

Windham Watershed Protection Grant 2016

Final Report for Collins Pond

Applicant Contact Information:

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10/25/16

Project Detail:

Since 2007 the Collins Pond Improvement Association has been working to reduce the infestation of invasive milfoil in Collins Pond. The goal is to eradicate this plant, though at this time we are just trying to get it under control to the point where our efforts can be reduced to the annual removal of a small amount of remaining plants. We continue to use benthic mats in a few areas but plan to eliminate the larger mats by next year. Smaller mats are in use in scattered areas where lake front owners have chosen to reduce the amount of plants in swimming areas. The most productive method to mitigate this invasive plant continues to be the Diver Assisted Suction Harvester (DASH) boats. A diver weeds the plants from the bottom of the lake, trying to get the entire root ball removed, and feeds this into a large suction hose. The hose pulls the plant up onto the boat where it can be collected and eventually disposed of for composting. Employing only volunteer crews and divers on the Collins Pond Improvement Association DASH boat, we use onion bags to collect the plant. Starting in 2014 we additionally hired a local company which has greatly increased the volume of plants we are able to remove. The private contractor, New England Milfoil from Brownfield Maine, uses a slightly different collection technique to loosely collect the plants. They then transfer the plants to a dump trailer. Both the loose plants in the dump trailer and the bagged plants from our boat are delivered to the Pearson's Town Farm at St. Joseph's College in Standish for composting. The Maine DEP Plant Control grant program provides most of the funding to support our efforts. The number of lakes with infestations continues to grow. Because of this there was less money available for each lake through the DEP program this year. We have had to use more of our own funding to accomplish our goal.

Please attach a project budget spreadsheet including all income and expenses including material, equipment, labor, and indirect costs (e.g., insurance).

Expenses:

	<u>Estimated</u>	<u>Actual</u>
Marine Liability/Officers & Directors insurance	\$2331	\$ 2350.00
DASH Boat costs:		
Onion bags, Boat/Motor maintenance/winterization,		
Gas/Oil/boat supplies (gloves/rakes, etc),		
DEP Permit-By-Rule, air test kit for diver air,	\$2500	\$ 1371.57
New England Milfoil-private contractor (8 days)	\$10600	\$ 10600.00

Sources of Income:

	<u>Estimated</u>	<u>Actual</u>
Maine D.E.P.-Plant Control Grant	\$ 12000	\$ 9866.00
Windham Watershed Protection grant	\$ 1500	\$ 1000.00
Collins Pond Improvement Association	\$ 0	\$ 3455.57
Total Project Cost	\$13500	\$14321.57

Value of Volunteer Match

The State of Maine grant program established a dollar value to be used for volunteer hours donated to accomplish our project. Sixteen volunteers worked as boat captains, boat staff, surface support and divers. **The total value of their volunteer labor was calculated at \$3363.04.** This year, for the first time, the DEP grant program required a CASH match equaling 20% of the DEP grant. Previously the volunteer match could count toward this 20% requirement.

Accomplishments for the 2016 season:

We were able to get three surveys done at the beginning, middle and end of the season. The benthic mats were moved once. Additionally we retired two of the 5 long mats (10 x 100 foot). These long mats have proved to be more difficult to relocate than we originally anticipated using the DASH boat.

We hired New England Milfoil from Brownfield Maine for the third year. They use a crew of three which allows them a diver, a boat tender and a third person who is required to be available as an emergency diver. The Maine DEP requires, for the first time this year, that any paid boat crew follow the Federal OSHA dive rules. These rules are proving to be onerous and expensive. One of the requirements is that an additional person must be available on the boat as an emergency diver anytime a diver is in the water. This individual cannot be the boat tender operating the pump. Also you have to be in voice communication with the diver requiring the use of a special mask and radio transmitter. The OSHA dive rules do not discriminate whether the work area is deep in the ocean or in 10 feet of lake water. Despite these additional requirements, New England Milfoil kept their price the same as the previous year. Some of their eight work days we were able to have a volunteer on the surface to help gather plants that floated away. Periodically the diver surfaced and the collected plants were transferred to a rented dump trailer on shore. At the end of each work day the trailer was taken to the Pearson's Town Farm where the farm manager composts the plants for use in this organic farm. Due to the drought conditions this year, the milfoil plants were sometimes placed directly on the rows of growing produce. The wet milfoil plants added their own moisture to the growing produce and helped to retain the moisture added from irrigation. Other lake groups have started to deliver milfoil for composting to this farm.

The Collins Pond DASH boat worked in the cove marked location #6 on the lake map. We had five work days this summer, down from the usual 12, due to weather and lack of volunteer crews. A survey at the end of the season showed that a large area in the center of the cove was clear of all but scattered plants while the surrounding areas not worked were still dense with milfoil.

