

FINAL MINUTES
HB 1295 COMMISSION TO STUDY THE ISSUE OF
STORMWATER MANAGEMENT

November 3, 2008 1:00 PM
NH Legislative Office Building, Room 305, Concord, NH

Members Present:

Chair: Dari Sassan	NH Office of Energy and Planning
Vice Chair: Judith Spang	NH House of Representatives
Eber Currier	NH Farm Bureau
Karen Ebel	The Nature Conservancy
Donald Sienkiewicz	Home Builders and Remodelers Association
Newb LeRoy	Associated General Contractors of NH
Dave Danielson	NH Association of Regional Planning Commissions
Steve Kahl	NH Lakes Association
Chris Devine	NH Local Government Center
Rob Roseen	University of New Hampshire Stormwater Center
Carl Paulsen	NH Rivers Council
David Cedarholm	NH Public Works Association
David Borden	NH House of Representatives
Charlie Hood	NH Department of Transportation

Others Present:

Ted Diers (for Paul Currier)	NH Department of Environmental Services
Jamey Robichaud	Northeast Concrete Products Association
Ari Pollack	Gallagher, Callahan & Gartrell
Doug Bechtel	The Nature Conservancy
Kathryn Fox	Environment NH
Michael Simpson	Antioch University New England

Commission Staff Present:

Jillian McCarthy	NH Department of Environmental Services
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I. ROLL CALL AND INTRODUCTIONS

Chairperson Sassan called the meeting to order at 1:09 PM.

II. APPROVAL OF MINUTES FROM OCTOBER 6, 2008 MEETING

Ms. McCarthy reviewed the following recommended changes to the draft minutes:

- The addition of a website link on page 2 to Mr. Robert Roseen's presentation at the October 6th, 2008 Stormwater Commission meeting.

- A clarification of Mr. Sienkiewicz's statement on page 6.

Mr. Danielson brought the motion forward to accept the minutes from the October 6, 2008 meeting. **Rep. Spang** seconded the motion. **All approved and none opposed.**

III. PRESENTATION 1

Mr. Ted Diers, from the Department of Environmental Services, presented a slideshow titled "NH Water Primer and Stormwater Permitting at NHDES."

http://www.nh.gov/oep/legislation/2008/hb1295/documents/stormwater_permitting_at_nhdes.pdf

The presentation focused on the draft NH Water Primer being developed by DES as well as the existing state and federal permitting structure related to land disturbance activities and stormwater discharges.

Mr. Diers explained that the NH Water Primer is the first attempt at a statewide water resources plan. The introductory chapter provides overarching information on how each of the individual chapters fit together. The individual chapters then go into greater detail on each topic. **Ms. McCarthy** informed the Commission members that a draft of the Stormwater Chapter was provided in their meeting materials and that a final version will be available at the end of November. **Mr. Roseen** questioned if the stormwater chapter should contain more information on the Multi-Sector General Permit (MSGP) 2008 and Total Maximum Daily Loads (TMDLs). **Mr. Cedarholm** stated that the Municipal Separate Storm Sewer System (MS4) permits may also be linked to TMDLs and that this could have a big impact on the permits.

Mr. Diers continued his presentation and moved to the topic of state and federal permits related to stormwater. He presented summary information on the NH Alteration of Terrain (AoT) Permit, the National Pollutant Discharge and Elimination System (NPDES) MS4 permit, the NPDES Construction General Permit (CGP), and the Multi-Sector General Permit.

Mr. Sienkiewicz pointed out that both the AoT permit and the CGP involve construction site runoff and post-construction runoff controls and questioned if this is overlap. **Mr. Diers** responded that communities subject to the MS4 permit need to develop regulations for post-construction and construction-phase runoff controls and stated that this is particularly important where no other state, federal, or local regulations apply. **Mr. Cedarholm** added that MS4 communities must adopt rules for sites greater than one acre as a minimum. **Mr. Sienkiewicz** stated that this requirement closes the gap between the MS4 permit and the AoT permit.

