 65-FN - relative to the acceptance of in lieu payments for the restoration and creation of wetlands and establishing a committee to study the administrative fee percentage for such in lieu payments. (Support)
 - Senate Bill 107 - relative to the leasing of state-owned real estate on public waters. (Support)
 - Senate Bill 139 - establishing a moratorium on the shoreline protection act and establishing a commission to study revision of the shoreland protection act.(Oppose)
- Members served on five legislative, advisory or rule making committees on river-related issues representing the RMAC:
 - House Bill 648 Comprehensive Flood Management Commission
 - House Bill 710 Leasing of State-Owned Land Commission
 - Water Quality Standards Advisory Committee
 - Comprehensive Shoreland Protection Act Rules Working Group
 - Stream Crossing Rules Working Group

- Developed *The Sustainability of New Hampshire's Surface Waters* document in January 2008, in conjunction with the Lakes Management Advisory Committee (LMAC), in an effort to guide the RMAC and LMAC, DES and the state to develop environmental and programmatic indicators and recommendations to address a variety of issues and problems facing New Hampshire's water resources. See section 3.9.2 for more information.

3.2.2 River Nominations (RSA 483:6)

The RMAC plays a critical role in the nomination process for a river to become designated under the RMPP. After a river nomination is submitted and deemed complete by the river coordinator per the requirements of DES Administrative Rules Env-Wq 1800, the next step is for the RMAC to review the nomination. River nomination administrative rules can be found on the DES website at: <http://des.nh.gov/organization/commissioner/legal/rules/index.htm>. See section 3.1 for more information.

Review of nominations by the RMAC consists of the group or individual sponsoring the nomination making a short presentation about the river to the RMAC, followed by a question and answer session. A public hearing in one of the riverfront communities is required for each river nomination and this provides the RMAC, along with the rivers coordinator, the opportunity to gage the level of public support for the river nomination. In conjunction with the public hearing, the nomination sponsor will often arrange a tour of the river for the RMAC prior to the hearing. Following the public hearing, both the rivers coordinator and the RMAC complete their evaluations and prepare a recommendation based on the factors listed in RSA 483:6, IV (a), and consideration of the public comments received. This recommendation is then forwarded to the DES Commissioner for review and approval.

Once the DES Commissioner has approved the nomination and legislation has been submitted to designate the nominated river into the RMPP, the RMAC has always historically supported that legislation through testimony or submitting letters of support.

During the 2008-2009 biennium the RMAC:

- Recommended the designation of the Upper Reach of the Ammonoosuc River after touring the river and hearing the enthusiasm of the riverfront communities at the public hearing. The Upper Reach of the Ammonoosuc River was designated in September 2009.
- Recommended the designation of the Cocheco River after touring the river and hearing the overwhelming public support of the nomination. The Cocheco River became the 16th designated river in July 2009.
- Supported legislation (House Bill 102) during the 2009 Legislative Session to clearly allow tidal rivers to be designated under RSA 483. As a result, the Exeter River Local Advisory Committee, with the help of Rockingham Planning Commission, is developing a nomination document for the Squamscott River, the tidal, downstream section of the designated Exeter River, through funds provided by the American Recovery and Reinvestment Act (ARRA). See sections 3.8.3.2 for more information.

3.2.3 Surplus Land Reviews (RSA 483:14)

The RMAC is also responsible for reviewing and making recommendations on plans to dispose of state-owned property along or providing access to a river. The RMAC procedures for reviewing state-owned

property disposals can be found at:

http://des.nh.gov/organization/divisions/water/wmb/rivers/rmac/documents/procedure_disposal.pdf.

During the 2008-2009 biennium, the RMAC:

- Reviewed and advised the state on the disposal of 17 state-owned properties near or adjacent to the state's rivers.
- Updated the RMAC checklist used to standardize state-owned land disposal recommendations, which can be found at:
http://des.nh.gov/organization/divisions/water/wmb/rivers/rmac/documents/staff_review_checklist.pdf.

3.3 Local River Management Advisory Committees (LACs) (RSA 483:8-a)

A distinctive characteristic of the RMPP is the partnership created between state government and local citizens through the formation of a local river management advisory committee (LAC) for each designated river. Each committee plays a vital role in protecting not only the river, but its shorelands as well. A minimum of one resident from each riverfront community along the length of the entire designation is appointed to the committee by the DES Commissioner. Committee members represent a broad range of interests and backgrounds. The main responsibilities of the local advisory committee is to develop and implement a local river corridor management plan, and to advise local, state and federal governing bodies and agencies of activities which may affect the water quality or flow of the protected river or segment and its tributary drainage area. DES offers the committee technical assistance in developing and implementing the management plan. All LAC members must be New Hampshire residents.

The Connecticut River's designation into the Rivers Program is unique in that members of the local river management advisory committees for the Connecticut River represent both New Hampshire and Vermont, creating an interstate partnership for protection of the common and valuable resource. The DES Commissioner appoints the New Hampshire Connecticut River Valley Resource Commission, as the local river management advisory committee, to work with the Vermont Connecticut River Watershed Advisory Commission, whose membership is established by RSA 227-E. The two committees work together as the Connecticut River Joint Commissions (CRJC). Five subcommittees are administered by the Connecticut River Valley Resource Commission along the river between Vermont and New Hampshire in accordance with RSA 483:8-a, II.

A total of 119 individuals served on the 14 active Local River Management Advisory Committees throughout the state during the 2008-2009 biennium resulting in 21,372 hours of volunteer time towards river protection.

3.3.1 Local River Management Advisory Committees Activities

Each year the LACs and CRJC are required to submit an annual report highlighting the major activities each committee has accomplished during that calendar year. These reports are submitted by early spring and highlights of these reports are generally included in the RMPP newsletter *Meanderings*. During the 2009 legislative session House Bill 102 was passed and now requires the LACs and CRJC to submit activity reports to DES biannually. The 2008 calendar year LAC annual reports can be found in Appendix E or at: http://des.nh.gov/organization/divisions/water/wmb/rivers/lac/annual_reports.htm.

The LACs often participate in a variety of activities to better protect their rivers beyond those duties required by the RMPP statute, RSA 483. The following tables represent the estimated number of volunteer hours LAC members contributed towards river protection, along with the number of meetings held, permits reviewed and site walks conducted, during the 2008-2009 biennium. Each LAC submitted their own estimates, while some volunteer hours reported may not reflect time spent directly related to LAC responsibilities per RSA 483, all activities were related to river protection efforts. For example, many LACs participate in the DES Volunteer River Assessment Program to collect water quality information which is not a responsibility of the LACs, but does contribute to river protection that may not exist without the presence of the LAC.

Connecticut River Local Advisory Committee Activities Summary

Volunteer Body	# volunteer hours contributed for river protection activities	Meetings held	Permits reviewed	Site walks
Connecticut River Joint Commissions	876	23	2*	1
<i>Local Subcommittee subtotal</i>	756	44	41	8
Headwaters	164	9	10	1
Riverbend	138	9	10	3
Upper Valley	182	8	7	3
Mt. Ascutney	146	9	5	1
Wantastiquet	126	9	9	0
Total	1,632 hours	67	43	9
*The Connecticut River Joint Commissions have delegated responsibility for permit review to their five local river subcommittees. Commissioners participate in subcommittee meetings, keep informed of subcommittee recommendations, and occasionally review and advise on exceptional permits themselves.				

Local River Management Advisory Committee Activities Summary

Local Advisory Committee	# volunteer hours contributed for river protection activities	Meetings held	Permits reviewed	Site walks
Ammonoosuc River	1,316	13	14	10
Ashuelot River	2,830	21	27	8
Cold River	3,100	50	10	10
Contoocook & North Branch Rivers	480	12	14	2
Exeter River	1,940	20	10	2
Isinglass River	390	22	5	5
Lamprey River	3,600	48	7	4
Lower Merrimack River	400	19	9	0
Pemigewasset River	281	13	7	7
Piscataquog River	200	20	35	2
Saco River	<i>This LAC was inactive during the 2008-2009 biennium.</i>			
Souhegan River	200	7	5	5
Swift River	800	12	12	50
Upper Merrimack River	4,203	22	50	4
Subtotal	19,740 hours	279	205	109
TOTAL - All LACs (including the Connecticut River)	(1,632 hours + 19,740 hours = 21,372 hours) * (2008 federal volunteer rate of \$18.77/hour) = \$401,152			

3.3.2 LAC Permit Notification and Comments (RSA 483:12-a)

A major duty of the LACs is to review and comment on local, state or federal activities, within a quarter mile on either side of the river, in accordance with RSA 483:12-a. RMPP staff is responsible for coordinating the procedure by which the LACs are notified when state action is being considered which affects a designated river. State actions and permits that qualify for review by the LACs (RSA 483:8-a, III, (a) & (b) are as follows:

Statutes

- Groundwater Protection Act (RSA 485-C)
- Water Pollution and Waste Disposal (RSA 485-A)
- Dams, Mills and Flowage (RSA 482)
- Hazardous Waste Management (RSA 147-A)
- Solid Waste Management (RSA 149-M)

State Permits

- Alteration of Terrain (AoT) Permit (RSA 485-A:17)
- Comprehensive Shoreland Protection Act (CSPA) Shoreland Permit (RSA 483-B)
- Wetlands Bureau Permits (RSA 482-A:3)
- 401 Water Quality Certification Programs
- Pesticide Application Permits (RSA 430) were added in 2009 with the passage of House Bill 102.

During the 2008-2009 biennium, RMPP staff notified the Local Advisory Committees of 251 state actions. Of those actions 182 were reviewed and/or commented on by the LACs. In 2009, RMPP staff worked with the RMAC, LACs, and DES permitting staff and leadership, to develop the DES Standard Operating Procedure #801, *Local River Management Advisory Committee Permit Notification and Communication Protocol* which implements RSA 483:12-a.

3.3.3 LAC Membership

The RMPP administers the status of LAC members and provides updates to LACs upon request. Every year, the RMPP notifies each LAC regarding the status of their members (all nominated by their town and appointed by the DES Commissioner), including whether a member's term is still current. If a LAC is lacking representation from a town or the current representative is no longer active, RMPP staff notifies the town(s) lacking representation and requests up to three nominees be submitted to DES.

Local River Management Advisory Committee Membership Summary (June 2009)

River Name	Total Number of Riverfront Towns	Number of Towns Lacking Representation	Percentage of Towns Represented
Ammonoosuc River	7	0	100%
Ashuelot River	10	3	70%
Cold River	5	0	100%
Connecticut River*	26	2	92%
Contoocook River	14	6	57%
Exeter River	7	1	86%
Isinglass River	3	0	100%
Lamprey River	2	0	100%
Lower Merrimack River	4	0	100%
Upper Merrimack River	6	0	100%
Pemigewasset River	12	6	50%
Piscataquog River	7	3	57%
Saco River	3	3	0%
Souhegan River	6	2	67%
Swift River	4	2	50%
Total	116	28	76%

*There are 26 NH and 27 VT riverfront towns. Currently there are 24 NH towns with active representation.

Over 800 miles of river are currently designated and nearly half of all New Hampshire towns have at least one designated river within their boundaries. Through the efforts of the LACs, riverfront towns and RMPP

staff almost 80 percent of towns with a designated river have at least one representative participating on a LAC.

3.3.4 Legislative Updates

As part of the RMPP effort to keep LAC members informed of water-related legislation in the state, a weekly notice is sent out with the New Hampshire legislative calendar, the list of legislation DES is following, and the list and status of legislation that the Rivers Management Advisory Committee (RMAC) is following. Additional information regarding state decisions affecting the LACs, RMAC or the RMPP, such as the RMPP budget, is periodically included.

3.4 Protected Instream Flows (RSA 483:9-c)

Instream flow is one of the key protection measures provided under RSA 483 the Rivers Management and Protection Act. RSA 483 gives DES the authority and responsibility to maintain flow to support instream public uses in rivers that have been designated by the legislature for special protection including, but not limited to, navigation; recreation; fishing; storage; conservation; maintenance and enhancement of aquatic and fish life; fish and wildlife habitat; wildlife; the protection of water quality and public health; pollution abatement; aesthetic beauty; and hydroelectric energy production.

3.4.1 Pilot Study

In 2002, a broad coalition of New Hampshire business and conservation interests joined together to enact compromise legislation which became Chapter 278, Laws of 2002 (from House Bill 1449-A). This bill called for a pilot program for instream flow protection on two designated rivers: the Lamprey and the Souhegan Rivers. With the advice and input of the RMAC, DES adopted Instream Flow Rules (Env-Ws 1900) effective May 29, 2003 that apply to the Souhegan and Lamprey Rivers. The rules describe the process for conducting a protected instream flow study to define protected instream flows and developing a water management plan to implement the study results.

During the 2008-2009 biennium, the Instream Flow Program within the RMPP:

- Established protected instream flow for the Souhegan River in April 2008.
- Issued the *Draft Lamprey River Proposed Protected Instream Flows Report* in December 2008 for public comment.
- Developed criteria and tracked the application for maintaining stream flows below DES-operated dams during spring-time, lake-filling events.
- Developed a draft guidance paper on the protection of headwater streams.
- Developed a work plan for conducting water use versus stream flow assessments and applied it to individual designated rivers for the years 2006 and 2007.
- Made multiple presentations describing protected instream flow concepts and methods to rivers groups, students, technical and stakeholder committees, and interested citizens; and also met with instream flow specialists to coordinate priorities and share ideas for instream flow development.
- Developed guidance for defining protected flow conditions associated with water withdrawal and diversion requests.
- Administered the National Oceanic and Atmospheric Administration (NOAA) grant funding the Lamprey River pilot program and Instream Flow Program staff.

- Developed and set up a third-party review by the Instream Flow Council organization (<http://www.instreamflowcouncil.org>) of the pilot program's methods and results.

Additionally, the establishment of the protected instream flow for the Lamprey River is expected to be completed by September 2010, the deadline extension established with the passage of House Bill 102 in 2009.

3.4.2 Water Use Reports

The administrative rules for the Instream Flow Program (Env-Wq 1903.02) require the annual reporting of water use versus stream flow for all designated rivers. The instream flow rules require that designated rivers without protected instream flows have estimates conducted regarding the location and months that flows are not in compliance with the general standard. (As of April 2008, only the Souhegan River had established protected instream flows.) The **general standard**, as defined in Env-Wq 1903.02(c), is a reference tool for comparing the water use on all designated rivers. Included in these annual water use reports are:

- An estimate of water use for each affected water user.
- An estimate of aggregate water use at each withdrawal or return location.
- An estimate of stream flow at each withdrawal or return location.
- A record of the month(s) and location(s) not in compliance with the general standard.
- A description of the area designated river(s) that are not in compliance with the general standard.
- For each designated river with protected instream flows established a record of the date(s) and location(s) at which protected instream flows were not maintained.

The real value of the water use reports is to use standardized criteria to identify potential problem reaches on the designated rivers and to identify rivers that seem to be completely or to a larger degree in good shape. It can be used as a tool for identifying locations where there is or is not available water for consumptive use.

Due to the lag time between reporting of water use and detailed analysis needed to determine water use for all 15 designated rivers water use reports have only been completed through 2006. The water use reports for 2003, 2004, 2005 and 2006 can be found on the Instream Flow Program website: <http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/studies.htm>.

3.4.3 401 Water Quality Certification (RSA 483:10-b)

The 401 Water Quality Certification review process considers all discharges associated with the construction or operation of a project, and also considers the potential impacts of the discharge to the designated uses of the surface water, such as the support of aquatic life. The RMPP is concerned with protecting water quality and designated uses under the 401 Certification by maintaining appropriate stream flows to support biological integrity. Coordination with state and federal fish and wildlife agencies is essential to define and target species of concern and the flow or water level conditions necessary to support them. Program staff then evaluates conditions and determines flow protection criteria to support and maintain biological integrity.

During the 2008-2009 biennium, the Instream Flow Program completed or began evaluations for the following reviews for 401 Water Quality Certifications:

- Robbins Pond
- Merrimack River, Manchester withdrawal
- Danbury Bog , Ragged Mountain (this review required extensive evaluation)
- Bellamy River, Pruven
- Merrimack River, Concord Steam
- Lamprey River, town of Newmarket withdrawal
- Town of Bartlett Water Precinct
- Warner River, Ladd Hydropower

3.4.4 Stream Gage Task Force

In 2006, the New Hampshire Stream Gage Task Force issued a report identifying the data needs not being met by the existing state stream gage network and proposed additional stream gages to fill those voids. This strategy was implemented after the Rivers Management Advisory Committee became alarmed in 2005 that the state's stream gage network had been reduced to its lowest level since 1939 and proposed development of a long-term strategy for adequate state-wide coverage and funding for stream gages.

During the 2008-2009 biennium, the Instream Flow Specialist of the RMPP helped to implement the following steps in order to ensure the long-term coverage of a state-wide stream gage network:

- Secured approximately \$325,000 towards the installation, maintenance and operations cost for 15 stream gages. The state provided approximately \$200,000 in funding to match the United States Geologic Survey (USGS) \$125,000 funds and in kind services towards the gages.
- Coordinated the installation of gages to the New Hampshire Stream Gage Network. Nine of the 15 gages were installed during the biennium.
- Identified the need for gages in small watersheds, defined five locations and began determining funding sources for installation and long-term operation.

3.5 Local River Corridor Management Plans (RSA 483:10)

Development of a local river corridor management plan, mandated by RSA 483:10 is one of the primary duties of a LAC, with collaboration and technical assistance from the state. These plans are intended to identify watershed management and protection measures that if implemented will sustain the outstanding characteristics and instream public uses of the river. These plans are developed with a focus of coordinating local level activities, in that they are authorized by RSA 483:8-a, III (c) to be adopted as part of a community's master plan. With the passage of House Bill 102 in 2009, RSA 483:10 now states that state agencies must collaborate with and assist the rivers coordinator and the local river management advisory committee in the development and implementation of river corridor management plans. By the end of the 2008-2009 biennium, 14 of the 15 state designated rivers² had local river corridor management plans, with the Ammonoosuc River beginning the process of developing their plan.

² As of June 30, 2009, the last day of the 2008-2009 biennium there were 15 rivers designated under RSA 483. The Cocheo River became the 16th designated river in July 2009 at the start of the 2010-2011 biennium.

Specifically during the 2008-2009 biennium:

- The Cold River and Isinglass River LACs published their management plans.
- The Ashuelot River, Upper Merrimack River, Lower Merrimack River and Lamprey River LACs and the Connecticut River Joint Commissions updated their management plans.
- The Ammonoosuc River LAC began development of their management plan.

The RMPP assists LACs in obtaining funding to develop, update and implement their management plans on a regular basis. The 604(b) grant administered by the RMPP specifically funds management plan projects, amongst other water quality protection projects. (See section 3.8.3.1 more detail regarding the 604(b) grant and a list of funded projects.) Other funding sources, including other DES grants, are also regularly used to fund implementation projects.

3.5.1 New Management Plans

The most recent LACs to develop a local river corridor management plan include the Cold River and the Isinglass River. Major goals of these management plans are as follows:

Cold River Local River Corridor Management Plan, completed April 2009.

- Protecting water quality and quantity while balancing uses and understanding the impacts to water resources.
- Protecting river ecosystem diversity and habitat.
- Balancing diverse land use with river protection and social and economic factors.

Isinglass River Local River Corridor Management Plan, completed in June 2008.

- Water quality and quantity protection.
- Flood management and remediation.
- Land protection, resource and habitat conservation.
- River corridor and watershed planning.
- Stewardship, education and outreach.

