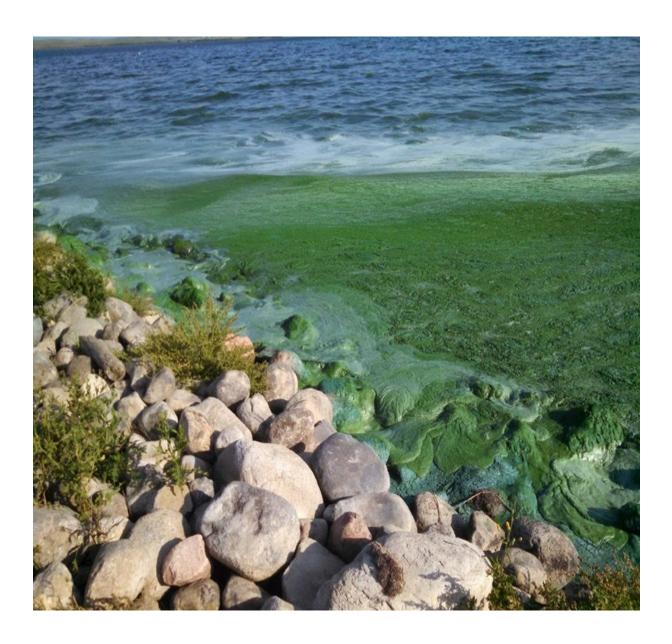


Overview

- How did we get here?
- Community Outreach
- Presentation of Proposed Regulatory Framework
 - Nitrogen Sensitive Area (NSA) Designation
 - Establishing New Natural Resource Area NSA
 - Requirements and Exemptions
 - Watershed Permit
 - Application Components, Permit Requirements, Permitting Processes
- Funding Opportunities
 - SRF Program/Community Septic System Program/Loans
- Public Information Sessions
- Public Comment



Many estuaries do not meet the Massachusetts Water Quality Standards
Resulting in an "impaired" listing and
Requiring development of Total Maximum Daily Load (TMDL).

This is an **environmental problem and economic problem** because it causes a decline in:

- Fishing
- Shellfishing
- Recreational opportunities
- Tourism
- Real Estate Values
- Business

Unaddressed this problem will become worse

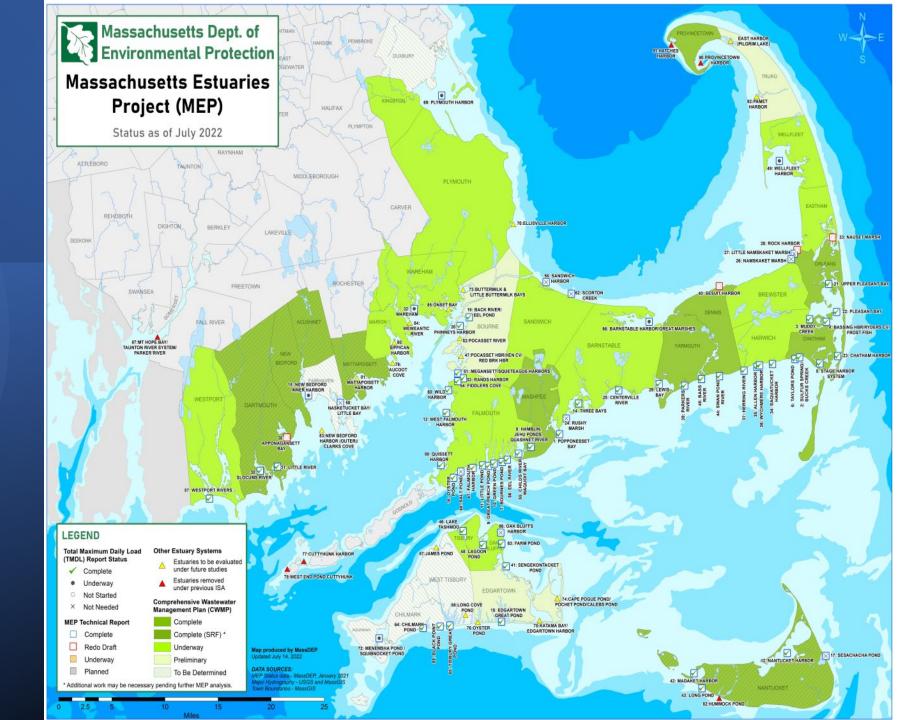
Why DEP is Proposing Changes to Title 5 Regulations?

