

State targets nitrogen entering Centerville estuary

By [Doug Fraser](#)

STAFF WRITER

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A report from the state Department of Environmental Protection calls for a 52 percent reduction in the amount of nitrogen entering Centerville River estuary.

Up to 95 percent of the nitrogen comes from septic systems and enters the estuary through ground water that has been contaminated by septic wastewater.

Nitrogen is a fertilizer for algae, which out-compete other plant life in the shallow waters. Rapid algae growth depletes oxygen in water, killing plants and animals. Algae blooms also make the water cloudy, keeping sunlight from reaching the plants below.

The DEP report is part of a statewide effort to cut back the flow of nitrogen and other contaminants into the state's coastal waters and make them all swimmable, fishable, and capable of supporting marine life. The effort to reduce nitrogen in local waterways is the state's response to the federal Clean Water Act. It will be expensive.

Chatham estimates it will cost \$300 million to install sewer systems to restore their coastal waters.

The University of Massachusetts at Dartmouth recently estimated it may cost \$2 billion to \$3 billion to clean up Southeastern Massachusetts coastal waters.

In their report on the Centerville River, the DEP recommended reducing the nitrogen flowing into the river from septic systems by 80 percent in a large portion of the watershed.

Eelgrass is the hallmark of a healthy estuary. The ribbon plants need oxygen-rich water to survive.

The nitrogen-rich waters of the Centerville River are diluted by the larger Nantucket Sound, and eelgrass beds flourish.

The report also notes that many of the larger, better flushed, sections of the river system showed relatively healthy oxygen levels. The least healthy areas were the ones furthest inland, including the most northerly fingers of Scudder Bay and Bumps River.

Most of the watershed is in a residential area, with homes using individual septic systems.

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Public meeting on nitrogen reduction

- When: Tomorrow, from 7 to 9 p.m.
- Where: Town Council Hearing Room, Barnstable Town Hall, 367 Main St., Hyannis
- To look at the report, go to www.oceanscience.net/estuaries/reports.htm