Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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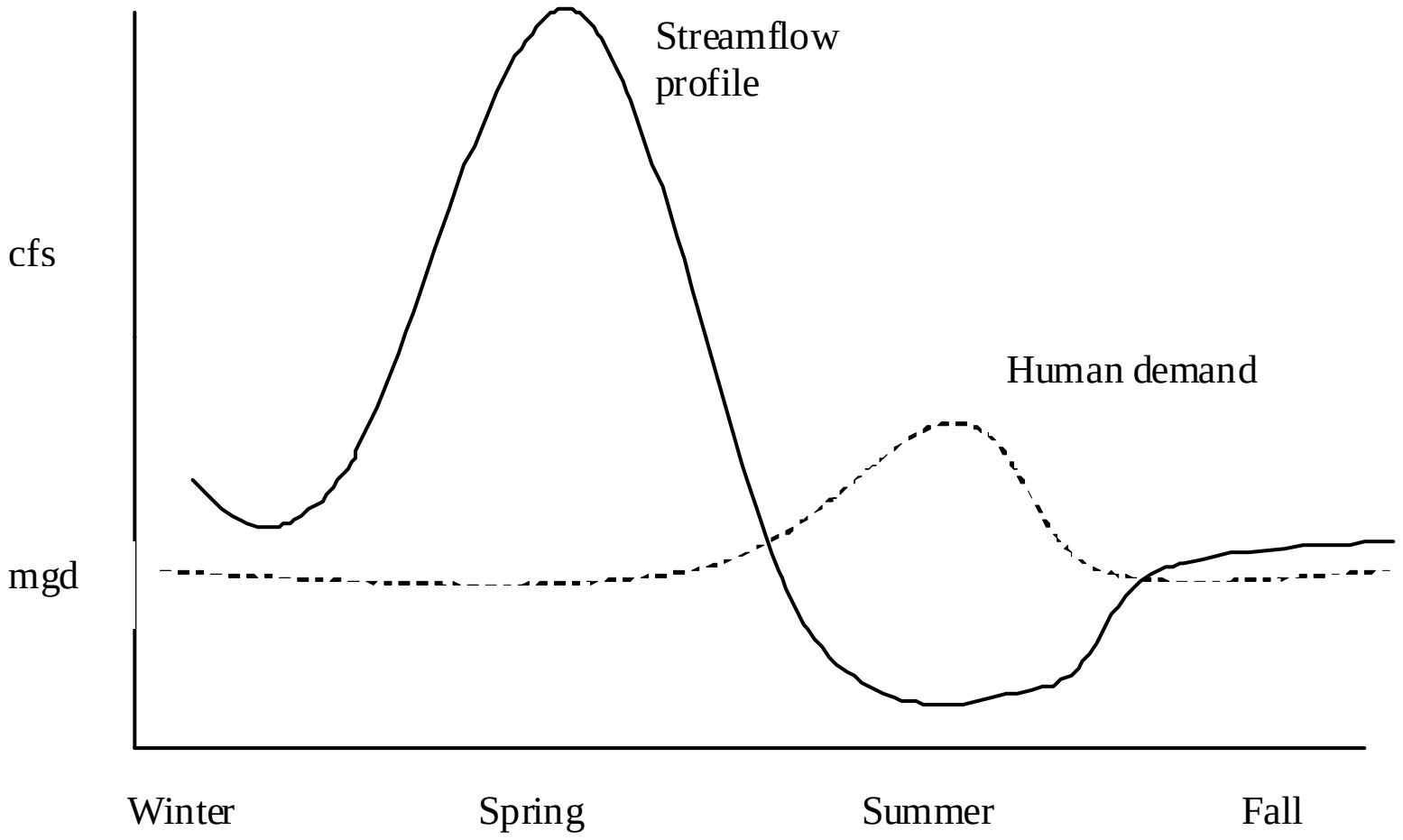
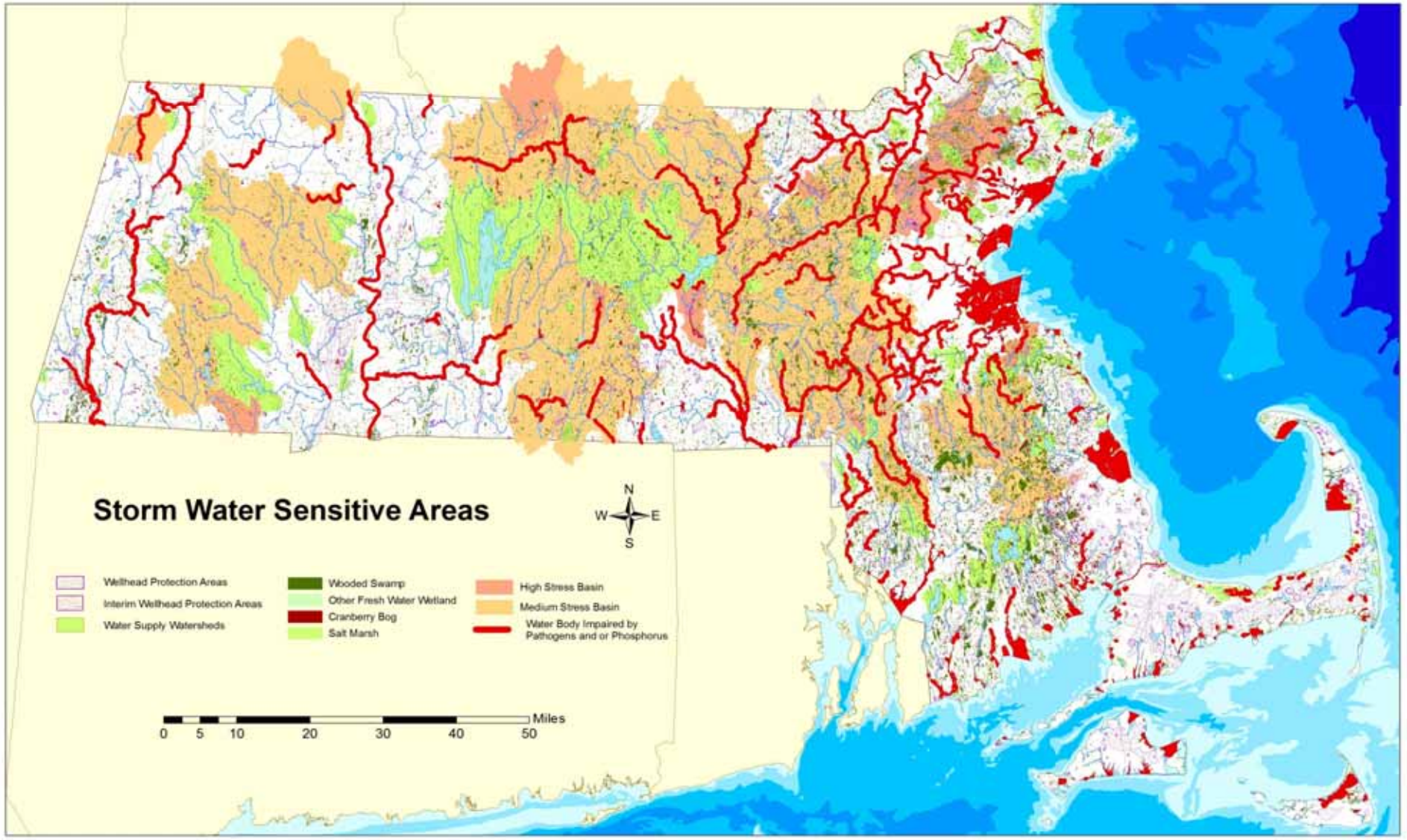
those who think they get it
those who think they both get it and do not get it
those who think they do not get it
those who are very confused
those who think they get it and think there is nothing to get
those who think they do not get it and think there is nothing to get
those who think there is nothing to get


