

Strategy for Prioritizing Surface Waters for Protection and Restoration

10-Year Vision for Watershed Planning in Massachusetts

*Clean Water Act Vision Workshop: Watershed Planning Program
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Goals for Today

- * Engage stakeholders in strategic planning
 - * Focus on prioritization for ***Protection and Restoration***
 - * Share state strategies for prioritization
 - * Collect your input on stakeholder prioritization
 - * Collect input for planning and future workshops
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- * ***Note next workshop is April 26th – Focus on Monitoring & Assessment***

Workshop Overview

MassDEP Perspective

- * Background on CWA Programs and State's role
- * Why prioritize waters? How? What?
- * Protection - baseline programs/regulations
- * Restoration - TMDL development (next 5 years)
- * Challenges & Opportunities

Panel and Breakout Sessions

- * Discuss stakeholder-driven priorities for restoration and protection
- * Discuss implementation measures

Background CWA Program

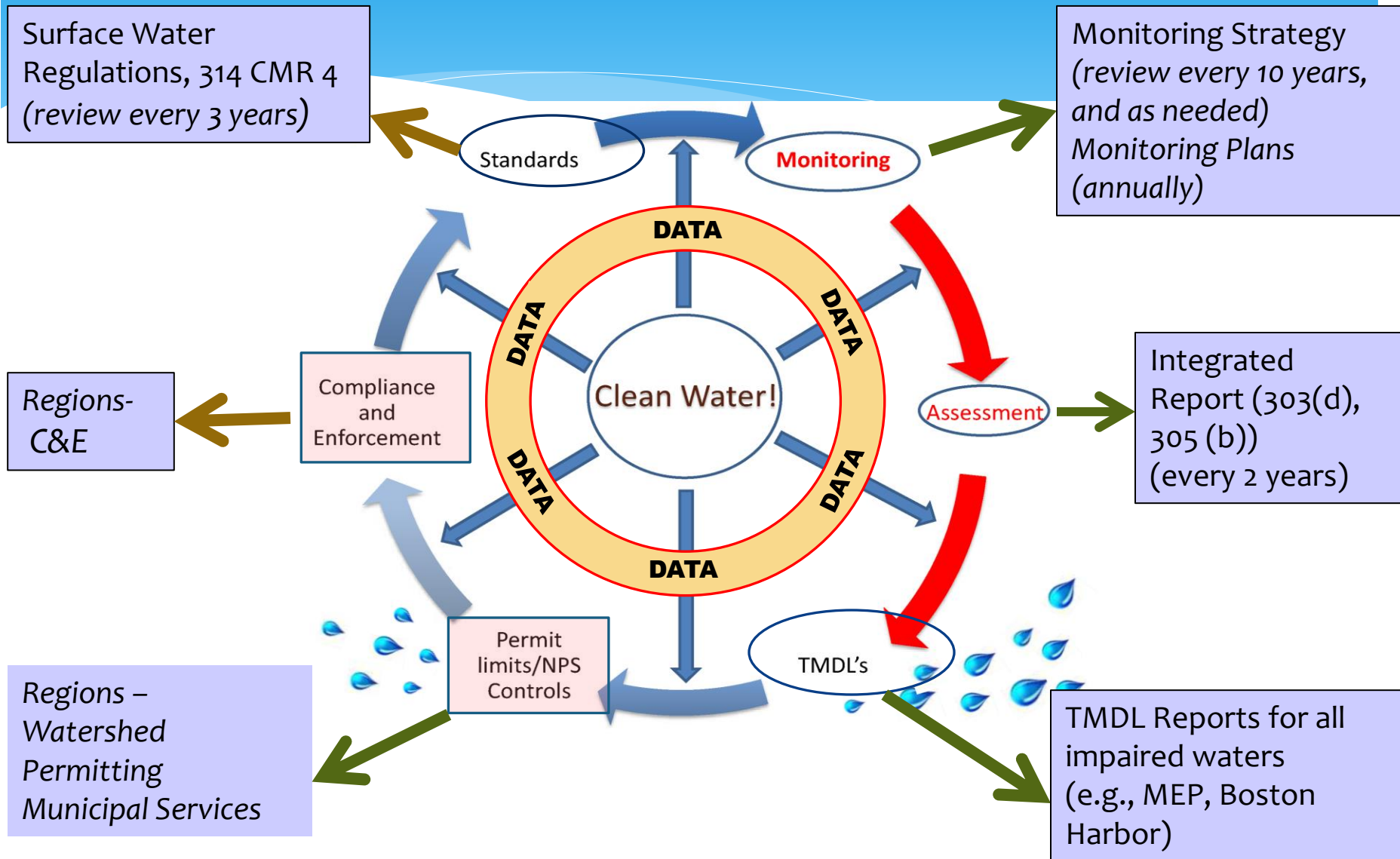
We are stewards of the water resources of Massachusetts.

Together with other state environmental agencies, we share in the duty and responsibility to ***protect, enhance and restore the quality and value*** of the waters of the Commonwealth.

