



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Thomas S. Burack, Commissioner**

October 31, 2008

Joyce Lacerda, Cooperative Programs Specialist  
National Marine Fisheries  
National Oceanic & Atmospheric Administration  
One Blackburn Drive  
Gloucester, MA 01930

Dear Ms. Lacerda:

Enclosed please find the seventh semi-annual status report for the NH Instream Flow Pilot Program for the Lamprey and Souhegan Rivers, Assistance Agreement No. NA04NMF4540382 for the project period 04/01/08 through 09/30/08. In accordance with NOAA Administrative Standard Award Conditions Attachment B, Section B, as a condition of the acceptance of Department of Commerce funds, Performance/ Progress Reports are to be submitted.

Sincerely,

C. Wayne Ives, P.G., Hydrogeologist  
Watershed Management Bureau

Attachment

## **SEMIANNUAL PROGRESS REPORT 04/01/08 through 09/30/08**

- A. Grant Number:** NA04NMF4540382  
**B. Amount of Grant:** Federal - \$545,000; Match - \$0; Total - \$545,000  
**C. Project Title:** New Hampshire Instream Flow Pilot Program for the Lamprey and Souhegan Rivers  
**D. Grantee:** New Hampshire Department of Environmental Services  
29 Hazen Drive, PO Box 95  
Concord, NH 03302-0095  
FEIN – 02-6000-618W  
**E. Award Period:** From 10/1/2004 to 9/30/2008

### **F. Summary of Progress and Expenditures to Date**

#### **1. Work Accomplishments**

The work tasks were defined in DES's grant application dated June 8, 2004. The grant application defined the schedule for conducting the work elements as being carried out roughly over the period September 1, 2004 through December 1, 2008. The schedule identified some tasks out 48 months from the beginning of the work effort. During the last reporting period, DES was granted an extension of the grant period to September 30, 2008. DES's deadline for the Lamprey and Souhegan Pilot programs is written in statute. Legislation was passed in the state legislature spring 2008 extending this date to October 1, 2009.

The 2004 grant application summarized the work to be completed under the grant as follows: The primary goal is to complete the Instream Flow Pilot Program as described under the Instream Flow Rules (Env-Ws 1900) and the state statutes governing Instream Flow (RSA 483). The Instream Flow Pilot Program includes the Souhegan and Lamprey Designated Rivers. To complete this goal several work elements must be completed. DES has contracted out some of the required work elements described under the Instream Flow Rules and retains the remaining elements. Contractual Scope of Work tasks are being conducted on the Souhegan by the University of New Hampshire (UNH); and on the Lamprey, by Normandeau Associates, Inc. (NAI). The Pilot Program includes the following elements:

1. Convene and administer a Lamprey River Technical Review Committee
2. Convene and administer a Lamprey River Water Management Advisory Committee
3. Prepare a detailed work scope for a contractor to prepare a Protected Instream Flow Study and a Water Management Plan for the Lamprey River Designated Reach
4. Procure a contractor, administer the contract, and review technical work products
5. Conduct committee hearings for feedback on technical and stakeholder decisions
6. Conduct public hearings at project milestones and other stakeholder outreach
7. Adopt protected instream flows, incorporating public comment
8. Identify and include all affected water users and dam owners in the water management plan development
9. Adopt a Lamprey River Water Management Plan, incorporating public comment
10. Administer initial implementation of the Water Management Plan
11. Report annual water use versus stream flow for all Designated Rivers
12. Annual and periodic reports to the NH state legislature

## **Instream Flow activities during 04/01/08 through 09/30/08 Annual Water Use versus Stream Flow Report**

The Annual Water Use versus Stream Flow Report for 2005 required by the Instream Flow Rules (Env-Ws 1903.02) was worked on but not finished. Additional staff time is being assigned to these assessments. GIS staff is funded for a total of 125 hours to support the Instream Flow Program in these assessments. Also, a new staff person, Kathie Fife, Instream Flow Environmentalist, was hired using this grant funding and is tasked primarily with completing and publishing the 2006 and 2007 reports. She started May 12, 2008. She is conducting assessments and developing documentation of the work process. A new mechanism is under development by NH Geological Survey and expected to be available December 2008 that may change and simplify the process for these assessments.

### **NEPA review**

A grant requirement for NEPA review prior to the development of the Lamprey Water Management Plan was discussed with NOAA personnel. Grant application documents discuss implementation of the Water Management Plan, but implementation will not be funded using grant funds since funding for DES staff is expected to be expended before the implementation phase. Sarah M. Thompson, NEPA Policy Analyst, concluded on April 9, 2008 that there is no need for additional NEPA for the development of the plan.

### **Stream gage network development**

Improvement of the stream gage network is an important part of NH's instream flow program needs. Although current activities are not funded directly under this grant, earlier efforts funded by the grant culminated in these improvements to the stream gage network. Five stream gages were installed during this reporting period. The Stream Gage Task Force Report (September 2006), supported by this grant, identified priority locations for gage installations. Instream flow support was a major factor in determining gage location priorities. Eight gages will be installed next year.

