

November 20, 2014

Cape Cod Commission  
3225 Main Street  
Barnstable, MA 02630

RE: Cape Cod 208 Plan Comments

Thank you for the opportunity to participate in the Cape Cod 208 Plan process, and provide comments regarding its importance and application not only to Cape Cod but the region.

The Nature Conservancy is an international nonprofit conservation organization with 32,000 members in Massachusetts. The mission of the Nature Conservancy is to conserve the lands and waters on which all life depends.

#### **Importance of Nitrogen Pollution Impacts in Coastal Waters**

The Nature Conservancy is focused on nitrogen reduction in coastal waters not only in Massachusetts but in Southern New England from Cape Cod to Long Island, NY. The understanding of the ecological impacts of excess nitrogen on coastal waters has improved over time -- including the degradation of salt marsh, eelgrass meadows and shellfish reefs. Science-based research has proven that impacts from excess nutrients are one of our greatest ecological conservation and restoration challenges in the Northeast US.

The Cape Cod 208 Plan documents the ecological degradation from excess nutrients on Cape Cod including quality of life issues such as economic impacts on tourism and fisheries. While the source of nitrogen may vary depending upon location within Southern New England, the impacts and threats to coastal watersheds are similar. Developed with assistance from the Cape Cod Commission, the 208 planning process is an outstanding example of a watershed-based approach to achieve reduced levels of pollution in coastal waters.

#### **Public Process and Participation Value**

The public process has been impressive for sharing information, providing opportunities to participate on subcommittees and soliciting feedback on draft concepts and ideas. Particularly noteworthy was an on-line planning tool and simulation application, numerous public meetings in multiple communities, and several subcommittee interactions on various aspects of reducing nutrient pollution.

In fact, the 208 process has unfolded to be a model for other local communities, regions and states wrestling with the very same issues threatening their coastal waters. It seems apparent that the application of a similar 208 processes would be helpful in other locations in Massachusetts in order to mobilize scientific and social understanding of the impacts of nitrogen pollution, provide consideration of potential solutions, and to seek long-term financial investments for overcoming the challenge.

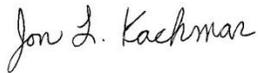
## **Green infrastructure Recommendations**

The 208 Plan provides over 60 “treatments” for addressing excess nitrogen pollution on Cape Cod. Green infrastructure provides co-benefits, including: water filtration, erosion control, flood management and nitrogen reduction. Examples of these projects include: growing oysters in coastal waters, building permeable reactive barriers to filter nitrogen, opening up constricted salt marshes to improve water flow, and constructing alternative septic systems that reduce pollution. Green infrastructure and other innovative approaches deserve recognition and praise for providing a more functional coastal ecosystem and cost-savings.

While the primary source of nutrients on Cape Cod is from septic systems, the Conservancy also encourages efforts to reduce excess nutrients from other sources such as: wastewater, land-based sources of runoff including stormwater, and atmospheric deposition.

The Conservancy has been advocating for legislation to provide funding for water infrastructure. We have also provided public comment on permits for licensed sewage treatment plants. The Conservancy has conducted stormwater management demonstration projects and dam removals to improve water quality and quantity -- particularly in the Taunton River Watershed. Without addressing the systemic flow of excess reactive nitrogen in the entire coastal watershed, we will continue to face degraded water quality and resultant coastal habitats such as salt marsh, eelgrass meadows and shellfish beds.

Thank you for your time and consideration. Please feel free to contact me should you have any questions.



Jon Kachmar  
Massachusetts Coastal Dir./  
Southern New England Water Quality Co-lead