2001	2015	2017	2020
Assessing Nitrogen Impacts Start of Mass Estuaries Project MEP	Coastal embayments impacted by Nitrogen Cape Cod 208 Plan approved by EPA EO 562 issued Comments rec'd on Title 5	EO562 Title 5/ Groundwater Stakeholder Group Nitrogen Sensitive Areas of Title 5	NSA Subcommittee formed to discuss Nitrogen impacts

Background

- Stakeholder Group NSA Subcommittee met on September 3, 2020, February 23, 2021, & June 3, 2022 to discuss potential changes to Nitrogen Sensitive Area (NSA) provisions of Title 5
- Topics discussed:
 - Expansion of definition of NSA
 - Defining how these areas might be determined
 - New nitrogen requirements for certain NSA areas
 - Compliance options
 - Implementation schedule for new requirements

Cities &
Towns
Affected by
Regulatory
Revision



MassDEP Outreach

- June 1, 2022, Regulatory Revisions Announcement Letter & Fact Sheet
- 46 meetings 32 Cities/Towns and Interested Groups
 - Cape Cod Commission, Buzzards Bay Action Committee, Cape Realtors Association, Cape Cod Health Agents, Island Health Agents, Cape Town Managers Association, EPA, Legislators
 - Ongoing Development of Webpage
 - 310 CMR 15.000: Septic Systems ("Title 5") | Mass.gov
 - Table of Contents Strategy for Nitrogen Impaired Estuaries

Proposed Regulatory Framework

Current Title 5 regulations

- Defines 'Drinking Water Protection' Nitrogen Sensitive Areas (NSAs) as:
 - Zone IIs, Interim Wellhead Protection Areas (IWPAs) and areas with both on-site septic systems and non-public drinking water supply wells
 - Imposes loading restrictions (440 gpd/acre)
 - These provisions are maintained in Draft Regulations

Proposed Title 5 regulations

 Establishes new designation of Natural Resource Area NSAs

Natural Resource Area NSAs:

- 1) Any watershed to an embayment or sub-embayment that is the subject of a Nitrogen Total Maximum Daily Load (TMDL)* approved by the USEPA pursuant to the federal Clean Water Act and an Area Wide Water Quality Management Plan pursuant to Section 208 of the Clean Water Act addressing nitrogen pollution
 - * A "TMDL" is an EPA-approved calculation 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 sources of the pollutant

Natural Resource Area NSAs:

- All Cape Cod communities are subject to the "208 Plan" approved by EPA in 2015
- There are currently 30 watersheds across Cape Cod with EPA-approved nitrogen TMDLs

Natural Resource Area NSAs:

2) Any watershed to an embayment or sub embayment that is the subject of an EPA approved TMDL or determined to be nitrogen sensitive by MassDEP based on scientific evaluation and adopted through a public process involving public notice, including the scientific and regulatory rational for the designation, and a 60-day public comment period

NSAs designation requires reduction in nitrogen migrating to impaired estuaries:

Option 1:

Systems serving new construction/existing facilities must incorporate **Best Available Nitrogen Reducing Technology** within 5 years of the effective date of the NSA designation

OR

Option 2: Community(ies) operate under a **Watershed Permit**

Best Available Nitrogen Reducing Technology:

 An alternative system certified by MassDEP for general use pursuant to Title 5 which has the lowest effluent Total Nitrogen performance value

 An alternative system granted provisional or pilot approval by MassDEP may also be utilized as long as such system has a Total Nitrogen performance value less than or equal to the lowest alternative system certified for general use by MassDEP

