



## Department of Environmental Protection

Charles D. Baker  
Governor

Karyn E. Polito  
Lieutenant Governor

Bethany A. Card  
Secretary

Martin Suuberg  
Commissioner

June 1, 2022

Dear Municipal Official:

I am writing to inform you of regulatory revisions the Massachusetts Department of Environmental Protection (MassDEP) is developing to ensure that timely actions are taken to restore and protect coastal estuaries that have been impacted by excessive nitrogen pollution. The two regulatory approaches we developed and plan to publish for public comment this fall provide communities with choices on how to address the growing pollution problem affecting our waters. MassDEP will be requesting a meeting with you as we seek input on these proposals prior to publication.

As you are well aware, nutrient contamination is one of the most pressing environmental challenges facing Cape Cod. Increased population and development in those areas surrounding Cape Cod's estuaries have resulted in excessive amounts of nutrients being discharged into these sensitive resources, causing eutrophication and prompting the accelerated growth of nuisance plants, weeds and algae, using up much of the oxygen in the water. This forces out finfish, shellfish, and indigenous plant species. The result-water bodies that violate state water quality standards, are visually displeasing, smell bad, and cannot support the natural uses that the estuaries have historically offered. This is not only an environmental problem- if not addressed in a timely way, it is likely to harm the Cape's economy through a decline in fishing, shellfishing, tourism, and property values.

The primary water quality problem on Cape Cod stems from nitrogen contamination. Nitrogen from septic systems, wastewater treatment plants, lawns and stormwater leaches into groundwater and flows underground and is discharged to surface water bodies. While nitrogen comes from a variety of sources, on Cape Cod the predominant sources are on-site septic systems. Approximately 85 percent of the wastewater flow into Cape Cod's embayments comes from on-site septic systems.

MassDEP has been working closely with Cape Cod communities to assess and address this problem. First, MassDEP collaborated with Cape Cod communities and the University of Massachusetts, through the Massachusetts Estuaries Project, to provide communities with the scientific studies they need to effectively address the specific water quality issues impacting each estuary. These studies, which clearly demonstrate the need to take action, were also used to form the underlying basis for Total Maximum Daily Loads (TMDLs). TMDLs are U.S.

Environmental Protection Agency or EPA-approved calculations of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant. There are currently 30 TMDLs for nitrogen across Cape Cod, generally requiring significant reductions in nitrogen loads.

To further facilitate development of solutions to this problem, in 2013 MassDEP directed the Cape Cod Commission to prepare an update to the 1978 Water Quality Management (WQM) Plan for Cape Cod in accordance with §208 of the Federal Clean Water Act ("CWA" or the "Act"). The Plan was certified by Governor Baker and approved by EPA in 2015, after an extensive public participation process that included numerous public meetings across the Cape and input from hundreds of residents, community officials and stakeholders. The Plan examines the causes of water quality issues on Cape Cod and provides options for communities to consider, including new planning tools to use in making local decisions about potential solutions. The Plan Update also offers greater flexibility and discusses financing and funding options to help implement those solutions.

Since adoption of the Updated Plan there have been important steps taken to further assist such efforts, including a new source of ongoing funding, proposed by Cape legislators and signed into law by the Governor, to help towns pay for necessary wastewater infrastructure and water quality remediation projects. This fund, known as the Cape Cod and Islands Water Protection Fund, is already providing substantial financial assistance to wastewater efforts on Cape Cod. MassDEP has also continued to work with communities to develop and implement wastewater plans, and we have been pleased to see a range of progress across with the Cape, including planning, funding, evaluating pilot approaches, and, in some cases, the actual implementation of solutions. At the same time, such progress has been inconsistent and unpredictable across the Cape communities. We have clearly heard this concern from citizens and advocates who have urged additional action. MassDEP ultimately has the responsibility to ensure that concrete actions are taken in a timely way to address the ongoing nitrogen contamination and ensure these critical water resources meet water quality standards.

MassDEP, therefore, is planning to propose two regulatory changes to meet this responsibility. First, the primary source of the nitrogen contamination is septic systems, and our regulatory authority for such systems is the Title 5 regulation- and MassDEP must ensure these requirements are protective of water quality. Therefore, we are proposing to revise Title 5 regulations to establish "Nitrogen Sensitive Areas" (NSAs) for watersheds draining into an estuaries where there is an EPA-approved "Total Maximum Daily Load," which finds that the estuary is impaired by nitrogen. The revised regulations would require - unless Towns take advantage of an alternative watershed approach - that within 5 years of the effective of the NSA designation, new on-site systems include, and existing on-site systems upgrade to, enhanced nitrogen treatment systems demonstrating the lowest nitrogen levels in their effluent. For Cape Cod communities subject to the Section 208 Water Quality Management Plan, the designation and new requirements would become effective upon the final promulgation of the regulations.

MassDEP has prioritized our efforts for years to work with communities to develop more tailored and effective wastewater solutions and remains committed to such efforts. Therefore, we are also proposing a second regulatory revision to formally establish the “watershed permit.” These permits are 20-year permits that are based on long-term wastewater plans that will achieve water quality goals and provide communities the opportunity to utilize a range of approaches, including centralized sewer treatment and innovative approaches. Importantly, if communities take advantage of this approach, and obtain a watershed permit that covers an area that would be subject to new NSA regulations, the system-by-system approach can be avoided.

To help provide some of the immediate funding needs that Towns moving forward will face, Governor Baker has proposed \$200 million in additional funding for communities moving forward to addressing this environmental challenge. These funds will help support the needed actions over the next several years to improve water quality, and demonstrate our ongoing commitment to working with communities. The Baker-Polito Administration will be working to secure passage of this important funding in the coming weeks.

MassDEP recognizes that Cape communities have been working to develop and implement plans to address these water quality challenges. As we seek input and comment on these regulatory approaches over the next few months, we would like to meet with appropriate officials in your community to discuss the status of these efforts and how they may comport with the proposed changes. I have attached a fact sheet that provides more details on the proposed regulatory framework. Please contact Millie Garcia-Serrano, Director of MassDEP’s Southeast Regional Office at [millie.garcia-serrano@mass.gov](mailto:millie.garcia-serrano@mass.gov) to schedule a time where we can meet to discuss these regulatory approaches in person.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin J. Suuberg". The signature is written in a cursive, flowing style.

Martin J. Suuberg  
Commissioner

