

Stormwater Management in New Hampshire: What is and What Should be

2009 NH Joint Water and
Watershed Conference



Jillian McCarthy
Stormwater Coordinator

What is...

- ❑ Antidegradation in NH
- ❑ Stormwater Utilities
- ❑ New Hampshire Stormwater Manual
- ❑ Stormwater Workgroups, Coalitions, Commissions

What should be...

Stormwater Areas for Improvement Survey:

- ❑ Opportunity to comment and provide input on the work of the NH Stormwater Legislative Commission

Quick Stormwater 101



What is Stormwater?

- Rainfall or snowmelt that runs over the land surface (runoff) and does not infiltrate the ground.



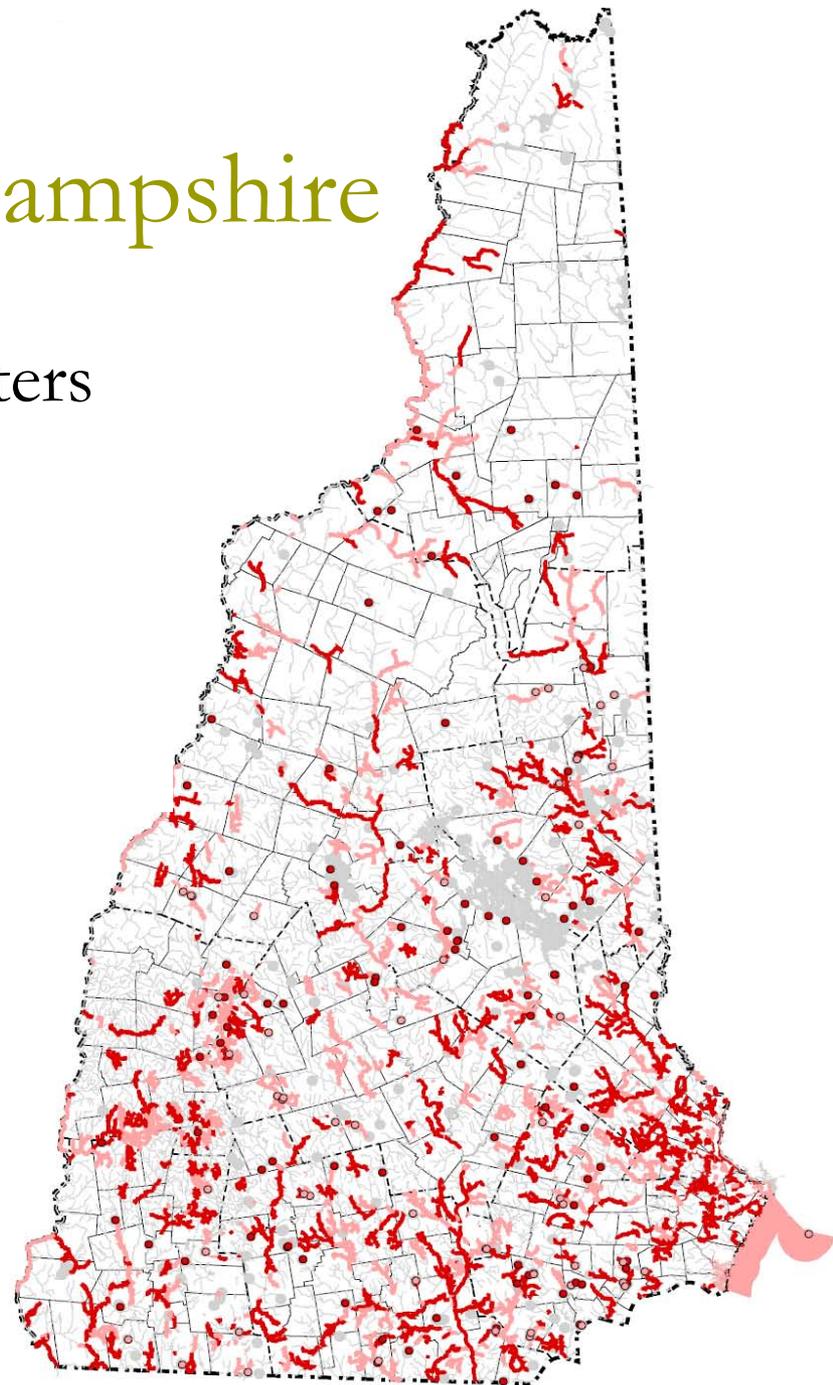
What causes stormwater pollution?



