

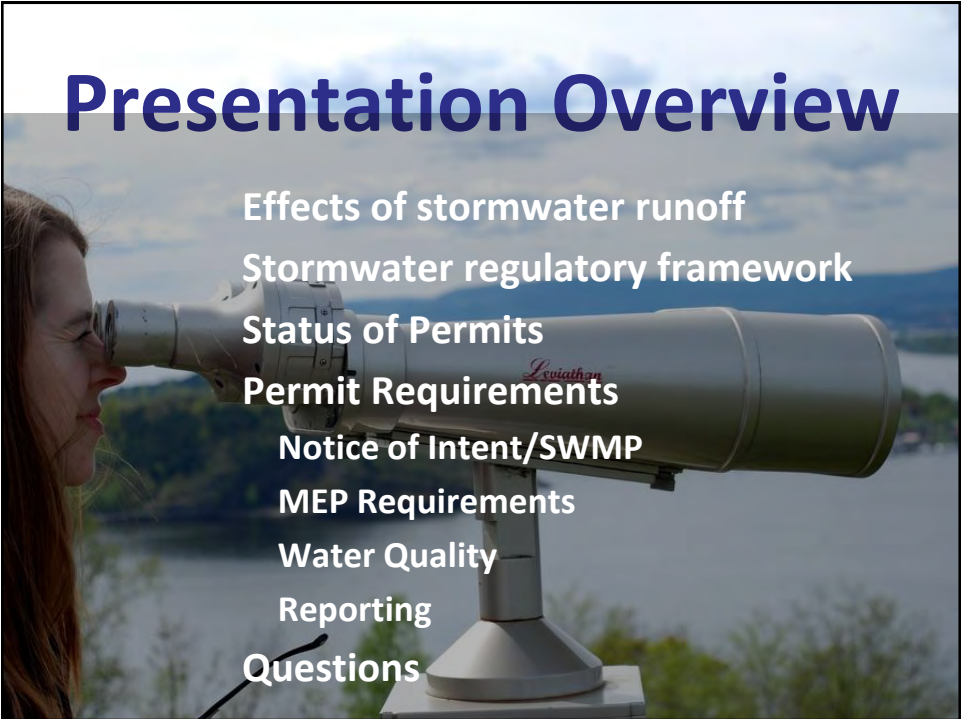
Draft Small MS4 General Permit

An Overview of the Permit Requirements

Susan Murphy
EPA New England

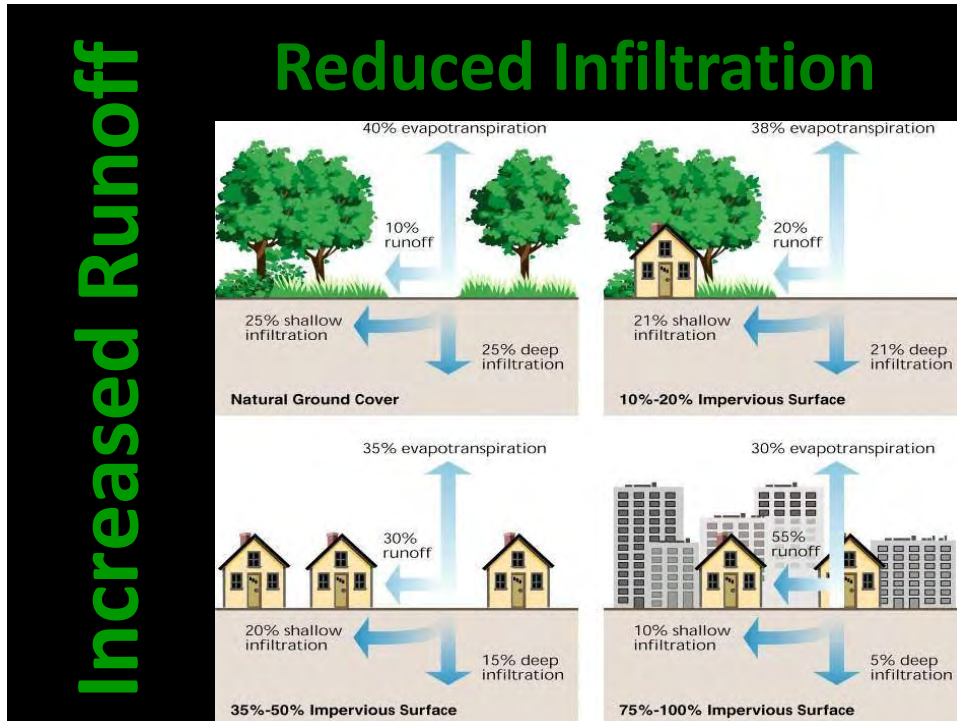
U.S. Environmental Protection Agency

Presentation Overview



Effects of stormwater runoff
Stormwater regulatory framework
Status of Permits
Permit Requirements
Notice of Intent/SWMP
MEP Requirements
Water Quality
Reporting
Questions