3.5.2 Updated Management Plans

The development of a local river corridor management plan is a tremendous undertaking for any LAC; however, updating a management plan to reflect changing knowledge and conditions of a river can prove even more difficult. During the 2008-2009 biennium five LACs, including three of the original five designated rivers (Lamprey River, Upper Merrimack River and Lower Merrimack River), took on this challenge. Highlights from each river's update management plans are:

Ashuelot River Local River Corridor Management Plan

- Increased emphasis on land and habitat conservation with the updated management plan with reference to The Nature Conservancy's 2004 "A Land Conservation Plan for the Ashuelot River."
- Summary information on the LAC's water quality monitoring data.
- Emphasis on the need for local governments, private organizations and academics to cooperate in order to protect the river corridor through education, management and planning.

Lamprey River Local River Corridor Management Plan

- Increased efforts to work with town conservation commissions and riverfront land owners to protect more land within the river corridor.
- Continued work with local communities and water users, along side the DES Instream Flow pilot project, to help ensure adequate water for both humans and wildlife.
- Goals to increase public education and stewardship of the river.

Upper Merrimack River Local River Corridor Management Plan

- Identification of 13 resource areas considered unique or critical to the river corridor and developed goals and objectives aimed at protecting water resources, outstanding resources and riparian lands over the next five years.
- Strongly emphasized continuation of the Upper Merrimack LAC's water quality and biomonitoring programs given the tremendous growth the towns in the corridor are experiencing.

Lower Merrimack River Local River Corridor Management Plan

- Emphasized better control of non-point source pollution.
- Improvements to recreational opportunities along the river including trails and boat launch sites.
- Clearer recommendations for Nashua, Hudson, Litchfield and Merrimack to manage and improve land use and pollution control surrounding the Merrimack River.

Connecticut River Joint Commission – Water Resources Plan

- Emphasized the need for strong, consistent riparian buffer protection.
- Reemphasis on continued work on natural valley flood storage, riverbank erosion, stormwater management and dam operations.
- New topics of focus include climate change, mercury, acid mine drainage, instream flow and groundwater protection. The topic of invasive aquatic species took on new significance with the discovery of the invasive diatom *Didymo* in the river's uppermost reaches in 2007.

3.5.3 Management Plans In Progress

The Connecticut River Joint Commission received \$123,000 in 2009 through a 319 grant administered by the DES Watershed Assistance Program to conduct a fluvial geomorphic assessment on the designated Ammonoosuc River, a tributary to the Connecticut River. This assessment is the second phase of an assessment conducted by DES. The information gathered will identify areas of channel instability and the causes of instability and will be useful to the affected communities and to the Ammonoosuc River Local Advisory Committee as it proceeds with the development of a river management plan. RMPP staff is directly involved in the development of this project.

Two LACs are also in the process of updating their existing management plans: Piscataquog River LAC and the Contoocook and North Branch Rivers LAC. The updates were funded through the RMPP administered 604(b) grant and the American Recovery and Reinvestment Act (see section 3.8.3).

3.5.4 Management Plan Implementation

The majority of LACs worked on projects during the 2008-2009 biennium to implement the goals and recommendations set forth in their river's local river corridor management plan. For a list of all LAC activities as reported in their annual reports, including management plan implementation projects, please refer to Appendix E.

3.5.5 Coordination with Federal Statutes (RSA 483:5)

At the end of the 2008-2009 biennium, the Rivers Program submitted all the local river corridor management plans to the Federal Energy Regulatory Commission (FERC) pursuant to RSA 483:5. These management plans were reviewed and approved by FERC in October 2009 and were incorporated into the *List of Comprehensive Plans*, which can be found at <http://www.ferc.gov/industries/hydropower/gen-info/licensing/complan.pdf>. Any other local or state management plan developed pursuant to RSA 483 would be considered protected waterways under the provisions of the Public Utilities Regulatory Policies Act, section 210(j)(2), 16 U.S.C. section 824a-3(j)(2).

3.5.6 Awards

In an effort to promote the RMPP and the Local River Management Advisory Committees' (LACs) ongoing volunteer efforts to protect the state's rivers, RMPP staff submitted several nominations on behalf of the LACs for awards that recognize their work.

The following awards were received by the LACs during the 2008-2009 biennium for the countless hours these volunteers spend protecting New Hampshire's rivers and to celebrate the RMPP's 20th anniversary:

- In April 2008, the LACs received the *President's Volunteer Service Award* from Environmental Protection Agency Administrator Stephen L. Johnson in honor of their volunteer service in their communities.
- In November 2008, the LACs received the *Spirit of New Hampshire Volunteer Service Award from Volunteer NH!* as part of a collaborative effort with the Office of Governor John Lynch to promote volunteerism in the state.

3.6 Long Range Management Plans (RSA 483:10-a)

In 1990, RSA 483:10-a called for the development of a long-range management plan for state-owned lands within designated river corridors and tributary drainage areas to protect instream values. In January 2008 the Rivers Management Advisory Committee (RMAC) voted to conduct a pilot long range management plan study on the Exeter River. The Exeter River was chosen due to its size, amount of state-owned land, local protection efforts and data availability. The overall intent for developing a long-range management plan is to coordinate the *state* management of fisheries, streams, waters, wildlife and boating to protect instream values. The plan focused solely on the management of state-owned lands within the designated Exeter River watershed.

RMPP staff worked closely with other DES staff, the Exeter River Local Advisory Committee and other state agencies, including the Department of Transportation, Department of Resources and Economic Development, Fish and Game Department and Department of Agriculture, Markets & Foods, to gather information and develop recommendations for state-owned property in the designated Exeter River

watershed. General and parcel specific management recommendations were developed to reflect the protection of river corridor values as set forth by RSA 483. Once approved by DES Commissioner Burack, expected in late 2009, the Exeter River will become the first designated river with a long range management plan for state-owned lands. Based on the results of the pilot study and the adoption of a long-range management plan for the designated Exeter River watershed, long range management plans for other designated rivers will then be developed.

3.7 Rivers Program Permit Notification and Comment (RSA 483:12-a)

In 2009, RMPP staff worked with the RMAC, LACs, and DES leadership and permitting staff, to develop DES Standard Operating Procedure #801, *Local River Management Advisory Committee Permit Notification and Communication Protocol*, which implements RSA 483:12-a. This is the procedure by which DES permitting programs notify appropriate LACs and the rivers coordinator of state actions or permits within a designated river corridor. During the 2008-2009 biennium, RMPP staff commented on 16 state actions and permits.

State actions and permits that qualify for review by the RMPP (RSA 483:8-a, III, (a) & (b)) are the same as those reviewed by the LACs listed in section 3.3.2.

3.8 River Protection

3.8.1 Legislation and Policy

The RMPP, in conjunction with the RMAC, is continually developing and advising DES, state agencies, and the general court on river-related legislation. RMPP staff is periodically asked to serve on legislative study commissions, comment on DES supported legislation, and draft legislation.

During the 2008-2009 biennium, the RMPP:

- Served as the DES Commissioner's representative on House Bill 648 Comprehensive Flood Study Commission to develop recommendations to help minimize the impact of flooding in New Hampshire. The commission's report was finalized in October 2008. Several of the recommendations are in the process of being implemented due to RMPP staff efforts including:
- Assisted in securing \$325,000 in funds for the installation of 15 stream gages and implementation of recommendations as part of its continued role as a member of the Stream Gage Task Force. For more information see section 3.4.4.
- Participated and contributed to the Stream Rules Work Group that began formal rulemaking in September 2009: http://des.nh.gov/organization/divisions/water/wetlands/streams_crossings.htm.
- In 2009 Legislative Session, RMPP staff served as DES lead on:
 - Senate Bill 65 - relative to the acceptance of in lieu payments for the restoration or creation of wetlands and establishing a committee to study the administrative fee percentage for such in lieu payments
 - House Bills 102 - relative to the rivers management and protection program, establishing the volunteer river assessment program, and naming the bridge at the intersection of NH route 12A and NH route 123 in Alstead the Alstead Veterans Memorial Bridge.
 - House Bill 290 - authorizing fluvial erosion hazard ordinances.
 - House Bill 452 - designating segments of the Ammonoosuc River into the rivers management and protection program, relative to the consideration of riparian rights in the

- establishment of instream flows, and relative to an exemption from terrain alteration permitting requirements.
- House Bill 59 - designating segments of the Cochecho River as protected under the rivers management and protection program.
- Presented to the Stormwater Commission (House Bill 1295) and the Great Bay Siltation Commission (House Bill 216).
- Provided ongoing support to Senate Bill 330, Instream Flow Committee.

3.8.2 Education and Outreach

To promote the RMPP and the importance of river management and protection, RMPP staff routinely present to local river and watershed associations, municipal boards and other interested parties on the program itself and watershed protection in general. During the 2008-2009 biennium, the RMPP staff conducted 34 presentations regarding the Rivers Program itself, and general watershed protection and management issues. The RMPP also publishes fact sheets on each designated river, all of which were updated in 2008, along with other education and guidance documents. The RMPP newsletter *Meanderings* is published on a quasi-annual basis, and touches on current river management issues and LAC activities. For a complete list of all RMPP publications please see Appendix B.

3.8.2.1 Watershed Conference

In November 2007 and 2008, the RMPP, along with the Lakes Management and Protection Program (LMPP), the New Hampshire Rivers Council and the New Hampshire Lakes Association, held the annual Watershed Conference. The conference is designed to address environmental topics related to lakes, rivers and watersheds throughout the state of New Hampshire and is aimed at a non-technical audience. Attendance at the 2007 Watershed Conference was 188 individuals; 179 individuals attended the 2008 Watershed Conference. Agendas for both conferences can be found in Appendix C.

During early planning efforts, held towards the end of the 2008-2009 biennium, for the 2009 Watershed Conference, it was decided to expand the conference to a two-day event. The New Hampshire Water Conference, geared towards a more technical audience, joined the Watershed Conference, which is geared mainly towards volunteers and municipal officials. This combined event was done both to reach a wider audience and maximize available resources. This event is scheduled for November 2009.

3.8.2.2 Designated River Signs

In conjunction with the Department of Transportation, DES developed the New Hampshire Protected River signs to promote designated rivers around the state. These signs help communities showcase the importance of designated rivers to the area's natural and cultural heritage. Protected River signs are available to all local advisory committees and their corridor communities. When funding is available, DES has partially or fully funded these signs. More information regarding designated river signs can be found at:

http://des.nh.gov/organization/divisions/water/wmb/rivers/documents/protected_river_sign.pdf

During the 2008-2009 biennium, the RMPP:

- Processed applications for over 56 locations along five of the designated rivers.
- Distributed over \$3,576 in funding towards the cost of these signs.

3.8.3 Grants

3.8.3.1 604(b) Grant

The RMPP, in conjunction with the LMPP, administers a federal Clean Water Act Section 604(b) grant, awarded by the U.S. Environmental Protection Agency, which provides approximately \$80,000 biannually to Regional Planning Commissions and/or the Connecticut River Joint Commissions (CRJC) for water quality planning purposes. In accordance with the federal Clean Water Act, the state is required to pass 40 percent of the funding to regional planning commissions. With the influx of American Recovery and Reinvestment Act funds in 2009, DES exceeded this requirement and passed 56 percent of 604(b) funds to the regional planning commissions and CRJC to maximize water quality planning projects. Funding priority is given to projects developing and implementing lake management/shoreland protection plans, river corridor/river watershed plans, designated river nominations or comprehensive lake inventories. All 604(b) grant funds are distributed following the federal fiscal year and thus overlap with the state fiscal year.

During the 2008-2009 biennium the RMPP administered:

- A total of \$81,800 604(b) grant during federal fiscal year 2007-2008 and \$80,000 during federal fiscal year 2009-2010. During the 2009-2010 grant round the RMPP received funding requested for \$127,505 for a total of 13 projects; only six projects were able to be fully or partially funded through 604(b) funds. One project was awarded funding through a DES Drinking Water and Groundwater Bureau Local Source Water Protection Grant. See section 3.8.3.3 for more information.
- \$235,820 in ARRA funds that went towards 18 projects, including 16 river-specific projects. Several of the projects were those not able to be funded from the 2009-2010 604(b) grant round. See section 3.8.3.2 for more information.

For the 604(b) grant period starting January 1, 2007 through December 31, 2008, all funding went directly to five Regional Planning Commissions and the Connecticut River Joint Commissions for river related projects. For the 604(b) grant period starting January 1, 2009 through December 31, 2010 all funding also went directly towards river-related projects. These projects are:

- Southern New Hampshire Planning Commission
 - Update the Piscataquog River Local Corridor River Management Plan (FY 2009 - 2010)
- Nashua Regional Planning Commission
 - Lower Merrimack Corridor Recreational Trails and Access Inventory (FY 2007 - 2008)
 - Maximum Impervious Surface Model Ordinance and Low Impact Development Guidebook for the Lower Merrimack River Corridor Communities (FY 2009 – 2010)
- Central New Hampshire Regional Planning Commission
 - Upper Merrimack River Buffer Protection Grant (FY 2009 – 2010)
- North Country Council
 - Assist the Lakes Region Planning Commission in the Education and Outreach Portion of the Co-Occurrence Mapping Project in Support of the Pemigewasset River Local Advisory Committee (FY 2007 – 2008)
- Lakes Region Planning Commission
 - Development of Co-occurrence Mapping and a Conservation Plan within the Pemigewasset River Watershed (FY 2007 - 2008)

- Rockingham Planning Commission
 - Implementation of Recommendations Set Forth in the Exeter River Corridor and Watershed Management Plan (FY 2007 - 2008)
 - Water Quality Planning Activities in Support of the Exeter River (FY 2009 – 2010)
- Strafford Regional Planning Commission
 - Isinglass River Management Plan (FY 2007 – 2008)
 - Oyster River Nomination to the New Hampshire Rivers Management and Protection Program (FY 2009 -2010)
- Connecticut River Joint Commissions
 - Updating and Implementing the Water Resources Chapter of the Connecticut River Management Plan (FY 2007 – 2008)
 - Education and Outreach for the New Connecticut River Water Resources Plan (FY 2009 - 2010)

3.8.3.2 American Recovery and Reinvestment Act 604(b) Funds

In addition to the regular 604(b) funds the RMPP/LMPP receives biannually, New Hampshire also received an additional \$235,384 in funding as part of the American Recovery and Reinvestment Act (ARRA) of 2009. These funds were used for projects that were unable to previously be funded. All regional planning commissions received an equal amount of funding \$24,444.00, with the Connecticut River Joint Commissions receiving an additional \$15,384. Each regional planning commission will be conducting work related to innovative land use, and innovative permitting and technical assistance. The ARRA funds will be used to implement the following projects, not all of which are specifically river-related:

- Southern New Hampshire Planning Commission:
 - A Land Conservation Plan for the Piscataquog River Watershed
 - Fluvial Erosion Hazard Ordinance Outreach for the Exeter River to the Town of Raymond
- Nashua Regional Planning Commission
 - Souhegan River Local River Corridor Management Plan Adoption
 - Innovative Land Use Ordinances in the Souhegan River Watershed
- Central New Hampshire Regional Planning Commission
 - Contoocook River Local River Corridor Management Plan Update (in conjunction with Southwest Regional Planning Commission)
- North Country Council
 - Education and Outreach for the Ammonoosuc River Watershed regarding Fluvial Geomorphic Assessment
 - Pemigewasset River Corridor Management Plan Community Survey (in conjunction with Lakes Region Planning Commission)
 - Outreach to the Towns of Woodstock and Lincoln regarding the Rivers Management and Protection Program
- Lakes Region Planning Commission
 - Bristol-New Hampton Co-occurrence Mapping Refinement and Outreach
 - Pemigewasset River Corridor Management Plan Community Survey (in conjunction with North Country Council)
- Upper Valley Lake Sunapee Regional Planning Commission
 - Comprehensive Lake Inventory and Management Plan for Highland Lake in the Town of Washington

- Homeowners Guide to Stormwater Management
- Southwest Regional Planning Commission
 - Ashuelot River Action Plan (in conjunction with Upper Valley Lake Sunapee Regional Planning Commission)
 - Contoocook River Corridor Management Plan Update (in conjunction with Central New Hampshire Regional Planning Commission)
- Rockingham Planning Commission
 - Fluvial Erosion Hazard and Innovative Land Use Chapter and Adoption in the Exeter River Watershed
 - Squamscott River Nomination into the Rivers Management and Protection Program
- Strafford Regional Planning Commission
 - Fluvial Erosion Hazard Ordinance Outreach and in the Isinglass River Watershed.
 - Isinglass River Local River Corridor Management Plan Action Items
- Connecticut River Joint Commissions
 - Connecticut River Water Resources Management Plans - Local Subcommittee Editions

3.8.3.3 Additional Grants

To encourage funding of river designation and protection efforts RMPP staff worked with the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC) to develop a grant offered through the DES Drinking Water Source Protection Program to develop a designated river nomination document for the Mascoma River. The Local Source Water Protection grant was awarded to UVLSRPC for a total of \$17,080 over 18 months to work with the Mascoma River Nominating Committee to develop the nomination.

It should be noted that UVLSRPC originally applied to the RMPP administered 604(b) grant and was slated to receive full funding. However, the RMPP was able to stretch available river protection dollars by assisting UVLSRPC in applying for the Local Source Water Protection grant. This allowed additional river protection efforts to be funded through the 604(b) grant.

The RMPP also assisted LACs, Regional Planning Commissions and other organizations in developing or implementing river management projects on designated river with 319 grant funds administered by the DES Watershed Assistance Section. These grants are funding through the federal Clean Water Act and are intended to help restore impaired waters or protect high quality watersheds.

During the 2008-2009 biennium the following projects were developed or implementing through the 319 grant with the RMPP assistance:

- Restoration planning for aquatic connectivity in high quality water of the Ashuelot River watershed - The Nature Conservancy and Southwest Regional Planning Commission.
- River continuity assessment of the Ashuelot River watershed - The Nature Conservancy.
- Phase 2 assessment of the Ammonoosuc River and floodplain conservation - Connecticut River Joint Commissions.
- Stream restoration at Lower Mohawk River and Colebrook Industrial Park - Connecticut River Joint Commissions.
- Swift River restoration at the Conway Scenic Railroad Bridge - Swift River Local Advisory Committee.

3.9 Program Initiatives

3.9.1 Projects

In addition to the projects listed in Section 3.8.3, RMPP staff was also involved with the following projects by assisting with project development, implementation or facilitating. The RMPP staff specifically:

- Facilitated and assisted with the application of the funding for the development of trails in the Souhegan and Pemigewasset River corridors through the National Parks Service's Rivers, Trails and Conservation Assistance Program (RTCA).
- Assisting the development and implementation of the *Geomorphic-based Restoration Plan for the Suncook River in Epsom, NH* funded through the DES Watershed Assistance Section.
- Coordinated efforts for the *Exeter River Geomorphic Assessment and Restoration Plan* with the DES Watershed Assistance Section 319 and the DES Coastal Program to develop restoration and protection efforts along 12 miles of the Middle Exeter River.
- Worked with the town of Alstead to develop the *Warren Brook Restoration Plan* to address restoration and enhancement needs of the brook as a result of flooding in 2005.
- Assisted with the development of the Rivers and the Flood and Drought chapters of the *New Hampshire Water Resources Primer, December 2008*.
- Coordinated the reporting of the House Bill 648 Comprehensive Flood Management Commission Report.
- Facilitated the Bacteria Total Maximum Daily Load on the Souhegan River subwatershed at the request of the Environmental Protection Agency.
- Coordinated program development and funding of the New Hampshire Fluvial Erosion Hazard Program established through a Federal Emergency Management Agency (FEMA) Emergency Management Performance Grant (\$100,000 during federal fiscal year 2007 and \$200,000 during federal fiscal year 2008).