The problem in New Hampshire

2008, 303(d) List of Impaired Waters
Requiring a TMDL

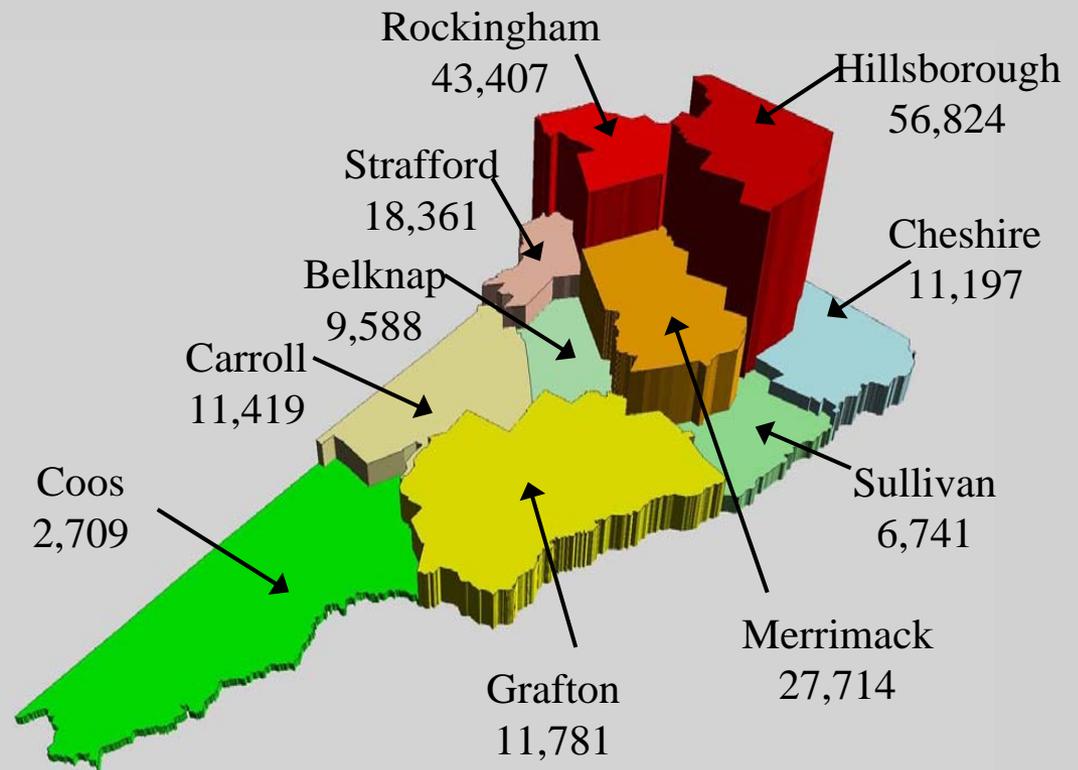
- 83% of surface water quality impairments in NH are due, at least in part, to stormwater.



The Projected Future?

