

# *Approved - February 3, 2011*

## **DURHAM CONSERVATION COMMISSION**

**January 13, 2011**

**Durham Town Office – Council Chambers**

**7:00 PM**

**Members Present:** Jamie Houle, Robin Mower, Dwight Baldwin, Derek Sowers, Julian Smith

**Members Not Present:** Malin Clyde, Larry Harris

**Alternates Present:** Stephen Burns, Ann Welsh

**Also Present:** Richard Lundorn, Vi and Malcolm McNeil

### **1) Call the meeting to order and acknowledge absentees and those with voting authority. Approve agenda.**

Chair Houle called the January 13, 2011 meeting of the Durham Conservation Commission to order at 7:00 pm.

Stephen Burns and Ann Welsh will assume voting responsibilities in the absence of regular members.

*Chair Houle MOVED to approve the agenda as written, this was SECONDED by Derek Sowers and APPROVED unanimously.*

### **2) Presentations**

- a) Presentation on a Standard Dredge and Fill Application filed with NHDES for the construction of stone riprap to stabilize 120 feet of eroding shoreline at 44 Colony Road in Durham. – Don Rhodes Norway Plains Associates, Inc.

Rick Lundborn presented this project to the Commission for Norway Plains Associates, Inc. He said the project concerns a 2.5 acre lot which is experiencing erosion on the beach going into Little Bay. Mr. Lundborn said the situation seems to have been exacerbated in the last 5 years and feels it is time to repair it. He said the wave action needs to be dissipated by using large stones. Mr. Lundborn said they met with Dori Wiggin at the property and discussed the plan. He said she was in agreement that using large stone with fabric underlay was the proper method to stabilize the slope. Mr. Lundborn said no lawn is being added, no fill will be used and only stone on top of fabric will be added.

Peter Smith asked where the riprap will begin. Rick Lundborn said the riprap will begin at the stone and move up over the lip to protect the exposed earth.

Chair Houle said the Commission is asked to comment to DES about the appropriateness of the measure and any instances dealing with construction, such as erosion sedimentation control during construction if there is a disturbance. He asked if there is an erosion sediment control plan.

Rick Lundborn replied that they are proposing an erosion control log be used that runs the length of the stone armoring. He said the erosion control log is easier to conform to the rock, and therefore more effective.

Chair Houle asked if any measures such as skirts or floating curtains were considered. He also asked if construction equipment will be utilized. Mr. Lundborn replied that they did not feel skirts or floating curtains were necessary and said the construction equipment will work from the shore around the time of low tide.

Derek Sowers said he had questions regarding the permit. He noted that question 1 on the permit asks if any work will occur upstream within one mile of an impaired water way. Mr. Sowers said this question was answered “no” by the applicant; however, Little Bay is currently impaired for nitrogen so the answer to this question should be “yes”. He said the primary source of nitrogen is nutrient runoff from lawns. He noted this property has a large lawn adjacent to Little Bay and is now looking to put in more stone which has no nutrient removal benefits, but a vegetative buffer would add benefit. Mr. Sowers asked why an alternative analysis was not done and why more consideration isn’t being given to vegetation. The owner, Malcolm McNeil, said they had previously received a permit to complete this work in 2001 that expired in 2006 for an impact that had twice this impact. He said the work was not done at that time due to financial concerns. Mr. McNeil distributed a photo from 2003 showing the lawn as it was then and noted what has been eroded since then. He said the project is being proposed because they feel they have no choice because of the erosion that continues to occur. Mr. McNeil said over the last 2 to 3 years erosion is discernible after major storms.

