



Barnstable Town Council

Water Resources

Management Update

Embayment Monitoring Program

Department of Public Works

October 20, 2022

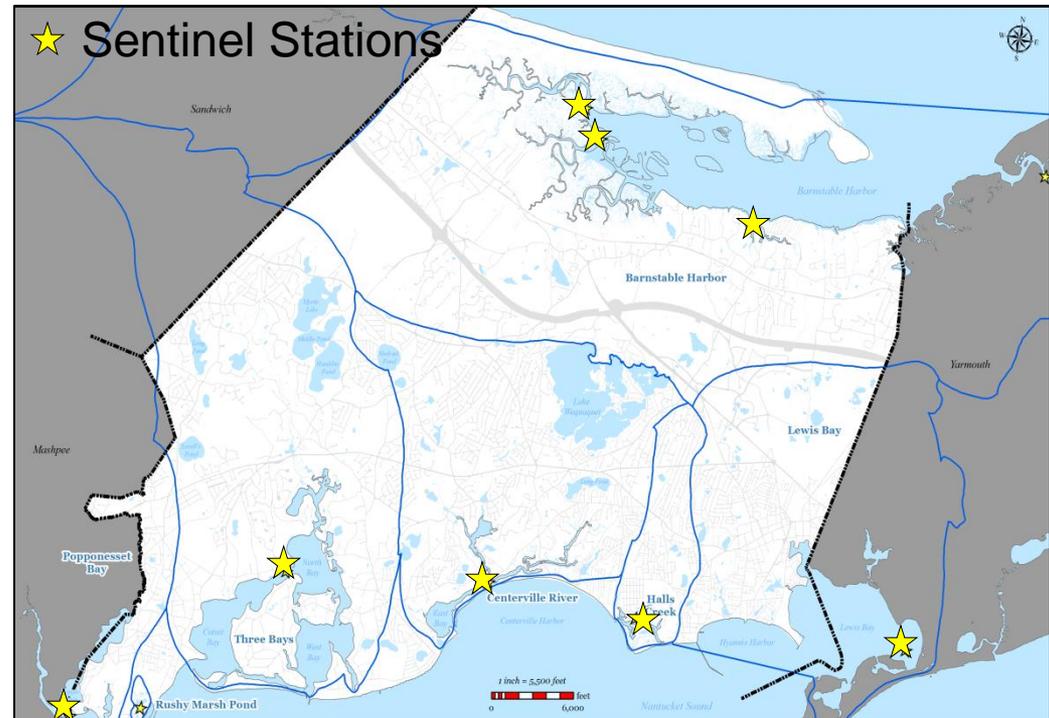


Embayment Monitoring Program Overview



- **General**

- Annual monitoring program
- Data collected from 70 stations
- Initiated in 2002
- Collaborative effort involving:
 - Town staff
 - citizen volunteers
 - Barnstable Clean Water Coalition
 - adjacent Towns, and
 - SMAST

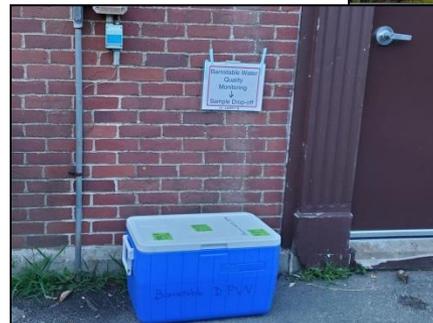
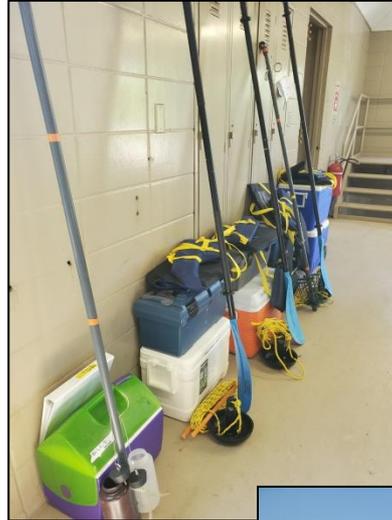




Embayment Monitoring Program Field Sampling



- Annual training for roughly 25-30 samplers divided among ~15 teams
- Sampling occurs during a mid-ebb tide between 6-9AM from July – Sept
- Field data collected for water clarity, dissolved oxygen, and temperature.
- ~ 300 samples are collected each year over four sampling events
- Samples are delivered to SMAST for sample processing

