



Freshwater Initiative
Sagamore Lens Stakeholder Group

Meeting 1 Summary: March 19, 2024

The first Sagamore Lens Stakeholder Group meeting for the Freshwater Initiative was held on March 19, 2024. The purpose of the meeting was to provide an overview of the Freshwater Initiative, establish a shared understanding of freshwater systems, share data collection efforts, and discuss local observations about ponds and potential outcomes of the Freshwater Initiative.

Following introductions, Cape Cod Commission staff and consultants presented an overview of the Freshwater Initiative, information on the context and ecology of Cape Cod's ponds and lakes, findings on the economic impacts ponds and lakes have on the regional economy, and information and data from the Regional Pond Monitoring Program.

Participants were asked to provide input on the qualities of ponds that are important to their work, what they value about ponds, what information they would like to know from data collection, and what they are hoping the Freshwater Initiative will achieve, as described below.

OF THE FOLLOWING, WHAT DO YOU THINK ARE THE TOP 3 THREATS TO FRESHWATER POND HEALTH?

Participants were asked to select what they believe to be the three top threats to freshwater pond health. The top three selected, in order of largest threat to smallest were:

- Nutrient inputs (phosphorus and nitrogen)
- Stormwater runoff [tied]
- Pollutants (lead, sediment, pesticides, fertilizer, oil, and gas) [tied]

Other threats selected include:

- Erosion
- Algae growth, harmful algal blooms
- Low dissolved oxygen
- Cyanobacteria
- Overuse

Options not selected include:

- Shoreside development

- High water temperatures
- Fish kills
- Low water levels
- Invasive species
- Water clarity
- Litter

WHAT QUALITIES OF PONDS ARE IMPORTANT TO YOU OR YOUR WORK? WHAT DO YOU VALUE ABOUT PONDS?

Many meeting attendees commented on the importance and value of pond aesthetics, noting their physical and spiritual beauty. One attendee said ponds are a ‘happy place’ and somewhere they go to have a good time. The visual importance of ponds was also applied to the physical characteristics of water quality, with one participant noting pets like to swim but the water can sometimes be dangerous for pets.

Attendees also noted the value of pond recreation, particularly fishing and swimming, and the importance of public access to recreate. Fishing was also noted as relevant to the economy. Many attendees commented on safety. One attendee commented on the ability to use a pond effectively and safely in regard to how others are using a pond and gave the example of jet skis being used in a safe manner. Another attendee noted their pond has seen an increase in use, offering that jet skis are not allowed so more people can access the pond safely. Another attendee said ponds are a way to connect to the natural environment in a safe place. Attendees also noted that as important as how they are used is how ponds are protected.

Attendees also commented on the value ponds bring to property owners. One attendee expressed concern about how pond degradation may impact property values and desired to have more information on this topic available, such as examples of houses adjacent to degraded ponds selling for less or staying on the market longer due to the pond impairment.

One attendee noted the importance of ponds relative to their connection to drinking water.

QUESTIONS ON THE ECONOMIC ANALYSIS? DID ANYTHING SURPRISE YOU?

One attendee noted the economic analysis provided data on a snapshot in time, and asked if economic data collection would be ongoing. Commission staff said these data establish a baseline to help inform implementation, but future data could be collected if there is a need identified.

One attendee expressed surprise that the discrete choice experiment found that the amount of shoreline development was generally not an important factor when deciding which pond or lake to visit.

Another attendee was interested in findings related to signage and water quality. She said signage notifying people about water quality was talked about during Pond Network meetings. She expressed interest in a universal sign for Cape Cod, saying while signs may be posted at the beach or on the town website, people may be accessing a pond from their own dock or a private access point.

IS THERE SOMETHING ELSE YOU WOULD LIKE TO KNOW FROM THE DATA?

Attendees expressed interest in knowing more about cyanobacteria, toxicity, and contaminants, such as those that are anthropogenic or contaminants of emerging concern, and to know a pond's history of these issues.

One attendee asked if the data could help decide a broad management strategy, such as creating a total maximum daily load (TMDL) for phosphorus in ponds, or something to effect change, like TMDLs do for coastal waters.

