

Wellfleet Harbor dredging crisis leaves boats stuck, shellfish smothered

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WELLFLEET — Another summer has passed with boats grounded for hours in the harbor at low tide and “black mayonnaise” killing oysters, and still there is no guarantee that dredging will occur anytime soon.

“Black mayonnaise,” an anoxic, sulfuric sludge derived from dead marsh vegetation, is encroaching on aquaculture beds, smothering the oysters. Assistant Shellfish Constable John “Clam” Mankevetch said this week that dredging will alleviate some of the risks posed by the black mayonnaise.

“There has been tremendous [shellfish] mortality due to smothering because oysters can’t get oxygenated water,” Mankevetch said.

Dredging the harbor is a massive and complex project that will take up to three years and around \$20 million to complete, Town Administrator Dan Hoort said. The U.S. Army Corps of Engineers, which will conduct part of the dredging, this June passed over Wellfleet in favor of Plymouth, which is preparing for the 400th anniversary celebration of the Pilgrims’ landing. This leaves Wellfleet high and dry until the next funding cycle.

Oysterman Dave Seitler said that the buildup of sediments threatens aquaculture operations and the wild oyster population in the harbor.

“The harbor needs to be dredged badly,” Seitler said. “That mud is why the oyster seed can’t attach — shellfish can’t grow in mud. Gear is sinking into the ground, and nobody can plant clams. Our lives depend on [dredging] at this point.”

Dredging is also crucial for the marina, where revenues are down. “We’ve seen a significant decline in profit and fuel sales,” Harbormaster Michael Flanagan said, adding that boats at the mooring field end up sitting in the mud at low tide. The marina has 300 moorings. Ten years ago they were all full and there was a long waiting list; this year, however, “we’re lucky if we have 150 [boats] out there,” Flanagan said, adding that the channel is almost void of water at extreme low tides due to siltation.

“Transient traffic, people coming to spend a week or a few nights here — a lot of them bypass Wellfleet now,” he added. That means the number of boat slips sold at the marina has decreased by at least half.

“It’s a public safety issue,” Flanagan said. “Right now the marina is restricted for four hours around low tide, when no one can move around. If we had to respond to an emergency at low tide, we couldn’t get a boat out.”

The closest harbor with an emergency response team is in Dennis.

It's clear to town officials, mariners and shellfishermen that dredging is a necessity. But the process is neither simple nor fast.

"Everyone seems to think you just make a call and the dredge shows up the next day. It's quite a complicated process," Flanagan said, adding that permits and funding negotiations take time. "We've been working on the federal project for 10 years."

In the best case scenario, it would take at least three years to complete a full dredging of the harbor. Flanagan hoped that dredging would begin this fall, but that's not going to happen because Plymouth got precedence.

The dredging of Wellfleet Harbor would occur in three phases. The first, done by the federal government, would take one year. The second two phases would be carried out by the town over two years.

In the first phase, the Army Corps plans to dredge the 120-foot-wide and 10-foot-deep federal channel and the federal anchorage at the town landing, which is 500 by 800 feet and 10 feet deep. The total volume of sediment for the federal phase would be 160,000 cubic yards, and the feds would pay.

The town and state would be charged with dredging two other areas of the harbor in the second and third phases, Flanagan said. Phase two would consist of dredging the north and south channels and some anchorage areas near the marina. Phase three would consist of dredging the mooring field. Dredging the town's areas must wait until the federal channel has been cleared so the necessary equipment can enter and exit the harbor. In total, 340,000 cubic yards of sediment will be removed from the town's areas in phases two and three.

Adding to the complexity, funding from the federal government, the state and the town is not yet settled. The federal government will likely dole out \$5 million for its portion, and the state and town will likely split the remaining \$15 million to dredge the town's areas.

Army Corps of Engineers Project Manager Craig Martin has been working on the federal project for several years. Part of his work has consisted of obtaining environmental permits that show the dredging would not pose a significant risk to ecosystems both in Wellfleet Harbor and at the disposal site for the dredged material in Cape Cod Bay.

But receiving an environmental permit does not mean funding is guaranteed. "Just because we get a water quality permit does not mean we get construction funds," Martin said. "Our project in Wellfleet is stacked against other projects around the nation. We don't have any idea of when funding is going to come. We just need to be prepared so when it does, we're ready."

Hoort hopes the state and town can split their costs, each paying \$7.5 million. The town will have to vote to borrow the money at town meeting.

The state will also have to be convinced of the project's necessity. "We're confident that the state will support this idea," Hoort said.

To receive funding from the state, the town must design a dredging maintenance program "so we're not coming back in 10 years for another full dredging," Hoort said, adding that the money for the dredging maintenance program might come from increased occupancy tax revenue or taxes on marijuana establishments.

The maintenance program would involve dredging smaller areas of the harbor every two to three years. “We’d keep the channels open and try to maintain them more effectively by dredging small areas where it’s needed,” Flanagan said.

In each phase of the dredging, the work will be done from September through December, when conditions are best and there is less boat traffic in the harbor. Operations will continue around the clock. The scale of the project is daunting: the total 500,000 cubic yards of sediment to be dredged is equivalent to 25,000 truckloads.

This sediment comes from erosion on land, but Flanagan said the primary source is the tide itself. The flow is stronger than the ebb. As the tide quickly moves in, it carries sediment with it. As it recedes, however, it moves more slowly, leaving sediment behind, which accumulates over time.

According to an Army Corps public notice, Wellfleet Harbor was first dredged in 1899 to create a channel four feet deep from the town wharves at Duck Creek to the harbor’s head. In 1958, the federal channel was extended to the 10-foot-deep and 125-foot-wide channel it is today. The federal channel and anchorage were last dredged in 1995, when 111,000 cubic yards of sediment was removed.

Besides the cost and effort, there doesn’t seem to be much of a downside to dredging. “We’re not expecting any negative impacts of dredging,” Martin said.

Shellfisherman Richard Blakeley said, “Dredging would be good for everything.” He would, however, like to see the town use a pump dredge instead of a mechanical dredge, which is similar to a large bucket scooping material. With a mechanical dredge, the black mayonnaise that plagues aquaculture would eventually slide down into the holes, he said. A pump would more effectively get rid of the muck, but Blakeley thinks the town will choose not to pump as there would be nowhere to put the dredged material.

Blakeley said dredging is crucial for the harbor, no matter how it’s done. “It goes to the overall health of the harbor,” he said. “This is my business. This is my life. They can’t start dredging soon enough for me.”