

2007 Watershed Assistance and Restoration Grants

Project Proposals are due by 4:00 p.m. on January 19, 2007.

Submit **one signed copy** (no binding please) of the 2007 Watershed Assistance or Restoration Grants Full Proposal Form (attached) and all attachments, via mail or hand delivery, and an electronic copy of the Full Proposal Form and all attachments (other than support letters) in Microsoft Word or PDF file formats to:

NH Department of Environmental Services
Attention: Jeff Marcoux
Watershed Assistance Section
PO Box 95
Concord, NH 03302-0095

For overnight shipping or hand deliveries, our address is 29 Hazen Drive, Concord NH 03301-6509.

E-mail electronic copies to: jmarcoux@des.state.nh.us
If you have difficulty e-mailing attachments, such as maps and photos, please contact Jeff Marcoux to make alternate arrangements.

Your Full Proposal package should include:

- The completed project proposal form
- A site map
- Optional:
 - o Letters of support
 - o Photos
 - o Water quality data

The DES Project Leader assigned to your project is:
Name: _____
Tel. #: _____
E-mail _____

DES has determined that your project will be considered as a Watershed _____ Grant proposal.

FULL PROPOSAL DEADLINE : 4:00PM JANUARY 19, 2007



1. Project Title

Newfound Lake Region - Watershed Master Plan Development and Implementation

2. Contact Information

Primary contact person:	Boyd Smith	
Organization:	Newfound Lake Region Association	
Street address:	800 Lake St.	
City, State, ZIP:	Bristol, NH 03222	
Day phone: (603)	Fax: ()	Email: info@newfoundlakeregionassociation.org

Signature of Applicant: _____

Date of signature: _____

3. Project Summary.

4. Total Project Cost

Note: Actual non-federal match exceeds minimum required (see Section 17)

Project Costs

Total project cost	100%	307,000
Grant funds requested	60%	184,000
Required non-federal match amount	40%	123,000

5. Project Management

Project manager name:	Boyd Smith	
Title:	Executive Director	
Affiliation:		
Street address:		
City, State, ZIP:		
Day phone: ()744-8689	Fax: ()	Email: info@newfoundlakeregionassociation.org

Project co-manager name:
Title:
Affiliation:

Street Address:

City, State, ZIP:

Day phone: () 744-8689

Fax: ()

Email:

info@newfoundlakeregionassociation.org

6. Project Location

A. Town(s):

Is project statewide? **Yes** **No**

Does project involve other states? **Yes** **No**

B. What type of water body does it affect? **River** **Stream** **Lake/Pond**
Estuary **Other**

Waterbody name:

12-digit hydrologic unit code (HUC) [interactive map online at
www.des.nh.gov/wmb/swqa/AU/select_basin.htm]

Newfound Lake is covered by three 12-digit HUCs (010700010601, 010700010602, and 010700010603).

C. Is this water resource listed as impaired or threatened by causes other than mercury on the 2004 305(b)/303(d) Surface Water Quality Assessment? (list available online at <http://www.des.state.nh.us/wmb/was/documents/2006-NP-Sources.pdf>)

Yes **No**

If yes, what is the cause(s) of impairment on which the listing is based?

D. *Area Affected. If applicable, list the size (in acres) of the project or area that would be included in the proposed treatment or management.*

E. Attach a project location map to your proposal (required). **Yes**

7. Problem/Need

8. Outcome Statement

Our vision of total success includes the following core elements: Newfound Lake and its tributaries maintain their DES-designated use status, and Newfound Lake remains oligotrophic; the final WMP is accepted by at least five (5) watershed towns for use in land use planning; there is a measurable and sustainable increase in conservation awareness and behavior; data collected during this project is made widely available through a public-access database.

9. Project Period

Total project duration is planned from June 2007 through December 2009. However, we have scheduled completion of the WMP by August 2009 to provide time for watershed towns to adopt all or parts of the WMP during the following town meeting cycle (March 2010).

10. Interagency Coordination, Roles, and Responsibilities

The following agencies and organizations are committed to and participating in the Newfound Lake Region Watershed Master Plan process (type of non-federal match in parentheses):

- Newfound Lake Region Association (NLRA). Program and grant management, communications coordination, local capacity building, (match: continued monitoring and educational programs).
- NH Department of Environmental Services (DES). Program Director (Watershed Assistance Section), invasive species (Limnology Section), lake levels (Water Division – Dam Bureau), shore land and wetlands protection (Wetlands Bureau), others as needed
- Jeffrey A. Taylor and Associates (JTA). Watershed Master Plan preparation, meeting presentations and facilitation.
- Plymouth State University (PSU). Behavioral surveys, public relations, GIS support (match: professional time, student support).
- University of New Hampshire (UNH). Prepare Project QAPP, perform focused water quality monitoring of near-shore “hot-spots” (match: ongoing lake and tributary monitoring with data analysis and reporting).
- Newfound Area School District (NASD). Develop and expand science curriculum, partner with PSU and UNH for field projects, increase opportunities for student involvement (match: provide staff to support participation).
- Town of Bristol. Assess water resource capacity for growth, direct sanitary survey initiatives, and identify potential threats to public water supply (match: information sharing).

Other watershed towns, environmental non-profit organizations (e.g. SPNHF, AMC, Lakes Region Planning Commission, NH Lakes Association, private camps), condominium associations, local businesses, NLRA members and watershed residents will be engaged as part of the process to develop long-term capacity for watershed protection.

11. Public Participation

A key goal for this program is to provide interactive public workshops about watershed management best practices that will attract, inform and motivate a large number of stakeholders. Target audiences include town governing boards (e.g. Select, Planning, Zoning and Conservation Commissions), local businesses and private landowners. The NLRA has already sponsored several such outreach events, including our “floating classroom” and public meetings around the WMP, and is planning on hosting meetings on high-value habitats, land conservation tax advantages, lake level management, municipal planning “tool kits” and BMPs for timbering operations between January and May 2007. We expect to continue this approach, using feedback from attendees and the results of the PSU survey (see below) to help select topics of interest.