### **DES staff**

Wayne Ives's funding source has been changed from this grant to a state funding source since July 1, 2007. On April 8, 2008 the Instream Flow Specialist position was moved to the River Management and Protection Program from the Water Quality Planning Section, both of which are in the Watershed Management Bureau at DES.

Funding under this grant will continue to support Steve Gaughan, GIS specialist. Steve Gaughan was budgeted for 125 hours for the remainder of the grant. He used 78.5 hours during this reporting period. Steve generates water use tables from linked water use database and the GIS coverages

The remaining personnel funding is reserved for Kathie Fife in a part-time, temporary position titled Instream Flow Environmentalist (TEMP\_23). Primary responsibility of this position is the completion of the annual water use versus stream flow assessments and reporting. The position is a temporary, part time (30 hours per week) position until May 2009 when the Personnel class funding will be expended. Additional work efforts during this reporting period include completing water use assessments and creating watershed maps for the Ammonoosuc and Cocheco Rivers. These rivers are being nominated as Designated Rivers and will have instream flow requirements if their nominations are approved. She is also conducting research into the ecological functions of headwater/intermittent streams towards developing a site investigation protocol for

developing protected flows in tiny watersheds. She developed a press release for the stream gages installed in part to support instream flow assessments released. She assessed flows below DES-operated dams during the spring fill period to see how well we are meeting our goal to meet at minimum subsistence flows. The report is near completion that will point out problem areas and identify data collection and recording improvements needing to be instituted by dam operators.

### **Third-party review of the PISF methods and results**

As part of the process for evaluating the final results of the Pilot Program, DES plans to conduct a third-party review of the Lamprey and Souhegan PISF methods and results. Funding from the NOAA grant of about \$29,000 from the contractual budget is proposed to support this activity. The review will be overseen by the Instream Flow Council (<http://www.instreamflowcouncil.org/>) an organization that “represents the interests of state and provincial fish and wildlife management agencies in the United States and Canada dedicated to improving the effectiveness of their instream flow programs.” The review process will involve preparation a formal report outline describing the required discussion topics (draft completed). The next step is selection of the three members of the review panel. DES’s contractors will make formal presentations of the theoretical and applied methodology with interactive review by the panel members supported by the contractors. The review panelists will submit individual evaluation reports that will be compiled and summarized for submittal as part of the DES report required by December 2010 to the Senate President, the Speaker of the House of Representatives, the Governor, and the state library.

### **Support for the Instream Flow Advisory Committees**

#### **Committee Reports**

Department personnel provided administrative support for the advisory committees overseeing the work conducted on each of the pilot rivers. The Technical Review Committee (TRC) and Water Management Planning Area Advisory Committee (WMPAAC) reports for each river, due annually by November 1, were completed and were incorporated into the 2008 report to the Senate Bill 330 committee describing the pilot program’s progress. SB 330 is the legislative oversight committee for the Instream Flow Program.

#### **Souhegan Committee meetings**

Individual reports are available for the activities of the Souhegan Technical Review Committee and the Souhegan Water Management Planning Area Committee. The Technical Review Committee has fulfilled its specific duty under Laws of 2002, Chapter 278, but will provide technical support when needed in developing the Water Management Plan. The WMPAAC supported the public hearing held on March 21, 2007 and met in October 2007 to begin the Water Management Plan. Meeting information for these Souhegan committees is available at <http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/souhegan/trc.htm> and <http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/souhegan/wmpa.htm>.

#### **Lamprey Committee meetings**

Individual reports are attached for the activities of the Lamprey Technical Review Committee and the Lamprey Water Management Planning Area Committee. The Lamprey Technical Review Committee has met June 9, 2008 to review the draft Proposed Protected Instream Flow report. Lamprey Water Management Planning Area Committee members were invited to those meetings. Committee meeting information is available at

<http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/lamprey/trc.htm> and <http://des.nh.gov/organization/divisions/water/wmb/rivers/instream/lamprey/wmpa.htm>.

### **Instream Flow Presentations**

DES staff gave presentation to various organizations to promote Instream Flow issues and the methods be used by DES to protect water quantity. These are the presentations that were given during this reporting period.

Wayne Ives gave a presentation at Plymouth State University November 27, 2007 to the Pemigewasset Local River Management Advisory Committee with members of the Baker Watershed Association in attendance. The Baker Association may wish to nominate that river for Designation. A story describing the establishment of the Souhegan protected flows was printed in the Spring 2008 issue of *Meanderings*, the NH River Management and Protection Program's newsletter. A presentation was given at the second annual New Hampshire Water Conference was held on April 16, 2008 in Concord, NH. The theme was Science, Policy, and Management of Water in New Hampshire. On May 14, 2008 the Wayne Ives and the Lamprey River project consultants gave a presentation to a group attending the River Management Society's conference in Portland, Maine. The group spent the day at UNH where the presentation was given followed by a tour of a portion of the Designated Segment of the Lamprey River. The SB330 Committee members were sent a copy of the Souhegan Protected Instream Flow Study on CD and a copy of *Meanderings* on June 19, 2008. Wayne Ives gave a presentation July 11, 2008 to the graduate-level Water Resources class at Antioch College in Keene, NH.

