

Lake Massapoag Advisory Committee – Updates - 2018

2018 Overview

Lake levels: On May 15th the lake water level was at 10.5 feet. Significant rainfall and fairly cool temperatures helped maintain the lake level in the Spring and into the Summer. The outflow at the flume house was carefully monitored and controlled on a regular basis by the Town's conservation agent, Greg Meister. As expected, lake levels dropped in August and September. To maintain ecology of the downstream water, the conservation agent attempts to maintain outflow at 1.5 cubic feet per second and above.

Weeds: Annual professionally performed invasive weed species surveys are performed. This year, the survey was conducted on August 24. As anticipated, the south cove of Lake Massapoag was found to have persistent Fanwort, an invasive species. In addition, dense growth of Fanwort was found in the body of water (the lagoon) behind the Sharon Community Center. The Committee and a professional lake management consulting company (SOLitude Lake Management) believe that the Fanwort in the lagoon is flowing into the lake proper and resulting in recurrent/persistent growth in the lake. A map identifying areas of the lake where weeds are present is available in the links on the left side of this webpage.

In the off season, the Lake Management committee worked closely with the Massachusetts Natural Heritage & Endangered Species Program and our town Conservation Commission to formulate a plan to address the weed growth in the lagoon. The plan was approved by the Conservation Commission. We engaged SOLitude Lake Management to apply a herbicide in the lagoon and contracted with consulting company (Oxbow Associates) to have a botanist oversee the treatment. The primary purpose of the botanist was to oversee proper administration of the herbicide and ensure that an endangered plant species called Toothcup (*Rotala ramosior*) would not be harmed. Conditions were optimal and the herbicidal treatment was successfully administered to the lagoon. No herbicide was directly administered to Lake Massapoag itself. The treatment was closely monitored by a professional botanist and the post treatment survey indicated that there was no harm to the Toothcup species. A summary of the weed treatment is presented in the report "2018 Vegetation Survey Report" available in the links to the left.

In order to keep the invasive weed burden down, we again hired New England Aquatic Services to perform diver assisted suction harvesting (DASH) in the Lake's South Cove. This technique uses suction to remove the invasive weed and its root from the lake bottom. Over two days, many bags of Fanwort was removed from the lake near the Community Center. This technique is commonly employed in New England fresh water bodies impacted by invasive weeds and is not intended to rid the lake of the invasive species. The DASH process helps keep down the weed growth; it is analogous to weeding in your garden. This approach will likely become a mainstay of our committee's approach to weed management. In the future, we may recommend an herbicide treatment to the lake itself to help keep down invasive species.

In order to continue to monitor invasive weed growth, we will continue with annual professional surveys.