3.9.2 Sustainability Initiative

In January 2008, the Rivers Management Advisory Committee (RMAC) and the Lakes Management Advisory Committee (LMAC) presented *The Sustainability of New Hampshire's Surface Waters* (Sustainability Initiative) to DES Commissioner Thomas Burack. The initiative provides a roadmap to address the RMAC and LMAC's concerns that despite decades of efforts the quality and integrity of the state's water resources will decline under current efforts. With the assistance of the RMPP and Lakes Management and Protection Program (LMPP) staff, the RMAC and LMAC identified eight significant issues that threaten the long term viability of the state's surface waters:

- 1) Lack of data and improve data access and management by data users.
Related issues: increase the network of stream gages and expand and improve water quality monitoring.
- 2) Lack of a coordinated watershed management approach.
- 3) Protect shorelands and riparian buffers.
- 4) Limit impacts to water quality and quantity from urbanization and watershed development.
- 5) Determine carrying capacity.
Related issue: provide adequate public access.

- 6) Control invasive aquatic species.
- 7) Consumptive uses of surface and groundwater.
Related issues: determine and implement instream flow protection and groundwater withdrawal.
- 8) Address climate change impacts.

In order to address these issues, RMPP and LMPP staff worked with the RMAC, LMAC, and other DES staff to develop a list of recommended actions that could be taken in the short-term to address those issues not currently addressed by other groups. Several of the recommendations put forth have been implemented during the 2008-2009 biennium. However, during a follow-up meeting in January 2009 with Commissioner Burack it became clear that the state was lacking the means to communicate watershed status on both the state and local level to the public. This was identified as a major hindrance to long-term water and river protection. As a result, the RMPP/LMPP staff began to work with DES staff to address this need through the development of the *DES 2009-2013 Strategic Plan*. This will be the focus of efforts for the Sustainability Initiative for the immediate future; however, the eight issues of concern listed above continue to guide the RMPP and RMAC efforts.

The entire Sustainability Initiative can be found at:

http://des.nh.gov/organization/divisions/water/wmb/lakes/documents/sustainability_initiative.pdf.

4. Program Costs

4.1 Program Budget for 2008-2009

The Rivers Management and Protection Program (RMPP) is mainly funding through the state General Fund, with some additional financial support from federal grants. The program consists of 2.75 equivalent full-time staff and one part-time temporary staff position. The RMPP budget is intertwined with the Lakes Management and Protection Program (LMPP) budget; both programs share one full-time staff position and one part-time staff position. Both the RMPP and LMPP also equally share all funds with the exception of personnel and benefits. The budget below includes only the RMPP portion of the RMPP/LMPP budget.

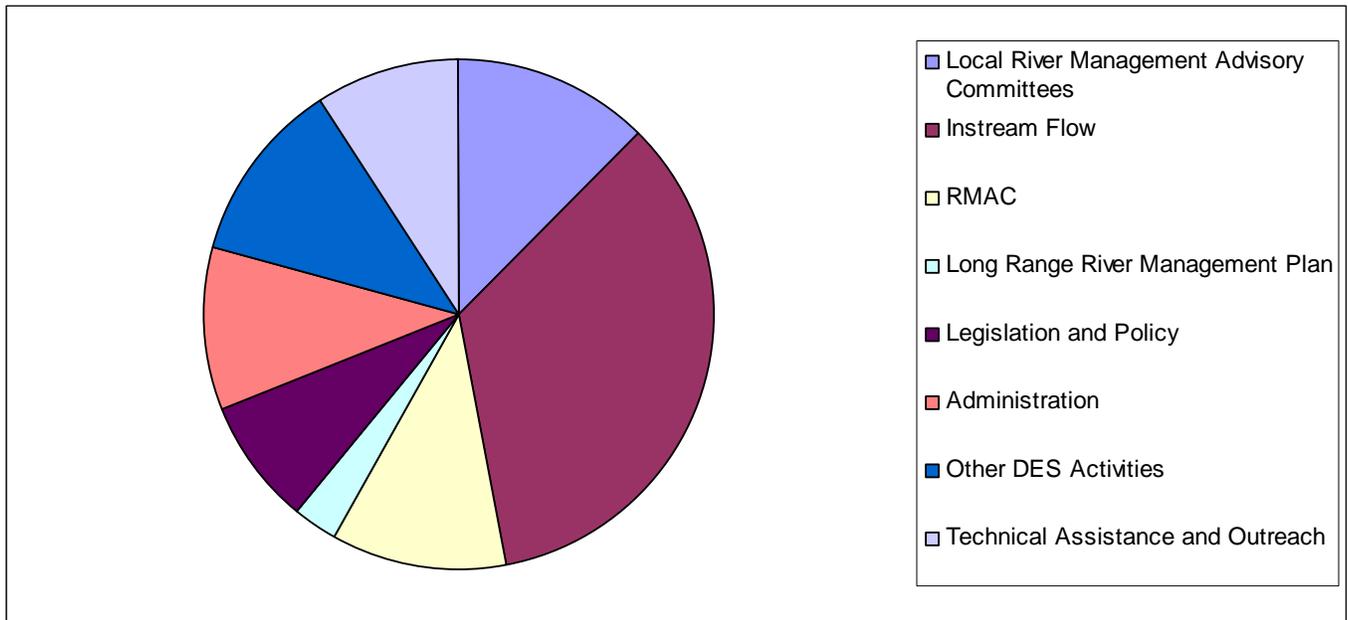
	Fiscal Year 2008	Fiscal Year 2009
Personal Services - Permanent	128,181	133,047
Current Expenses	4,470	4,470
Maintenance, other than buildings and grounds.	1,050	1,050
Transfer to Office of Information Technology	7,050	7,050
Transfer to General Services	6,200	6,200
Equipment	2,070	1,560
Transfer to other State Agencies	140	140
Personal Services – Temporary	13,026	13,026
Benefits	61,527	63,862
In-state Travel	3,500	3,500
Out-of-state Travel	2,100	2,100
Outreach	2,500	2,500
Subtotal	\$231,814.00	\$238,505.00
Total	\$470,319.00	

It should be noted that the estimated volunteer match time contributed by the Rivers Management Advisory Committee (RMAC) and the Local River Management Advisory Committees (LACs) totals \$409,974.

4.2 Staff Time

Approximately, 12,000 hours of RMPP staff time was available during the 2008-2009 biennium. Staff spent approximately 90 percent of those hours on RMPP activities shown in the following chart. The remaining 10 percent of staff hours were largely spent assisting other programs or projects within DES; almost all related to water protection.

RMPP Staff Activity during the 2008-2009 Biennium



4.3 Rivers Management and Protection Fund (RSA 483:13)

In 2009, the NH Legislature passed House Bill 102 which established a dedicated, non-lapsing Rivers Management and Protection Fund in the New Hampshire Treasury Office for the purpose of accepting donated funds for the implementing of the provisions of RSA 483, the Rivers Management and Protection Program. As of June 30, 2009 no funds had been accepted or expended through this fund.

5. Future Program Goals

New Hampshire's rivers are being impacted by a combination of forces, including rapid population growth and urbanization, which affect the state's ability to protect, maintain and, when necessary, restore surface water quality. The water quality of any river reflects the health of that river's entire watershed. In order to adequately protect the water quality of rivers, and all surface waters, the state must focus on protecting watersheds as a whole. With the majority of the state's rivers already listed as being impaired by DES (2008 *New Hampshire 305(b)/303(d) Surface Water Quality Report*) and the rest under varying levels of threat, New Hampshire is approaching a critical junction in how the state manages water resources. To prevent the negative impacts of landscape change on rivers, the state must develop more coordinated approaches to watershed management that go beyond task forces and piecemeal strategies. If this does not occur then it is highly likely that implementing water and watershed protection or restoration efforts will become too costly or may be impossible.

The Rivers Management and Protection Program (RMPP) is in an excellent position to help the state protect its water resources through its unique design that coordinates state and local level decisions regarding river and watershed management. In January 2008, the Rivers Management Advisory Committee (RMAC), along with the Lakes Management Advisory Committee (LMAC), adopted *The Sustainability of New Hampshire's Surface Waters* (Sustainability Initiative) as an initiative to guide their efforts to ensure the long-term sustainability of the state's waterbodies. Of the eight issues of concern from the Sustainability Initiative (listed below), the RMAC and LMAC have chosen to focus on those issues, or aspects of issues, not being addressed by other groups, specifically lack of data and data access, lack of coordinated watershed management, invasive aquatic species, and consumptive use of surface and groundwater (numbers 1, 2, 6 and 7). However, the RMAC's short-term and long-term goals, along with the LMAC's goals, revolve around all eight issues.

- 1) Lack of data and improve data access and management by data users.
Related issues: increase the network of stream gages and expand and improve water quality and biological monitoring.
- 2) Lack of a coordinated watershed management approach.
- 3) Protect shorelands and riparian buffers.
- 4) Limit impacts to water quality and quantity from urbanization and watershed development.
- 5) Determine carrying capacity.
Related issue: provide adequate public access.
- 6) Control invasive aquatic species.
- 7) Manage consumptive uses of surface and groundwater.
Related issues: determine and implement instream flow protection and define groundwater withdrawal relationship to stream flow.
- 8) Address climate change impacts.

The goals listed below for the RMPP and river protection efforts in the state are intended to reflect achievable goals within the next five years.

5.1 Outreach and Education

Promotion of river and watershed protection through the RMPP is primarily achieved through outreach and education by the LACs, RMAC and RMPP staff. When it comes to river and watershed protection the RMPP does not have any enforcement capabilities; however, the RMAC and the LACs do have advisory

authority on state and federal permit applications and state-owned land disposals within river corridors. Due to the lack of enforcement capabilities the most critical role the RMPP plays in river protection is giving the state local input regarding decisions affecting designated rivers and communities a direct way to advise the state on potential local impacts. By educating decision makers and the general public about river-related issues, the RMPP is able to promote means of addressing those issues on the individual, community or state level.

Future goals for outreach and education for the RMPP include:

- Using a watershed-based approach to organize information about each designated river on the RMPP website.
- Combine the RMPP newsletter *Meanderings* and the DES Volunteer Rivers Assessment Program newsletter *Streamlines* into one publication focusing on New Hampshire river stewardship.
- Encourage the protection and restoration of riparian buffers by developing a guidance document, in conjunction with the DES Shoreland Protection Program.
- Work with the RMAC/LMAC *Sustainability Initiative* data subcommittee to develop watershed indicators to better communicate the health of the state's rivers to the general public. The goal is for DES to have an interactive website that will allow the general public to access information about the status of water in the state and on specific waterbodies.

5.2 Legislation and Policy

The purpose of the RMPP, as stated under RSA 483, is to conserve and protect those rivers with outstanding characteristics in the state. While protecting designated rivers is the main goal of the RMPP, ultimately all river protection policies developed through the RMPP help protect all of the state's rivers. In order to protect the state's rivers, the RMPP focuses on ways to protect water quality and quantity in such a way that allows use of the river while protecting a river's natural characteristics.

Future goals for river legislation and policy for the RMPP included:

- Develop legislation to protect headwater streams in order to protect water quality and aquatic habitat.
- Incorporate designated uses into state water quality standards legislation. This legislation has been drafted for introduction into the 2010 legislative session.
- Implement the recommendations of the House Bill 648 Comprehensive Flood Management Commission. Work on several of the recommendations has already begun.

5.3 Technical Assistance

A large role of the RMPP is to provide technical assistance to the state, municipalities, individuals, the RMAC and LACs on river-related issues. The assistance the RMPP provides ranges from coordinating project development to assisting a local community with promotion of a river protection ordinance.

Future goals for technical assistance related to river protection and management for the RMPP include:

- Continue to work with the New Hampshire Geological Survey, state and local officials, and regional planning commissions to conduct geomorphic assessments on rivers in order to allow

towns to develop fluvial erosion hazard ordinances. This will serve to protect river's riparian buffers and to help minimize damage from future flood events.

- Continue to use the RMPP administered federal Clean Water Act Section 604(b) grant funds to implement water quality protection planning activities identified by LAC local river corridor management plans.
- Work with other DES programs to identify projects and funding sources in order to coordinate watershed management on designated rivers that reflect local river corridor management plans.
- Increasing the level of communication between state agencies, including DES, and LACs regarding permits and activities affecting designated rivers.
- Work with the LACs to develop a means to track the effectiveness of their local river corridor management plan.
- Develop additional long-range management plans for state-owned lands with designated river watersheds.

5.4 Research

The RMPP itself does not routinely conduct research efforts; however, it often promotes research efforts through funding and technical assistance. In order to develop better river and watershed management plans and projects it is important for the RMPP to have adequate information. For example, according to the *2008 New Hampshire 305(b)/ 303(d) Surface Water Quality Report* (Appendix D), only 50 to 77 percent of designated rivers are actually able to be assessed for meeting various designated uses; the remaining sections of river simply do not have enough data. It is highly unlikely that the state will ever have full data coverage, however, maximizing the use of the data that does exist and gearing research efforts towards data that is most useful is possible.

Future research efforts related to river protection and management goals for the RMPP include:

- Increase the amount of monitoring of physical, chemical and biological data on the state's rivers, specifically those parameters used to determine designated uses.
- Work with organizations conducting river monitoring to incorporate their data into the DES Environmental Monitoring Database.
- Continue to conduct and refine fluvial geomorphic assessments and promote how the results can be incorporated into watershed planning efforts.
- Incorporate instream flow and geomorphic stability into the DES Consolidating Assessment Listing Methodology (CALM) used to assess the status of water reported to the Environmental Protection Agency as part of the 305(b)/303(d) report.
- Promoting research efforts that identify control and removal methods of both terrestrial and aquatic invasive species that impact rivers and riparian areas.

5.5 Anticipated Rivers Management and Protection Program Needs

5.5.1 Staffing

The RMPP had 2.75 equivalent full-time staff and a one-year part-time temporary staff position during the 2008-2009 biennium. One full-time staff position and the temporary staff position were primarily dedicated to implementation of the Instream Flow Program. The RMPP also shared one full-time and one part-time planner position with the Lakes Management and Protection Program. Given the increase and anticipated growth of the number of rivers designed under RSA 483 there will be increased demand on

RMPP staff to provide technical support for all the LACs. The process of establishing protected instream flows on designated rivers and other rivers in the state will continue to demand significant amounts of staff time. The addition of one position to provide assistance in coordinating LAC related activities at the state level and to provide assistance to the Instream Flow Program will allow the RMPP to better keep pace with the increasing number of designated rivers in New Hampshire from five in 1990 to 16 rivers in 2009. Without increased staff assistance for a growing program, the volunteers on the LACs and RMAC, communities, state agencies and the state legislature will see diminishing ability of the program to meet its legislative charge to protect the state's rivers.

Current anticipated staffing need is 3.5 full-time staff, to include the following positions:

- 1 Rivers Program Coordinator (existing position)
- 1 Instream Flow Specialist (existing position)
- 0.5 Watershed Planner (existing position)
- 1 Technical Assistant (proposed position)

5.5.2 Long-term Funding for the Instream Flow Program

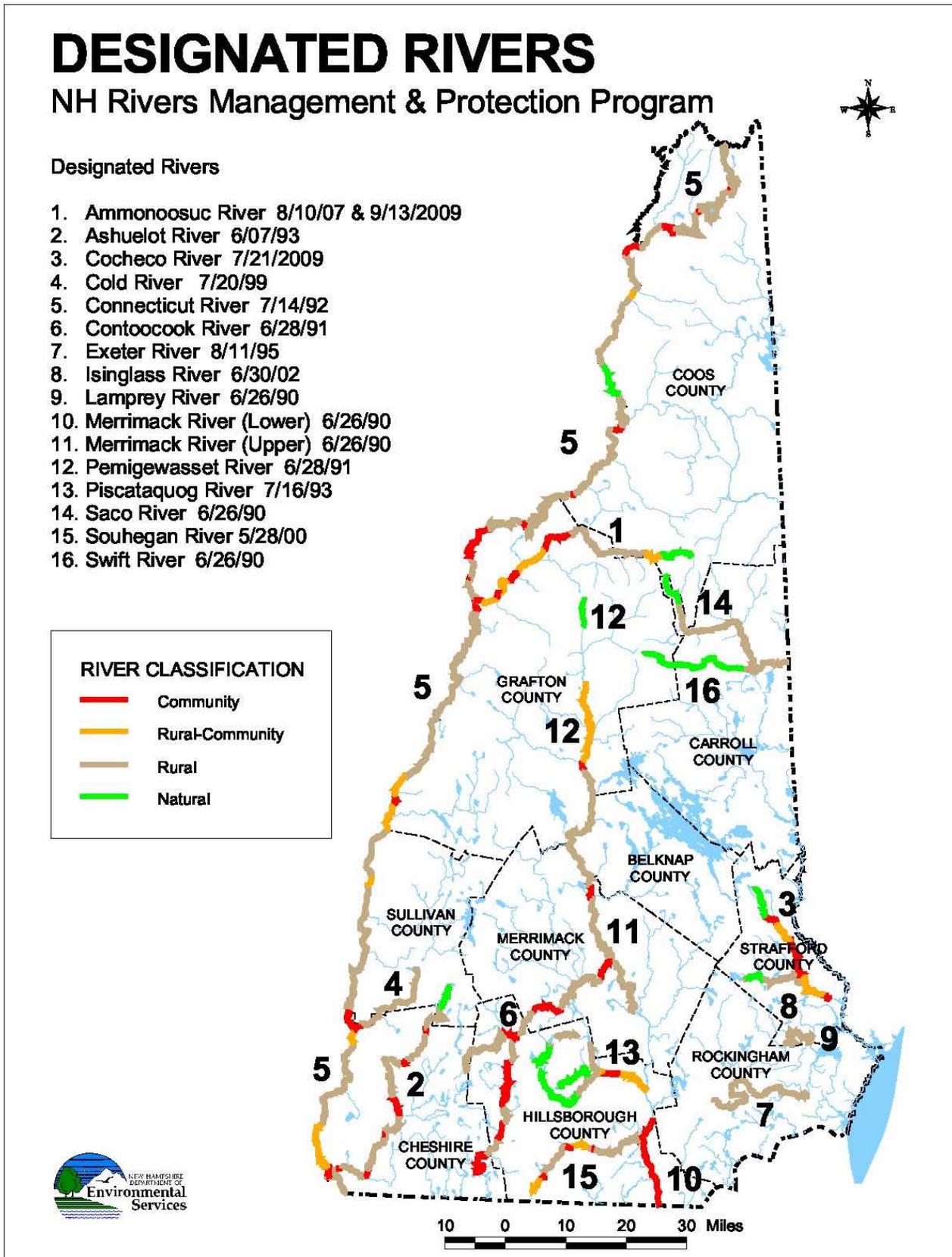
As of September 2009, only the Souhegan River has established protected instream flows and the Lamprey River establishment is anticipated soon, even though the statutory requirement has been included in RSA 483 since 1990. The funding from both the New Hampshire legislature and a NOAA grant to establish protected flows on these two rivers totaled \$900,000 and took seven years since the enacting legislation called for the instream flow pilot study (Section 3.4.1). The funding came from both federal grants and the New Hampshire General Fund. Without a long-term dedicated funding source for developing protected instream flows, it is unlikely that the program will be able to establish protected instream flows on the other existing designated rivers, and other rivers in the state, in an effective and reasonable timeframe.

5.5.3 Small Grants for Local River Management Advisory Committees

In the Rivers and Lakes Management Advisory Committees (RMAC/LMAC) *The Sustainability of New Hampshire's Surface Waters*, it was identified that there has not been enough implementation of the Local River Corridor Management Plans, called for by RSA 483:10, by the LACs primarily due to the lack of funding. The RMPP currently administers the 604(b) grant (Section 3.8.3) that provides up to \$80,000 every two years for projects such as local river management plan implementation. While these funds, and other grant opportunities within DES, do exist they are insufficient for allowing the current LACs to implement their management plans. The anticipated growth of the RMPP will increase demand for funding for river protection projects and management plan implementation; however, funds available for these projects is not expected to increase given current funding sources.

