
MS4 Compliance:

Common Threads (and Opportunities!) in New England Permits

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Fuss & O'Neill, Inc.

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How is the MS4 Program Administered?

By the State

Maine

Vermont

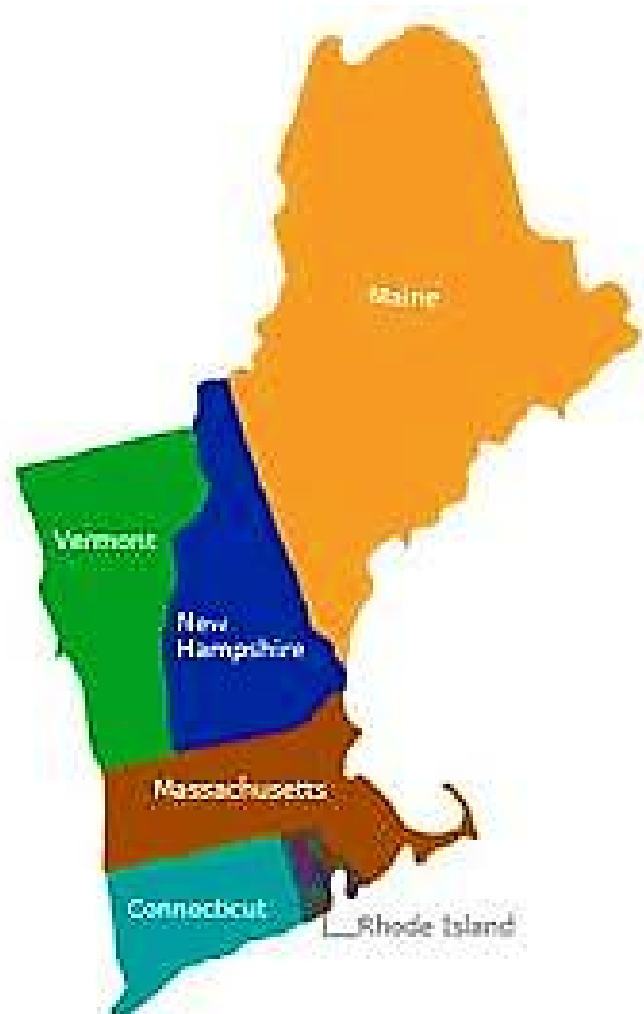
Connecticut

Rhode Island

By USEPA

New Hampshire

Massachusetts



Review of New England's MS4 Permits

State	Regulatory Authority	Status
Connecticut	CT DEEP	Draft: July 2014*; January 2004
Maine	Maine DEP	July 2013
Massachusetts	US EPA	Drafts: September 2014; 2008-2010 (watershed-specific); May 2003
New Hampshire	US EPA	Drafts: December 2008; February 2013; May 2003
Rhode Island	RI DEM	November 2003
Vermont	VT DEC	December 2012

*- Some things in the CT Draft will change after February 5.

Unique Elements in State Permits

Connecticut

- Everyone is an MS4!

Current Permit

- Only municipalities in **Urbanized Areas**
- No institutions

Proposed Permit

- **All municipalities** in CT
- Municipalities in Urbanized Areas (Tier 1)
 - Previously covered
 - Newly covered
- Public institutions (Tier 1)
- Municipalities outside of Urbanized Areas or within UA with waiver (Tier 2)

Unique Elements in State Permits

Connecticut

- In-Stream Monitoring of **Receiving Water**
 - Wet weather
 - Dry weather
 - pH, temperature, DO, hardness, conductivity, oil & grease, COD, surfactants, chloride, magnesium, cyanide, turbidity, TSS, total P, ammonia, TKN, nitrate & nitrite, total copper, total lead, total zinc, E. Coli & total coliform (fresh) or fecal coliform & enterococci (marine); rainfall pH

Unique Elements in State Permits

Connecticut

- In-Stream Monitoring of **Outfalls**
 - 4 to 12 locations, depending on population
 - Wet weather
 - Dry weather
 - pH, temperature, DO, hardness, conductivity, chloride, magnesium, cyanide, surfactants, TPH, oil & grease, COD, TSS, total P, ammonia, TKN, nitrate & nitrite, total copper, total lead, total zinc, E. Coli & total coliform (fresh) or fecal coliform & enterococci (marine); rainfall pH

Unique Elements in State Permits

Maine

- **Stormwater Awareness Plan**
 - Expand outreach to the public
- **Permit Awareness Plan**
 - Expand understanding of municipal employees about their roles in Permit compliance
- Public Education & outreach
 - Focus on priority watershed OR regional need
- **Targeted BMP Adoption Plan** (at least 1)

Unique Elements in State Permits

Vermont

- **Flow Restoration Plans** for impaired streams
 - For each watershed: required controls; design and construction schedule; financial plan; regulatory analysis and assistance; and ID of third party implementation.

