



City of Cambridge Conservation Commission

147 Hampshire Street
Cambridge, MA 02139
Ph. 617.349.4680

Jennifer Letourneau, Director

jletourneau@cambridgema.gov

Public Meeting – Monday, March 13, 2023 at 7:00 PM Zoom MEETING MINUTES

The following meeting minutes were taken by Tracy Dwyer and are respectfully submitted.

Present Commission Members: Jennifer Letourneau (Director), Purvi Patel (Chair), David Lyons (Vice Chair), Kaki Martin, Erum Sattar, Kathryn Hess, Michelle Lane, Elysse Magnotto-Cleary

Absent Commission Members: n/a

Attendees: Tracy Dwyer, DPW; Jim Wilcox, DPW; Naomi Valentine, SWCA; Beth Walsh, Department of Conservation & Recreation; Kara Silwoski, Department of Conservation & Recreation; Keith Gazaille, Solitude Lake

Purvi Patel opened the meeting.

7:00 – 2022 Summary Charles River Reservation (Lower Basin) Vegetation Management DCR and SWCA DEP File #123-316

Naomi Valentine from SWCA was at the meeting and representing the Department of Conservation and Recreation (DCR). Naomi stated that the summary of the work that was going to be preformed was general maintenance, continued special event maintenance which included the three main events: Head of the Charles Regatta, Fourth of July Celebration, and the Dragon Boat Race. There would also be invasive plant management which included restoration to enhance the ecology of the river. Naomi stated that in 2022 not much work was completed because of the timing of when the permit was issued but there was general maintenance done and there was also trimming done for the three special events which included trimming down to twenty-four inches. She stated that the Charles River Conservancy also was able to perform some invasive plant management through manual and mechanical means. Naomi also said that DCR hired Bartlett Tree to conduct a tree survey along the Charles River within the boundary of Cambridge. Naomi stated that with the general maintenance that mowing occurred, trimming of the rivers edge only happen during special events. Maintenance occurred on the green infrastructure, landscaped areas, and structures along the Charles River. She stated during the special event trimming more specifically the Head of the Charles there was a lot of native species that were left because it was not necessary for them to get trimmed for the event or because of

habitat reasons. She stated that a lot of the invasive species were also left untrimmed as well. Naomi went through the focus areas where invasives were worked on and that was all four of the areas except for focus area two (2) which was not worked on in 2022. She listed out the dates the areas were worked on, the location of the focus areas, the vegetation and method that was used to remove the invasives and who worked in the focus area. Naomi said during the tree survey which was conducted between July and October all trees over two (2) inches in DBH in public areas and over six (6) inches DBH in forested areas. She said that a total of eighty-one (81) species were identified and a total of 2,211 trees were surveyed. Naomi stated that work planned in 2023 is much the same as they did in 2022 but now that they have a full survey of the trees, they will be working on what needs to be limbed, removed, etc. based on their condition. Naomi also said that with the invasive plant management they will always use volunteers, DCR staff as well as a contractor especially if herbicides need to be used. She said that in focus area one (1) and three (3) they were focusing on phragmites. Also, focus area one (1) and four (4) will be focusing on Japanese knotweed. She stated that any herbicides used will be at the minimum extent possible and if funding allows, they will be experimenting with the Hydrogel along the bike paths edge.

David Lyons asked where they will be getting from funding on the experimental Hydrogel.

Naomi said DCR might be waiting to see what their budget allows.

Beth Walsh from DCR said they were finalizing their budgets and plans for FY24 they are trying to find resources within DCR and expand if that is possible.

Kaki Martin stated that she is interested in hearing about the process on how it went.

Naomi asked if this was regarding invasive plant management. She said they were in the process of streamlining their reporting on the maintenance tasks with the VMP. She stated that because of the timing of the permit there was not a lot of assessment and not a lot to be told about 2022. Naomi did say that observations from 2022 will be included in the future reporting.

Kaki asked if what they observed in 2022 will be taken into account for lessons learned going forward.