Many of the projects for implementing parts of local river management plans only require a few hundred to a few thousand dollars and can often take under a year to accomplish. The same is often true for many of the other river protection projects conducted by LACs. Developing a long-term funding source for small grants for LACs is needed to support these efforts of existing and future LACs in order to meet the purpose of the RMPP and the LACs to protect the state's river resources.

Appendix A – Map of all designated rivers, including the Cochecho River and the Upper Reach of the Ammonoosuc River that were designated during the 2009 legislative session.



Appendix B – List of Rivers Management and Protection Program fact sheets and publications

All fact sheets and publications are available at:

<http://des.nh.gov/organization/divisions/water/wmb/rivers/categories/publications.htm>.

Fact Sheets

R&L-2 The New Hampshire Rivers Management and Protection Program

R&L-3 The Ashuelot River

R&L-4 The Connecticut River

R&L-5 The Contoocook and North Branch Rivers

R&L-6 The Exeter River

R&L-7 The Lamprey River

R&L-8 The Lower Merrimack River

R&L-9 The Pemigewasset River

R&L-10 The Piscataquog River

R&L-11 The Saco River

R&L-12 The Swift River

R&L-13 The Upper Merrimack River

R&L-14 The New Hampshire Rivers Management and Protection Program: River Classifications and State Regulated Protection Measures As They Apply To Each Classification

R&L-16 The Cold River

R&L-17 The Souhegan River

R&L-18 The Isinglass River

R&L-19 What the Rivers Management and Protection Program Means to Riparian Landowners Along Designated Rivers

R&L-20 The Ammonoosuc River

R&L-21 Minimum Impact BMPs for Removal of Debris from Streams and Rivers

R&L 23 The Cochecho River

WD-SP-4 Shorelands Under the Jurisdiction of the Comprehensive Shoreland Protection Act

Guidance Documents

CO-WD-08-1 A Guide to River Nominations

R-CO-97-3 A Guide to River Corridor Management Plans

R-WD-06-37 Guidelines for Naturalized River Channel Design and Bank Stabilization

Quick Reference Guide for Displaying Outstanding Resource Waters (ORW) and Impaired Surface Waters with a 1-Mile Buffer for Development Projects

WD-06-27 White Paper: River Restoration and Fluvial Geomorphology

Reports to the General Court

The Ammonoosuc River, January 2007 and November 2008

The Ashuelot River, June 1993

The Cochecho River, January 2009

The Cold River, February 1999

The Connecticut River, December 1991

The Contoocook River and North Branch Rivers, March 1991

The Exeter River, January 1995

The Isinglass River, January 2002

The Lamprey River (Lee and Durham, NH), January 1990

The Lower Merrimack River (Merrimack-Bedford Town line to Massachusetts Border), January 1990

The Pemigewasset River, March 1991

The Piscataquog River, July 1993

The Saco River, January 1990

The Souhegan River, January 2000

The Swift River, January 1990

The Upper Merrimack River (Headwaters of the Merrimack River to Garvins Falls), January 1990

RMPP Newsletter – *Meanderings*, Spring 2008

Appendix C – 2007 and 2008 New Hampshire Watershed Conference agendas



2007 WATERSHED CONFERENCE AGENDA

Track 1: Organizational Development – Room 316

Track 2: Effecting Change – Room 311

Track 3: Tech Time – Room 317

Track 4: Managing Our Watersheds – Auditorium

Track 5: Ecology – Rooms 314/315

Track 6: GIS – Room 318

7:45 - 8:15 am	Poster Set-Up — <i>Multi-Purpose Room</i>					
8:15 - 8:45 am	Registration and Refreshments — <i>Student Center and Bistro</i>					
8:45 - 9:00 am	Introduction and Welcome — <i>Auditorium</i>					
9:00 - 10:00 am	Plenary Session: Actions Speak Louder than Words – Understanding How Local and State Actions Affect Us Globally — <i>Auditorium</i>					
	Track #1 Room 316	Track #2 Room 311	Track #3 Room 317	Track #4 Auditorium	Track #5 Rooms 314/315	Track #6 Room 318
Session I 10:10 - 11:05 am	A. The Importance of Volunteer Programs and Partnerships in Watershed Protection	B. The Economic Cost of Declining Water Quality in New Hampshire	C. Plan Reading and Analysis – With a Flair for Fun! (part 1 of 2)	D. Newfound Watershed Master Plan – An Early Report from the Front	E. Culvert Ops – Continuity Assessment of the Ashuelot River Watershed	F. Getting to Know Geographical Information Systems (GIS)
11:05 - 11:35 am	Morning Break, Refreshments, and Poster Session — <i>Student Center and Multi-Purpose Room</i>					
Session II 11:35 - 12:30 pm	G. Stay Out of Jail – Legal Requirements for Dummies!	H. Are You Prepared for Climate Change? A City's Decision-Making Regarding Infrastructure	I. Plan Reading and Analysis – With a Flair for Fun! (part 2 of 2)	J. Restoring the Cold River and Warren Brook	K. Water Quality Impacts in the Suburbanized Lamprey River Basin	L. Hands-on with ArcView 3 (additional cost of \$15, limit 14 attendees)
12:30 - 1:30 pm	Lunch — <i>Student Center and Bistro</i>					
Workshops 1:30 - 3:30 pm	M. Designing Stronger Projects and Proposals for Water Resource Protection	N. Working with Innovative Land Use Controls – The Nuts and Bolts of a Conservation Subdivision Ordinance	O. Low Impact Development Works! The Jordan Cove Watershed Project	P. The Development of New Hampshire's Water Resources Plan Explained!	Q. A Virtual Field Guide to Common Riparian Plants of New Hampshire	R. Hands-on with ArcGIS 9 (additional cost of \$30, limit 14 attendees)
3:30 pm	Conference Concludes					





2008 WATERSHED CONFERENCE AGENDA

- Track 1: Organizational Development
- Track 2: Effecting Change
- Track 3: Tech Time
- Track 4: Managing Our Watersheds
- Track 5: Ecology
- Track 6: GIS

7:00 - 7:30 am	Poster Set-Up — Granite Ballroom and Prefunction Area					
7:30 - 8:00 am	Registration and Refreshments — Prefunction Area					
8:00 - 8:15 am	Introduction and Welcome — Granite Ballroom					
8:15 - 9:15 am	Plenary Session: Looking Forward – A Story of the Merrimack Watershed’s Struggles — Granite Ballroom					
	Track #1 <i>Capital Rm.</i>	Track #2 <i>Concord Rm.</i>	Track #3 <i>Merrimack Rm.</i>	Track #4 <i>Constitution Rm.</i>	Track #5 <i>Salon C Back</i>	Track #6 <i>Salon C Front</i>
Session I 9:30 - 10:30 am	A. Meetings Got You Down? Learn How-to Run Effective Ones!	B. Innovative Land Use Planning Techniques for Shoreland Protection and Riparian Buffers	C. Mucking Around – Developing Methods for Monitoring and Assessing NH’s Wetlands	D. Working Together to Protect Cultural and Natural Resources: Case Studies and Examples	E. Bridge Over Troubled Waters: The Importance of Stream Crossings	F. GIS on Pennies a Day
10:30 - 11:00 am	Break, Refreshments, and Poster Session — Granite Ballroom and Prefunction Area					
Session II 11:00 - 12:00 pm	G. I Stopped Running the Faucet While Brushing My Teeth and You Can Too! A Social Marketing Overview and Hands-on Session	H. The Nine Elements of Watershed-Based Plans – What You Need to Know for DES Watershed Grants	I. Souhegan Protected Instream Flow in the Context of the Natural Flow Paradigm	J. Ten Years of Building a Watershed Organization: Successes and Lessons Learned	K. Chemical, Biological and Physical Disturbance of the Suncook River Avulsion	L. Hands-on with ArcView 3 (additional cost of \$15, limit 14 attendees)
12:00 - 1:00 pm	Lunch — Granite Ballroom					
Workshops 1:00 - 3:00 pm	M. Not the Usual Suspects: Creating Dynamic Partnerships	N. Breaking Boundaries: Acton Wakefield Watersheds Alliance and Cains Brook/Mill Creek Watershed	O. The Comprehensive Lake Inventory and What It Can Do for You: The Lake Sunapee Experience	P. The State Water Resources Plan Process – Status Update and Interactive Listening Session	Q. A Virtual Field Guide to Common Aquatic and Riparian Plants of New Hampshire	R. Hands-on with ArcGIS 9 (additional cost of \$30, limit 14 attendees)
3:00 pm	Conference Concludes					



Appendix D – Summary of designated rivers meeting designated uses as reported in the 2008 New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report

The entire report can be found at: <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>

Water Type*	Use Description	Total Size	Assessed Size	Full Support Size	Non Support Size	Assessed % of total	Full Support (as % of assessed)	Non Support (as % of assessed)
Impoundments (acres)	Aquatic Life	12611	9376	6655	2721	74.3%	71.0%	29.0%
	Primary Contact	12611	10633	10123	510	84.3%	95.2%	4.8%
	Recreation	12611	10319	10319	0	81.8%	100.0%	0.0%
Lakes (acres)	Aquatic Life	15515	2945	1	2944	19.0%	0.0%	100.0%
	Primary Contact	15515	14952	12934	2019	96.4%	86.5%	13.5%
	Recreation	15515	14972	13765	1208	96.5%	91.9%	8.1%
Rivers (miles)	Aquatic Life	1008	637	68	569	63.2%	10.7%	89.3%
	Primary Contact	1008	512	230	282	50.8%	44.9%	55.1%
	Recreation	1008	530	515	15	52.6%	97.1%	2.9%

Water Type	Use Description	Assessed % of total	Full Support (as % of assessed)	Non Support (as % of assessed)
OVERALL MIXED	Aquatic Life	52.2%	27.2%	72.8%
	Primary Contact	77.2%	75.5%	24.5%
	Recreation	77.0%	96.4%	3.6%

Appendix E– Local River Management Advisory Committees Annual Reports (2007 and 2008)³

Attached:

Ammonoosuc River - 2008 only

Ashuelot River - 2007 and 2008

Cold River - 2007 and 2008

Connecticut River - 2007 and 2008

Contoocook River - 2007 and 2008

Exeter River - 2007 and 2008

Isinglass River – 2008 only

Lamprey River - 2007 and 2008

Merrimack River (Lower) - 2007 and 2008

Merrimack River (Upper) - 2007 and 2008

Pemigewasset River - 2008 only

Piscataquog River - 2008 only

Saco River – Inactive during 2007 and 2008

Souhegan River - 2008 only

Swift River - 2007 and 2008

³ Please note that the last six months (January through June 2009) of the 2008-2009 biennium will not be reported by the LACs as their biannual reports are due in early 2010.

Ammonoosuc River Local Advisory Committee (Ammo LAC)
Annual Report 2008
Chairman, Charlie Ryan

The first meeting of the Ammonoosuc River Local Advisory Committee took place in January 2008. The importance of offering protection to the entire river was recognized early on and given top priority by Ammo LAC. The members worked diligently to compile information for the nomination of the Upper Reach portion of the Ammonoosuc River into the Rivers Management Protection Program (RMPP). The river designation of 2007 offered protection for the river, from the White Mountain National Forest boundary near Lower Falls in Carroll to Haverhill. It was deemed critical to the future management and protection of the river to oversee it from its source to its confluence with the Connecticut River, also a N.H. Department of Environmental Services (DES) Designated River. We met with representatives of the Mt. Washington Resort to address any concerns they might have. A tour of the site was provided to the Rivers Management Advisory Committee and other interested parties and a location for the required public hearing was made available. There was considerable interest shown in the nomination as evidenced by the attendance of 30 people from the regional area; everyone who provided testimony supported the nomination. Federal, state, regional, municipal, community, and non-profit conservation organization representatives spoke on behalf of the designation at the hearing. By year end the nomination had reached the General Court for approval of the designation of the Upper Reach into the RMPP. Final decision is expected in early 2009.

North Country Council (NCC), Connecticut River Joint Commission (CRJC), and the Ammonoosuc Conservation Trust have been assisting the Ammo LAC in applying for grant funding to complete a River Management Plan, which under the auspices of technical assistance and funding provided by DES would include completion of a fluvial geomorphic study of the river. Tara Bamford, NCC Planning Director, has been serving as a planning coach to help Ammo LAC in its endeavour to draft a corridor management plan.

Ammo LAC reviewed the DES Wetland Bureau permit applications for five of the seven representative towns, made field inspections at each of the permit sites, and commented in one case.

Jen Drociak, Volunteer River Assessment Program (VRAP) Coordinator, provided a water quality-training workshop for us. Six members and three volunteers subsequently conducted all of the monthly testing of the river under the VRAP Program. No water quality issues were found. Rainbow trout introduced into the river did not fare well, seemingly due to a hatchery tank problem; the dead fish were removed from the river. There were no further incidences of fish kill observed. Members kept a watchful eye for invasive algae *Didymo*. Noteworthy intrusions of Japanese knotweed and purple loosestrife were observed along the shoreline in Littleton, Lisbon, and Bath.

Ray Lobdell, Certified Wetlands Scientist, provided Ammo LAC members with a wetlands workshop, including a field trip to wetland drainage areas in Littleton's meadow by the river. Stormwater treatment standards were discussed.

The results of the Benthic Macroinvertebrate Index Study, by Teacher Aaron Townshend's Littleton High School Biology/Environmental Science Class, were shared with the CRJC. The study assessed water quality in three areas of the Ammonoosuc River, including the Lake of the Clouds, Ammonoosuc Ravine, and downtown Littleton.

Members attended the Comprehensive Shoreland Protection Act presentation, regarding changes effective July 1, 2008.

Ammo LAC expressed its support of the Brownfield Program to reduce impacts of development on the Ammonoosuc River Watershed.

The Ammo LAC received awards at presentations that honored the state's Local River Advisory Committees for serving their nation and communities in 2008. On Earth Day, EPA Administrator Stephen Johnson honored volunteers at Faneuil Hall in Boston with the President's Volunteer Service Award and Senator-Elect Jeanne Shaheen presented the Volunteer NH Service Awards to the LACs at a ceremony held in Concord on November 13. LAC Chairman Charlie Ryan was present to receive both awards.

2008 Ammonoosuc River Local Advisory Committee

Charlie Ryan, Chairman (Littleton)
Richard Walling, Vice-Chair (Bath)
Connie McDade, Secretary (Littleton)
Michael King, Treasurer (Haverhill)
Robert Fagnant, Member (Haverhill)
Michael Dannehy, Member (Woodsville)
Dennis Solinsky, Member (Bath)
Douglas Erb, Member (Landaff)
Steve Jesseman, Member (Lisbon)
Jonathan Reid (Lisbon)
Aaron Townshend, Member (Littleton)
Marilyn Johnson, Member (Bethlehem)
Joan Karpf, Member (Carroll)
Leslie Bergum, Member (Carroll)

Compiled by Connie McDade, Secretary

Submitted by Charlie Ryan, Chairman

Ashuelot River Local Advisory Committee

Washington Lempster Marlow Gilsum Sullivan Surry Keene Swanzey Winchester Hinsdale

2007 Annual Report

The Ashuelot River Local Advisory Committee (ARLAC) was established in 1994, one year after the Ashuelot River was enrolled into the State Rivers Management and Protection Program. Since then, members, nominated by local municipal officials and appointed by the Commissioner of the NH Department of Environmental Services (DES), have been educated in a broad array of issues associated with the River and its watershed. It is the hope of the committee to be a resource that works well between the interests and concerns of the citizens in the watershed and State authorities.

The volunteer Ashuelot River water quality monitoring program in conjunction with the DES Volunteer River Assessment Program (VRAP) continued for its seventh season. Ten sites were sampled along the River's 64-mile length, from Washington to Hinsdale. Analyses were done for temperature, pH, total phosphorus, dissolved oxygen (DO), turbidity and conductivity, with the City of Keene donating lab services to check samples for E.coli. ARLAC members, working with community volunteers, participated in a spring training session, leading into a five-month effort of sampling once per month from May through September. E. coli and phosphorus samples were obtained monthly on Tuesdays in July, August and September. While most parameters test favorably, concern continues for high E.coli readings that occur in the River most notably south of Keene, with levels exceeding standards in September during a rainy period. The 7 years of data are available online at <http://www.des.state.nh.us/wmb/VRAP/>. A second water quality concern is the elevated phosphorus readings, again mostly south of Keene. A reading of .05mg/L is considered a level of concern. At the Thompson Covered Bridge the readings were 0.5mg/L in July, 0.6mg/L in August, and 0.23mg/L in September. Due to the persistence of phosphorus in the river south of Keene, ARLAC has advocated for the establishment of phosphorus limits in National Pollutant Discharge Elimination Permits (NPDES). The Environmental Protection Agency did add a phosphorus monitoring requirement to the Hinsdale wastewater treatment plant's NPDES permit this year. Keene and Swanzey plants had phosphorus limits added to their 2006 permits. Members also participated in and supported a new initiative on Beaver Brook by the City of Keene to assess water quality and restore fish habitat in that stream.

A regular task for ARLAC is to review and comment on state permit applications within the River corridor that may have potential impacts on the River. This year we submitted comments on projects proposed in Washington, Gilsum, Keene, Winchester, and Hinsdale. These included 2 site-specific applications, and 6 wetlands applications.

ARLAC also requested the NH Department of Transportation (NHDOT) to review its policy in the clearing of brush and trees along roads that are adjacent to the River. NHDOT agreed to work with ARLAC to evaluate practices that might impact River water quality. We also advocated for keeping the rail-trail bridge over Route 101 scheduled for 2010 in their 10-year Transportation Improvement Plan. ARLAC continued to follow the legislation and rulemaking regarding sludge and septage, continuing to advocate maintaining River corridor protection. ARLAC sponsored the showing of the film "Sludge Diet" to local legislators and the public, and offered comments to the Joint Legislative Committee on Administrative Rules regarding proposed DES changes to the sludge rules. Other legislative activity included support of a bill to keep landfills outside of the 1500-foot river corridor. We also offered comments to the NH Rivers Management Advisory Committee regarding improvements to the Comprehensive Shoreland Protection Act.

We continued participation as a member of the NH River Restoration Task Force and continue to support removal of the Homestead dam. Concerns regarding the stability of the Thompson Covered Bridge are being addressed thanks to the receipt of the Federal Highway Historic Bridge grant by the Town of Swanzey, and it is expected the dam may be removed in 2008.

ARLAC worked this year to get our updated River Management Plan accepted by the towns and city along the river, adding Marlow, Gilsum, and Winchester as towns approving the plan. Members also worked with towns to obtain signage proclaiming the protected status of the River. We can expect to see signs appearing in Marlow, Hinsdale, and Swanzey soon.

ARLAC activities on the River included a canoe trip in July from Coombs Covered Bridge to the Ashuelot Covered Bridge Winchester. It was noted that the area of the Motorcross track was very loud during times of racing, and many footpaths to the river had been opened along the banks showing signs of active use of the River in that location. ARLAC also co-sponsored a River clean up from Rte 101 to the Cresson Covered Bridge and a portion of West Swanzey as part of the Source to the Sea cleanup. A total of approximately 150 volunteers picked up 2200 lbs of garbage 81 tires and 980 lbs of scrap metal plus a large number of shopping carts.

ARLAC continues to educate itself regarding issues on the River, learning about the threat of and keeping a watchful eye for the invasive algae didymo. We also heard a presentation by Keene State College students regarding their study of polyaromatic hydrocarbon-degrading microbes in the River sediments contaminated by the waste of the former manufactured gas plant located in Keene at Mill Creek. ARLAC will keep updated on their work and the progress of the clean-up efforts there.

We continue to collaborate and support other regional efforts in the Ashuelot Watershed, participating in a planning forum sponsored this spring by the Ashuelot Valley Environmental Observatory, and a Friends of Keene Open Space forum on Greenways.