Common Threads:

Six Minimum Control Measures



Compare & Contrast: Public Education

	Connecticut	Massachusetts	New Hampshire
Permit Section	6.a.1	2.3.2	2.3.2
Distribute To:	“the community”	<i>Four target audiences</i> <ol style="list-style-type: none"> 1. Residents 2. Business, institutions (college, school, hospitals), and commercial 3. Developers (construction) 4. Industrial 	
Progress	<ul style="list-style-type: none"> • Start effective date • Continue each year 	<ul style="list-style-type: none"> • Start on the effective date • Eight messages (minimum) over the permit term • Two messages (minimum) per target 	
Reporting	Summarize	Provide evidence of each message	

Compare & Contrast: Public Education

	Connecticut	Massachusetts	New Hampshire
Permit Section	6.a.1	2.3.2	2.3.2
Measurement	(None)	<ul style="list-style-type: none">• Modify any ineffective message• Modify any ineffective distribution method• Document the method(s) used to assess the effectiveness of <i>each message</i>• Document method used to assess effectiveness of <i>the overall education program</i>	

Compare & Contrast: Catch Basin Cleaning

	Connecticut	Massachusetts	New Hampshire
Permit Section	6.a.6.C(x)	2.3.7(a) iii	2.3.7.1(d)
Inspection frequency (minimum)	<u>Impaired Waters</u> <i>First two years</i> Every six months <i>After that</i> As needed <u>Other Waters</u> <i>First two years</i> At least once <i>After that</i> Cleaned- within 6 months	Within a year, establish cleaning frequency for all basins.	Within a year, establish cleaning frequency for all basins. Prioritize based on Impairment for silt, N, or P
Cleaning frequency	As needed so no sump is more than 50% full.	As needed so no sump is more than 50% full at any time.	As needed so no sump is more than 50% full at any time.

