



# Title 5 and Watershed Permitting Regulatory Proposal

Title 5 Advisory Committee  
May 18, 2023

# Title 5 Advisory Committee Meeting Agenda

Welcome and Introductions (15 minutes)

Background (10 Minutes)

- a. Nitrogen Sensitive Embayments
- b. 2022 Proposed framework and Draft regulations

Discussion of major comments received

- a. Geographic Area (15 minutes)
- b. Time allotted for Title 5 Upgrade and Watershed Permit (15 minutes)
- c. Streamline Watershed Permit Process (30 minutes)
- d. Title 5 System Upgrade Requirement (30 minutes)

Next Steps



# Background – The Problem



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.**

# Background- 2022 Proposed Regulatory Strategy

## **Title 5 Regulatory Revision:**

- Establish new "Nitrogen Sensitive Area" (NSA) designations under Title 5 regulations.
- Septic systems located in new NSA's would be required to be constructed or upgraded with enhanced nitrogen treatment systems, **unless** the designated watershed is covered by a Watershed Permit.

## **New Watershed Permit Regulations:**

- Establish new Watershed Permit framework.
- Authorizes 20 year permits to implement long term wastewater solutions inclusive of innovative solutions.

# Background – 2022 Proposed Regulatory Strategy (Continued)

**NSA designation requires reduction in nitrogen load migrating to impaired estuaries:**

**Option 1:** Septic 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** detailing plan to achieve nitrogen reduction

# 2022 Proposed Title 5 Regulatory Framework

## Current Title 5 regulations

- Defines 'Drinking Water Protection' Nitrogen Sensitive Areas (NSAs) as:
  - **New Construction** in Zone IIs, Interim Wellhead Protection Areas (IWPAAs) 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**
  - **New Construction and existing systems** in areas designated as Natural Resource Areas NSAs
    - Watersheds with nitrogen Total Maximum Daily Load (TMDL) or scientific evaluation quantifying nitrogen impact
      - Automatic designation or Public Notice designation



# 2022 Proposed Regulatory Framework (cont'd)

## **Automatic Natural Resource Area NSAs designation:**

- **Upon promulgation of Title 5**
- Watersheds subject to the Cape Cod 208 plan with a nitrogen Total Maximum Daily Load
- All Cape Cod communities are subject to the “208 Plan” approved by EPA in 2015
- There are currently 30 watersheds across 11 Cape Cod communities with EPA-approved nitrogen TMDLs

