

HARWICH Pond Coalition (HPC)

Inaugural Meeting Notes

Saturday July 13, 2024

Ann Frechette, Vice President of the Great Sand Lakes Association (GSLA, composed of four ponds: John Joseph, Bucks, Kiddies and Sand Lake) opened the meeting, which is sponsored by GSLA, Hinckleys Pond Association (HPA, represented by Scott Norum) and the Watershed of West Harwich (WASH, represented by John Ketchum). There were about 90 people in the audience.

Harwich works hard to protect the Town's freshwater resources, including its ponds. But it is under-resourced in many areas, including the Town Dept. of Natural Resources. We can help the Town in this mission. Ann surveyed the audience to find out which ponds were represented. The lack of people from the smaller ponds is a problem because their users can lose out on the chance to help shape the HPA's actions, especially political goals. If you know people from these smaller ponds, or others from ponds lightly represented today, please encourage them to sign up with the HPA.

The audience then spoke of their concerns about the issues outlined on Slide 5 of the presentation.

Water Quality: Ann summarized the four kinds of testing that occur on Harwich ponds:

1. "Baseline" testing, also known as the PALS program (Pond and Lake Stewards) is coordinated by the Harwich Department of Natural Resources. The testing itself is done by resident volunteers, including water clarity (Secchi disk), dissolved oxygen, temperature, nitrogen and phosphorus concentrations. Phosphorus is believed to be the key element for cyanobacteria blooms, which are toxic and close ponds to swimming. Don Yannuzzi (Harwich Director of Natural Resources), who recently replaced Heinz Proft, is the contact person for questions about this testing. Some ponds may not have been tested last week (the first week of this summer's schedule). Additional volunteers are needed. This is a great way to get to know your pond and meet your neighbors.
2. The Association to Preserve Cape Cod (APCC) tests for cyanobacteria at least every two weeks during the summer. They provide alerts for people who sign up for them, and a map with the current status of all Cape Cod ponds. Alerts are posted right now for Upper Mill Pond and Lower Mill Pond in Brewster.
3. Barnstable County tests for *E. coli* bacteria at least once a week during the summer and issues warnings on its website when levels are high.

4. The Association to Preserve Cape Cod (APCC) is in the second year of a three-year grant to test the waters of fifty Cape Cod ponds, sampling for the same “baseline” measures as the PALS program plus a few more.

Pond Health: Excess nutrients (especially Phosphorus) are the biggest threat to pond health. Higher temperatures also change the biology of the ponds but there’s nothing to do about that in the short term. The main source of excess nutrients are septic systems (up to 80% of total Phosphorus), fertilizers and road runoff. The GSLA website has a great Scientific American video about excess nutrients:

[What’s Turning Cape Cod’s Water ‘Pea-Soup Green’? | Scientific American](#)

Climate change (specifically intense rainstorms) stress existing runoff diversion infrastructure. A Bucks Pond representative reported that the Town was very responsive in installing new berms when existing structures were unable to properly control runoff.

Homeowners who import traditional suburban lawns to Cape Cod’s sandy soils use fertilizers which add to excess nutrients in the ponds. These landscape choices also represent deserts for pollinators, native plants and animals. A “Cape Cod landscape” can be a beautiful, productive place for all native species.

Citizen petitions to reduce the application of fertilizers to private properties have been introduced at Town Meeting the past two years but failed. The number of citizens voting at Town Meeting is a very small percentage of the population. Harwich Pond Coalition could have a key role in encouraging better education about fertilizer use and higher rates of participation in Town Meeting.

Invasive plant species are competing against native species in some of our ponds, principally Phragmites (a common reed), Purple Loosestrife and Milfoil. Some ponds have organized efforts to monitor and manually remove these plants, but it is a labor-intensive process that requires repeated efforts across multiple years. This is another great opportunity for collaboration and education among ponds. All such efforts require a Town permit (valid for one year) from Amy Usowski, Harwich Conservation Administrator. Some species, such as Phragmites, may spread from adjacent areas to ponds, so control efforts should not be restricted solely to freshwater areas. Milfoil can be introduced to a pond on boats that have been used in other places. Some NY State ponds no longer allow boats to be brought in without inspection. Harwich residents and visitors should be encouraged to clean their boats before bringing them to Cape Cod waters, another Harwich Pond Coalition opportunity for education and collaboration.

Massachusetts Department of Conservation and Recreation has information on its website about invasive species and offers “weed watchers workshops” to help people identify and

control invasives. Harwich Pond Coalition could help coordinate these workshops for its members. This will be a great opportunity for volunteers to participate.

The only proven approach for reducing Phosphorus levels in ponds is application of aluminum salts, which bind to Phosphorus and precipitate it to the bottom of the pond. This treatment was applied to Long Pond many years ago, mainly at private homeowner expense, and seems to have helped. Since then, the Town has funded treatments at Hinckleys Pond (2019) and Skinequit Pond (2023). Skinequit has accumulated 10 feet of nutrient-laden muck over the past century or more¹. The Hinckleys treatment appears to have been successful in reducing Phosphorus levels. It's too early to tell at Skinequit. Alum is only a temporary solution because excess nutrients continue to flow into the ponds. The treatments are expensive (hundreds of thousands of dollars).

Public access to ponds for swimming, fishing and boating is varied across Harwich ponds. Where access exists, Town needs to maintain safety. Some Bucks Pond access routes have become treacherous, and some swimming areas have been clogged with weeds so that they are no longer usable. These issues should be reported to the Town Conservation Administrator (Amy Usowski). Amy can tell you which ponds have public access, but there is no general public source for this information. A sheet or page for each pond's profile would be another great project for the Harwich Pond Coalition.

Ann introduced Mike Lach, Executive Director of the Harwich Conservation Trust (HCT). The HCT was established in 1988 as a local land trust charged with protecting the natural environment of Harwich. Since then, HCT has preserved 745 acres, starting with a quarter-acre lot overlooking Mill Pond back in 1990. In its Priority Ponds Program, HCT has protected 283 acres within the watershed of 14 ponds, including more than 10,000 feet of shoreline. HCT land and pond protection takes many forms. Owners can donate land outright, sell to HCT including at a discounted price, or agree to a conservation restriction

¹ According to the Town-funded management report written before the Skinequit Alum treatment: "Of greatest historical concern is the now defunct cranberry bog which operated for decades at a time when environmental controls were limited to absent. The load of organic matter and nutrients to Skinequit Pond was likely large for many years. The likely scenario is that water was pumped from the pond to irrigate and flood the bog. Irrigation water would not have typically returned to the pond, but flood waters would have gone back to the pond with high quantities of organic matter and nutrients. The bog occupied a little over 9 acres, half the area of the pond, so a typical harvest flood event would have involved only about 5-7% of the pond volume, not enough to have a major impact in any one year, but the load mostly winds up in the sediment and that eventually creates a serious oxygen demand and internal phosphorus loading problem."

which limits the development of a parcel of land for all time, regardless of future ownership. All of these options can offer potential tax advantages.

The missions of the HCT and the Harwich Pond Coalition are totally harmonious, and the two organizations continue to discuss the best ways to collaborate in the future.

In closing, Ann promised to list all of the resources mentioned so far on the new Harwich Pond Coalition website (harwichwaters.org) and asked participants to volunteer for leadership and other roles. Lively discussion and numerous signups ensued.