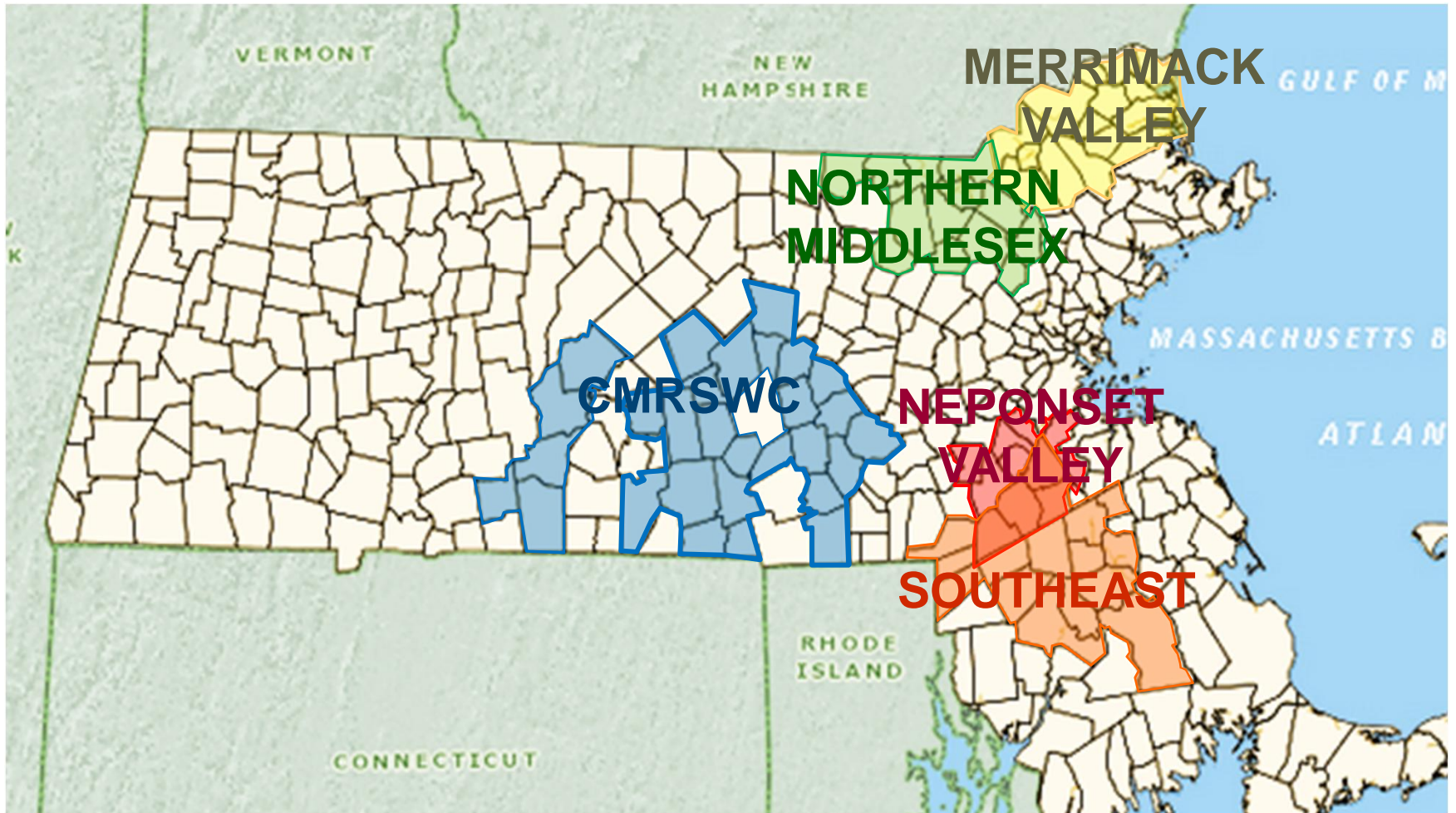
Compare & Contrast: Catch Basin Cleaning

	Connecticut	Massachusetts	New Hampshire
Permit Section	6.a.6.C(x)	2.3.7(a) iii	2.3.7.1(d)
Reporting	<ul style="list-style-type: none"> Document in annual report (and SMP) the cleaning frequency for each CB. 	<ul style="list-style-type: none"> Total number of CB's Number inspected in permit year Number cleaned Volume of mass of material from each CB (in impaired waters) Volume or mass of material from all CBs (total) Cleaning frequency for each CB. 	<ul style="list-style-type: none"> Total number of CB's Number inspected in permit year Number cleaned Volume of mass of material from each CB (in impaired waters) Volume or mass of material from all CBs (total) Cleaning frequency for each CB.

Now for the “Opportunities” Part!

*Resources Available from Massachusetts’
Stormwater Coalitions
and other Organizations*