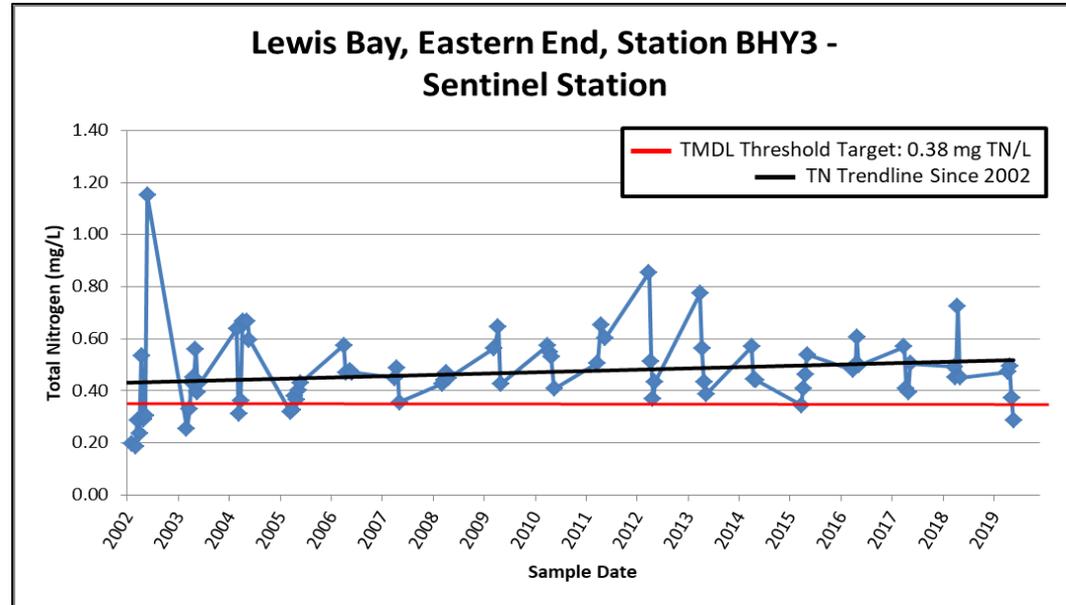
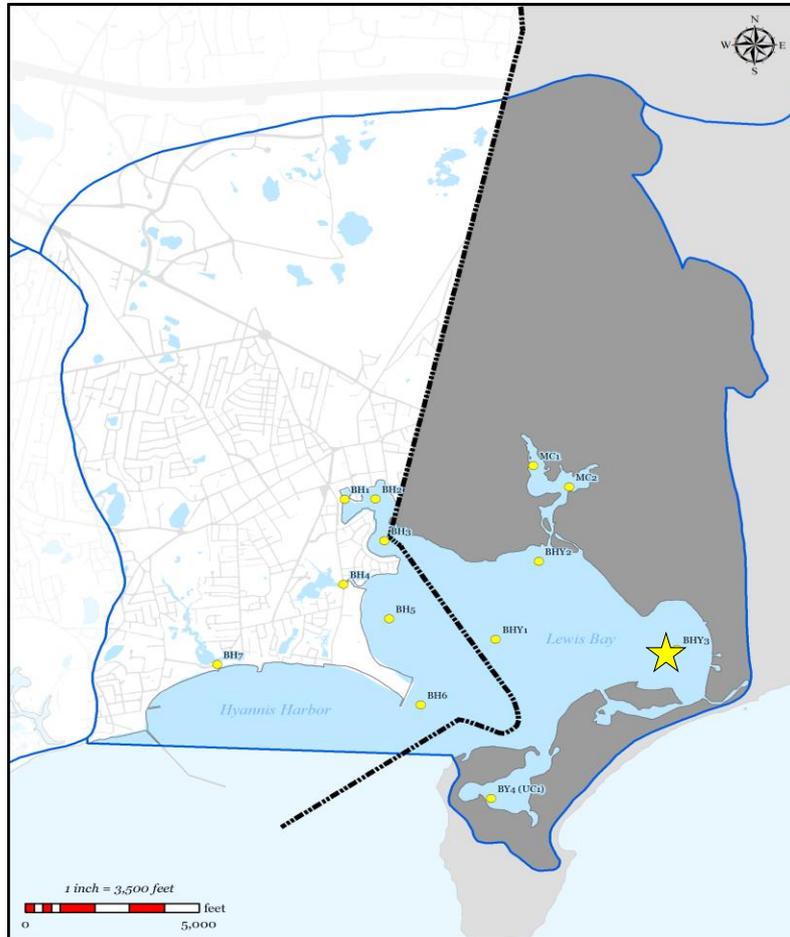