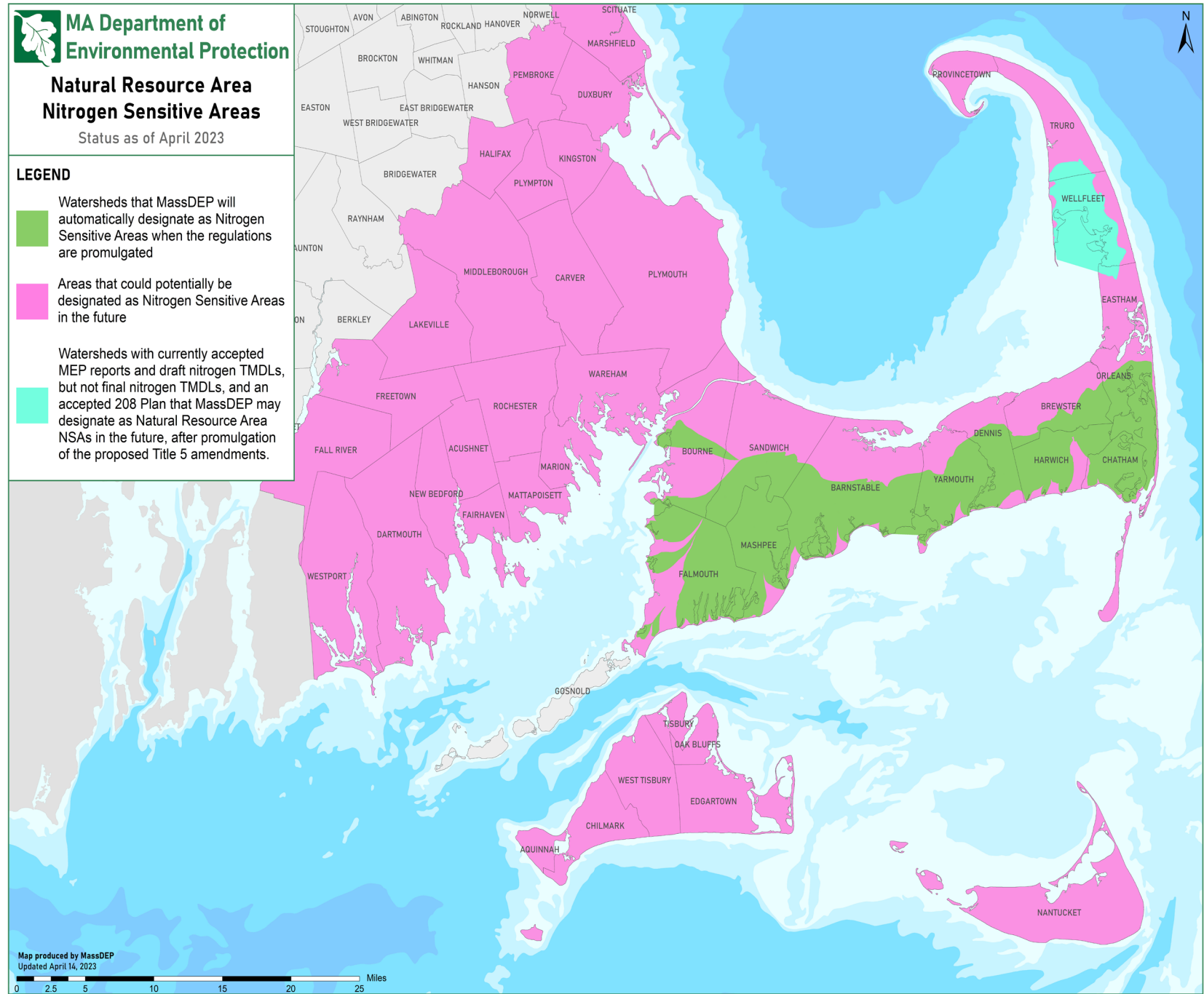
# 2022 Proposed Regulatory Framework (cont'd)

## **Natural Resource Area NSA designation through public process:**

- Watersheds on the Islands and southeastern/south coastal Massachusetts with a TMDL or scientific evaluation showing nitrogen impairment; Cape Watersheds with TMDL development or scientific evaluation after Title 5 promulgation
- May be designated through a public process after development of TMDL or conclusion of scientific evaluation showing nitrogen impairment



# Background - Cities & Towns Affected by 2022 Regulatory Proposal





MA Department of  
Environmental Protection

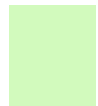
## Natural Resource Area Nitrogen Sensitive Areas