Chair Houle said the Commission is not questioning the need for the project. He said they are discussing if stabilization can be attained through another means that meets other objectives. Mr. McNeil said they would like to stop the erosion and if there is an easier way to accomplish that it would be acceptable. Derek Sowers said lawn is very poor at resisting erosion but trees, roots, and stumps are often very good. Rick Lundborn said they did look at the use of vegetation as a means to control the erosion, but feel that sometimes mechanical means really are the suitable solution. He said the amount of energy to be dissipated is so high that planting vegetation would not do the job. Derek Sowers suggested a happy medium where there is some hard substrate put down but some vegetation put into the mix instead of just leaving as lawn which offers no benefit. Rick Lundborn asked the McNeil’s if they would be amendable to this suggestion. Mr. McNeil asked what kind of vegetation is being suggested. Mr. Sowers responded that native species, low shrubs would be appropriate.

Chair Houle said the Commission is being asked to comment on the measures being proposed, noting it is not the Commission’s decision and that DES grants the permit. He noted that the town of Durham has a Shoreland Protection Overlay and this project would fall under that as well. He asked the owners if they are pursuing a permit. Mr. McNeil said they wanted to begin with this meeting before venturing further into the town process.

Derek Sowers said the Durham Shoreland Protection Overlay regulations encourage a 25 ft natural vegetated buffer where an existing lawn is and, if the property is undeveloped, a 150 ft buffer is required. He noted that lawn directly down to the bay is not a healthy situation and would like to use this project as an opportunity to establish a vegetated buffer and comply with the Shoreland Protection Overlay regulation.

Chair Houle said that stabilization of the shoreland within the Overlay by vegetation does not require a permit. He noted that these comments are getting ahead a little bit, but said that these would be some of the comments that the Commission would give to the Planning Board if that situation were to arise. Chair Houle said the construction sequencing seems logical, erosion sediment control issues are suitable, but

riprap does not dissipate energy, it deflects energy. Mr. Lundborn said that if they felt a more vegetated natural method would work they would not be proposing the riprap.

Derek Sowers noted that the area being protected is lawn and said there is a more environmentally friendly way to do this. He said the erosion that is occurring, from the standpoint of the bay, is not an unnatural process. He said what the commission is attempting to do is provide a buffer between the estuary and the lawn.

Mr. Lundborn said the riprap has the advantage of not allowing soil to wash into the bay. He asked if the commission is specifically asking for a 25 foot vegetated buffer be added to the plan. Derek Sowers responded that it is required in the Town ordinance. He said he is bringing this up in the context of the Town's shoreland protection overlay regulations. Mr. Lundborn said the lawn is an existing structure. Chair Houle said the Town's ordinance states that a 25 ft buffer is required for existing lawn. Robin Mower read a portion of the regulation: "... existing lawns may be allowed to remain, provided that a 25 ft wide strip adjacent to the shore, is not mowed and is allowed to be revegetated..."

Mr. McNeil said the lawn has existed since 1983. He said he will need to do research with regard to the Planning Board and what will be required. He noted that Dori Wiggin came to the site and heard the proposal and he is confident that DES will approve the permitting for this project without the 25 ft buffer. Mr. McNeil said they will need to discuss this and determine if they are willing to allow the 25 ft buffer.

Chair Houle said he agrees that DES will not require the buffer. He said it is required through the Town's ordinance. Chair Houle said these comments have been provided to let the owners know what the Commission's comments would be if the project were to come to the Commission for comment as requested by the Planning Board.

Chair Houle noted that riprap is only anchoring through weight and more erosion will occur over time. He said vegetation is a longer term, different approach. He summarized that the Commission has enough information to offer guidance to the DES permit application. Chair Houle said those comments would be to look for an alternative plan that utilizes vegetated stabilization. Mr. McNeil commented that the Commission is asking them to give up 25 feet of lawn along the shoreline. Chair Houle noted it is what is required in the Town ordinance.

Derek Sowers asked that the Commission's comments to DES note that this is an impaired waterway and that this plan is not the least impacting alternative.

Peter Smith said from the perspective of a river property owner, he has had experience with this problem. He said his concern is the limited utility of the method being proposed. He said his experience that rocks on the shore, will not solve the problem.