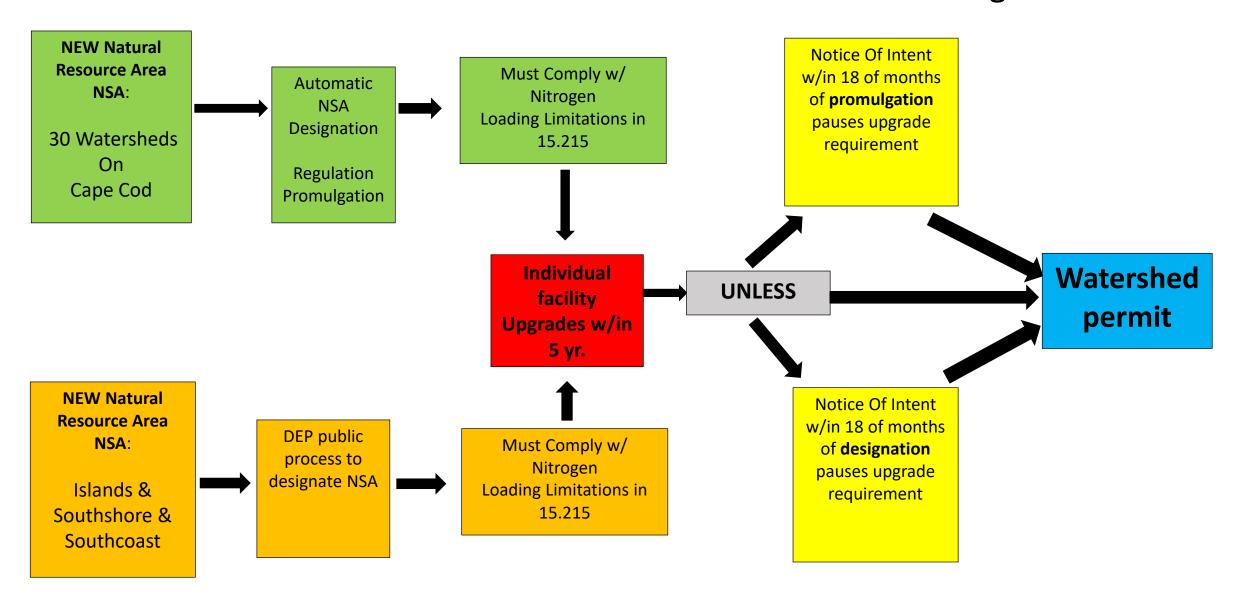
Timing for implementing requirements for Natural Resource Area NSAs:

- TMDL + 208 plan = NSA effective date of regulation promulgation
- TMDL/Scientific Evaluation + Public Process = NSA effective date of designation

Exemption from Enhanced Treatment Requirements for Natural Resource Area NSAs:

- If communities obtain a Watershed Permit that covers an area that would be subject to new NSA regulations, the Title 5 NSA requirement to install Best Available Nitrogen Reducing Technology in 5 years would <u>not</u> apply
- If a community submits a Notice of Intent (NOI) within 18 months of designation as an NSA, the 5 year installation requirement is tolled

How do Title 5 Revisions and Watershed Permit Work Together?



Watershed Permit:

- 20-year voluntary permit instead of the traditional fiveyear permit
- Issued to Local Government Unit, Regional Local Government Unit, Multiple local Government Unit (through Intermunicipal agreement)
- Provides communities the opportunity to employ a greater range of solutions to address their water quality needs, including alternative or innovative approaches
- Utilizes an adaptive management approach, requires monitor, evaluation, reporting of results, and modification of the approach as needed to address conditions that are causing the water quality impairments
- Watershed Permit is based on a Town approved
 Watershed Management Plan



Watershed Management Plan:

- A long-term plan to address an existing water quality impairment to restore and protect water quality
- Based on a Comprehensive or Targeted Watershed Management Plan
- For watersheds with a TMDL, the plan must be designed to achieve compliance with the Water Quality Standards in the TMDL and demonstrate > 75% pollutant reduction within 20 years
 - MassDEP may determine an alternative schedule is appropriate based on watershed-specific issues

Watershed Permit Application includes:

- Estimated load reductions needed to meet the threshold concentration(s) at the sentinel station(s) for the selected Conventional Control Technologies and Alternative Control Approaches or Technologies
- An implementation schedule, not to exceed 20 years, including a designated set of activities
 that will occur in the first 5-year block of time, and the results of which will enable the
 permittee to revise the implementation plans for the next 5-year period as necessary to meet
 load reduction requirements
- Core Sewer Area and the service areas prioritized for wastewater collection and treatment after accounting for implementation of the selected Alternative Control Approaches and Technologies

