

AGENDA ITEM #: 21-12 & 21-13
COUNCIL MTG. OF: January 19, 2021
FROM: Dave Caron, Town Administrator
OFFERED BY: Mike Fowler, Director Public Works
PREPARED BY: Craig Durrett, Environmental Coordinator
SUBJECT: Milfoil Treatment at Beaver Lake

INTRODUCTION:

To seek authorization to continue working with the Beaver Lake Improvement Association to provide milfoil treatment at Beaver Lake.

TOWN ADMINISTRATOR COMMENTS

Please see comments within this staff report.

BACKGROUND

Milfoil is an invasive species which has infiltrated Beaver Lake. FY 20 was the first year in which the Town Council voted to appropriate funds to assist with the control and future eradication of the plants. Before that date, BLIA exclusively assumed this responsibility, with grant assistance from the State Department of Environmental Services. The Council, recognizing both the financial burden upon a private organization preserving a public body of water, and the potential adverse impact upon property values should milfoil not be controlled, earmarked approximately \$6,000 in FY 22.

DISCUSSION

The Beaver Lake Improvement Association Board of Directors met and agreed to set aside up to \$3,000 toward the Milfoil eradication. For the herbicide treatment the cost to the Town would be less than previous year at \$5960 versus at \$6,257 and \$6,585 in 2020 and 2019, respectively.

In FY 20 a singular approach was used which focused on an herbicide treatment; As in FY 21, NHDES has requested bids for divers in FY22 as well. Although the Town and BLIA will have discussion on the selected methods and ultimate cost for the program, NHDES stipulates that the entire grant needs to be accepted if the Town decides on one or both approaches.

Listed below are statistics documenting BLIA's work to mitigate milfoil in the lake:

	2020	2019	2018
Diver Hours	69	75	65
Volunteer Hours (Diver and Spotter Time)	137	147	127
Gallons of Milfoil Removed	147	203	173
Total Plants Removed	1442	2046	No Count

As the numbers reflect, the BLIA still spent more time in and on the water in 2020 removing more milfoil than the first year in 2018 but slightly less time than in 2019. An important difference between 2019 and 2020 is that in 2020 BLIA purchased and began using sea scooters to travel underwater at much faster speeds. With the use of this type of equipment BLIA covered a tremendous amount of acreage in a fraction of the time. Prior to 2019 BLIA divers moved through the water with only manpower via scuba diving fins which was much slower. While the dive hours were 8% lower than the previous year, it is estimated that they likely covered the lake bottom 50-100% more in 2020 versus 2019. In past years, divers could only go to an area 2-3 times, whereas in 2020 they were able to hit the same areas 4-6 times because they were moving through the water at greater speeds.

While a reduction from 2019 to 2020 is encouraging, we are hopeful that the 2021 numbers continue to see a decline. At this point, BLIA has not identified any more “hot spots” in the lake and by the end of the season they were only finding random plants as they used the scooters to go deeper into 14-18’ depths. The plants primarily grow in the 6-8’ depths which is optimal depth with the right amount of sunlight penetration for the plants to grow. BLIA concentrated on that depth for the past 3 years and ventured out deeper as they exhausted the shallower depths. At 16’, the light penetration diminishes significantly restricting aquatic plant growth at deeper depths. We hope to see the volume of milfoil removed exhibits a decreasing trend which would suggest that we are ahead of the growth.

FISCAL IMPACT:

Currently, the Town budgets \$6,000 as an approximate 40% match for the herbicide treatment; this year, the maximum NHDES grant is \$5,974, which is divided between the Herbicide Treatment (\$5,074) and diver costs (\$900). Should the Town and BLIA proceed with both options, a discussion will ensue regarding the assumption of the additional local share of the Diver program (\$3,000).

RECOMMENDED ACTION BY COUNCIL

Action #1 – Support Resolution #2021-009 which will allow the Town to receive up to \$5,974 in NHDES Grant Funds;

Action #2 – Support Resolution #2021-010 which will allow the Town to receive up to \$3,000 in funds from Beaver Lake Improvement Association.

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