Status as of November 2022

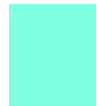
### LEGEND



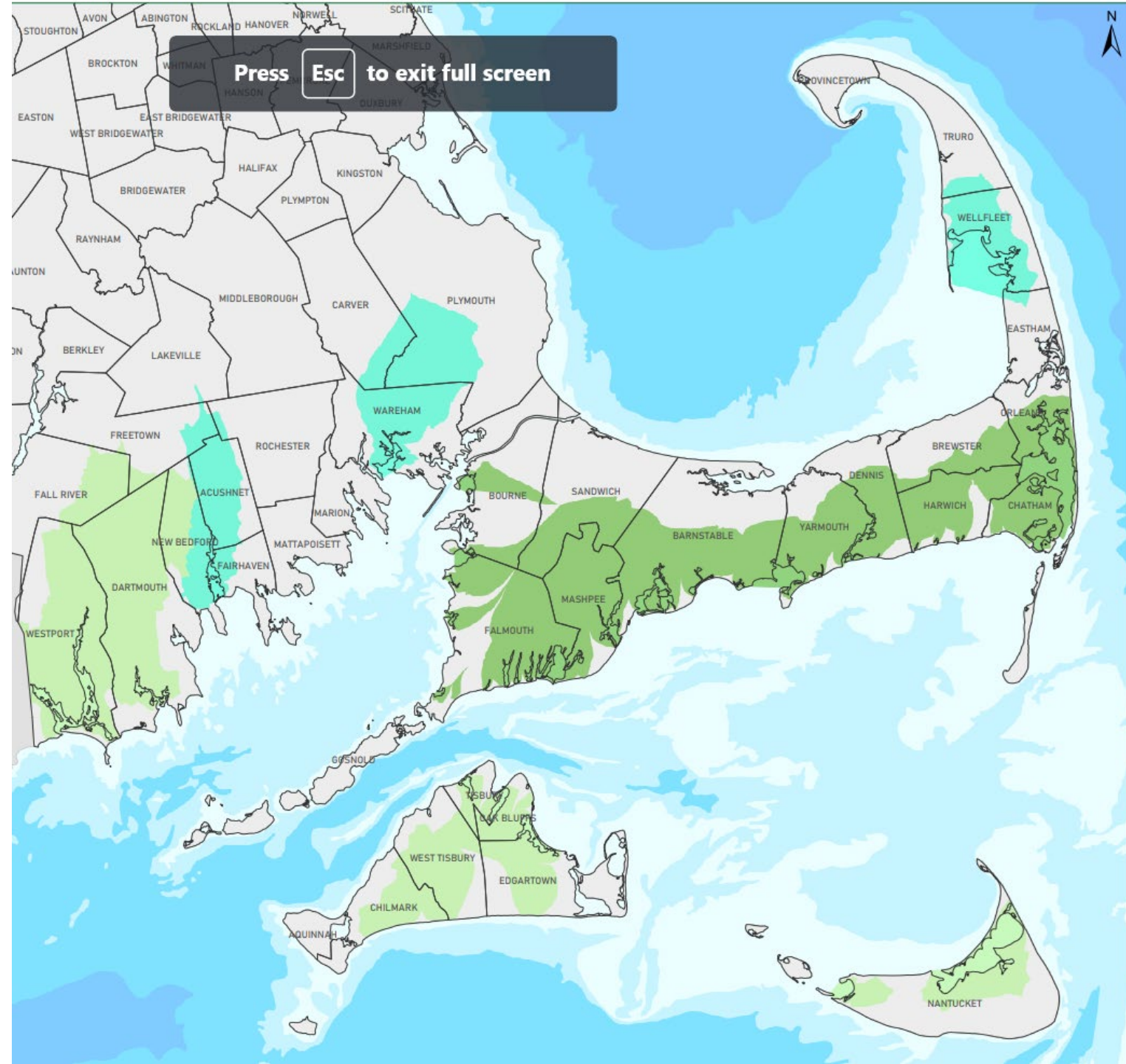
Watersheds with final total nitrogen TMDLs that MassDEP will automatically designate as Natural Resource Area NSAs upon promulgation of the proposed Title 5 amendments



Watersheds with final total nitrogen TMDLs that MassDEP may designate as Natural Resource Area NSAs in the future, after promulgation of the proposed Title 5 amendments



Watersheds with currently accepted MEP reports, but not final total nitrogen TMDLs, that MassDEP may designate as Natural Resource Area NSAs in the future, after promulgation of the proposed Title 5 amendments



## 2022 Proposed Regulatory Framework (cont'd)

### Exemption from Individual System 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 not apply
- If a community submits a Notice of Intent (NOI) within 18 months of designation as an NSA, the 5-year installation requirement is paused



