

REPORT
Facts and Recommendations concerning Locke Lake Complaints at
June 29, 2021 Selectmen Meeting, Town of Barnstead, NH

Office of the Selectmen
Town of Barnstead
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Barnstead Milfoil Control Committee

Complaint:

1. Locke Lake cove fed by Half Moon Lake is 'loaded with milfoil'.
 - a. Implication is that Half Moon is feeding milfoil into Locke Lake.
 - b. East end of Locke Lake has new milfoil growing.
2. Water temperature played a part in reducing new milfoil growth.
3. Locke Lake's 'burden' must deal with Solitude directly and pay without any help from Barnstead.
4. Milfoil treatment by Solitude in 2020 was less than contracted amount.
 - a. Pictures provided by Ed Neister showed the area to be treated.
 - b. This resulted in Locke Lake Colony not receiving full 'reimbursement' amount.

Facts:

The statements made during the meeting along with the support of invoices and statements by all involved with this treatment in 2020 are compiled and the facts are detailed as follows:

1. There have been no sightings of floating milfoil stalks in Half Moon Lake the last two years. This indicates that Half Moon Lake is not feeding milfoil plants into Locke Lake. Half Moon was surveyed in previous milfoil locations in June 2021 and found to be clear of milfoil at depths less than 10 feet. Deeper areas will be surveyed later in the summer of 2021, but milfoil generally does not grow at depths greater than 11 feet in Barnstead waters.
 - a. The milfoil growing in the cove is from seed dropped by plants in previous years. Amy P. Smagula, Limnologist/Exotic Species Program Coordinator Watershed Management Bureau Water Division, NH Department of Environmental Services confirmed that herbicides and particularly ProcellaCOR does not affect seeds. It can take up to 3 years for these seeds to germinate confirming that constant vigilance and surveying is required each year.
 - b. The East end of Locke Lake has been saturated with milfoil for many years. It will require constant vigilance to search for new shoots that should be pulled by certified WCD divers as soon as they are spotted. Milfoil plants break off shoots that will start new plants when they sink to the lake floor. The plants also produce stolons that will start new plant clusters if left to grow. One acre of milfoil can produce over 50,000 seeds if it is permitted to flower.
 - c. Locke Lake is predominantly oriented as an East-West water body. The predominant winds in this area flow from West to East. Since water can not pile up, a wind from the West will create a counter current 1 to 2 feet below the water surface that flows in the opposite direction. This is the most likely cause for milfoil being located in the inlet channel since Half Moon Lake has never had many milfoil plants in the lake, most

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floating segments were generally removed by residents, and the East end of Locke Lake has been saturated with milfoil plants for many years. Yellow dash is the treatment area in 2019, blue is the survey prior to treatment indicating large clumps of milfoil, red dash shows the area killed by the ProcettaCOR treatment, green is the night survey where no milfoil plants were observed. Red is 2021 new growth. The herbicide killed 3 times more area than was treated.

2. The delay in locating milfoil is most likely due to new plant development that can take several months or longer to develop and produce spouts large enough to be seen by people from the surface. Water temperature only affects plant growth when it is 50 degrees or less. Most water temperatures exceed 50 degrees by late April.
3. Amy Smagula states:

“It is our policy not to provide funds to waterbodies with a gated access controlled by an association or other entity, as it restricts public access to those waterbodies. Further, Locke Lake is a man-made system and not one routinely monitored by the state, which puts the waterbody in a category that we also do not fund. We have not funded their milfoil control efforts in the past, and there is no plan to do so in the future.

Management costs for that waterbody are incurred locally, either by the colony or the town. This is not new. I understand that the town of Barnstead allocates funding for milfoil management in town waterbodies, but it is incumbent on the town to set an agreement on cost share among waterbodies in town, the state does not direct the town in where to find local funding for projects, or how to divvy up that funding.

Beyond this, I have no other information to share on the Locke Lake project, other than what I indicated before....I am glad to survey and make recommendations for management, but any local decision and support for management needs to be derived locally, and the colony contracts directly with Solitude or other contractor to do work.

Further, we do not make retroactive agreements with entities for funds that were expended in the past fiscal years, even if they are eligible. All our funds are granted out each year, in advance of projects taking place, so we rarely have any leftover funds to delve into.

There are a number of waterbodies in the same situation as Locke Lake, and they either fund projects locally or do not initiate projects.”

4. The Solitude contract states under Task 2: “..should less acreage require treatment ... the cost will be adjusted accordingly; please note that less acreage may require higher application rate”. The billings submitted to Locke Lake and copied to the Town of Barnstead show the treatment area was adjusted to 3.9 acres and billed at \$6366. The survey, State required sampling and report charges remained the same and totaled \$4010. Thus, the non-treatment charges represent 39% of the new adjusted charges for 3.9 acre treatment. This makes the use of divers to remove new plants of better value and should be the first choice after any herbicide treatment. The Locke Lake diver charge for 2020 was \$2887.50.

Pete Beisler-Solitude herbicide applicator stated: “You were correct about the billing and that we could not treat where there was no milfoil. I surveyed prior to treatment (the day of), Amy surveyed, and you surveyed. I only billed them for the treatment performed.”

Enclosed are two maps showing the proposed and actual treatment areas. Note that to date, the actual milfoil locations are in the entrance cove and the East end of Locke Lake and not the West side as suggested in the meeting.