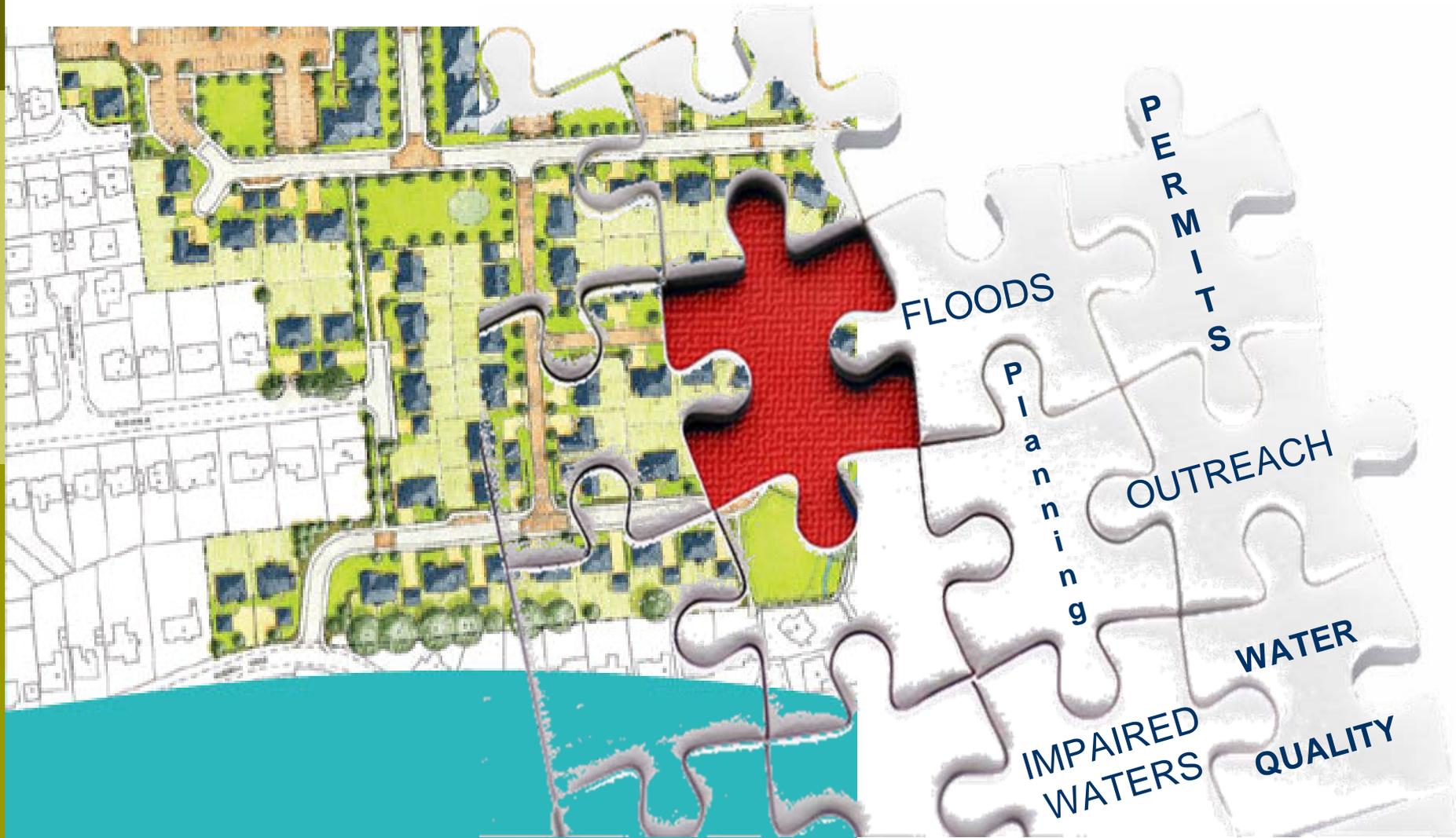
- NH is projected to add ~200,000 new residents by 2030 (~15% growth)
- 74% of this growth will be absorbed in the 4 southeastern counties, on only 1/3 of the state's land base.

Projected Population Increase 2010 to 2030 Total Increase = 199,700



Managing for Stormwater

Putting the Pieces Together...



STORMWATER INITIATIVES

- Antidegradation for Nonpoint Source Pollution
- Stormwater Utility Feasibility Studies
- New Hampshire Stormwater Manual
- Alliances, Coalitions, Commissions, Oh My!

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ANTIDEGRADATION

PURPOSE:

- ❑ To protect and maintain existing water quality and uses.

APPLICABILITY:

- ❑ Applies to any new or increased activity that would lower water quality or diminish uses



AUTHORITY:

- 40 CFR 131.12
- Statutory authority RSA 485-A:8
- Env-Wq 1708

ANTIDEGRADATION

REQUIREMENTS:

- ❑ No Long-Term Degradation to:
 - Outstanding Resource Waters (ORWs)
 - Threatened Waters (Tier 1)

- ❑ Potentially Limited Degradation to:
 - High Quality Waters (Tier 2)*

*a water quality study, alternatives analysis, and public participation are necessary before DES will make a decision whether or not to allow degradation.