Naomi said the two big factors are how well the invasives are being managed and how well the natives are regenerating. How well are things growing after management and do we need to plant additional seed for bare spots.

Kathryn Hess asked if they have an equivalent effort going on over on the other side of the river in Boston.

Naomi stated that yes, they do as well as in Watertown and Newton.

Erum Sattar stated that in some of the reports there was a note that some of the species were found less of and that is an effect of previous efforts being effective.

Naomi stated that information was probably from the aquatic VMP, because they have not gotten that far on their reporting.

Erum asked if the decision of the focus areas were from sort of upstream population.

Naomi stated that the four focus areas were where there were the highest concentrations of invasive species, and they were identified by DCR. If DCR finds other areas where concentrations are high, they can come before the commission to add those areas to the permitting.

Jennifer Letourneau stated she knows there have been some staff changes at DCR and was looking for the best contact person at DCR for the terrestrial vegetation management plan and the 2023-2024 growing seasons.

Beth Walsh stated that she was the Project Manager for the Charles River Vegetation Management Plan and she said they also hired a new Ecologist and that is Megan Shave.

Jennifer said that when they originally did the Terrestrial VMP that they only went as far as the Museum of Science and the map that was included did not go to Northpoint Park like what was stated at the last meeting that DCR would include that piece.

Naomi apologized and said that the map was from an earlier submittal and that yes, the VMP now includes Northpoint Park.

Jennifer wanted to point out that there are some major construction projects coming up, the Weld Boathouse for the Harvard University will be completed within the next year, when they vacate the area, they will restore their laydown areas associated with the project. Once their fence is down the land will be turned back over to DCR and will be part of the Head of the Charles this coming year. Jennifer said also in 2024-2025 Jim Wilcox has been spearheading and Eversource electric project which will be using the soccer fields at Magazine Beach, once the project is done and areas are restored they will be under DCR's VMP plan.

**7:26 – 2022 Summary Charles River Reservation (Lower Basin) Aquatic
Vegetation Management
DCR and Solitude Lake Management
DEP File # 123-306**

Kara Silwoski with the DCR Lake and Ponds Program introduced the AVP. Kara stated that the program goes from the Charles River Dam to the Watertown Dam, otherwise known as the lower basin. Kara reviewed the timeline and in 2018 the Charles River Vegetation Management Plan was initiated and in August 2019 the lower basin was surveyed, COVID hit and in June 2021 the lower basin was permitted by the commission and the Lakes District survey began. In April of 2022 the Lakes District was permitted and in August of 2022 they did their first ProcellaCOR treatment. Kara stated that their approach to their management plan was to manage both the lower basin and lakes district together as a whole river. They wanted to do hand-pulling and/or machinal harvesting of water chestnut only and use aquatic herbicides primarily for milfoil and fanwort.

Keith Gazaille from Solitude Lake stated that in June 2022 they conducted a pre-treatment survey, he said there were not many changes and they saw non native species and native species. Keith stated that the commission may recall that they stated that their first approach maybe a overall sonar application to the lower basin and lakes region. Keith stated with the time of year restrictions from the Division of Marine and Fisheries they changed their approach and decided to do a more targeted area treatment with the ProcellaCOR. Keith stated that they identified 37 separate areas totaling 146 acres and in Cambridge that was 27 acres. Keith stated that much of the shoreline of the river was treated for the Eurasian Watermilfoil. Keith stated that on August 18, 2022, the ProcellaCOR treatment was conducted with a total of 2596 prescription dose units (PDU's). He stated that they used real time GPS navigation for the accurate even application of the herbicide and they were no adverse impacts to human, fish or wildlife health. He stated that