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- a. The pictures supplied by Ed Neister were made as estimated locations to be checked during the survey done in June 2020. During the survey, no milfoil was located in these areas and was found in and near the end of the cove where the boat dock is located. These maps were incorrectly presented as milfoil locations known by Ed.
- b. Locke Lake did not receive any funding for milfoil treatment for 2021 for several reasons. The reduced treatment area for 2020 had nothing to do with Barnstead not providing funding to Locke Lake.
 - i. The Barnstead Milfoil Control Committee was not notified, nor did they participate in the 2020 treatment preparation and sight identification. Because of COVID transmission, no monthly meetings were held at the town library and there was no recorded contact by anyone from Locke Lake that a treatment was being proposed or done. A correct assessment of potential plant growth would have been in the inlet cove and the East end of Locke Lake and not along the West shoreline.
 - ii. Steve Jonasch emailed a question about funding for 2020. Ed Neister, Chairman of the BMCC responded with the following explanation:

Dec 1, 2020 at 8:33 PM <Ed@far-uv.com> wrote:

Steve, my statements to the Selectmen included Suncook Lake as well. Both Suncook Upper and Lower Lakes as well as Locke Lake have little or no milfoil, but the Suncook River is saturated. We as a committee have held off treating the S River so that both lake systems that are upstream can be treated first. Now we need to have both Lake Committees put in the time to find new plants and use divers to remove the small number that may grow from seed for the next three years. The Town will provide the light bar survey of Locke Lake later this summer 2021 so we can determine where and how much milfoil is or is not present.... that is the Town's expense. Suncook Lake has that ability, and they will be doing that many times this 2021 summer to ensure milfoil is removed when found.

We have always represented to the town that we will be able to reduce the milfoil expense as we become more successful in eradicating it. What I need from you is how much it will cost to remove what is left from the tributary. If you need to do a treatment, then from my notes that should cost about \$2500-\$3000. However, divers may be more effective. And instead of Locke Lake Community having to plan and allocate \$20,000 for milfoil, I would think it is fair that the Town split the cost and figure \$3000 for a treatment and \$3000 for divers. If no treatment is needed, then the Town doesn't pay any to Locke Lake. That is a savings for the Town and a huge savings for the Locke Lake community. It also shows the Town that the milfoil bill is being reduced; no money is being paid to Suncook Lake Association this 2021 year so with Locke Lake's cost, it represents a savings of \$8000.

I was planning on having a meeting in November, but the COVID crisis stopped that per a vote of the committee. We do need to have this conversation, but the year and time is moving faster than I can get jobs done. I just completed the treatment plan for the S-River on 11/25, the day it was due. We need to stay positive with the Town to get money to do the treatments, but we also need to be responsive to the fact it is not our money.

So, make a suggestion on how we approach the funding articles for the Town of Barnstead for this spring. Then let's see what the Selectmen think. Unfortunately, we have to do this by email, but that is the best we have right now. (No suggestion was received.)

- iii. COVID affects the Town Budget approval: The Selectmen and the Budget Committee approved the BMCC request for \$20,000 along with the funding raised in 2019 for the treatment of the Suncook River with the new herbicide ProcellaCOR. Neither committee approved the request for \$10,000 to operate the DASH on the S-River. The Town approved the funding article for the treatment but did not approve the funding for the DASH operation. This reduced the manpower available to do site surveys with divers to determine

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the extent of the ProcellaCOR treatment on the Suncook River during the 2021 summer.

Recommendations:

The State Limnologist Amy Smagula is correct in stating that Barnstead needs to have a policy in place with all Town lake associations on how milfoil will be handled and how any financial assistance will be made. Department of Agriculture (DOA) decides whether to grant an herbicide treatment by the data that is presented. Paramount to this decision is the need for DOA to believe that the projected treatment by any lake association has experienced people who have demonstrated appropriate knowledge to qualify the application as valid. The application is also backed up by the assessment of DES as well as the herbicide treatment company, Solitude.

The Barnstead Milfoil Control Committee was formed to provide this interface, knowledge, and expertise that is known by DOA, DES and Solitude personnel. The yearly schedule for meetings is from September to May on the second Saturday of the month beginning at 9 am at the Oscar Foss Memorial Library in Center Barnstead.

Because of the current complaint, it is recommended that BMCC will, with the approval of the Selectmen, adopt the following conditions before any water milfoil funding support by the Town of Barnstead to any town lake association can be presented to the Town as a warrant article:

1. Any lake association must have formed a committee of more than 3 people to provide the oversight, the need, and the map locations to the BMCC for treatment (or diver) consideration.
2. Since the Town Budget must be determined prior to December 1 of each year, any lake association must have presented their case to the BMCC and received approval by the first meeting in December for the next summer treatment.
3. The BMCC is able to apply for grant funding by DES for all public water bodies in Barnstead but monies from the Town to Locke Lake Colony LLC for milfoil treatment in their water body will have to continue in the form of a warrant article at Town Meeting. The BMCC can also provide support to Locke Lake by providing night light bar surveying to assist in locating plants and by providing WCD's to assist in meeting any plant removal schedule before cold weather occurs in the fall. In all cases, the Locke Lake Health Committee must contract the herbicide company directly using recommendations made by the BMCC to be paid by Locke Lake with no financial involvement by the Town of Barnstead.
4. No funding will be requested by the BMCC at the annual Town meeting for any lake association assistance if conditions 1 & 2 are not met.



S. Edward Neister
Chair – BMCC
July 18, 2021