

## **September 21, 2023 - Fresh Pond Reservation Master Plan Advisory Board Meeting**

**Minutes** (Hybrid Meeting – Zoom, In-person)

Submitted: David Kaplan – November 16, 2023

### Advisory Board Members in Attendance:

Janice Snow (Chair), David Kaplan, Jennifer Letourneau, Adam Corbeil, Ann Roosevelt, Candace Young, Susan Agger, Janet Burns, Sophia Emperor, Deborah Masterson, Jim Barton, Kathy Hess

### Cambridge Water Department (CWD) Staff in Attendance:

Julie Greenwood-Torelli, Vincent Falcione, Jamie O'Connell, Tim Puopolo, Omar Mejia, Anna Van Dreser

### Others in Attendance:

Elizabeth Wylde, Patrick Barton

Meeting opened at 6:04pm

Meeting Minutes: D. Kaplan

### **Item 1: Review Agenda**

No changes proposed. The Chair introduced new member Kathy Hess as the Conservation Commission representative on the Advisory Board. She replaces David Lyons. All Advisory Board members and Water Department staff introduced themselves.

### **Item 2: Meeting Minutes**

*May 18, 2023 Minutes:* C. Young moved and D. Masterson seconded the motion to accept the minutes as presented. The vote was unanimous in favor of the motion.

### **Item 3: Monarch Butterfly Release and other wildlife notes:** (T. Puopolo)

Reservation Ranger Tim Puopolo's presentation is available for download

<https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Minutes/2023/09212023WildlifeReportFPMPAB.pdf>.

Tim first described the August 20, 2023 9<sup>th</sup> Annual Monarch Butterfly Release celebration, where an estimated 250 people attended. Closer to 200 butterflies were released this season, just 125 on the event day. The event was reported by the Boston Globe. A recent study indicates the species is not likely to go extinct over the next 500 years. Their migration throughout North America, however, is likely to go extinct in the next 50 years due to population stress and climate change. Their future range will likely be limited to southern climates.

Tim then discussed White-tailed deer on the property. Although only based on our acreage, Fresh Pond Reservation deer biological carrying capacity is 16 deer, above which a population faces disease, starvation, and an increase in vehicle accident risk, the sustainable carrying capacity at the Reservation is between 0-8 deer. Any population greater than 8 could cause an annual vegetation decline. Currently there are 8 resident deer. Recently there was one confirmed, and one likely deer death from Fresh Pond dogs. Ranger Tim recommends management continue to be

focused on protecting sensitive vegetation, but if deer populations continue to increase, we should investigate and implement deer population management strategies. Discussion ensued on the continued use of organic deer-deterrent spray in the Lusitania Woodland.

There is a family of 4 great horned owls on the property. Tim discussed the management and protection of the nest near the Weir Meadow. J. Snow asked about considerations needed during Pine Forest restoration, improvement projects.

Raccoons denning together in winter can cause a spike in rabies cases. There are no indications that this is currently an issue, but T. Puopolo is monitoring. The end of daylight saving time causes the most opportunities for human, coyote conflicts. Dusk happens at the same time for coyotes, but an hour earlier for humans, when uses overlap. Off leash dogs, cat-sized or smaller are susceptible to coyote predation. There are currently 2 resident coyotes at Fresh Pond. Discussion continued around the coyotes' location around the reservation, owl ranges and their behavior, and rabid raccoon issues, response, and management. Reservation rangers are trained in handling rabies issues.

#### **Item 4: Upcountry Reservoir Report (J. O'Connell)**

Watershed Protection Supervisor Jamie O'Connell's presentation is available for download [https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Minutes/2023/WatershedFPA\\_Bupdate09212023.pdf](https://www.cambridgema.gov/-/media/Files/waterdepartment/freshpondreservation/advisoryboardagendasandminutes/Minutes/2023/WatershedFPA_Bupdate09212023.pdf)

Jamie first described recent additions to the staff, including the creation of a Watershed Technical Supervisor Position now staffed by Anna Van Dreser, the former Watershed Management Assistant temporary position. The empty Watershed Management Assistant position will be advertised soon.