Regional Stormwater Coalitions in MA

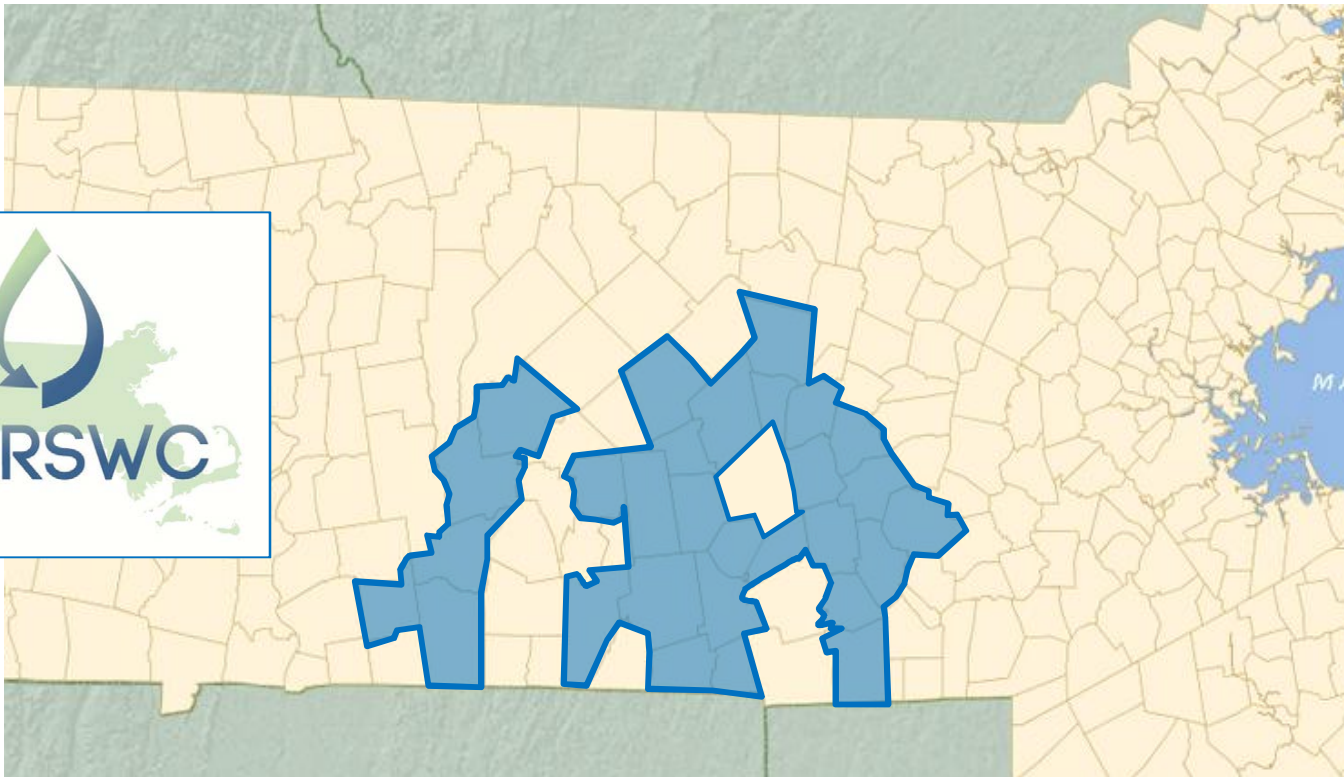


Caveats When Sharing Resources

1. Another coalition's work will not be 100% applicable for all states, towns or watersheds.
2. Another coalition's work will not be ready to go "off the shelf"- some customization may be necessary.
3. Some tools were developed for the 2003 MS4 Permit and will need to be updated for the 2014 MA MS4 Permit.
4. Tools are voluntary: if a town already has a process or method that is working, keep doing it!

Central MA Regional Stormwater Coalition

Auburn, Boylston, Charlton, Dudley, Grafton, Hardwick, Holden, Hopkinton, Leicester, Millbury, Northborough, Northbridge, Oxford, Palmer, Paxton, Rutland, Shrewsbury, Southbridge, Spencer, Sterling, Sturbridge, Upton, Uxbridge, Ware, Webster, West Boylston, Westborough, and Wilbraham



Shareable Resources from this Group

1. **15 Standard Operating Procedures**
(SOPs): inspections and forms
2. **Stormwater Pollution Prevention Plan (SWPPP) Template**
3. **IDDE Communication and Training Toolk**
4. **Sump Pump Discharge Policy**
5. **Salt/Sand Calibration**
6. **Stormwater BMP Toolbox:** encourage residents to use low-impact development



Format of the SWPPP Template

Location:

www.centralmastormwater.org/Pages/crsc_toolbox/SWPPPtemplate

Word Document:

- # indicates where site or Town-specific information is needed
- Delete what you don't need.
- TOC will automatically update

Instructions: directly in text inside boxes; purple font.

SECTION 2 - SWPPP Evaluation

2.1 Description of the Municipality

##MUNICIPALITY is located within the Massachusetts Interstate South-Flowing Watershed. The total population of the community is ##VALUE per the 2010 Census. The extent of the MS4 Urbanized Area within ##MUNICIPALITY, per the 2000 Census, is shown in **Figure 2-X**. The Urbanized Area per the 2010 Census has not yet been developed or released by USEPA.