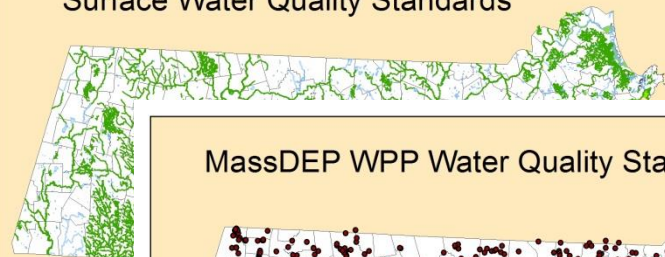
Strategies:

- * Develop and adopt surface water quality standards;
- * Monitor and evaluate surface water quality;
- * Develop plans to protect and restore water quality; and,
- * Coordinate and collaborate with stakeholders to promote stewardship of our valued water resources.

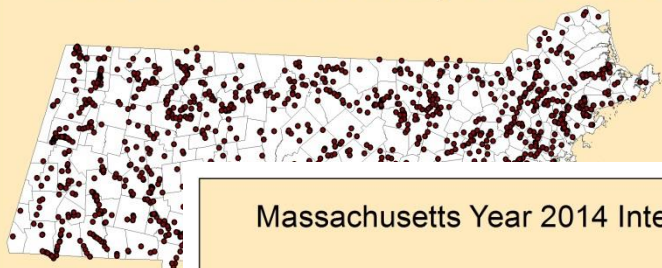
Background: Clean Water Act Process



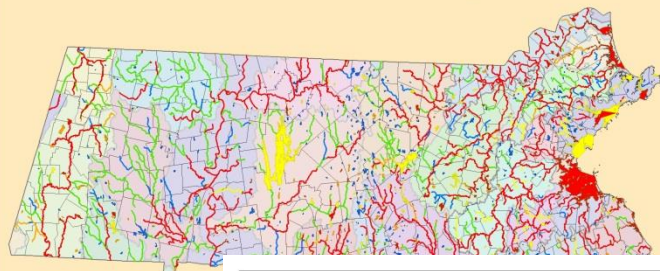
Massachusetts 314 CMR 4 Surface Water Quality Standards



MassDEP WPP Water Quality Stations 1994 - 2014



Massachusetts Year 2014 Integrated List of Waters



Legend

Water Body Segments - Rivers
Category

- 2 - Attaining some uses; other uses not as
- 3 - No uses assessed
- 4A - Impaired - TMDL is completed
- 4C - Impairment not caused by a pollutant
- 5 - Impaired - TMDL required

Water Body Segments - Lakes, Estuaries
Category

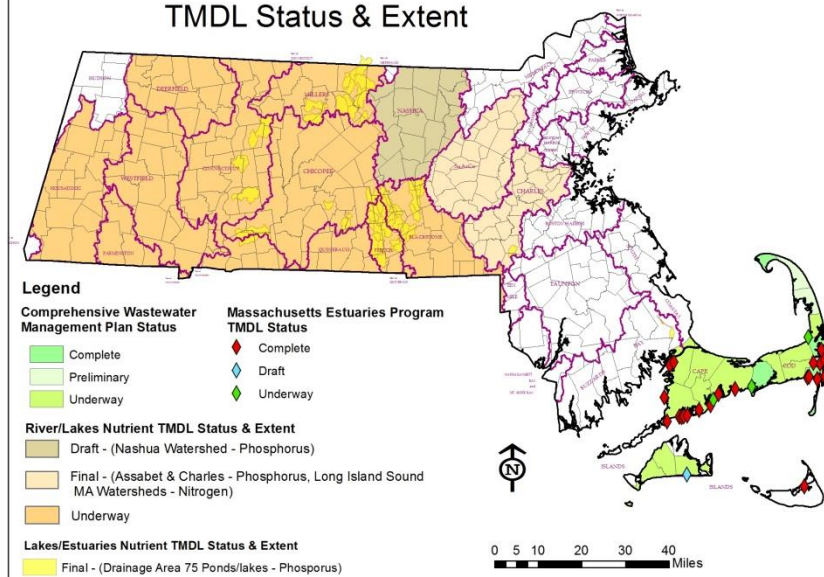
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Surface Water Quality Standards

Monitoring

Assessment and Listing

Massachusetts River/Lakes Nutrient TMDL Status & Extent



TMDLs and Alternative Plans

MassDEP Programs

Massachusetts Surface Waters

Water Body Type	Value (units)
Rivers and Streams	13, 919 (miles)
Lakes and Ponds	196,121 (acres)
Coastal Waters	2726 (sq miles)
Coastal Tidal Shoreline	1,519 (miles)
Wetlands	1,149,712 (acres)