The NASD and PSU have expressed strong interest in joint curriculum development and hands-on projects for students of all ages, including graduate internships. Representatives from both the school district and PSU serve on the WMP steering committee. This action will not only directly introduce students to watershed stewardship, but through their experience inform their families of what the watershed represents and how to care for it.

The PSU Center for the Environment will conduct an initial survey of residents in the watershed to statistically determine their values and desires for the future of the watershed and its environmental characteristics. This survey will provide stewardship education by asking questions to determine the knowledge base of residents. It will also provide high visibility to the WMP process itself. A follow-up survey will determine if the WMP process has resulted in changes in stewardship knowledge, and what the most effective steps will be to increase this knowledge.

PSU also has expert media capacity to apply towards public relations, education and outreach. These assets will be used to convey watershed-related concepts effectively and succinctly. By translating some of the more complex aspects of watershed stewardship into compelling and understandable messages, we hope to greatly increase the level of dialogue and commitment from the roughly 8,000 year-round watershed residents.

12. Verification of Project Success

See Section 16 (below). Each of the Milestones described in Section 16 has an associated verification component.

13. Final Products

See Section 16 (below).

14. Maintenance

No maintenance required for this project..

15. Environmental Monitoring

See Items under Section 16, Performance target 1 – Environmental Assessment. UNH will prepare project QAPPs based on existing protocols which are currently in use and have been approved by DES and the US EPA.

16. Performance Targets, Milestones, and Tasks

This Section summarizes the Performance Targets designed to achieve the desired project Outcome (Section 8). Milestones and Tasks are generally grouped under the most applicable Performance Targets. Table A summarizes the Tasks presented in Section 16, and also includes projected completion dates as well as requested grant funds and estimated match for each Task.

Performance Target 1 – Environmental Assessments. To meet the project water quality objective, Tasks included under Performance Target A are focused on collecting and analyzing water quality and natural resources data from the watershed to develop an understanding of baseline conditions, to identify potential threats to water quality, and to prioritize these threats. Assessment results and recommendations will be incorporated into other project documents (e.g. the WMP) and shared with watershed stakeholders via electronic and print media as well as public meetings and discussions. Our goal is to raise public awareness of the watersheds' function, how human activity can impact water quality, and what can be done to reduce adverse impacts.

NLRA Milestone 1A: Increase volunteer participation by ten percent per year, Newfound Lake remains free of invasives and maintains historic water quality.

Verification: Submit summary report comparing monitoring results to DES standards for surface water quality to DES.

Task 1 (match): Continue NLRA monitoring programs (invasives, lake, tributary, weed watching). Obtain NHLA funding, coordinate volunteers, track paid and volunteer time, submit samples to labs, manage grant reporting, coordinate with DES and UNH.

UNH Milestone 1B: Approval of the QAPP.

Verification: Provide copies of the completed project QAPP to DES.

Task 2: Develop a project specific Quality Assurance Project Plan (QAPP) for submission to the NHDES and the United States EPA (January – June 2007).

UNH Milestone 1C (Match): Collect, analyze, compile and interpret the water quality data and write a summary report that contains graphic analysis, GIS maps, interpretive text and that contains summary recommendations.

Verification: Deliver an interpretive tributary monitoring summary report for distribution among the NLRA membership and to JTA for incorporation into the WMP. Provide copy to DES.

Task 3 (match): Conduct training session for Newfound lake volunteer monitors and UNH field technicians. Collect weekly water quality data at the 23 primary tributary inlets and the Newfound River tributary outlet (June – December 2007). Analyze water quality data, and compile the data into database files. (June 2007 – January 2008). Produce GIS based

watershed maps, generate graphic output, and produce tabular data summaries for inclusion in the report. (June 2007-January 2008). Interpret the results and write a summary report, then print five copies of the summary tributary monitoring report (January – April 2008).

UNH Milestone 1D: Identify areas of concern within the Newfound Lake watershed and quantify the current water quality conditions that will facilitate sound water quality based planning efforts.

Verification: Compile in-lake and tributary water quality monitoring results into notebooks, summary spreadsheets and GIS-based graphics. Provide copies to DES.

Task 4: Conduct monthly tributary sampling of the primary tributary inlets, and the Newfound River outlet (January – December 2008).

- a. Conduct preliminary training sessions with the volunteer monitors and UNH field technicians (November – December 2007).
- b. Collect monthly data at the Newfound Lake tributary sampling locations (January – December 2008).
- c. Analyze the water quality data (January 2008 – January 2009).
- d. Enter the data onto database files (January 2008 – January 2009).
- e. Print a summary table of the tributary monitoring results (January 2009).

Task 5: Initiate water quality sampling of headwater tributaries using a combined paired watershed/stream-bracketing approach to document water quality variations between impaired and unimpaired/minimally impaired (reference) stream reaches (2007-2008).

- a. Locate suitable stream study sites (May – September 2007).
- b. Amend QAPP to document the final study locations (May – September 2007).
- c. Conduct training session with UNH field technicians (September 2007).
- d. Collect water quality data (September 2007 – December 2008).
- e. Analyze water quality data (September 2007 – January 2009).
- f. Enter the data onto database files (September 2007 – January 2009).
- g. Print a summary table of the paired watershed/stream bracketing results (January 2009).

Task 6: Conduct in-lake water quality sampling of the seven historical deep in-lake water quality monitoring sampling stations (May – September, summers 2007 and 2008).

- a. Conduct training session with UNH field technicians (May 2007).
- b. Collect water quality data (May 2007 – September 2008).
- c. Analyze water quality data (June 2007-October 2008).
- d. Enter the data onto database files (June 2007 – October 2008).
- e. Print a summary table of the paired watershed/stream bracketing results (December 2008).

Task 7: Conduct near-shore conductivity surveys to identify “hot spots” around the periphery of Newfound Lake (2007 and 2008).

