



Lake Health and Fish Habitat Committee Report
Paul McDaniel, Committee Chairman
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Written and submitted by: Paul McDaniel

Date: 0/417/2021

Charter: To oversee and monitor lake conditions and create a healthy fish habitat for recreational purposes.

Committee Members: Paul McDaniel as Chairman, Louis Santoriello, Paul Flanagan, Jeff Harbert, Laura Pool, Jessie Logero, Roy McCuthon, Glenn Christensen, Mike Oatley, Anita Francis, and Jameson Smith.

Meetings: A hybrid Zoom and face to face meeting is scheduled for April 25th. An earlier attempt was made but could not get a quorum committed to attend. I have continued to speak as often as possible about specific projects via one on one conversations and phone calls.

Project Updates:

- Fishing and Lake Rules . Last season we were flexible based on Water temperature and related lake readings and will be again if necessary. We did not have the influx of trespassers and poachers we expected. This is an indication the signage had some effect, but is also likely to be because of the pandemic as well as the drought this summer. We lost fish to heat and related water conditions in Mirror and Willow Lakes. Sadly but not surprisingly there were more issues with rules with Big Elk Residents than outsiders. We will be exploring ways to successfully ask members to be responsible for their actions in a manner befitting responsible members of Big Elk Meadows.
- Algae Blooms: We have always had challenges with algae, especially later in the summer. 2020 was one of the worst years for Algae due to heat and no new moisture until fall. We have enough Biolyneus for one more treatment as soon as weather permits, Algae control has been and will continue to be an issue. We are implementing a new strategy comprised of a three way approach. We will be using Aquatic Associates, a well known Lake Management Company as well as our current fish supplier. 1) We will continue testing and get a more comprehensive lab analysis. 2) We are going to attack the toxic and phosphorus producing sludge that varies from a few inches to at least two in depth on our lake floors with Microbial treatments targeted at the specific forms of problematic microbial species. 3) Aggressively attack Algae Blooms as they are occurring as well as using Microbial treatments targeted at the specific blooms we are experiencing.
- Aeration: Aeration continues to be a top priority. We have budgeted to install a modern and more efficient type Aeration System for Meadow Lake. We are attempting to coordinate with Operations and Water to update the Aeration System in Mirror Lake, which is critical as it is part of our fresh water supply/system. We have the repair parts to get the broken pump in Rainbow Lake System back up and running. If possible and/or necessary will upgrade aeration heads with low cost Nano Bubble heads which efficiently produce more bubbles than existing heads and do not require maintenance as well as have long term warranty.
- Weed Mowing: No weed mowing was done in 2020 and probably not in 2021 as well. We are adopting a more targeted and aggressive weed management as opposed to weed removal. As well, the mower will require extensive repair as well as lots of volunteer hours to run it even if it were working.
- Fishing Club: No further action has been taken at this time. Given the importance expressed by the membership for Lake Health and Fishing, we believe it to be better to not involve an outside fishing club at this time.
- Lake Readings: We continued regular lake readings until ice-over. The cooler fall weather brought the readings back toward where they need to be. The use of Aquatics Associates will reduce the total number of factors we will need to test for but Dissolved Oxygen and PH we will need to test for as these are very active parameters based on weather conditions.

- Funding: We believe our budget has been approved and are making preparations to proceed with the plan as written based on weather conditions.
- Team Building with Other Relevant and Interdependent Committees: We have started using this opportunity to interact and leverage cooperation with the Long Term Planning committees as hoped and will work toward mutually beneficial projects, strategies, and activities in 2021. We need to interface more with Water, which I have high confidence of accomplishing, to coordinate our efforts for compliance to our water decree with treatments and transfer of water through our Lake Ecosystem.

Activities:

- Development of supplying some cooler water from wells to help keep water temps down in the deeper sections of the lakes. Willow well house has been cleaned out and the interior painted for use next summer. We need to get Willow Well House electrical capabilities up to snuff and have asked for quotes, none of which have been forthcoming so we are going to take a more aggressive approach to secure competitive bids. We are looking at other wells which may be helpful as well. Meadow well is refilling slowly but slowly. The recent and continuing moisture is being helpful in this area..
- We have developed a stronger relationship with our fish supplier for more precision stocking rates, weed management, Algae Blooms and water clarification as well as improving our aeration systems, We have been asked many times to re-introduce Brown Trout into our Lake Ecosystem and have found a viable way to achieve this. This will be implemented in the fall.
- Continue to form strategic communications and activities with other committees for mutual benefit. This is a fairly slow process but progress is being made
- Fish Stocking, weather permitting, is scheduled for April 18th.