

Give the Bays a hand!



Three Bays Preservation, Inc.  
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## ONE CAPE:

# DESIGNING SOLUTIONS FOR CLEAN WATER

Paul Niedzwiecki, Executive Director of the Cape Cod Commission, opened February's Section 208 meeting in Hyannis with a sobering reality: "Our waters are being poisoned by nitrogen."

That gets your attention. For the past three years, the Commission and more than 200 stakeholders—residents, policy makers, community and business leaders—have been meeting to address this Cape-wide problem. It is caused primarily by a surge in Title V systems (due to a 400 percent increase in population from 1950-1998), which contributes excess nitrogen into our waters. The Cape represents four percent of the state's population but twenty percent of the Title V systems. It affects all of Cape Cod's 53 watersheds, 32 of which cross town boundaries.

The Section 208 Water Quality Management Plan draft, which addresses this serious problem, was released in August. Its eight chapters include community engagement, our waters, regulations, technologies, traditional and non-traditional solutions, costs, growth, information and support. The plan dictates that solutions be watershed-based, use current infrastructure where it makes sense, be a combination of traditional and alternative approaches, and be phased in over time.

"The nitrogen problem is complex, elusive and expensive," said speaker Lynne Hamjian, Deputy Director for Ecosystem Protection with the US EPA. "The EPA wants you to succeed because it is of critical importance to everyone."

Breakout sessions included presentations of major issues: Waste Management Agencies [see page 2], watershed teams, monitoring, non-nitrogen issues, and cost. A panel entitled "The Environment Is Our Economy: The Cost of Doing Nothing"

was moderated by Dorothy Savarese, President and CEO of Cape Cod Five Cents Savings Bank.

"The Cape is at a tipping point," she said, "and the time to act is now. Our environment is tied to our economy. It causes a chain reaction that affects us all, regardless of our vicinity." Savarese then invited panelists to discuss impacts on their respective industries.

Wendy Northcross, Cape Cod Chamber of Commerce President and CEO, explained that travel and tourism is a \$1 billion industry on Cape Cod, noting the direct consequence of water quality. "People pick beautiful places," she said. "The effects will show here first."

"We're all part of the problem," said Tony Shepley, President and CEO of Shepley Wood Products. "We were all 'new construction' at some point. Cape Cod is a world-class address. We need to come together to join forces."

"The environment defines the image of Cape Cod," Mike Lauf, President and CEO of Cape Cod Healthcare, said. He noted that 88 percent of the MDs looking for employment ranked the environment as the number one reason they selected Cape Cod Healthcare.

Bob Churchill, Broker-Owner of Buyer Brokers of Cape Cod, Churchill Associates, said that choosing to live here is often discretionary. "People have an emotional attachment to the Cape. Many had childhood experiences they want to relive or replicate for their families. They don't have to buy here."

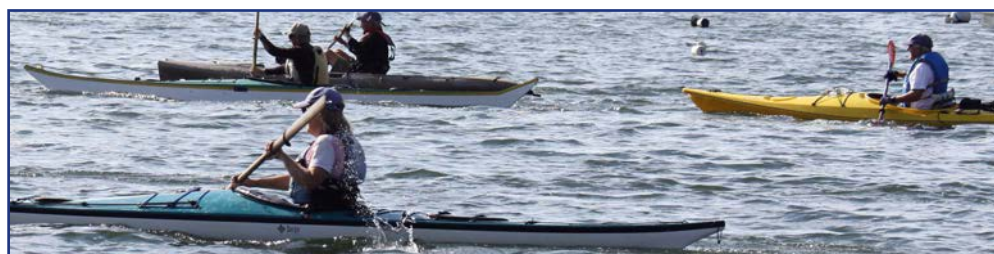
"Clean water, more value," said Ed Dewitt, Executive Director of the Association to Preserve Cape Cod. "The economy of fish kill impacts people, and it is happening now."

*continued on next page*

The Newsletter of  
Three Bays  
Preservation, Inc.

