

Part A
Annual Priority Grant Application Summary

Project Name: Continuation of the multi-year Eurasian Watermilfoil (*Myriophyllum spicatum*) control project on Lake Colby.

Applicant: Lake Colby Association (see www.lakecolby.org and www.lcbp.org/watersheds/lcolby.htm). Fed ID 75-3074896; DLN: 102016009; APA Permit 2002-71

Project category: Annual Priority Grant

Contact Information: Ernest E. "Lee" Keet, Treasurer, Lake Colby Association, P.O. Box 1199, Saranac Lake, NY 12983, Phone: 518 261-6608, Fax: 208 275-7423, email: Lee@lakecolby.org

Grant request: \$8,200 to finish the project begun in 2002

Organization purpose: The Lake Colby Association (LCA) is a volunteer not-for-profit organization dedicated to water quality and quality of life issues on Lake Colby.

Project Summary: For the past two years the LCA and its partners have made major progress in reducing the impact of Eurasian Watermilfoil on Lake Colby, a key demonstration project for the Adirondacks and beyond. In partnership with the Town of Harrietstown, and with the support of the NYSDEC, LCA was gratified to be the recipient of a \$4,350 LCBP Partnership Grant in 2002 and a continuation Partnership Grant of \$4,500 in 2003. The LCA also received a two-year New York State Aid to Localities Grant. These grants plus significant member support allowed the LCA to begin a multi-year effort in August 2002 to control the heretofore rampant spread of Eurasian Milfoil on the Lake. The LCA used the remnant of the 2003 grant in 2004 along with approximately \$8,000 in local funding to make continuing gains against the milfoil. Unfortunately, funds were exhausted before the full lake had been re-harvested. Nonetheless, the LCA has significant hopes that, with adequate funding, victory - defined as maintainable low levels of infestation - can be achieved in 2005.

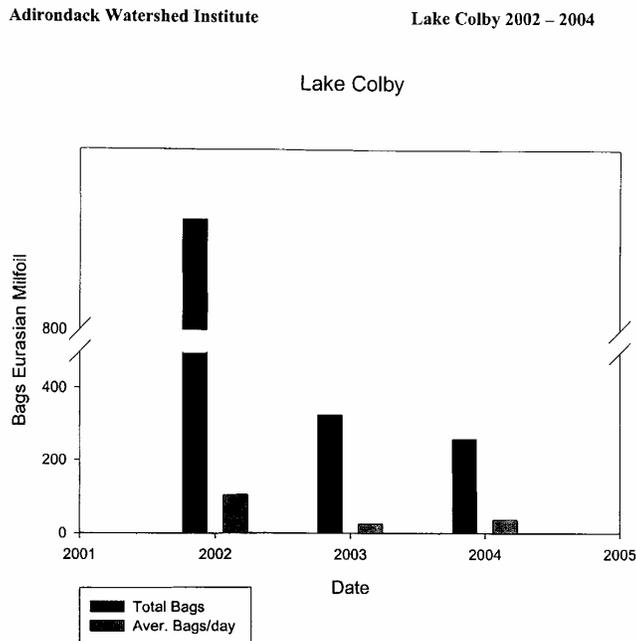
The 2005 plan involves re-setting the benthic barriers twice and a final complete hand harvesting of new plants that have rooted as a result of fragmentation and seeding in 2004. These new plants will be harvested in late June and early July, with a survey of growth later in the summer. Our hope is that by August 2005 the Lake can be held in maintenance status with minimal continuing expenditures to restrain the milfoil.

The LCA is a registered IRS 501(c)4 and New York 102(a)5 tax exempt organization. Our cooperative partnerships with the Town of Harriestown and the D.E.C. will continue during the 2005 season.

Deliverable: With the 2005 effort we hope to be able to definitively demonstrate that mechanical control measures can work to control Eurasian Watermilfoil on lakes of less than 300 acres, at reasonable cost.

