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Trunk River Dredge Balances Risks Of Algal Bloom, Fish Kill

By BRITTANY FELDOTT
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The Falmouth DPW uses a backhoe to dredge Trunk River yesterday morning. They hope to increase the flow into and out of Oyster Pond.

GENE M. MARCHAND/ENTERPRISE

The Department of Public Works dredged the mouth of Trunk River yesterday morning in response to a worsening blue-green cyanobacterial algal bloom in Oyster Pond.

The Oyster Pond Environmental Trust reported last week that the algal bloom posed a potential health hazard, and warned members against coming into contact with pond waters.

In some cases, blue-green algae can cause skin rashes, eye irritation, and gastrointestinal problems.

As of yesterday, Falmouth health agent David Carignan said that his department has received no official scientific evaluation of the algal bloom in Oyster Pond, and thus cannot confirm any associated health risks.

John E. Dowling, trust president and head of the Pond Watchers program, said that the culprit of the algal bloom is a low level of salinity in the pond, caused by sedimentation at the Trunk River inlet.

About a month ago, town officials dredged eight cubic yards of sediment from the Trunk River area in an attempt to remedy the situation, but Dr. Dowling said it was not enough to produce a substantial change. Yesterday morning, the DPW further cleared about 12 cubic yards of sand, silt and rocks from the inlet in hopes of improving tidal flow to the pond.

“I don’t think it’s going to be the magic bullet, but hopefully it’ll help,” Deputy Director of Marine and Environmental Services R. Charles Martinsen III said.

However, Mr. Martinsen also said that workers had to be careful not to remove too much sand from the area, as a dramatic increase in outflow could prompt an exodus of river herring into the attached lagoon and lead to a fish kill.

River herring are attuned to water movement, he said, and “when you trigger water to flow out of a herring river, you call fish to exit.”

Many areas of the lagoon are bogged down in mud and reeds, which is less hospitable to the threatened fish species. Mr. Martinsen also said that a dramatic dredge could lower water levels in the lagoon, leaving herring more vulnerable to being marooned in eel grass or preyed upon by birds.

Whether or not the dredge abates the algal bloom in Oyster Pond will not be immediately evident, Mr. Martinsen said, but he noted that dropping temperatures should also calm the algae growth.

Although Oyster Pond has received attention due in part to OPET and the Pond Watchers, Mr. Martinsen stressed that the severe algal growth is not unique in Falmouth. Other local ponds,

such as Mill Pond in East Falmouth, are facing similar problems.

“This is not a random act of deterioration. It’s eutrophication that is happening all up and down the Eastern seaboard,” he said.

Although leaders of OPET consider recently dropping salinity levels to be the tipping point in the rapid deterioration of Oyster Pond, Director Wendi B. Buesseler also reminded members that an overload of nitrogen and phosphorous in the pond is the underlying problem.

In the long term, she said, residents around the pond must consider sewering the area or improving de-nitrification systems in existing septic tanks.

The sediment dredged from Trunk River will be treated at a DPW facility, where roots of the invasive plant species phragmites will be incinerated and removed from the sand. Mr. Martinsen said it is not yet known whether the sand will be compatible for beach renourishment.