Water Quantity Impacts



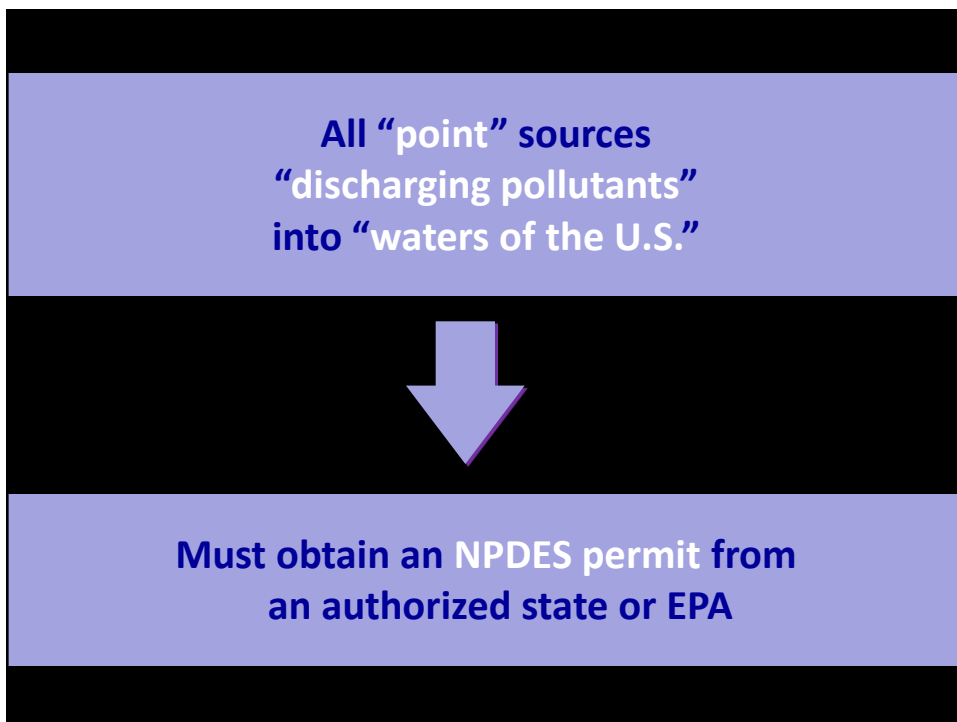
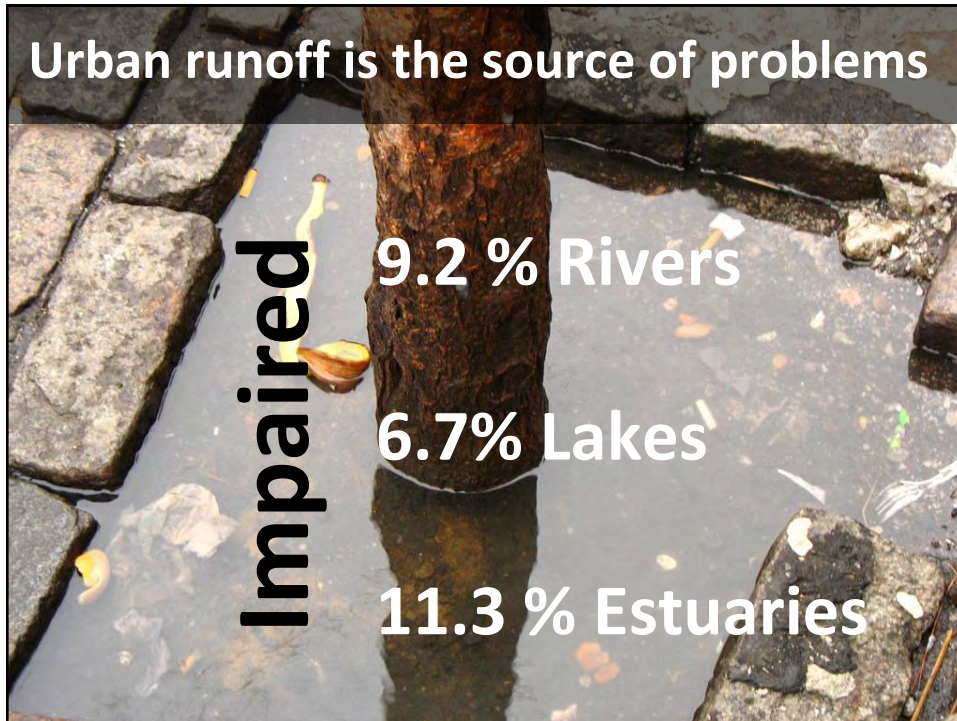
Increased stormwater
volume & velocity