Application Questions (Part B)

1. **Need.** The 2005 Lake Colby Milfoil Control Project is hopefully the final stage of a multi-year project begun in 2002. We began the project with member funds in 2002 because our expert advisors (Adirondack Ecologists and the Adirondack Watershed Institute) and the 2001 CSLAP survey told us that if the milfoil spread was not stopped immediately conventional control means would no longer be an option. This dire forecast proved optimistic – the Lake had been nearly taken over by Eurasian Milfoil when our



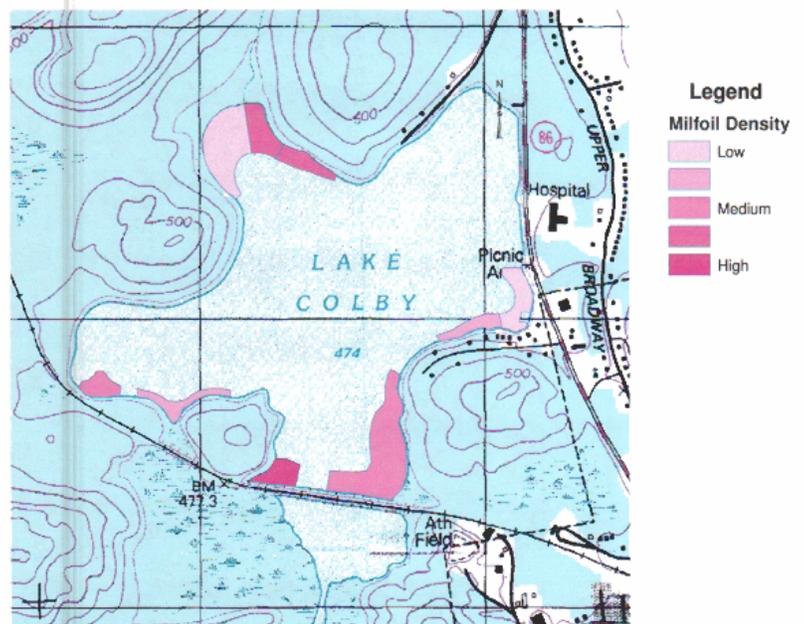
2002 harvesting program began. Despite this, aggressive efforts in 2002 removed over ten tons of milfoil and killed an additional 4,000 square feet through the use of barriers. At the end of 2003 we had reduced the milfoil by an additional five tons. In 2004 we removed three additional tons, mostly from a virulent re-growth in an area picked clean in 2003, a pattern we have seen repetitively. This seems to be the final large bed in the lake, although second picking of beds removed this year or last will be required in 2005. We are clearly gaining on the infestation and expect to be able to bring the milfoil under control with a final year of intensive harvesting and matting. Thereafter we should be able to maintain minimal infestation levels with non-heroic efforts.

Benthic barriers have played a significant role in attacking the dense beds. With the assistance of the Department of Environmental Conservation (D.E.C.) who supplied boats and volunteers in support of LCA volunteers the benthic mats were installed and moved three times in 2002, three times in 2003 and twice in 2004, killing roughly 1200 square feet of dense beds in each application. The entire lake has now been hand-harvested at least once (see www.lakecolby.org for detailed maps, activities, and photos of the project in process). Finishing this project is critical to the future of the Lake.

2. **How our project addresses this need.** Aquatic nuisance control is a priority of the *Opportunities for Action* listed by the LCBP and is also a priority in the Village of Saranac Lake's Waterfront Revitalization master plan, to which the LCA was a contributor. At Lake Colby, and for the LCA it is more than a priority; it is a struggle for the life or death of the Lake. If we can stop and reverse the spread of the milfoil we can save the Lake. Our actions in 2002, 2003 and 2004 have put us back in the game. We now are very sure that we can win. In 2005, again with the help of volunteers, we will (i) place benthic barriers to suppress re-growth in freshly picked areas, and (ii) continue the Paul Smith Watershed Institute hand harvesting program with the help of LCA, DEC, and other local volunteers.

