

**DRAFT MINUTES**  
**HB 1295 COMMISSION TO STUDY THE ISSUE OF**  
**STORMWATER MANAGEMENT**

January 5, 2009 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
Dave Danielson	NH Association of Regional Planning Commissions
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
Charlie Hood	NH Department of Transportation
Michael Trainque	American Council of Engineering Companies
Paul Currier	NH Department of Environmental Services
Amy Manzelli	Business and Industry Association of NH
Steve Kahl	NH Lakes Association

**Members Absent:**

Jacalyn Cilley	NH Senate
Eric Stohl	NH House of Representatives
Newb LeRoy	Associated General Contractors of NH
David Borden	NH House of Representatives
Joe Robertie	NH Timber Owners Association

**Others Present:**

Doug Bechtel	The Nature Conservancy
Jennifer Gilbert	NH Office of Energy and Planning
Collis Adams	NH Department of Environmental Services
Lori Sommer	NH Department of Environmental Services
Steve Couture	NH Department of Environmental Services
Ted Diers	NH Department of Environmental Services
Joel Anderson	NH House of Representative Staff
John Magee	NH Fish and Game Department
Harold Janeway	NH Senate

**Commission Staff Present:**

Jillian McCarthy	NH Department of Environmental Services
------------------	---

## I. ROLL CALL AND INTRODUCTIONS

**Chairperson Sassan** called the meeting to order at 1:06 PM. Chairperson Sassan requested that Commissioners, staff and attendees introduce themselves by name and representation. Introductions were made around the room.

## II. APPROVAL OF MINUTES FROM DECEMBER 1, 2008 MEETING

**Ms. McCarthy** recorded changes noted by the Commission.

1. Page 4, First full paragraph: change “statue” to “statue” in the sentence, “**Ms. Ebel** asked if the coalitions were created by state statute”.
2. Page 5, first full paragraph, third sentence change the order of wording from “general construction permit” to “construction general permit”.
3. Page 5, last paragraph, first sentence: change “Mr. Roseen” to “Dr. Roseen”.

**Dr. Kahl** brought the motion forward to accept the minutes as amended as per Commissioners’ comments from the December 1, 2008. **Ms. Ebel** seconded the motion. **All approved and none opposed.**

## III. DISCUSSION OF NEXT MEETING

**Mr. Danielson** asked if there would be follow up on the question of municipal authority as discussed at the December 1, 2008 meeting. **Chairperson Sassan** responded that the next meeting would have representatives from the Attorney General’s [AG] Office, the Local Government Center [LGC], and Eric Williams from NH Department of Environmental Services. **Rep. Spang** added that all of the Commissions questions related to authority were compiled and emailed to the AG’s Office and the LGC. The AG’s Office responded that they are not responsible for implementing municipal regulations, but that they will attend the meeting and join the discussion.

## IV. PRESENTATION ON THE FLOOD COMMISSION FINAL REPORT – STEVE COUTURE, NHDES

**Mr. Steve Couture**, from the Department of Environmental Services, presented a slideshow titled “Presentation to: HB 1295 Commission to Study the Issue of Stormwater Management”, which described the work and outcome of the Flood Commission established under HB 648. Mr. Couture manages the Rivers Management Program at DES, but he presented to the Commission as a representative of the Flood Commission. **Mr. Couture** explained that the Flood Commission formed as a result of the flooding in 2005 and 2006. The Flood Commission held one meeting that was specifically focused on stormwater. **Mr. Couture** presented the Key Findings related to stormwater that were included in

the Flood Commission's final report. Key Findings included the following identified needs related to stormwater:

- Limit the new construction of critical or state facilities in fluvial hazard zones.
- Establish a state-level regulatory approach for floodplain management.
- Increase ability for the state and municipalities to manage stormwater.
- Ensure that bridges and culverts are adequately sized.
- Increase education and outreach to communities regarding floodplain management and insurance options.

The full presentation and details of recommendations can be found at the following link:

<http://www.nh.gov/oep/legislation/2008/hb1295/2009/documents/010509couture.pdf>

During the presentation **Mr. Couture** explained that the Flood Commission recommended that any new state facility exceeding 5,000 square feet in size would need to implement low impact development practice to meet stormwater volume and flow limits. He stated that this has not yet been implemented at the state level, but it is at the federal level and the Stormwater Commission might want to consider this item to move forward.