Mr. McNeil asked what type of vegetation is being proposed. He noted a reluctance on their part to give up any lawn, saying this affects the value of the property. Derek Sowers said there is a recommended list of natural species that would do well and allow you to maintain a view of the estuary while providing some buffering between landscaped lawn and the estuary. Mr. Lundborn suggested that the owners might not mow the 25 ft as the ordinance provides as a possible solution. Chair Houle said the main objective is to get root structure to provide long term stabilization. Derek Sowers said erosion is a natural shoreline occurrence and provides a benefit to the bay. Robin Mower said she understands the concern about losing the view, but noted there are low shrubs that would help with stabilization, while allowing a view. She suggested contacting UNH Cooperative Extension for ideas and options. Robin Mower also suggested consulting the book "Landscaping at the Water's Edge". Mrs. McNeil said they are discussing only 150 ft of frontage on the bay, the rest they are not looking to change and that area is natural. She said this is

the small area with lawn that has always been that way. Chair Houle said the Commission would rather see a more vegetative approach. He said it is the collective wisdom of the Commission that it would be functional from an ecological viewpoint and would be more long term.

Derek Sowers said the other question is about the erosion practice of the logs. He asked how this would control silt from washing down into the bay. Rick Lundborn responded that the flexible logs will be in the area where the riprap will be to try to control siltation. Dwight Baldwin asked what would keep the water (possibly with siltation) from going under the log and stone. Mr. Lundborn responded that the siltation would have a harder time with the erosion log in place than if they were not in place.

Dwight Baldwin said storms are getting more severe and if riprap, is brought up to the berm, there is nothing left to keep it from being an ongoing problem. He said it would be in the best interest of the owners to have rooted shrubs to provide protection. Mr. Baldwin suggested speaking to experts on the subject not involved in the project.

Derek Sowers said one local expert is David Burdick at UNH, a wetlands scientist that has done work on shoreland stabilization. Dwight Baldwin said it may be worth having him visit the property and be able to say you considered other options and discussed it with an expert.

Mr. McNeil said they are attempting to go through the appropriate channels and if there is another method that does not have an adverse affect on the property's value they would consider it. He noted that he believes DES will approve the project as presented and that the legal issue becomes the extent of the Commission's jurisdiction. He said once DES makes a decision, he will need to review the interplay between the Town ordinance and DES' approval.

Chair Houle said his intention was to speak to both issues – which don't always agree. He said the letter of the law is that the more conservative/strict approach carries. He said the Town of Durham's ordinances are designed to be as stringent or more than the State's ordinances.

Chair Houle said the statements made this evening reflect how these members read the Town ordinance and what we would recommend. He said the Commission is purely advisory to DES, wetlands bureau and the Planning Board. Chair Houle said the comments made tonight will be the same comments provided to DES and to the Planning Board.

Peter Smith said he would urge the owners to speak to someone who has the science background and is not involved in the project. He said they may find that their money will be better spent on vegetation than on rocks.

### **3) Acceptance of minutes**

- a) December 9, 2010

Corrections and changes were made by Chair Houle, Julian Smith and Robin Mower.

*Dwight Baldwin MOVED to accept the amended minutes. This was SECONDED by Julian Smith and APPROVED unanimously.*

### **4) New and Old Business**

- a) Update on the use of the Conservation Fund to hire a hydrogeologist to review and suggest amendments to the town's Aquifer Protection Overlay District (APOD).

Chair Houle said the hydrologist to review the amendments has been hired. He reported that Emery and Garrett have agreed to provide these services. Chair Houle said an official scope of work has not been agreed upon yet, but he is confident one will be available for the next meeting and at that point will be able to provide more information on the actual schedule.

- b) Update on the use of the Conservation Fund to hire Professional Planning Assistance to review and suggest amendments to the Calculation of Usable Area, section 175-55 (E), of the Zoning Ordinance.

