

NACWA Presentation

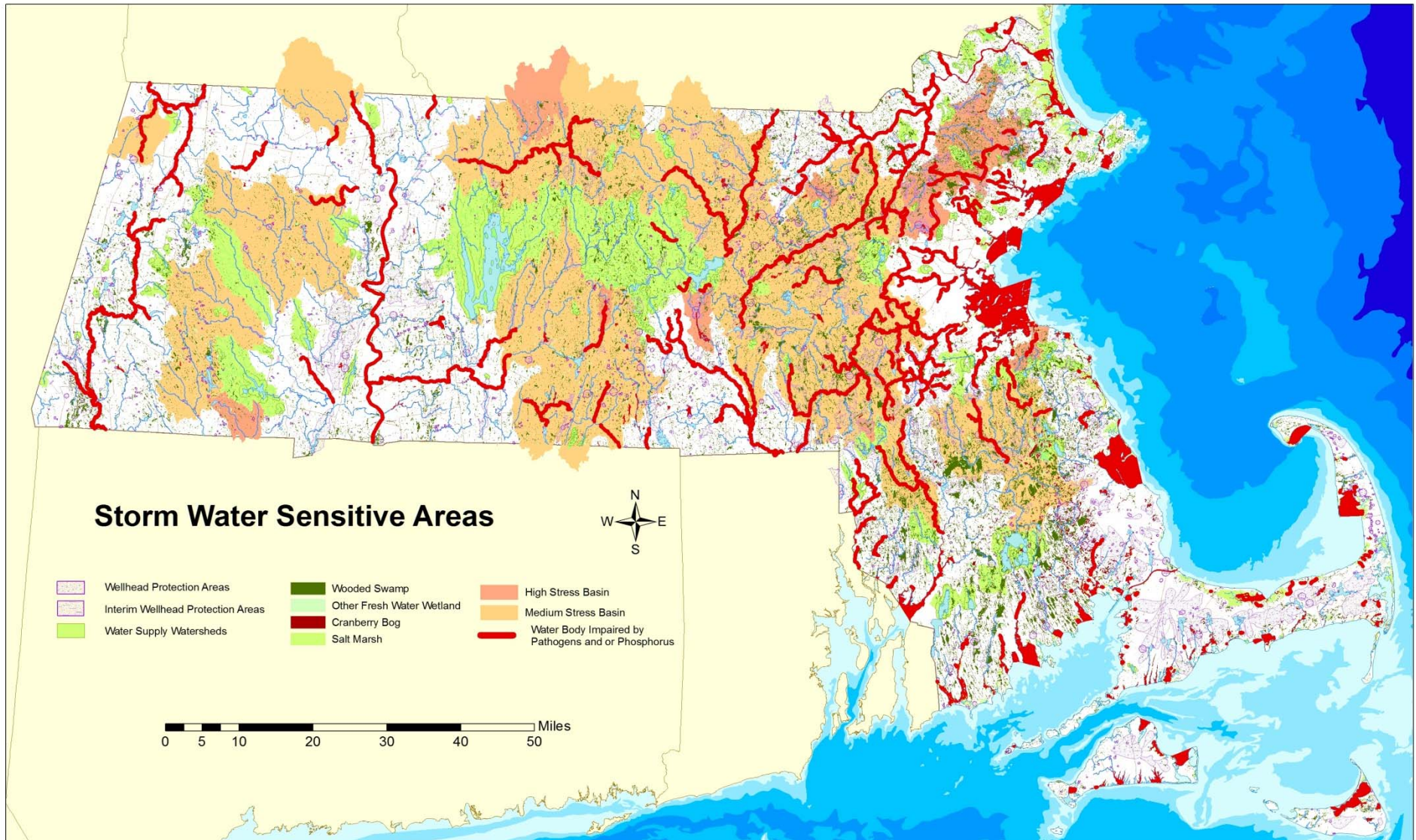
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November 21, 2013



Topics

- ▶ MS4 in Massachusetts
 - First MS4 permit 2003 – general requirements
 - Successor permit will be coming “soon” – with detailed and specific requirements
- ▶ Residual Designation Authority
 - 3 Towns in the Upper Charles
 - Regionwide
- ▶ Unique in Massachusetts
 - Bi-State project for RI/MA
 - Central MA Regional SW Coalition
 - WPI student projects in Central MA