**Mr. Couture** described the Flood Commission's recommendation of a state-level regulatory approach for floodplain management. He stated that FEMA recommended that the state develop watershed-specific HEC-RAS models across the state to assist in understanding flood flow characteristics and how land use and climate changes are affecting flood prone areas. This type of modeling could also determine critical flood storage areas needed for protection from development. The State could use it as a basis for build-out analysis. This would also allow the cumulative impacts of stormwater over time to be incorporated into the state regulatory mechanism, possibly through the Alteration of Terrain program. **Rep. Spang** stated that this seems like such a large item that it might not be possible to implement. **Mr. Couture** responded that it might not be possible, but because FEMA made the recommendation and the US Geological Survey expressed interest, they included it. He stated that many more details would be needed before it could be implemented. **Rep. Spang** asked if the Flood Commission discussed doing this on a site-specific basis. **Mr. Couture** responded that there was discussion about Alteration of Terrain projects needed to run an individual HEC-RAS. **Mr. P. Currier** stated that HEC-RAS needs to be run river-by-river and added that there is a lot of information out there already from the HEC-RAS analysis done by FEMA in the 1970's. **Rep. Spang** asked if the flood plain has changed since the 1970's. **Mr. Cedarholm** responded that if USGS moves forward with new topographic maps, the 1970's FEMA HEC-RAS data could be easily updated.

**Mr. Couture** stated that the Flood Commission defaulted many issues to the Stormwater Commission including: limitations on impervious cover, state facility requirements, and climate change impacts. He also stated that some of the recommendations from the Flood Commission are in place, such as the enabling legislation for stormwater utilities. Additional recommendation, yet to be implemented include:

- DES and OEP should provide technical assistance program for communities.
- Continue support for DES and Regional Planning Commissions Innovative Land Use Controls stormwater ordinance.
- Encourage municipalities to submit stormwater infrastructure needs to DES as part of the 2008 Clean Water Needs Survey.
  - Fund stormwater infrastructure improvements through the State Revolving Fund and State Aid Grant programs.
- Develop a multidisciplinary team to assist communities who request help to improve floodplain management, possibly based on the Natural Resources Outreach Coalition [NROC] model.
- Department of Transportation [DOT] should address climate change and impervious surface effects when updating its *Manual on Drainage Design for Highways*.

**Mr. Couture** described the NROC model of community assistance to the Commission. It is a process for municipalities to get planning technical assistance. If they successfully apply, the assistance is committed to that community for a guaranteed amount of time. The NROC model is very goal oriented and stays focused on the established goals. There may be an opportunity to create that type of NROC model to provide technical assistance to communities. **Rep. Spang** asked if “opportunities” means funding opportunities. **Mr. P. Currier** explained that small pots of money from sources such as UNH Cooperative Extension and NHDES Section 319 Nonpoint Source Funding could be used to leverage larger pots of money. **Mr. Diers** of the NHDES Coastal Program explained that a third party assessment of the NROC program was conducted and it was determined that it costs approximately \$160,000 per year to run it. This sum includes in-kind contributions and funding for a coordinator position, as well as trying to allow between \$5,000 and \$10,000 for each community to be used toward funding a project after they complete the program. He stated that NROC is a very intensive program that contracts with only three communities per year. The small number per year is reflective of the intensity of the program and the resources available. **Mr. Couture** added that the National Park Services has a similar program to provide assistance on a focused effort, but it is not tied to funding. Instead, applicants apply for services such as assistance with trails or grant writing. He stated that only a few people at the state level in New Hampshire provide technical services and the best way to get those services out to the public needs to be determined.

**Mr. Couture** described the implementation of Flood Commission recommendation to date, including:

- LSR 207 to include fluvial erosion hazard ordinance into the Innovative Land Use Controls statute.
- LSR 743 to authorize lieu of fee option for wetlands for projects that impact floodplains and stream channels.
- Inventorying state land in 100 & 500-year floodplains.
- Inclusion of 100-year floodplains in new AoT rules. In Zone A the applicant will have to model the floodplain.
- Commission findings/ recommendations included in OEP *Floodlines*, DES newsletter, and Dept. of Safety's electronic newsletter.
- Report to be referenced in Climate Change Task Force Report, Adaptation Chapter and findings/recommendation to be considered in Climate Change Adaptation plan.

