

PEPPERELL CONSERVATION COMMISSION

Minutes – December 1, 2009

The Pepperell Conservation Commission (PCC) held a regularly scheduled meeting under the Massachusetts Wetlands Protection Act, MGL Ch. 131, §40 and the Pepperell Wetlands Protection By-Law. The meeting was held in the Town Hall at 7:00 p.m.

Members present: Elliott presiding, Masterson, Rand, Rice, and Sauer; members absent: Moody and Steeves.

7:00 p.m. Discussion with Forester Craig Birch of proposed revisions to Pepperell Springs Forest Stewardship Plan

Prior to the meeting, Craig Birch had submitted a draft of revisions to the plan, which had been emailed to the Commissioners. The reason that the Commissioners had wanted revisions was that the suggested management activity (primarily, the type of timber harvesting) had not been consistent with the goals listed in the original plan. In the original plan the Commission specified that they wanted to view Pepperell Springs in its regional context and to manage it to provide as much forest-interior habitat as possible because it is less common than early successional or edge habitats in an area such as Pepperell which is undergoing suburban development. The timber harvesting in the plan, however, had been designed to provide a diversity of habitat types, including early successional, and to generate income from the harvest & regeneration of white pine.

In January 2008 the Commissioners had refined the goals for Pepperell Springs forest management. The new statement of the goal was to create a forest as much as possible like the one that would have existed on this site prior to European settlement. Birch's revisions called this a forest with old-growth characteristics. The Commissioners had several questions. Rice said that she agreed that property lines should be marked, but that metal pins should be used rather than blazes, at least at the corners. Birch said that he agreed, but that since he is not a surveyor, he could not set pins. Rice also said that in considering the future condition of the forest, she would like to see less white pine. She questioned whether his patch cuts would achieve this. Birch said that hardwoods would sprout from their stumps and would generally out-compete white pines after harvest.

Rice also asked how Birch would recommend that monitoring to identify the trees that were good mast producers should be done. Birch said that trees could be marked as "legacy trees", both to designate the best mast producers and the trees to be left to create large standing snags, but that it would be time-consuming and probably not necessary. He said that when areas were marked for harvest likely legacy trees could be avoided, and with the 100-foot buffer to wetlands off-limits for harvests, there would be plenty of trees to provide good regeneration. Fisher said that paint marks on trees could encourage vandalism or be misinterpreted to be marks for cutting.

Masterson suggested that the Commission could monitor the forest by observing representative plots, rather than trying to keep track of the whole thing. Rice agreed that permanently marked plots would be a good way to track changes in the forest. The Commissioners discussed the fact that management to create old-growth characteristics could be perceived as less attractive by the public, especially if exotic insects such as the hemlock wooly adelgid or the Asian longhorn beetle kill large patches of trees. Masterson asked if there were other insects that pose a threat. Birch mentioned the emerald ash

borer, and Rice added the winter moth, which threatens oaks. Birch said that he wanted to ask the Commission their philosophy about salvaging saleable timber if the hemlock wooly adelgid appears at Pepperell Springs. Salvage would involve cutting and removing as much hemlock as possible before the trees die. Rice said that much of the chestnut threatened by the blight in the early 20th century was salvaged, and there is the possibility that that had removed trees which may have been naturally resistant to the blight. Birch said that the die-out would be gradual and that as soon as the canopy opened, sprouting black or yellow birch would soon come up underneath. Rice said that many people worry about fire in this situation, but that actually it is only a small danger. It was the Commission's consensus that the forest management plan should not include salvage.

7:30 p.m. Public Hearing re NOI filed by Robert Lee, Pepperell DPW, for construction of a new municipal well with pump station, access road and associated infrastructure west of Nashua Road near the NH state line

Jeff Faulkner, Nicole Sanford, and Tom Mahanna, all of Stantec, and Bob Lee attended the hearing. Under the Pepperell Wetlands Protection Bylaw, the Commission determined that the project area involves BVW, and the proposed activity is excepted from the 50' setback requirement as a Limited Project. Faulkner began the presentation by reviewing the location of the project. He said that the well site had been approved by DEP in 2003 for withdrawal of 500,000 gallons per day. He pointed out the existing gravel road which connects Emerson Circle to the site of the proposed pump station. He said that the access road to the pump station would be paved, but that the driveway from the pump station to the well head, which would cross about 170 linear feet of BVW and floodplain, would be gravel. Faulkner said that 3 utility lines would be beneath the driveway from the pump station to the well head: electricity, communication, and the water main.

Faulkner described the pump house as 10 feet high, approximately 700-800 square feet. The pump house area also would contain a back up generator, communications pole, and aeration tower to gas off radon (if needed in the future) and CO₂ (to increase pH, which decreases the need for chemical treatments of the water). There would also be a drywell to dispose of the water used for analysis.

Elliott asked if Stantec had done borings in the wetland on which the driveway was proposed. Faulkner said they had done borings only under the building site. He said that the driveway design was a "floating road," which would sit on top of the wetland. A layer of trap rock enclosed in reinforced geotextile would float on top of the wetland soils. Elliott said that there needed to be at least 4 feet of organics beneath a floating road before it would work. He also said that the layer of rock should be 12 inches, rather than 8 inches, thick. Elliott said that if there are less than 4 feet of organics, culverts should be used. Faulkner said that culverts would raise the road bed and, to accommodate the side slopes, that would fill more wetland area. Elliott said that DEP's manual for unpaved roads allows steeper side slopes. Elliott asked if the joints in the water main would be flexible. Bob Lee said they would be standard Tyton Pipe, which is a brand name of a popular ductile iron pipe.

