

Vermont Watershed Grants
Project Year 2012

#WG 6-12
(Write in your grant #)

Watershed Grant Application
Grant awards up to \$15,000 (maximum)

Nine (9) complete paper copies due in the Watershed Grants office.

Must be postmarked or delivered by Friday, December 9, 2011.

(Application must be typed. Faxed or emailed applications will **not** be accepted. This application form may be downloaded at http://www.anr.state.vt.us/dec/waterq/lakes/htm/lp_watershedgrants.htm.)

You must also register your application online by the above deadline from the above web site, and obtain your grant number.

There are insurance requirements that grant recipients must meet (refer to web site for details). These may be cost-prohibitive or otherwise problematic for some applicants. If you are not familiar with these requirements, we ask that you contact either Rod Wentworth (Fish & Wildlife, 654-8949) or Rick Hopkins (Environmental Conservation, 338-4878) before applying for a grant.

Name of Project:: Restoration of Black River tributaries north of Lake Rescue. This project continues the efforts of the Lake Rescue Association to control sedimentation of Lake Rescue/Round Pond, a natural lake on the Black River.

Project Applicant:: Lake Rescue Association, PO Box 572, Ludlow, VT 05149

Type of organization: Municipal entity Non-profit org. Sole-proprietor
 Corporation Other (Specify: _____)

Contact person: Christina Salerno

Mailing Address: 7 Norman Drive, Ludlow, VT 05149
Telephone: 802-228-4306 fax: Email: chrssal@aol.com

Grant Amount Requested: \$12,672.00

Project location & name of affected watershed or waterbody: Buffalo Brook and Reading Pond Brook, tributaries of the Black River in Plymouth, Windsor County. These streams, draining many acres of State Forest, contribute significant sediment to the Black River which deposits sediment in an ever growing delta in Round Pond (Lake Rescue). Following TS Irene, Lake Rescue and Round Pond have experienced huge deposits of sediment from the river including two new sand bars. To this day the lake water remains brown with suspended sediment (Figure 1). Addressing sediment sources in these streams will protect the water quality of both Echo Lake and Lake Rescue while improving instream habitats and flood resiliency.

Provide a brief project summary including the goal of the project (in less than 100 words): The project goal is to reduce sediment flow into the Black River by identifying, prioritizing, and planning for

improved forest management practices and stream restoration projects in the Buffalo Brook watershed, in collaboration with VT Departments of Forests, Parks & Recreation, and Fish & Wildlife and the Towns of Plymouth and Reading. This area is largely undeveloped forest land in state and private ownership, crisscrossed by old roads no longer maintained. A pre-Irene geomorphic assessment identified abandoned road segments as a significant source of sediment (Figures 2D, 2E). A possible goal will be to “re-wild” the roads to prevent excessive erosion.

Provide a brief sequence of tasks to be performed, with estimated completion dates. Indicate aspects of the project that need to be completed before the project can begin (e.g. land purchase, securing additional funding, landowner agreements). (In less than 100 words).

- 1) Hold steering committee meetings including coordination with Plymouth, Reading and landowners. (*May, Sept, Dec, 2012*)
- 2) Evaluate post-Irene stream conditions with VFPR, VFW, VTDEC including photodocumentation, mapping, limited survey data (*June-August 2012*)
- 3) Identify, prioritize mitigation projects/practices. (*Sept 2012*)
- 4) Prepare conceptual designs & budgetary estimates; identify technical and financial resources/stakeholders for project implementation. (*August-Sept 2012*)
- 5) Implement one restoration/habitat improvement project in the watershed and/or at Camp Plymouth State Park to address Irene damages. (*August-Sept 2012*)
- 6) Create brochure for improved forest management for public distribution (500 printed copies) and LRA website posting. (*Oct-Dec 2012*)

Include additional information addressing the relevant evaluation criteria listed in the Application Guide, in order to help the Citizen Review Committee understand and review your project proposal. Please be concise (less than 500 words). You may also include design sketches, publication outlines and letters of support.

This project incorporates many of the criteria listed in the Guide:

- 1) VFW personnel have observed declining brook trout and rainbow smelt populations in the Buffalo Brook watershed, perhaps related to the deteriorated streambed conditions. A goal of mitigation strategies will be to improve instream habitats for the wild, self-sustaining brook trout populations.
- 2) The project will leverage existing geomorphic data for the watershed (pre-Irene). LRA commissioned a 2009 Stream Geomorphic Assessment of the Buffalo Brook / Reading Pond Brook that was completed to VTANR protocols and was funded in part by a VTDEC Clean & Clear grant.
- 3) The underlying project impetus is to restore the water quality of the downstream lakes on the Black River, particularly Lake Rescue which serves as a major sediment collection site due to peculiar river geography: the river takes a full right angle turn east just before entering Round Pond, slowing, dumping sediment, and then turning another 90 degrees south to enter the channel to Lake Rescue and again depositing sediment which has created a new sand bar, post Irene, in what was 12 ft of open water.
- 4) Reducing sedimentation of Lake Rescue is now necessary to preserve the recreational value of the lake. Two new sandbars, one each in Round Pond and Lake Rescue, are impeding boating of all sorts and making channel access difficult. The Town of Ludlow values highly the recreational opportunities of the lakes, as its economy is now based on year round resort activities ancillary to Okemo Mountain. Sedimentation is and has been for ten years an issue for lake front owners, swimmers and fishermen as well as boaters. Controlling sediment entering the lake is now the main focus of the Lake Rescue Association (LRA) which has been working for seven years with Better