Rowing together to Protect and Restore the Waters of the Commonwealth

- **State-led priorities**
- **Stakeholder-led priorities**

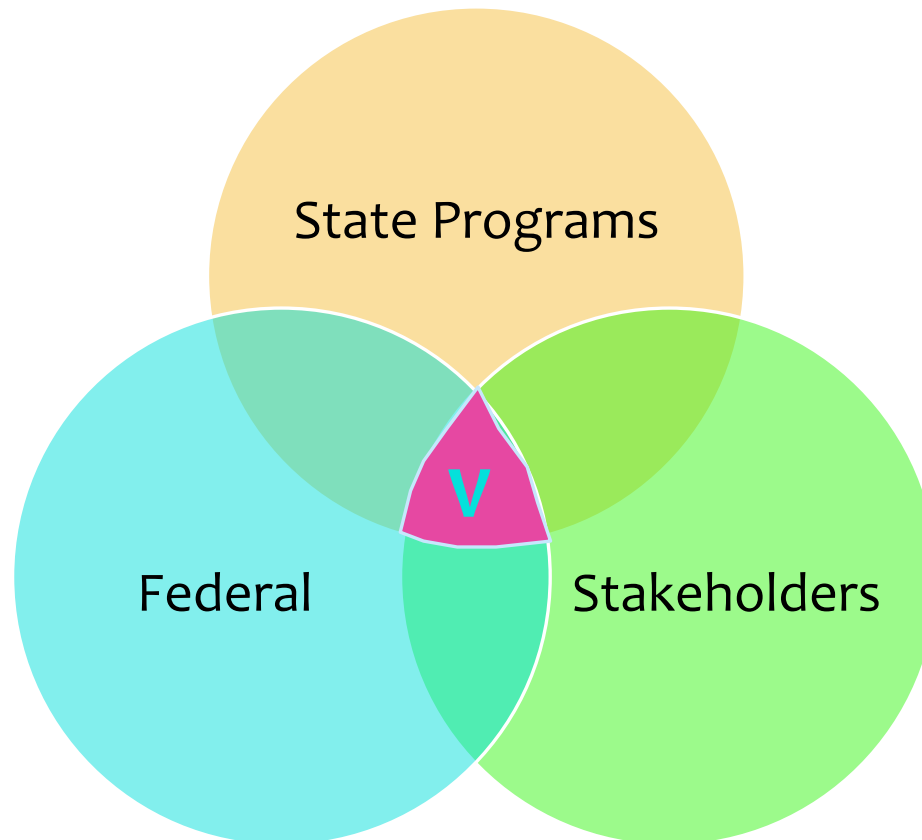


Prioritization

“Prioritization”: States review, systematically *prioritize, and report watersheds or waters for restoration and protection* to facilitate State strategic planning for achieving water quality goals

- * Focus resources to achieve results
- * May be developed at different scales
- * Potential for state- and stakeholder-driven activities to work together

Coordination and Collaboration



Prioritization

Many options for how to set priorities:

- * Pollutant
- * Water body
- * Public or agency interest
- * Administrative
- * Implementation
- * Other