*Instructions: Refer to the folder "Urbanized Area" on the DVD provided.
Locate the subfolder with your community name.
Open the filename "Figure". Print and insert the figure at the following page break.*

2.2 Responsibilities of Municipal Departments

The ##DEPARTMENT in ##MUNICIPALITY is the primary entity responsible for administering and implementing the requirements of the 2003 Massachusetts MS4

Savings of CMRSWC's SWPPP Template

	Individual Approach	Regional Approach
Consultant Fee	\$8,000	\$16,000
#of Towns Benefitting	1	30
Cost per Town=	\$8,000	\$533
Assumption: both Approaches require 16 hours of staff time Regional Approach = decreased cost per Town		

Contact Information for CMRSWC

Name: Robin Craver, Charlton Town Administrator

Phone: 508-248-2206

Email: robin.craver@townofcharlton.net

Name: Aubrey Strause

Email: aubrey@verdantwater.com

Phone: 207-641-7704

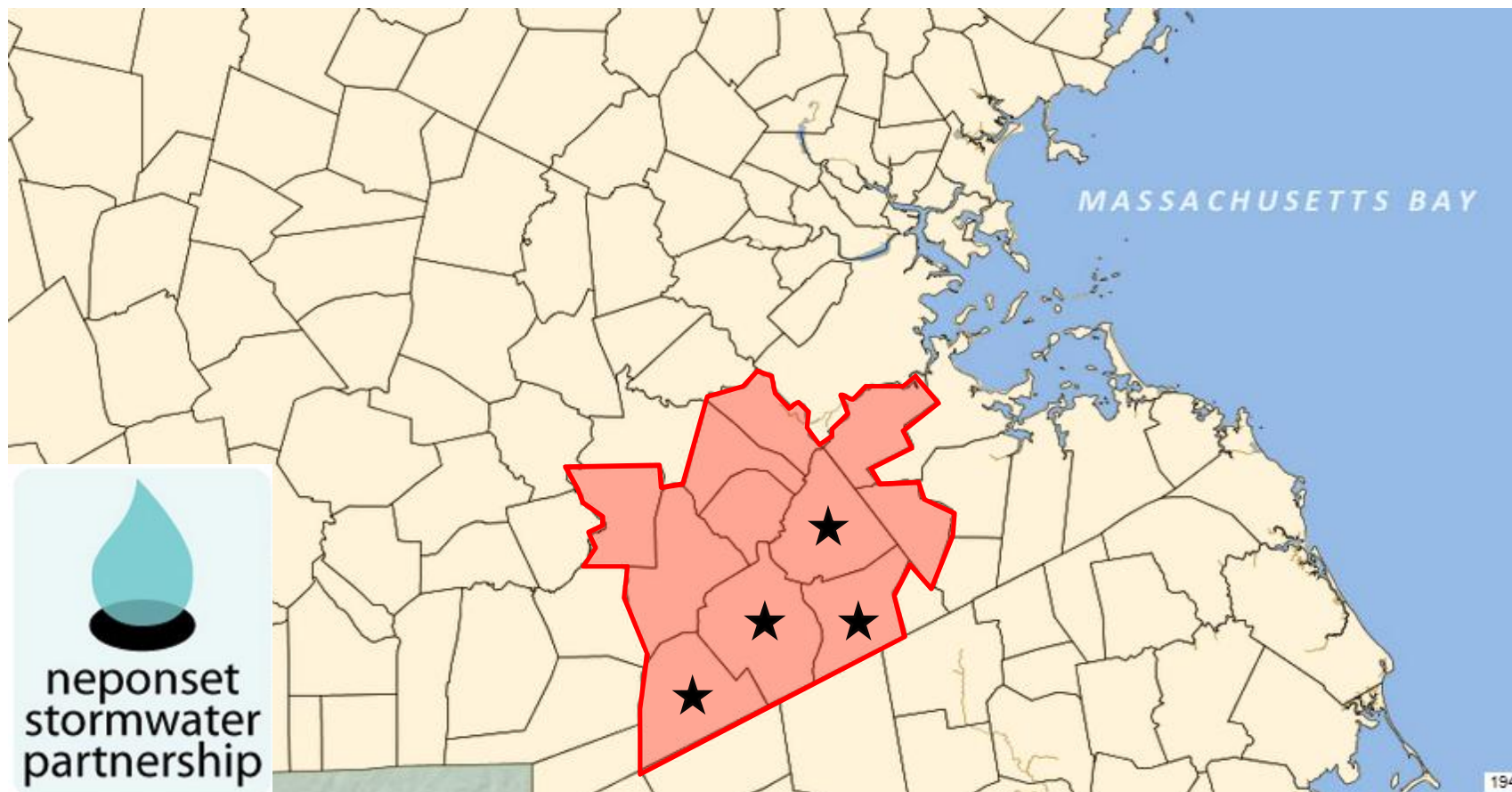
Website: www.CentralMAStormwater.org

Twitter: @MAStormH2O



Neponset Stormwater Partnership

Canton*, Dedham, Foxborough*, Medfield, Milton, Norwood, Randolph, Sharon*, Stoughton*, Walpole, and Westwood



Shareable Resources from this Group:

1. High-resolution, print ready **outreach materials** for residential commercial, construction, and industrial audiences.
2. Model **Stormwater Management Plan (SWMP) language** for IDDE, outreach, and public participation.
3. **Bylaw checklists** for stormwater and non-stormwater bylaws.
4. Methodology for delineating and **ranking catchment** areas.



