ECOS Field Demo of US EPA Office of Research and Development (ORD) & Rhode Island Research

Mashapaug Pond, Providence, RI

This field trip will visit Mashapaug Pond, an urban pond with a long history of pollution and water quality concerns that have resulted from a variety of activities within the watershed. Mashapaug Pond is included on the state 303d list of impaired waters for fecal coliform, excess algal growth, low dissolved oxygen, total phosphorus, and PCBs in fish tissue. Health advisories due to harmful algal blooms (HABs) have been issued by the state for Mashapaug Pond every year except one since 2011 (see August 2024 press release). Given these challenges, Mashapaug Pond has been a focus of HABs research for EPA ORD's Atlantic Coastal Environmental Services Division in Narragansett, RI. RI DEM is also exploring enhanced stormwater controls in the watershed (news story).

We will be outside, and there is little shade. If it is a hot day, you may want to bring water and a hat.

September 6, 2024

12:20 pm Depart from lobby of Hotel Viking and travel by rental cars or taxi/Uber to field demo site (~40 minutes)

1:30 pm Mashapaug Pond

350 Niantic Ave, Providence, RI 02907 (Turn onto Access Rd. for parking)

EPA ORD's Atlantic Coastal Environmental Services Division HABs team will provide an overview of research being conducted at Mashapaug Pond, including tools they use to understand and forecast HABs, and discuss ongoing collaborations with state and local partners. *Tim Gleason, EPA ORD*

- Demonstration of novel HAB monitoring approaches (in-situ and remote sensing) that are being evaluated
 Jeff Hollister, Stephen Shivers and Darryl Keith, EPA ORD; Jakob Stankoski, ORAU contractor
- Social science research to understand the social and recreational use impacts of ponds affected by HABs
 Kate Mulvaney, EPA ORD
- Collaboration with state and local partners in the watershed

Rhode Island's stormwater management efforts (RI DEM)

3:00 pm Share rides/return on your own to Providence or Boston for flight home

(~10 minutes to T.F. Green International Airport in Providence)

For More Information

CyAN HABs Forecasting research: https://www.epa.gov/water-research/cyanobacterial-harmful-algal-blooms-forecasting-research

HABs and Remote Sensing research: https://www.epa.gov/water-research/harmful-algal-blooms-monitoring-and-remote-sensing-research

CyAN website: https://www.epa.gov/cyanoproject

CyAN Webapp: https://www.epa.gov/water-research/cyanobacteria-assessment-network-application-cyan-app

EPA's Report on Environment CyAN regional metric indicators: https://cfpub.epa.gov/roe/indicator.cfm?i=95

EnviroAtlas CyAN lake (spatial extent and temporal frequency) metrics: https://enviroatlas.epa.gov/enviroatlas/interactivemap/ (under Harmful Algal Blooms tab on left side in pink)

Workshop Report to Improve HABs Risk Communication throughout the Southeast New England Program Region: https://www.epa.gov/snep/working-improve-habs-risk-communication-throughout-snep-region