- h. Locate suitable stream study sites (June – August 2007).
- i. Amend the QAPP to document the final study locations (June – August 2007).
- j. Conduct training session with UNH field technicians and Newfound Lake volunteer monitors (June – August 2007).
- k. Collect water quality data (August 2007 – September 2008).
- l. Analyze water quality data (August 2007 - October 2008).
- m. Enter the data onto database files (August 2007 – October 2008).

- n. Print a summary table of the paired watershed/stream bracketing results (November 2008).

UNH Milestone 1E: Approved amended QAPP.

Verification: Provide DES with copies of the approved amended project QAPP.

Task 8 (match): Submit amendments to the approved project QAPP that will encompass the collection of near-shore benthic sediment samples and the use of benthic artificial substrate samplers (June 2007 – March 2008).

UNH Milestone 1F: Ten artificial benthic substrate samplers have been constructed.

Verification: Provide DES with a sketch or photograph of constructed samplers.

Task 9: Purchase the supplies necessary to construct the benthic artificial substrate samplers, and construct the samplers (March 2008).

UNH Milestone 1G: Benthic sampling data compiled into notebooks and summary spreadsheets.

Verification: Provide DES with copies of the compiled benthic sampling results.

Task 10: Collect and analyze benthic substrate data and sediment samples. Compile benthic sediment sample data onto database files, then print a summary of the benthic sediment sample data (June – December 2008).

UNH Milestone 1H: Summary report identifying areas of concern within the Newfound Lake watershed. The report contains graphic analysis, GIS maps, interpretive text and that contains summary recommendations.

Verification: Submit copy of a summary Water Quality Monitoring report to DES (April 2009).

Task 11: Produce graphic output of the water quality data, and assemble the tabular summaries into Appendices (June 2008). Interpret the results and write a summary report, then print five copies of the summary water quality monitoring report (April 2009).

UNH Milestone 1I: Summary chapter of Newfound Lake's trophic status incorporated into the report outlined in **Milestone 1H**.

Verification: Deliver an interpretive report for distribution among the NLRA membership and to JTA for incorporation into the WMP. Provide copy to DES.

Task 12 (match): Interpret the water quality results and write a report chapter that summarizes the data. Include the Trophic Lake summary in the Water Quality Monitoring report.

Performance Target 2 – Community Assessment. Work closely with Town governments, businesses, residents and other watershed stakeholders to identify policies, procedures and behaviors that can adversely impact the watershed. Continue collaborations through meetings and information sharing to foster beneficial and sustainable behaviors that ensure long-term health of the watershed. A key and innovative component of Performance Target 2, social science research will be

conducted to examine social factors relevant to efforts to maintain water quality. The findings will provide information for use in the development of the WMP and the design and delivery of education and outreach programs. The second stage of the research will provide additional information for those efforts and will also be used to evaluate outcomes of the project.

PSU Milestone 2A: Completed initial scientific survey of Newfound region community residents to determine their values for the watershed, present understanding of stewardship principles, correlates of environmentally responsible behavior, perceived barriers to and benefits of adopting environmentally responsible behaviors, and trust in information sources and vectors of delivery. In addition, collected information useful for the WMP in consultation with the Project Team.

Verification: Provide DES copies of the completed project reports providing information used to develop the WMP, community outreach activities, and the design of educational programs.

Task 15: Complete literature review and hire graduate and undergraduate student assistants.

Task 16: Prepare to administer first survey (develop questionnaire; consult with working group; print questionnaires, return envelopes, and postcard reminders; develop sampling frame; draw scientifically random sample).

Task 17: Administer survey (Tailored Design Method (multiple waves of mailings and other techniques to enhance response rates)).

Task 18: Enter survey data into Statistical Package for the Social Sciences, and complete data analysis.

Task 19: Write draft report, then review draft report and the potential applications of findings with project working group.

Task 20: Write final report.

PSU Milestone 2B: Completed follow-up scientific survey of Newfound region community residents to determine the effects of the WMP creation process, educational programs, and outreach on their values for the watershed, understanding of stewardship principles, changes in residents' use of environmentally responsible behaviors, and changes in residents' perceived barriers to and benefits of adopting environmentally responsible behaviors. Combined data to evaluate the impacts and effects of the activities in the project, and to determined future activities.

Verification: Provide DES with a completed project report providing information about the effectiveness of the WMP process.

Task 21: Complete literature review and hire graduate and undergraduate student assistants.

Task 22: Prepare to administer second survey (develop questionnaire; consult with working group; print questionnaires, return envelopes, and postcard reminders).

Task 23: Administer survey using Tailored Design Method (multiple waves of mailings and other techniques to enhance response rates) (Summer 2009)

Task 24: Enter survey data into Statistical Package for the Social Sciences, and complete data analysis.

Task 25: Write evaluation draft report, then review draft report and the potential applications of findings with project working group.

Task 26: Write final evaluation report

JTA Milestone 2C: Completed Demographic/Growth Assessment chapter for the WMP.

Verification: Provide DES a copy of the completed Demographic/Growth Assessment

Task 27: Gather and analyze local, regional, and state level demographic/growth data.

Task 28: Prepare a draft WMP chapter based on the information gathered.

Task 29: Conduct a public meeting to present the draft chapter and solicit feedback.

JTA Milestone 2D: Completed policy level inventory and analysis of existing land use related plans and regulations in the watershed communities chapter for the WMP.

Verification: Provide DES a copy of the completed inventory and analysis of land use related plans and regulations.

Task 30: Attend Planning Board meetings to gather the most recent copies of Master Plans and regulations, and to discuss the status and success of these plans and regulations with the Boards.

Task 31: Compare and contrast the land use related plans and regulations from across the watershed.

Task 32: Outline and draft the Chapter for the WMP, then conduct a public meeting to present the draft chapter and solicit feedback.

Performance Target 3 - Outreach and Education. Utilize the Newfound Lake Region as an outdoor classroom for schools and colleges in the region, as well as for residents and visitors to the area, to create an enduring sense of stewardship.

NLRA Milestone 3A: Conducted up to 12 periodic meetings with Town leaders and the public; provided written materials to support watershed stewardship; developed and implement public relations strategy, produce at least 2 NLRA Newsletters / year.