Mr. Diers explained that, because New Hampshire is not a delegated state, the NPDES CGP is administered by EPA. DES issues a general 401 Water Quality

Certification for the overall general permit and that individual projects could be pulled out of the general permit or could require an individual 401 Certification under certain circumstances. He gave the example that the state may want to look more closely at projects near impaired waters or outstanding resource waters. **Mr. Diers** further explained that if a project does not trigger one of the state permits, the state would not necessarily be notified of a project. The Commission members offered examples of projects that may be subject to the CGP, but would not trigger a state permit including installation of a tennis court. **Mr. LeRoy** suggested the possibility of requiring applicants to file a copy of their Notice of Intent (NOI) to the state at the same time it is submitted to EPA. **Mr. Danielson** asked if DES has considered administering the NPDES CGP. **Mr. Diers** said that it had been discussed, but it is not something DES wants to do. It would require more resources than DES currently has and would be costly.

Mr. Diers then discussed the Multi-Sector General Permit (MSGP) and said that he doesn't know a lot about the permit. **Mr. LeRoy** told the Commission that the 2008 MSGP was just issued, which requires a new NOI to be filed by January 5, 2009 and a new Stormwater Pollution Prevention Plan (SWPPP). The sampling requirements are the same. He stated that it is going to be more difficult to obtain coverage under the 2008 MSGP. Unlike other permits, this deals with existing development. He gave examples of companies that currently require coverage under the MSGP including Pike Industries, Audley, and Precision Lumber. **Mr. Danielson** asked if it also includes commercial development. **Mr. LeRoy** responded that it can include some commercial depending on the situation. He said that it excludes shopping plazas and malls, but includes airports. Parking lots are typically not brought into the permit unless the parking lots are used for vehicle storage. **Mr. Cedarholm** added that it also includes some municipal operations. **Mr. LeRoy** explained that monitoring and inspection requirements typically result from a complaint. **Mr. Roseen** added that the permit requires self-monitoring and stated that the big change between the previous MSGP and the 2008 MSGP is that the 2008 MSGP links to TMDL.

Mr. Diers then moved to a discussion on permitting context. He stated that DES only permits what comes in the door. DES has jurisdiction based on what people want to do. He also said that where to locate a project is decided before DES gets a permit. He explained that state permits can happen before, at the same time, or after the local permit decisions; this is different for each town and that permit decisions are based solely on statutes and rules. DES has guidance and policy, but ultimately, decisions are based on statutes and rules. He stated that some permits are formulaic and some are interpretive, and some have a federal component. **Rep. Spang** asked if permit applicants need to show the least impacting alternative. **Mr. Michael Simpson** responded that this is needed to wetland permits. **Ms. McCarthy** added that the draft Alteration of Terrain rules incorporate the Antidegradation provisions of the NH Surface Water Quality Standards, which includes an alternatives analysis for proposed water quality degradation.

Mr. Diers explained that there are a lot of places within the existing permitting process where projects can be adjusted, through providing comment, setting conditions to a permit, appeals, and inspection for compliance. He concluded by saying that although these regulations and permits exist, there are many ways outside of regulations to address stormwater management concerns.

Mr. Danielson stated that most Regional Planning Commissions (RPCs) have master plans for their regions. These plans could be considered for answering the question of where development should go.

IV. INTRODUCTIONS

Chairperson Sassan requested that Commissioners, staff and attendees introduce themselves to Mr. Simpson by name and representation.

V. PRESENTATION 2

Mr. Michael Simpson from Antioch University New England gave a presentation titled “Water from the Hills.”

http://www.nh.gov/oep/legislation/2008/hb1295/documents/water_from_the_hills-preparing_our_communities_for_change.pdf

The presentation focused on research he has conducted on culvert sizing. He stated that, historically, stormwater management structures, including culverts, were sized for the 24 hour, 25-year storm event. New Hampshire has seen many 100-year storm events in the last few years that have resulted in bridge washouts and loss of life. He described the multi-tiered research analysis. The first step was a build-out analysis for the White Brook watershed using a build-out model and based on city and town zoning density. He and his research team studied flow characteristics at each culvert and the relationship and influence of culverts upstream. He noted that they found in flooding events, sediment could have a greater economic impact than water. As part of the build-out analysis, they measured all of the culverts and slopes and reversed engineered the culverts to determine what level of storm events they were designed for and went further to determine what size the culverts should be. They recognized three reasons for a culvert being undersized: 1) the culvert was very old and there was no design used for sizing; 2) the culvert was designed based on the “Green Book” [Rockingham County Conservation District. *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire*. August, 1992.]; or 3) the landscape had changed to include more development and increased impervious cover since the culvert was designed.