Massachusetts Sensitive Areas



Current Stormwater Regulation in Massachusetts

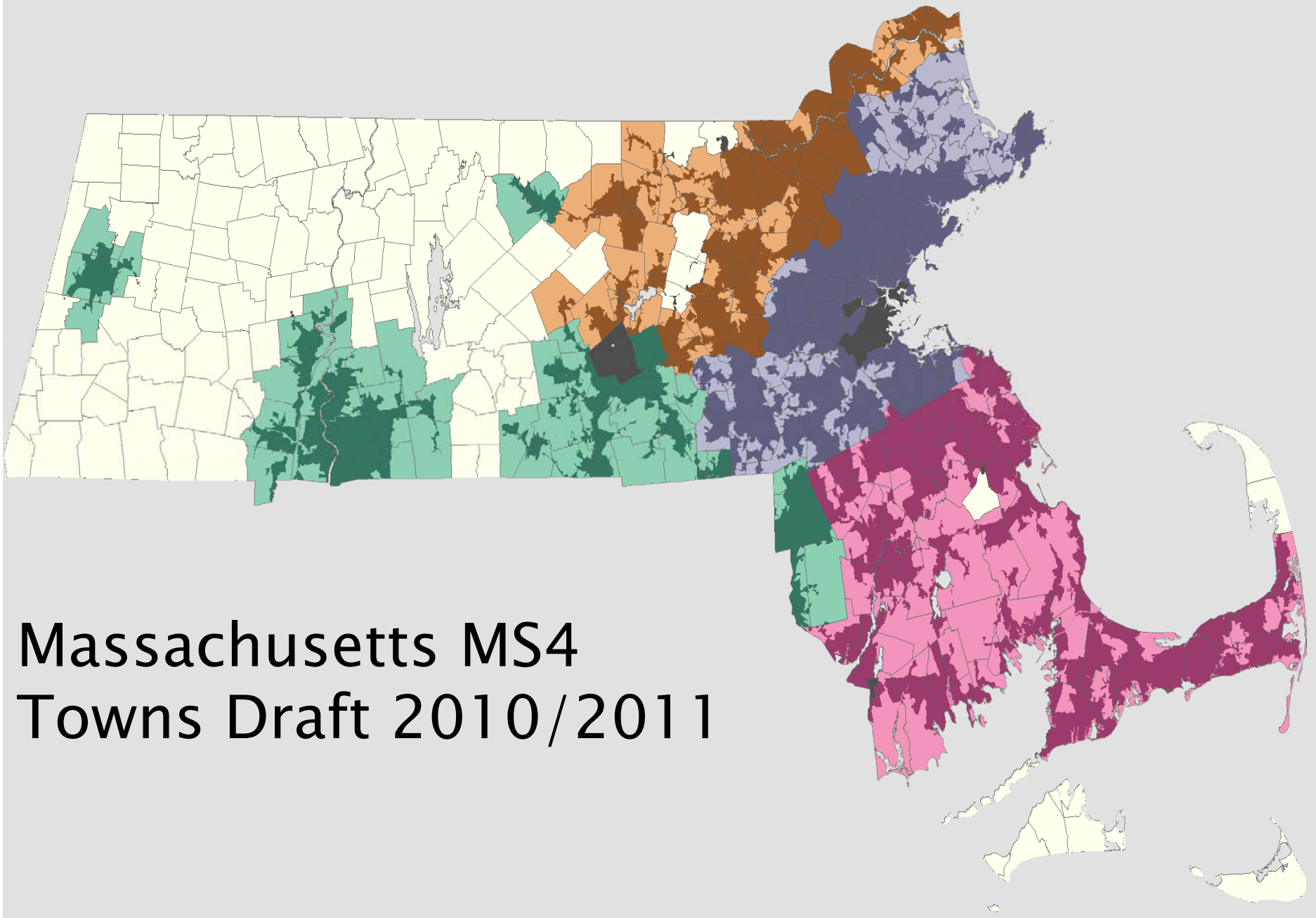
- ▶ Federal Regulations
 - Construction General Permit
 - Multi Sector General Permit
 - Municipal Separate Storm Sewer System (Ms4)
 - Residual Designation Authority
- ▶ State Regulations
 - Massachusetts Stormwater Standards
 - In “Wetlands jurisdictional areas”
- ▶ Local Bylaws



Which SW Rules Apply?

