

October 15, 2014

Paul Niedzwiecki, Executive Director  
Cape Cod Commission  
3225 Main St., PO Box 226  
Barnstable, MA 02630

RE: Comment on Draft 208 Plan

Dear Mr. Niedzwiecki:

While the draft 208 Cape Cod Water Quality Management Plan is a step in the right direction, we are concerned that it is not providing a truly comprehensive management strategy for the Cape's waters. All of the Cape's waters are linked together: the watersheds to the estuaries contain the watersheds to the public drinking water wells, as well as the freshwater ponds. The draft 208 is the synthesis of many meetings and discussions, but, as currently written, seems to be on a path that will leave the next generation of Cape Codders with clean drinking water and estuaries, but with hundreds of dirty ponds and lakes.

This path is one that was well-worn by the last 208 plan, which was completed during the late 1970's. The 208 process is supposed to provide a 20 year plan for water quality management and the last plan, in much the same way as the current process, brought together folks from all over the Cape to discuss and understand community goals and water quality needs. During development of the last plan, it was hamstrung by lack of reliable information; enough wasn't known about the water quality in the estuaries and freshwater ponds, so the primary focus was protecting drinking water.

Among the other community goals of the 70's-era 208 was continuing to rely on septic systems for wastewater treatment and maintaining a rural character for Cape Cod. In order to protect the drinking water and attain these other community goals, a strategy was developed to create large lot zoning. This strategy would spread the septic systems out in a low density pattern, sustain a rural character, and allow septic systems and drinking water wells to exist together in the same aquifer system and have acceptable water quality. This strategy is largely responsible for the Cape's current land use pattern.

This strategy also led directly to many of today's challenges for addressing water quality in the estuaries: long costly distances to lay sewer pipes, difficulties finding appropriate and acceptable sites for wastewater treatment and discharge facilities, and high, unsubsidized costs for any wastewater infrastructure. These results should be a warning for all of us: craft a 208 plan that comprehensively addresses all water quality. All the Cape's waters are linked together; if we only address one type of water, we run the risk of exceptionally high future costs and onerous unintended consequences.

We have a tremendous start on addressing water quality in the ponds, but we need a plan and funding to restore these waters. Water quality monitoring of over 150 ponds has been completed annually for more than a decade by volunteer and town staff samplers. Free sample analysis has

been provided by the SMAST lab at UMass Dartmouth and logistics support has been provided by the Cape Cod Commission. These free laboratory and volunteer services cannot be expected to continue long term without regular support. These annual Cape Cod Pond and Lakes Stewardship (PALS) snapshots show that more than 75% of the Cape's ponds have excessive nutrients.

Data without context is just numbers. Basic information for each pond is needed to move toward effective management. Key examples of needed information are: how deep is the pond, what is its watershed, and what is the balance of nutrients between its watershed vs. its sediments. Individual towns are addressing selected ponds as they can, but a strategy that tackles both the estuaries and the ponds within their watersheds would be optimal for cutting costs and avoiding the pitfalls of the last 208 plan.

Some have said that if we sewer the estuary watersheds, then the ponds will be clean too. This neglects the basic science of ponds. Ponds trap and hold nutrients, often holding nutrients from decades before in their sediments. This natural function means that even if the watershed is sewered, previous septic inputs to the pond may cause the pond to be impaired for decades later.

We need a strategy to address this because it is a costly undertaking. The 2003 Cape Cod Pond and Lake Atlas lists 994 ponds and lakes with a total area of approximately 11,000 acres. If one only looked at just the 165 Great Ponds (ponds >10 acres) of Cape Cod and added the following assumptions: a) 75% need to be restored, b) \$30,000 to assess and c) \$100,000 to restore each impaired pond; the total Cape-wide cost would be \$16.1 million. This is far less than the estimated costs of restoring the estuaries, but it is something that could be addressed at the same time. In addition, if one begins to add in management of smaller ponds (there are 106 ponds of 5-10 acres) and other comprehensive pond management issues such as invasive plants, fisheries management or competing uses of the pond surface, the total bill grows even larger.

The success of the PALS program offers some insights into what steps a Cape Cod ponds strategy might take and we offer these as suggested steps to move forward:

1. Review the PALS data and Update the Cape Cod Pond and Lake Atlas.

The Cape Cod Ponds Atlas provides the last comprehensive review of the PALS Snapshot data. This review is based on the first PALS Snapshot in 2001. There are 13 additional years of Snapshot data. Having this data reviewed will provide a better sense of the most and least impaired ponds and guidance on prioritization of funding for assessment and management activities.

2. Create a county pond and lake technical services fund.

Although the PALS Snapshots have provided an annual water quality measurement in many ponds, this information needs to be paired with more detailed targeted data collection tackled on an individual pond-by-pond basis. We propose that a pond and lake technical service fund be created at the county level to fund town initiatives to develop pond-specific assessments. This fund could be created out of a number of existing sources, including county/CCC taxes, a portion of regular EPA funds to MassDEP, a very small increase of property tax for pondshore homeowners, fees for beach stickers, and/or fishing licenses could create enough funding to address the regional assessment needs. It is further proposed that the goals of the fund be reviewed every 5 years as part of the

county's Regional Policy Plan review with a proposed sunset of the fund after 20 years. If the total annual cost estimated above is used, the cost for each household on the Cape would be \$5 per year.

3. Provide a regular sampling and review program.

Management of the ponds will likely require a host of management approaches, but all approaches will require regular feedback to determine if water quality objectives are being attained. We are suggesting that the county provide regular funding for a program that has a nested series of objectives to provide regular regional feedback (like the PALS Snapshots), as well as more detailed pond-specific feedback for ponds where town management activities have been accomplished. Creating this program through the county will provide cost savings to the towns and, hopefully, technical assistance and consistency.

The current 208 plan is the opportunity to complete what the last 208 plan couldn't: comprehensively address management of all of the waters of Cape Cod. We urge the Cape Cod Commission, MassDEP, and the EPA to put forward a final 208 that achieves a goal of clean water quality for all of Cape Cod's water resources.

Thank you for consideration of these comments.

Sincerely,

Ed Eichner

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Gail Maguire, Ph.D., Vice President and past-President, Wequaquet Lake Protective Association

Alexena Frazee, President, Indian Ponds Association

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cc:

Mary Pat Flynn, Chair, Barnstable County Commissioners

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Curt Spalding, Region 1 Administrator, USEPA

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Town PALS coordinators