Watershed Permit Application includes:

- A contingency plan for a back-up Conventional Control Technology will be provided in the event that the Alternative Control Approaches and Technologies selected do not function as predicted
- The proposed approach to control future pollutant loads to ensure that loads will always stay below the applicable threshold levels
- Cost estimates for the infrastructure and programs associated with the proposed actions, if available

Standard Watershed Permit Provisions:

- The proposed activities, implementation schedule, and facilities included in the Watershed Management Plan shall be enforceable requirements, incorporated in a Watershed Permit
- Annual report submittal
- 5- year evaluation and review
- Permits issued by DEP that comprise a component of the implementation activities or are applicable to the pollutant discharges in the watershed shall be incorporated by reference into the Watershed Permit (i.e., Groundwater Discharge Permit)
- Public notice requirements for issuance, modification, revocation and termination

Watershed Permit Issuance Process:

- Public Notice of the watershed Permit Application
 - MEPA Environmental Monitor
 - Newspaper circulated in the area of the Watershed Permit
 - MassDEP's webpage
- Comment Period of at least 60 days
- A public hearing if requested by permittee or deemed necessary by MassDEP

Watershed Permit Modification/Suspension/Revocation/Termination:

- MassDEP will process permit modifications, suspensions or revocations in the same manner as an application for a Watershed Permit
 - If the permit is revoked, the Best Available Nitrogen Reducing Technology requirement applies to systems in the NSA
- MassDEP may approve revisions to the schedule under certain circumstances (public notice is not required)
- Permittees may terminate permits by providing advanced written notice to MassDEP following same process as the application
 - Upon termination, the Best Available Nitrogen Reducing Technology requirement applies to systems in the NSA

SRF's Community
Septic
Management
Program (CSMP)
Loan Model

The Massachusetts Clean Water Trust (Trust) dedicates **\$5 million** a year to offer **2%** interest rate loans to communities to fund their CSMP programs that provide loans to homeowners to replace their failed septic systems.

Over the past 5 years the CSMP has made 29 loans totaling \$14.2 million at an average loan amount of \$450,000.

Additionally, the CWSRF has financed Barnstable County's septic loan program, which now operates as its own revolving fund.

About the CSMP

- The program operates on a rolling application basis and communities apply for financing when there is demand from homeowners.
- Homeowners apply to the town for financing and the town draws down funds as needed from the Trust.
- The loan to the community is secured with a general obligation pledge of the communities and receives the traditional debt authorization at the local level.
- The loan to the homeowner is secured with a betterment agreement between the community and the homeowner, to which the Trust is not a party.

About the CSMP

- Since the loan to the homeowner is secured with a betterment agreement, Massachusetts
 General Law governs that agreement and the interest rates that can be charged.
 - The interest charged by the community to the homeowner can be used to cover administrative expenses and to make new loans, which Barnstable County and others have done.
- The draws made against the loan by the community operate under the Trust's interim loan program and accrue no interest and no fees.
- In most instances, the loan is put into repayment within two years or sooner if all the funds have been drawn or if the community decides they are finished with the program.

The Trust and MassDEP look forward to working with all Cape towns in developing solutions that work for the towns and do so at the lowest cost possible.

State Revolving Fund Loan Process

The SRF financing process can take up to two years, depending on the community and project, from the initial project proposal to funding being disbursed. MassDEP staff will provide assistance to the community from application submission to project completion.



Public Information Sessions and Public Comment — Tentative Schedule

Public Information Sessions

- November 15th 6:00 pm Zoom Webinar
- November 16th 12:00 pm Zoom Webinar

Public Hearing Schedule

- November 30th 6:00 pm DEP Lakeville
 Office Hybrid Meeting
- December 1st 1:00 pm Zoom Meeting
- December 5th 6:00 pm Barnstable Town Hall Hybrid Meeting

Proposed Regs and Public Hearing Sessions

https://www.mass.gov/servicedetails/massdep-public-hearingscomment-opportunities



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▲ OFFERED BY Massachusetts Department of Environmental Protection

MassDEP Public Hearings & Comment Opportunities

Participate in a public hearing or meeting, or submit comments on an environmental regulation, permit, or report.

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