Construction sequencing for building the driveway across the BVW was discussed. Faulkner said that erosion control would be installed first, then clearing and grubbing, followed by dewatering by pump to an upland area. Elliott asked if all 3 trenches would be dug at once. Faulkner said that the contractor would make the final decisions at that level of detail. There were questions about how equipment would access the driveway area to install the utilities or build the driveway without damaging the wetland further. Elliott

asked how the Conservation Commission would be able to determine whether the plan was satisfactory if all construction details are not yet determined.

Mahanna said that the water main would be installed first since it is the deepest; then it would be backfilled with a shelf to the side for the other 2 utilities in PVC conduits. The trap rock layer was described as 6-inch+ trap rock, 8 inches thick with Mirafil 500X reinforced geotextile above and below the trap rock layer. Elliott said that, because of the side of the rock, the trap rock layer would need to be thicker in order to provide adequate voids between the rocks. He also asked how the sides of the road would be stabilized. Mahanna said that the side slopes would be planted to stabilize them. Elliott asked how siltation into the trap rock layer could be prevented. Lee said that the DPW did not expect to need to regrade the driveway very often, but that they would be willing to coordinate with the Conservation Commission if necessary. Mahanna said that after construction the driveway would get only very light use. He said that his company had been hired because of their experience with similar projects. He cited W. Groton and Chelmsford as examples.

Sanford continued the presentation. She submitted the green cards. She reviewed the MEPA filing in 2003 in which no EIR had been required, but said that MEPA was now requiring a Notice of Project Change. The decision on that was expected on January 8th. She said that they would like to leave the hearing open until after that, requesting a continuance until January 19th. The original plan submitted to MEPA showed access to the wellhead through the parcel in New Hampshire, under the incorrect assumption that that would have no resource area impacts. Sanford said that the recent delineation had shown that this was not true. Besides being more expensive, the original access proposal actually had more resource area and buffer zone impact than the current proposal.

Sanford pointed out the proposed replication area, saying that BVW replication and compensatory flood storage would be accommodated in the same area. She pointed out the compensatory flood storage area from the 2003 plan, saying that it had been rejected since there would need to be considerable tree cutting in order to access it. Elliott suggested that maybe the replication area was not even necessary and that eliminating it from the plan might better protect the wetland from the driveway. Fisher said that at least compensatory flood storage is one of the requirements for this type of Limited Project. It was noted that the proposed driveway surface elevation is below the 100-year flood elevation. Lee said that DPW was aware of that and did not see it as a problem.

Elliott asked what would happen to the material that would be removed to create the replication area. Sanford said it would be moved off-site, not be reused in this project. Rice said that she had concerns about what type of soils would be used in the replication area. She said that local soils, containing local seeds, should be used if possible. Sanford said that soils would have to be formulated since the wetland crossing was not planned to be excavated. Rice asked if it was necessary to pave the road between Emerson Circle and the pumping station. Faulkner said that it would regularly be used by heavy trucks so paving would be desirable. Masterson asked about the Zone 2 & 3 modelling. Sanford said it had been done by others at the time of the original planning and permitting for this well site. The hearing was continued until January 19, 2010 at 7:10 p.m.

Conservation Administrator's Report

WRPOD meeting with Planning Board re-scheduled to December 14th

Fisher distributed partial copies of the SEA report that was the basis for the establishment of the WRPOD. The Commissioners asked her to post the meeting as a Special Meeting of the Commission since a quorum of members were likely to attend.

Update on Shattuck Oil, 16 Groton Street

Fisher described a misunderstanding that had occurred at the last Planning Board meeting about the design of the containment structure. Bob Coluccio of Web Engineering had told the Planning Board that the structure was going to be drained into a level-spreader on the ground via a pump to be hand-activated when water accumulated in the structure. Fisher had notified the applicant that this would constitute a change to the Final Approved Plans for the Order of Conditions and advised them to return to the Commission with an Amendment request. Louis Berube had emailed to say that this type of drainage system was not going to be part of the proposal after all. The Planning Board's hearing remains open.

Request for Certificate of Compliance, 104-106 West Street, File #259-553

Fisher reported a satisfactory site visit. On a motion from Elliott, seconded by Rand, all

VOTED: to issue a Certificate of Compliance.

Discussion of Next Steps in Heald Street Orchard Management Plan

The Commissioners reviewed the work plan and decided that the work on control of invasives in compartments other than where the trees were removed should be begun in the spring.

Correspondence from Brian Trickett

A letter concerning a request to extend the archery hunting allowed by permit in the Orchard be extended into the shotgun and muzzle loader seasons was read and placed on file for consideration next year.

Meeting Schedule for 2010

The Commission determined that a regular meeting on each first and third Monday of the month would be scheduled from January through June 2010.

Other Business

The Commissioners cancelled the December 15, 2009 regular meeting since there were no scheduled appointments on the agenda.

Fisher reported that the update of the Open Space and Recreation Plan needs public input, such as a public forum. She also said that she would like to hold a meeting to organize the trails volunteer group. The Commissioners decided to include both items in the January 5th meeting.

The meeting adjourned at 9:30 p.m.

Respectfully submitted,

Ellen L. Fisher