Stream widening &
down-cutting

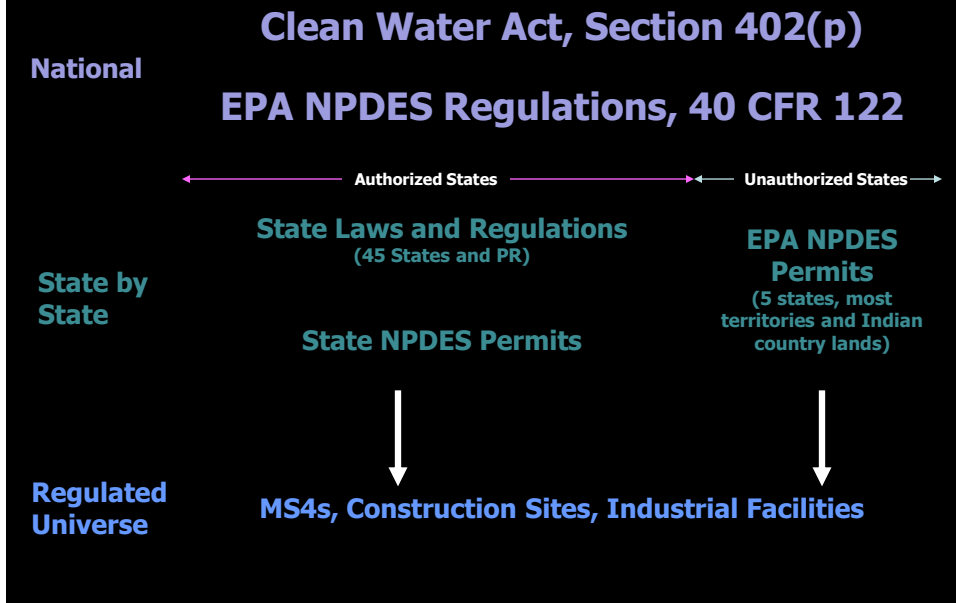
Decreased baseflow

And . . . more flooding!

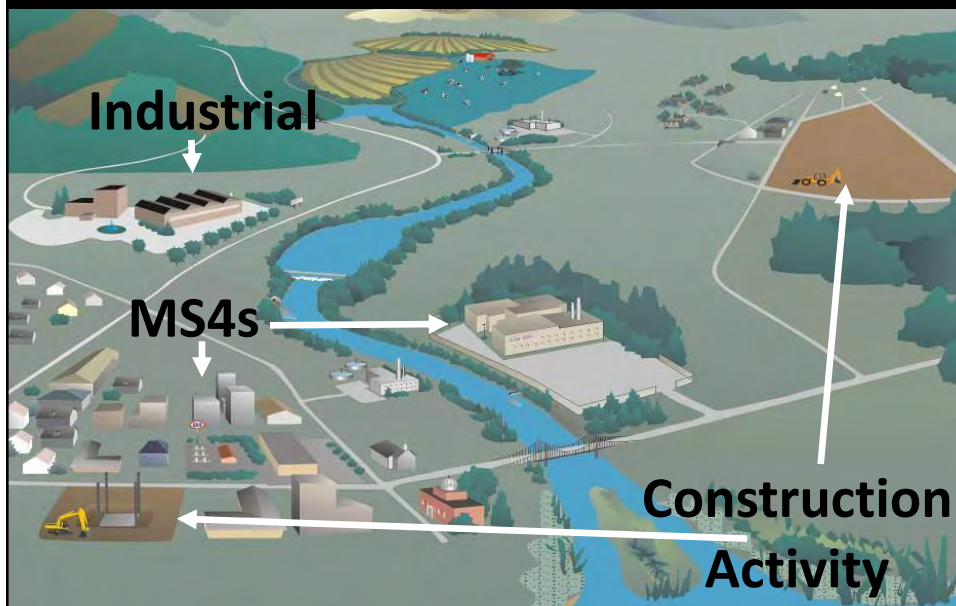
Changes to Stream Geomorphology



Regulatory Framework



NPDES Stormwater Program Regulates





Draft Permits

NH Small MS4 Draft

Public Noticed 12/23/08 – 2/20/09

[www.epa.gov/region1/npdes/
stormwater/MS4_2008_NH.html](http://www.epa.gov/region1/npdes/stormwater/MS4_2008_NH.html)