## 2022 Proposed Regulatory Framework (cont'd)

### Watershed Permit:

- 20-year voluntary permit instead of the traditional five-year 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
- The plan must be designed to reduce nitrogen loads by 100% within 20 years
  - MassDEP may allow for at least a 75% load reduction and may determine an alternative schedule is appropriate based on watershed-specific issues

# Background – 2022 Public Outreach Efforts

## **Regulatory Framework:**

- In June 2022, MassDEP released a proposed regulatory framework
- Implemented outreach campaign, including:

2 Legislative Briefings

45 public meetings

- 32 one-on-one meetings with local officials
- Engagement with Stakeholders including: Cape Cod Commission, Cape Cod Board of Health Coalition, Cape Cod Municipal Managers Association, Cape Cod Realtors Association, Cape Cod Commission, Buzzards Bay Action Committee, Island Health Agents, Cape Town Managers Association, U.S. EPA Region 1, Cape and Off-Cape Town officials



# Background –Draft Regulations Public Comment

## **Draft Regulations:**

- November 10, 2022 MassDEP issued draft regulations for public comment
- December 16, 2022 public comment deadline extended until January 30, 2023
  - 4 Public Information Sessions
  - 5 Public Hearings
  - Legislative briefing
  - 3 Legislative and 4 Municipal “Office Hours”
  - Received more than 900 comments

# Major Public Comments Received

## Geographic Area (15 min)

## Timing (15 min)

- Title 5 System Upgrade
- Watershed Permit

## Streamlining Watershed Permit Process (30 min)

- Comprehensive or Targeted Watershed Management Plan Status and Process
- Flexibility
- Regulatory requirements
- De Minimis Load

## Title 5 System Upgrade Requirement (30 min)

- Existing System Allowance
- Best Available Nitrogen Reducing Technology Definition

# Major Comments

## Geographic Area

- Communities at different stages in assessing and addressing coastal water quality issues
- Cape Cod further along in their process
  - MEP Reports
  - Cape Cod 208 Plan
  - TMDLs developed
  - Towns already implementing solutions
- Some off-Cape communities need more discussion and strategic planning
  - Time to assess nitrogen sources
  - Time to plan for new requirements



# Major Comments

## Timing

### Proposed Title 5 Timeframe

5-year upgrade requirement timeframe too short

Feasibility issues for system owners, Boards of Health, Installers

Potential supply and contractor constraints

### Proposed Notice of Intent (NOI) and Watershed Permit Application timeframe

18-month NOI submittal too short

Want to pursue Watershed Permit but not ready yet

Need more time to complete planning process

# Major Comments

## Watershed Permit

Towns want more flexibility with Watershed Permit:

- Want to utilize existing approved Comprehensive or Targeted Watershed Management Plans

- Want credit for work previously done

- Want permit to cover multiple Watersheds

# Major Comments

## Watershed Permit cont'd

Towns want more flexibility with Watershed Permit:

Concerned with meeting sentinel station concentrations vs. nitrogen load reductions

Concerned with meeting nitrogen load reductions in the specified timeframe

Want a simpler pathway for communities that encompassed a watershed or part of a watershed where the community's nitrogen contribution to the embayment or estuary was only a very small proportion of the entire watershed – a de minimis load



# Major Comments

## Title 5 Upgrade

Allow existing systems with nitrogen removal to remain in place.

Current draft allows systems installed within one year of regulation to remain

Best Available Nitrogen Reducing Technology  
Definition

Severely limits the technologies available  
for the consumer

Will create a monopoly of one  
technology

Will create price gouging

# Draft Title 5 BANRT Definition

## **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

# Next Steps

- DEP will post the recording of this meeting on MassDEP's Website:  
[310 CMR 15.000: Septic Systems \("Title 5"\) | Mass.gov](#)  
[314 CMR 21.00: Watershed Permit Regulations | Mass.gov](#)  
[MassDEP Public Hearings & Comment Opportunities | Mass.gov](#)
- Draft meeting minutes will be circulated to the Committee
- Finalize Regulations
- Next Meeting
- Meeting Adjourned