Contact Information for Neponset

Name: Ian Cooke, Executive Director

Neponset River Watershed Association

Phone: 781-575-0354 ext. 305

Email: cooke@neponset.org

Name: Martin Pillsbury, Metro. Area Planning Council

Email: mpillsbury@mapc.org

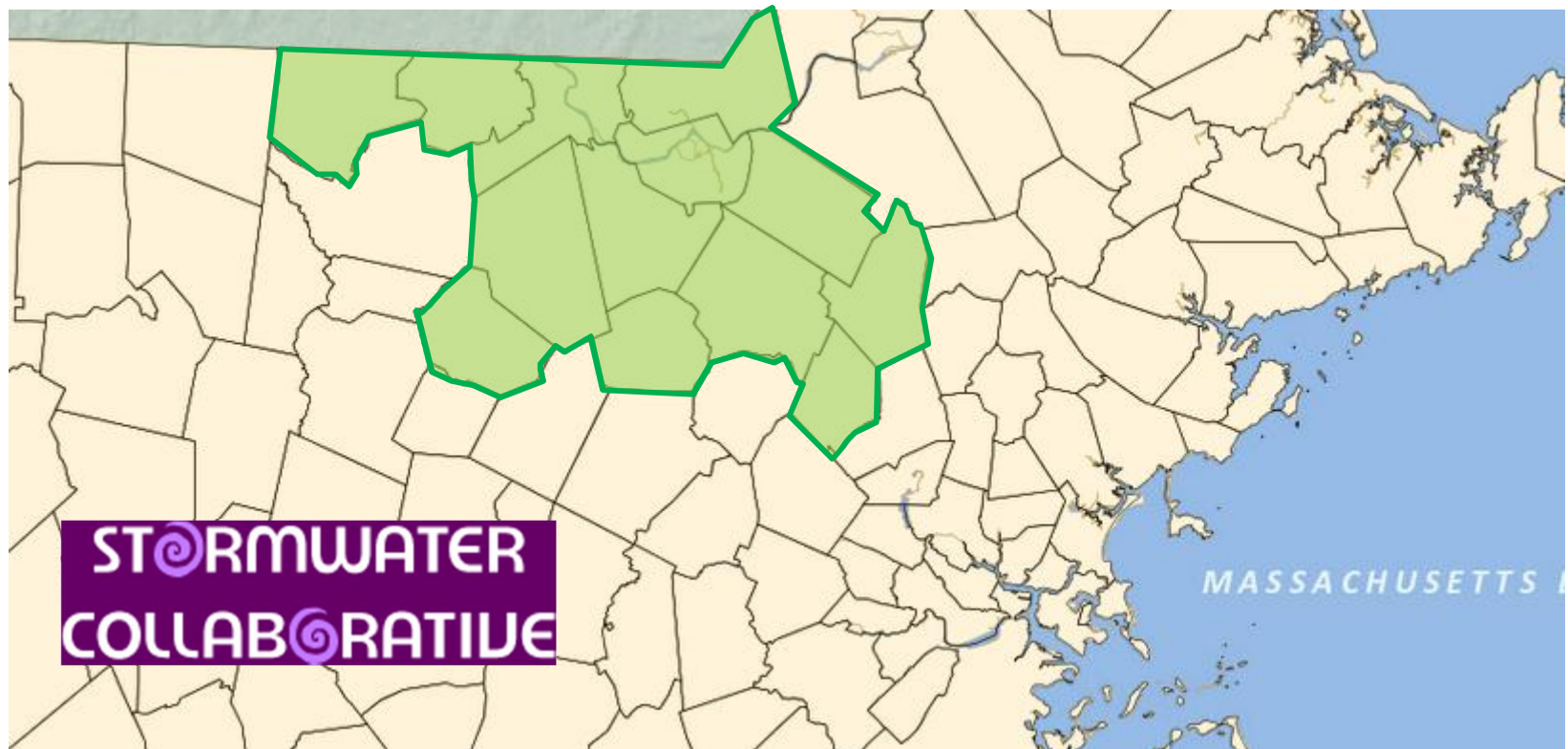
Phone: 617-451-2770 ext. 747

Website: www.NeponsetStormwater.org



Northern Middlesex Stormwater Collaborative

Lowell, Billerica, Burlington, Carlisle, Chelmsford, Dracut, Dunstable, Littleton, Pepperell, Tewksbury, Tyngsborough, Westford, and Wilmington



Shareable Resources from this Group:

1. Two video **public service announcements** called “Raindrops”: 2 minutes; 30 seconds. Transcripts available.
2. Developing **outreach material templates** in Word: door hanger, brochure.
3. Brochure for **businesses** includes BMP’s
4. Regional **procurement templates**
5. Model **Low Impact Development Bylaw**

STORMWATER
COLLABORATIVE

Contact Information for Northern Middlesex

Name: Danielle Mucciarone

Northern Middlesex Council of Governments

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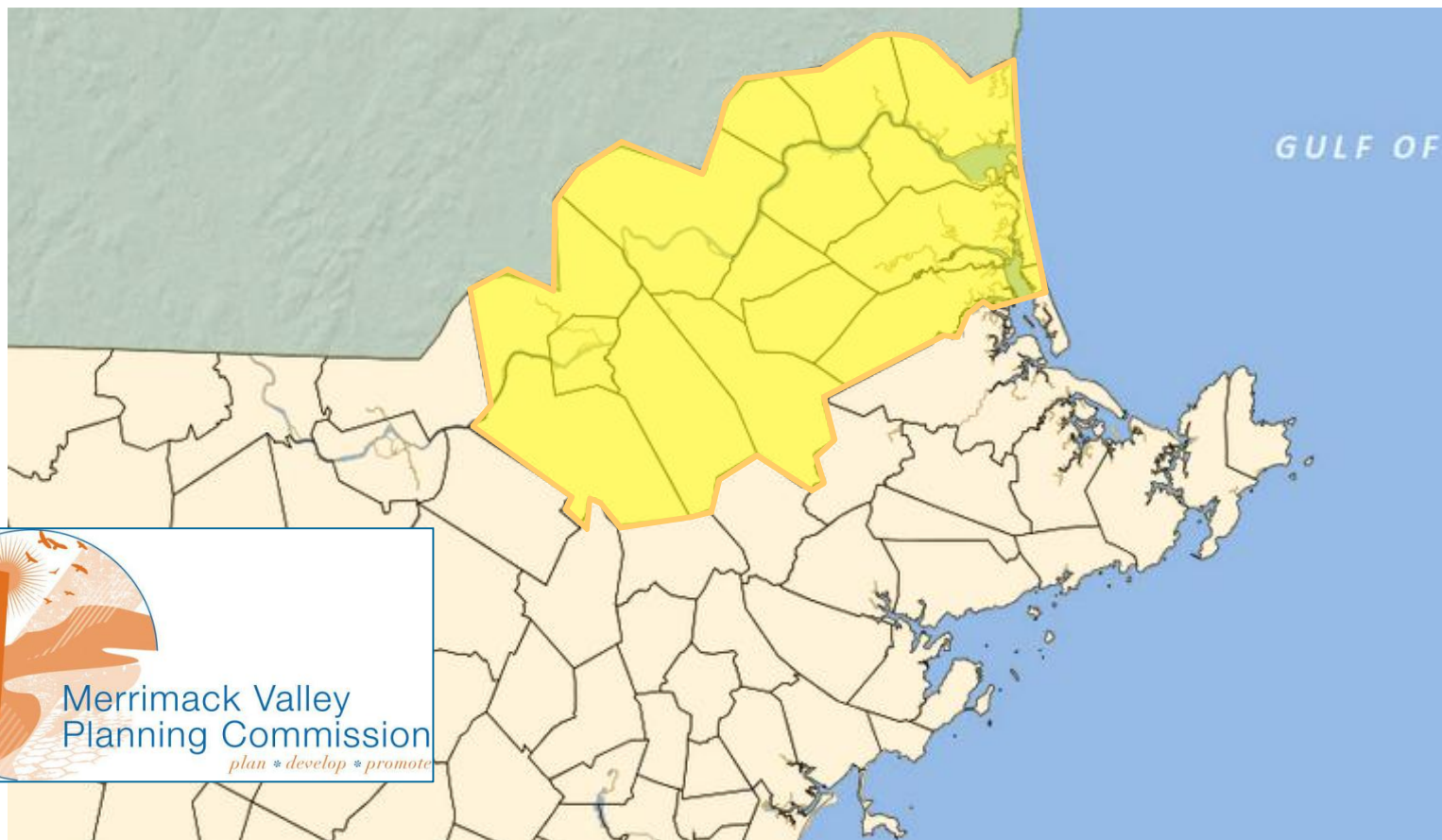
Website: www.NMStormwater.org