**Rep. Spang** asked what would need to be done for the Alteration of Terrain modeling in the 100-year floodplain. **Mr. Couture** explained that the model is to make sure that there is no increase in flood elevations upstream or downstream of the site, that all culverts in the 100-year flood plain must be sized to pass the 100-year event, and that an erosion analysis must be performed. **Chairperson Sassan** asked if the recommendation was considered in the recently adopted Alteration of Terrain rules. **Mr. Couture** responded that it was not considered because the timing was off. He added that changes to the Alteration of Terrain Rules are anticipated for early 2010 at which time this addition could be made.

**Ms. Manzelli** stated that the executive summary of the Flood Commission Report states that the current 100 and 500-year floodplains are incorrect because climate change. Steve stated that DES is trying to obtain funding for statewide LiDAR (Light Detection and Ranging) for all communities to use to update their flood plain maps. That request has been scaled back, however; in an attempt to receive funding for LiDAR acquisition in the Coastal Watershed. **Dr. Roseen** stated that changes in rainfall depth would not require change in modeling and asked if DES is considering adopting new rainfall data. **Mr. Couture** responded that adopting new rainfall data was discussed early on in the Commissions efforts, but it fell under the radar screen.

**Mr. Danielson** asked who has the responsibility in determining the downstream impact of development. **Mr. Couture** explained that the developer must submit data for DES to review. **Mr. P. Currier** added that there are also secondary impacts that are reviewed under the wetlands statute. **Mr. Danielson** stated that the current development of regional impact legislation would give planning commissions the authority to review development for specific regional impacts and would include a fee. It is currently procedural legislation and doesn't include stormwater. The Commission discussed that stormwater should be included in the regional impact review. **Rep. Spang** added that a municipality, other than the municipality involved, should be given an opportunity to assess for regional impacts and that possibly an amendment should be made to include that. **Mr. Sienkiewicz** asked if the Development of Regional Impact (DRI) has a definition

of “impact”. **Mr. Danielson** responded that “impact” is not defined. It could be education or it could be economic. **Mr. Danielson** informed the Commission that he will look into it and stated that if a project has a downstream impact, it should be studied more clearly. **Ms. Ebel** stated that this gets back to a watershed scale and added that the regional impact needs to be reviewed on a regional basis.

**Mr. Sienkiewicz** stated that if a project triggers an Alteration of Terrain permit, it will be reviewed and he is not sure that adding a regional review is necessary. He added that a regional impact statement is not a way to regulate. **Dr. Roseen** stated that the trigger for an Alteration of Terrain permit is 100,000 square feet of disturbance and gave a 50 foot wide and 200 foot long road as an example stating that roads can go in without a permit review if no houses are proposed. He suggested that the state might want to lower the 100,000 square foot trigger and propose a change to the Alteration of Terrain rules. He stated that this would increase the number of projects getting reviewed, and added that the smaller projects should be reviewed by EPA. **Mr. P. Currier** suggested having municipalities use the same performance requirements as the Alteration of Terrain permit, but for municipalities to receive technical assistance to allow them to conduct their own reviews. **Mr. Sienkiewicz** stated that the homebuilders’ preference would be to not have overlapping or filling of Alteration of Terrain loopholes with municipal authority. He suggested having the Alteration of Terrain program regulate the smaller scale development projects as well. He added that an NROC style of technical assistance would take an extremely long time to cover all of the municipalities in the state. Municipalities already pay for third party review of plans. **Dr. Roseen** asked if there is another way to regulate stormwater than at the municipal level. **Mr. P. Currier** suggested that the state could provide performance specifications that can be adopted by municipalities and encourage municipalities to adopt them. **Chairperson Sassan** asked if the performance specifications would come with incentives for adoption. **Mr. P. Currier** responded yes. **Mr. Sienkiewicz** stated that state incentives would require state money to give.