Streamflow
profile
cfs
Human demand
mgd
Winter
Spring
Summer
Fall

Massachusetts Sensitive Areas



Massachusetts Stormwater Standards

1. No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
2. Manage peak discharges
3. Provide recharge
4. Reduce TSS
5. Prevent pollution from land uses with higher potential pollutant loads
6. Protect Critical Areas
7. Redevelopment: meet standards to maximum extent practicable AND improve existing conditions
8. Control construction-related impacts
9. Provide operation and maintenance
10. Remove illicit discharges

Standard No. 3

- Provide stormwater recharge.

Hydrologic Soil Group	New Recharge Depth x Total Impervious Area	Old Recharge Depth x Total Impervious Area
A	0.60 inches	0.40 inches
B	0.35 inches	0.25 inches
C	0.25 inches	0.10 inches
D	0.10 inches	waived

Treatment Rules for Stormwater

- Treatment ALWAYS Required before Recharge

- Additional Treatment ALWAYS Required if:
  - ***Within a Zone II or Interim Wellhead Protection Area;***
  - Near Outstanding Resource Water;
  - Near Special Resource Water;
  - Near Shellfish Growing Area;
  - Near Cold-water Fishery;
  - Near Bathing Beach;
  - From Land Uses with Higher Potential Pollutant Loads; or
  - In Area with Rapid Infiltration Rate (> 2.4 inches/hour).

Standard 4

DON'T FORGET TO ADSORB YOUR SUSPENDED SEDIMENT

- Remove 80% TSS

  Through
  - Structural BMPs
  - Nonstructural practices
  - Pollution Prevention

- Sized for ½-inch or 1-inch *Water Quality Volume*
- Updated TSS Removal Table – Jan. 2, 2008
- BMPs added to TSS Removal Table – Jan. 2, 2008
- Long Term Pollution Prevention Plan Required

What If MassDEP Has Adopted a Total Maximum Daily Load *(TMDL)?*

- BMPs Selected Must Be Consistent with TMDLs
- >180 TMDLs currently in place
- More TMDLs Under Development

Standard 6: Critical Areas

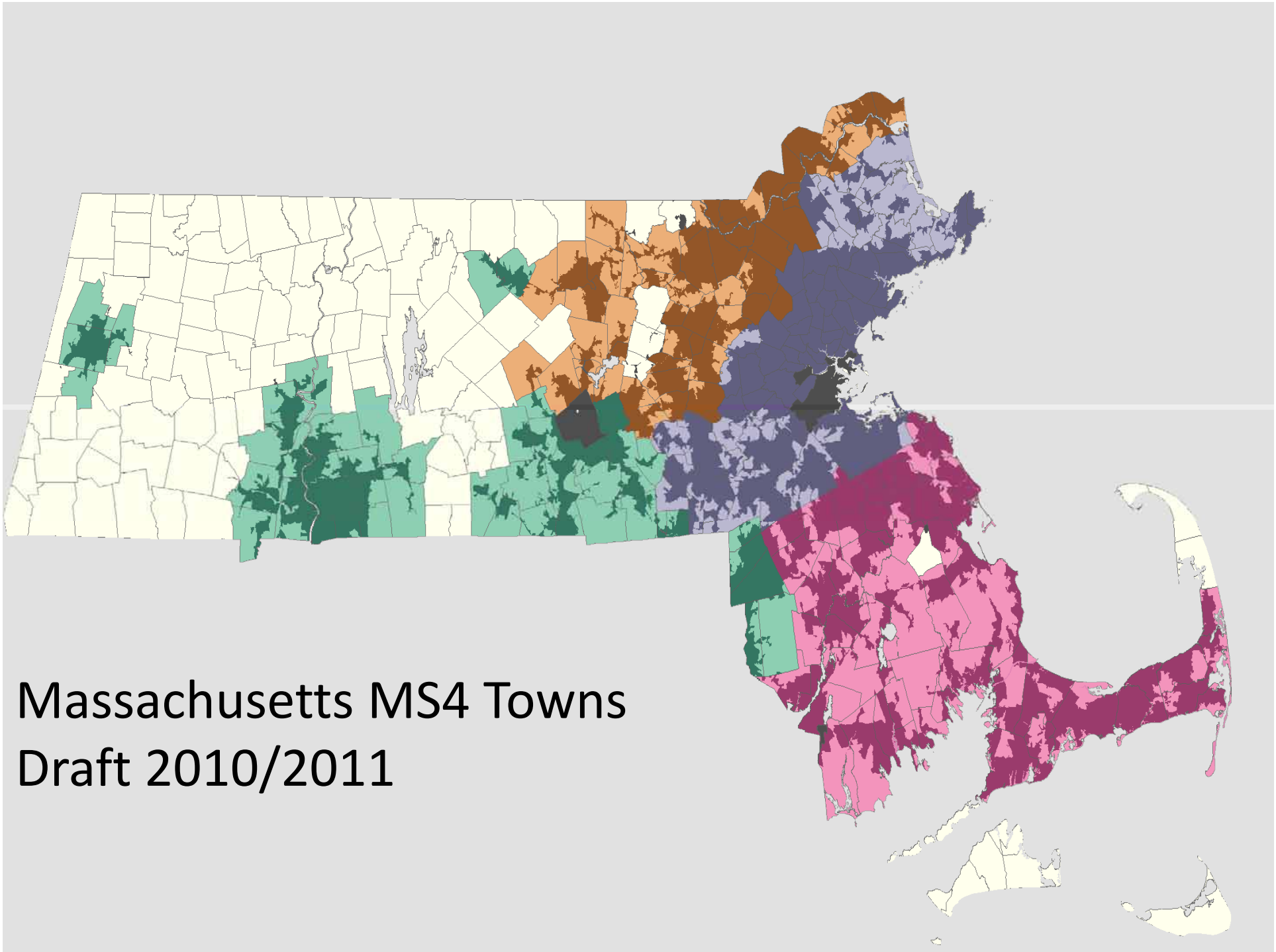
- Special Controls Required
- Includes Water Supply Areas