J. O'Connell reviewed the watershed water quality monitoring program and notable updates, including adding chlorophyll analysis in-house realizing significant cost savings, and the ability to also test for cyanobacteria indicators. The division has also increased its ability to identify and enumerate algae in-house and has created and updated an interactive source water quality report <https://storymaps.arcgis.com/collections/b9385c27481d4167a35e87a34c50d4d2> through using and customizing the ESRI Story Maps tool. The division, through a continuing partnership with the United States Geological Survey, recently added a near real-time in situ sensor transmitting temperature data and phycocyanin occurrences, an indicator of cyanobacteria in Fresh Pond reservoir.

Aspects of the Site Monitoring Program were reviewed and updates provided. The division is working to develop a site monitoring mobile management and reporting tool that houses spatial and other information about monitoring locations and projects in one place. Similar to the site monitoring tool, the division created a dam inspection tool that allows for mobile data collection and streamlined management of observed issues with the Department's dam infrastructure.

J. Snow asked about any notable changes to algae in the reservoirs. J. O'Connell explained that the record is not long enough to answer that question, and building the program will help fill that information gap. Discussion continued around water quality and environmental factors that

influence the growth of cyanobacteria, and the impact of drought on source water salt concentrations.

**Item 5: FY24 Budgeting & Master Plan Projects** (D. Kaplan and J. Greenwood-Torelli)

J. Greenwood-Torelli talked about competing priorities in the treatment plant, such as replacing the SCADA system and ozone generators taking precedence over tackling Reservation issues. The Watershed Division will focus on tackling smaller projects and looking for alternative sources of funding.

**Item 6: Watershed Manager's Report** (D. Kaplan)

D. Kaplan discussed near-term work that will include developing an implementable restoration plan for the Huron (Pine) Forest, and to repair the Little Fresh Pond shoreline access, and Old Field Birch Grove seating area.

Landscape Management Report: (V. Falcione)

V. Falcione discussed the disconcerting loss of reservation white pines and reinforced the need to include a forest pathologist in planning the restoration of the Huron Pine Grove. White pine decline is a factor. J. Snow also recommended a soil biologist. Recently, 2 hemlock trees died in the "Norton Grove" area of Kingsley Park. Two White oaks at Pat Pratt Grove are healthy, and the other planted tree is struggling. V. Falcione recently trimmed back the dying oak limbs and will continue monitoring. He discussed past and recent issues with public foraging and the benefit of having two full time rangers to dissuade this activity. One option to consider is signage in high-value foraging areas.

**Item 7: Stewardship Awards Recommendation Status**

J. Snow and A. Roosevelt discussed plans for another Stewardship Awards presentation ceremony.

**Item 8: Designating Joseph Harrington Way**

J. Snow asked A. Roosevelt to solidify with the City Manager's Office the official designation of the area from the Treatment Plant to the Woodland Restoration Habitat as Harrington Way. D. Kaplan asked A. Roosevelt to follow up on codifying proposed updates to the Water Board Rules and Regulations for Fresh Pond Reservation.

**Item 9: 2023-2024 Term Meeting Schedule Reminder**

November 16, 2023; March 21, 2024, May 16 2024. Optional dates if needed: January 18 and/or April 2024.

**Item 10: Preliminary Agenda for November 16, 2023**

Updated agenda items discussed. J. Snow asked about setting up a formal dedication date, event for the Pat Pratt and Chip Norton Groves, Spring 2024. J. Snow discussed the need for mapping and identifying management strategies for water resources transition zones.

**Item 11: Public Comment**

No public comment.

C. Young moved, D. Kaplan seconded the motion to adjourn. Meeting Adjourned 7:58pm