Verification: Submit meeting attendance sheets, meeting materials and Newsletters to DES.

Task 33 (match): Serve as watershed management resource.

UNH Milestone 3B: Provided technical seminars related to land use management, natural resource protection and water quality to Town Boards, and supplied sample ordinance language to submit for voter approval.

Verification: Submit meeting attendance sheets, meeting materials and Newsletters to DES.

Task 13 (match): UNH staff will participate in up to six (6) public workshops to relay the water quality monitoring findings to the watershed residents and the project stakeholders.

JTA Milestone 3C: Facilitate and participate on WMP kick-off meeting.

Verification: Submit meeting attendance sheets and meeting materials to DES.

Task 14: Facilitate and participate on WMP kick-off meeting.

PSU Milestone 3D: Provided technical seminars related to land use management, natural resource protection and water quality to Town Boards, and supplied sample ordinance language to submit for voter approval.

Verification: Completed design and delivery of multiple outreach and education programs. Provide DES with meeting attendance sheets and program materials.

Task 34 (match): Use survey findings and expert knowledge to contribute to the development of seminars, and participate in seminar delivery.

PSU Milestone 3E: Discover and maintain “quality of life” values that are shared by watershed residents and visitors, including families and alumni who have experienced the camps, cottage colonies, and generations of family properties within the watershed. Use these findings to help strengthen a “sense of place” among stakeholders.

Verification: Submit summary of education and outreach strategy, with attendance sheets and a portfolio of materials for outreach and education programs, to DES.

Task 35 (match): Participate in design of education and outreach programs. Use survey findings and expert knowledge to contribute to the development of educational and outreach programs, and participate in review of program designs to ensure accurate and appropriate uses of the information collected. (2008-2009)

PSU Milestone 3F: Created oral histories from interviews with individuals who have grown up in the watershed to capture some of the history of the area, and provided opportunities for inter-generational understanding.

Verification: Submit a final oral history project report to DES.

Task 36: Design oral history project goals in consultation with NASD and project team.

Task 37: Conduct oral history research in Plymouth State graduate/undergraduate classes and transcribe the oral histories.

Task 38: Analyze data, determine how information can be applied in consultation with project team and prepare final oral history project report.

NASD Milestone 3G: Developed environmental science and policy curriculum for public schools. Teachers agreed to develop curriculum under the Newfound Area School District summer projects program

Verification: Submit written curricula relevant to the Watershed Grant to DES. This curriculum will be identified by grade level and subject area along with relevance to state frameworks and Grade Level Expectations (GLEs)

Task 39: NLRA nominates a contact from UNH or PSU to work with Newfound District.

Task 40: Contact works with seventh grade team from middle school to develop curriculum that would be included in their annual spring Water Project. Seventh grade team decides which pieces from Watershed Grant are appropriate.

Task 41: NLRA recommended contact works with teachers from Awaken the Senses interdisciplinary course to develop curriculum. High school teachers decide which pieces from grant are appropriate.

NASD Milestone 3H: Increased opportunity for student involvement. Created team of adults and students to install signage indicating watershed boundaries.

Verification: Provide DES with photo-documentation of the presence of signage indicating boundaries of Newfound Watershed

Task 42: Use maps and site visits to locate watershed boundaries, and purchase tools and supplies for creating and installing signs

Task 43: Complete installation and keep written and visual record of installations

NASD Milestone 3I: Agreement from middle school teachers to coordinate existing oral history activities with Watershed Grant

Verification: Submit multimedia artifacts containing oral histories to DES.

Task 44: Designate representative from PSU to contact middle school teachers and agree on content, timelines and format. Create oral histories from watershed residents, working in coordination with PSU oral history tasks.

Performance Target 4 – Public Communication. Throughout the project, multiple activities of interest to the public will be communicated in a fashion that continually utilizes feedback from the various project elements (e.g. surveys, meetings, oral histories). Performance Target 4 will identify and leverage opportunities for citizens to participate and provide input using multiple media platforms.

NLRA Milestone 4A: Design and implementation of a public communications strategy. High-frequency exposure including the local press, public meetings and via updates on the NLRA and other project partner Web sites.

Verification: Submit copy of communication strategy (initial and final revisions), a portfolio of media releases, meeting attendance records and materials, and records of annual NLRA and WMP Web site hits (2007, 2008, 2009).

Task 45: Develop project communication strategy with PSU, including written goals and objectives with draft schedule and outline of events. Update at least annually (2 updates)

Task 46: Coordinate / advertise Kick-off meeting with Steering Committee and public.

Task 47: Coordinate / advertise public meeting (mid-project status update).

Task 48: Coordinate / advertise public (project completion and final WMP).

Task 49: Create new Web structure on existing NLRA site that highlights WMP purpose, events calendar and progress.

PSU Milestone 4B: Implementation of a completed communications strategy.

Verification: A written strategy and schedule, and portfolio of completed communications provided to DES.

Task 50 (match): Develop and implement a communications strategy for the project that includes upgrading the existing NLRA Web site to include project-specific pages and links. Develop and implement a media strategy for the project that will provide articles and press releases to local media throughout the project including invitations to public meetings, regular dialogue with local reporters to keep them abreast of project activities, routine news releases, and media events.

Task 51: Produce initial printed communications materials.

Task 52: Produce second-generation communications materials.

Task 53: Organize an initial public relations event. Collaborate with other stakeholders to share communications platforms (e.g. inserts / articles in newsletters and reports).

Task 54: Organize a follow-up public relations event in collaboration with other stakeholders.

Performance Target 5 - Administrative and Organizational

Capacity. Enhance the effectiveness of the NLRA in its role as project implementer, and further develop its capacity as the leading environmental advocate for the Newfound Lake Region.

NLRA Milestone 5A: Program management meets expectations, and will be approximately divided over six (6) time periods within the total project duration. Project Tasks will be invoiced no more often than monthly, and no invoice will be generated for any month where total completed Task value is less than \$1,000.