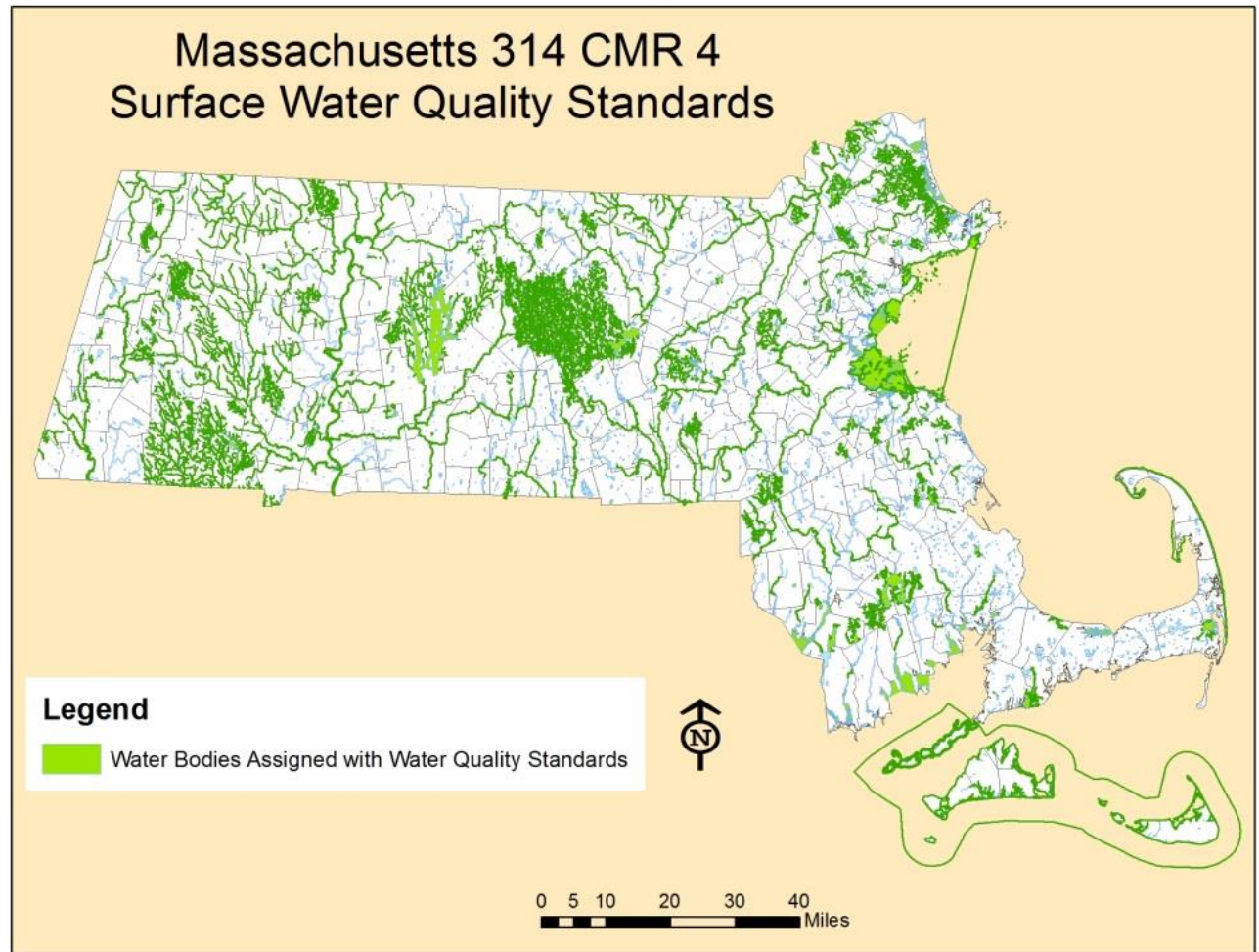
• **Key Concepts:**

- Have a plan
- Track activities
- Be flexible to address changes over time
- Reserve capacity

Prioritization for Protection – Keep Clean Water Clean

*Prevention is
more cost
effective than
clean-up*

*Maintain high
quality & existing
uses*



Baseline Protection

- * Surface Water Quality Standards Regulations 314 CMR 4.00
 - * Water Body Inventory: Class A, B, SA, SB
 - * WQ Criteria
 - * Outstanding Resource Waters (ORW) - bordering wetlands, many Areas of Critical Environmental Concern, and vernal pools
 - * Cold Water Fisheries—Cold Water Fishery Resources
 - * Shellfishing/shellfish harvesting
 - * Antidegradation (regs and implementation policy)
- * Public Water Supplies – ORWs and tribs thereto
- * Wetlands Protection – (e.g., Critical Areas)
- * Protective TMDLs
- * *National Parks– Cape Cod National Seashore, Boston Harbor Islands*

Regulatory Programs

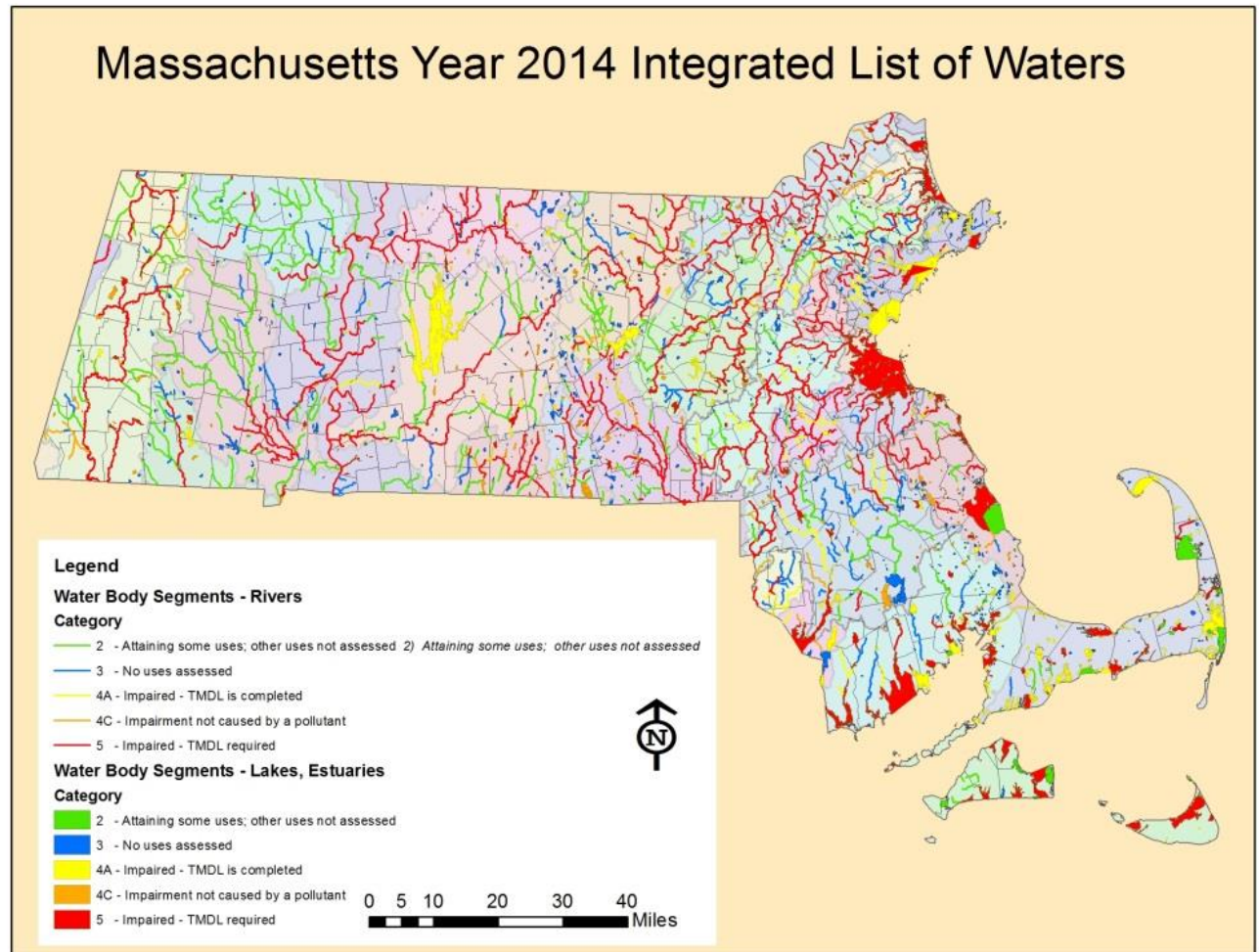
- * MassDEP
 - * NPDES Stormwater -General Permit Programs
 - * NPDES Surface Water Discharge Permitting Program
 - * Title 5 Program
 - * Drinking Water Program – Zones of protection, ORWs
 - * Wetlands Program - ORWs
- * Mass Division of Fish and Wildlife - fishery designations
- * Mass Division of Marine Fisheries - Shellfish Area Designations
- * Mass Environmental Policy Act-project scoping information

