

GROTON CONSERVATION COMMISSION

Minutes

January 8, 2013

Chairman Craig Auman called the meeting to order at 7:00 p.m. in the 2nd floor conference room in Town Hall. Members Bruce Easom, Marshall Giguere, Peter Morrison, John Smigelski, and Rena Swezey were present. Nadia Madden arrived at 7:06 p.m. Conservation Administrator Barbara Ganem was present.

Stormwater Presentation

C. Auman introduced Savas Danos, General Manager of the Littleton Electric Light and Water Department. Mr. Danos, a resident of Groton, has recently been appointed to the Groton Great Ponds Advisory Committee. He has a Master's degree in limnology from the University of Wisconsin. Art Prest explained that Mr. Danos presented a program on the use of the herbicide Sonar to treat weeds in Spectacle Pond which is located adjacent to a public water supply well in Littleton. At that time, he also mentioned Littleton's work on stormwater management around Long Pond. S. Danos has been with the Littleton water management program for drinking supplies for 32 years. The Water Department controls all the hills in Littleton, and cell towers are located on the hills. Rental fees received for these cell towers provided some of the funding for the stormwater management techniques. The stormwater retrofit utilized low-impact development methods and received funding through the state 319 program, the cell tower rental fees, and other state Department of Conservation & Recreation monies for demonstration projects.

(N. Madden arrived at 7:06 p.m.)

Mr. Danos said Long Lake is a seepage lake, and flow from 18 direct stormwater discharges into Long Pond has actually created vegetated deltas extending out into the pond. The stormwater discharge is loaded with nutrients that trigger additional plant growth. Using dye tests, the study determined that stormwater frequently bypasses catch basins due to improperly contoured roads. The dye showed stormwater flow clearly reached the pond. The first step in the analysis is to disconnect the stormwater flows using mechanical means such as intercepting flow with infiltration or other treatment mechanisms. No dam controls the water level. The parking lot at the Town's recreational beach and a public boat launch were among the first items addressed. An underdrain was placed at the end of the parking lot and planted with vegetation. Filterra bioretention cells were used for tree plantings. The vegetated stormwater infiltration swale is designed to cascade the flow, capturing the first ½" of rainfall before it discharges to the lake. Higher volume storms means the flow will not be absorbed by the swale. Porous pavers and gravel were used in the boat launch area, both providing permeable surfacing. This was done in 2005, and there has not yet been any follow-up maintenance work necessary. The parking area is not plowed in the winter because obviously it's not used.

The aerobic area below the pavers is quite successful at breaking down hydrocarbons as well as attenuating nutrients. In designing rain gardens, Mr. Danos said the key is to build them down,

not up. This aspect of stormwater management required a very close private – public partnership. In the case of elevated septic systems the Board of Health often requires rain gardens at the base of mounded septic systems. Rain garden plantings must be salt tolerant because roadway runoff frequently contains salt. The purpose is to intercept the first flush of runoff as this is apt to be the nastiest. The remaining flow will have less impact on the lake as the overflow water is cleaner. Mr. Danos noted there are a number of brochures which address the construction and planting of rain gardens and how to improve phosphorous and sediment levels.

The state now advocates low-impact development with the use of smaller structures distributed throughout an area. Using these techniques can provide more attenuation than detention structures do. Mr. Danos said that their consultant, Camp, Dresser & McGee, prepared a best management practices manual in 2007. The manual provides guidance to both the Town and residents on how to best manage stormwater. The 319 grants are the major source of funding at this time. S. Danos estimated they spent about \$450,000 over a 2 – 3 year period. Costs for stormwater structures may actually have decreased since they are now in more common use. The soils in the Lost Lake/Knops Pond area are sandier than the glacial till surrounding Long Pond so it is unlikely a lot of replacement soils will be necessary. On the other hand, M. Giguere noted Lost Lake/Knops Pond has a challenging terrain, and road runoff is one of the chief problems. Intercepting runoff from roofs through the use of rain gardens is a technique that would help keep dust and pollen from running into the lake. Another method is to construct a forebay or gabion to intercept flashy flows.

S. Danos stressed that it is important to work with homeowners to make this work. Individual homeowners will have to clean out the rain gardens which need regular maintenance, such as the removal of leaves and replacement of plants. If there are people sharing plants and doing it themselves, it is apt to be far more successful. M. Giguere said that working with lake associations to form a private-public partnership is critical. The concrete ramp at the boat launch was placed by the state, but the area is maintained by the Town. Mr. Danos said he would like to see the lifeguards actively reminding users of the need to wash their boats. DCR does own land around the pond, but they do not manage the beach or boat wash. Mr. Danos estimated there were 18 – 20 private rain gardens that have been installed as a result of this project.

Art Prest said there is a bill on the Governor's desk which will prohibit the transfer of weeds from lake to lake. He noted there are opportunities for the Town to improve eroding sites around Lost Lake/Knops Pond with riprap on steep sections. This is particularly obvious on the sides of the bridge on Island Road. The cost for the pavers at the Littleton boat launch ran between \$80,000 and \$90,000. The installation of leaching catch basins can help reduce the flashiness of water flows.

