

## MEMORANDUM

---

**DATE:** November 1, 2009

**TO:** Honorable John H. Lynch, Governor  
Honorable Terie Norelli, Speaker of the House  
Honorable Sylvia B. Larsen, President of the Senate  
Honorable Karen O. Wadsworth, House Clerk  
Tammy L. Wright, Senate Clerk  
Michael York, State Librarian

**FROM:** David Cedarholm, Chair

**SUBJECT:** Interim Report on HB 1295, Chapter 71, Laws of 2008

---

Please find the enclosed Interim Report of the Commission to Study the Issue of Stormwater Management, Submitted in compliance with HB 1295, Chapter 71:5, Laws of 2008.

If you have any questions or comments regarding this report or the work of the Commission, please do not hesitate to contact me at 603-868-5578 or [dcedarholm@ci.durham.nh.us](mailto:dcedarholm@ci.durham.nh.us).

DC: jem  
Enclosures

# HB 1295 COMMISSION TO STUDY THE ISSUE OF STORMWATER MANAGEMENT

## INTERIM REPORT

November 1, 2009

### Duties

As dictated by Chapter 71:3, the Commission shall study:

- a. The effects of stormwater and stormwater management on water quality, water supply and quantity, terrestrial and aquatic habitat, flooding, and drought hazards.
- b. The relationship between land use change and stormwater.
- c. The relationships among and adequacy of federal, state, and local regulations and practices that pertain to stormwater management.
- d. State and municipal infrastructure construction and maintenance practices.
- e. The role of design, construction, and maintenance practices by residential, commercial, and industrial property owners.
- f. The effects of climate change on stormwater and stormwater management.

### Commission Members

David Cedarholm, Chair	New Hampshire Public Works Association
Judith Spang, Vice Chair	New Hampshire House of Representatives, Chair, Resources, Recreation and Development Committee
David Borden	New Hampshire House of Representatives
Jacalyn Cilley	New Hampshire Senate
Eber Currier	New Hampshire Farm Bureau
Paul Currier	New Hampshire Department of Environmental Services
Dave Danielson	New Hampshire Association of Regional Planning Commissions
Chris Devine	New Hampshire Local Government Center
Karen Ebel	The Nature Conservancy
Mark Hemmerlein (replacing Charlie Hood)	New Hampshire Department of Transportation
Steve Kahl	New Hampshire Lakes Association
New LeRoy	Associated General Contractors of New Hampshire
Amy Manzelli	Business and Industry Association
Josh Cline (replacing Carl Paulsen)	New Hampshire Rivers Council
Joe Robertie	New Hampshire Timberland Owners Association
Robert Roseen	University of New Hampshire Stormwater Center
Dari Sassan	Office of Energy and Planning
Donald H. Sienkiewicz	Home Builders & Remodelers Association of New Hampshire
L. Mike Kappler(resigned) (replacing Eric Stohl)	New Hampshire House of Representatives
Mike Trainque	American Council of Engineering Companies in New Hampshire

## Duties in Progress

In response to duties a – f listed in Chapter 71:3, the Commission reports the following:

### **Presentations and Guest Speakers as informational background for the commission**

9/4/08	“Stormwater in New Hampshire” Paul Currier, PE, PG, Jillian McCarthy, NH Department of Environmental Services
10/6/08	“Stormwater Management, Community Resiliency and Climate Change” Robert Roseen, Ph.D, P.E., Director of the UNH Stormwater Center
11/3/08	“The NH Water Primer and Stormwater Permitting at NHDES” Ted Diers, NH Department of Environmental Services “Water from the Hills: Preparing Our Communities for Change” Michael Simpson, Antioch University – New England
12/1/08	“Small MS4 General Permit” Barbara McMillan, NH Department of Environmental Services
1/5/09	“Stormwater Implications of the September 2008 Flood Commission Report” Steve Couture, NH HB648 Flood Commission “Summary of the Effects of Land Use on Water Quality” John Magee, NH Fish and Game Department
2/2/09	Discussion of Municipal Authority to Regulate Stormwater Eric Williams, NH Department of Environmental Services Allen Brooks, NH Attorney General’s Office Paul Sanderson, NH Local Government Center
4/6/09	“Event Mean Concentrations and Land Use” Paul Currier, PE, PG, DES Watershed Management Bureau Administrator
7/7/09	“Stormwater Utilities” Eugene Forbes, PE, Hoyle, Tanner & Associates, Inc.
8/3/09	Land Use Development Commission Update Rep. Susan Gottling, Land Use Development Commission Chair

### **Draft Work Products**

- “Draft Summary of Needs for Improved Stormwater Management in New Hampshire” Attachment A
- “Draft Complete Summary of Stormwater Law” Upon request
- “Draft Funding Mechanisms for Stormwater Management” Upon request

### **Meetings**

The Commission has met monthly since September 2008 with regularly scheduled meetings on the first Monday of each month at 1:00 PM in room 305 of the Legislative Office Building in Concord. Minutes, agendas, handouts, and presentations can be accessed online by visiting:

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

## **Sub-Committees**

To more efficiently address the duties of the Commission, three sub-committees were formed to address key topics, identified by the Commission, requiring further consideration:

### NEEDS SUBCOMMITTEE

Purpose:

- To compile a list of pertinent findings from Commission discussions, presentations, and guest speakers including regulatory gaps, areas for improvement, and other stormwater related “needs” for improved stormwater management, in accordance with the statutory duties of the Commission.
- To propose potential solutions/opportunities to achieve the identified stormwater-related needs.