MA North Coastal Draft

Public Noticed 2/4/10 – 3/31/10

[www.epa.gov/region1/npdes/stormwater/
draft_manc_sms4gp.html](http://www.epa.gov/region1/npdes/stormwater/draft_manc_sms4gp.html)

MA Interstate, Merrimack, South Coastal Draft

Public Noticed 11/4/10 – 3/11/11

[www.epa.gov/region1/npdes/stormwater/
mimsc_sms4.html](http://www.epa.gov/region1/npdes/stormwater/mimsc_sms4.html)



Comment letters & emails

Cities & towns

Citizens

**Environmental and
watershed organizations**



Types of Comments

Costs & funding

Timing of requirements

Clarifications & tools

Type of analysis required

Operational considerations



Permit Requirements

Getting Started

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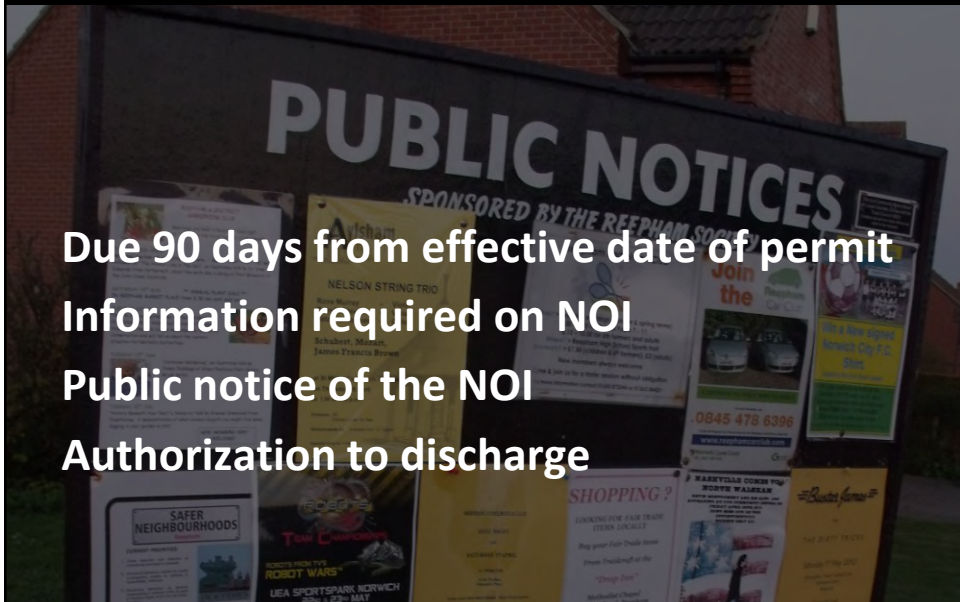


MS4s



Notice of Intent - NOI

Due 90 days from effective date of permit
Information required on NOI
Public notice of the NOI
Authorization to discharge



Required NOI Info

Basic Info

2003 permit items

Endangered Species

Historic Properties

BMPs

Cert & signature



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Endangered Species

Species of concern

- Northern Red-bellied Cooter
- Dwarf Wedge Mussel
- Bog Turtle
- Shortnose Sturgeon