Erich Garger (46 Redskin Trail) asked how caring for septic systems affects water quality. Mr. Danos responded that using no-phosphate detergents is helpful, as is minimizing the use of phosphate-based fertilizers. The planting of drought tolerant grasses also improves conditions. Basically maintaining the septic tanks by pumping every two years and minimizing nutrient inputs are the way to improve water quality.

Marion Stoddart (59 Long Hill Rd.) asked if the lake is suitable for recreation, and Mr. Danos replied there is a very active community around the lakes in Littleton. A weir on Spectacle Pond allows for lake elevations to be reduced, and residents can clean up beach areas. Mr. Garger pointed out that Groton owns a parcel on Redskin Trail that may be appropriate for stormwater management. The local match required in 319 grant can be residents creating rain gardens or labor provided by the Town. It is important to look for ways in which to make the best management practices sustainable. Mr. Danos said Littleton was limited in the sizing of some of its techniques due to the acreage with which they were working.

Alex Woodle reported that during his meeting with the Earth Removal Storm Water Advisory Committee it was suggested that a meeting be set up with Comprehensive Environmental, Inc. (CEI), the consultants who worked on the James Brook 319 project. This will help prioritize an inventory of what needs to be done. There is also an educational component, and consideration should be given to agricultural impacts from Gibbet Hill and other contributors such as Lawrence Academy. He commented that the watershed contributing to Lost Lake/Knops Pond is predominantly northwest of the lake.

Upon a motion by B. Easom, seconded by M. Giguere, it was

VOTED: to approve the minutes of December 11, 2012 as drafted.

The vote was unanimous.

Commissioners discussed signage for newly acquired conservation areas, and upon a motion by B. Easom, seconded by P. Morrison, it was

VOTED: to purchase and install a sign identifying the “Baddacook Pond Conservation Area” on the east shore of Baddacook Pond.

The vote was unanimous.

Members suggested placing the sign at the trail easement on Old Dunstable Rd. or at the corner of Old Dunstable Rd. and Rt. 40.

Upon a motion by B. Easom, seconded by M. Giguere, it was

VOTED: to purchase and install a sign identifying the “Fuccillo Conservation Area” on Lowell Rd.

The vote was unanimous.

8:15 p.m. – Town of Groton - Fitch’s Bridge/Nashua River Notice of Intent DEP#169-1092 continuation

Ann Marton of LEC Environmental explained she was standing in for Rich Kirby who had another hearing to attend. Ms. Marton said that the contractor will not be left to his own devices but will be overseen either by Fay, Spofford & Thorndike, another resident engineer, or the

town. A construction sequence is included in the filing, but it is recommended a pre-construction meeting be held to define how and when work will occur on site. It is likely the work will take place later in the summer. The contract is out to bid, and some of the contractors are interested in seeing the Order of Conditions before bidding. The plan has been revised to include signage and bollards.

Regarding ADA-compliant accessible parking, Ms. Marton said the funding is not in place to provide this currently. She appreciated the opportunity to construct parking in the future but would not like to see it as a requirement of the Order of Conditions as it is not in the bid specifications. A. Marton explained steel plates could be placed at the wetland crossing to support the weight of the crane, and this should be addressed in the construction sequence. The bids will be opened shortly so that Town Meeting will know the funding request. Members explained there is a draft Order, and Ms. Marton asked if she could review it. Upon a motion by N. Madden, seconded by J. Smigelski, it was

VOTED: to close the hearing for DEP#169-1092.

The vote was unanimous.

The management of invasive plants on conservation land is of great concern to the Commission. B. Ganem commented Bay State Forestry Services recommends herbicide treatments in the fall, particularly after there has been a forestry project. For instance, Farmers & Mechanics should be looked at in the fall of 2013. It is not likely Williams Barn Sorhaug Woods will be logged until winter 2013 – 2014 so invasive management should not occur until after a year's growth.

8:30 p.m. – Appointment – Andrew Davis & Danny Horrigan/Sargisson Beach

The Commission had an opportunity to look at Sargisson Beach about 2/3's of the way through Danny Horrigan's Eagle Scout project for which he gave a PowerPoint presentation. The culvert near the ramp to the beach was cleared out and a gravel filled channel, underlain with filter fabric, was installed. This channel will help prevent future build up of sediments and leaves in the culvert. The culvert outlets to a small settling basin lined with gravel. A number of water bars were installed throughout the trail network. D. Horrigan was successful in getting volunteers to help with the project; he estimated there were over 180 man hours. He has receipts for \$55.55 for materials. B. Ganem mentioned there is another bill for \$129 for gravel in tonight's bills.

Chairman Auman asked if this is an interim report, and D. Horrigan explained the project is complete, and he has to get his paperwork signed and move on to the next step. Andrew Davis said that Danny had exceeded the scope of his original project. M. Giguere agreed that the installation of water bars will improve conditions, and the addition of mulch along the driveway will also help absorb runoff. Members thanked D. Horrigan for all his work. A. Davis said it is important that we maintain the work that has been done and mentioned he continues to work on a management plan for the site. He anticipates this will generate perhaps 5 other scouting projects. Upon a motion by M. Giguere, seconded by P. Morrison, it was

VOTED: to authorize B. Ganem to send a letter thanking Mr. Horrigan for his work on the Sargisson Beach erosion control project.