Back Roads and the Town of Ludlow on improving road conditions bordering the lake. LRA also regularly distributes VT Water Quality materials regarding good stewardship of lake front properties and maintains a website to post all relevant information and activities as a resource for residents.

- 5) The creation of a brochure documenting forest and stream management techniques to control erosion and reduce sediment production will be used to educate riparian and lake-side landowners regarding the need for careful maintenance of streams, streambeds, and shorelines. TS Irene has heightened awareness of the destructive power of water: now is the time to clarify the lessons learned from this event, and how we can reduce the impact of future high water, be it spring melt or flood. As LRA embarks on new projects which require collaboration with state agencies (other than Lakes and Ponds) such as VFPR and VFW, with other municipalities (Plymouth, Reading), and with riparian landowners, we need documented remediation projects to win cooperation in our efforts to protect our lake. We also know our problems are replicated throughout the state. Hopefully our brochure will provide effective educational information with utility outside of our immediate community.

In conclusion, describe the specific products or outcomes that will result from the proposed project (in less than 100 words).

- 1) Mitigation / restoration projects planned and conceptually designed on state-owned lands in the Buffalo Brook watershed.
- 2) One completed restoration/habitat improvement project in the watershed and/or at Camp Plymouth State Park.
- 3) A printed brochure with website availability describing in words, photos and diagrams, forest and stream management techniques to control erosion and reduce sediment production.
- 4) Successful collaboration with Towns of Plymouth, Reading, VFPR, VFW and VTDEC to reduce sedimentation in the Black River, Echo Lake, Round Pond and Lake Rescue. This grant inaugurates Phase II of Lakes Restoration: projects on the Black River, beyond our immediate shores.

In signing this application, I affirm that I understand the insurance requirements for grant recipients and that the applicant has the required insurance or will purchase it if awarded a grant.

Authorized Signature

Date

Mary Rita Batesole, President, Lake Rescue Association

Type or print name & title

Return to: Vermont Watershed Grants (VSAC), Vermont Agency of Natural Resources, Department of Fish & Wildlife, Building 10 South, 103 South Main Street, Waterbury, VT 05671-0401.

Project Year 2012 Watershed Grant Proposed Budget

Estimated project budget

Please fill out the budget table below. Expense/Items may include costs for items such as: administration, design, labor, purchasing of materials, equipment rental, and printing. Be specific as the information provided will be used to understand how you intend to spend grant funds. Although a local match is not required, by including “in-kind” expenses or cash contributions on the table below, the Review Committee can evaluate the cost-effectiveness and community support of your project. A budget table is provided below.

| Expense/Item | Grant request | Local (cash & in-kind) | Other non-local sources | Total Cost |
|---|-------------------------------------|----------------------------|-------------------------------|-------------------------|
| Administrative Overhead Water Quality committee research, grant writing, coordination , oversight. lay monitoring | \$ 1,000 | \$ 2,000 | \$ | \$3,000 |
| Direct labor: meetings, field assessment, project design/budgets | \$7,800.00 | \$ 2,240 | \$ 1,000 (VFPR, VFW, VDEC) | \$ 11,040 |
| Purchased Materials and Services Gas; travel time “Additional insured” insurance | \$572 \$200 | \$ | \$ | \$ 772 |
| Map, Plan or Publication Costs Brochure design, printing | Printing: \$1,000 Design \$1,500 | \$ 320 | \$ | \$ 2,820 |
| Other Costs Copying misc materials Website: fee/manage phone | \$ 300 \$ 300 | \$ 100 \$ 200 \$ 100 | \$ | \$400 \$500 \$100 |
| TOTALS | \$ 12,672 | \$4,960 | \$ 1,000 | \$ 18,632 |

(“Local,” “Other non-local” and “grant request” columns should add up to “total cost” figures.)

Grant Request: \$12,672 Total Cost of Project: \$ 18,632

Figure 1. Round Pond (foreground) and Lake Rescue in the days following Tropical Storm Irene. These instream lakes on the Black River continue to run turbid, due to ongoing channel work along upstream reaches and tributaries in the town of Plymouth.



Figure 2.

