

Cranberry Bog Working Group  
Meeting Minutes  
September 12, 2022 via Zoom

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Members Present: Alex Parra, Susan Provenzano, Luke Ascolillo, Brian Murphy, Helen Young

Conservation Administrator: Sylvia Willard

Public: Pam Rivard, Sara Dunleavy & Charles Ford, Dave McLachlan, Mark Barrow, Ariella Rebbi, Chris Spinney, Warren Lyman, Wendy Barrow, Iva Mooney, John Ballentine, Mark Duffy, Bill Risso, Steven Christopher, Karl Bistof, Chris Garrahan, Sue Mahoney

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Meeting began at 7:00 pm

Chair Murphy initiated the meeting by doing a roll call of all members, administrators, and public. He then recited the Massachusetts governors order for conducting public meetings by remote. This meeting was covered by the minutes and not recorded. Murphy also explained public input will be taken when the Chair asks for public input and will call on persons and each will have 3 minutes.

1. Minutes - Ascolillo moved to approve the minutes as amended by Willard. Approved unanimously.

2. Meet with Hart Pond Dam Committee -- Pam Rivard introduced their group and handed off to Steve Christopher who is in charge of the Hart Pond dam. The dam is regulated in the spring and fall and when water is high are lowered until at determined level. (Due to the drought water currently 16" below top board) This group took over from Chelmsford DPW in 2010. Adjusting the dam boards is physically hard to do as one has to get into the water. Takes time because the boards have to be removed slowly to release the water slowly. Beavers have been an issue. Water level adjustments happen in April and October to assist with the cranberry harvest. In April the water is held back to get up to 28" to the top board. Then in the fall they lower the level. Duffy commented that Heart Pond water control was created for the cranberry agriculture. McLachlan mentioned that there are people that mess with the boards on the Chelmsford side of the bog. Beavers have caused a lot of issues in the water flow. Willard said water is so low at the bog that she can now walk easily along the base of Cranberry Bog Dam #1 where there should be water. Heart Pond is down about 16" from where it should be. Parra asked what is the difference in height between the April and October settings. Steve said in October through December they drop the level down a total of 28". Then in April they add boards to get the water level up 28". Parra asked how they determined the levels. Steve said the State determined it when the dam/spillway was built. Duffy asked if there was once a planned lowering to get rid of invasive plants. Pam said they did drain it a bit to try to get rid of invasive plants with mixed success. Solitude Lake Management treats the pond yearly and makes the pond usable. Willard asked when water is flowing over the spillway and there is a major storm

event does anyone monitor it. Steve says there is a 24" difference between the boards and dam top. Dam was designed to handle a 100- year flood. Any issues are reported to the town. Parra asked what are the invasive plants were and they were curly leaf and water chestnuts. They are on the look out for milfoil. Murphy asked about the Phragmites. Pam responded that there's a lot. Steve said normally there is good inflow and outflow if there is no drought and no beavers. But beavers are a real problem. Spinney asked if in October Heart Pond will remove boards to drop the water level from 16" to 28" below the boards. Spinney emphasized that really need to keep the beavers out of the culverts. Pam said that every inch over the dam is 375,000 gallons coming down to the bog. Carlisle is in level 3 drought. Ballentine commented on dam breaches due to beaver issues. Asked how do we manage the water with the beavers. Chelmsford used a trapper to reduce the beaver (Leo Martin) and he got 8 beavers. Ballentine asked if Duffy had more trapping abilities due to the agricultural status. Murphy asked if we wanted more meetings. Steve offered to notify Carlisle when he started removing the boards. Willard asked if they could scan the dam design and send it for Carlisle's reference.

3. Irrigation and Irrigation House - Parra thought there was an issue with removal of the pump house. Duffy said the issue would be the piping. Parra would like the pump house to be gone and thought the irrigation system was Duffy's. Duffy said most of the piping is Driscoll welded pipe and it would require a lot of work to remove and suggested more conversation about the pump house removal. Provenzano commented that she would like to know more about what was involved in removing the pump house before voting on it's removal. Ascolillo suggested that Duffy find out what is involved in the pump house removal. Wendy Barrow asked if there was a bat study using the pump house. Willard said they moved the study pole that was part of the bat study to another location at the bog. Spinney commented that he thought this was voted on a while ago. Willard and others will meet to look at the pump house.