More >>

www.fws.gov/newengland/index.htm

Historic Properties



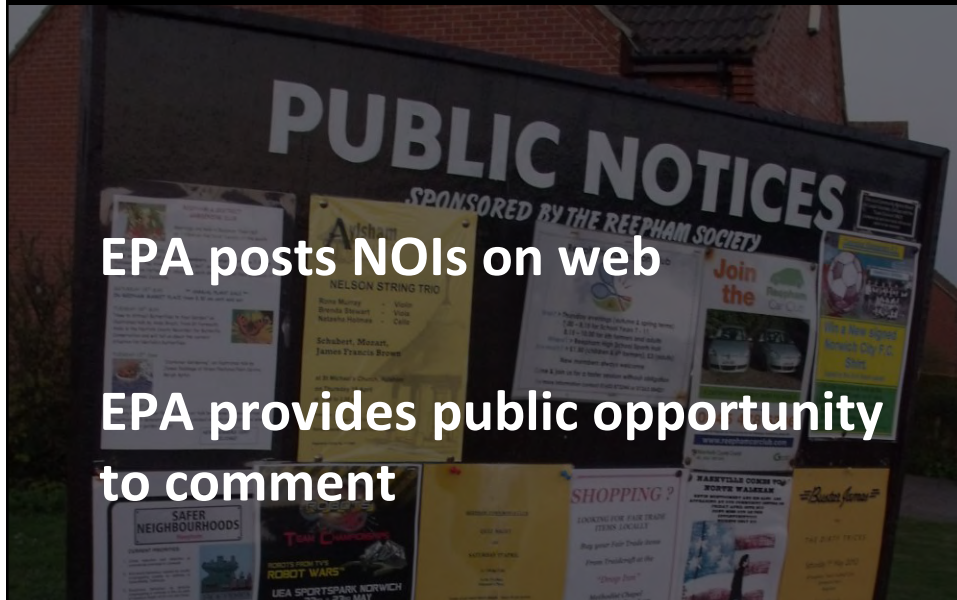
National Register

www.nps.gov/nr

New Hampshire Register

www.state.nh.us/nhdhr

Public Notice of NOI



EPA posts NOIs on web

EPA provides public opportunity
to comment

Stormwater Management Program

What is it?

Where to keep it

Making it available

Elements of SWMP

Description & details

Map

Annual evaluation



Permit Requirements

MEP Requirements

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Six Minimum Measures

1. Public education
2. Public involvement
3. Illicit discharge detection & elimination
4. Construction runoff
5. Post-construction stormwater management
6. Pollution Prevention



Shared Responsibility

The regulations, 40 CFR 122.35, allow for MS4s to share responsibility for the implementation of the six minimum measures



Illicit Discharge Detection and Elimination (IDDE)

Ordinance
Map
Illicit discharge assessment
Locating and removing
Tracking
Public education
Monitoring



www.cwmp.org

Required by 2003 permit

Must allow the MS4 to:

Prohibit non-stormwater discharges

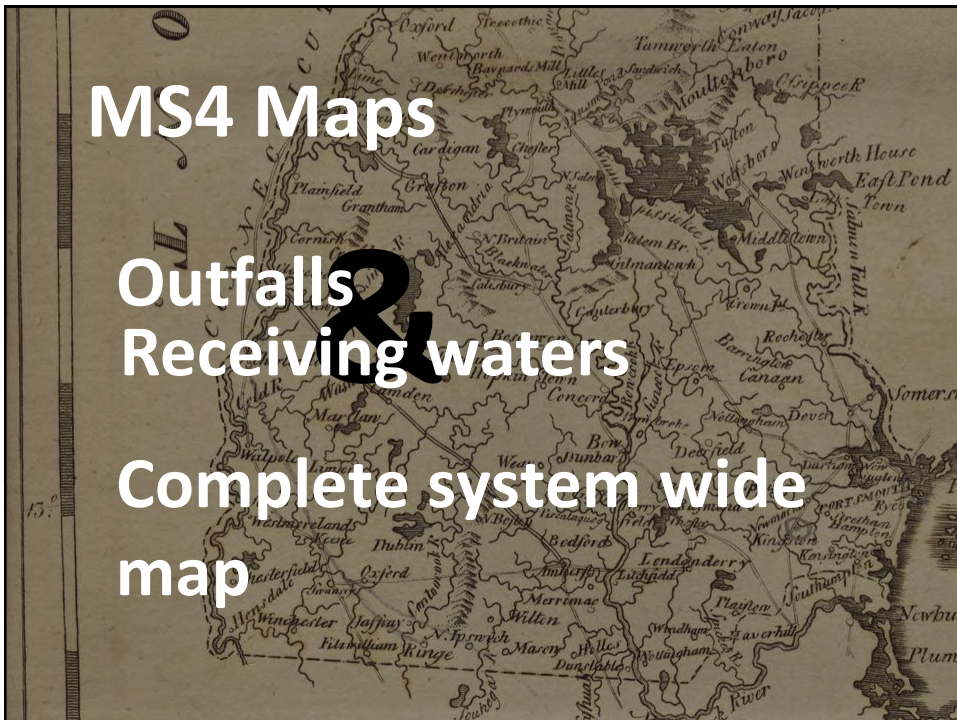
Implement enforcement

Ordinance

MS4 Maps

Outfalls
Receiving waters

Complete system wide
map



Program Components

Identification of responsibility illicits

Outfall inventory

Assessment of system for illicits

Investigation procedure

Tracking progress

Wet & dry weather sampling

Many comments

Outfalls from the MS4

Interconnections

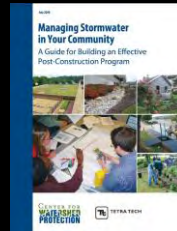
Monitoring

Post-Construction

Development ordinance

Program requirements

**Additional
assessments**



www.cwp.org

Post Construction Ordinance



**Required by 2003
permit – effective
May 1, 2008**

**Draft permit
requires capture of
1" of runoff**

EPA Region 1 Small MS4 Stormwater
General Permits and LID Training Clinic

Program Requirements





Permit Requirements

Water Quality

5/20/2011

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A photograph of a calm lake surrounded by a dense forest of evergreen and deciduous trees. A small white boat is visible on the water. The scene is reflected in the still water.

TMDLs

What is it?

The connection?

Draft Bacteria TMDLs

New TMDLs: Statewide bacteria; Chlorides

Requirements in the permit

What is a TMDL?

TMDL **T**otal **M**aximum **D**aily **L**oad

$$\text{TMDL} = \sum \text{WLA} + \sum \text{LA} + \text{MOS}$$

WLA = Wasteload allocation

LA = Load allocation

MOS = Margin of safety

TMDLs and MS4 Permits

Implementation plan

BMPs to meet LA and WLA

Permit limits



Other Water Quality Requirements

**Discharges to impaired waters
without approved TMDLs**

In general

Chlorides

Nitrogen

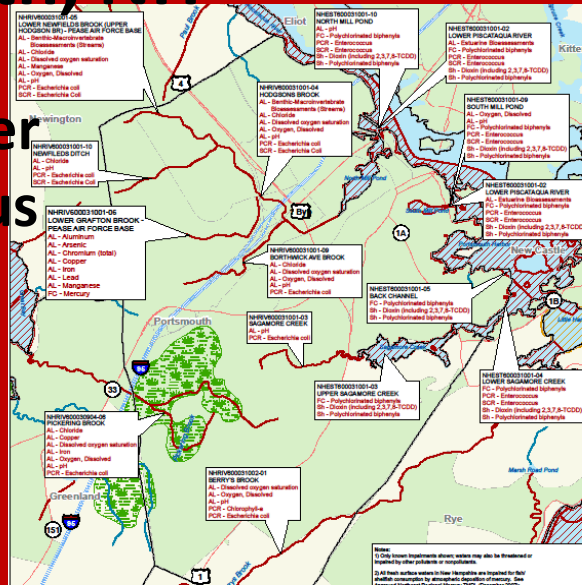
New and increased discharges

Availability of WQ Information

**[www.epa.gov/region1/npdes/
Stormwater/nh/305bMaps/
Portsmouth_NH.pdf](http://www.epa.gov/region1/npdes/Stormwater/nh/305bMaps/Portsmouth_NH.pdf)**

Portsmouth, NH

Surface Water Quality Status



Permit Requirements

Evaluation and Reporting

Reporting Requirements

Annual reporting

**EPA will provide a suggested format
for reports**



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Sidewalk Tree – Credit: <http://www.flickr.com/photos/madmardign777/79436383/>

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EPA HQ Building – Credit: EPA HQ

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TMDL Waterbody – Credit: MassDEP

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Fishing – Credit: EPA HQ

Merrimack River, Manchester, NH – Credit:
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Ruler – Credit: <http://www.flickr.com/photos/vrillusions/5197046091/>

Rowers – Credit: MS Office Clip Art

Dirty Water – Credit: EPA HQ

NH Map

Credit: <http://www.flickr.com/photos/normanbleventhalmapcenter/3046241210/>

Maple Leaf in Rain – Credit: <http://www.flickr.com/photos/lanier67/184302007>

Ribbon Cutting – Credit: <http://www.flickr.com/photos/sanjoselibrary/3870090928/>

Boat Water Sampling – Credit : EPA NE

Watch – Credit: <http://www.flickr.com/photos/dibytes/4647624108/>

2 Center for Watershed Protection Publications – Credit: <http://www.cwp.org>

All pictograms sourced from EPA HQ

Image Credits III



Thank you

Questions ?

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