

Town of Newington, NH

CONSERVATION COMMISSION

Meeting Minutes July 14, 2011

Call to Order: Co-Chairs, Justin Richardson and Jane Hislop called the July 14, 2011 meeting to order at 6:40 PM.

Present: Justin Richardson, Co-Chair Person; Jane Hislop, Co-Chair; Margaret Lamson; Nancy Cauvet; Nell Ann Hiatt; Dorene Stern; and Thomas Morgan, Town Planner

Absent: George Fletcher

Public Guests: Michelle Daley, with UNH's NH Water Resources Research Center; UNH Professor, Fred Short; Planning Board Chair, Denis Hebert; Cliff Abbott; Rick Stern; Designer, Penny Wright with Wright Choice, Inc.

1) **Nitrogen in the Estuaries of Great Bay** Presentation by Michelle Daley

UNH Researcher, Michelle Daley presented data obtained over the past year from the NH Water Resources Research Center under UNH's Department of Natural Resources Director, Bill McDowell, focusing on the watershed surrounding Great Bay. Ms. Daley defined a watershed as a land area that sheds water to a common outlet, such as Great Bay.

Daley said the nitrogen impairment that has been found in Great Bay is a violation of the Environmental Protection's Clean Water Act, and as a result the 2009 NH State Legislative Session created Southeast Watershed Alliance under RSA:485-E which is a collaborative group of 28 of the 42 eligible towns who have joined together to review the issues and consider solutions.

Daley's presentation went over the various organic, inorganic and particulate components and methods of determining sources of the nitrogen pollution, noting that although 27% comes from wastewater treatment plant point sources, and 73% comes from combined non-point sources such as atmospheric deposition, chemical and organic fertilizers, leaching septic systems and leaky sewer lines, the easiest, most immediate and least expensive solution per dollar per pound of treatment would be to improve wastewater treatment plants. However, both Daley and Professor Fred Short said it shouldn't be an either/or solution as the non-point source pollutants are also large contributors to the problem.

Discussion ensued regarding various problems and solutions from leaching septic systems to storm water runoff from roofs and the large impervious parking lots in the area, noting that one of the largest areas of runoff is from the Pease runway near the bay which has no treatment.

Commission Co-Chair, Justin Richardson asked Ms. Daley if she would provide a copy of the presentation to Town Planner, Tom Morgan to put on the Town website. Additional information on the health of Great Bay can be obtained at www.greatbay.org

Town of Newington, NH

CONSERVATION COMMISSION

Meeting Minutes July 14, 2011

2) Preliminary Discussions:

Dredging in the Piscataqua River and Possible Eelgrass Mitigation

Commission Co-Chair, Justin Richardson invited UNH Professor Fred Short to discuss the possibility of writing recommendations for eelgrass mitigation to the Portsmouth Development Harbor Authority who are making plans to dredge the Piscataqua River near Gosling Road to Bloody Point, including a turning point near the Sprague facility, considering the changes in turbidity that will effect the eelgrass.

Co-Chair Richardson said they would also like to know more about the disappearing eelgrass in Great Bay. Dr. Short said eelgrass had been transplanted into new beds along the Shaftmaster facility in the Piscataqua and along Broad Cove in 1993 and 1994. Although the 3 acres of plantings along were successful, the transplants in Broad Cove were not due to the biological obstacles of clamworms. Dr. Short said that eelgrass used to occur on all Newington shores, but the transplants and existing beds started decreasing in 2001 and disappeared from the Upper Piscataqua River and Little Bay and Upper Little Bay by 2005. Although they have since developed solutions to address the clamworm issues, they also know that seaweed is able to take up excess nitrogens better than eelgrass, but the seaweed rots, settles and becomes anoxic & chokes out and kills the eelgrass. They have also been observing more seed production from the stressed eelgrass, but Short is hoping that this coping mechanism will help re-establish the beds, noting that eelgrass is making a comeback in Welsh Cove. Commissioner Peggy Lamson said she was talking to Lobstermen who said they are also seeing more lobsters in the Cove as well.