  - 44% TSS Pretreatment Required Prior to Recharge
  - Only Specific Treatment BMPs Allowed
  - Requires 1-inch Water Quality Volume
  - May Require Removal of Other Constituents to Prevent Pollution to Wetlands
  - Especially Critical if TMDL Established or Redevelopment Site

Standard 7: Redevelopment

- Comply to the "Maximum Extent Practicable"

  - Redevelopment Checklist Must Be Completed
  - Must Fully Meet Standards 1, 8, 9, and 10
  - Must Meet Other Standards to "Maximum Extent Practicable"
  - Any Existing Illicit Discharges Must Be Removed (Std. 10)
  - Construction Period Controls Fully Required (Std. 8)
  - Long term Pollution Prevention & O/M Plans Required
  - *Reminder* - Redevelopment ALSO Must Improve Existing Conditions



Massachusetts MS4 Towns
Draft 2010/2011

What's Coming Down the Pike?

- Integrative programs
  - Integrating water management, wastewater management and stormwater
  - TMDLs across the Commonwealth
  - More protective SW rules for Towns: MS4
  - Sustainable Water Management Initiative
- These all drive toward more coordinated local actions
- "one hand washes the other"

"No, Thursday's out. How about never—is never good for you?"

Regional Cooperation At Its Best- CMRSWC

- Central Massachusetts Regional Stormwater Coalition – originally 13 Towns
- Goal: better/more efficient cheaper stormwater management = less cost to taxpayers
- Recently expanded to 30 Towns

Q: Why are Vulnerable Wetlands Important?

