



## STAFF REPORT

AGENDA ITEM #: 22-10 & 22-11  
COUNCIL MTG. OF: January 18, 2022  
FROM: Dave Caron, Town Administrator  
OFFERED BY: Mike Fowler, Director Public Works  
PREPARED BY: Craig Durrett, Environmental Coordinator  
SUBJECT: 2022 Milfoil Treatment at Beaver Lake

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### 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 in 2021. The BLIA estimated a local match of up to \$3000 again for 2022 in the grant application. For the herbicide treatment the cost to the Town would be less than previous years at \$4,498 versus \$5960 to \$6,585 in 2021 through 2019, respectively.

In FY 20 a singular approach was used which focused on an herbicide treatment; As in FY 20, bids were only requested for herbicide treatment.

Listed below are statistics documenting BLIA's work to mitigate milfoil in the lake through 2020:

	<b>2020</b>	<b>2019</b>	<b>2018</b>
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. BLIA divers continued their removal efforts in 2021, however that data for 2021 was not reported yet.

While a reduction from 2019 to 2020 is encouraging, we are hopeful that the 2021 and 2022 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 \$7,498, which is allotted entirely to the Herbicide Treatment.

RECOMMENDED ACTION BY COUNCIL

Action #1 – Support Resolution #2022-007 which will allow the Town to receive up to \$7,498 in NHDES Grant Funds;

Action #2 – Support Resolution #2022-008 which will allow the Town to receive up to \$3,000 in funds from Beaver Lake Improvement Association.

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