# Monitor

## 2015 EVENTS & ACTIVITIES



*We're all looking forward to summer and being outside! Here's what's coming up:*

- **Bayside Explorers – Wednesdays from 7/8-8/19** at Dowses Beach, Osterville. Explore the wonders of the bayside's aquatic life at low tide.
- **Family Paddle Day – 7/30 from 5-8 pm** at Dowses Beach, Osterville. Kayak and SUP board demos, trials and instruction for all ages and skill levels.
- **Cape Cod Wildlife Collaborative Festival – 9/12 from 10 am-3 pm**, Mass Audubon's Long Pasture Sanctuary, Cummaquid. A great family event. Free!
- **Paddle Dinner & Auction – 9/18 starting at 6 pm**, Veteran's Hall, Osterville. Kick off **RACE Cape Cod** at our pre-race dinner.
- **Paddle for the Bays: RACE Cape Cod – 9/19**, Ropes Beach, Cotuit. Registration begins at 7 am. Support and celebrate the three bays!

— More details about the above events to come —

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### FEATURES

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**“The Cape is at a tipping point  
...the time to act is now.”**

Mahesh Ramachandran, Environmental Economist with the Cape Cod Commission, discussed his economic study of coastal properties in our three bay area (organized by Three Bays Preservation), which underscored the correlation between water quality and real estate values [see below]. Although similar studies have been done elsewhere, this was the first on the Cape. “The hydrology is unique here,” he said, “we needed a local study.”

The panelists noted the challenge of making constituents aware of the urgency without scaring people away. “It is a balancing act,” said Dorothy Savarese.

“We have to be honest,” Wendy Northcross added, “but we need to be problem solvers instead of teeth gnashers. The argument whether this is needed is over. If we don’t have a great product, we won’t have any customers.”

To view the draft summary and complete Section 208 Plan, go to <http://cape2o.org/>

**3 Bay Area Economic Impact Study:  
Doing the Numbers**

The three bay area study determined that for every ten percent decrease in water quality, there is a corresponding 0.61 percent decrease in property values. If the nitrogen in our waters had been decreasing since 2005, the average home price would have increased by \$16,000-\$33,000. A three percent decrease in nitrogen would result in a \$41-\$80 million increase in property values.

The study asked waterfront owners whether water quality would change their behavior. Twelve percent said yes; eight percent said they would leave this area. If coastal property values go down, the tax burden shifts to those who can least afford it. This is not just an environmental problem but a looming economic crisis.

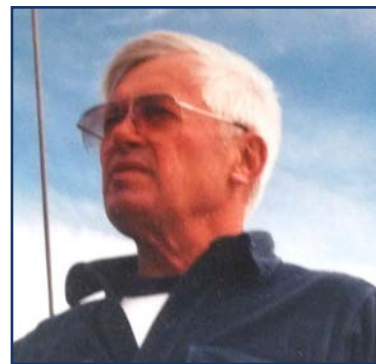
**Next Step: Waste Management Agencies**

The Section 208 Clean Water Act mandates the designation of Waste Management Agencies (WMAs). These entities will be responsible for carrying out all aspects of the plan, including:

- Managing the waste treatment plan and related facilities
- Designing, constructing, operating and maintaining new and existing works (directly or by contract)
- Accepting and utilizing grants and state and federal funds as available
- Raising revenues and incurring short and long-term indebtedness
- Assuring that each community pays its proportionate share of treatment costs

The Cape Cod Commission is working with town teams to designate WMAs. Potential WMAs (in the mid-Cape area) are: the Barnstable, Cotuit, Hyannis and West Barnstable fire districts, the C-O-MM water district plus adjacent Mashpee and Sandwich water districts. The designations will be part of the Section 208 Plan submitted by the MassDEP to the EPA by June 15. The EPA will then decide if the designations are acceptable.