**Rep. Spang** suggested that the Commission watch a documentary about water infrastructure done by Penn State University called “Liquid Assets” that discusses how 80% of the nation’s water infrastructure will soon be obsolete and need replacement. She asked if the impacts on existing infrastructure and the burden on it are being looked at in new development, and if there is a role the state could play in making sure infrastructure doesn’t decline. **Dr. Roseen** stated that this is a big discussion beyond water quality. He added that climate change issues are clearly not being addressed and there is no consensus on how to deal with it. He explained that municipalities that are regulating the amount of stormwater added to municipal storm sewer systems that are using old rainfall depths are underestimating the impact. He stated that new rainfall depth data needs to be used. **Mr. P. Currier** stated that performance criteria should be to maintain the existing condition for runoff volume and to maintain the hydrograph, but the impact of climate change needs to be considered since it will put more water in

those pipes anyway. **Mr. Cedarholm** offered a response to Rep. Spang's question regarding infrastructure. He stated that the municipal perspective is if it's not broken, don't fix it. The new Municipal Separate Storm Sewer System [MS4] permit that was just issued will require inspection of existing infrastructure, which is a step in the right direction. **Mr. Cedarholm** stated that the new permit also requires that if a project proposed to discharge to an impaired water, the developer will need to show that the project will have no impact on the impairment. **Dr. Kahl** stated that if the responsibility is on the developer to prove there is no water quality impact and they're using old rainfall data and old floodplain elevations, the impact will be underestimated. **Mr. P. Currier** responded that a state framework to be able to update the data is needed. **Mr. Couture** added that a Climate Change Task Force, headed by DES, was established and that it is finishing its final report. He added that it will be developing a post-report adaptation plan and that the Stormwater Commission may want to be involved with it.

**Rep. Spang** stated that the Commission has not discussed the role of dam management on managing stormwater. **Mr. Couture** responded that when it came to floodplain management, the Flood Commission decided the existing dams will be maintained, but in the future, dams should not be used for flood management. Most dams are designed for water resources management and recreation.

**Dr. Roseen** asked whom the Commission should contact on climate change and the timeframe for the adaptation plan. **Mr. Couture** recommended contacting Sherry Godlewski at DES. **Mr. Diers** stated that the "plan" is more of a list of recommendations at this point and that four or five out of approximately 20 recommendations involve stormwater.

**Dr. Kahl** stated that when a development is proposed in a floodplain, it almost always meets the 100-year floodplain requirements. He added that municipalities have to adopt minimum requirements set by FEMA. **Mr. P. Currier** stated that FEMA's minimum requirements are that the lowest livable floor has to be above the 100-year floodplain, which is very different from restricting development in the floodplain. **Dr. Kahl** added that the floodplain maps are outdated and stated that if a development has a significant increase in impervious cover and an increase in runoff, it could cause downstream communities to not meet the 100-year floodplain requirements. **Mr. Couture** responded that there is currently no requirement to maintain volume and peak flows. **Ms. Gilbert** of the NH Office of Energy and Planning explained that "freeboard" is the most common requirement and typically two to three feet of freeboard above the floodplain is required. **Rep. Spang** asked if municipalities can opt out of those requirements. **Ms. Gilbert** responded that some communities do not want to participate. This means that homeowners in those communities cannot get flood insurance. **Rep. Spang** asked for clarification the type of impact Mr. Couture was referring to in his comment that development cannot have an impact upstream or downstream of a project.

**Mr. Couture** responded that there cannot be an increase in flood elevation. This is accomplished through flood storage and erosion potential needs to be considered. A development project may be able to meet the elevation, but the erosion potential of the area shouldn't allow it.

**Mr. Couture** informed the Commission that the Flood Commission is no longer active, but if there are general questions, the Commission can contact the most appropriate member of the Flood Commission. If a more formal interaction is necessary, the Flood Commission Chair, Rep. Anderson, should be contacted.

**Ms. Manzelli** asked if states that have had debilitating floods have requirements that are more stringent than the minimum. **Ms. Gilbert** responded that states mostly have freeboard requirements and added that the Association of Floodplain Managers ([www.floods.org](http://www.floods.org)) has information on what states are doing beyond the minimum. **Mr. Couture** added that Vermont had major flooding in the 1990's and started a flood commission, which began their fluvial morphology program. After ten years, they now have a law that the state has to be used to advise the municipality when the municipality adopts ordinances.