Verification: Contractor agreements formalized and submitted to DES. Quarterly and Annual status reports, invoices and other documents prepared under this proposal submitted to DES as required.

Task 55: Develop Sub-Agreements with contracting partners receiving grant funding.

Task 56: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

Task 57: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

Task 58: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

Task 59: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

Task 60: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

Task 61: Program management (administer program in collaboration with DES, coordinate contractors, coordinate communications, author DES-required reports). Required reporting includes up to ten (10) Quarterly and one (1) Final DES status reports.

NLRA Milestone 5B: Increased NLRA public profile and membership.

Verification: PSU secondary survey results indicate public awareness of NLRA statistically significantly increased.

Task 62 (match): Communicate role and value of NLRA to watershed via NLRA media and project public outlets.

Task 63: Purchase Audio/Visual equipment for public presentations.

Performance Target 6 - Develop a WMP. The WMP will act as the unifying project document. It is intended to act as a model for Newfound Lake Region watershed as well as other watersheds wishing to establish long-term social and governing structures that will protect water quality. The WMP will compile all project elements and become a working document for local and regional implementation.

JTA Milestone 6A: Completed outline of the WMP

Verification: Draft outline of WMP provided to DES.

Task 64: Draft an outline of the WMP. Present draft outline to the Steering Committee for review and comment, and communicate with Steering Committee members and gather prepared materials in a compatible format.

JTA Milestone 6B: Completed printing of the WMP

Verification: Delivery of a completed WMP to NLRA for distribution. Provide copies to DES.

Task 65: Facilitate and participate in mid-project status update meeting.

Task 66: Facilitate and participate in project completion and final WMP presentation.

Task 67: Prepare, format, and distribute draft WMP.

Task 68: Conduct two (2) public meetings to present the Draft WMP and solicit feedback.

Task 69: Finalize WMP for distribution (including up to 50 printed copies).

17. Schedule and Budget

Table A. Project Schedule and Budget by Task

Task #	Brief Description of Task	Proposed Date	Requested Grant Amount (\$)	Non-Federal Grant Amount (\$)	Total Cost of Task (\$)
1	Continue NLRA monitoring programs (invasives, lake, tributary, weed watching)	June 2007 - December 2009	0	20,000	20,000
2	Develop QAPP	June 2007	1,000	200	1,200
3	Collect, analyze, compile and interpret the water quality data and write a summary report that contains graphic analysis, GIS maps, interpretive text and that contains summary recommendations.	April 2008	0	20,000	20,000
4	Monthly stream monitoring data collection and analysis	January 2008 - January 2009	700	4,635	5,335
5	Paired watershed/stream bracketing data collection and analysis	September 2007 - January 2009	3,550	4,680	8,230
6	In-Lake water quality sampling and data analysis	June 2007 - December 2008	1,540	5,204	6,744
7	Conduct near shore conductivity survey and collect e-coli samples	August 2007 - November 2008	1,800	1,755	3,555
8	Amend QAPP to include benthic sampling protocols	June 2007 - March 2008	0	1,600	1,600
9	Construct benthic artificial substrate periphyton samplers	March - April 2008	1,000	400	1,400
10	Collect and analyze benthic artificial substrate data and sediment samples	May 2008 - December 2008	3,850	7,130	10,980
11	Produce a summary report that summarizes the water quality and benthic data and identifies areas of concern	June 2008	50	1,200	1,250
12	Produce a report that summarizes water quality data (Tasks 27 - 30) and documents Newfoundland Lake's trophic status	January - March 2009	0	400	400
13	Participate in natural resource based seminars	June 2007 - December 2009	0	400	400
14	Kick-off meeting with Steering Committee and general public	August 2007	4,540	0	4,540
15	Hire assistants and complete literature review	June 2007	2,769	575	3,375
16	Survey Administration Preparation	July 2007	6,432	1,500	7,300

Task #	Brief Description of Task	Proposed Date	Requested Grant Amount (\$)	Non-Federal Grant Amount (\$)	Total Cost of Task (\$)
17	Survey Administration	August 2007	6,120	1,000	6,870
18	Data Entry and Analysis	November 2007	1,637	1,000	2,450
19	Write Draft Report (including Project Team review)	February 2008	3,000	1,500	4,500
20	Write Final Report	April 2008	450	2,000	1,450
21	Second Community Survey Preparation	June 2008	2,827	500	3,500
22	Second Survey Administration Preparation	July 2008	2,020	1,000	2,520
23	Second Survey Administration	August 2008	5,120	1,462	6,120
24	Data Entry and Analysis	November 2008	1,680	1,000	2,180
25	Write Evaluation Draft Report (including Project Team review)	February 2009	1,000	1,500	2,500
26	Write Evaluation Final Report	April 2009	680	2,000	1,680
27	Gather and analyze local, state and regional demographic data	July 2007	960	0	960
28	Prepare draft WMP chapter on demographics	August 2007	4,920	0	4,920
29	Conduct 1 public meeting to present results and solicit feedback	September 2007	500	0	500
30	Meet Watershed Planning Boards, obtain current regulations, discuss Board concerns	September 2007	1,300	0	1,300
31	Compare and contrast watershed land use regulations	October 2007	4,340	0	4,340
32	Prepare draft WMP chapter and conduct 1 public meeting to present results and solicit feedback	November 2007	1,900	0	1,900
33	Identify and engage stakeholders; establish enduring partnerships; serve as watershed resource; increase members	June 2007 - December 2009	0	20,000	20,000
34	Conducting Outreach/ Seminars	July 2009	0	4,000	4,000
35	Participate in Design of Education/ Outreach	July 2009	0	2,737	2,000
36	Design Oral History project	August 2007	1,100	0	1,200