3. **Reasons for project.** Lake Colby is a very special body of water: it is home to the State Environmental Education Camp, Harrietstown LaTour park, and Village of Saranac Lake beach facilities (as well as the Adirondack Medical Center), and provides easy access for quiet enjoyment by the general public. It is also special because it is ideally sized for immediate control by conventional means and has no inlets to re-infect it, i.e., it is a battle we can win. However, Lake Colby is far from unique in its problem with milfoil. Many lakes in the Adirondacks (42 have been identified, and Eurasian water milfoil is in fact in 48 out of 50 states) are facing milfoil infestations. We believe that the right long-term solution is coordination of research and control efforts across and between the states and the federal government most likely resulting in natural biological control mechanisms. The LCA has been actively pursuing such a solution with the USDA, Army Corps of Engineers, and others and will continue to press for coordinated research and action. Other lakes in the LCBP program have requested (and some have received) funding for control of milfoil, and we monitor these closely (e.g., the Lincoln Pond project). However, as noted above, for Lake Colby time is of the essence. In our 2003 application we said “We have no choice other than immediate action, even if it simply gives us the opportunity to continue the battle next year, hopefully with much improved odds and a much lower cost.” We believe we achieved our 2003 and 2004 goals and now want help to finish the job.
4. **Why we are doing the project.** We are a much-watched pioneer in the effort to control Eurasian Watermilfoil without the use of chemicals or non-native pathogens. Most of our shoreowners use the lake for drinking water. The three-year model for our project has been posted on our web site (www.lakecolby.org) and has served as a model for other, even much larger projects (e.g., the \$1.5 million Upper Saranac Lake project) who have used our experiences to size and staff their own efforts. Unfortunately, unlike some lakes with greater resources, Lake Colby has only 1,200 feet of private shoreline and seven private shoreowners on a lake with over 17,000 feet of total shoreline (most of which is forever wild). The presence of so many public-use facilities on the lake has raised the priority for this project, thus inducing a high level participation from the Town, NYSDEC, and volunteers.
5. **Objectives and tasks.** The adjoining map produced by the Paul Smith’s Watershed Institute shows the remaining work to be done. There are two phases to the 2005 project as there were in prior years. The first is the placement of semi-porous benthic mats secured by steel bars over the densest beds of milfoil. One dense bed was picked and matted in 2004: we ran out of money before we could revisit all of the sites picked clean in 2003. The major effort in 2005 will involve using (licensed and experienced) volunteer and professional divers to hand harvest the remaining milfoil. This work

Distribution of EWM in Lake Colby - July 2004



will be limited to funds available, but if fully funded we believe this will be the last year requiring heroic efforts. Our 2005 need is for a total of roughly \$12,800 in cash plus significant in-kind contributions. Without the requested LCBP grant we will be limited to an incomplete picking schedule and will be, at best, able to afford three days of hand-harvesting by a team of five versus the seven days projected as necessary. With the LCBP grant we will be able to re-swim and pick the entire lake one final time before entering maintenance mode.

6. **Methods.** The methods are those used in 2002, 2003 and 2004 which have proven effective. We will engage the same volunteer corps from the community, the D.E.C., and the LCA members. All permits (Town, County, APA) were obtained for a multi-year project beginning in 2002.
7. **Staffing, etc.** On-shore re-assembly of benthic barriers if required, boat handling, and some of the placement will be done by D.E.C. and LCA volunteers. The benthic barriers will be moved twice and then removed by the same team. To the extent possible all non-specialist work will be done by volunteers, including LCA members. All of the hand harvesting will be sub-contracted to the Paul Smith's Watershed Institute team who now know the lake well and who have considerable expertise in milfoil control.
8. **Tangible products.** We seek to reduce milfoil in Lake Colby to levels that can be controlled by minimal annual effort and expense. We expect to be able to "declare victory" in 2005 if we receive all of the necessary funding and support we are seeking. Secondly, we are creating a trained corps of volunteers who can both monitor progress and harvest milfoil in future seasons. In the end, protection of the Lake as a public resource is the single most important reason for continuing this project.

Budget (Part C)

Project Expense 2005	Benthic Barrier and Hand Harvesting Project				
DIRECT Costs:	Hours	Rate	LCBP Grant Funding	Grantee Funds	Total
<i>Contractual Services</i>			\$ 8,200	\$ 4,010	\$ 12,210
<i>Supplies/Materials</i>	0	\$ -	\$ -	\$ -	\$ -
<i>Equipment</i>	0	\$ -	\$ -	\$ -	\$ -
<i>Travel & support</i>			\$ -	\$ -	\$ -
<i>Subtotal: Direct Costs</i>			\$ 8,200	\$ 4,010	\$ 12,210
INDIRECT Costs:	0	\$ -	\$ -	\$ 1,150	\$ 1,150
Total Project Costs			\$ 8,200	\$ 5,160	\$ 13,360

Notes:

1. Contract Dive Coordinator & staff are under contract with Paul Smiths' Watershed Institute, the same team employed in 2002-4. We expect to have additional volunteer divers who will work under the master diver's supervision, as in past years.
2. Indirect costs include 50 hours of volunteer work at a deemed cost of \$10/hour to remove and reinstall the benthic barriers twice and 40 hours of volunteer labor to surface assist the Paul Smith's dive team, also at \$10/hour. The balance of the indirect cost is \$250 of legal expense to administer the project and grants.

Letters of Support (Part D)

As this is a multi-year project that has already received LCBP support and which continues to be a community-wide effort, we enclose copies of the original and recently received project letters of support. Each of these organizations can be contacted for references on the status of the project and the need for its continuation.