Embayment Monitoring Program Results



- Lewis Bay

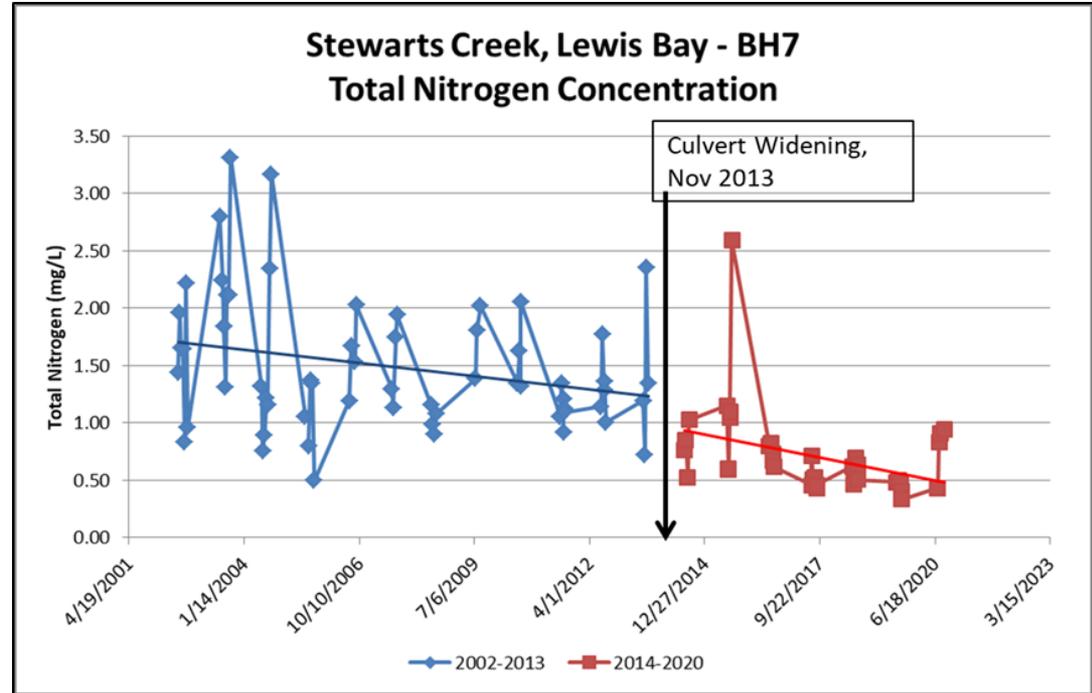
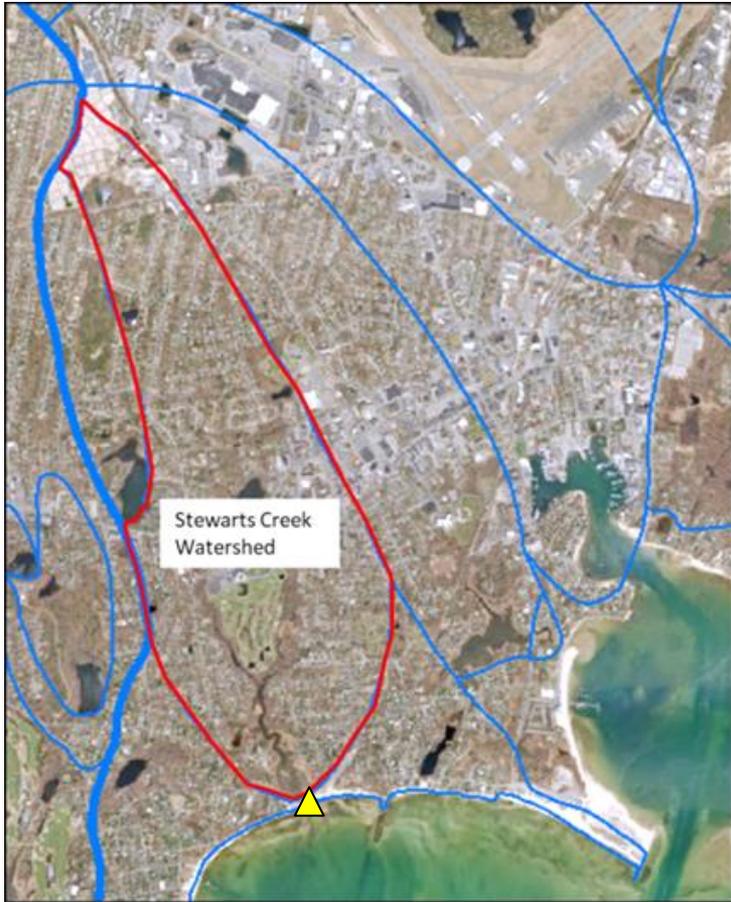




