

The Barnstable Patriot

Three Bays Preservation: We are one Cape

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By Michael J. Egan

It's an uncomfortable conversation everyone should have, even at the dinner table: excess nutrients seeping from septic systems, fertilizers and stormwater runoff overloading our freshwater ponds, rivers and marine estuaries.

Just how impaired is our own Three Bays watershed?

Each day, the nitrogen from septic systems deposited into the Three Bays estuary is equal to 66 50-pound bags of fertilizer. Every 24-hour cycle that goes by, we continue to poison the very waters in which we drink, swim and fish. This accurate assessment is proven by our 20 years of in-house research.

Last Thursday and Friday I attended One Cape, a summit on clean water sponsored by the Cape Cod Commission, at the Resort and Conference Center in Hyannis. Regulators from the EPA, DEP, scientists, non-profit organizations, lawmakers, concerned citizens, municipal employees and others convened to share and report on observations, data and plans to restore impaired water bodies to sustainable health. What did I learn? We don't have a clean water problem, we have a wastewater management problem, and every person, home and bathroom is the source. It's not a nameless, faceless conglomerate or evil company at fault, it's all of us.

The One Cape conference provided the audience with an update on what Cape Cod is doing to clean up its lakes, ponds and estuaries to comply with Section 208 of the federal Clean Water Act. The Cape Cod Commission announced the release and certification of the area-wide 208 Plan, which gives each municipality the responsibility and tools to create their own wastewater management plan, and to do so on a watershed-to-watershed basis.

I learned that each town and each watershed would be asked to create, permit, implement and monitor a wastewater management plan. Chatham has decided to install a town-wide sewer collection wastewater management plant. Mashpee has implemented a plan to increase aquaculture by growing an additional two million oysters that they believe will solve 60 percent of their nitrogen problem. Each town and watershed must find their own combination of methods or technologies and do so soon. Failure will result in the loss of local control, and state or federal regulators may impose more expensive solutions.

Within our own organization, Executive Director Lindsey B. Counsell is leading the charge to restore Mill Pond in Marstons Mills, a site beset by hundreds of years of thick sediment accrual. Our consultant, Scott Horsley, designed an innovative urine reuse pilot project underway on a small patch of land at Cape Cod Academy. It uses diluted and sanitized human urine as a lawn fertilizer instead of disposing urine into the groundwater via septic systems. In partnership with the Barnstable Department of Public Works, green infrastructure in the form of a rain garden to catch nutrients from storm water before they flow into Cotuit Bay is up and running. An extensive aquaculture initiative on Middle Cove will use filter-feeding oysters to rid the water of excess nitrogen. And at Prince's Cove, permeable reactive barriers, or PRBs, will be tested for their efficacy to cleanse groundwater.

In the Three Bays watershed, we need to remove and prevent excess nitrogen pollution. If we increase

aquaculture as they are doing in Mashpee, and when we restore Mill Pond, we will have removed 25 percent of the excess nitrogen flowing into our Three Bays. But only by preventing pollution at its source can we reliably manage the problem. There are more than 8,000 homes in the watershed, and every septic system is a point source contributing to the pollution of our ponds and bays.

The time to have the urgent conversation in every neighborhood, every community, every region, is right now. Only by working together can we solve the largest environmental and complex problem Cape Cod has ever faced.

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Michael J. Egan is President of the Board of Directors of Three Bays Preservation, Inc., a group dedicated to restoring and protecting West, North and Cotuit bays, and the coves, ponds, rivers and streams that form our watershed and ecosystems. Learn more at www.3bays.org.