The vote was unanimous.

Mr. Davis, steward for the Sargisson Beach Conservation Area, reported he had locked the gate to the parking area for Sargisson Beach after the first snow fall. The silt fencing was re-installed at the base of the ramp to the beach. A. Davis has observed ATV tracks on the trails, and this causes erosion. He has posted new signage on the trails. This past Saturday he noticed that snowmobiles had mowed the silt fencing down. He requested the Commission notify abutters about the rules and regulations for the property which prohibit the use of motorized vehicles, with a copy to the Police Department. He noted that all of the work done by Mr. Horrigan could be destroyed by the use of motorized vehicles on the trails. Upon a motion by B. Easom, seconded by N. Madden, it was

VOTED: to send a letter to the abutters of the Sargisson Beach Conservation Area, including the Priest Memorial Area, noting that motorized vehicles, such as ATVs and snowmobiles, are prohibited on conservation land. A copy will also be sent to the Police Department.

The motion passed, with P. Morrison voting in the negative.

Future projects include the updating of the stewardship plan, moving rocks back into the retaining wall at the shore line, and getting bids for the restoration of the wall. Techniques to stabilize the site will be the focus. It may be that we seek CPC funding to cover the cost of materials although some might be donated. P. Morrison has large rocks available. The Troop 1 scoutmaster plans to write up more projects in the next couple of weeks. C. Auman declared volunteers are wonderful, and thanked Mr. Davis for all his work.

In discussion on the draft Order for the demolition and restoration of Fitch's Bridge, P. Morrison, seconded by B. Easom, made a motion to accept the first 18 general conditions. N. Madden expressed concern about allowing A. Marton to comment on the draft Order as the hearing has been closed, and it is not a time to offer any new input. Members thought that clarifications would be acceptable, and they could decide if a suggestion is appropriate or not. Ms. Marton pointed out that no work is proposed in wetlands, but work is proposed within Bordering Land Subject to Flooding and the Riverfront Area, both wetland resource areas. Another area of concern is whether there will be any stockpiling of excavated materials, and it was agreed these materials should be removed from the site. With these modifications, members returned to the original motion, and it was

VOTED: to issue an Order of Conditions for DEP#169-1092 for Fitch's Bridge, as amended, under the Wetlands Protection Act.

Upon a motion by P. Morrison, seconded by B. Easom, it was

VOTED: to issue an Order of Conditions for DEP#169-1092 for Fitch's Bridge, as drafted, under the Wetlands Protection Bylaw.

Ms. Marton requested that a copy of the document be emailed to her.

The Community Preservation Committee has requested the Commission sign a contractual agreement for the use of the \$25,000 in CPC funds approved at the October Town Meeting. B. Easom explained that the Committee has requested this for other projects using CPC funds, and volunteered to help comply with the agreement. It is likely the full \$25,000 will be expended for the acquisition of the Walker-Cox parcels. Upon a motion by B. Easom, seconded by P. Morrison, it was

VOTED: to sign off on the contractual agreement with the Community Preservation Committee for the \$25,000 in CPC funding and to deputize B. Easom to provide the details on the expenditure of the funds.

The motion passed by majority vote, with M. Giguere absent at the time of the vote.

In discussion on the draft "Invitation to Bid" prepared by Eric Radlof of Bay State Forestry Service for the forestry project at the Baddacook Field woodlot, members agreed that no manmade materials should remain on the site once the demolition of the shacks is completed. The site should be rough graded to the natural terrain. N. Madden questioned whether it will be confusing for loggers to submit bids on a demolition project, particularly if it results in lowered quotes. Having to bring in a dumpster may detract from the main work. P. Morrison suggested that we put it out to bid separately and just go with a local operator. The list of items to be complied with is confusing because #14 comes at the end. J. Smigelski felt that most loggers are not set up to do this as they don't have an excavator and dump trucks. Upon a motion by J. Smigelski, seconded by P. Morrison, it was

VOTED: to pull the demolition item out of the forestry bid and request local bids.

J. Smigelski agreed to oversee the installation of a barn owl box at The General Field. Attorney Collins is working to revise the language on the TABCOM Conservation Restriction to bring it into line with the Selectmen's concern about allowing bicycling. There has been no progress on the Ames Meadow Memorandum of Understanding. B. Ganem said she will send a copy of the Forestry Cutting Plan for Baddacook Field to the Groton Conservation Trust who will be the holder of the Conservation Restriction.

There being no further business, the meeting was adjourned at 9:30 p.m.

Notes by Barbara V. Ganem
Conservation Administrator

Approved as drafted 1/22/13.

EXHIBITS

Document	Source	Date
Minutes	Conservation Commission	12/11/12
DEP#169-1092	Groton/Fitch's Bridge demolition & replacement	Filed 11/11/12
Sargisson Erosion Control	Danny Horrigan/Eagle Scout Project	1/8/13
Draft Invitation to Bid	Eric Radlof/Bay State Forestry Services	1/8/13