Embayment Monitoring Program Results



- Stewarts Creek

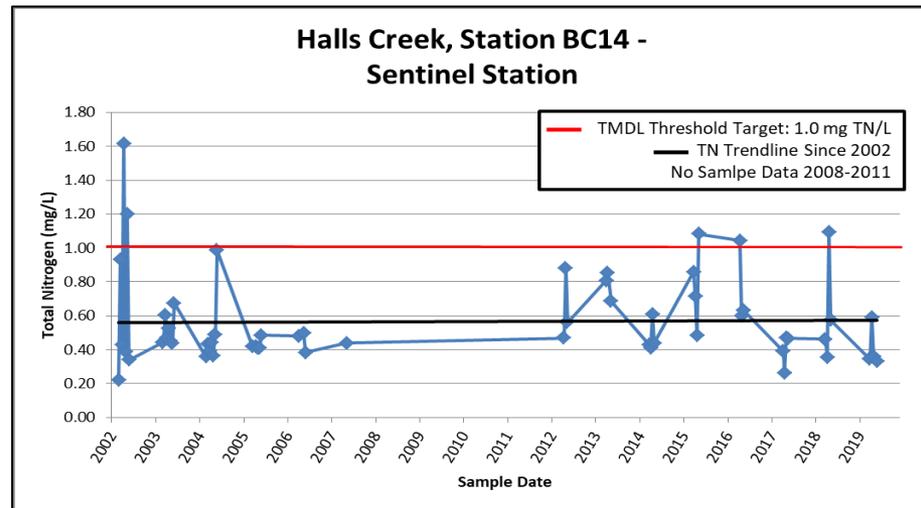
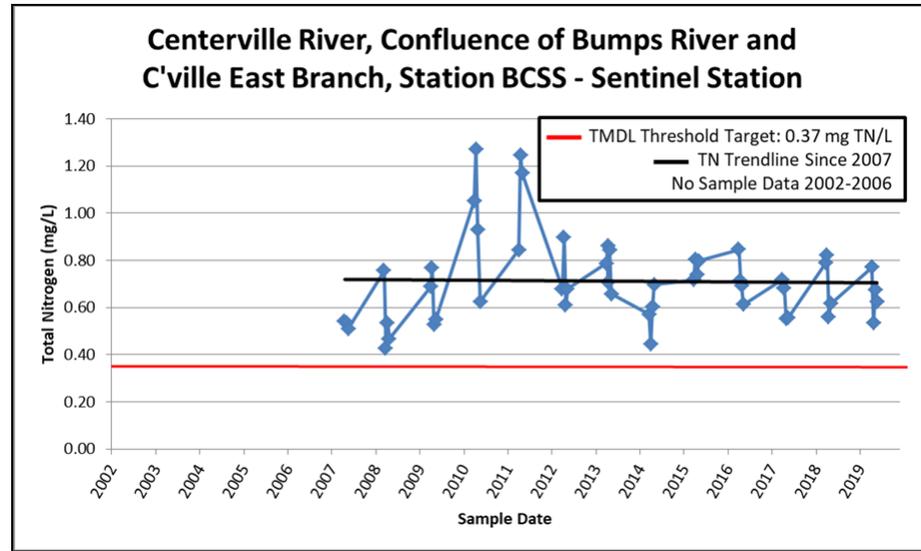
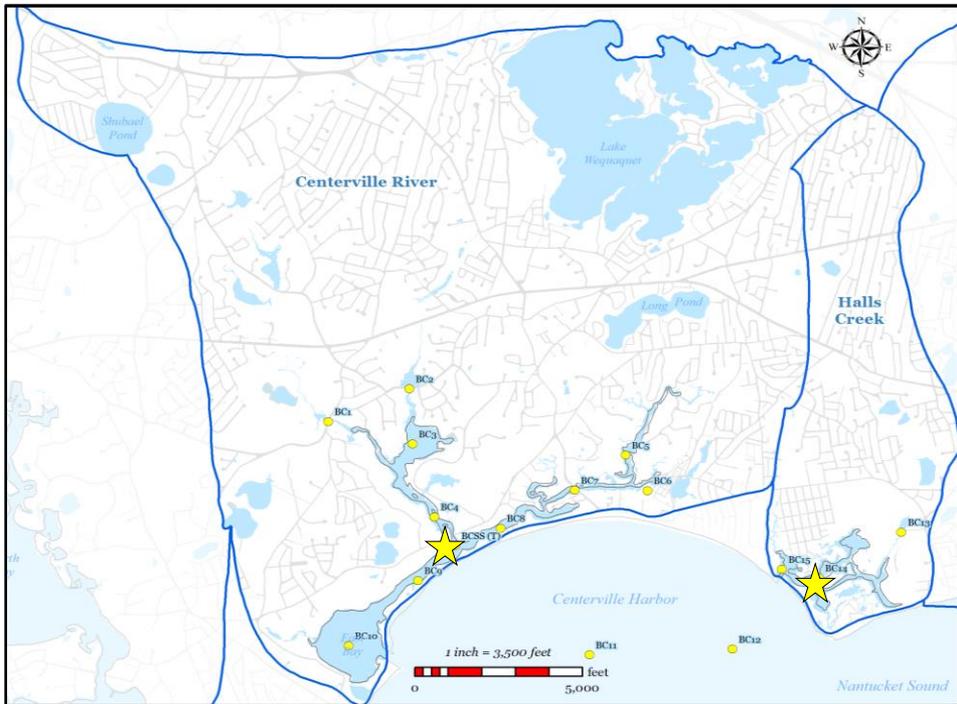