Task #	Brief Description of Task	Proposed Date	Requested Grant Amount (\$)	Non-Federal Grant Amount (\$)	Total Cost of Task (\$)
37	Conduct oral history research	December 2007	640	0	700
38	Analyze results and prepare report	April 2008	639	0	700
39	NLRA nominates a contact from UNH or PSU to work with NASD oral history	September 2007	1,000	300	1,300
40	Contact works with seventh grade team from middle school to develop curriculum that would be included in their annual spring Water Project	June 2007 - June 2009	1,000	300	1,300
41	NLRA recommended contact works with NASD teachers from Awaken the Senses interdisciplinary course to develop curriculum	June 2007 - June 2009	1,000	460	1,460
42	Use maps and site visits to locate watershed boundaries, and purchase tools and supplies for creating and installing signs	June 2007 - June 2008	1,000	1,000	2,000
43	Complete installation and keep written and visual record of installations	June 2007 - June 2008	500	1,000	1,500
44	NASD oral histories, coordinated with PSU	June 2007 - June 2008	90	90	180
45	Develop project communication strategy	June 2007	4,100	2,000	6,100
46	Kick-off meeting with Steering Committee and general public	August 2007	4,000	2,000	6,000
47	Public meeting on mid-project status update	August 2008	4,000	2,000	6,000
48	Public meeting on project completion and final WMP	August 2009	4,000	2,000	6,000
49	Update NLRA Web site to provide WMP news and events; maintain site for project	June 2007	4,400	5,000	9,400
50	Develop Communications Strategy including Website Consultation	July 2009	0	2,900	5,900
51	Publication Development, Production, and Coordination of outreach materials	August 2007	3,200	1070	5,200
52	Publication Development, Production, and Coordination of outreach materials	August 2008	1,500	500	2,500
53	Organize public relations event and materials	August 2007	2,040	1,300	4,040
54	Organize public relations event and materials	August 2009	1,200	1,000	2,700
55	Develop Grant Agreement w/ NHDES and subcontracting project partners	May 2007	1,710	1,000	2,710
56	Manage grant (coordinate partners, communications, invoices and author	July 2007	3,000	3,000	6,000

Task #	Brief Description of Task	Proposed Date	Requested Grant Amount (\$)	Non-Federal Grant Amount (\$)	Total Cost of Task (\$)
	DES-required reports).				
57	Manage grant (coordinate partners, communications, invoices and author DES-required reports).	December 2007	5,000	3,000	8,000
58	Manage grant (coordinate partners, communications, invoices and author DES-required reports).	July 2008	3,000	3,000	6,000
59	Manage grant (coordinate partners, communications, invoices and author DES-required reports).	December 2008	5,000	3,000	8,000
60	Manage grant (coordinate partners, communications, invoices and author DES-required reports).	July 2009	4,000	3,000	7,000
61	Manage grant (coordinate partners, communications, invoices and author DES-required reports).	December 2009	5,000	3,000	8,000
62	Public Communications	December 2009	0	10,000	10,000
63	Purchase A / V equipment (laptop and projector)	June 2007	2,500	500	3,000
64	Draft outline of Watershed Management Plan. Present draft of Watershed Management Plan to SC for review and comment. Revise draft Watershed Management Plan outline.	June 2007	1,900	0	1,900
65	Public meeting participation and facilitation of mid-project status update	August 2008	3,800	0	3,800
66	Public meeting participation and facilitation of project completion and final WMP	August 2009	3,800	0	3,800
67	Prepare and distribute draft WMP	June 2009	34,700	0	34,700
68	Conduct 2 public meetings to present draft WMP	July 2009	1,000	0	1,000
69	Prepare final WMP (including print and electronic copies for watershed Towns)	August 2009	7,640	0	7,640
		TOTALS	184,000	162,000*	346,000*

* Match and Totals rounded to closest \$500

Table B. Project Costs by Category

Budget Category						Requested grant amount	Non-federal match amount	Total cost of category
1. Salary & Fringe								
Include salaries and fringe benefits paid for work performed on the project. "Salary" should reflect the rate per hour, by position. "Fringe benefits" are employment benefits given in addition to one's wages or salary.								
Name	Title	Salary Hourly rate	Approx. # of Hours	Salary Charged to Project	Fringe			
Boyd Smith	Exec. Director	\$30	800	\$64,320	10	\$32,000	\$32,320	\$64,320
Martha Twombly	Program Director	21	300	\$42,520	13	\$10,200	\$32,320	\$42,520
"Salary Charged to Project" includes both grant hours and match hours, based on estimated percent of annual staff contributions to program over 30-month period (June 2007 – December 2009).								
					Subtotal	\$42,200	\$64,640	\$106,840
2. Indirect Cost of Salary								
Indicate the indirect costs. Typical indirect costs are associated with but are not limited to office space, telephones, personnel administration, accounting, and room or equipment rental and usage (i.e., the cost of doing business).								
Match amount = 25% of 2007 NLRA Office Expense and Accounting Budget * 2.5 years. This line item includes Office Supplies.							\$11,250	\$11,250
3. Supplies								
Includes field and lab supplies; data processing materials; equipment costing less than \$1,000; clothing; books, paper, and other office supplies.								
(NLRA supplies) Materials for Quarterly and Final reports, articles, press releases, news releases and media events; printer ink, toner, paper						\$3,000	\$5,000	\$8,000
(UNH supplies – included in costs under Item 6) Quantity 14: HOBOWare® Pendant 64K Temp/Light Data Logger (UA-002-64) Quantity 1: HOBOWare Pro for Windows (software) (BHW-PC) Quantity 1: User-Replaceable Battery Replacement Options (HRB-TEMP) Quantity 1: Data Logging Communications Systems: (U-DTW-1)						\$1,000	0	\$1,000
4 Equipment								
List any item(s) of equipment costing more than \$1,000 in total. Equipment costing less than \$1,000 should be listed in Supplies (#3).								
Laptop and software for public presentations						\$1,000	0	\$1,000
LCD Projector for public presentations						\$1,500	\$500	\$1,500
5. Travel and Training								
Includes project-related charges for travel (travel, tolls), and charges as a result of use of an auto. Vehicle costs should be shown as the number of miles times the mileage rate being applied. Mileage rates cannot exceed the Standard Mileage Rate provided by the Internal Revenue Service (see www.irs.gov/index.html)								
Assumes 1,000 miles/yr * 2.5 yrs. * 0.50 * \$0.445/mi						\$0	\$1,112	\$1,112
6. Contractual								
Includes expenditures made to sub-grantees/sub-contractors, hired speakers, legal services, cost of engineering and design, etc. The rate of pay per hour, number of hours and type of service provided should be included.								