We would like to thank W.S. Badger Co. for its donation supporting ARLAC's work. The Committee meets each month, on the third Tuesday evening in Keene. The Local Advisory Committee invites citizens and town officials to contact their local ARLAC representatives or the Southwest Region Planning Commission for more information.

Respectfully submitted,
Jim Holley, Secretary

2007 Membership:

Linda Fuerderer – Marlow; Pablo Fleischmann – Gilsum; Gary Pelton – US Army Corps of Engineers; Patrick Eggleston, Jim Holley, Jo Beth Mullens -- Keene; Barbara Skuly, Stephen Stepenuck – Swanzey; Jim Ammann, John Stetser – Winchester; Barbara Fostyck, Terri Mitchell – Hinsdale.

Ashuelot River Local Advisory Committee

Washington Lempster Marlow Gilsum Sullivan Surry Keene Swanzey Winchester Hinsdale

2008 Annual Report

This year the Ashuelot River Local Advisory Committee (ARLAC), along with other NH Local Advisory Committees, was honored with the *President's Volunteer Award* in April, and the *Spirit of NH Volunteer Service Award* in the State and Local Government category in November for our efforts to advise the NH Department of Environmental Services (DES) and our communities on actions and issues to protect and manage the Ashuelot River. This year also commemorated the 20th Anniversary of the NH Rivers Management and Protection Program. The Ashuelot was designated as a protected river in 1993. ARLAC members, nominated by local municipal officials and appointed by the commissioner of DES, have been educated in a broad array of issues associated with the river and its watershed. It is the hope of the committee to be a resource that works well between the interests and concerns of the citizens in the watershed and state authorities.

This year we performed site visits and submitted comments on 10 projects occurring in Washington, Keene, Swanzey, Winchester and Hinsdale; two NH Department of Transportation projects; and actions on state land in Keene and Winchester. Letters of support were submitted for a NH Office of Energy and Planning grant to the town of Marlow for development of a Natural Resource Inventory, and in support of the final report of the DES Ashuelot Pond Drawdown Study. Comments were submitted to the Silvio Conte Comprehensive Conservation Plan. ARLAC continued to follow legislation and rulemaking, supporting changes to the Comprehensive Shoreland Protection Act, and HB 384 safeguarding surface waters by requiring more stringent reporting of failed septic systems on lakes and rivers. We also supported the passage of the comprehensive Alteration of Terrain rules established late this year. We continued participation as a member of the NH River Restoration Task Force and support the removal of the Homestead dam which has been delayed for another year. This year Keene adopted parts of the 2006 Ashuelot River Corridor Management Plan into its Open Space Ordinance.

The Ashuelot River water quality monitoring program in conjunction with the DES Volunteer River Assessment Program (VRAP) continued for its eighth season. Ten sites were sampled from Washington to Hinsdale. Analyses were done for temperature, pH, total phosphorus (TP), dissolved oxygen, turbidity, conductivity, and metals with the City of Keene donating lab services to analyze samples for cadmium, copper, lead and zinc. ARLAC members, working with community volunteers collected samples monthly from May through September. E. coli samples were obtained monthly in July, August and September. Additional sampling in Swanzey was funded by the Swanzey Conservation Commission to assess TP and E.coli in W. Swanzey. Data are available online at <http://academics.keene.edu/pegglest/AshuelotRiver.htm> or <http://des.nh.gov/organization/divisions/water/wmb/vrap/ashuelot/index.htm>.

In October ARLAC co-sponsored a cleanup of the River from upstream of Ashuelot River Park to the Thompson Covered Bridge in Swanzey as part of the Source to the Sea cleanup. A total of 204 volunteers removed 3,976 pounds of garbage plus 25 shopping carts from the River. Also this fall NH Protected River signs were purchased and posted in Marlow, Swanzey and Hinsdale.

ARLAC heard presentations on the results of The Nature Conservancy's culvert study, which found most dams in the watershed and 20% of culverts are a severe barrier to the movement of species in the streams; Keene State College students' study of coal tar pollution in Mill Creek; and the Society for the Protection of NH Forests' plans for land conservation within the Ashuelot River watershed.

ARLAC invites interested parties to join us at our monthly meetings in Keene on the third Tuesday. Do contact your local ARLAC representatives or the Southwest Region Planning Commission for more information.

Respectfully submitted,
Barbara Skuly, Chairman

2008 Membership: Linda Fuerderer -- Marlow; Pablo Fleischmann -- Gilsum; Jim Holley, Jo Beth Mullens -- Keene; Barbara Skuly, Stephen Stepenuck -- Swanzey; John Stetser, Dan Carr- Winchester; Terri Mitchell -- Hinsdale.

**The Cold River Local Advisory Committee
Acworth, Alstead, Langdon, Lempster and Walpole**

The Cold River Local Advisory Committee (CRLAC) consists of citizen representatives appointed by select boards from Acworth, Alstead, Langdon, Lempster, and Walpole. These representatives volunteer their time to help municipal boards and residents manage the natural, cultural, scenic and scientific resources of the Cold River watershed. The LAC also reviews river corridor projects needing state and federal permits and evaluates water-related issues of local or statewide significance.

CRLAC ACCOMPLISHMENTS IN 2007:

1. Municipal Conservation, Planning & Health Assistance

- Assisted town residents/boards with the resolution of potential water quality degradation and drinking water protection issues.
- Reviewed and commented on the water resource aspects of the draft Alstead Master Plan update.
- Continued work on a voluntary watershed management plan to assist towns in managing their water resources.
- Reviewed and commented on numerous stream bank stabilization and road/bridge projects resulting from the Flood of October 2005.
- Supported state and federal efforts to fund local stream restoration projects to complement/enhance the stabilization work.

2. Workshops, Events & Education

- Began updating the LAC web site.
- Participated in the 2007 NH Watershed Conference and Alstead Festival, including a sampling equipment demonstration.
- Co-sponsored the Alstead Flood Symposium in October at the request of the Alstead Conservation Commission.
- Published a brief public summary of the 2006 water sampling results.

3. Water Quality & Quantity Monitoring

- Completed the fifth year of our sampling program, including three “routine” and three additional water quality and

stream level monitoring events on the Cold River and its tributaries.

- Analyzed over 80 water samples in the field for pH, dissolved oxygen, conductivity, turbidity and temperature.
- Solicited and received DES funding for additional bacteria, nutrient and metal analyses conducted at the state laboratory.
- Measured late summer flow rates on the Cold River and Warren Brook.
- Advocated for the replacement of the abandoned flow gauging station at Drewsville Gorge.

The Advisory Committee welcomes your participation on any of our projects. We meet on the fourth Thursday of each month, 7- 9PM, usually in the Alstead Town Offices. To be on our email notices for workshops or water quality monitoring events, please call any LAC member.

Sincerely,

Acworth: Deborah Hinman (Chair)

Alstead: Mike Heidorn (Water Quality Monitoring), Carol Drummond, and Sam Sutcliffe (Treasurer)

Langdon: Jennifer Polcari (Vice Chair) and Cathy MacDonald

Lempster: Susan Lichty

Walpole: Charles Montgomery (scribe), Austin Hunter

The Cold River Local Advisory Committee:
Acworth, Alstead, Langdon, Lempster and Walpole

The Cold River Local Advisory Committee (CRLAC) consists of citizens appointed by select boards from Acworth, Alstead, Langdon, Lempster and Walpole. These representatives volunteer their time to help municipal boards and residents manage the natural, cultural, scenic and scientific resources of the Cold River watershed. The CRLAC also reviews river corridor projects needing state and federal permits and evaluates water-related issues of local or statewide significance.

CRLAC ACCOMPLISHMENTS IN 2008:

1. Municipal Conservation, Planning & Health Assistance

- Assisted residents/boards/business owners with the resolution of a variety of potential water quality degradation issues.
- Reviewed and commented on stream debris removal, a stream buffer property transfer and road/bridge/gravel pit projects.
- Participated in the Alstead Community Conservation Partnership Task Force and Land Conservation Leadership Course.
- Supported local and state efforts to fund stream restoration projects in Flood-damaged areas and develop partnerships with federal wildlife officials for habitat improvements.
- Advised Lempster officials on potential impacts to Dodge Pond of a contaminated site and proposed subdivision.

2. Workshops, Events & Education

- Participated in the 2008 NH Watershed Conference.
- Completed presentations on water quality testing and ground water resource challenges for Conservation Commissions in Acworth, Alstead, Lempster and Walpole.
- Published/distributed a brief public summary of the 2007 water sampling results.

3. Water Quality & Quantity Monitoring

- Completed the sixth year of our voluntary sampling program, including three “routine” and three additional water quality and water level monitoring events on the Cold River, its tributaries and two ponds (Newell/Dodge).
- Analyzed over 125 water samples in the field for pH, dissolved oxygen, conductivity, turbidity and temperature.
- Raised additional funds for over 150 bacteria, nutrient, metal and salt analyses conducted by the state laboratory.
- Completed a winter road salt impact study in Alstead & Walpole including 70 additional field and lab samples.
- Added 29 new sampling sites on: Warren Brook and Camp Brook (Alstead); Honey Brook (Marlow/Acworth); Dodge Brook and its tributaries (Lempster); and Great Brook and its tributaries including Ram, Brush Meadow and Jewett Brooks (Langdon/Walpole).
- Assisted state/federal officials with the site selection process for a new stream flow gauging station on the Cold River.

The Advisory Committee welcomes your participation in any of our projects and is actively seeking new members/alternates. We meet the fourth Thursday of each month, 7- 9PM, usually in the Alstead Town Offices. Please contact any CRLAC member for more info.

Sincerely,

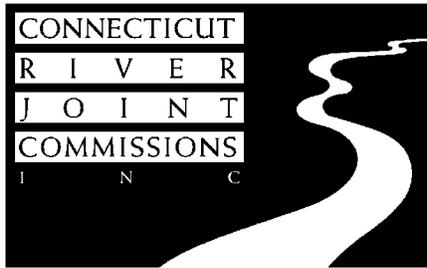
Acworth: Deborah Hinman (Chair)

Alstead: Mike Heidorn (Water Quality Monitoring), Carol Drummond and Sam Sutcliffe (Treasurer)

Langdon: Jennifer Polcari (Vice Chair) and Cathy MacDonald

Lempster: Susan Lichty

Walpole: Charles Montgomery (Scribe) and Austin Hunter



Annual Report 2007

The Connecticut, two centuries ago, formed the natural link between all the towns and people within its reach. This linkage broke down over the years as people became less dependent on the river, less aware of it, less caring; but the feeling of unity - of the Connecticut River Valley as one comprehensible, interconnected whole - is coming back again. . . .

Walter Wetherell, This American River, Five Centuries of Writing about the Connecticut, University Press of New England, 2002

Introduction

Since 1989, the Connecticut River Joint Commissions (CRJC) have provided a focal point for communication about the river and its watershed between the states of New Hampshire and Vermont, and with federal resource agencies, communities, organizations, and landowners. Both commissions are advisory, without regulatory power, preferring instead to educate and empower their communities and colleagues to understand and benefit from the river. The thirty volunteer river commissioners, fifteen from each state, are citizens who live and work in the watershed and are committed to its future.

The New Hampshire Connecticut River Valley Resource Commission and the Vermont Connecticut River Watershed Advisory Commission meet separately to elect the officers of their own commissions. These officers comprise the directors of the Connecticut River Joint Commissions. By combining staff and programs, the individual commissions accomplish far more than they could do alone. This report constitutes the report of the two state commissions.

Core funding for the work of the commissions comes from an annual appropriation from the legislatures of New Hampshire and Vermont which the states increased in 2007 to \$60,000 each, in order to enable the Connecticut River Joint Commissions to leverage grants from federal agencies. In 2007, the commissions supplemented this funding with grants from the National Oceanographic and Atmospheric Administration, the New Hampshire Department of Environmental Services, the Vermont Agency of Transportation, and the Upper Connecticut River Mitigation and Enhancement Fund. Financial support from the two states is an essential base for qualifying for funds from federal sources.

Over the years, CRJC has provided leadership in the valley on issues of erosion, riverbank restoration, riparian land uses and habitat, river access, river flow, water quality, non-point pollution prevention, watershed planning, heritage tourism, and the Connecticut River Scenic Byway.

2007 Programs

PUBLIC INVOLVEMENT

A. A Planning Blueprint: the *Connecticut River Management Plan*

The predecessor to the *Connecticut River Management Plan*, the six-volume *Connecticut River Corridor Management Plan*, was prepared by CRJC and our five bi-state local river subcommittees - - Headwaters, Riverbend, Upper Valley, Mt. Ascutney, and Wantastiquet - - and published in May 1997. The Plan is called for under the NH Rivers Management and Protection Act, and serves as a guide for local communities, as well as state and federal agencies. Since 1997, substantial progress has been made in implementing hundreds of recommendations of the Plan. CRJC embarked on updating the Plan in 2004 with the help of the local river subcommittees. The 1997 Plan addressed only the immediate corridor of the Connecticut River. The revised plan also addresses the impacts of tributaries higher in the watershed and reflect planning underway on those tributaries. This revision process is ongoing, and involves nearly one hundred people.

Progress in 2007: Water resources have been the focus of attention for CRJC and the subcommittees in 2007. Topics that are being addressed include water quality, river flow, erosion, buffers, flood plains, gages, power production, flood control, drinking water withdrawals, sources of pollution, and protection for the river. The subcommittees completed their five bi-state regional water resource plans, and CRJC worked to finalize an overview volume that reflects issues pertinent to the entire Vermont and New Hampshire watershed. CRJC sought and received comment on both the local and riverwide components of the draft water resources chapter after a series of public meetings and wide distribution of the drafts.

B. Connecticut River Partnership Program of Small Grants

The Connecticut River Partnership has been a central element of CRJC's role of stimulating and assisting local initiatives to encourage both environmental protection and economic development, and implementing recommendations of the *Connecticut River Corridor Management Plan* and the Scenic Byway Plan. Starting in 1992, each year the Commissions have awarded small grants for worthy local projects, utilizing a yearly Congressional appropriation. Unfortunately, a ban on earmarks in the federal appropriations bill in 2007 eliminated any funding for this popular program. CRJC continued efforts to win this funding for the next year.

C. Local River Subcommittees

Each of our five bi-state local river subcommittees is an active voice for river issues and stewardship in its region. The subcommittees are consulted by agencies of both New Hampshire and Vermont to advise on permits and other actions affecting the river. The five local river subcommittees provide local, on-the-ground knowledge to state agencies and local communities, based on the findings and recommendations of the *Connecticut River Corridor Management Plan* and newly updated chapters on recreation and water resources.

Progress in 2007 : The subcommittees provided advice on twenty permit applications. This advice addressed development on shorelines and in the flood plain, storm water treatment, recreational access,

installation of private docks, a project at the Gilman Dam, gravel extraction near the river, a riverfront campground, a major commercial development, culvert replacements, riverbank stabilization and stabilization of a railroad bridge across the river.

The majority of effort by the subcommittees in 2007 was directed to an extensive updating and expansion of the water resource section of the *Connecticut River Management Plan*. Each subcommittee hosted a public information session to present their new draft plan, received comments and adopted a final water resources plan for their section of the river. At the conclusion of the year, most of the subcommittees also discussed and agreed upon instream protected uses, outstanding characteristics, and resources for their sections of the river.

Several towns appointed new representatives to the subcommittees in 2007.

D. Provide a Forum

The Connecticut River Joint Commissions are the only entity that regularly addresses issues and opportunities for the bi-state Connecticut River watershed. Meetings of the Connecticut River Joint Commissions focus public attention and provide an ongoing discussion on a wide range of topics.

Topics in 2007:

- ◆ State and national actions to address mercury emissions;
- ◆ Shoreland protection legislation in VT and NH;
- ◆ Brownfields assessments and benefits;
- ◆ Vermont's Clean and Clear Program;
- ◆ The proposed "Important Bird Area" along the Connecticut River;
- ◆ Plans and projects for the Silvio O. Conte National Fish and Wildlife Refuge;
- ◆ Connecticut River hydro operations;
- ◆ Flood plain forests;
- ◆ Revising and updating the riverwide overview of the Water Resources plan.

RIVER SCIENCE

A. Fluvial Geomorphological Assessment

Riverbank erosion is a costly problem on the Connecticut River and is of real concern to farmers losing agricultural land. While some erosion is a natural and essential process on stable rivers, accelerated and extensive erosion can diminish farmland, and degrade habitat for fish through the loss of cover, spawning grounds, and riparian buffer zones.

In past years, stabilization of eroded riverbanks has occurred primarily on a site-by-site basis without a full understanding of the root causes of the erosion problem or how stabilization of one bank may affect the stability of others. Recently, a growing number of agencies and organizations throughout the United States are attempting to restore streams to an equilibrium condition using the principles of fluvial geomorphology, a science that examines how natural conditions and human land use in a watershed influence the shape of a river channel. Since stable channels do not change their shape over time, erosion can be greatly reduced, benefitting agriculture and fish habitat.

CRJC retained a professional consulting fluvial geomorphologist, Dr. John Field of Farmington, Maine, to study the natural and human causes for channel instability in the eighty-five mile section of the Connecticut River between Murphy Dam and Canaan Dam. We have learned from this research that a

third of the northern section of the river had been straightened before 1925, in all likelihood to accommodate log drives. These long straight stretches, such as through Canaan and Stratford, are not natural and have resulted in sharp corners which the river subsequently is trying to shape back into smoother curves. Dr. Field's study identified where tributary streams have brought substantial quantities of sediment into the Connecticut to the extent that the river's current has shifted and erosion has resulted.

Dr. Field's reports and maps prepared for CRJC are posted on our web site, www.crjc.org/erosion, where they offer helpful information to other organizations and agencies active on the northern river.

Progress in 2007 With support from the NH Department of Environmental Services, the Upper Connecticut River Mitigation and Enhancement Fund, and the National Oceanographic and Atmospheric Administration, CRJC continued Dr. Field's research in 2007. Highlights include:

- ◆ A detailed assessment including hydrological modeling of the lower Mohawk River near its confluence with the Connecticut in order to develop detailed plans for curbing erosion through reestablishment of the natural side channels of the Mohawk's alluvial fan. This research enabled CRJC to develop a proposal for project implementation in 2008.
- ◆ A conservation easement was finalized and recorded with the Coos County Registry of Deeds by the town of Colebrook and the Colebrook Business Park to secure permanent protection of a surveyed buffer of natural and replanted vegetation along the top of the Business Park riverbank. The easement allows for planting and maintaining buffer vegetation, and for recreational access to the river.
- ◆ In the Town of Stark, NH, Dr. Field analyzed various options for slowing Mill Brook and dispersing its flow before it reaches the Upper Ammonoosuc River where it has been causing substantial erosion and threatening a nearby road. These options were presented to local officials and property owners for their consideration.

PROTECTION AND ENJOYMENT OF VALLEY ASSETS

A. Silvio O. Conte National Fish and Wildlife Refuge

In 1991, Congress established a new kind of refuge in the four-state Connecticut River watershed, one that would identify and preserve the natural diversity, abundance, and key habitats of both fish and wildlife, that would emphasize education of the public, and engage in partnerships to achieve its mission. The Environmental Impact Statement and Action Plan adopted by the Refuge in 1995 identified 78,000 acres of "focus areas" to protect, largely through conservation easements.

Subsequently the Conte Refuge has protected over 26,000 acres of former Champion lands in the Nulhegan basin of Vermont, and 5,600 acres of habitat at Pondicherry in Jefferson, New Hampshire, plus additional areas in Massachusetts and Connecticut.

Progress in 2007: As the Conte Refuge embarked upon a new "comprehensive conservation plan," CRJC co-hosted a workshop at the Montshire Museum in Norwich, Vt, to consider the Refuge's mandate from Congress, its accomplishments, and the opportunities ahead. One of these, for example, is to partner with New Hampshire Audubon and Audubon Society of Vermont to protect a recently-identified IBA (Important Bird Area) along the Connecticut River from the Massachusetts border north to Weathersfield, and a significant stop over area for migratory waterfowl.