Embayment Monitoring Program Results



- *Centerville River*
- *Halls Creek*

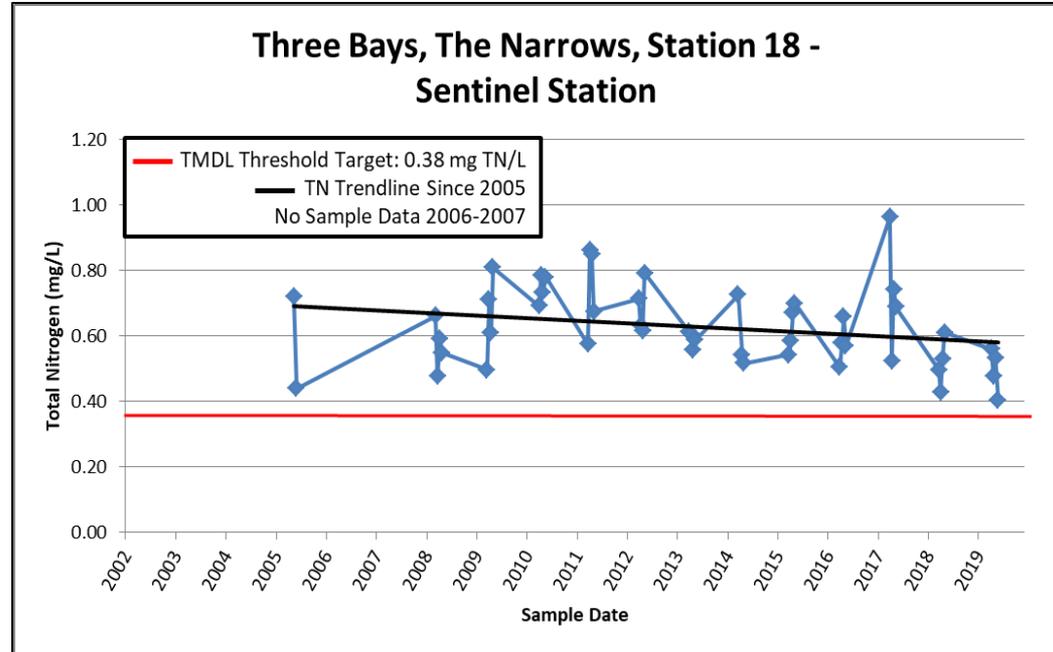
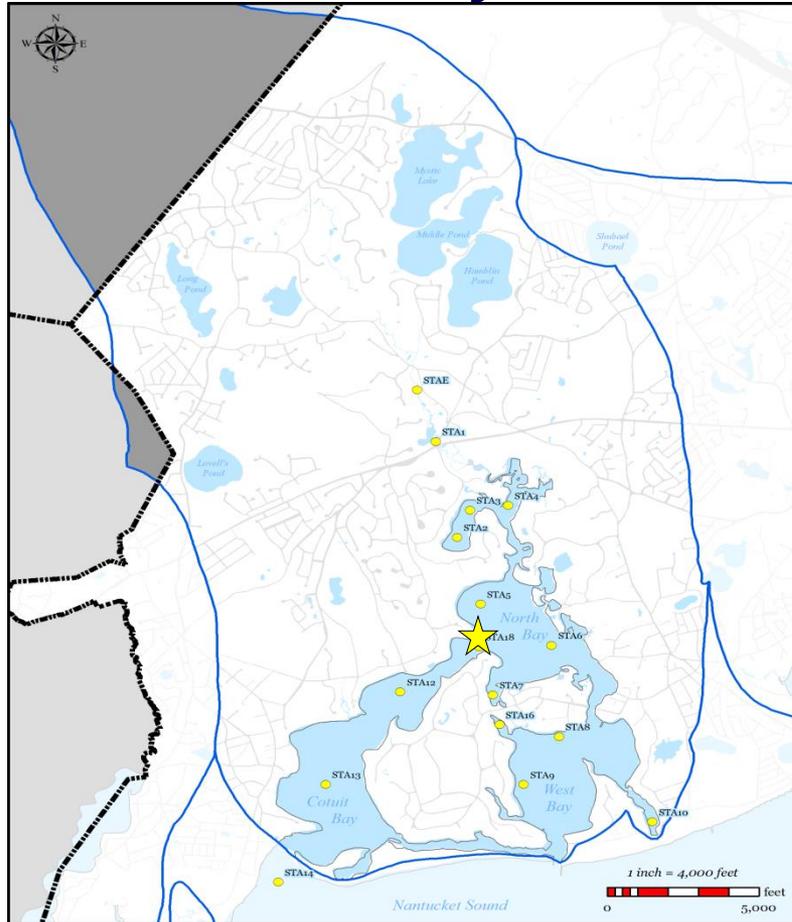