Another attendee asked to clarify the relationship between ponds and nitrogen going into estuaries, using the example of Mashpee-Wakeby Pond, which is at the top of the watershed and has very poor water quality. She questioned the relationship of water leaving that pond and entering Popponesset Bay, and if a relationship could be established between the two. Commission staff noted that relationship has been defined to some degree in Massachusetts Estuaries Project models, that ponds are a source of nitrogen attenuation but there could be unique cases (of which Mashpee-Wakeby is one) where a stream or river (not groundwater) could transport nitrogen to the coast.

Another attendee said a website would be helpful to see the different pond treatments going on across the Cape, to research or compare management strategies across ponds with similar characteristics. The Commission has a pond restoration viewer, which is currently being updated and revised. The link will be provided as soon as it becomes available. Some attendees commented on restoration successes and failures.

WHAT ARE YOU HOPING THE FRESHWATER INITIATIVE WILL ACHIEVE?

One attendee expressed the need to undertake a diagnostic look at ponds and desired guidance for municipalities on setting priorities for pond management. She also asked for help seeking funding for such work and an interest in getting citizens to approve funding to remediate ponds.

Some attendees suggested more education for, and communication aimed at, citizens and tourists on the importance of pond health.

Another attendee expressed interest in the sharing of ideas across the region.

The Sagamore Lens stakeholder group will meet again on Tuesday, April 23, 2024, from 9:00 – 10:30 am at Old Sandwich Town Hall [New Location].

Meeting 1 Agenda

1. Introductions: Cape Cod Commission (Commission) staff will facilitate the introduction of meeting participants.
2. Freshwater Initiative Overview: Commission staff will provide an overview of the components of the Cape Cod Freshwater Initiative, a planning process to engage stakeholders to protect and restore Cape Cod's freshwater resources.
3. The Context of Cape Cod's Ponds and Lakes: Commission staff and consultants will provide a brief overview of the ecology of ponds within the Cape Cod region.
4. Understanding the Economic Impacts of Cape Cod's Freshwater: Consultants will provide a brief overview of the key findings from an economic study conducted on the impacts that Cape Cod's ponds and lakes have on the Cape's regional economy.
5. The Data: Commission staff and consultants will review observations from the first year of the Regional Pond Monitoring Program and discuss conditions contributing to the changes in water quality in Cape Cod's ponds and lakes on a regional scale.
6. Discussion: Participants will share their observations of Cape Cod ponds and discuss potential outcomes of the Cape Cod Freshwater Initiative.
7. Next Steps: Commission staff will discuss next steps for participants, including future meeting dates.

Meeting 1 Participants

Stakeholder Participants

- John Cotton, Town of Mashpee
- Ashley Fisher, Town of Mashpee
- Jennifer Copeland, Town of Bourne
- Darcy Karle, Town of Barnstable
- Brooke Withers, Town of Barnstable
- Susan Dangel, Save Mashpee Wakeby Pond Alliance
- Kim Comart, Falmouth Ponds Coalition
- Mike Morrison, Rideaway Adventures
- Michael Smith, Barnstable High School
- Luke Cadrin, Barnstable Clean Water Coalition

- Dave DeConto, Town of Sandwich
- Douglas Carson, Joint Base Cape Cod
- Shawn Cody, Joint Base Cape Cod
- Neel Aluru, Woods Hole Oceanographic Institution and Falmouth Water Stewards
- Leanne Drake, Town of Sandwich
- Jodi Cutler, Joint Base Cape Cod
- Paul Niedzwiecki, Cape Cod Chamber of Commerce

Cape Cod Commission Staff Present

- Kristy Senatori, Executive Director
- Erin Perry, Deputy Director
- Heather McElroy, Natural Resources Program Manager
- Tim Pasakarnis, Water Resources Analyst
- Tara Nye Lewis, Water Resources Analyst
- Michele White, Special Projects Coordinator
- Sarah Colvin, Communications Manager

Partners in the Regional Pond Monitoring Program

- Julie Hambrook, Association to Preserve Cape Cod
- Lynn Francis, Association to Preserve Cape Cod

Consultants to the Cape Cod Commission

- Liz Moran, Anchor QEA, LLC
- Charles Goodhue, Eastern Research Group