Phase 2 and the multi-tiered analysis looked at climate impacts. They used the A2 model, which **Mr. Simpson** identified as being slightly pessimistic, that is based on carbon dioxide loading. He stated that climate change induced increases in rainfall amounts would disproportionately increase the frequency of the most

intense storms. He explained that we are seeing an increase in storm frequency by about 30% and that in the future, between 2046 and 2076, the 250-year storm event will come with a frequency of the historic 25-year storm event.

Mr. Simpsons discussed the tools for adapting to these changes. He stated that many people believe that anthropogenic climate change is not real. Regardless of the cause, even the most conservative carbon dioxide model shows that by mid-century, around 2040, there will be an increase in carbon dioxide in the atmosphere. **Mr. Simpson** stated his concern that at the municipal planning board level, where land use decisions are made, there is a failure to see how the incremental, small decisions have a cumulative impact over time.

Mr. Simpson closed with future research needs explaining that the analysis to date has been done in rural areas because the data is based on the best data available from Granite. To do an analysis in an urban environment they need much more refined elevation data.

Rep. Borden asked if the model they developed can be used more quickly and cost effectively for each town. **Mr. Simpson** responded that the model is almost there, but in order to determine a culverts capability, it needs to be reverse designed. He explained that the methodology can be used anywhere, but the numbers can't be used everywhere because rainfall is different in different regions.

Mr. Cedarholm explained when he and his crew replace culverts they need to decide which to replace first. In some situations he is happy that he has some small upstream culverts because they hold back some water. They need to replace the downstream culverts first in order to have them handle the higher flows when upstream culverts are replaced. **Mr. Simpson** responded that culverts are not designed to be dams, adding that a failure could be catastrophic.

Mr. Danielson asked how to get local planners to begin to think on a macro scale and to plan regionally. **Mr. Simpson** agreed that a regional perspective is necessary because stormwater is not contained within municipal boundaries.

Ms. Ebel stated that just putting in a bigger culvert is not the only issue; a lot of education needs to be done to teach public works. **Mr. Simpson** said that there are different "lenses" to look through for each culvert. There are many objectives including geomorphology, wildlife, etc. **Ms. Ebel** added that municipalities sometimes use the Regional Planning Commissions (RPC)s and sometimes do not. Some towns pay dues, other do not. She asked how RPCs can be strengthened to help deal with these issues. **Mr. Danielson** responded that RPCs allow towns access to a tremendous amount of information and that the RPCs depend on each other. **Ms. Ebel** said that some states require RPCs to be involved. **Mr. Danielson** informed the Commissioners that there has been no increase in RPC funding since 1988.

Mr. Kahl stated that replacing culverts is a reactive process. The Commission needs to look at a proactive approach such as increasing buffers and other incentives for people to reduce the amount of lawn and pavement. **Mr. Simpson** responded that they have looked at proactive approaches, such as low impact development (LID), but that the presentation focused on culverts because it is something that people can understand. **Mr. Roseen** added that the land use and proactive approach is the next logical step. He stated that economic incentives for proper land use planning and LID approaches, as well as cost-based incentives for communities are needed so they still see economic incentives for moving forward.

Mr. Danielson told the Commission that, at the time, the planning boards thought they were doing great things. They thought they were on the cutting edge, although he can recognize now that some of the decisions they made were not right. The things that are being discussed now were not even on the map. The Commission needs to also look into the future and ask what will be the best decisions twenty years down the road.