Chair Houle said he had spoken with Dan Camara of the Strafford Regional Planning Commission. He said Mr. Camara indicated that Strafford Regional Planning Commission could review the “Calculation of Usable Area” section of 175-55(E) by looking at surrounding town’s with similar ordinances, speak with the Conservation Commission and Planning Board on the efficacy of an approach like Durham’s and to explore other potentially more effective approaches. Chair Houle said he feels this is a useful exercise and it is a good approach to tap into expertise at the Strafford Regional Planning Commission. He said Mr. Camara said the Town’s interests will be conveyed to the head of the Commission, Cynthia Copeland who will be in touch with the commission.

Derek Sowers asked if this work will be done as part of the cost of the Town’s dues in the Strafford Regional Planning Commission. Chair Houle said that Mr. Camara felt it would fall under the cost of dues. Chair Houle said if the Strafford Regional Planning Commission cannot provide the needed expertise, the Commission has provided the funds to solicit expertise from other sources.

- c) Master Plan update: Final discussion of survey questions and update of the NRI maps for inclusion in the Town’s Master Plan.

Chair Houle said Dan Camara is the GIS expert at Strafford Regional Planning Commission and indicated that it would be an uncomplicated task to update the maps. Mr. Camara said he would need input from the Commission as to what layers and themes the maps are to be populated with. Chair Houle distributed copies of the themes to the members.

The members concluded that they would like to see all 10 themes listed. Derek Sowers asked if anything is missing from the themes listed. Robin Mower suggested adding a shoreland conservation buffer zones map to the list. Derek Sowers suggested adding the DES source water protection map for public water supplies (Oyster River Reservoir).

Chair Houle said he would request all maps and ask for the addition of the shoreland conservation buffer map and the DES source water protection map for public water supplies for a total of 12 maps. Derek Sowers said PDF copies of the maps would be needed to post on the website.

Robin Mower said a volunteer is needed to write the narrative for the website needed to post the maps.

Robin Mower said that January 21<sup>st</sup> is the deadline for the MPAC survey subcommittee to receive input from boards and committees regarding topics and/or questions to be included in the survey. She asked the members to keep in mind that the survey will be short and that zoning and taxes are high on the list of concerns for residents.

Derek Sowers asked if the Planning Board had finalized their questions. Robin Mower said the Planning Board has provided two suggestions, which are in the process of being refined. She said they deal with the perception of residents as to the efficacy of the current zoning ordinance to getting them what they want to see in Durham and the procedures of the Planning Board. She said there was some question as to whether those questions would be meaningful without knowing how familiar the respondent is with the zoning and planning board. Ms. Mower said another question is about the town's relationship with UNH, the downtown and the B. Dennis report.

There was lengthy discussion as to what areas the questions from the Conservation Commission should refer to. After much discussion, the following four fundamental questions were agreed upon for further refining by a subcommittee to consist of Robin Mower and Derek Sowers to be forwarded to the Master Plan Advisory Committee.

- 1) Durham's natural setting and recreational opportunities are factors in whether I continue to live in Durham.
- 2) It is appropriate that Durham will concentrate commercial and residential development near the center of town, while preserving outlying natural areas (maybe to also state, including gateways).
- 3) Protecting water quality for swimming and drinking water, and supporting aquatic life is important to me.
- 4) Durham, as a coastal town adjacent to Great Bay Estuary, has a special responsibility to protect its water quality and natural functions.

Chair Houle said he met with the Town Planner to discuss the jurisdictional responsibilities of the Conservation Commission. He said these were written into an outline, with the help of Derek Sowers, who researched the Commission's DES responsibilities. Chair Houle said these have formed the first draft of the Durham Conservation Commission guidelines. He distributed a copy of them to the members and said he would forward an electronic version to each member. Chair Houle also distributed relevant portions of the Town Zoning that pertain to and outline the responsibilities of the Commission.

