

# Oxygen levels critically low at site of fish die-off in Peconic River, experts say

June 17, 2015 by MARK HARRINGTON AND WILL JAMES / [mark.harrington@newsday.com](mailto:mark.harrington@newsday.com), [will.james@newsday.com](mailto:will.james@newsday.com)



Oxygen levels remain critically low to nonexistent along a stretch of the Peconic River that has seen two massive fish kills in recent weeks, creating a large dead zone in which little life can survive, experts said.

Over the two-day period since the most recent die-off of menhaden, when tens of thousands of fish massed in Riverhead boatyards, oxygen levels have hit zero on three occasions, according to data from the U.S. Geological Survey of the Peconic at Route 105. The levels have yet to rise above the EPA standard for survival of juvenile or adult fish.

"The bottom line is, not much can survive through that," said Christopher Gobler, a professor at Stony Brook University's Center for Aquatic and Atmospheric Sciences, noting that low levels have registered before, including the days leading up to the first die-off in late May.

"There were cases last week where fish were literally swimming out of the river up a boat ramp to get oxygen," Gobler said.

The Town of Riverhead, meanwhile, is planning its latest clean-up effort. Supervisor Sean Walter said the town board planned to pay Tim Sweat, a Greenport fisherman, 32 cents a pound to haul the dead bunker out of the river with a seine net. The town board passed a resolution authorizing the work Tuesday night, and cleanup was expected to begin Wednesday.

Riverhead also is seeking permission from the U.S. Coast Guard to install booms across six of the seven spans of the Route 105 bridge to prevent the fish from traveling down river.

On the western end of the Peconic riverfront in Riverhead, large schools of living bunker swarmed near the waterway's western end, where a fish ladder and spillway provide levels of aeration not present on the eastern end. Exacerbating the problem is that the population of menhaden, also known as bunker, have been increasing. The more fish that mass in the river, some chased by predatory bluefish, the quicker the oxygen is depleted.

"Coincident with this is that the menhaden population has been increasing significantly in the past few years," said Emerson Hasbrouck, senior educator at the Cornell Cooperative

Extension's Marine Program and a commissioner on the Atlantic States Marine Fisheries Commission, a federal fishery management body. "There are a lot more menhaden out there."

Gobler said the prospect of manually oxygenating the water was "possible," though he wasn't sure how to do it on a large enough scale to supply the number of fish traveling in the waterway.

"Scale always becomes the issue," he said. " ... You'd need a lot of aeration to make a difference."

Higher levels of nitrogen and the alga blooms that accompany them have been cited as the main culprit for this week's die-off.

Rising water temperatures will further constrain the ability of the water to hold dissolved oxygen. Water temperatures in the river reached a 2015 high on Sunday of nearly 78 degrees, according to U.S. Geological Survey data.

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