

HLA Lake Committee Annual Report 2023

Lake Committee Members:

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Accomplishment Summary:

1. Completed water testing per bylaw recommendations
2. **Aquatic Ecosystem Research (AER)**
 - Bathymetric mapping delivered
 - Sediment and lake report delivered
3. Lake blankets installed and removed
4. Beach signs have been received, installation is in work
5. Beach entrance posts that hold the cabling have been painted for safety/visibility
6. New landscape company has been hired
7. Lower the Lake: Pond and Lake Connection has made technical advice on depth of lowered lake. The depth gauge installed at the dam as well as the bathymetric mapping that was recently completed shall help this determination.
8. During the draw down a plan to reclaim the sand at the beaches was completed
9. Beaches cleaned, and sand recovered
10. Proposed Lake Committee budget

AER Report Summary Recommendations

Water Quality:

- Develop a standardized water quality and bacteria monitoring program and memorialize these protocols in a Quality Assurance Project Plan (QAPP) or similar document;
- As financial resources allow, incorporate first the critical water quality variables at one or two sites, and several times a season (early season, mid-season, late season);
- Evaluate E. coli testing sites and adjust accordingly. Consider sampling more frequently;
- Compile all existing water quality and waterbody datasets, expand on this compilation with future data;
- Assess trends and variability within future and current datasets.

Plant Management:

- Continue management of aquatic vegetation situated in the central “deep water” basin, as well as high use shoreline areas to maintain recreational access;
- Utilize mechanical methods for removal of plants in shallow areas as possible. Mechanical methods will remove organic material from the waterbody rather than allowing degradation/sedimentation;
- Retain plant assemblages in undeveloped shoreline areas and coves;
- Conduct a waterbody-wide third-party plant survey to assess community health; a horizon of once each decade is recommended;
- Continue with watercraft inspection program to limit the possibility of invasive plant introduction.

Drawdowns:

- Conduct drawdowns of consistent depth and duration;
- Reduce the frequency and duration of drawdowns to “as necessary” to retain shallow water plant species.

Sedimentation & Bathymetry:

- Conduct periodic intensive bathymetric/sediment surveys using comparable methods to the 2022 initiative to assess basin depth. A horizon of once each decade is recommended.
- When conducting catch basin maintenance, monitor and record catch basin sediment accumulation.

Watershed:

- Develop a “LakeSmart” program (i.e. Beseck Lake, Lake Pocotopaug) to educate homeowners on practices to protect the water quality and ecosystem of Hidden Lake;
- Work with shoreline landowners and/or landscaping companies to establish native vegetation buffer zones and gardens on shoreline properties;

- Limit or prohibit use of fertilizers and pesticides by Association homeowners;
- Monitor existing and proposed land use activities in the larger watershed. Communicate concerns or comments to local land use officials