Mr. Doug Bechtel informed the Commission that he has been involved in a culvert assessment in the Ashuelot River watershed and that they will begin meetings with watershed towns and the RPC. He asked Mr. Simpson what he would ask a local road agent about fixing a failure. **Mr. Simpson** responded that he would first ask the road agent what happened. He encourages “train the trainer” programs for DPW staff to train each other. The Technology Transfer program at UNH was mentioned as a training option as well.

Mr. Simpson said that his research will continue and that he is most interested in dams and floodplains. He explained that anytime water moves, sediment moves, and when sediment moves, phosphorus moves. Controlling water quantity is driving erosion control and ultimately control of nutrients. **Rep. Spang** asked him more about the issue of dams and floodplains. **Mr. Simpson** explained that he is talking about small dams that act similar to culverts.

Mr. Diers asked him if, and where, he sees places in which the permitting structure limits the ability to do what needs to be done to address culverts or other stormwater issues. He gave the example that road agents can replace the same size culvert without having to deal with DES. **Mr. Simpson** responded that he has concerns that the draft Alteration of Terrain rules uses the historic 10-year storm event, based on old data. He also mentioned that the draft rules have a 10% effective impervious cover (EIC) requirement, which is very good and important, but none of the rules are looking at the future.

Mr. Sienkiewicz stated that he is impressed in a bad way about how much influence the fire department and road agents have on subdivision regulations. He stated a take-home point from Mr. Roseen’s presentation at a previous meeting, that the land use side has to be pushed. The landscape needs to be made more

resilient. **Mr. Roseen** added that the cost needs to be put more equally on developers and owners and not only on municipalities. Many of the approaches for stormwater management add value to a property. **Mr. Sienkiewicz** responded that upping the regulations for new construction only puts unfair burden on new construction. **Mr. Danielson** stated that is where stormwater utilities come into play.

VI. DISCUSSION OF FUTURE MEETING TOPICS AND DATES

Chairperson Sassan asked the Commissioners to confirm that the first Monday of the month at 1pm works to schedule regular meetings. All agreed to this day and time.

Date	Time	Location
December 1, 2008	1:00pm	LOB 305*
January 5, 2009	1:00pm	LOB 305*
February 2, 2009	1:00pm	LOB 305*

*NH Legislative Office Building, 33 North State Street, Concord, NH

VII. POTENTIAL INVOLVEMENT OF REGIONAL PLANNING COMMISSIONS

Chairperson Sassan read the following excerpt from an October 17, 2008 email from Mr. Sienkiewicz to the Commission:

Dave Danielson followed up my comment with a comment which the minutes reflect as "Mr. Danielson told the Commission that there is more technical ability in the RPC's than people realize. He stated that the public works directors and road agents are very concerned about more regulations coming their way. They are the ones who have to deal with the budget impacts. If the responsibility is moved further away from the towns' authorities, they may become more suspicious. The support should be close to the towns."

I agree that there is quite a bit of technical ability in the RPCs. I am glad to be reminded that there is - potentially - both a useful resource and a potential intermediate level of permitting authority between the State and the localities.

I would, and I believe builders generally would, like to see the RPCs have more influence in the permitting process - IF it replaced, and didn't simply add to, areas to which the municipalities are already attending. On something like stormwater, uniform state regulations can be digested by professionals at the RPCs and explained to their constituent municipal boards and road agents. The fundamental hindrance to RPCs, as I understand it, is that they are largely funded by their member municipalities, whose participation is more or less voluntary. The municipal board members can choose to listen to (or ignore) the professionals at the RPC just like they can with the State, wherever there are no laws that supersede local permitting authority. I think the "technical assistance" model that our RPCs work under would only get good, uniform results across the

State if the RPCs had significant funding, independent of the towns, AND the towns all had board members who stayed in their positions a long time AND were open to receiving the advice of and training from the RPCs. Might only work if each municipality had a staff planner, too.

I welcome Commissioners' thoughts.