- ▶ Depends on three questions . . .
- ▶ WHO are you?
 - e.g., A Town with both “urbanized area” and a stormwater system
- ▶ WHERE is the project located?
 - e.g., within a wetlands jurisdictional area
- ▶ WHAT will the project do?
 - e.g., construction that disturbs an acre or more





Coming MS4 Requirements That Are Similar to 2010/2011 Draft Permits

- ▶ Public Education and Outreach
 - Minimum 2 Educational messages/year
 - To 4 groups (Business/Commercial/Institutional; Developers and Construction/Industrial/residential)
 - Show evidence of targeting and effectiveness
- ▶ Public Participation
- ▶ Construction – indications of no major changes
- ▶ New Development/Redevelopment – indications of no major changes
 - Standards 3–7 from the MA SW Handbook

Major Changes to MS4 Permit: Wet Weather Monitoring

- ▶ Wet Weather Monitoring is part of IDDE
- ▶ Won't require wet weather monitoring at all outfalls
- ▶ Instead, requires it if needed:
 - Indications of septic runoff
 - Wet Weather Screening in Spring only
 - Based on "Systems Vulnerability Factors"
 - Any one of 12 factors is a trigger
 - If triggered, must investigate the catchment area
- ▶ 10 years to fully implement IDDE, not 7





Major Changes to MS4 Permit: TMDLs

- ▶ Ongoing question: how to implement TMDLs in the MS4s?
- ▶ EPA will place TMDL-related requirements in permit sections dealing Public Education and Outreach, IDDE, and Good Housekeeping for Town operations
 - actions to reduce nitrogen and/or phosphorus pollutants
- ▶ Major New Action and Tracking requirements:
 - Action: that new development and redevelopment stormwater management BMPs be optimized for pollutant removal
 - Tracking: “permittee shall document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP in each annual report” and estimate resulting pollutant removal
- ▶ Also develop and implement Water Quality Response Plans for impaired waters



EPA to Harmonize SW Rules

- ▶ 2003 permit and the draft MS4 permit require Towns to adopt local bylaws to manage stormwater in “urbanized area”
 - Construction
 - Post-construction
 - Illicit discharges
- ▶ Draft MS4 permit will require that Towns use MA Stormwater Standards 3–7 for post-construction
 - MA SW Standards already required in Wetlands 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

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

Two RDAs in MA

- ▶ 3 Towns of the Upper Charles
 - Bellingham, Franklin, Milford
 - Draft permit proposed by EPA
 - Proposes retrofits of public or private property with 2 acres or more impervious surface
- ▶ Regionwide Petition
 - To implement TMDLs in EPA Regions 1,3 and 9
 - EPA considering its response
 - Petition did not propose specific threshold



Details for the RDA for 3 Towns of the Upper Charles

- ▶ Bellingham, Franklin, Milford – Draft permit issued 2010
- ▶ Draft proposal to implement Charles River TMDL
 - retrofits of public/private property w/2 acres or more impervious surface
 - Phosphorus Control Plan required for each Town
- ▶ Flexibility proposed:
 - Implementation Time – 10–25 years
 - Funding Mechanism: encourages Stormwater Utility
 - Management Approach: either individually or cooperatively, through a CMPP
- ▶ CMPP – Certified Municipal Phosphorus Program
 - Instead of each permittee reducing P on each site, groups of permittees pay for most efficiently located BMPs



Bi-State Stormwater Project

- ▶ 38 Towns in the Blackstone and Ten-Mile River Watersheds in Rhode Island and Massachusetts
 - Promote more stormwater Best Management Practices (BMPs) that use Low Impact Development (LID) techniques to manage and treat stormwater;
 - Write practical local stormwater bylaws and improve the quality of local waters for drinking, fishing and recreation;
 - Examine the establishment of stormwater utility districts, stable funding sources for local stormwater work that assess fees based on how much a stormwater system is used, not through taxes.