**Chairperson Sassan** asked if anyone had thoughts on Rep. Spang's question about the ability of existing infrastructure to handle increasing loads. He suggested that some of the data gathering that would go along with the formation of a stormwater utility could serve to answer some of those questions.

#### IV. DISCUSSION OF THE EFFECTS OF LAND USE ON WATER QUALITY, AQUATIC HABITAT, AND BIOTA – JOHN MAGEE, NH FISH & GAME

**Mr. Magee** of the New Hampshire Fish and Game Department submitted a draft paper to the Commission titled *Summary of the Effects of Land Use on Water Quality, Aquatic Habitat and Biota*.

<http://www.nh.gov/oep/legislation/2008/hb1295/2009/documents/010509magee.pdf>

**Mr. Magee** informed the Commission that he also submitted the draft paper to the Land Use Commission. He explained that he used impervious surface as a surrogate for stormwater throughout the paper. **Mr. Magee** presented a summary of his paper to the Commission. He explained that there is a lot of information on the topic. Mr. Magee said that there are hundreds of peer-reviewed literature sources that all conclude that an increase in impervious cover directly correlates to a decrease in water quality, habitat, and aquatic life. He stated that this correlation is extremely well document, but what isn't well documented it the threshold of impervious cover in a watershed that begins to impact water quality. A study in Maryland shows impacts at four percent. Ten percent is often cited as the threshold and newer studies indicate that impacts are seen at less than ten percent. **Dr. Roseen** added that a study conducted by USGS in the New

Hampshire seacoast showed similar results of 4% and then a big line indicating impacts. **Mr. Magee** continued to discuss the impacts and explained that changes in hydrology from development can lower the water table and decrease the availability of groundwater to maintain base stream flows and supply drinking water. He stated that not all activities are currently regulated, particularly small-scale disturbances. He gave the example that nothing prevents him from building a shed at his house and that nothing in the current regulations require the 12 to 13 homes in his neighborhood to manage stormwater.

**Mr. Magee** informed the Commission that he could provide additional information on the impact of stormwater on habitat if given more time. **Chairperson Sassan** responded that Mr. Magee had covered the basic duty to study the impact of stormwater on aquatic and terrestrial habitat, and asked the Commission if there were additional questions they would like Mr. Magee to respond to. **Rep. Spang** asked about a presentation on siltation. **Dr. Roseen** asked if Mr. Magee had come across recommendations for the width of riparian buffers to protect aquatic habitat. **Mr. Magee** responded that in general, the greater the buffer width, the less the impact. **Dr. Roseen** asked if it could be as simple as saying that if a buffer is restored it would restore aquatic life or if there are certain buffer widths or a certain percentage of impervious cover that related to a certain reduction in impact. **Mr. P. Currier** stated that there is a difference between connected and disconnected impervious cover. **Dr. Kahl** stated that first order streams need buffers and that impacts are coming from currently unregulated first order streams. He added that this is a regulatory problem. **Rep. Spang** stated that the Comprehensive Shoreland Protection Act [CSPA] put some requirements on impervious cover. **Mr. P. Currier** added that the impervious cover requirements are only within the buffer. **Rep. Spang** stated that there is a flip side because some species require floods. **Mr. Magee** agreed and gave the example that the Silver Maple requires flooding to bring nutrients. **Mr. Magee** stated that there is a problem where floodplains are no longer connected to the stream and gave Nash Stream as an example. They are seeing impacts to native brook trout. The water quality and habitat are okay, but changes to the stream channel and stream dynamics have changed so much that it isn't supporting the brook trout. In response to Dr. Roseen's question, **Mr. Magee** answered that it may be difficult to determine that X% impervious cover requires X width of buffer to mitigate the impacts of the impervious cover because land uses have such different impacts. **Mr. Cedarholm** added that he is wary of when a certain buffer width is specified. He stated that stormwater can find a way to channelize through a buffer and that municipalities rarely go out to see if the buffer is working or if there is channelized flow. **Dr. Roseen** responded that it's important to say that buffers can help where they work, but they aren't the only solution. **Ms. Manzelli** stated that the conversation is getting circular and is going back to the issue of engineering for the 100-year floodplain elevation or the old rainfall data.

