

The goal of water quality testing is to collect chemical and physical data, analyze the findings, and report to the public the findings and likely implications. Our methods are guided by a quality assurance project plan filed with the state. We work closely with the Selectmen, Town Administrator, DPW, Conservation Commission, and Board of Health and truly appreciate their support. We also collaborate with the North South River Watershed Association for grant writing support.

This year heavy spring rains resulted in significant run off with early algal blooms in both Furnace and Oldham Ponds. However, by August, water levels were low, water was warm, and blue-green algal growth proliferated in Oldham, Furnace, and Stetson Ponds.

Summary of Pond Activities and Testing:

1. Oldham Pond: A 604 (b) grant to study the impact of stream flow into the pond from the northwest area was completed. We completed testing at routine sites as well as the stream beds until they dried up. The pond had significantly less weed growth than years past; however algae growth was significant, resulting in poor water quality. The stream impact seemed minimal; however, water quality from the Beckett/Pearl Street area was very poor. We expect an engineering design from CEI this summer to lessen the impact of impaired stream flow into Oldham Pond.

2. Furnace Pond: We worked closely with Aquatic Technology, and copper sulfate applications occurred in early July and mid-August. Routine testing and weekly algae count testing for application timing was completed. Water clarity was very poor prior to the copper sulfate treatment, but improved significantly after the first treatment; somewhat improved after the second treatment.

3. Stetson Pond: Routine testing was completed and additional testing of bog channel areas was completed in August. As expected, high phosphorus and turbidity levels were found which could impact the pond during overflow from heavy rains. Blue green algae occurred in late summer, likely indicating further degradation of water quality.

4. Hobomock Pond was not tested due to hydrilla treatments and Little Sandy Bottom Pond has not been tested, but appears in good shape.

Overall, the ponds are suffering from road and storm drain run off and algae blooms are becoming more common; weeds are more problematic. Additionally, the ponds have large amounts of muck, loaded with nutrient rich phosphorus on the bottom that feeds the algae and weeds. It is difficult to have a really significant impact on water quality as long as the muck is present and storm drains and yard run off continue unchecked.

OUR RECOMMENDATIONS ARE UNCHANGED:

- 1. Prevent run off of water, fertilizer, dirt, pet waste, and trash into the ponds from your yards, driveways, and roads.*
- 2. Use rain gardens or rain barrels and plant bushes and trees to prevent run off.*
- 3. Don't dump leaves, grass clippings, or trash into the pond or storm drains.*
- 4. Don't feed the water fowl.*

Patti McCabe, Water Quality Chair 2010