Embayment Monitoring Program Results



- Three Bays

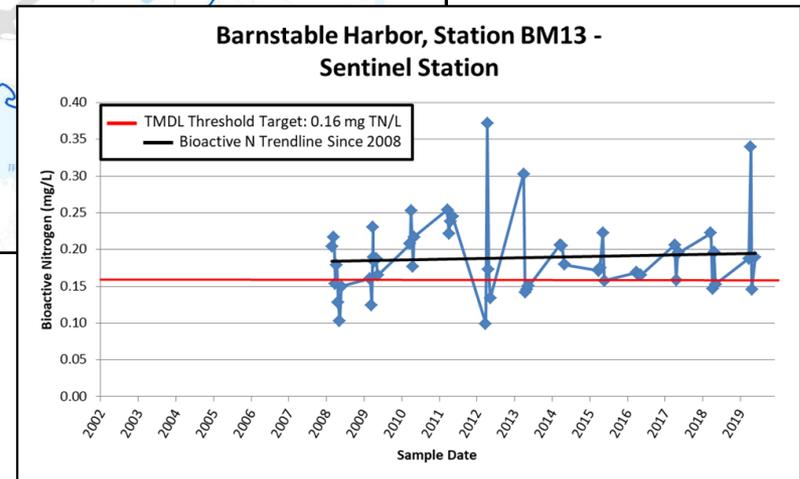
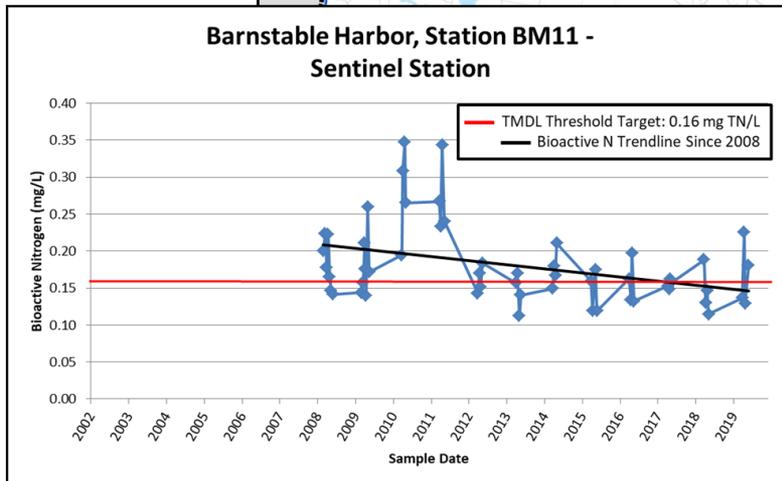
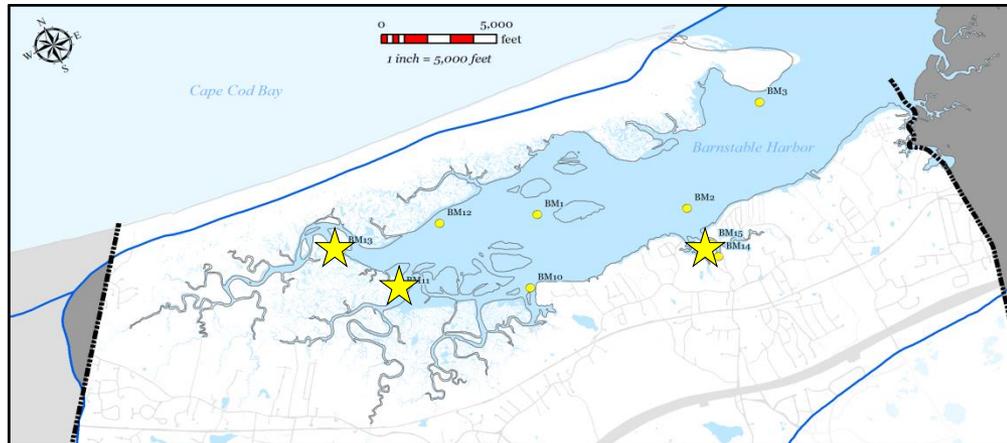




