SCIENTIFIC & TECHNICAL ADVISORY COMMITTEE

Meeting Agenda



DATE & TIME: October 29, 2021 -- 9:00 a.m. to 12:00 p.m.

VIRTUAL MEETING: Zoom: https://udel.zoom.us/j/99628698900 Passcode: science

Phone: 1-646-876-9923; Meeting ID: 996 2869 8900

AGENDA ITEMS

Call to order, Welcome, New Members, Introductions - Jenn Volk, Chair

Announcements

Old Business

Wastewater subcommittee update -- Michelle Schmidt, CIB

Continuous water quality monitoring network - Andrew McGowan and Marianne Walch, CIB

Discussion of plans for submission of 2020 data to DNREC, and comments on 305(b)/303(d) report methodologies.

New Business

State of the Bays report update – *Marianne Walch and Andrew McGowan, CIB; Andrew Homsey, Univ. of Delaware IPA*

Marianne will provide an update on the report timeline and review/approval process. Results of analyses for some of the indicators (including water quality, nutrient loads, land use/land cover changes, impervious surface, and salt marsh acreage/condition) will be presented for discussion by STAC.

Tracing the sources of phosphorus along the salinity gradient in Love Creek Watershed using multi-isotope proxies - Deb Jaisi, Univ. of Delaware CANR

Understanding of the phosphorus (P) load sources in watersheds is limited, largely due to lack of appropriate methods. Dr. Jaisi will discuss multi-isotope proxies that his lab is applying to track P sources and evaluate their relative contributions in Love Creek, a tributary of Rehoboth Bay. Comparative analyses of concentrations and isotopes of carbon, nitrogen, and phosphate oxygen in waters and their potential land sources (agricultural soils, forest soils, septic wastes, and plant debris) revealed that plant debris and soils from forests are dominant sources of P in the freshwater region of the creek. The contribution of terrestrial P sources gradually decreased along the salinity gradient ,and agricultural soil sources gradually dominated in the saline water portion of the creek. Overall, these results provide improved insights into potential sources and biogeochemical processes in the Love Creek estuary, which are expected to be useful for water quality monitoring programs.

Living shoreline project on the Lewes-Rehoboth Canal: lessons learned – *Alison Rogerson, DNREC Wetlands Monitoring and Assessment Program*

Monitoring results will be shared from a multi-year living shoreline demonstration project constructed on the Lewes-Rehoboth Canal. The design and drive for the most recent phase of the project was rooted in monitoring done there as a control site to a 2014 project. Immediate beneficial changes were observed. This project was also a good example of partner collaboration and community involvement.

Open

Adjourn

Next Meeting: WEDNESDAY, February 16, 2022 9:00 a.m. to 12:00 p.m.