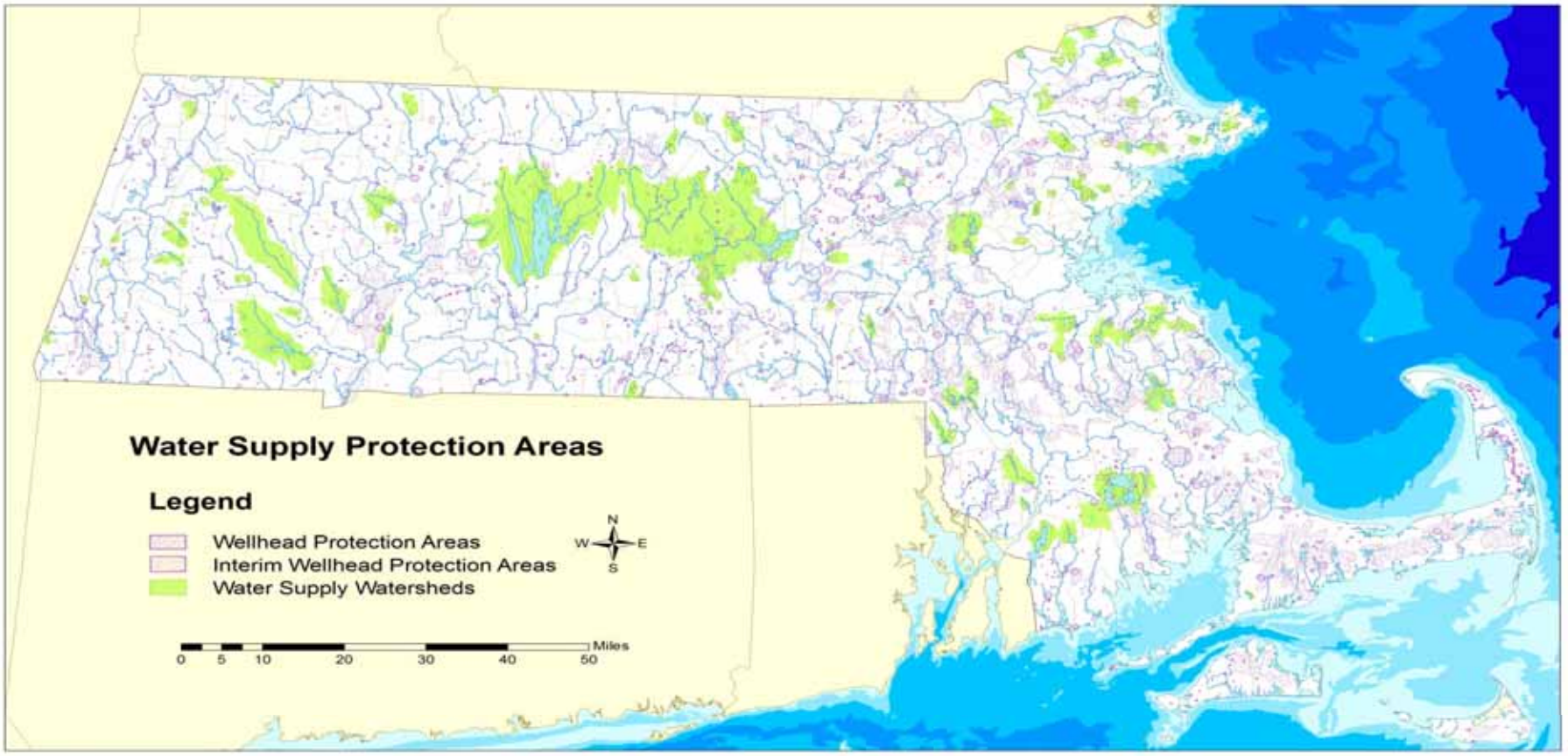
A: Water Quality

- headwater streams and isolated wetlands retain and transform excess Phosphorus and over 50% of Nitrogen
- Extensive land/water exchanges serve as natural filters to improve water quality to downstream resources
- Protect them = fewer retrofits later

Actions Towns Can Take to Protect Vulnerable Wetlands

- Protect or restore vegetated buffers around wetlands.
- Set back or treat existing discharges to wetlands, especially near water supplies.
- Reconstruct existing drainage systems: disconnect and distribute
- For new drainage systems: recharge and infiltrate on site

Water Supply Protection Areas



Resources

- Massachusetts Stormwater Handbook
  - http://www.mass.gov/eea/agencies/massdep/water/regulations/massachusetts-stormwater-handbook.html
- CMRSWC
  - http://centralmastormwater.org/Pages/index
- MA Stormwater Coordinator
  - Frederick.Civian@state.ma.us

www.mass.gov/eea/agencies/massdep/

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