Embayment Monitoring Program Results



- Barnstable Harbor, Great Marshes*

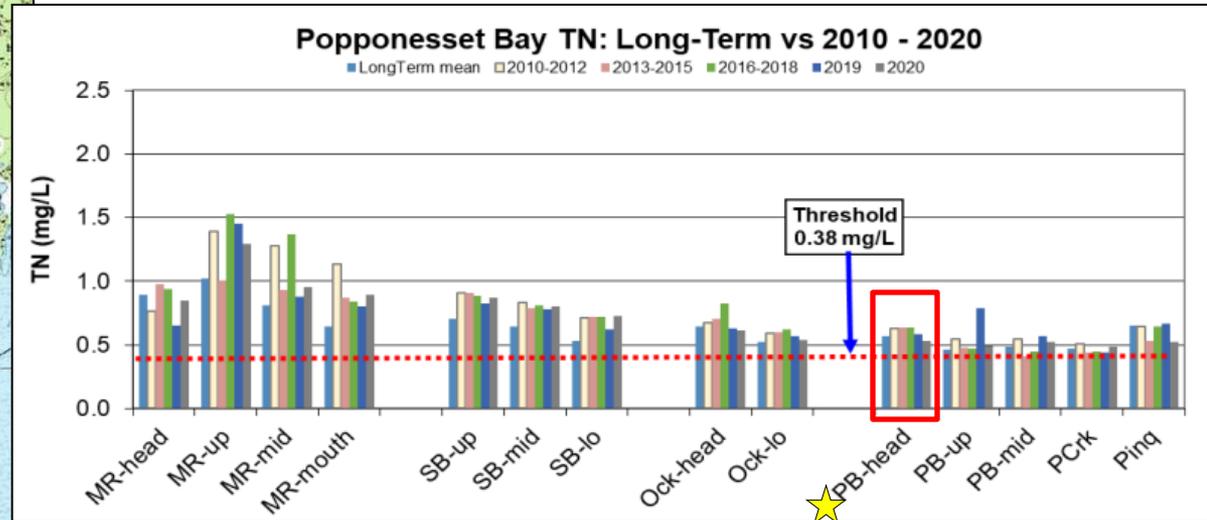




Embayment Monitoring Program Results



- Popponessett Bay (Shoestring Bay)