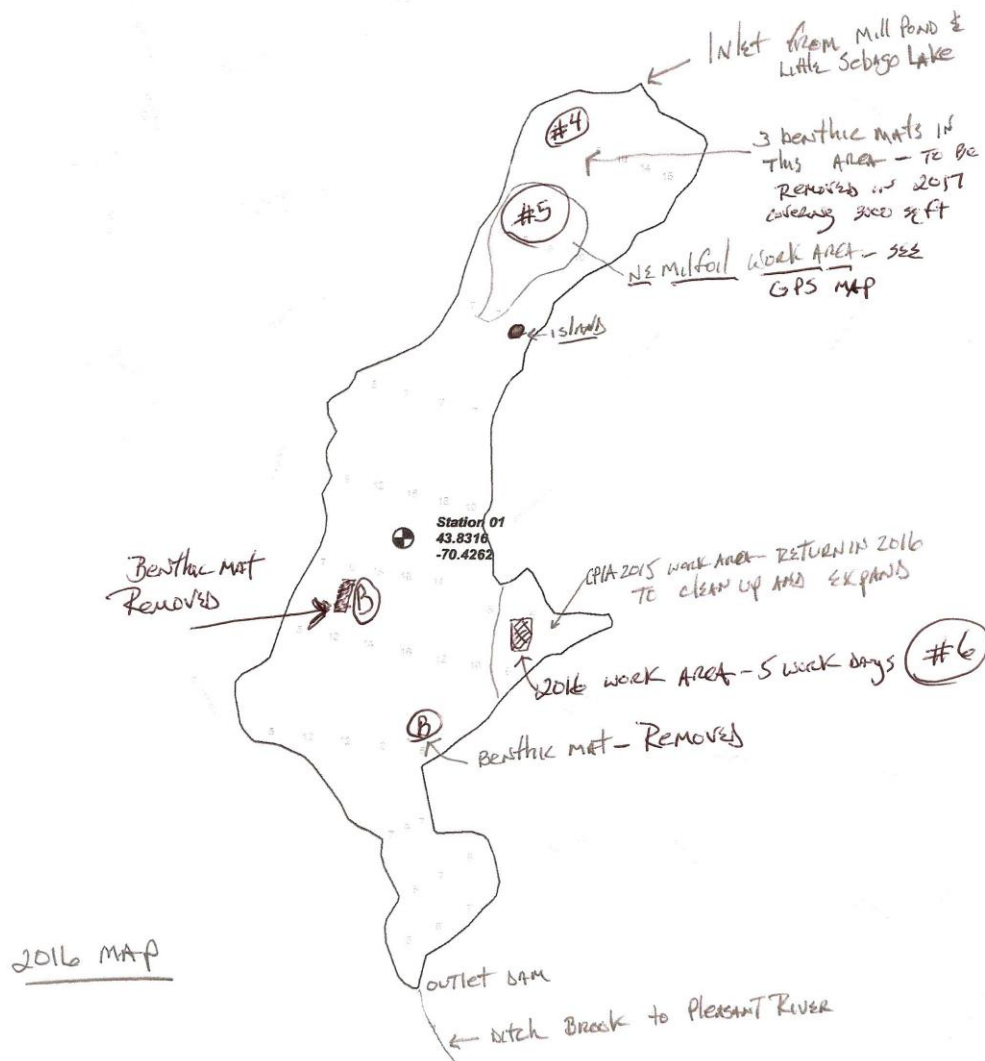
A survey of the New England Milfoil work area, #5 on the lake map, was very clear of plants with mostly just scattered ones remaining and a clear muddy lake bottom. The surrounding areas have both dense milfoil and dense areas of natural grasses with some naturally clear areas. We hope to have NE Milfoil continue working in this area again next season on a northward trek until they reach the inlet. This is a hard area to work in due to the abundance of sawdust and woodchips which create large root balls. These tend to clog the hose frequently. Also the shallow depth means that the plants are near or at the surface. Because of this, the foot valve screen becomes clogged frequently requiring a stoppage to clean it. Despite these problems, NE Milfoil was able to clear a large area during their time on the lake.

The total number of gallons removed this year was over 14624. This is about 20% less than last year partly due to the new OSHA rules and partly due to our decreasing volunteer crew availability.

With continued financial support, we plan to bring in this same contractor next summer. We realize that without the same volunteer support of previous years, we must focus more effort on fund raising to hire private contractors. This year we are updating our Bylaws and plan to file an application to become a 501(c)3 organization. We hope this will encourage more financial support from our members and from outside grant giving organizations. If we allow this infestation of invasive milfoil to continue to get out of control it will eventually affect the property values and tax revenue for this area. Additionally the plants will likely continue to wash downstream to the Pleasant and Presumpscot rivers becoming an environmental and financial problem for the Town.