In recent years, the Conte Refuge has focused on obtaining properties in federal ownership, but the refuge budget has been severely reduced and they have lost staff. CRJC is encouraging the Refuge to partner with state and regional land trusts and thus stretch federal dollars for protecting outstanding fish and wildlife habitat by widespread use of conservation easements rather than fee purchase.

CRJC has been invited to join a new coalition, Friends of Conte, that is advising and assisting the Refuge with the many challenges of funding, planning, and responsible resource management.

B. Heritage Tourism

CRJC encourages and supports efforts to safeguard natural and historic assets of the Valley, and through the Partnership Program have supported a wide array of local efforts to preserve and educate the public about historic and cultural assets. A database of historic sites is carried on the CRJC web site at www.crjc.org/heritage.htm and covers an increasing number of NH and VT riverfront communities.

C. Connecticut River Scenic Byway

CRJC sponsors the Scenic Byway Council, which serves as a unifying network of communities, businesses, and organizations that foster the promotion of tourism in the Connecticut River Valley, preservation of scenic, cultural, and recreational features, and development of the infrastructure of interpretive centers, signage, and other information to enable visitors to enjoy and explore the many opportunities the Valley affords.

Roadways comprising the bi-state Connecticut River Byway were designated a National Scenic Byway in 2005 by the Federal Highway Administration. Over 500 miles of roads on both sides of the river are included, and encompass the major state roads that border the river as well as several spur routes to scenic areas or special attractions.

The Byway Council has developed an infrastructure for heritage tourism in the form of a website: www.ctrivertravel.net, a map/brochure, exhibits in interpretive centers at ten “waypoint” communities along the Byway, a master plan for roadside byway signs, and a 14 minute video, *Welcome to the Heart of New England*.

Progress in 2007: The Byway Council received funding from the U.S. Department of Transportation to install identification signs along the Byway, and in 2007 worked with the two state transportation departments and with the ten waypoint communities to finalize plans for locating over one hundred signs which will be fabricated and installed in 2008.

The Council also worked with the Vermont Department of Tourism and Marketing and the New Hampshire Division of Travel and Tourism to develop a marketing plan for the byway, and produced and distributed an attractive new brochure to lure prospective travelers.

CRJC staff participated on the New Hampshire Travel and Tourism Advisory Committee, and assisted citizens in Hinsdale, NH in seeking funding for protection and preservation of a key historic riverfront landmark. CRJC also completed a multi-year effort to assist the New Hampshire Department of Transportation in providing a new public boating and fishing access at the Stratford-Maidstone Bridge.

PUBLIC INFORMATION AND EDUCATION

A. Atlas

In 2004, CRJC initiated the development of a new and major publication in partnership with Dartmouth College: an *Atlas of the Upper Connecticut River Watershed of Vermont and New Hampshire*. The

Atlas explores physical geography, ecosystems, Native American heritage, settlement, agriculture, transportation, demographics, economics, and issues such as flooding, riverbank restoration, water quality, and much more. Chapters on more than forty topics have been prepared by experts in the various fields.

Progress in 2007: This spring, CRJC signed a contract with University Press of New England to print, publish, and market the Atlas. CRJC's communications director, who is also the atlas editor, has worked with all the authors to review, edit, and finalize their sections, and worked with the cartographer, Northern Cartographics of Burlington, VT, on suitable depictions in maps and graphics. Additionally, Dartmouth students have assisted in locating and obtaining permission for use of photos. CRJC has raised funds to support the project, and looks forward to seeing the Atlas printed in 2009.

B. Newsletters

CRJC published an issue of *River Valley News* in 2007 that focused on the local river subcommittees' priority recommendations for addressing water resource topics, and upon Mercury and other fish toxins in the river.

C. Web Site

CRJC has invested substantial effort into making the web site, www.crjc.org, easily accessible, attractive, and informative for the public.

The calendar pages allow web site visitors to learn about the dates and agendas of upcoming CRJC and local river subcommittee meetings. A section on river flows and policy links the viewer directly to real-time flow and water temperature information for the Connecticut River and its tributaries, and An *education* section links the visitor with museums and environmental education centers and curricula in the valley and beyond. The *Scenic Byway* page on the site has also been expanded to reflect CRJC's leadership role in development of the Byway. The acclaimed educational series of fact sheets for landowners, *Riparian Buffers for the Connecticut River Watershed*, and *The Challenge of Erosion in the Connecticut River Watershed*, has also been posted on the web site, as has *A Homeowners's Guide to Non-point Source Pollution..* CRJC has also posted extensive information about public recreation on and near the river, including information related to the safety of the river for swimming, fishing, and boating.

Progress in 2007: CRJC updated the site in several respects, and added a substantial section on invasive species with many links and a focus on the newly discovered invasive alga, *Didymo*.

D. Byway Website

The Byway Council's website, www.ctrivertravel.net has a wealth of ideas about things to do and places to enjoy in the Connecticut River Valley. CRJC has updated and expanded this site as developments occur in the byway, and attractions, such as art galleries and farmer's markets are added.

E. Exhibit

CRJC regards public education as a key part of its mandate to guide growth and development in the Connecticut River Valley. The Commissions' traveling exhibit is used at public events, fairs, and workshops. The exhibit features imagery and illustrative text to describe the major areas of CRJC's program, and also includes a learning panel on riparian buffers and bank erosion.

F. Publications

CRJC's widely distributed *Living With the River* series of publications includes:

- ❖ **Connecticut River Byway Publications Manual**, 2006. A 46 page how-to-do-it illustrated guide for planning and producing high quality publications.
- ❖ **Proud to Live Here**, 2003. A 232 page book written by Richard Ewald, with Adair Mulligan, edited by Sharon Francis. The book is an exploration of the rich cultural and natural resources of the Connecticut River Valley, and is liberally illustrated with almost 400 images. Copies available through CRJC for \$20.00 plus \$5.00 postage and handling.
- ❖ **Connecticut River Heritage Trail**, 1999. A 77-mile itinerary of historic and cultural sites in Claremont, Cornish, and Plainfield, NH and Windsor and Hartford, VT. *On the web at www.crjc.org.*
- ❖ **Boating on the Connecticut River in Vermont and New Hampshire**, 2001. A 28 page handy set of maps with educational information about access sites, boating safety laws, visitor etiquette, wildlife and more. *On the web at www.crjc.org.*
- ❖ **Connecticut River Corridor Management Plan, Vol. I - VI**, 1997. CRJC's Overview volume, plus the plans developed by the five local river subcommittees, Headwaters, Riverbend, Upper Valley, Mt. Ascutney, and Wantastiquet, provide a comprehensive blueprint for river conservation and economic development based on renewable natural resources. Contains over 800 recommendations aimed at riverfront landowners, local communities, civic organizations, and state and federal agencies. *Volume I and summaries of volumes II-VI on the web at www.crjc.org.*
- ❖ **Connecticut River Corridor Management Plan, Actions to Date**, Spring, 2003. A 4-page listing of the many steps taken by federal and state agencies, local jurisdictions, organizations, and individuals to implement the Plan's recommendations.
- ❖ **Riparian Buffers for the Connecticut River Watershed**, 2001. These informational fact sheets explain the many values of riparian buffers and offer information for people who live adjacent to rivers, as well as for those who have agricultural or forest lands, and for community leaders, people in urban areas, and those who wish to improve habitat for fish and wildlife. *On the web at www.crjc.org.*
- ❖ **The Challenge of Erosion in the Connecticut River Watershed**, 1996. A series of informational fact sheets on riverbanks and buffers summarize the findings of a year-long multi-agency investigation into riverbank erosion. Written for the riverfront landowner or interested citizen, they cover river dynamics and the many causes of erosion, riparian buffers, streambank stabilization techniques, field assessment of problem sites, and a guide to permitting requirements on each side of the river. *On the web at www.crjc.org.*
- ❖ **Video: "Welcome to the Heart of New England,"** 2004. The 14-minute film of aerial shots and on the ground close-ups of people and scenery by producer Caro Thompson is available from CRJC in video for \$9.95 and in DVD for \$14.95.

The Commissioners, Volunteers & Staff

Thirty Commissioners, fifteen from each state, comprise the Connecticut River Joint Commissions. Legislative mandates specify the composition of each Commission. New Hampshire's Connecticut River Valley Resource Commission includes appointees from the North Country Council, Upper Valley Lake Sunapee Regional Planning Commission, Southwest Region Planning Commission, Connecticut River Watershed Council, and the Connecticut River Flood Control Commission. Additionally, the Governor and Council appoint a representative from each of the following interests: hydroelectric concerns, state-wide conservation organization, tourism, agriculture, and forestry. Five members are chosen at-large.

Vermont's Connecticut River Watershed Advisory Commission is comprised of the secretary of the Agency of Natural Resources, a representative of each of the five regional planning commissions that border the Connecticut River, and ten at-large members appointed by the governor. These may include members of the General Assembly, and representatives of diverse interests including forestry, tourism, fishing, boating, land preservation and historic preservation. One or more of the appointees must be a farmer.

The Commissioners and eighty local river subcommittee members serve as volunteers to the CRJC.

Connecticut River Joint Commissions - 2007

NEW HAMPSHIRE

Connecticut River Valley Resource Commission
Cleve Kapala, *Concord*, Chair

Robert Christie, *Lancaster*
Glenn English, *Haverhill*
Nancy Franklin, *Plainfield*
Robert Harcke, *Westmoreland*
Robert Kline, *Plainfield*
Denise Meadows, *Keene*
Cheston Newbold, *Cornish*
Robert Ritchie, *Piermont*
William Roberts, *Hinsdale*
John Severance, *Whitefield*
Mary Sloat, *Northumberland*
Henry Swan, *Lyme*
John Tucker, *New London*
George Watkins, *Walpole*

VERMONT

Connecticut River Watershed Advisory Commission
Bev Major, *Westminister*, Chair

Peter Gregory, *Hartland*
Tom Kennedy, *Windsor*
John Lawe, *Norwich*
Stephen Long, *Corinth*
James Matteau, *Brattleboro*
Alison Meaders, *St. Johnsbury*
Gary Moore, *Bradford*
Gayle Ottmann, *Hartford*
Joe Sampson, *Bradford*
Michaela Stickney, *Waterbury*
Nat Tripp, *Barnet*
Walasewicz, Stephen, *Perkinsville*
Brendan Whittaker, *Brunswick*
Norman Wright, *Putney*



Sharon Francis, *Executive Director*
Adair Mulligan, *Conservation Director*
Rebecca Brown, *Communications Director*
Barbara Harris, *Office Manager*

2008 Annual Report Connecticut River Joint Commissions Local River Subcommittees

This year the Connecticut River Joint Commissions (CRJC) have considered issues as wide-ranging as the status of shoreland and fluvial erosion hazard protection in New Hampshire and Vermont to the effort to restore a riverbank and tributary delta in Colebrook. We hosted site visits at the Colebrook Business Park for Governor Lynch and fisheries biologists, regional and state agency staff, other river experts, and local officials, and devoted considerable time and energy to raising funds for this project. We also completed a new five-year strategic plan to guide the work of the Commissions.

CRJC's five local river subcommittees met throughout the year, preparing their *Connecticut River Recreation Management Plan* for publication and selecting key recommendations of their new *Connecticut River Water Resources Management Plan* to implement in their communities. These include pursuit of conservation funding for a major parcel of floodplain forest and migratory waterfowl resting habitat in Hinsdale to assistance with an alert system for riverfront landowners in times of unexpected high water from Murphy Dam in Pittsburg and conservation of five miles of river frontage in Pittsburg and Clarksville. The subcommittees reviewed a number of permit applications for projects that could affect the river, including projects proposed for the Vermont side of the river. CRJC and the subcommittees also provided advice to the US Fish and Wildlife Service as it moves forward with its new Comprehensive Conservation Plan for the Silvio O. Conte National Fish and Wildlife Refuge, identifying areas for habitat conservation either through partnerships with local landowners or easements.

CRJC supports efforts to safeguard the valley's natural, agricultural, and historic assets, and is working with businesses and the states to strengthen the local base for tourism through the Connecticut River Byway. In 2008 we completed a major project to install byway signage along the 500 miles of the designated National Scenic Byway in New Hampshire and Vermont. CRJC maintains a web site for the Byway at www.ctrivertravel.net. CRJC's home web site at www.crjc.org includes a calendar of events, useful information and links, and our newsletters, *River Valley News* and *River Byway News*.

CNBRLAC
(CONTOOCCOOK AND NORTH BRANCH RIVERS LOCAL ADVISORY COMMITTEE)



As your town's representatives to this committee, here is a brief summary of what we have been doing to protect the river that runs through our fourteen towns.

MONITORING AND CLEANUP ALONG THE RIVER

Our monitoring of the river each summer continues. Anyone willing to volunteer with us this coming summer, please contact us.

We thank the numbers of volunteers who helped clean up the river after the floods in the towns of Peterborough, Greenfield, Bennington, Hancock, Hillsboro, and Henniker.

We helped the town of Hillsborough to obtain a Brownfields Grant to start clean up of the collapsing old mills downtown along the river.

Both Jaffrey and Hillsboro town meetings passed articles to improve their sewage treatment plants this year. Also much of the milfoil (an alien invasive species) has been removed from Contoocook Lake in Jaffrey and Rindge (near the start of the river).

POWERPOINT PROGRAM ON HISTORY OF THE CONTOOCCOOK RIVER

We also completed a new power-point program on the History of the Contoocook River that is now available for use by town groups, civic clubs, libraries, schools, or other interested groups. If you would like to see the program, please contact Marian Baker, Secretary of CNBRLAC. We also have started putting the many articles and photos of the river into scrapbooks, available for display.

ADVISING TOWNS ON BUILDING IN THE RIVER CORRIDOR

We continue to work on a revision of the River management plan. A flyer summarizing the main points is available from our newly appointed chair person, Michelle Hamm, Environmental Engineer at Monadnock Paper Mill in Bennington.

Two sections of the river have become protected land, one section along Cheshire Pond in Jaffrey, and a long stretch from Robb Reservoir in Stoddard to Antrim along the North Branch. Henniker is also protecting a section along Freight Train Rapids.

SIGNS ALONG THE RIVER

We have been working with towns to purchase official protected river signs to erect where highways cross the river. The first signs will be put in when the ground thaws this spring.

Our monthly meetings are held the third Monday of each month, usually at Monadnock Paper Mill in Bennington. They are open to the public.

Serving the towns of Antrim, Bennington, Boscawen, Concord, Contoocook, Deering, Greenfield, Hancock, Henniker, Hillsborough, Hopkinton, Jaffrey, Penacook, Peterborough, Stoddard, Rindge
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**CONTOOCCOOK AND NORTH BRANCH RIVERS LOCAL ADVISORY COMMITTEE
(CNBRLAC)**



Below, please find a brief summary of the accomplishments of the Contoocook and North Branch Rivers Local Advisory Committee (CNBRLAC) in 2008 to protect the river that runs through fourteen towns.

RECEIVED TWO AWARDS

This year our committee received an award from EPA for our volunteer efforts, as well as one from the State of New Hampshire! Michelle Hamm, our Chair collected these on our behalf.

MONITORING AND CLEAN-UP ALONG THE RIVER

This year we increased the number of sites monitored, especially in Henniker and Hopkinton. Special thanks go to Jill Winton of Deering for her help in getting several volunteers to help us. We hope to do more on invasive plants this coming year.

We have noted an increase of foam in the river, possibly due to car washing, phosphate fertilizer, or leaf decomposition, depending on the time of year.

EDUCATIONAL AND PUBLICITY ABOUT THE RIVER

We still have a power-point program on the history of the river, a large display board, a video of the river set to Vivaldi's Four Season music, and a scrapbook of pictures and historical articles about the river available for display at community functions. If you would like the display or a program presented in your town or at a regional organization, contact our secretary, Marian Baker at 478-5650. We plan to complete brochures, update our website, and conduct a survey of riverfront owners and others interested in the river late this spring.

SIGNS ALONG THE RIVER

So far we have bought and erected colorful Protected River signs in Bennington, Henniker, Peterborough, and Contoocook. Look for them! We were the grateful recipients of donations made in the memory of Marshall Harvey, who spent his childhood years on the river in Hillsboro. This money was used to enable our town of Hillsboro to purchase several sets of signs to erect where highways cross the river in our town.

WILDLIFE IN THE RIVER

Each month we get reports of wildlife seen along the river; eagles, herons, mergansers, migratory waterfowl, otters, and snow buntings. Do let your town representatives know of interesting sightings in your town.

ADVISING TOWNS ON BUILDING IN THE RIVER CORRIDOR

We continue to advise towns concerning the shoreland protection act, best management practices for the development of land along the river, and dredge and fill permits.

NEW MEMBERS

We have several new members on our committee, but are looking for new ones from Rindge, Jaffrey, Greenfield, Antrim, Stoddard, and Hopkinton. Our monthly meetings are held the third Monday of each month, usually at Monadnock Paper Mill in Bennington. They are open to the public.

For more information please contact either Marian Baker at 478-5650 or Phil Harvey at 464-3678.

Serving the towns of: Antrim, Bennington, Boscawen, Concord, Contoocook, Deering, Greenfield, Hancock, Henniker, Hillsborough, Hopkinton, Jaffrey, Penacook, Peterborough, Stoddard, and Rindge

2007 Annual Report Exeter River Local Advisory Committee

The Exeter River Local Advisory Committee (ERLAC) celebrated its 11th year of stewardship of the river and watershed in 2007. The year was marked by productive partnerships with several organizations, including the Rockingham Planning Commission, NH Department of Environmental Services, NH Coastal Program, and NH Estuaries Project. These partnerships provide ERLAC with an opportunity to work with local Conservation Commissions to advocate effectively for protection of natural resources throughout the watershed.

ERLAC partnered with the Fremont Conservation Commission to hold the seventh annual vernal pool workshop in May. Children and adults waded into woodland pools to identify salamanders, turtles and clusters of frog eggs. Development of forestland threatens vernal pools in every watershed community.

In June, ERLAC partnered with dozens of environmental and community organizations and several local artists to hold the Exeter River Alewife Festival and canoe and kayak race. Funding to support this event was provided by the NH Coastal Program and NH Department of Environmental Services. ERLAC looks forward to working with Conservation Commissions and other organizations in the watershed on a new series of activities in 2008.

Several ERLAC members spent the summer working with the NH Coastal Program to collect and identify macroinvertebrates in the Exeter River and its tributaries. These intrepid volunteers waded into the water at several locations to capture and identify bugs hiding under rocks in rapid sections of the river. Macroinvertebrates are used as an indication of water quality. ERLAC members are also actively monitoring water temperature and other indicators. Results from these sampling programs will be available in early 2008 on ERLAC's website, www.exeterriver.org.

In October, ERLAC partnered with the Sandown Conservation Commission and NH Department of Environmental Services to hold a family friendly workshop explaining how to identify macroinvertebrates and why they are an important indicator of the impacts of land use on water quality and quantity.

ERLAC has also been working with the NH Department of Environmental Services and the consulting firm Geosyntec on a Watershed Restoration Plan. The first phase of the plan, a Vulnerability Analysis, has just been completed and identifies sections of the Exeter River and the watershed most impacted by development. The next phase of the project will involve management and restoration plans for these areas.

ERLAC meets the fourth Tuesday of each month at 7:00 p.m. in the conference room at the Rockingham County Nursing Home in Brentwood. Representatives are needed from your community. Please call 778-0885 for more information, or visit www.exeterriver.org.

2008 Annual Report Exeter River Local Advisory Committee

The Exeter River Local Advisory Committee (ERLAC) celebrated its 12th year of stewardship of the river and watershed in 2008. The year was marked by productive partnerships with several organizations, including the Rockingham Planning Commission, NH Department of Environmental Services, NH Coastal Program, and NH Estuaries Project. These partnerships provide ERLAC with an opportunity to work with local Conservation Commissions to advocate effectively for the protection of natural resources throughout the watershed.