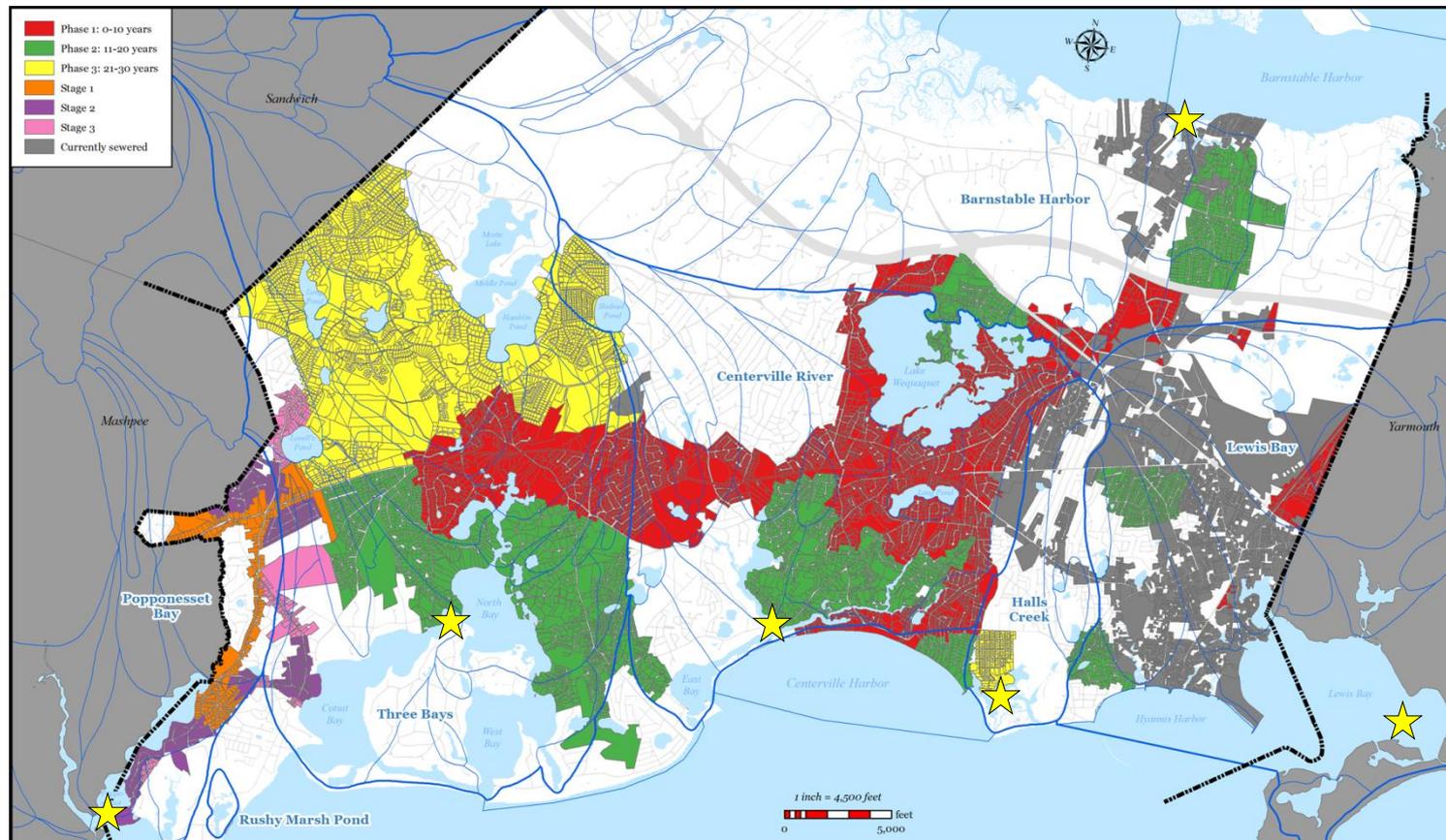




Embayment Monitoring Program Looking Forward



- This monitoring program provides the baseline data for our estuaries and the ability to track nitrogen improvements as we implement our CWMP





Discussion?