**HELPING OUT WITH WATER QUALITY SAMPLING**



**Harry Davenport** retired from AT&T 20 years ago. Like most retirees, the former attorney found he had a lot of free time. “I literally walked in the door of Three Bays Preservation and asked ‘How can I help?’ They were looking for volunteers to do water quality sampling,” he said. “I have a technical background in oceanographic sampling...it was a marriage made in heaven.”

After a dozen years, Harry Davenport and Three Bays Preservation are still going strong. Each summer, he faithfully returns to North and West Bays to take samples along with fellow samplers Jack Griffin and Carl Riedell. “We’ve been a team for three years. They are hard workers well trained in observation and good at sticking to a routine.”

After graduating from the Coast Guard Academy in 1948, Harry performed water sampling and sonar observations in the North Atlantic for the Navy. Water quality monitoring in ten feet of water in the three bays is quite a bit different than more than 5,000 feet in the North Atlantic. “But it all fits together,” he noted. “You are still doing something accurate and reasonably scientific.”

Harry has enjoyed being around the water since childhood. He’s sailed on Long Island Sound and the Hudson River, in the Bermuda races, and to the Azores.

“As a yachtsman, the quality of the bays is of real concern to me. Three Bays Preservation is truly a leader in this.”

*Interested in getting outside and helping the three bays? Call us at 508-420-0780 or email [info@3Bays.org](mailto:info@3Bays.org).*

**WAITING FOR SPRING...AND THE RIVER HERRING**

**W**ith this winter’s endless barrage of snow/cold/snow/cold, we’re all eager for spring! By the end of March, longer days encouraged the crocuses to bravely poke through the ground, the osprey returned and the peepers started peeping. But with water temperatures well below normal, another sure sign of spring—the return of the river herring—was temporarily on hold.

The bluebacks and alewives may have been late to the party but when they arrived, volunteers were waiting, clickers in hand. The annual rite of counting the wee fish as they return from the sea to spawn in the fresh waters of Cape Cod was underway! Approximately 40 dedicated volunteers participate in the Marstons Mills River counting program, organized each year by Judy Heller, Three Bays Preservation’s Program Manager. This is the fourth year the organization has tracked the herring, historically an important food source and a beneficial fertilizer, and which continue to play a critical role in the health of our waters and our ecosystem.

Natural Resources Officer Amy Croteau spoke at Three Bays Preservation’s training session for volunteer herring counters in March. She explained that the state considers April 1<sup>st</sup> to be the start of the counting season. Despite what the calendar says, the herring won’t show up until water temperatures reach the low 50s.

The alewives arrive first; the bluebacks follow a few weeks later when temps rise to the high 50s. But by April Fools’ Day, water temperatures remained in the chilly 30s. “It hasn’t stopped the osprey and plovers,” Amy said, “but the herring will wait.”

Once the fish start coming, volunteers don’t distinguish between the two varieties. “You can’t tell the difference unless they are out of the water on their sides,” Amy explained, “so we refer to river herring collectively.”



**WELCOME, ALEWIVES AND BLUEBACKS!**

Volunteers simply count the herring as they pass over a submerged white board at the top of the fish ladder, where the Marstons Mills River enters the Mill Pond. Amy reminded attendees that it is illegal to harvest, touch or in any way harass the herring. “There is no such thing as ‘catch and release.’”

Amy is leading a new counting program along the Centerville River. Another active run exists along the Santuit River, shared by Barnstable and Mashpee. She also mentioned locations where the town is investigating the viability of restoring the herring runs: a small run at Mill Pond in West Barnstable, inactive for more than a decade, and a potential major rehab project along the Skunknett River in Centerville.

Thanks to state, town and volunteer efforts, numbers are up from 719 in 2006, when monitoring began, to over 55,000 in 2013. For unknown reasons, numbers dipped a bit last year to 47,000 fish. Fluctuations can be due to numerous factors but the herring seem to be making a comeback, thanks to the removal of physical barriers and increased protection from harvesting.

The final tally? By mid-May, we counted over 3,500 herring. Not the strongest numbers we’ve seen in recent years...but we’re mighty glad they are back!