- ❑ Restoration of:
 - Impaired Waters

Implementing Antidegradation for NPS Pollution

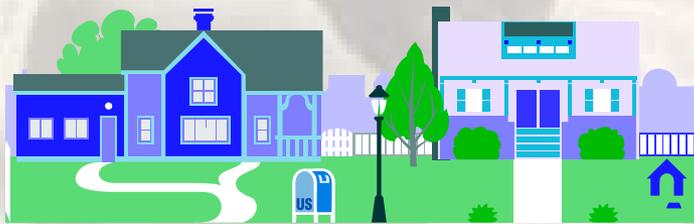
- ❑ Alteration of Terrain (AoT) Program
 - NH's permitting program for land disturbance activities
 - Permit trigger: 100,000 sq.ft.
50,000 sq.ft. if in protected shoreland
 - Variety of permit requirements including:
 - ❑ Erosion & sediment control
 - ❑ Post-construction management practices
 - ❑ Groundwater recharge
 - ❑ Channel protection



Incorporating Antidegradation into the Alteration of Terrain Program

WHY:

- To verify that the post-construction best management practices proposed are anticipated to meet the requirements of Antidegradation.
 - Most likely through a pollutant loading analysis or similar QUANTITATIVE exercise to show:



Post-Development
pollutant loading

>



Pre-Development
pollutant loading

Incorporating Antidegradation into the Alteration of Terrain Program

HOW:

- Established Antidegradation Rules Workgroup:
 - Variety of stakeholders
 - PURPOSE:
 - Draft Antidegradation Rules to include in the existing AoT Program Rules (Env-Wq 1500)
 - Develop Antidegradation Implementation guidance
 - Anticipate working out methodology and drafting rules language in the next year

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What is a Stormwater Utility?

A funding option to provide a predictable and sustainable revenue that is dedicated to implementing stormwater management.

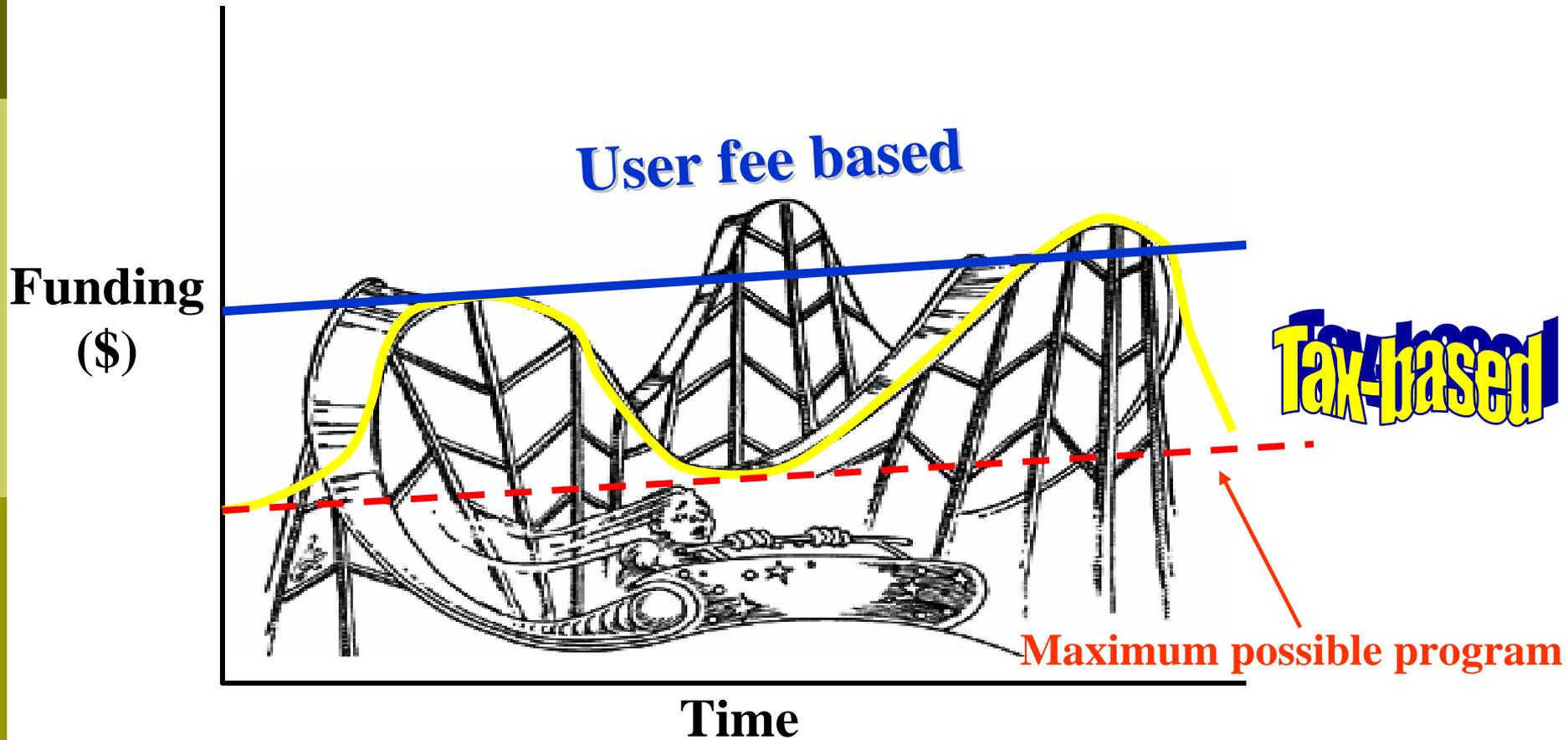
The revenue can be used to:

- Maintain and upgrade existing storm drain systems;
- Catch basin cleaning;
- Street sweeping; and,
- Cover administrative costs of running a stormwater program.



Photo Courtesy of the Union Leader

User Fee vs. Tax-Based Funding



On-going NH Feasibility Studies

- Dover
- Portsmouth
- Nashua
- Manchester

Stormwater Utilities Nearby

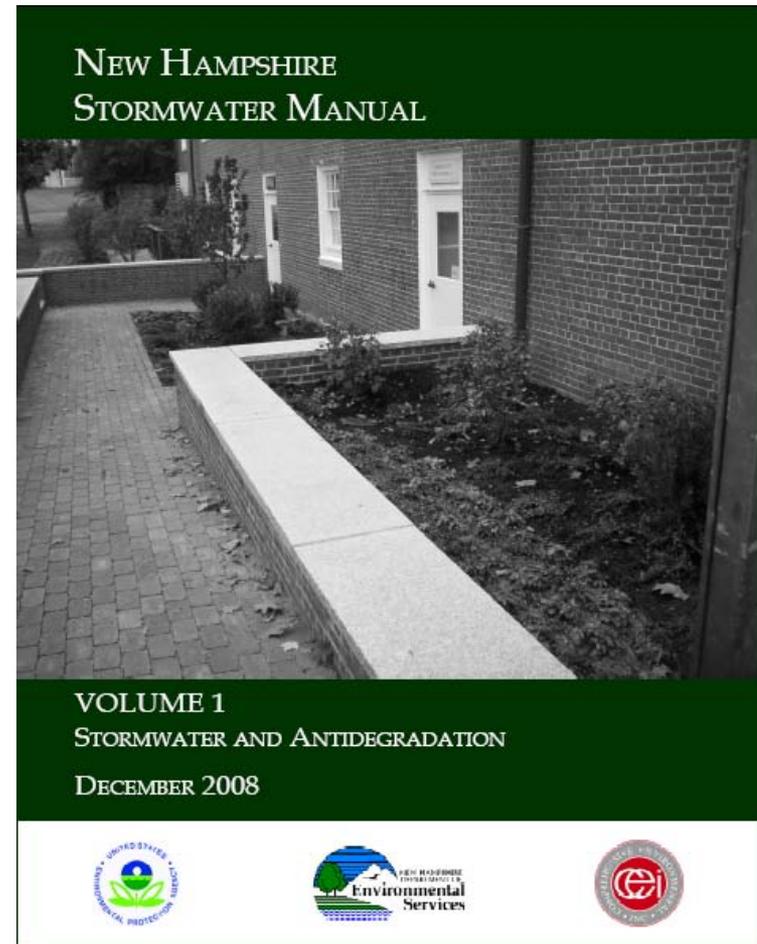
- South Burlington, VT
- Chicopee, MA
- Newton, MA
- Reading, MA
- Lewiston, ME
- More...?