## **5) Ongoing Business**

### **a) Wetlands Applications**

Chair Houle said a letter would be written to DES with the Commission's recommendations regarding the McNeil Application. He said he would also write the Town Planner with the Commission's guidance regarding the need for a permit.

Derek Sowers will write comments to DES on behalf of the Conservation Commission.

Derek Sowers reported that the Commission has been notified that the wetland permit for the Town of Durham to dredge and fill at Reservoir Pettee Brook under the Amtrak railway has been approved.

He reported that the amended permit to the Town of Durham at Jackson Landing to replace the existing boat ramp in the same footprint has been approved.

Mr. Sowers reported that the permit to the Town of Durham for turning lanes at Route 4/Morgan Way was approved.

He said the Commission was informed of a "complete forestry notification" to commence a forestry project by Edward McNitt at 101 Durham Point Road.

Chair Houle said he learned that the Commission has 14 days to intervene (request more time to evaluate a proposal) after an application is signed by the Town Clerk. He stated this in reference to the Capstone Dredge and Fill application from last month. Chair Houle said the DES permit is less comprehensive, but can be used as a means to comment to Dori Wiggin and express concerns. Chair Houle said he would forward the Commission's comments from December to Dori Wiggin regarding the filing.

Derek Sowers said he will attempt to monitor the Commission's "In Box". He said a process is needed to deal with an item that may be of concern to discuss it and see if the commission wants to intervene.

b) Land Protection Activities

No discussion at this meeting.

c) Town Owned Land/Conservation Easements

No discussion at this meeting.

d) Discussion of questions for the Town's Master Plan  
Advisory Committee Survey

This item was discussed earlier in the meeting.

**6) Board and Committee Reports**

a) Town Council

Robin Mower reported that the council received a presentation from George Rief and Dave Cedarholm regarding the Southeast Watershed Alliance (SWA) on December 20<sup>th</sup>. She noted they forwarded a letter that the Town of Durham has signed that is a regional statement of concern about the approach that DES and EPA is taking relative to nutrient loading in the estuary.

Derek Sowers asked if the Town Council endorsed the positions taken in the letter. Robin Mower said the Town Council does endorse the letter in that it heard Dave Cedarholm's concerns about the 3 milliliters limit being scientifically sound and reasonable. Derek Sowers said the science has been misrepresented. He said waste water treatment plant upgrades are expensive, but if costs are the concern the council should not dismiss the science, but should discuss how to raise money to solve the problem.

Chair Houle said he spoke with the Town Administrator, who said there was a group of towns concerned with/ and challenging the science. He said he told the Town Administrator there is more to be gained from a cooperative approach addressing the issue and nothing to be gained by confronting the science that has been done and accepted. Chair Houle said the Towns would do better to put their collective support to finding other approaches that get to the same thresholds with a variety of solutions.

Derek Sowers said it would be helpful for the Town to have a discussion with the people doing the science at DES and ask questions directly of them.

Robin Mower asked if he is suggesting that the council has heard from the Town Engineer and SWA representative and feels it is important that they hear another opinion. Derek Sowers said he feels it is important to gain more information. Chair Houle said the challenge arises that this is the interpretation of the Town Engineer whose perspective is taken without question and his opinion is not the collective opinion of many.

Derek Sowers said it is worth understanding that what you read in the paper is not always representative of what is going on and may have a great impact on the Great Bay's health. Derek Sowers said SWA was not a party to the memo, but that the memo was written and signed by a subset of towns that have waste water management plants.

Chair Houle said it is a misperception that this type of challenge will benefit the Town. Dwight Baldwin asked what the recommendation to the council is. Derek Sowers said the Council should get a balanced picture about the science of nutrient balance in the Great Bay. He suggested the Town Administrator meet with DES.

Julian Smith said the Council was not given the science but an opinion about what the expense would be if DES prevailed at setting the bar at a certain point. Derek Sowers said DES does not set the permit limit, the EPA does. Chair Houle said it behooves the council to look at all the options.