Any procured services not provided by the Grantee should be listed here. (See Supplement to Table B)			
PSU (Surveys, PR, Oral History, Curriculum Devpt.)	\$46,204	\$28,475	\$74,385
UNH (WQ monitoring, reporting)	\$13,490	\$47,604	\$61,094
JTA (WMP preparation, meetings)	\$71,016	N/A	\$71,016
NASD (Oral History, Watershed Signage, Curriculum Devpt.)	\$4,590	\$3,150	\$7,740
7. Construction			
Costs (construction contracts, cost share agreements, etc.) associated with construction. Permit fees can be included.			
Not Applicable			
8. Other (specify)			
Includes postage, printing, license fees, equipment maintenance and repair, computer software, non-staff insurance. Any item greater than \$1,000 must be itemized below.			
Totals	\$184,000	\$162,000	\$346,000*

* Match and Totals rounded to closest \$500

Supplement to Section 17, Table B, Item 6

<u>Contractor</u>	<u>Staff</u>	<u>Rate (\$/hr.)</u>	<u>Hours</u>	<u>Labor (\$)</u>	<u>Service</u>
PSU	B. Eisenhower, PhD.	37	240	8880	Social Science Research
	R. Stedman, PhD.	54	30	1620	Social Science Research
	J. Brehm, PhD.	54	30	1620	Social Science Research
	M. Blaine, PhD.	36	40	1440	Oral history
	Transcriber	11	55	605	Oral history
	Graduate Stipend (2)			5000	Research Asst.
	Undergraduate	10	440	4400	Data collection / entry
TOTALS	Expenses	22,639	23,565	46,204	
UNH	R. Craycraft	40	35	1400	Water quality sampling program
	Research Asst.	20	212	4240	Field / lab assistant
	TOTALS	Expenses	7,850	5,640	13,490
JTA	J. Taylor	110	115	12650	Senior planner
	S. Whitman	60	850	51000	Project planner
	TOTALS	Expenses	7,366	63,650	71,016
NASD	Sr. Admin.	50	60	3000	Curriculum development
	Faculty	20	25	500	Program management
	Staff	18	5	90	Field / lab assistant
	TOTALS	Expenses	1,000	3,590	4,590

APPENDIX A. Pollutant Categories, Categories of Activity, BMP Names

NPS Primary Pollutant Category

<input type="checkbox"/> 0000 All Sources	<input type="checkbox"/> 6000 Land Disposal/Storage/Treatment
X 1000 Agriculture	<input type="checkbox"/> 7000 Hydromodification
<input type="checkbox"/> 1600 Animal Feeding Operations	X 7900 Marinas and Recreational Boating
X 2000 Silviculture	<input type="checkbox"/> 8000 Other NPS Pollution
X 3000 Construction	<input type="checkbox"/> 8500 Historical Pollutants
X 4000 Urban Runoff/Stormwater	X 8700 Turf Management
X 5000 Resource Extraction	

NPS Secondary Pollutant Category

<input type="checkbox"/> 1350 Grazing-Related Source	X 7100 Channelization
X 1400 Pasture Grazing	X 7190 Channel Erosion/Incision
<input type="checkbox"/> 2200 Forest Management (e.g. pumped drainage/fertilization/pesticide application)	X 7200 Dredging
X 2300 Road Construction/Maintenance	<input type="checkbox"/> 7300 Dam Construction
X 3100 Highways/Roads/Bridges	<input type="checkbox"/> 7350 Upstream Impoundment
X 3200 Land Development or Redevelopment	X 7400 Flow Regulations/Modifications
X 4190 Municipal	X 7550 Other Habitat Modification
X 4191 Commercial	X 7600 Removal of Riparian Vegetation
X 4192 Residential (e.g. non-commercial automotive/pet waste/etc.)	X 7700 Streambank or Shoreline Modification/Destabilization
<input type="checkbox"/> 4400 Illicit Connections/Illegal Hook-ups	X 7800 Drainage/Filling of Wetlands
<input type="checkbox"/> 4450 Dry Weather Flows	X 7996 Shoreline Erosion
X 4500 Highway/Road/Bridge Runoff	X 7998 Dredging
X 4590 Post-Development Erosion and Sedimentation	<input type="checkbox"/> 8100 Atmospheric Deposition
<input type="checkbox"/> 4650 Salt Storage Sites	<input type="checkbox"/> 8590 Contaminated Sediments
X 5990 Sand/Gravel Mining	X 8591 Clean Sediments
X 6200 Wastewater	<input type="checkbox"/> 8592 Other Historical Pollutants
<input type="checkbox"/> 6300 Landfills	X 8600 Natural Sources
X 6350 Inappropriate Waste Disposal	X 8700 Recreational and Tourism Activities (non-boating)
<input type="checkbox"/> 6400 Industrial Land Management	<input type="checkbox"/> 8710 Golf Courses
<input type="checkbox"/> 6500 On-site/Decentralized Wastewater Treatment	X 8790 Yard Maintenance
X 6700 Septage Disposal	X 8910 Groundwater Loadings
<input type="checkbox"/> 6800 Waste Storage/Storage Tank Leaks (above ground)	<input type="checkbox"/> 8950 Wildlife
<input type="checkbox"/> 6900 Waste Storage/Storage Tank Leaks (below ground)	

