## SCIENTIFIC & TECHNICAL ADVISORY COMMITTEE

Meeting Agenda



DATE & TIME: July 26, 2019 -- 9:00 a.m. to 12:00 p.m.

LOCATION: DNREC Lewes Field Facility, end of Pilottown Road, Lewes

Meeting called by: Scott Andres, Chair

## **AGENDA ITEMS**

Call to order, Welcome, Introductions

Announcements

Construction of an innovative 600 ft regenerative stream channel at the head of tide mill dam in Bishopville Maryland is described. At the insistence of local residents, a major portion of the 4-acre pond was to be maintained upon modification of the 4-ft sheet-metal dam. The dam was replaced with a series of four riffles and step-pools that raised each water level by 1 ft over a distance of 30 ft. Completed in Dec 2014, monitoring over the past 5 years documents the consistent passage of alewife and white perch to over 7 miles of freshwater stream in the St Martins River system.

Shifts in global temperature as well as carbon dioxide are expected to have potentially profound effects on phytoplankton communities, with possible cascading consequences for marine food webs. We studied how climate change (rising temperature and/or ocean acidification) influence the physiology of three major HAB species originating from the Inland Bays. Our study showed that climate change condition will result in major physiological changes, such as toxin production and fatty acid profiles of the studied HAB species, which in turn can have negative effects on trophic transfer.

Update on summer 2019 status of Inland Bays algal blooms, macroalgae, and baygrasses,

Update on Inland Bays Modeling Effort

## **New Business**

- Transition in STAC leadership
- 2021 State of the Inlands Bays

Adjourn