Mr. Sienkiewicz told the Commission that he still stands by his statement and welcomed discussion. **Ms. Ebel** stated that she thinks it would be good to strengthen the hand of the RPCs. Towns are not currently required to be a member of an RPC and some towns do not have planners. She felt it would be beneficial to get a situation where there is a required linkage between the towns and the RPCs. **Mr. Danielson** stated that the RPCs would support that added responsibility, but they would need more funding. He also stated that funding is not consistent between the RPCs. **Ms. Ebel** explained that if a town is a member of an RPC, they are supposed to send two representatives, but sometimes this doesn't happen. **Mr. Paulsen** noted that this isn't a specific duty of the Commission, but asked if the Commission will look at possible funding mechanisms. **Ms. Ebel** added that this issue gets to the fact that water doesn't adhere to municipal boundaries, and more stormwater planning should be done regionally.

Rep. Spang stated that RPCs cannot provide as many services as they would like to with the current dues. Towns are afraid to ask for assistance from the RPCs because they are afraid of increasing the fee. **Mr. Danielson** responded that everyone would like to get services for free. **Ms. Ebel** asked how fees are calculated. **Mr. Danielson** answered that dues are calculated differently for each RPC. Manchester's fee for example, has been \$0.67 per person for the last fifteen years. **Ms. Ebel** answered that, that for example, New London pays \$5,000 per year for its dues, but is charged separately for RPC services. **Rep. Spang** suggested that this could be a better conversation when and if the Commission determines that there is something they want the RPCs to do. **Chairperson Sassan** noted that the RPC issue would be readdressed and asked if there is a good model in place where RPCs have a clearly stated role in permitting in New Hampshire. **Mr. Danielson** said no, the RPCs have no authority, but that he will try to find an example outside of New Hampshire. **Ms. Ebel** asked if the Commission can look at regional stormwater planning, but noted that although the RPC's work on a larger, regional level than the town, the RPCs do not follow watershed boundaries. She opined that stormwater planning should be done on a watershed basis to the extent possible.

VIII. FUTURE SCHEDULE

Chairperson Sassan informed the Commission that there are eleven more meetings. He proposed a work schedule, which would allot one meeting for each of the five permitting scenarios, four meetings to make hypotheses, recommendations, and discussions, and the last two meetings for the final report.

He asked if the Commission agreed with this approach. **Mr. Cedarholm** asked if the interim report had been submitted. **Chairperson Sassan** stated that the interim report had been submitted and that he was going to sign it after the meeting. **Mr. Cedarholm** explained that, based on the email correspondence, it not clear that stormwater may not be under municipal authority. **Chairperson Sassan** responded that it is obviously a topic of interest that should be addressed in future meetings, but that it had not been discussed at a previous Commission meeting and was therefore not included in the interim report. **Mr. Danielson** asked Rep. Spang, because of her experience with other study commissions, if the interim report is consistent with others. **Rep. Spang** answered that it is consistent and meatier than most interim reports.

Mr. Danielson brought forward a motion to approve the interim report. **Mr. Paulsen** seconded. **All approved and none opposed.**

Chairperson Sassan asked the Commissioners to go back to the process of the meeting schedule. **Ms. Ebel** questioned if each topic needs a full meeting. **Chairperson Sassan** said that he thinks that each topic will need a full meeting and thinks that meetings may need to be longer to provide sufficient time. **Ms. Ebel** stated that the five scenarios agreed upon at an earlier meeting really focus only on permits, and expressed concern that other important aspects of stormwater treatment, such as dunes and the placement and replacement of road culvert, especially on town roads, might be overlooked. **Chairperson Sassan** asked the Commissioners to keep in mind that the five scenarios approach is simply a way to break up the landscape. He added that the Commission is fortunate to have appointees from a broad, all-encompassing range of stakeholders and that the Commission will rely on that broad knowledge base to ensure that issues, which do not fall neatly within one scenario or another, are also brought forward. He added that if the Commission gets through the nine questions established to study each of the scenarios and realize that information is missing or there are additional questions, there will be opportunity to address it further.

IX. ADJOURNMENT

At 3:34 PM, **Rep. Spang** brought motion to adjourn forward. **Mr. Sienkiewicz** seconded. **All voted in favor.**