Commissioner Nancy Cauvet asked if oyster beds help take up the nitrogen, and Dr. Short said that oysters may help some, but mostly filter phytoplankton.

Co-Chair Richardson asked if there is a link between increased turbidity from dredging and the effects on eelgrass. Short said there would definitely be an impact on the eelgrass in the area by removing habitat along the Piscataqua permanently, and therefore there would be a good case for re-establishing beds by transplanting and seeding new beds in Broad Cove near Great Bay Marina as the most prime area.

Richardson asked Dr. Short to put together a work plan proposal, budget and time frame for mitigation to present to the Department of Environmental Services before the Port Authority comes to the next meeting on August 11. Town Planner, Tom Morgan noted that there were no plans to do any dredging this year.

3) **NH DES Expedited Minimum Impact Application** for 110 Patterson Lane, Tax Map14, Lot 11

Designer Penny Wright with Wright Choice came before the Commission with plans for a paved driveway, garage and septic for property owner, Jane Byrd who was not able to attend the meeting. Because of the dense clay soils on the property, they are proposing to install an aeration pretreatment septic tank with an oversized leach field for a four bedroom, though there are only two bedrooms which will also prevent overloading the system when the owner returns from week long travel. They also proposed a garage for protected vehicle storage while away, and a paved driveway for ease and safety of fuel delivery and emergency vehicles if needed.

Town of Newington, NH

CONSERVATION COMMISSION

Meeting Minutes July 14, 2011

Co-Chair, Jane Hislop motioned to sign the Expedited Minimum Impact Application for the aerobic septic system installation at 110 Patterson Lane, Tax Map 14, Lot 11 as presented. Commissioner Dorene Stern seconded, and all were in favor.

4) **Great Bay Municipal Bioretention Program** Proposal

Information on the Great Bay Municipal Bioretention Program, and 2011 NHDES Watershed Assistance Grants was included in the packet

Without further discussion Co-Chair Jane Hislop recommended endorsement of the Bioretention project. Nancy Cauvet seconded and all were in favor.

5) **Landscaping at Newington Public Elementary School**

Co-Chair Richardson said he had received an email from Robbie Woodburn offering to replace the dead Red Maple near Newington Public School entrance. Commissioners agreed with Richardson that it would be best not to plant any more trees, which would entail additional care to establish.

Richardson said he expected LJH Landscaping to install water gators around the trees for watering soon.

Invoices:

Co-Chair Jane Hislop motioned to pay LJH Landscaping \$2,265.50 in landscape maintenance fees out of the Conservation Commission budget. Nancy Cauvet seconded and all were in favor.

Peggy Lamson moved to pay West Environmental \$804 for work on the Town Forest plan. Nancy Cauvet seconded and all were in favor.

Peggy Lamson moved to pay Attorneys Breton and Berube \$517.50 for legal services regarding the establishment of a conservation easement of the DOT Mitigation on David Hislop's property sale. Nancy Cauvet seconded and all were in favor.

Nancy Cauvet moved to amend the first motion to pay Attorneys Breton and Berube \$517.50 for legal services regarding the establishment of a conservation easement of the DOT Mitigation on David Hislop's property sale from Conservation Funds. Abutters Justin Richardson and Jane Hislop recused themselves. Peggy Lamson seconded and all were in favor.

Minutes: Co-Chair Justin Richardson moved to approve the Minutes of June 9, 2011. Nancy Cauvet seconded and all were in favor

Adjournment: Peggy Lamson motioned to adjourn, Nancy Cauvet seconded, and all were in favor. The meeting adjourned at 9:30 p.m.

Next Meeting: Thursday, July 28, 2011

Respectfully

Submitted by: Jane K. Kendall, Recording Secretary