### REGULATORY AUTHORITY SUBCOMMITTEE

Purpose:

- To identify existing regulatory authority for federal, state, and local governments.
- To determine whether sufficient authority sufficiently exists to implement potential solutions to stormwater-related needs identified by the Needs Subcommittee.
- If regulatory authority does not exist, to propose legislative changes needed to create appropriate authority
- Based on feedback from the full Commission, to draft recommendations for amended or new legislation to create appropriate authority.

### FUNDING SUBCOMMITTEE

Purpose:

- To estimate the cost of meeting the stormwater-related needs identified by the Needs Subcommittee, including costs of implementing new legislation identified by the Regulatory Authority Subcommittee, if applicable.
- To identify existing funding sources to meet the stormwater-related needs identified by the Needs Subcommittee.
- If sufficient funding does not exist, to identify opportunities for new funding sources to meet the stormwater-related needs identified by the Needs Subcommittee
- To propose marketing approaches to promote funding sources/mechanisms
- To research funding mechanisms used by other states and municipalities of other states for stormwater programs and activities

## **Future Actions**

The following actions are anticipated to be completed by the Commission to fully address the duties set forth in Chapter 71:3:

1. Prioritize the stormwater-related needs identified by the Needs Subcommittee. This will be accomplished through discussion of the full Commission as well as input

from public participation at the 2009 New Hampshire Joint Water and Watershed Conference.

2. Propose solutions/recommendations to address the stormwater-related needs, or a sub-set of these needs as determined by prioritization.
3. Determine potential legislative changes necessary, if any, to better enable implementing the proposed solutions/recommendations.
4. Propose new legislation or amendments to existing legislation, as determined in task 3.
5. Identify potential new and continued funding sources and mechanisms to implement recommendations.
6. Provide a final report of Commission findings and any recommendations for proposed legislation on or before November 1, 2010.

Respectfully submitted on behalf of the Commission,

A handwritten signature in black ink, appearing to read "David Cedarholm", written over a horizontal line.

David Cedarholm, Chair

## **ATTACHMENT A**

### **DRAFT SUMMARY OF NEEDS FOR IMPROVED STORMWATER MANAGEMENT IN NEW HAMPSHIRE**

Stormwater Commission HB1295

October 28, 2009

#### **INTRODUCTION**

This document provides a DRAFT summary of the regulatory gaps, areas for improvement, and other “Needs” for improved stormwater management identified by the Commission to:

- Minimize the effects of stormwater on water quality, water supply and quantity, terrestrial and aquatic habitat, flooding, and drought hazards;
- Better manage land use change and to minimize the generation of stormwater,
- Minimize gaps, duplication, or inconsistencies in federal, state, and local ordinances and regulations, and practices that pertain to stormwater management;
- Improve state and municipal infrastructure construction and maintenance practices;
- Improve the design, construction, and maintenance practices of residential, commercial, and industrial property owners to reduce the generation of stormwater and the impact of stormwater on water resources; and
- Minimize and develop strategies to adapt to the effects of climate change on stormwater and stormwater management.

#### **NEEDS FOR IMPROVED STORMWATER MANAGEMENT**

##### **1. Watershed Management Planning**

- Support watershed level stormwater management by:
  - Supporting uniformity in stormwater regulations across municipalities within watershed boundaries;
  - Supporting watershed-based hydrologic modeling;
  - Strengthen RPC (RPC) (or County) ability/authority to provide municipal assistance and require review of watershed impacts by RPCs with jurisdiction over land lying within an affected watershed.
  - Promoting/enabling LiDAR in updating flood plain maps; and
  - Prohibiting development/expansion of state-owned properties in floodplain areas.

##### **2. State Regulations and Permitting**

- Address the regulatory gaps in and improve efficiency and effectiveness of state permits and certification programs to better protect water quality from stormwater pollution by:

- Lowering the trigger threshold for the Alteration of Terrain (AoT) Permit with different trigger thresholds for re-development versus new development and land use to capture and track the cumulative impacts of small-scale development;
- Developing integrated permitting with an expanded pre-proposal process; and
- Developing regulatory incentives for environmentally responsible developers and development for managing stormwater beyond the minimum compliance.
- Address the barriers to development in impaired watershed and other watersheds with limitations on increases in pollutant loading through water quality credit trading, incentives for smart growth in impaired watersheds, or other means for the AoT program and the 401 Water Quality Certification.