ERLAC partnered with the Raymond Conservation Commission to hold the seventh annual vernal pool workshop in May. Children and adults waded into woodland pools to identify salamanders, turtles and clusters of frog eggs. Development of forestland threatens vernal pools in every watershed community.

Several ERLAC members spent the summer working with the NH Department of Environmental Services to collect and identify macroinvertebrates in the Exeter River and its tributaries. These intrepid volunteers waded into the water at several locations to capture and identify bugs hiding under rocks in rapid sections of the river. Macroinvertebrates are used as an indication of water quality. ERLAC members are also actively monitoring water temperature and other indicators. Results from these sampling programs will be available in early 2009 on ERLAC's website, www.exeterriver.org.

In October, ERLAC partnered with the Great Bay Chapter of Trout Unlimited, NH Fish and Game, and the NH Department of Environmental Services to hold a fly-fishing workshop for children. With Trout Unlimited guides beside them, dozens of kids had an opportunity to learn how to cast and how to catch trout from the Exeter River just below Pickpocket Dam. Staff from the NH Department of Environmental Services also worked with kids and their parents to identify macroinvertebrates found in the river and explain why these creatures are such an important indicator of the impacts of land use on water quality and quantity. A volunteer from NH Fish and Game was also on hand to teach kids how to tie their own fishing flies, rounding out a wonderful day of fishing and learning on the Exeter River.

ERLAC continues to work closely with the NH Department of Environmental Services and the consulting firm Bear Creek on a Geomorphic Assessment of the Exeter River. The consultants and ERLAC members have walked miles and miles of the river corridor identifying erosion and other threats to water quality. ERLAC will be working closely with watershed Conservation Commissions in 2009 on restoration of several of the sites identified.

ERLAC meets the fourth Tuesday of each month at 7:00 p.m. in the conference room at the Rockingham County Nursing Home in Brentwood. Representatives are needed from your community. Please call 778-0885 for more information, or visit www.exeterriver.org.

Isinglass River Local Advisory Committee
2008 Annual Report

Two thousand eight was an especially exciting year for the Isinglass River Local Advisory Committee (LAC). We witnessed great progress in protecting our river in so many ways.

- The LAC, working with the Strafford Regional Planning Commission, with section 604(b) grant funding from DES, completed our River Management Plan and presented the plan with public meetings during the month of June. The new plan was distributed to member communities and stakeholder organizations throughout the Isinglass River watershed later in the summer.
- One of our LAC members developed new stream assessment field data sheets and trained volunteers in their use.
- LAC members participated in biological monitoring of the Isinglass (VBAP) as well as traditional summer water testing (VRAP) of the Isinglass River and several of the tributaries. Testing results were fantastic and showed that the Isinglass River remains a healthy river. VBAP results show that aquatic viability is good.
- LAC members participated in river clean-up events and hauled a full truckload of trash from one location. While working, we discovered an older illicit discharge into the Isinglass, which after investigation, led to the upgrade of a local business' septic system.
- In August, LAC members, along with many area conservation organizations and the town of Strafford, celebrated the completion of the Isinglass River Conservation Reserve project. Through a combination of land purchases and conservation easements, the conservation reserve project permanently conserved nearly 800 acres in the Isinglass River watershed, including over a mile of riparian land, with the assistance of the federal Coastal Estuarine Land Conservation Program.
- LAC members manned a booth at Waste Management of New Hampshire's *Get Wild about Water and Wildlife* Event in October at the Turnkey facility in Rochester on the Isinglass River.

Our LAC has been fortunate to partner with Waste Management for several projects, including the October river festival. We are proud to have partnered with Waste Management throughout the years, and congratulate them for their 2008 certification as a Corporate Lands for Learning site from the Wildlife Habitat Council. The designation provides encouragement for the use of Waste Management's hiking trails along the Isinglass as a learning laboratory and outdoor education center. We look forward to working with them to bring more river ecology programs into area schools. We would also like to thank Waste Management for their donation of water quality testing kits for the Isinglass River Local Advisory Committee. Our water quality monitoring volunteers use these kits weekly throughout the summer testing season. Having the additional kits

has allowed us to collect more data, expanding the testing program from six to 22 different sites, which in turn has allowed us to set priorities for our testing program. The Isinglass River is known for its high water quality. It is important to maintain our testing regime so that we will be able to both assess any possible threats to the river, and to celebrate the valuable habitats that our river supports. A biothon event held by Bear-Paw Regional Greenways at the Isinglass River Conservation Reserve lands in June 2008 found more than 350 species of flora and fauna, including such pleasant surprises as American Eels at several stages of development—a truly remarkable indication of the health of our river system.

The Isinglass River Local Advisory Committee meets on the second Wednesday of the month at 5:00 p.m. in the Turnkey Conference Room at Waste Management in Rochester. All are welcome to attend. For additional information, please contact our chairman or one of the representatives from your community.

Respectfully submitted,

Elizabeth Evans
Chairman (graycape@metrocast.net)

Barrington--
Pam Skeffington
Ann Schultz
Ted Walsh

Rochester--
Alan Davis
Elaine Lauterborn
John Johnstone

Strafford--
Maryalice Fischer
Wayne Donle
Elizabeth Evans
Bruce Smith (emeritus)

Dover (advisory)--
Dean Peschel

Lamprey River Advisory Committee
2007 Report
Kevin Martin, Chair

2007 was a productive year for the Lamprey River Advisory Committee. After years without a home, the Committee now has an office for meetings and file storage, in the Mill Pond Arts Center in Durham. We actively pursued land conservation, resulting in three new riverfront conservation easements. We also have a newly updated Management Plan, which Committee members presented for comment to most Planning Boards, Conservation Commissions and Selectmen in Epping, Lee, Durham and Newmarket. The Management Plan can be seen on our evolving website, www.lampreyriver.com. On a very rainy fall day, at the Lee Grange, the community celebrated the 10th anniversary of the Wild and Scenic designation of the river! Our Wildlife Subcommittee oversaw another turtle survey by David Carroll, which will give insight into changes over time and effective or detrimental management practices. In collaboration with the Lamprey River Watershed Association, we sponsored two volunteer workdays to begin to eradicate the invasive knotweed at Wadleigh Falls in Lee. The Recreation Committee made great progress on a recreation tour of the river. A guidebook will take people along the river to learn its history, hike the trails, and launch a boat.



2007 Accomplishments

Management Plan Update- The Lamprey River Advisory Committee produced an updated Management Plan for the river, incorporating comments from various Town boards. See www.lampreyriver.com.

Recreation- We have met with groups in the 4 towns to discuss working with them on the Lamprey Tour. There was agreement in all the towns to go forward. We are nearing completion of the tour guide and from there will start working to help the towns upgrade the sites on the guide with kiosks, trail maps, historic information, etc. This is an exciting project and we hope to help balance management and use issues while highlighting the assets of the Lamprey. The LRAC has a purchase agreement for a small strip of land along the river along RTE 152 in Lee. This land will be turned over to the town and allow permanent access to the river just upstream of Wadleigh Falls.

Water Quality Monitoring – LRAC agreed to contribute \$5,000 to the Lamprey River Watershed Association (LRWA) to continue their water quality testing program in the Lamprey watershed. This work is key in keeping track of changes that could occur over time and allow steps to be taken to improve the quality of the water in the river if needed.

Land Conservation – With the help of two land protection specialists, we made significant additions to the protection of riverfront land. We purchased a conservation easement on 28 acres of the Burrows property in Durham near the Wiswall Dam. The easement is held by the Southeast Land Trust of New Hampshire. This land has 1,200 feet of riverfront and is great for wildlife with its small trees and shrubs and many coves on the river. There is also a small pond. An agreement has also been made with the Dow family in west Epping to add 70 acres and 3,355 feet of riverfront to the Lamprey River Forest. The Society for the Protection of NH Forests will hold ownership of the land and manage with good forestry practices that help preserve the Lamprey water quality and enhance the wildlife in the area. With almost 200 houses being built near there, this is an important purchase. The Town of Epping contributed \$50,000. In Lee the Wellington family land is also under agreement as we have partnered with the Wetlands Reserve Program to see this project through. This is a significant amount of riverfront land bordering other conserved property. The Clark family in Epping added to a previous easement by donating an additional conservation easement on 62 floodplain acres along the river.

Water Use As the towns grow so does the need to use the Lamprey for drinking water. We have continued to be involved with the town of Durham to help work out its water needs. The LRAC has offered to help initiate a water conservation program and LRAC helped the Town send out leak detection kits for toilets in all Durham water bills. The Town of Newmarket is also looking to use water from the Lamprey to augment its wells. These water needs should be balanced with the needs of homeowners, farmers and wildlife along the river to ensure that there is enough water for all in the future.

Instream Flow Study - The LRAC is contributing its research and knowledge of the river to the development of this state study. The goal of the study is to determine how to protect the river's flow levels while accommodating public and private water needs. LRAC members serve on the Technical Review Committee and the Watershed Management Planning Advisory Committee.

Turtle Research – The LRAC hired David Carroll to walk the river to observe turtle habitat and activity, comparing it to previous surveys. This information will be added to a GIS wildlife map and database that we are creating with the help of New Hampshire Audubon.

Invasive Species – The Lamprey River Watershed Association and LRAC have begun to tackle eradication of Japanese knotweed at Wadleigh Falls. The Watershed Association will be conducting a river survey next summer, providing information for a more comprehensive invasives eradication program.

Epping Town Center The Town is going green with innovative improvements to the Town Hall to cut down on energy use. The LRAC has met with officials in town to look at the riverfront in the area and offer help in making improvements with drainage and invasive plants on the embankment there. The recent flooding has scoured out a new channel in the river and exposed an historic wood dam base in the old channel.

Outreach – As always, Committee members greeted visitors at various fairs and gatherings with displays of information about the Lamprey River. We have hired a website consultant and are working to upgrade our site to be more active and informative.

Goals for 2008

- Finish the Lamprey River Tour Brochures and have them available in the 4 towns.
- Help the towns complete some of the kiosks and help improve some of the properties on the tour route.
- Set up a program to help the towns control invasive species such as Japanese knotweed and purple loostrife at problem sites.
- Finish work to consolidate all of our wildlife studies and related material into an easily accessible format.
- Work to help improve drainage and control erosion where needed.

Place conservation easements on more undeveloped land in the Lamprey River corridor.

Members:

Durham

Dick Lord

Richard Kelly

Jim Hewitt

Cynthia Belowski

Bill Hall

Lee

Kitty Miller

Sharon Meeker

Epping

Kevin Martin Chair

Newmarket

Sarah Callaghan

At Large

Brian Giles

Lamprey River Advisory Committee
Overseeing the Lamprey Wild and Scenic River
2008 Report

In 2008, the Lamprey River Advisory Committee (LRAC) continued to be the eyes, ears and voice for the Lamprey River. LRAC conserved seven river corridor parcels and embarked on a project to eradicate Japanese knotweed, while participating in a variety of other river activities. Kevin Martin (Epping) stepped down as Chair of the Committee, after three years of outstanding leadership. Sharon Meeker (Lee), a longtime member of LRAC, took Kevin's place as Chair.

The Lamprey River Advisory Committee accomplishments in 2008 include:

Land Conservation

2008 was a banner year for land conservation for the Lamprey River Advisory Committee. Working with landowners to conserve their land is often a long term process. This was true for the seven projects which came to fruition in 2008. A total of 462 acres with almost a mile of river frontage plus a mile of tributary frontage was placed under conservation easement in 2008. In recognition of this tremendous success and in appreciation of all of the landowners who have placed their Lamprey River land in conservation over the past eleven years, LRAC and our partners hosted a festive and well attended landowner appreciation event at the Lee Grange Hall. Since LRAC began in 1997, 1,927 acres and 12 miles of river frontage had been conserved by the end of 2008, with every \$1 of LRAC funds being matched by \$3

Recreation

A beautiful new recreation tour map and brochure was created, printed, and distributed. A copy was sent to each riverfront landowner in the four Wild and Scenic towns (Epping, Lee, Durham and Newmarket). The tour features twelve stops and nine points of interest (see brochure at www.lampreyriver.org).

The Recreation Subcommittee is currently working to create an information kiosk at one of the recreation tour stops – Mary Blair Park. Similar kiosks will be installed, in cooperation with each town, at many of the other recreation tour stops.

The Recreation Subcommittee has also begun the process for building a hand-carry boat launch on the former Thibeault property, which is just above Wadleigh Falls in Lee.

Invasive Species Eradication

LRAC, in partnership with the Lamprey River Watershed Association (LRWA), organized an ongoing effort to eradicate Japanese knotweed from the river. This invasive plant has been appearing in more and larger stands along the river, taking over significant areas of native habitat. In 2008 LRAC and LRWA researched knotweed, made connections with others in the region who are working on this problem, and hired a coordinator. Two areas were

identified for pilot projects: Wadleigh Falls and the Epping Town Hall to the Route 125 Bridge. After obtaining landowner permission, volunteers cut and hauled knotweed at both sites. A permit was received from the Division of Pesticide Control to spray appropriate herbicide at both sites. The LRAC gratefully acknowledges the support given the project by the Lee and Epping Conservation Commissions and volunteers from Lee, Durham, Epping, Kingston, and Barrington. Two grants were secured from the Department of Agriculture's Integrated Pest Management program: \$4,500 for phase I in 2008 and \$12,500 for phase II in 2009. Currently, we are working on a strategic plan for the entire watershed, based on the Streamwalk inventory that was conducted in 2008 by LRWA volunteers.

Wiswall

LRAC has followed and participated in the design process for the Wiswall Bridge replacement. LRAC has spoken up for the bridge aesthetics, historical integrity, recreation access, and impact to the river. Through this process, the Wiswall mills area has been declared an historic district by the state. LRAC will continue to participate in this process, with a focus on creating an informational/historical kiosk in Wiswall Park. LRAC also continues to participate in committees responsible for creating fish passage at Wiswall Dam.

Wildlife

A turtle survey was conducted by David Carroll, comparing data and observations collected over the past fifteen years. Unfortunately, turtle populations appear to be in decline. This is inevitably the result of increased development of the land near the river. LRAC would like to conduct more investigations of turtles and other wildlife, to help guide land conservation priorities and land management recommendations.

Water

Water quantity as well as water quality is an important focus for the LRAC. Funds were voted to help support Professor William McDowell's Lamprey River Observatory which specializes in nutrient analysis of the river. In addition, two members from the LRAC participate in the state's Instream Flow Study which is working to determine how best to protect flow levels to accommodate public and private water needs. Work continues to assist towns in developing a reasonable water conservation plan and to have it in place before additional water is taken from the Lamprey River.

During National River Cleanup week, LRAC sponsored a public cleanup of the Lamprey River at Wadleigh Falls.

The Lamprey River Advisory Committee has a long range management plan for the 23 miles of the Lamprey River from West Epping to the Piscassic River in Newmarket. This part of the river is under the protection of the National Park's Wild and Scenic Rivers program. In addition, the river in Durham and Lee is designated for protection under the New Hampshire Rivers Management and Protection program. The LRAC meets at 7 p.m. on the second Tuesday of each month. All meetings are open to the public. For information, see www.lampreyriver.org, or call Chair, Sharon Meeker, (603) 659-5441.

Lamprey River Advisory Committee:

Lee: Sharon Meeker (Chair), Kitty Miller, Joachim Barth

Epping: Kevin Martin

Newmarket: Sara Callaghan

Durham: Richard Kelley, Cynthia Belowski, Jim Hewitt, Richard Lord, Bill Hall

At Large: Brian Giles

www.lampreyriver.org

2007 Annual Report Lower Merrimack River Local Advisory Committee (LMRLAC)

(LMRLAC) met in 2007 on the fourth Thursday of each month with a combined meeting for November and December. Offices are:

Chair Bob Robbins

Vice Chair Kath Nelson

Secretary Karen Archambault

Treasurer Glenn McKibben

The first meeting of the year held in January was an introduction of the new Nashua Regional Planning Commission's (NRPC) Planner Minda Shaheen. Steve Couture, DES Rivers Coordinator attended this meeting.

Corridor Plan

The primary focus of LMRLAC in 2007 was on collaborating with NRPC to finalize the Corridor Plan. Discussions were held at all of the meetings to provide comments, input and feedback to NRPC. Comments on organization and style were also provided.

River Place- Hudson

The large proposed project referred to as River Place in Hudson along the riverfront at the former golf course was discussed extensively. The NHDES Dredge and Fill application package was reviewed in detail. The lack of any low impact best management practices was noted as a concern and that storm water would impact the river significantly. Tracking the project at the local level including the Conservation Commission was discussed as a high priority. Among the comments discussed were to propose a no disturb area within 50 feet of the river, limited disturbance (walkways/bike path permitted, but no buildings or parking lots) in the next 100 feet. Restricted pesticide use and slow release fertilizer within 150feet of the river. Another priority was to promote low impact development methods, including permeable parking lots. Members discussed the letter of 3-31-06 from NH Fish and Game regarding eagles and leaving a buffer on the river undisturbed. Three points from that letter were emphasized:

- Request that the current wooded buffer along the river be retained
 - Point out that the current wooded buffer falls mostly in the existing jurisdictional area under the Shoreland Protection Act
 - Recommend the wooded buffer be placed in a conservation easement if possible
- Members concluded that off-site wetland mitigation did not make sense and that mitigation should be aimed at the riverfront.

LMRLAC submitted a 17-point recommendation letter to NHDES.

Nashua Landing project – E. Spit Brook Road, Nashua

A NHDES wetland permit was reviewed for minor impacts to Spit Brook for redevelopment of the former Hampshire Chemical site. LMRLAC recommended day lighting Spit Brook road as well as including the recommendation in the Corridor Plan to daylight all piped brook segments that flow into the Merrimack when opportunities arise.

Communication with NHDES

Bob met with DES Commissioner Burack to discuss several areas of concern.

- Feedback to the LMRLAC on communications/recommendations that the LAC submits to

NHDES. The LMRLAC would like feedback on what recommendations are and are not accepted and why.

- Better coordination between agencies

LMRLAC Newsletter

George put together a newsletter with information on flooding, comments on River Place and Nashua Landing (Dow Chemical redevelopment site in South Nashua), and asking for new members.

Communication with Hudson Conservation Commission

Bob attended a ConCom meeting and described what LMRLAC is and what it does. He mentioned that point source pollution is well covered in the corridor but that nonpoint source pollution is not.

Support of revised Comprehensive Shoreland Protection Act (CSPA)

LMRLAC sent a follow up letter supporting the Shoreland Protection Act changes to the committee chair, Martha Fuller Clark,

Nashua – Macy’s redevelopment at the Pheasant Lane Mall

A letter was sent to NHDES and the Nashua Planning Board to recommend the following:

- Enhance the landscaping
- Use LID for some portion of the project. One example given was to use a pervious surface for the walkway with an educational sign

Boat Ramp- Greeley Park

Nick Caggiano of Nashua Park and Recreation indicated that the Legal Department was researching the issue of whether the railroad crossing was public or private. The railroad crossing had to be resolved before NH Fish and Game would pursue leasing the boat ramp.

Litchfield Dock Permit

LMRLAC recommended that all the new provisions of CSPA be followed to minimize tree clearing along the bank.

Protected River Signs

George filled out an application and worked with DOT to get permission to put the signs up with assistance from each town’s highway departments to install the signs.

River Clean Up

A river trail cleanup day near the Sagamore Bridge in Nashua was held on November 18.

Lower Merrimack River Local Advisory Committee 2008 Annual Report

The Lower Merrimack River Local Advisory Committee (LMRLAC) is comprised of representatives from the business, recreation, and conservation community as well as local government. The committee serves as stewards and watchdogs over any activities in the Lower Merrimack River corridor. LMRLAC activities vary from reviewing and commenting on DES environmental permits and local site plans for development, to assisting with trail projects and commenting on conservation activities within the corridor. Communities in the Lower Merrimack River corridor include Nashua, Hudson, Litchfield and Merrimack.