4. Restoration Plan - Willard shared the plan that former chair Belitz had created. This document listed the objectives for the bog. Parra felt that the next step was to make those objectives into action plans. Repair Dam #1 is being looked at by Stamsky & MaNary and they are making a plan. The next step is to get the mowing plan for the Bog in Restoration area going. Willard has started a document for an NOI for this mowing. Parra asked about what technique would be necessary to get the vegetation in the area downstream from Cranberry Bog Dam #1 under control. Duffy said it depends on the winter, but often the bog isn't as frozen one thinks. Duffy said there is a lot of hand cutting of that area. May need specialized equipment or may not be possible with equipment. Parra mostly concerned with the saplings and bushes. Duffy said the last time it was done there was weeks of work with carrying out bundles of cuttings. Duffy summarized that some can be done; what can be done on the surface of a cranberry bog is different from an upland meadow. There are 20+ feet of peat and muck and it is easy for equipment to sink into the muck. Parra suggested a 3- year permit to get the area cut. Duffy said that the issue is the muskrats have tunnels throughout and the root system of the plants make it very difficult. Parra would like Willard to prepare a restoration plan and NOI to see if we can get ahead of the problem. Parra motioned that an NOI should be created for mowing the Bog in Restoration area (near dam #1). It was seconded by Young and approved unanimously.

5. Bog Management Plan - Parra made some redline edits to the contract and commented on those edits. One edit was to eliminate the agricultural references and declare order of conditions for authorization of mowing and other actions. Murphy queried about the 65% of the bog to make sure all of the bog got mowed eventually. The working area of the bog got mowed somewhat, but want to focus on the bog in restoration. Sides of the trails also need some mowing. Willard felt that should be done annually. Murphy said this should be defined in the NOI so that everyone knows what is expected. Parra suggested the DCR guidelines for the mowing. Parra said we could discuss this in the NOI and focus on the Bog in Restoration area first..

6. Committee membership - Ariella Rebbi expressed interest to Cons Com in becoming a member of the committee. Willard offered to send links to material and Parra quickly reviewed the history. Spinney asked why abutters cannot be part of the committee, since the Chelmsford group is all abutters. Parra explained about appellate rights and making abutters interested parties. Spinney feels that Carlisle should take advantage of abutters like Chelmsford has with their group. The creation of a Friends of the Carlisle Cranberry Bog Group was suggested.

7. Cranberry Bog Dam #1 and Beaver Control - Willard reported that a design was not complete enough. She felt more material needed to be put in to deal with the erosion issues. She is expecting a plan soon. The beaver lodge was dismantled and removed and no evidence of a beaver.

8. Water Lilies - Spinney commented on the beaver activity and suggested that the risers and culverts get really cleaned out. He noted that the beavers build up the material in the culverts. He feels there should be grates on both sides of the culverts. Duffy felt the addition of grates just adds another surface for the beavers to build on. Ballentine commented on Spinney's proposal and suggested getting a small NOI in a test area near their houses. Spinney shared his plan with the Trails Committee and CRAC. Spinney felt we need better water control to make the plan happen. Spinney feels the risers control the water and as long as the watershed is flowing we should have water, but because the watershed is very diffuse the water leaving Heart Pond may never get to the bog. Spinney would like to see just how much the water at the bog rises when Heart Pond lets out the 12" this fall. Parra summarized that the risers need to be higher to make a better water level. Duffy has a historical perspective. He said that water used to go through the Martin Street dam, but due to beavers now more water goes through the Fiske Street dam. The dam up in Chelmsford on the Cranberry Reservation is too small to handle that and could easily collapse.

9. Phragmites Control - arborist John Bakewell has been out and he is working on it. Section near Martin Street is the hardest to access.

10. Next meeting - October 17, 2022 at 7 pm.

Ended at 9:35 pm