Regional Cooperation At Its Best: CMRSWC

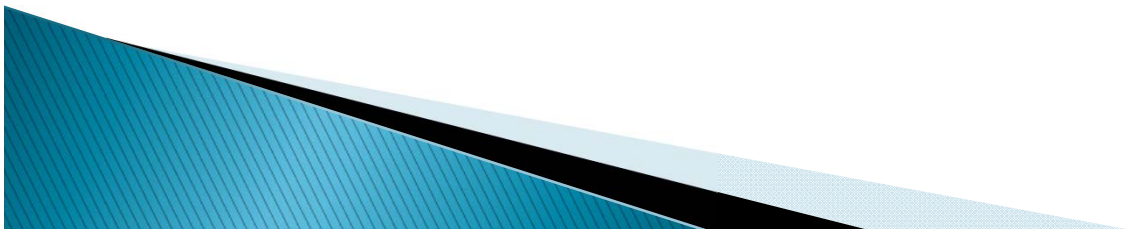
- ▶ Central Massachusetts Regional Stormwater Coalition
- ▶ Funded by state “Community Innovation Grant”
- ▶ Three lead communities: Charlton, Leicester, and Spencer
- ▶ Spencer = contracts, budget, reporting
- ▶ 6 Town Steering Committee
- ▶ Goal: better/more efficient cheaper stormwater management = less cost to taxpayers

CMRSWC Collaborative Policies and Procedures: 3 Examples

- ▶ Sump Pump Discharge Policy
 - Reasonable, consistent approach for allowing connection to storm drain system
- ▶ Stormwater Pollution Prevention Plan (SWPPP) Template
 - Appropriate for any municipal facility
 - Interactive Word document “total customization”
- ▶ Salt/Sand Application Benchmarking
 - Aimed at reducing chloride loadings to surface waters
 - Benchmarks current loadings, suggests reduction, defines calibration procedure
- ▶ Centralized Mapping database and GPS equipment

Is the CMRSWC Succeeding?

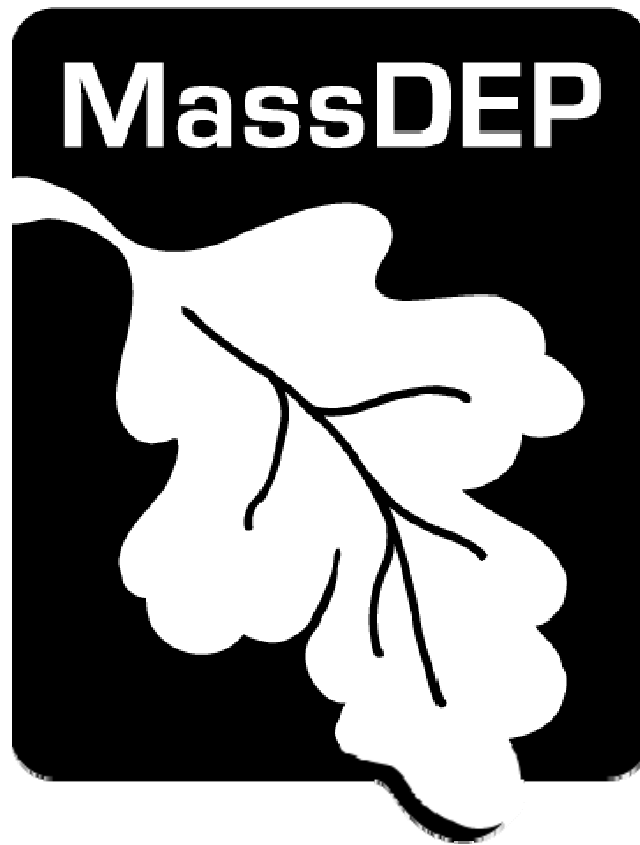
- ▶ 17 additional Towns signed up . . .
 - . . . and paid to join (~\$2700/town)
- ▶ Received additional grant funding for second year
- ▶ Developing an ongoing funding mechanism to continue project after grant expires



Worcester Polytechnic Institute Student Project

- ▶ Ongoing relationship with WPI
- ▶ 2–3 student groups each year
- ▶ Purposes:
 - Academic: understand need for actions to protect the environment
 - Regulatory: analyze Towns' compliance with MS4
 - Practical: help Towns map their MS4 system
- ▶ Focus: Assist Towns of the CMSWRC





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