

The Barnstable Patriot

Told You So

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If ever there was a sign that West, North and Cotuit Bays are severely wounded from toxic doses of excess nitrogen, look no further than the large, ugly masses of brown algae grasping into the water column across the 1,251-acre estuary, leaving a community and visitors in stunned disbelief.

You've got to see this stuff to believe it: the worst algae outbreak I've seen in 20 years. The Three Bays estuary has been turned into a cup of hot chocolate. Most people with whom I have spoken recently have the same visceral reaction: they are disgusted and they may be suspending any water-based activities in Barnstable's Three Bays.

It's all because of excess nitrogen pollution flowing from septic systems that has combined with hot temperatures and sunny days and have resulted in huge algae blooms. These algae are a natural part of the marine ecosystem, but this much of it is neither normal nor healthy for the environment. Algae dine on nutrients, and the king of this estuarine buffet is nitrogen, which by our careful measurements over the last fifteen years far exceeds the state's recommended threshold. Adding to the crisis is road runoff that sends lawn fertilizers, detergents from washing vehicles, and metals and hydrocarbons pouring into an overwhelmed marine environment. These, too, are on the menu of pollutants that are flowing into our bays.

Three Bays Preservation Inc. has been banging the drum on the issue of excess nitrogen for years. And we have been warning the community that this could happen. Just because the water seems to look clear most of the time, we have said, doesn't mean it's healthy. Now, nearly anyone who casually looks into the water can see that it is at a precarious tipping point.

Less than a week ago, dozens of scup died in a fish kill from a probable lack of oxygen in North Bay caused by microscopic and macro algae that deplete oxygen from the water. We have had to move 200,000 juvenile oysters out of Middle Pond because the measured dissolved oxygen was zero. The eelgrass, a key indicator of ecosystem health was once plentiful in vast underwater meadows of bright green grasses. That eelgrass that acted as a nursery for finfish and shellfish, died away several years ago because of lack of sunlight from algae blooms. Will be the few remaining beds of native shellfish be next, and is this a tipping point of no return for the health of our bays? Any question as to whether property values, and subsequent property tax revenue, are threatened, has been answered.

On the heels of the worst outbreak of algae that is covering much of North, West and Cotuit Bays in nearly two decades, Three Bays Preservation Inc. continues aggressive water quality testing across the 1,251-acre estuary. "It is a huge bloom," according to Three Bays long-time Executive Director Lindsey B. Counsell, who added "these brownish masses of algae will now rot on the shores and add to the brown muck that covers much of the bottom of the bays and coves," he noted, "from large clumps of macro algae to microscopic plankton, and all this added organic material further fuels the worsening nutrient problem in the bays."

We need to improve our wastewater management to prevent the nitrogen and other pollutants from septic systems from entering our estuary. We need wastewater treatment policies and processes that are effective

and sustainable, now. Let's stop living only a step away from the Middle Ages when we used to throw out our human waste into the street; today we just throw it under a couple feet of dirt in the backyard.

Our community should extend and add sewer lines where possible. We need to use alternative methods to restore freshwater ponds that eventually flow into the Three Bays estuary, including historic Mill Pond in Marstons Mills that is polluted by heavy, organic sediment deposits. We need to actively develop an enhanced Title V septic system that removes nitrogen at its source. I implore Town Management and our elected officials to finish the wastewater management plan they are obligated to produce. The solutions are known and there is a collective will to fund it. The cost of the cure is much less than the cost of the status quo.

Remember, the cost of prevention is much less than the cost of a cure of where we are now, the unfortunate status quo.

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Three Bays Preservation Inc. is dedicated to restoring and protecting West, North and Cotuit Bays, and the coves, ponds, rivers, and streams that form our watershed and ecosystems. Since 1996, Three Bays Preservation Inc. has continued stewardship efforts through applied science, educational programs, and ecosystem-based management practices. To learn more, visit Three Bays Preservation online at www.3bays.org.

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