Protection Tools

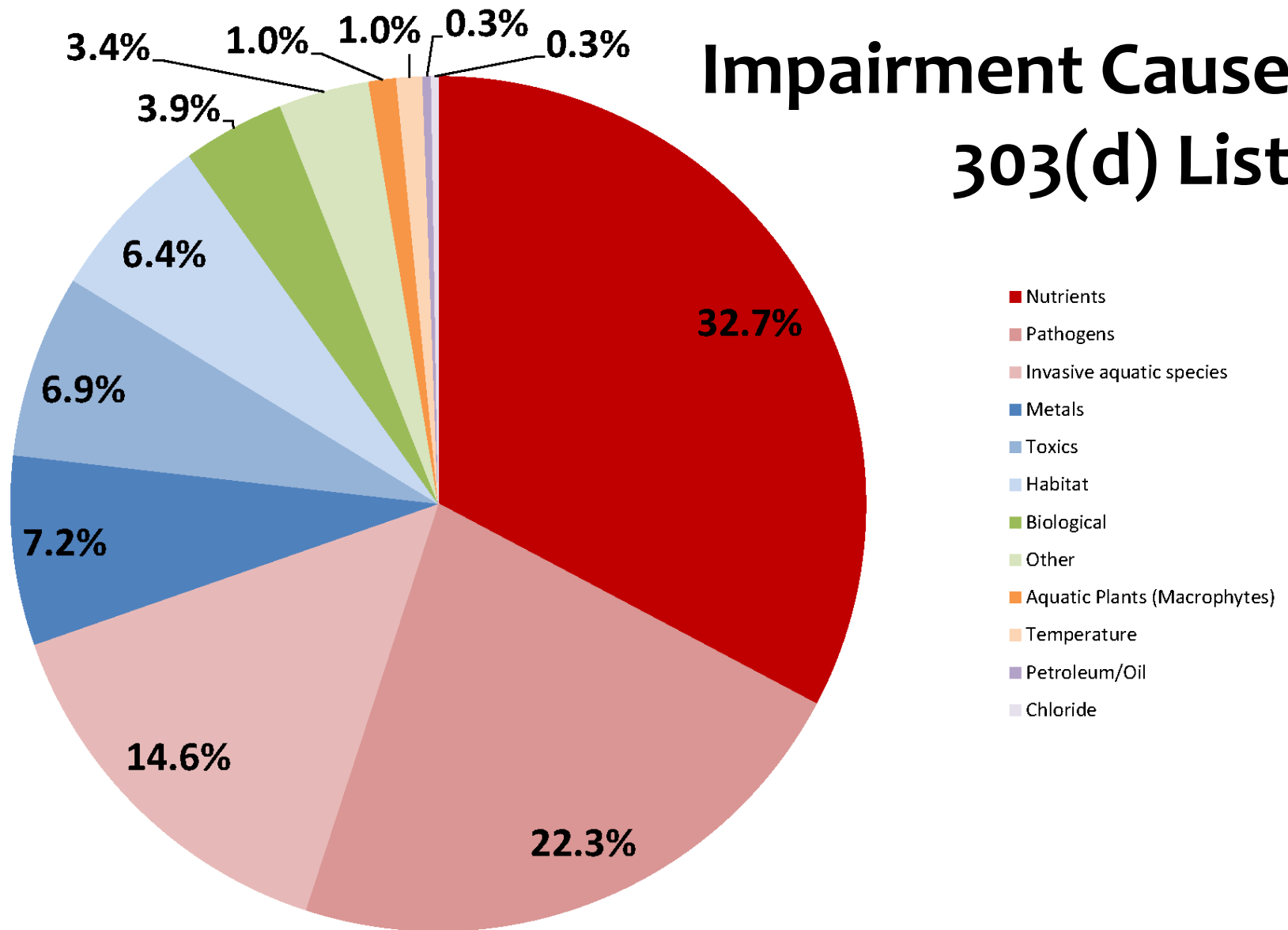
- * GIS Landscape tools
 - * BioMap2
 - * Hydrography
 - * Wetlands
- * Recovery Potential Screening Tool
- * Local By-laws
- * Watershed Protection Plans/Healthy Watersheds
- * Land protections