This year LMRLAC, along with other NH Local Advisory Committees, was honored with the President's Volunteer Award in April, and the Spirit of NH Volunteer Service Award in the State and Local Government category in November for our efforts to advise the NH Department of Environmental Services and our communities on actions and issues to protect and manage the Lower Merrimack River.

In 2008 we performed site visits and submitted comments on 11 projects occurring in Hudson, Nashua and Merrimack. Presentations were provided to LMRLAC on the status of the Nashua combined sewer overflow (CSO) sewer project and residential development on the river in Hudson that included trail easements. Letters of support were submitted for a city of Nashua landscaping project at Rotary Commons Park adjacent to Salmon Brook and for a Nashua Regional Planning Commission (NRPC) proposal to develop a low-impact design guidebook. LMRLAC submitted comments to Boot Hydro, operator of the dam in Lowell regarding scheduled drawdowns and the impact to boaters.

LMRLAC was especially enthused about the completion of the Lower Merrimack River Corridor Management Plan. LMRLAC gave slideshow presentations on the Corridor Plan to the planning boards and conservation commissions in Hudson, Nashua, Litchfield and Merrimack. Copies of the plan were provided to each of these groups and feedback was requested. The plan is available on the LMRLAC web page hosted by NRPC.

LMRLAC members attended the DES Watershed Conference in November; a presentation held at NRPC on updates to the Comprehensive Shoreland Protection Act and a presentation by Aries Engineering on a hydrologic study proposed for Thorough's Landing in Nashua. LMRLAC was updated on the status of the river clean up at the Beazer site in Nashua and requested DES to keep us informed of all future actions.

LMRLAC invites interested parties to join us at our monthly meetings held in Nashua on the fourth Thursday of the month.

Respectfully submitted,
Kathryn Nelson, Vice Chair

2008 Membership:
Bob Robbins (Chair) – Hudson
Kathryn Nelson (Vice Chair) – Nashua
Karen Archambault (Secretary) – Nashua
Jim Barnes (Treasurer) – Hudson
Glenn McKibben – Litchfield
George May – Merrimack
Associate Members:
Millie Mugica – Nashua
Paul Wiggins- Hudson

2008 REPORT
PEMIGEWASSET RIVER LOCAL ADVISORY COMMITTEE (PRLAC)

PRLAC is one of 15 Local Advisory Committees working on designated rivers around the state. Our focus continues to be water quality in the Pemigewasset River. Bi-weekly monitoring from April to mid-September continues to provide a strong (now six years) base of water quality data. This data is used to satisfy the state's reporting requirements to the US Environmental Protection Agency under the Clean Water Act. Although currently limited to eight sites – Thornton through Bristol – our data should provide a signal for early signs of potential impairment. Spikes of *E. coli* runoff pollution have been noted after significant rain events. A critical step in mitigating this runoff problem is the revised Comprehensive Shoreland Protection Act (CSPA) (RSA 483-B), which protects the Pemigewasset as of July 1, 2008. CSPA includes improved buffer management and more attention to the potential impact of impervious surfaces resulting from development in the 250 foot protected shoreland area. PRLAC is now asked to review and comment on all such development applications.

For the first time in our history, PRLAC has asked Pemigewasset corridor towns for financial assistance in keeping our basic monitoring activity up and running. Historically, we have been funded by Section 604(b) of the Clean Water Act through the Department of Environmental Services and distributed by the Lakes Region Planning Commission (LRPC). These funds are no longer automatically given to each LAC for program administration, but are for competitive water quality planning projects, so we are asking each Pemigewasset town to commit \$200 annually to our program.

Emphasis in 2009 will be on a) expanding water quality monitoring (*E. coli*) if lab test costs can be funded; b) milfoil control; c) review of shoreland development permit applications and certain other applications with water quality implications (eight projects reviewed in 2008); and d) following up on LRPC's Co-Occurrence Mapping and Analysis project, identifying aquatic resource conservation opportunities that might attract state funds accumulating under the state's Aquatic Resource Mitigation Fund (currently \$80,000 available for the Pemigewasset watershed).

We have representatives from all towns from Thornton through Bristol except for Ashland and Bridgewater. In October, the efforts of PRLAC and other Local Advisory Committees were recognized with the Volunteer NH! Champions Award. We meet the last Tuesday of most months on the campus of Plymouth State University. Call Max Stamp at 744-8223 for details if you are interested in attending.

Max Stamp, PRLAC Chair
12/6/08

Piscataquog River Local Advisory Committee 2008 Annual Report

The Piscataquog River Local Advisory Committee (PRLAC) reviewed and submitted comments on approximately fifteen applications submitted to DES.

The PRLAC continues to support the efforts of the Friends of the Greenway, who are working on the Goffstown Greenway, a rail-trail conversion effort. This is an important recreational project near the river that has the potential to (and already does) bring many residents closer to the river, and appreciate it even more.

Designated River signs have been placed at two locations and will be put up at two other locations in 2009. Thanks to DOT, DES and the Road Agents for helping with this!

We were made aware of significant impacts to streams and wetlands made by contractors working on upgrading electrical power lines in Weare and Deering. Although the impacts were later ameliorated to some degree (through DES enforcement action), the Class VI road remains open to travel by vehicles, and the impacts continue to occur. The PRLAC will continue to work with the Towns to preclude these illegal wetlands impacts.

Variable milfoil has established itself in the Designated Sections of the Piscataquog River, and PRLAC is very interested in learning what can be done. To date, Scobie Pond, at the upstream end of a Natural Section has been treated with herbicides to reduce the growth of the variable milfoil, and plans were made to do the same for the newly named Namaske Lake in Goffstown and Manchester, but Namaske Lake was not treated in 2008. The PRLAC eagerly awaits DES' variable milfoil management plan for the Watershed, and would like to provide help on this effort.

River Corridor Management Plan and Watershed Conservation Plan: Southern New Hampshire Planning Commission (SNHPC) received 604(b) funds from DES to update the Piscataquog River Corridor Plan. The PRLAC is very excited about working with SNHPC on this, and PRLAC will coordinate the effort with the Towns in the Watershed. We are looking forward to updating the Plan as many things have changed since the first one was finalized in 1999.

PRLAC meets on the third Monday of each month at 6:30pm in the Weare Library.
Sincerely,

Dick Ludders, Clerk (Weare)
Bev Yeaple (Deering)
John Turcotte (Goffstown)
Jane Beaulieu (Manchester)
Andrew Cadorette (Goffstown)
Janet White (New Boston)
Linda Kunhardt (Francestown)
John Magee (at large)

2007 Annual Report
Swift River Local Advisory Committee

The SRLAC continued to make progress with its #1 project: The Conway Scenic Railroad Bridge. The Swift River has changed course over the years causing erosion and damage to the bridge supports. The goal is to realign the river with the bridge opening and provide proper flow during spring and flood runoffs. Our Chairman, Bob Parrish, set up interview meetings with prospective engineering companies and we as a group were able to hear their proposals and ask questions. We also took a couple of field trips to the bridge to survey what needs to be done. The SRLAC chose Headwaters Hydrology to handle the project. Thus far Sean Sweeney P.E. principal of Headwaters has done core drilling, geotechnical testing and analysis of the site

SRLAC Vice Chairman Terry Miller, USDA, National Forest Service, has kept us informed of all DOT and NFS projects along the Kanc and Swift. Each year they earmark a new area to make road improvements including repaving and guardrails.

The SRLAC along with the National Forest Service has teamed up with The Nature Conservancy, The Saco River Council, The Saco River Commission and canoe companies to do a combined rivers cleanup. SRLAC member Kathy Carrier took on the task and has done a great job coordinating the cleanup. Kathy with the help of Michelle Broyer from The Saco River Council set up several meetings to iron out the logistics of such an undertaking. They also pooled sponsors from the Swift's past cleanups with sponsors from the Saco. The weekend after Labor Day was chosen with the Saco cleanup on Saturday and Sunday in canoes. The cleanup on the Swift was on Sunday. The weather cooperated Saturday but steady rains came in Sunday. Regardless there was an excellent turn out and we are committed to keep this an annual event. Many thanks go to longtime SRLAC member Frank Wolfe. Frank handled all arrangements with the NHDOT. They provided us with signs, safety vests and adopt a highway bags. Frank also shuttled volunteers to predetermined cleanup areas.

Chip Boisvert attended the Watershed Conference in November. He took classes on compliance, volunteer programs and invasive plant identification. Chip also set up the Swift River Local Advisory Committee display board at the conference.

Report submitted by Chip Boisvert, SRLAC Secretary.

2008 Swift River Local Advisory Committee Annual Report

The Swift River Project continues to be our main focus.

The goal is to realign the Swift River as it approaches the Conway Scenic Railroad Bridge. There have been erosion issues there for years and with the help of DES the Swift River Local Advisory Committee (SRLAC) is getting closer to accomplishing our goal.

The SRLAC as part of the NH Rivers and Management Program was proud to be recognized, along with our fellow Local Advisory Committees (LAC), for volunteerism at the U.S. Environmental Protection Agency's Earth Day Awards in Boston in April. At this ceremony we received The President's Award. In November we were also recognized, along with fellow LAC members, by Governor John Lynch for our work in river protection and volunteerism.

The SRLAC, with the support of and with much assistance from the National Forest Service, had our annual Swift River Cleanup. This was our 11th year and it was a huge success! The weather was great and many volunteers turned out. We ended the day with a cookout at Lower Falls on the Kanc.

The SRLAC also put a lot of effort into creating a logo and letterhead.

The SRLAC meets the first Monday of every month at 5:00 pm at the White Mountain National Forest Saco Ranger Station in Conway, NH. For more information, please contact Bob Parrish, SRLAC Chair at 447-2655 or rlparrish@roadrunner.com.

The Swift River Local Advisory members are Bob Parrish, Terry Miller, Frank Wolfe, Kathy Carrier and Chip Boisvert.

UPPER MERRIMACK RIVER LOCAL ADVISORY COMMITTEE
Annual Report • 2007

With assistance from Bill Arcieri, VHB, Inc. through a contract with the Central NH Regional Planning Commission and a grant from the NH Department of Environmental Services, the Upper Merrimack River Local Advisory Committee (UMRLAC) conducted an intensive process to re-write the *Upper Merrimack Management and Implementation Plan*. The new *Plan* addresses emerging issues in the upper Merrimack and provides vision, guidance, and watershed management recommendations for state agencies and municipalities. It includes logic model measurable outcome sections on water quality, water quantity, agriculture, recreation, wildlife, historical and archeological, geologic and natural features, fish and aquatic, vegetation, buffers and setbacks, and land and open space. The *Plan* can be downloaded and printed from MerrimackRiver.org as a PDF or you can use the interactive web-enabled version. A tremendous thank you to Bill for guiding UMRLAC through the planning process and producing a first-rate document.

The UMRLAC worked with Yellahoose to re-design its website. The new website features not only an interactive way to view the new *Plan*, but also downloads of documents, water quality data, and other resources. Thank you to Jim Cradock, Yellahoose, for his great work on the new and exciting MerrimackRiver.org. Please visit MerrimackRiver.org to learn more about the Merrimack River, UMRLAC, and its work.

In June, the UMRLAC hosted the state Rivers Management Advisory Committee's meeting along with a lunch and canoe trip from Franklin to Boscawen. RMAC members were treated to a beautiful and windy trip down the river and were provided with local information on habitat, history, and watershed conditions.

The UMRLAC hosted a legislative training session conducted by Derek Durbin, New Hampshire Lakes Association, and Carl Paulsen, New Hampshire Rivers Council. Several UMRLACers participated in the November state Watershed Conference in Concord. Thank you to Steve Landry for representing not only UMRLAC but several other Local River Management Advisory Committees in the Community Technical Assistance Program (I-93 expansion) process.

UMRLAC begins its twelfth year of the Upper Merrimack Monitoring Program (UMMP). The UMMP owes much of its success to strong municipal support and that from its Adopt-a-River Site Sponsors. The Program's Adopt-a-River Site Sponsors include Aquarian Analytical Laboratories, Inc.; Aries Engineering, Inc.; Checkmate Expert Payroll Services; Elektrisola; Franklin Savings Bank; Franklin Wastewater Treatment Facility; Public Service Company of NH Corporate Offices and Merrimack Station; and Watts Regulator/Webster Valve. Many thanks to the Conservation Commissions and Towns and Cities of Boscawen, Bow, Canterbury, Concord, Franklin, and Northfield for their ongoing support and for graciously hosting Upper Merrimack River Local Advisory Committee meetings. The Concord Community Cooperative chose UMRLAC as one of its twelve nonprofits to receive a percentage of their revenues in 2007.

The October meeting was hosted by the Franklin Waste Water Treatment Plant (FWWTP). Staff provided a tour of this fascinating facility for the UMRLACers. Since 1995, the FWWTTP provided *E. coli* sample processing for the UMMP with the assistance of over a dozen collection volunteers. The data are the first volunteer monitoring program's to be entered into the state Environmental Monitoring Database. These data are provided to the NH Department of Environmental Services and posted at MerrimackRiver.org for us by health officers, resource managers and planners, and visitors to the area.

Graciously hosted by St. Paul's School, Bug Nights continues its popularity in the region, entering its twelfth year in 2008 with dozens of individuals volunteering their collection and identification services. The UMRLAC has contracted with a consulting firm for a data analysis and recommendations report. This analysis will guide planning efforts for the next decade.

The UMLAC continued to review and provide comment on project plans and proposals including the relicensing application for several hydroelectric facilities on the Merrimack River, and site specific and wetlands applications, and the existing and proposed landfills (Franklin and Canterbury, respectively).

Officers were elected in November: Michele Tremblay, Chair; Steve Landry, Vice-Chair, Krista Crowell, Treasurer; and Gary Lynn, Secretary. The UMLAC is pleased to welcome Harry Anderson and Bill Dawson, both of Northfield, as the newest "UMLACers." A very warm welcome back to Robert Wyatt, Concord, formerly an UMLACer representing the Town of Bow.

Please visit UMLAC's brand new website at www.merrimackriver.org for further information on the river, committee membership, activities, maps, water quality data, and photographs of brave and selfless volunteers in action. The UMLAC meetings are held on a rotating basis in its six represented communities on the second Monday of each month at 7:00 PM. An informational "Around the Watershed" session is conducted at each meeting. All are welcome to attend. For meeting schedules, locations, and other information contact Michele Tremblay at 603.796.2615, MerrimackRiver.org, or your municipal representatives listed below.

Boscawen

Stephen C. Landry
Michele L. Tremblay

Bow

Krista Crowell
Gary Lynn

Canterbury

Anne Emerson
Nancy Roy

Concord

Alan Bartlett
Rick Chormann
Robert Wyatt

Franklin

Tucker Noack

Northfield

Harry Anderson
William Dawson
Mary Lee

UPPER MERRIMACK RIVER LOCAL ADVISORY COMMITTEE

Annual Report • 2008

The Upper Merrimack River Local Advisory Committee (UMRLAC) and other Local River Management Advisory Committees (LRMAC) were recognized this year with two awards. The first was the President's Volunteer Service Award gold level for organizations that have donated in excess of 1,000 hours. Each UMRLAC representative received a lapel pin. The UMRLAC received a certificate at the U.S. Environmental Protection Agency's awards ceremony in April. The UMRLAC and the other LRMAC were recognized with a "Volunteer NH! Service" awards at a November ceremony in Concord. The awards were presented by Senator-elect and former New Hampshire Governor, Jeanne Shaheen. The UMRLAC thanks Steve Couture of the NH Department of Environmental Services Rivers Management and Protection Program for nominating the LMRACs for these two awards.

The Rivers Management and Protection Program celebrated its twentieth anniversary with a commemorative poster. The poster features the upper Merrimack from the Route 4 Bridge at the Boscawen/Canterbury/Concord line with a photograph taken by Steve Landry, Boscawen UMRLAC representative.

The UMRLAC began implementing the *Upper Merrimack Management and Implementation Plan* with assistance from the Central New Hampshire Regional Planning Commission. The commission worked with the UMRLAC to write a successful funding proposal to implement the buffers objective. The plan can be downloaded and printed in a PDF format or viewed online as an interactive web-enabled version from the redesigned UMRLAC web site at www.merrimackriver.org.

This year the UMRLAC begins its thirteenth year of the Upper Merrimack Monitoring Program (UMMP). The UMMP owes much of its success to strong municipal support and that from its Adopt-a-River Site Sponsors. The program's Adopt-a-River Site sponsors include Aquarian Analytical Laboratories Inc.; Aries Engineering Inc.; Checkmate Expert Payroll Services; Elektrisola; Franklin Savings Bank; Franklin Wastewater Treatment Facility; Public Service of NH (both Corporate and Merrimack Station); and Watts Regulator/Webster Valve. The UMRLAC also thanks the Conservation Commissions and towns and cities of Boscawen, Bow, Canterbury, Concord, Franklin and Northfield for their ongoing support. The support of these towns, cities, and Adopt-a-River Site sponsors made possible equipment and supply purchases as well as maintenance to protect existing investments such as the UMMP's stereoscopes. Special thanks go to St. Paul's School for graciously hosting UMRLAC's "Bug Nights" educational and research program, which continues its popularity in the region with dozens of individuals volunteering their collection and identification services.

The UMRLAC contracted with EcoAnalysts Inc. to provide a data analysis and recommendations report related to the data collected in the Bug Nights program. This analysis will help guide the UMRLAC in its planning efforts for the next decade. The UMRLAC continued to review and provide comment on project plans and proposals including the FERC relicensing for hydroelectric facilities on the Merrimack River, site specific and wetlands applications in the upper Merrimack six municipalities, state surplus land disposal, and a proposed landfill expansion. The UMRLAC also provided comments on several NH Department of Transportation proposals and its pre-application process.

The UMRLAC elected the following slate of officers in November: Michele Tremblay, Chair; Steve Landry, Vice-Chair, Krista Crowell, Treasurer; and Gary Lynn, Secretary. The UMRLAC is pleased to welcome Brian Sullivan of Franklin as the newest "UMRLACer."

The UMRLAC hosted several informational and educational presentations from experts on issues including legislation, invasive species, climate change adaptation, and the NH Natural Heritage Bureau. During the summer, the UMRLAC hosted a public workshop in Canterbury on the revised Comprehensive Shoreland Protect Act. Several UMRLAC representatives participated in the annual Watershed Conference in November. Michele Tremblay presented a social marketing workshop.

Established in 1990, the Upper Merrimack River Local Advisory Committee has represented its six communities of Boscawen, Bow, Canterbury, Concord, Franklin, and Northfield in a variety of studies and planning activities related to the upper Merrimack River and its watershed. It serves as the area's advisory board on its designation in the NH Rivers Management and Protection program.

It's been nearly two decades since the UMLAC met for the first time. Representatives have begun planning for a twentieth anniversary celebration during 2010. To learn more or to be part of the fun, please contact the UMLAC or watch for updates on the UMLAC web site at www.merrimackriver.org.

Please visit UMLAC's redesigned website for further information on the river, committee membership, activities, summaries from prior meetings, upcoming meeting agendas, maps, water quality data, and photographs of brave and selfless volunteers in action. The UMLAC meets on a rotating basis in its six represented communities on the second Monday of each month at 7:00 PM. Many thanks to the towns and cities of Boscawen, Bow, Canterbury, Concord, Franklin and Northfield for graciously hosting Upper Merrimack River Local Advisory Committee meetings. An informational "Around the Watershed" session is conducted at each meeting. All are welcome to attend. For additional information, please contact Michele Tremblay at 603.796.2615, www.merrimackriver.org, or any of your municipal representatives listed below.

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