



Freshwater Initiative

Monomoy Lens Stakeholder Group

Meeting 2 Summary: April 23, 2024

The second Monomoy Lens Stakeholder Group meeting for the Freshwater Initiative was held on April 23, 2024. The purpose of the meeting was to share information on pond management strategies and discuss considerations for strategy selection, discuss pond management actions to date, and consider criteria for prioritizing ponds for management.

During introductions, participants shared questions, concerns, or observations about ponds, including but not limited to:

- The data is messy; it may not provide a clear picture of what is going on in a pond.
- Natural resources are suffering from multiple impacts; as many small impacts accumulate, resource managers need to think and act holistically.
- The biology of ponds is important, and more should be done to examine microbiology in ponds.
- What is a healthy pond (healthy for whom) and how does the public perceive whether a pond is healthy?
- Given how phosphorus travels through soil, does sewerage have an impact, and how soon might results from sewerage be observed in ponds?
- We need to balance who we are planning for and the natural ecology of the pond as we consider what we can accomplish.

Similarly, participants identified the need to acknowledge the wide range of pond conditions that could be considered healthy when setting expectations and choosing endpoints for management. Contaminants of emerging concern and the increased use of hardscaping in landscaping are concerns. Attendees noted the importance of considering how to manage public spaces to avoid overuse and the associated impacts.

Following introductions, Cape Cod Commission (Commission) staff reviewed feedback received from Meeting 1, presented an overview of the pond management strategies database, reviewed the Freshwater Pond Restoration Projects Viewer, and presented potential criteria for prioritizing ponds to manage.

Participants were asked to provide input on impacts to ponds not yet identified, what their priorities are when considering pond management strategies, what information they need to support decision

making, driving factors in choosing a strategy, and how they might prioritize ponds for management actions, as described below.

DEFINING THE PROBLEMS:

Participants were asked if there are impacts to ponds that are not being captured as part of the Freshwater Initiative that they think are important. They were also asked if there are other long-term planning considerations that should be included.

Attendees suggested water temperature, erosion, contaminants of emerging concern, impacts from cranberry operations, and the number of pond closures for usage as other impacts to be considered. Over-usage, shoreline development, septic systems, and management of spaces were cited as concerns to participants, in addition to increasing hardscapes and impervious areas of homes.

STRATEGIES:

Upon entering the meeting, participants were asked to identify their top considerations for selecting a pond management strategy. Using a posterboard, participants could select up to three top considerations. Responses are listed below, in order of most to least votes (#):

- Effectiveness (5)
- Community acceptance (3)
- Co-benefits (e.g., habitat, aesthetics, recreation, addressed multiple threats) (2)
- Cost (2)
- Maintenance requirements (2)
- Duration of benefits (1)

Attendees added other considerations:

- Habitat impact (3)
- Active watershed management in place (2)

Options not selected include:

- Level of threat
- Likelihood of obtaining permits
- Local priorities
- Time to implement
- Time to see results

During the meeting, participants were asked to elaborate on the considerations they selected. They were asked to share their top priority and discuss why. They were also asked to elaborate on whether there is other information they feel they need.

Many attendees cited cost, strategy effectiveness, co-benefits, and community acceptance as priorities when considering pond management strategies. Participants also mentioned ponds with public access and those that are the most used as priorities.

Several attendees also commented on prevention of impairment as an important strategy to protect ponds, including through prevention of inputs, such as nutrients, and property acquisition.

Attendees discussed the importance of understanding the characteristics of a pond before determining a management action and the desire to have information that can help identify strategies appropriate to address a noted impairment, such as a guidance document that could include management actions for shallow ponds or steep banks, as examples. There was also strong interest in looking at pond ecosystems and their habitat value holistically.

Many attendees also commented on the importance of having a management plan to help identify priorities and to help guide an approach to pond management.

One attendee noted that towns are limited in what they can do to address impaired private ponds. It was noted that towns may have limited staff capacity to proactively manage ponds, which can lead to towns being reactionary when issues arise and prioritizing the level of threat.

Attendees were interested in having more information on co-benefits, such as tree canopy shading cooling surface water temperatures along the pond shore, as an example. One attendee noted the benefit of habitat to the pond ecosystem, and another attendee suggested attractive example photos on the pond strategies fact sheets may persuade homeowners to undertake certain actions, such as vegetative buffer plantings. Several participants noted the importance of education to change behavior and create realistic expectations, citing new “pond pledge” programs.