Prioritization for Restoration – Make Dirty Water Clean

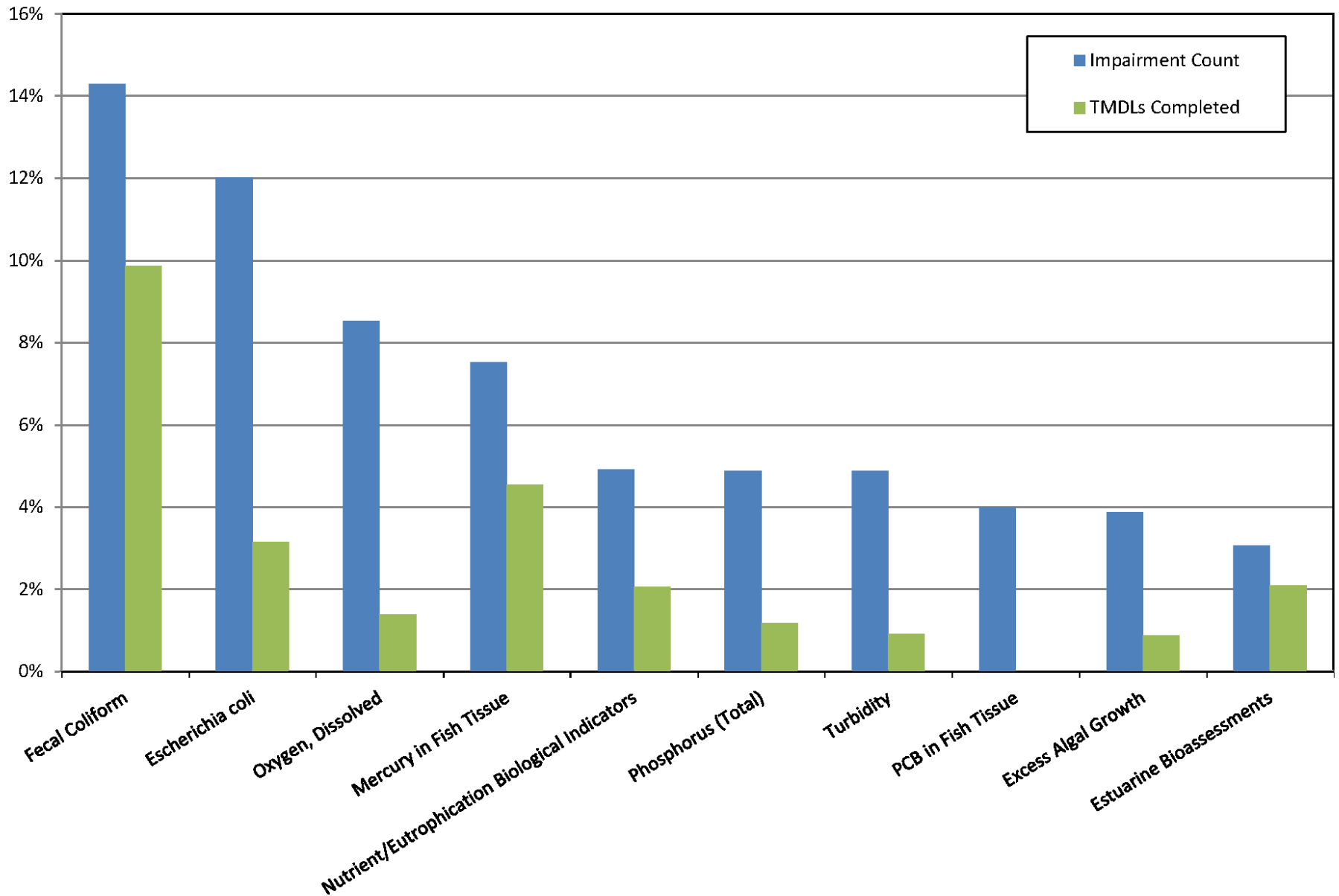
Restore Uses in Impaired Waters (303(d))



Impairment Cause 303(d) List



Top 10 Impairments Requiring TMDLs



Pollutants



Trash



Heavy Metals



Nutrients



Sediment




Pathogens



Oil & Grease

55 %



Attention
Dog Guardians

Pick up after your
dogs. Thank you.

Attention Dogs

Grrrrr, bark, woof.
Good dog.