We continue to participate in the Maine Milfoil Summit held annually at the U. Maine L/A campus where many organizations share ideas and accomplishments. Additionally we participate in discussions organized by Lakes Environmental Association in Bridgton around invasive plant control. Little Sebago Lake Association continues to assist us in obtaining our onion bags at a group buying price.

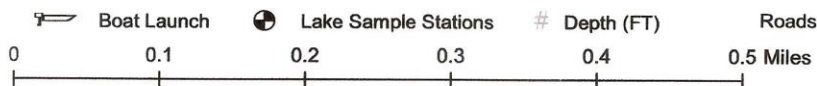
Map showing the #5 NE Milfoil work area and #6 Collins Pond Improvement Association work area. Also the benthic mats are located in area #4. The mats removed are noted with the letter B.



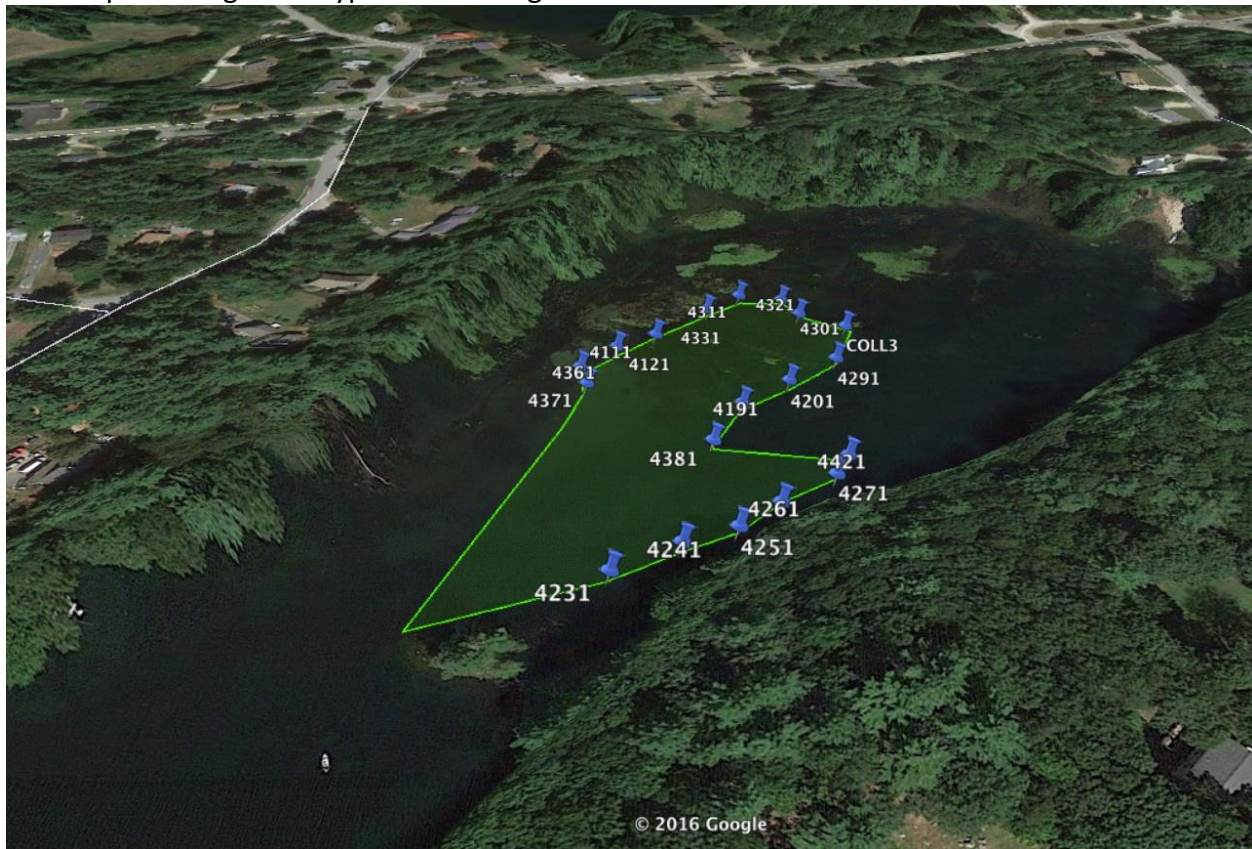
Collins Pond

MIDAS # 3728

Windham, Cumberland Co. - Delorme Page 5 - 43 acres



GPS map showing the waypoints marking the NE Milfoil work areas.



This map was provided to us by New England Milfoil using GPS coordinates to show the areas they worked. GPS is useful when going back the next year to inspect the areas worked. We also mark areas with small buoys to help find work areas.