NPS Functional Category of Activity

<input type="checkbox"/> 010 Corrective Action (other than BMP Implementation)	X 320 Inspection Activities
<input type="checkbox"/> 011 BMP Design/Implementation	X 330 Ordinance Development
X 012 BMP Performance Assessment	X 340 Enforcement Activities
<input type="checkbox"/> 013 Animal Manure/Litter Management Projects	X 401 Nutrient Management Planning
<input type="checkbox"/> 014 Livestock Control Projects	X 402 Stormwater Management Planning
X 016 Vegetation Management/Revegetation	<input type="checkbox"/> 410 Watershed Restoration Action Strategy (WRAS)/Watershed Planning
X 017 Stream Bank Stabilization	<input type="checkbox"/> 420 Develop/Revise Basin Plans
X 018 Grade Stabilization	<input type="checkbox"/> 430 TMDLs
X 019 Sediment Control	<input type="checkbox"/> 440 Nonstructural Planning (for new development)
<input type="checkbox"/> 020 Stormwater Discharge Design/Control	<input type="checkbox"/> 490 Other Planning
X 021 Erosion Control Projects	<input type="checkbox"/> 501 Instream Flow Assessment
<input type="checkbox"/> 023 Wetland Restoration/Protection	X 502 Assessments for Compliance with Water Quality Standards
<input type="checkbox"/> 024 Acquisition of Riparian Resources	<input type="checkbox"/> 503 Wetland Assessment/Monitoring
<input type="checkbox"/> 025 Riparian Projects	<input type="checkbox"/> 505 TMDL Assessment
<input type="checkbox"/> 026 Fisheries Projects	X 510 Water Quality Trend Assessment
<input type="checkbox"/> 027 Other Restoration/Protection/Prevention	X 520 Water Quality Problem Identification
<input type="checkbox"/> 100 Statewide Education/Information Programs	X 590 Other Water Quality Assessment/Monitoring
X 101 Local (Specific Target) Education/Information Programs	<input type="checkbox"/> 600 BMP Effectiveness Monitoring
X 200 Technical Assistance to State/Local	<input type="checkbox"/> 610 Biological Monitoring
<input type="checkbox"/> 201 Nonpoint Source Program Overall Coordination/Management	X 620 Watershed Assessments
<input type="checkbox"/> 202 Nonpoint Source Project Staffing	<input type="checkbox"/> 800 319(h) National Monitoring Projects
X 230 Technology Transfer to State/Local Government	X 910 Groundwater (all groundwater activities)
X 290 Other Technical Assistance Activity	<input type="checkbox"/> 920 Antidegradation Activities and Analysis
<input type="checkbox"/> 300 Certification Activities	<input type="checkbox"/> 930 Soil Analysis

Best Management Practice (BMP Name)

<input type="checkbox"/> Not applicable	
<input type="checkbox"/> 921 Alternative Septic System	<input type="checkbox"/> 451 Land Reclamation
<input type="checkbox"/> 914 Alternative Water Source	<input type="checkbox"/> 472 Livestock Exclusion
<input type="checkbox"/> 575 Animal Trails & Walkways	<input type="checkbox"/> 590 Nutrient Management
<input type="checkbox"/> 916 Baffle Boxes	<input type="checkbox"/> 010 Oil and Grit Separator
<input type="checkbox"/> 537 Barnyard Runoff Control	<input type="checkbox"/> 595 Pest Management
X 322 Channel Vegetation	<input type="checkbox"/> 915 Pesticide Management
<input type="checkbox"/> 317 Composting	X 562 Recreational Area Improvement
X 327 Conservation Cover	<input type="checkbox"/> 566 Recreational Land Grading/Shaping
<input type="checkbox"/> 328 Conservation Crop Rotation	X 568 Recreational Trail/Walkway

<input type="checkbox"/> 329 Conservation Tillage	<input type="checkbox"/> 558 Roof Runoff Management
<input type="checkbox"/> 332 Contour Buffer Strips	<input type="checkbox"/> 570 Runoff Management System
X 335 Controlled Drainage	<input type="checkbox"/> 350 Sediment Basin
X 342 Critical Area Planting	<input type="checkbox"/> 009 Stream Channel Restoration (Dam Removal)
<input type="checkbox"/> 349 Dam-Multiple Purpose	<input type="checkbox"/> 584 Stream Channel Stabilization
X 581 Ditch Stabilization	<input type="checkbox"/> 580 Streambank and Shoreline Protection
X 362 Diversion	<input type="checkbox"/> 612 Tree Shrub Establishment
<input type="checkbox"/> 007 Dredging	<input type="checkbox"/> 901 Urban Catch Basin
<input type="checkbox"/> 382 Fence	<input type="checkbox"/> 902 Urban Catch Basin-Oil
<input type="checkbox"/> 386 Field Border	<input type="checkbox"/> 903 Urban Catch Basin-Sand
X 393 Filter Strip	<input type="checkbox"/> 904 Urban Concrete Grid
X 396 Fish Passage	<input type="checkbox"/> 905 Urban Ext Detention Pond
<input type="checkbox"/> 395 Fish Stream Improvement	X 906 Urban Filtration Basin
<input type="checkbox"/> 408 Forest-Erosion Control	<input type="checkbox"/> 907 Urban Grassed Swale
X 654 Forest-Improved Harvest	<input type="checkbox"/> 908 Urban Infiltration Basin
X 409 Forest-Land Management	<input type="checkbox"/> 909 Urban Infiltration Trench
X 666 Forest-Stand Improvement	<input type="checkbox"/> 910 Urban Porous Pavement
X 655 Forest-Trails and Landings	<input type="checkbox"/> 911 Urban Stormwater Wetland
X 391 Forest Buffer-Riparian	X 912 Urban Vegetated Filter
<input type="checkbox"/> 410 Grade Stabilization Structure	<input type="checkbox"/> 913 Urban Wet Pond
X 412 Grassed Waterway	X 601 Vegetated Barriers
<input type="checkbox"/> 011 Green Roof System	<input type="checkbox"/> 312 Waste Management System
<input type="checkbox"/> 647 Habitat Development/Management	<input type="checkbox"/> 313 Waste Storage Facility
<input type="checkbox"/> 643 Habitat Restoration	<input type="checkbox"/> 635 Wastewater Treatment Strip
<input type="checkbox"/> 561 Heavy Use Area Protection	X 917 Watershed Management Plan
<input type="checkbox"/> 920 In-Lake Alum Treatment	X 638 Water/Sediment Control Basin