### **Instream Flow contract extensions and revisions**

On July 23, 2008 NOAA approved a one-year extension of the grant to September 30, 2009. The contract with Normandeau Associates, Inc. to conduct the Lamprey Instream Flow Pilot under this grant was extended to September 30, 2009 by approval of Governor and Council on September 3, 2008 (Item #53.)

### **Souhegan Pilot Program**

As last reported, the report and a Commissioner's Declaration establishing the protected flows were submitted to the Commissioner for approval March 31, 2008. The commissioner signed the Declaration April 1, 2008 making giving the protected flows for the Souhegan Designated River the status of water quality standards.

The Souhegan Water Management Plan continues to be developed. The DES Dam Bureau is developing legal and physical feasibility information for using DES-owned flood control dams as part of the Water Management Plan. Storage and release of water will have to meet flowage agreements with abutting land owners and physical operational and safety requirements. These dams seem to be the most suitable for providing relief flows to the river.

### **ESTIMATED TIMELINE**

#### **For Souhegan River Instream Flow Protection Pilot Project**

April 08 (done)	<b>DES establishes the Protected Instream Flow for the Souhegan</b>
November 08	Task 8 – Assessment of Water Use with the Established PISF
December 08	Task 9 – Development of WMP Sub-Plans
January 09	Task 10 – Proposed WMP
March 09	Task 11 – WMP Public Hearing (joint)

April 09	Task 12 – WMP Report for the Souhegan
	<b>DES adopts Water Management Plan for Souhegan</b>

### Lamprey Pilot Program

The Lamprey draft Proposed Protected Instream Flow Report was completed September 22, 2008. It is currently in review by the Technical Review Committee who met to get a preliminary view of the draft on June 9, 2008. The final version is expected to be put before a public hearing in January 2009. report is scheduled for completion by May 12, 2008 when it will be reviewed by the Lamprey Technical Review Committee prior to being presented at a public hearing sometime this summer.

Data collection for the Lamprey Water Management Plan has begun. Information related to water users and dam owners is being compiled to support water management plan development.

### ANTICIPATED TIMELINE

#### For Lamprey River Instream Flow Protection Pilot Project

November 08	Task 5 – PISF Assessments (completed) and Proposed PISF Report
January 09	Task 6 – PISF Public Hearing (jointly with legislature)
February 09	Task 7 – PISF Report for the Lamprey River
April 09	<b>DES establishes the Protected Instream Flow for the Lamprey</b>
April 09	Task 8 – Assessment of Water Use with the Established PISF
May 09	Task 9 – Development of WMP Sub-Plans
July 09	Task 10 – Proposed WMP
August 09	Task 11 – WMP Public Hearing (jointly with legislature)
September 09	Task 12 –WMP Report for the Lamprey
	<b>DES adopts Water Management Plan for Lamprey</b>

### 2. Expenditures

Expenditures under the grant are for two cost areas: 1) the Lamprey River Instream Flow consultant contract, and 2) for Department technical and administrative staff, overhead, equipment, travel, supplies, and direct or other costs to support the NH Instream Flow program. DES has encumbered \$287,000 in the Contractual Class for the Lamprey Program and plans to use the remaining unencumbered \$29,317 in this class for the third-party review described above. DES will continue to use the remaining \$227,783 for supporting staff for the Instream Flow Program.

Expenditures during this reporting period summed to \$18,755.89 representing Department staff time, benefits, direct and indirect costs, supplies, and overtime. Contractual costs are not scheduled—consultant fees are for completed Scope of Work tasks only and Department staff charges time and expenses for activities supporting the NH Instream Flow Program. Task 5C, conducting an additional low-flow survey and the related assessment, was completed and the bill for \$18,500 was paid July 30, 2008. The draft Lamprey Protected Instream Flow Report (Lamprey SOW Task 5) is a major effort and will be completed by review and approval by the Lamprey Technical Review Committee of a final version ready to go to the public hearing (Lamprey SOW Task 6.) The report is expected to be ready November 2008.

The Personnel and Benefits Classes’ existing and transferred funds will continue to support the GIS specialist position and the new, part-time, temporary position of Instream Flow

Environmentalist. Adding this position was discussed with NOAA personnel. Available funds will support this new position at \$19.97/hour at 30 hours per week for approximately one year.

Please contact me with any questions.



October 31, 2008

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**Signature**

**Date**

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