

CONSERVATION COMMISSION

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ENVIRONMENTAL PLANNER/ CONSERVATION AGENT

HOLLY JONES, MSCJ

OFFICE MANAGER/SR. ADMIN. ASST.
LYNN MARCHAND

Conservation Commission Meeting

March 31, 2021

7:30 P.M.

Present: Stephen Washburn -Chairman, Kristen Capezio -Vice Chair, Carley Rocklen -Treasurer, Heather Miller, Catherine Walsh, and Peter Bamber

Also Present: Holly Jones, Environmental Planner/Conservation Agent.

Please note the March 31, 2021 meeting was held remotely using GoToMeeting software pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A §18, and the Governor's March 15th Executive Order imposing strict limitations on the number of people that may gather in one place. Although no in-person attendance of members of the public occurred, the town of Norwood made every effort to ensure that the public can access the proceedings in real-time via technological means.

Special Presentation:

1. How Clean is Your Stream? Water Quality Problems and Solutions in Norwood.

Hosted by Ian Cook, Executive Director, and Declan Divine, Environmental Science and Engineering Fellow, of the Neponset River Watershed Association.

- Neponset Background
Mr. Divine explained that the Neponset watershed is all the land that drains into the Neponset river and it runs approximately 30 miles from Foxborough to Quincy. There are 14 Towns and Cities along the river, 330,000 people that live within the watershed, and 120,000 people that get their drinking water from the groundwater within the watershed. The Neponset River Watershed Association (NepRWA) began in 1967 with a mission to clean and protect the Neponset and its tributaries.
- Sampling Program & Water Quality Results and Trends
The Citizen Water Monitoring Network (CWMN) has been sampling and tracking water quality to track changes over time and to identify where to focus resources. There are 41 sample sites and over 60 volunteers.
Map showing ponds and brooks within Norwood that are being monitored.
Sampling is done once a month between May and October as that's when many of the water issues get the worst.
3 questions: How "healthy" is the water in 2020? How has water quality changed over time? How does water quality vary throughout the watershed?
There were 9 parameters tested with a focus on E. coli, Phosphorus, and Dissolved Oxygen which are the best indicators for overall river health and safety.
E. coli bacteria is an indicator of fecal contamination and associated with other pathogens, and pollution from sewer system problems and stormwater runoff.
Of the Neponset River samples tested for E. coli, 44% were swimmable, 31% were boat-able, and 25% were unsafe for recreation. E. Coli levels are higher after rainfall.
Norwood had unsafe levels at Germany Brook and Meadow Brook.

Phosphorous is a nutrient, transported by stormwater (fertilizer & organic material such as leaves and grass) and can lead to algal blooms which blocks light from getting into the stream/pond and makes it hard for fish to live. Norwood had 55% unhealthy levels of phosphorus in the samples collected. (>0.05 mg/L)

Dissolved oxygen (DO) is essential for fish and aquatic insect survival. Three things that can affect DO are flow (more flow=higher DO), water temperature (colder temperatures can hold more DO), and decomposition (algae, leaves, etc uses a lot of oxygen). In 2020, of the Norwood samples collected, 76% had healthy levels compared with 2006-2019 samples which had an average of 85% healthy levels.

- Tour de Norwood
 - Meadow Brook chart showing phosphorus levels from 2007-2020.
 - Hawes Brook chart showing E. coli levels from 2006-2020.
 - Traphole Brook -best cold water fishery in the Neponset River and one of the best in the greater Boston area with a healthy population of Eastern Brook Trout (native fish species). Chart showed fairly constant, healthy DO levels from 2006 to 2020.
 - Water quality overview for Norwood:
 - E. Coli -usually safe, except after rain
 - Phosphorus -poor, stormwater pollution
 - Dissolved Oxygen -pretty good, varies seasonally
- Next Steps (to improve water quality)
 - Individual
 - rain gardens
 - not dumping into catch basins and storm drains (oil, trash, pet waste)
 - reporting of contamination (yourcleanwater.org or NepRWA)
 - modest use of salt for ice management
 - reduce or eliminate use of fertilizer
 - leaves and grass clippings (compost them)
 - preventing runoff from personal property
 - using less water
 - servicing septic system regularly
 - Community
 - Best Management Practices (BMP) -structural installation that offers stormwater opportunities to soak into the ground.
 - filter pollutants and increase groundwater recharge and stormwater utility
 - Land and water conservation
 - Education
 - Working with DPW
 - Targeted outreach in areas identified as a problem
 - Upgrading old infrastructure
 - Updating stormwater bylaws

Board members asked questions and provided comments regarding sampling, targeted areas and outreach, combining efforts between ConCom and the Neponset RWA, grants and funding sources, creating or utilizing crowd source observational mobile apps. for reporting, branding catch basins/adding QR code for reporting, and having an annual meeting for continued collaboration with ConCom and the Neponset River Watershed Association.