Derek Sowers said SWA, as a body, is not challenging DES' nutrients criteria.

Robin Mowers reported that Neil Neiman has suggested wording regarding conservation subdivision regulations for ORLI and MUDOR. (...and those consisting of detached, single family dwellings and duplex dwelling on individual lots located in the Office, Research, Light Industry District and Multiunit Dwelling Office Research District...). The council came to a consensus to send the wording to the Planning Board to address the concerns of those who wish to see Conservation Subdivision regulations take effect in ORLI now that single family residences are a conditionally permitted use in ORLI.

Julian Smith questioned why there is objection by the Planning Board to applying conservation subdivision regulations to ORLI and MUDOR. Derek Sowers asked if the Town Council has the authority to institute this change. Julian Smith said the Council does have the authority, but they are trying to work with the Planning Board as a courtesy. He noted there was a great deal of discussion about the Planning Board not recommending this action.

#### b) Planning Board

Julian Smith said the Kimball revised application was approved with 8 parking spaces. He noted the Conservation Commission recommended 7 parking spaces. He said there was a motion to provide 10 parking spaces that failed, a second motion to provide 7 spaces that failed and a third motion to provide 8 parking spaces that passed. Robin Mower noted that requiring a meeting with the Town Engineer to discuss the issue of a swale was also approved.

Julian Smith reported that the Planning Board accepted the Capstone application for site plan review and conditional use permit. He said a site walk is scheduled for 1 pm on January 22<sup>nd</sup> (Saturday). The members will meet on Technology Drive north of the cemetery. Robin Mower reported that revisions have been made to the site plan to pull in from the wetlands.

Julian Smith said a public hearing is scheduled for January 26<sup>th</sup>. He said the ZBA met on Tuesday night but asked for the public hearing to be continued until the meeting on the 25<sup>th</sup>.

#### c) Water Resource Protection Subcommittee

No further discussion at this time.

#### d) Zoning Board of Adjustments



Ann Welsh reported that the replacement of a failing septic system was approved.

e) Lamprey River Advisory Committee

Stephen Burns reported that LRAC invited Paul Currier from DES to discuss the 401 water quality certificate. He indicated Mr. Currier felt the committee should be concerned with the new water management program that is currently in development.

Chair Houle said the 401 water quality permit is in the process of being phased out as the terms and conditions regarding mainstream flow rules are agreed upon.

Robin Mower said the council has agreed not to continue discussion of the 401 certificate since it will be phased out. Stephen Burns noted this was the view that Mr. Currier was saying to LRAC.

**7) Other Business**

Derek Sowers said the hearing on the nomination of the Oyster River was held and most who spoke, testified in favor of the nomination. He said Dave Cedarholm spoke and stated a position of support and concern. Mr. Sowers said Mr. Cedarholm reiterated the Town's letter of support – which stated support for the nomination in theory, but a concern that the same water rights will be preserved for Durham as in the past.

Peter Smith said he had previously spoken with the Town Administrator regarding regulations about alternates and their role on town boards/committees/commissions. He noted he recently spoke with another attorney and they concluded that new statutory provisions allowing alternates to participate fully in meetings, does not apply to Conservation Commissions. He explained that the definition of land use boards is used in the statute and conservation commissions are not included as land use boards.

**8) Administrative**

a) Correspondence

Chair Houle reported that dues are due for NH Conservation Commission

b) Next regular meeting February 10, 2011

**9) Adjournment**

*Stephen Burns MOVED to adjourn the January 13, 2011 meeting of the Durham Conservation Commission at 10:30 PM. This was SECONDED by Ann Welsh and APPROVED unanimously.*

**The January 13, 2011 meeting of the Durham Conservation Commission adjourned at 10:18 PM.**

**Respectfully submitted by,**

**Susan Lucius, secretary to the Durham Conservation Commission**