### **3. Municipal Stormwater Ordinances and Regulations**

- Encourage all municipalities to adopt, implement, and enforce uniform stormwater-related ordinances and/or land use regulations by one or more of the following:
  - Providing a RPC circuit rider to assist municipalities with ordinance review for consistency with state and federal regulations and standards as well as with other municipalities in the watershed;
  - Creating a statewide model stormwater ordinance and requiring municipal adoption, but allowing municipalities to adopt stricter and/or non-substantive provisions, subject to state approval with guidance of municipality's RPC (Maine example);
  - Creating a model ordinance for development on lands with steep slopes, shallow groundwater, ledge and other landscape characteristics that challenge development and stormwater management; and
  - Encouraging the adoption of a stormwater ordinance or local land use regulations that pertain to developments on site location and environmental condition, regardless of area of disturbance.
  - Creating legislation that clearly enables municipalities to impose stormwater management regulations, including stormwater management improvements to existing development in hydrologically- or quality-impaired watershed;

### **4. Stormwater Management Practices**

- Address water quality and quantity concerns created by stormwater by implementing stormwater management that includes mechanisms to reduce post-development runoff volumes and velocities, delays runoff times of concentration, and provides for habitat and water quality protection by:
  - Developing state-wide minimum criteria for stormwater management with incentives for municipal adoption with municipal administration and initial enforcement;
  - Requiring reduction in use of salt – educate road agents and truck drivers;
  - Developing a road salt applicator certification program;
  - Addressing aging, deteriorated, inadequate, and/or non-existent private; municipal, and state-owned stormwater infrastructure through extensive mapping and GIS/watershed based models, expansion of MS4 permitting to all cities and towns, and focusing on source control;

- Utilizing impervious cover as a surrogate for impairments caused by development for nutrients and sediment; and
- Developing an antidegradation implementation plan that is fair and equitable and a process to effectively implement it.

#### **5. Cost Sharing & Stormwater Utilities**

- Broadly spread the cost of fixing water quality and quantity problems across all users by:
  - Amending stormwater utility enabling legislation RSA 149-I:6 to clearly apply to stormwater independent of reference to “sewers” or “sewage”;
  - Fully apply the CWA construction grants and revolving loan fund to treat stormwater the same as waste water; and
  - Promoting and developing watershed-wide, region-wide, or state-wide stormwater utilities.

#### **6. Low Impact Development (LID) and Smart Growth**

- Develop incentives for municipalities, developers, engineers, and property owners to pursue innovative stormwater management including low impact development and smart growth to:
  - Promote re-development and infill development to reduce sprawl;
  - Promote the use and increase the availability and affordability of pervious pavements;
  - Focus on source control to reduce the amount of stormwater generated on a site and reduce the associated need for structural stormwater management practices;
  - Requiring LID through site plan review and allowing cap & trade for sites where LID is not feasible; and
  - Promote further research and development of effective innovative stormwater infrastructure.

#### **7. Erosion & Sediment Control**

- Improve implementation and enforcement of construction-phase sediment and erosion control to insure they are correctly installed and maintained by:
  - Developing erosion and sediment control training or certification for contractors and municipal building code enforcement officers; and
  - Implementing state or municipal inspection and enforcement of stormwater pollution prevention plans (SWPPPs).

#### **8. Buffer Protection**

- Encourage riparian buffer and wetland setbacks in accordance with resource protection needs to protect the miles of currently unprotected streambanks and other water resources that are not subject to the Comprehensive Shoreland Protection Act by:
  - Requiring buffers and water quality mitigation/restoration, improvements, etc. and allow for cap & trade or in-lieu fee (similar to CSPA & wetlands mitigation fund);

- Recommending or requiring minimum state-wide buffer setbacks with conditions and performance standards for stormwater management infrastructure and discharges near buffer boundaries; and
- Developing incentives to protect land with steep slopes, shallow depth to groundwater, ledge, or other landscape characteristics that make it difficult to develop and treat stormwater.

## **9. Outreach & Technical Assistance**

- Improve outreach and technical assistance across stakeholders by:
  - Working with municipalities to develop new or revise existing regulations and enforcement mechanisms to promote better stormwater management and address barriers to implementing LID;
  - Working with DOT and municipal road agents to better understand barriers to implementing more effective stormwater management strategies and maintenance requirements for linear road projects;
  - Developing standard model SWPPPs for routine projects;
  - Providing NROC-style technical assistance;
  - Providing support for Stormwater Coalitions and other voluntarily-organized groups for permit compliance support;
  - Educating the public, as well as trade associations, lake and watershed associations on the importance of stormwater management, and promoting outreach by these organizations; and
  - Developing a statewide or regional stormwater educational campaign similar to energy star.