Twitter: @NMStormwater



Merrimack Valley Stormwater Collaborative

Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimack, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, West Newbury



Shareable Resources from this Group:

1. Eight Towns and the Great Marsh:
“Greenscapes” smart landscaping program to
reduce pollution in runoff.

www.greenscapes.org



Shareable Resources from this Group:

2. Three upcoming training workshops open to other Coalitions!
- **Parks & Recreation:** March 10, 8 –10 AM; Northern Essex Community College
 - **Buildings, Facilities, Vehicle and Equipment Maintenance:** March 20, 8 – 11 AM; Andover Public Safety Building
 - **Stormwater Management and Infrastructure Maintenance:** April 10, 8-11 AM; Northern Essex Community College.

Please RSVP- see Aubrey for details & contacts.



Contact Information for Merrimack Valley

Name: Joe Cosgrove

Environmental Program Manager

Merrimack Valley Planning Commission

Phone: 978-374-0519 ext. 16

Email: jcosgrove@mvpc.org

Website:

<http://mvpc.org/programs/environment/eight-towns-the-bay/greenscapes/>

NH Regional Stormwater Coalitions

Manchester	Nashua	Seacoast
Atkinson Auburn Bedford Danville Derry Goffstown Hampstead Hooksett Londonderry Manchester Newton Plaistow Sandown	Amherst Hollis Hudson Litchfield Merrimack Milford Nashua Pelham Salem Windham	Dover Durham Exeter Greenland Hampton Kingston Milton New Castle North Hampton Portsmouth Rochester Rollinsford Rye Seabrook Somersworth UNH NH Technical College 4 Maine communities

**Get
active if
you
aren't
already!**

<http://des.nh.gov/organization/divisions/water/stormwater/coalitions.htm>

More Shareable Resources

1. Cumberland County (ME) Soil & Water Conservation District (www.cumberlandswcd.org)
 - Septic System Maintenance
 - YardScaping Program
 - Rain Garden Plant Lists
2. NH Seacoast Stormwater Coalition: IDDE Guidelines and SOP (des.nh.gov/organization/divisions/water/stormwater/documents/nh_idde_sop.pdf)
3. MA Metro. Area Planning Council (www.mapc.org)
 - Stormwater Financing Starter Kit
 - Low Impact Development Toolkit

More Shareable Resources

5. New England Interstate Water Pollution Control Commission (www.neiwpcc.org)
 - “*What Do You Know About...?*” Brochures
 - Regional Clean Water Guidelines for Fertilization of Urban Turf
6. NH DES Stormwater Guide for Homeowners (des.nh.gov)
7. New England Stormwater Collaborative: ***to be determined!***
(www.newwa.org/Resources/UtilityResources/NewEnglandStormwaterCollaborative.aspx)

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