



HARWICH — The hope was the town would be treating Hinckley's Pond with alum before the end of the year, but the conservation commission has not acted on the request, absent a response to the proposal from the state's Natural Heritage and Endangered Species (NHES) program.

Natural Resources Director Heinz Proft was before the commission in early October seeking the commission's approval for the proposed alum treatment as a means of reducing excessive fertilization of the pond, which has suffered several algae blooms and fish kills over the past several years.

The commission had numerous questions about the treatment, its impact on wildlife and other options for treatment of phosphorus, the main contributor of nutrient-driven anoxic conditions in the pond sediment. But they agreed last week they still cannot act on the town's request until the state NHES program responds.

Conservation Administrator Amy Usowski said they have had some feedback from NHES and hopefully they will have all the information necessary to make a decision in the next couple of weeks. Proft had told the commission in October he hoped to make the alum application this fall, since the water temperature in the pond needs to be 40 degrees or higher. Proft said they could do the work in the spring, or if necessary, even next fall. "We're not in that big a rush," he said last week.

The town has been pushing to address the excessive phosphorus conditions in the pond because of severe algae blooms and fish kills that have occurred there. At one point the state Department of Environmental Protection tested the pond and because of excessive counts closed it immediately.

Blue/green algae is natural, but when driven by too much nutrients, density levels of the algae can be harmful to humans and animals, causing gastroenteritis, liver and kidney problems and even neurotoxicity.

A study of the pond conducted in 2012 identified the excessive phosphorus as a key problem, and alum was the recommended treatment. Harwich and Brewster teamed up to address the issue in Long Pond and Proft told the commission that treatment has worked well. He said that pond has not experienced any fish kills and oxygen levels in the pond are good.

“It was successful,” the natural resources director said.

It took the town several attempts to get approval to use Community Preservation Act funds for the treatment. But last May town meeting approved \$650,000 for the treatment and some pond access improvements. The treatment is estimated to cost \$575,000.

In last week's meeting commission members had questions about the application, dosage and monitoring issues, once alum is applied. Proft said the town has more than a decade of water sampling data on the 176-acre pond and he added that sampling will continue afterward.

Both commission chairman Brad Chase and member John Ketchum emphasized the importance of post-treatment monitoring. Ketchum said there were ongoing concerns about the use of alum, adding this is an opportunity to collect data, observe and record in detail what response the whole pond has to the treatment.

Proft concurred, explaining it is their responsibility to know what the impacts of alum are.

“But if we don't do anything at all, we put that pond at risk,” Proft said.

Chase cited an earlier application in Hamblin Pond in Barnstable that led to fish kills, but added he did not believe there have been similar occurrences since then.

The natural resources director said much has been learned since the early days of alum application. Some communities are even making applications in drinking water reservoirs, he noted. Proft said that while the Hinckley's Pond dosage will be higher than that used in Long Pond, it is adequate for what is necessary there. He assured the commission they would also be conducting post-application sampling of the sediment where phosphorus will remain bonded to the alum.

Selectman Larry Ballantine, who has a doctorate degree in chemistry, said technicians first measure the volume of phosphorus in the pond and then add a matching amount of alum when determining dosage.

Commission members also had questions about steps taken to reduce phosphorus from entering the pond water, and Proft said there have been efforts to educate nearby property owners about ways to reduce phosphorus pollution. Adjustments will be included in the new Cape Cod Tech school building that will reduce the amount of stormwater runoff entering the pond.

The commission will take up the application again on Dec. 19.