District of North Vancouver.
Bylaw 5981-11(i)

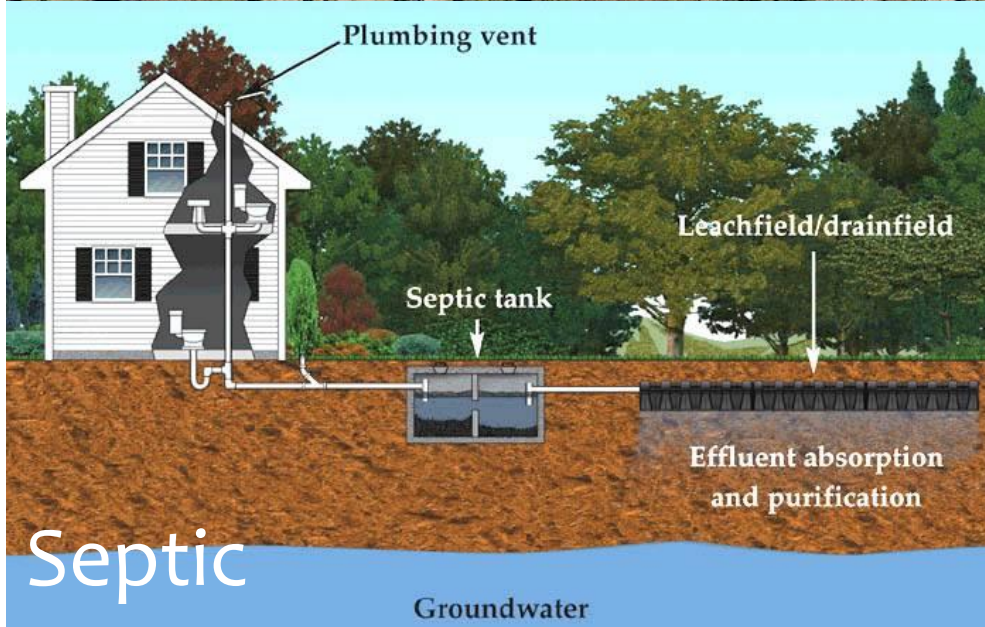
Stormwater & Nonpoint Source



Impoundments



Urban

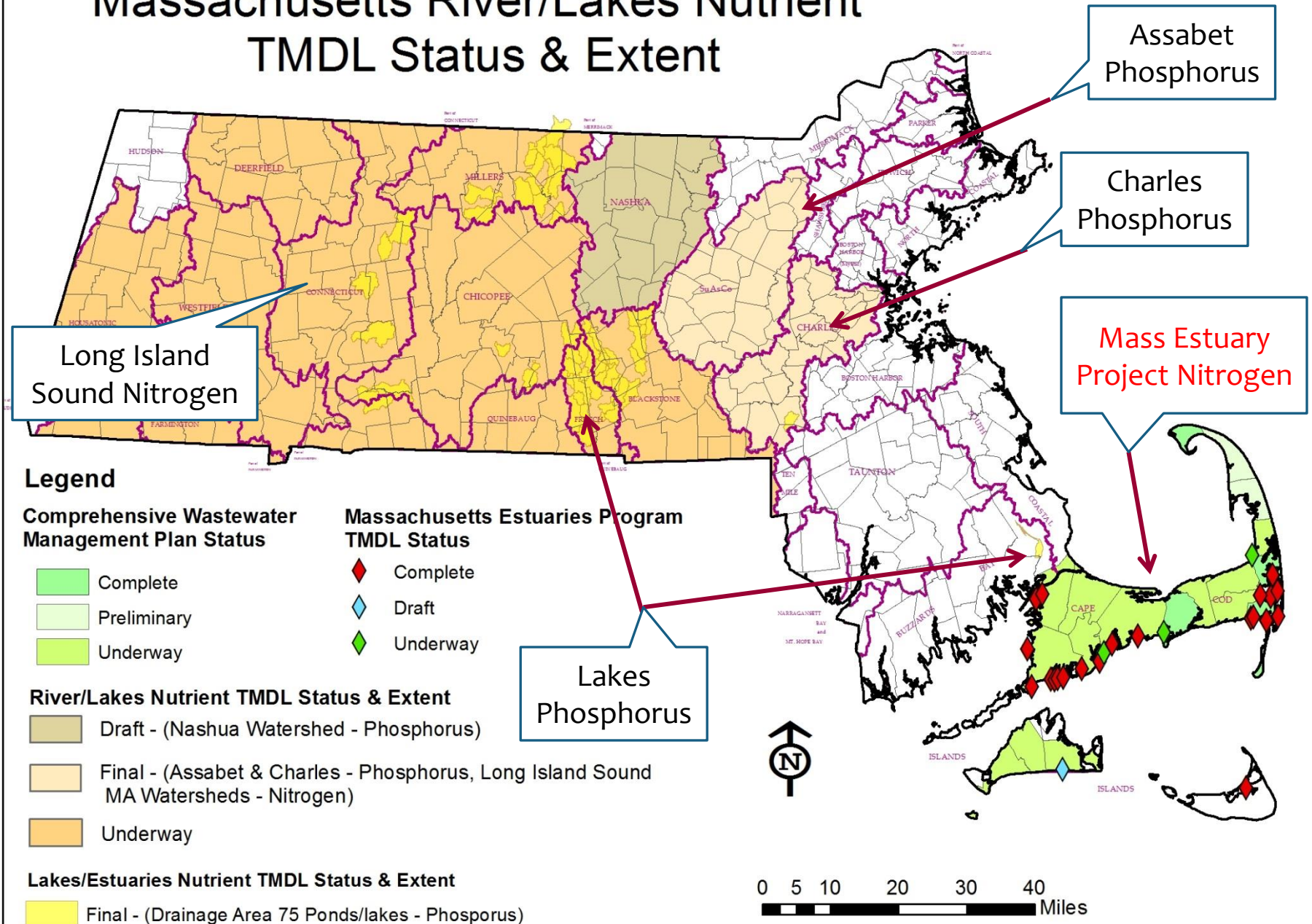


Septic

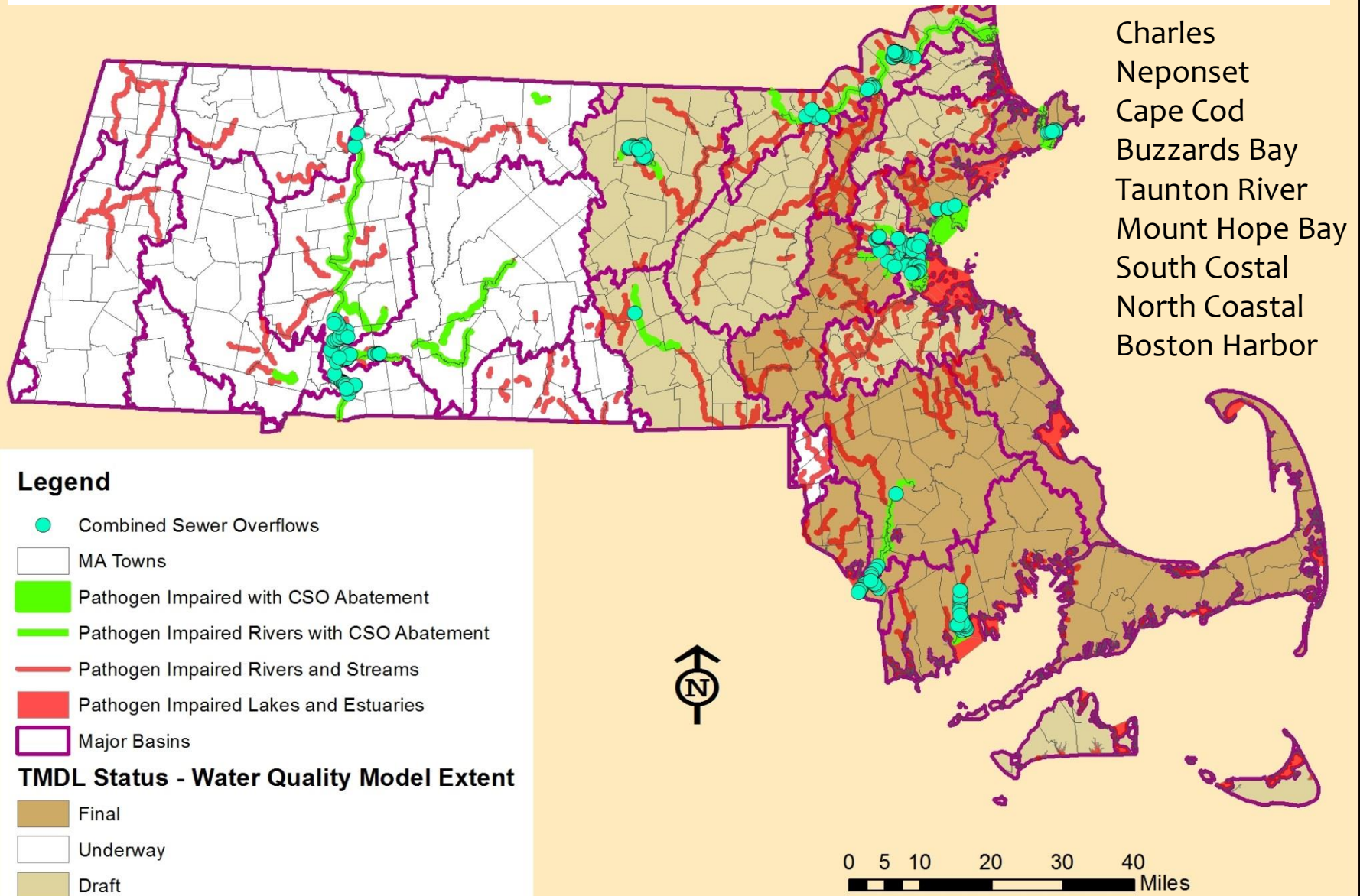


Agriculture

Massachusetts River/Lakes Nutrient TMDL Status & Extent



Pathogen Impaired Water Bodies and Bacteria TMDL Status



Prioritization Challenges & Opportunities

- * Solving water quality problems is expensive
- * Coordination of State- and stakeholder-driven priorities
- * Tracking of planning and implementation
- * Data collection is expensive
- * Need for science-driven solutions

- * Need to leverage partnerships & funding, cross-program integration
- * Optimize use of resources to achieve common goals
- * Use of technology and tools
- * Align MassDEP and non-DEP monitoring activities
- * Many good tools available to guide prioritization & implementation

Workshop

Panel and Breakout Sessions

- * Panel – case examples of stakeholder activities
- * Discuss stakeholder-driven priorities for protection
- * Discuss stakeholder-driven priorities for restoration
- * Discuss implementation measures