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- **New Hampshire Stormwater Manual**
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New Hampshire Stormwater Manual

- *Volume 1:*
 - Stormwater Regulations & Permitting
 - Intro to structural & non-structural BMPs
- *Volume 2:*
 - Post-construction design criteria
 - Tools for selecting BMPs
 - BMP Design
 - Operation & Maintenance
- *Volume 3:*
 - Planning & selecting erosion & sediment BMPs
 - BMP Design



How do I get one?

Available through:

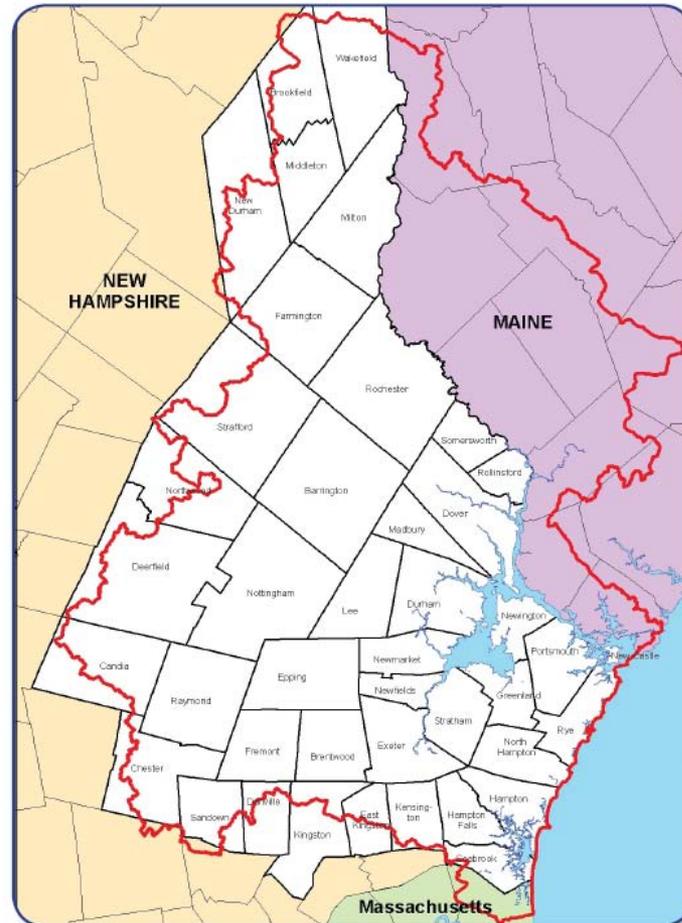
- ❑ Hard copies available for purchase through NHDES Public Information Center: (603) 271-2975 or email: pip@des.nh.gov.
- ❑ FREE pdf download on DES website: <http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>
- ❑ Anticipated revision at completion of Antidegradation Workgroup.

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Southeast Watershed Alliance

- Established by RSA 485-E (2009)
- Sets up organizational framework for coastal watershed communities to learn about and address water quality issues.



Membership
to date:
Dover
Rochester
Candia
Exeter
Kingston
Lee
Stratham

Newfound Lakes Region Association

- ❑ Request to classify Newfound Lake as a **High Quality Water of “Special Significance”**
 - Essentially limits phosphorus loading from development/redevelopment activities in the watershed
 - OVERALL GOAL: adopt local ordinances & foster behavior change to maintain the in-lake phosphorus levels.