**Mr. Paulsen** asked Mr. Magee if he has come across low flow impacts and studies looking at the impact of low flow on habitat such as reduced base flows in dry weather and the ability to support aquatic life. **Mr. Magee** responded that Dr. Tom Ballestero at UNH might have information on that. **Dr. Roseen** added that a good example is in the state of Vermont where they are using hydrology as a basis for Total Maximum Daily Load [TMDL] studies. Hydrology is being used as a surrogate contaminate instead of impervious cover. They establish a boundary of low flows and high flows. He asked if there is one contaminant that could be used as a surrogate and posed the question, what needs to be regulated to manage stormwater. **Mr. P. Currier** responded that the focus should be on nutrients and total suspended solids [TSS]. **Mr. Paulsen** added that salt is another important contaminant to look at and that the worst violations for salt were in low flow conditions because there was no dilution factor. **Dr. Kahl** gave two local examples of impervious cover thresholds in southern Maine and in literature review. He explained that some studies show 15% impervious cover is the threshold for impacts to water quality, but those higher percentages are in areas like Washington D.C. and New Jersey that are highly urbanized areas where it is very difficult to get into detail. It is more likely that there are impacts to water quality between 4% and 6%. This is from looking primarily at water quality and biota. There is an advantage to looking at impervious cover as a surrogate because it is visible and measurable. **Dr. Roseen** added that effective impervious cover has to be considered and defined. **Mr. P. Currier** stated that effective impervious cover is currently defined by techniques that, if implemented, are considered to “disconnect” a specific area of impervious cover from the drainage network. He added that impervious cover is something that people can understand. **Chairperson Sassan** asked if impervious cover can be assigned a value, he gave the example of a roof being 100% impervious. **Dr. Roseen** and **Mr. P. Currier** explained that it what curve numbers use. **Dr. Kahl** added that lawn may not be impervious cover, but that is isn't included in a buffer strip.

**Chairperson Sassan** told Mr. Magee that the Commission would take him up on his offer to present more information and requested that the Commission members submit their questions for Mr. Magee to Ms. McCarthy or Chairperson Sassan. **Ms. Manzelli** asked if Mr. Magee could look into greater ecosystem impacts because of habitat impacts, such as less diversity or more species with lower quality. **Dr. Kahl** asked about the smaller scale changes in macroinvertebrates and the impact on fish. **Mr. Magee** responded that there is a general link between a change in macroinvertebrate populations and a change in fish, but there is a possibility that the fish species are changing from the same environmental stressor that is changing the macroinvertebrate population and so a direct cause and effect relationship may not be possible to determine. **Ms. Ebel** stated that in journal articles, researchers had a difficult time knowing what the original state of the stream was. She asked if an urban stream gets a new buffer, will the stream come back and is that the goal. **Mr. Magee** responded that urban stream and rivers are pretty resilient and very site specific. **Mr. P. Currier** added that EPA has been encouraging states to create biological indices to rank rivers

and streams and define best condition or “undisturbed condition”. He stated that a point can be set for different land uses to be the best condition.

**Mr. E. Currier** asked if engineers are required to calculate and consider the impact of the change in land use. **Mr. P. Currier** responded that empirical coefficients were developed by USDA. **Mr. E. Currier** added that a study was done by DES in Great Bay on the runoff of nutrients into streams and that agriculture was far less of a source of nutrients than urban runoff.

**V. DISCUSSION OF FUTURE MEETING TOPICS AND DATES**

**Chairperson Sassan** informed the Commission that the next meeting is on February 2m 2009 at 1:00pm in room 305 of the Legislative Office Building. Representatives from the AG’s Office, the Local Government Center, and Eric Williams from DES will attend the meeting to discuss the issue of municipal authority to manage stormwater with the Commission.

Date	Time	Location
February 2, 2009	1:00pm	LOB 305*
March 2, 2009	1:00 PM	LOB 305*
April 6, 2009	1:00 PM	LOB 305*
May 4, 2009	1:00 PM	LOB 305*

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

**VI. ADJOURNMENT**

**Ms. Manzelli** made a motion to adjourn. **Mr. P. Currier** seconded. All approved.