



Freshwater Initiative

Nauset, Chequessett, Pamet, Pilgrim Lenses Stakeholder Group

Meeting 1 Summary: March 19, 2024

The first Nauset, Chequessett, Pamet, Pilgrim Lenses 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. Threats selected, in order of largest threat to smallest were:

- Nutrient inputs (phosphorus and nitrogen)
- High water temperatures; algae growth, harmful algal blooms; low dissolved oxygen [tied]
- Erosion

Options not selected include:

- Cyanobacteria
- Overuse
- Shoreside development
- High water temperatures
- Fish kills
- Low water levels
- Invasive species

- Water clarity
- Litter
- Pollutants (lead, sediment, pesticides, fertilizer, oil, and gas).

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

Attendees noted the importance of ecosystem services ponds provide, clean water, recreation opportunities like swimming, and serving as tourist destinations and providing economic value. A few attendees mentioned supporting wildlife and biodiversity in and around ponds, along with the role ponds play in sustaining unique plant species.

Another attendee commented on the importance and value the historical context and uses of ponds bring to the local and regional community, talking about the history of ponds to people and how ponds were historically used.

One attendee expressed the need for more and better ways to improve pond degradation in a short period of time, noting it will be decades until some places are sewered. The attendee explained the importance of needing to know external and internal sources of impairment and expressed the need for more in-pond impairment solutions.

QUESTIONS ON THE ECONOMIC ANALYSIS? DID ANYTHING SURPRISE YOU?

Attendees questioned how other factors may influence such economic analyses including ponds that allow public access versus those that do not, those that may require parking passes or have fees to access, those that allow boats compared to those that do not, and those that have other amenities such as kayak storage.

One attendee questioned how cell phone data was used as part of the analysis. Charles Goodhue with Eastern Research Group, the firm that conducted the analysis, explained cell phone data was used from visits to five ponds to gather insight into the relative number of times people visit ponds, during which months of the year, and what times of day.

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

Attendees asked how data could be accessed. Commission staff are working with consultants to develop a web-based public portal for data access and viewing.

One attendee was surprised by the variability of pond temperatures from year-to-year, and asked what contributes to such variability. Factors can include weather (wind, air temperature, sun exposure) and tree cover along the shore, among others.

Another asked if dissolved oxygen is monitored at the sediment-water interface, which could be helpful to have. Commission staff said samples are taken 0.5 meters above the pond bottom, noting samples could be impacted by disturbed sediment if collected closer to the bottom.

WHAT ARE YOU HOPING THE FRESHWATER INITIATIVE WILL ACHIEVE?

Several attendees expressed interest in permitting solutions to aid local permitting boards in reviewing pond projects, such as through conservation commissions. Several attendees also said publicly accessible data would be useful, in addition to analyses of what that data shows.

One attendee would like to see encouragement of innovative solutions and more ways to combat pond degradation and impairment.

Attendees noted the need to balance development with pond protection and said resources to do such would be beneficial.

One attendee noted that the period in which seasonal rentals are used seems to have extended, in that people appear to be using rentals or seasonal homes for longer periods of time than they have in the past. She questioned how this might impact ponds, noting this is not new development but a change in how properties are being used, and how home usage might influence pond health. She said this information could help towns with pond management.

The Nauset, Chequessett, Pamet, Pilgrim Lenses stakeholder group will meet again on Monday, April 22, 2024, from 12:30 – 2:00pm at the Wellfleet Public Library.

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

- Sophia Fox, Cape Cod National Seashore
- Alex Bates, Town of Eastham
- Geraldine Ramer, Sustainable CAPE
- Barbara Brennessel, Friends of Herring River
- Laura English, Friends of the Pond Village Watershed
- Carl Perrson, Ocean Solutions, Inc.

Cape Cod Commission Staff Present

- Erin Perry, Deputy 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
- Sarah Colvin, Communications Manager

Partners in the Regional Pond Monitoring Program

- Sophia Feuerhake, Association to Preserve Cape Cod

Consultants to the Cape Cod Commission

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