- ❑ PROJECT DETAILS:
 - Shared Environmental Planner for ordinance development
 - Stormwater mitigation projects
 - Community-based social marketing



Photo: Every Acre Counts The Newfound Watershed Master Plan

Stormwater Coalitions

- ❑ Regulated municipalities formed regional stormwater coalitions in Nashua, Manchester, and the Seacoast.
 - Assist each other with meeting permit requirements
 - Coordinate stormwater-related outreach and training events in their regions



NH Stormwater Commission (HB 1295)

- HB 1295 *AN ACT establishing a commission to study issues relating to stormwater.*



<http://www.nh.gov/oep/legislation/2008/hb1295/index.htm>

NH Stormwater Commission (HB 1295)

□ 20 Stakeholder Groups Representing:

- NH House of Representatives
- NH Senate
- NHDES
- NH Assoc. of Regional Planning Commissions
- Business and Industry Assoc.
- NH Local Government Center
- University System of NH
- Office of Energy and Planning
- The Nature Conservancy
- Home Builders & Remodelers Assoc.
- NH Rivers Council
- NH Lakes Association
- NH Assoc. of General Contractors
- NH Public Works Assoc.
- American Council of Engineering Companies
- NHDOT

NH Stormwater Commission (HB 1295)

- Recurring themes – the need for:
 - Watershed Level Planning
 - Cost Sharing & Stormwater Utilities
 - Outreach & Technical Assistance to Stakeholders
 - Uniformity in Stormwater Management

- Interim Report submitted November 2009
 - Included draft summary of stormwater needs that identify areas for improvement

- Ongoing through November 2010
 - Final report and any proposed legislation due

Moving in the right direction...

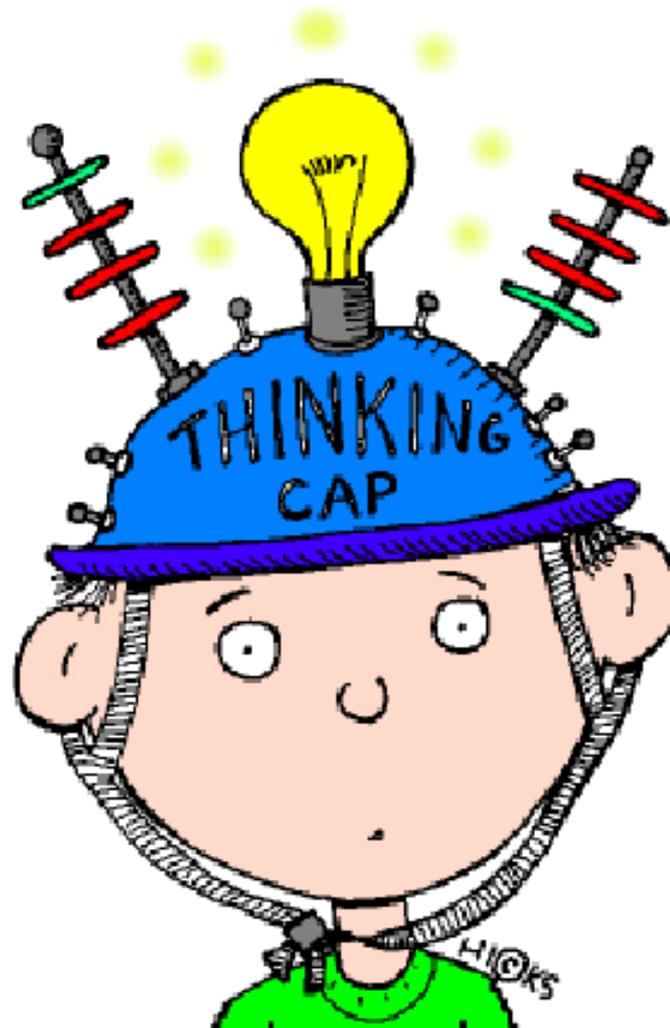


Questions?



SURVEY!

Tell us what you think...



THANK YOU

Jillian McCarthy
Stormwater Coordinator
NH DES

(603) 271-8475

jillian.mccarthy@des.nh.gov

"Stormwater Steve's"
philosophy on life...



www.stormwatersteve.com