PROJECTS:

Town staff present were asked to speak to pond projects in their community, including what considerations or driving factors contributed to the strategy selected and what additional information could have been helpful in the planning process.

Staff from one town provided an example of a pond with deteriorating water quality. A pond study showed that nutrients from a past cranberry bog operation were re-cycling through the pond ecosystem and there were few new inputs being added. The town chose to do an alum treatment over challenges with pond dredging, and due to cost, effectiveness, reduced habitat impacts compared to dredging, and community acceptance. The pond neighbors were the leading driver of

action at this pond. The town will consider the longer-term effectiveness of the project through monitoring.

Staff from another town presented an example of a pond that also had poor water quality. A study was done, and the town chose an alum treatment. The pond has been monitored for 17 years since the intervention and continues to have improved water quality, though town staff did note the intensity of use at that pond has decreased over that time, and it is unclear how that may influence the improved water quality. In another example, alum was applied to the deeper parts of the pond, avoiding the shallower areas where there is a lot of biota. There is speculation that the alum may have improved the pond habitat for herring, as there have been no fish kills post-treatment.

Noting that ponds can become sinks for nutrients, one participant wished for a “better dredge.”

PRIORITIES:

Participants were asked about criteria they think are important when prioritizing ponds and whether there are certain criteria that should be considered more heavily than others.

Some attendees wanted to understand the condition of all ponds in a town before prioritizing those for management actions. Other attendees acknowledged that all information about a pond is not known, so those criteria cannot be used in the selection process.

Participants commented on prioritizing those ponds that have public access and expressed interest in the need to quantify pond access, which does not always equate to pond usage.

One participant noted the importance of water supply as a criterion that would be weighed more heavily than others. Other potential tools mentioned included EPA’s Biodiversity Index, and participants offered cautions about relying only on the state’s Environmental Justice communities mapping or how to define public access.

The Monomoy Lens stakeholder group will meet again on Tuesday, June 4, 2024, from 1:30 – 3:00pm at the Harwich Community Center.

Meeting 2 Agenda

1. Introductions: Cape Cod Commission (Commission) staff will facilitate the introduction of meeting participants.
2. Defining the Problems: Commission staff will summarize stakeholder input from meeting 1 regarding threats to Cape Cod ponds and discuss and define the problems the Freshwater Initiative aims to address.

3. Strategies: Commission staff will provide a brief overview of the water quality strategies database. Stakeholders will be asked to identify and discuss the information that will be most impactful for local identification of strategies and decision-making.
4. Projects: Stakeholders will share their experiences and observations of strategies implemented on Cape Cod, their successes, challenges, and lessons learned.
5. Priorities: Stakeholders will discuss priorities and values for selecting a pond management strategy, including but not limited to cost, co-benefits, and time to implement. Commission staff will share information and gather feedback on prioritizing ponds for evaluation and implementation of strategies.
6. Next Steps: Commission staff will discuss next steps for participants, including future meeting dates and topics.

Meeting 2 Participants

Stakeholder Participants

- Amy Usowski, Town of Harwich
- Greg Berman, Town of Chatham
- Chris Miller, Town of Brewster
- George Meservey, Town of Orleans
- Michael Lach, Harwich Conservation trust
- Judith Bruce, Orleans Pond Coalition
- Sue Machie, Friends of Chatham Waterways
- Kim Pearson, Town of Brewster
- Ann Frechette, Great Sand Lakes Association
- Sherrie McCullough, Town of Brewster
- Amy Von Hone, Town of Brewster
- Carole Ridley, Pleasant Bay Alliance
- Scott Norum, Hinckleys Pond Association
- Susan Bridges, Brewster Ponds Coalition
- John Ketchum, Harwich Conservation Commission, Watershed Association of South Harwich

Cape Cod Commission Staff Present

- Kristy Senatori, Executive Director
- Heather McElroy, Natural Resources Program Manager
- Tim Pasakarnis, Water Resources Analyst
- Tara Nye Lewis, Water Resources Analyst
- Jessica Rempel, Natural Resources Analyst
- Michele White, Special Projects Coordinator

Partners in the Regional Pond Monitoring Program

- Kristin Andres, Association to Preserve Cape Cod