observation was made and reported following the application. Keith stated that the Water Chestnut management plan was through volunteer and contracted out hand harvesting both in the lower basin and lakes district. Keith stated that during the CRWA volunteer events they were able to remove 4000 pounds of water chestnuts and in 10 days of contracted hand-pulling they did additional 27 cubic yards. Keith said that in the post treatment survey they saw a lot of success and there was almost a 100% reduction in milfoil in the lower basin. Keith said that in 2019 there was only a 37.5% of frequency of occurrence and in 2022 there was only a 0.2% of frequency of occurrence. He said in 2023 they are expecting a lot less regrowth as well. Keith stated that in 2019 there were 5 of the 18 species identified, he said what this tells them is that they may need to look at how they do their pre-management surveys. Keith said they are happy with the reduction of the milfoil regrowth. Keith said their concern moving forward with the reduction of one invasive species may bring other species to grow more. He stated that their plan for 2023 is to do a large-scale Sonar herbicide treatment in the Lakes District to address the fanwort and prevent expansion of milfoil. Keith said they will also spot treat any Eurasian Watermilfoil in the Lower Basin with ProcellaCOR.

Kara added the Alliance of Boaters and other boating groups reached out with all positive feedback. She said that the Head of the Charles boaters were also positive about the outcome as well.

Purvi asked what their expectations are for the future management will it be a five-to-ten-year plan and wait and see or their metrics in place how much the application will be applied. Kara said with the aquatic plans those are less cut and dry like a terrestrial plan. Kara stated that this will probably be on-going for the next ten years or so. She said the Water Chestnuts are viable for up to ten years in sediment.

Purvi asked what the layering effect would be for the application and do you see some pulling back in the future.

Kara stated that after the large sonar application in the Lakes District she sees that this will help reduce the fanwort and milfoil and moving forward she sees just spot treatments rather than larger applications. Kara stated that instead of 37 sizable locations they are probably going to see 50 smaller areas to spot treat.

David Lyons was happy to hear that there were no adverse effects from the treatment that were observed but he was asking them to elaborate on what that entailed, how long were the observations and what methods were used.

Keith stated that during their treatment period and during the post survey there were not fish mortalities reported. He said that most commissions required some sort of water quality testing and there were no impacts with water quality, no dead fish and native species were not impacted as well.

Kara also added that CRWA has been their partner in this project, and they do weekly water quality testing and stated that they would let DCR know if there were any problems, and nothing was ever reported to them. She said that CRWA was out one of the days the application was done.

Erum Sattar asked if they took away one of the treatment units would the ecosystem for the invasive species become less hospitable and would others grow less do they know what will happen in this case.

Keith said with the intercept point surveys it would allow them to track the overall plant assemblages through time. He said the overall goal will be for the treatment to kill off the invasive species and for the native species to thrive. Keith stated like Kara said this is going to take some time to see the results.

Erum asked what this was doing to the overall ecosystem capacities and will this give one native species an advantage over another.

Keith stated yes over time there will be an improvement with the ecological system and see more native plant growth and a reduction in the invasive species plant assemblage.

Kara added when we are looking at native's vs natives, they keep each other in a nicer balance then natives vs invasives. Kara stated that some years ago they did a large-scale sonar treatment in the Mystic River in Medford and followed up with ProcellaCOR spot treatments and the natives have been flourishing there.

Jennifer stated that she didn't know if they heard about the removal of the Watertown Dam, and that Cambridge has been asked by the Charles River Watershed Association (CRWA) to sign on to the removal of the dam. She said before the city signs on to that they would like to understand the adverse effect and timing of the removal will have on the Aquatic Vegetation Management Plan.

Kara stated that she has not been part of a removal of a dam and its adverse effects, but she said after learning about the potential removal and looking at the area she said it's a ever narrow area and there is not much invasive vegetation upstream of the river so she doesn't believe that this will have a huge effect to their management plan. She said also with the removal of the dam there is also a release of nutrients with that, and she said past conversations about the dam removal she believes that studies have been done.

8:02 – Administrative Topics

Meeting Minutes from February 13, 2023

7 – In Favor, 0 – Absent, 0 – Opposed, 0 – Abstained

8:05 – Meeting Adjourned

7– In Favor, 0 – Absent, 0 – Opposed, 0 – Abstained