

# A Clearer View After Hinckleys Pond Alum Treatment

By: William F. Galvin Cape Cod Chronicle October 3, 2019

HARWICH — Hinckleys Pond is looking a little brighter these days, after the injection of 77,000 gallons of alum and close to 40,000 gallons of sodium aluminate in an effort to reduce excessive phosphorus feeding algae blooms and fish kills.

“The pond looks wonderful,” Natural Resources Director Heinz Proft said after the treatment was applied last week. “It’s a dose of medicine that will last a long time.”

“It essentially takes effect right a way, inactivating the phosphorus, and the following day after treatment we saw a lot of clarity,” said Dominic Meringolo, a senior environmental engineer with SOLitude Lake Management, which performed the application. The alum treatment was completed last Wednesday. Hinckleys Pond has had excessive phosphorus conditions for a number of years, and the nutrient has driven several algae blooms and fish kills over the past decade. In 2012, environmental consultants CDM Smith conducted a study of the pond and recommended the alum treatment to bind phosphorus and remove it from the water column. A similar treatment was conducted in Long Pond in 2006 and served to address similar conditions in the adjacent water body to the east.

Meringolo said the alum was applied in four quadrants in locations 12 feet or deeper, well away from the shoreline. Alum binds with phosphorus and strips it from the water column, settling in bottom sediments. The immediate clarity of the pond water is a sign the treatment it is working properly, but the proof will be a lack of algae blooms or cyanobacteria, he said.

Over the past year, as the conservation commission weighed the alum treatment proposal, members of the commission were concerned about the absence of long-term impact data on the post-treatment aquatic environment and required further monitoring of the pond.

Meringolo said alum treatment has been used since the 1970s, with the first application on the Cape in Hamblin Pond in Barnstable at that time. That pond is the only Cape pond to receive a second application. It is estimated an alum treatment will work for upward of 20 years, he said. Proft said Long Pond is still in great shape 13 years after its treatment.

Hinckleys Pond was monitored for pH and alkalinity, Meringolo said, and judging from the clarity of water and the lack of dead fish, “everything went as smoothly as it could go.”

Hinckleys Pond is one of a chain of headwaters in the Herring River corridor. Meringolo said there should be no impact on herring migration from the alum treatment. The state Department of Fish and Wildlife vetted the plan and put in place time of year restrictions for the application.

Selectmen approved an addendum to the project to allow long-term monitoring. Ken Wagner of Water Resource Services, LLC, who oversaw the alum application in Long Pond, will conduct the post-treatment monitoring. Proft said the assessment is intense, including video assessments, testing dissolved oxygen and other aspects of water quality. The state DFW has also required a post-application monitoring report.

One of the delays in addressing the condition of the pond was securing funding. The community preservation committee twice rejected an application, but when additional access improvements were added to the project, the committee supported \$650,000 for that and the alum application.

Proft said \$575,000 was budgeted for the pond treatment, and the cost will end up under \$400,000 for the treatment and the post- application monitoring.

The town is planning to use \$75,000 to construct a viewing platform and stairs leading to the pond along the Cape Cod Rail Trail just west of the trail crossing at Route 124. But approval is needed from the state Department of Conservation and Recreation to utilize a small section of land on the bike trail.

Conservation Administrator Amy Usowski said she has been in contact with Eric Levy, superintendent of Nickerson State Park, which oversee the rail trail, but she has not received a confirmation from DCR on the use of the site. The plan is to go to the conservation commission and get permits in place this fall and winter and have the construction work done next spring, she said.

“It’s swimmable, fishable and accessible,” Proft said of the status of the pond right now.