

Notes from STAC Meeting Discussion of Monitoring Plan September 18, 2015

Suggestion to review the monitoring plans of other programs:

- Other NEPs
- Chesapeake Bay Program
- National Coastal Assessment

Areas to focus on:

- *Bill Ullman*: Figure out how people use the estuary; focus on areas of the estuary that are most used
- *Robin Tyler*: Minimizing and tracking disruptive effects on the system
- *Jenn Volk*: Land use, BMPs, sea level rise, future land use
- *Andrew Homsey*: Tidal wetlands condition
 - Sea level rise, degradation, shorelines, vegetation changes
 - Aerial photography
 - Ability of wetlands to migrate
- Habitat Loss: GIS, remote sensing
- *Scott Andres*: Population, demographics and projections; this has a large impact
- Set aside areas to protect important resources
- *Joanna York*: Must consider projections to guide monitoring plan. Use models, think strategically about monitoring needed based on projections.
- Cost/benefit analyses (economics, ecosystem services). What has been spent already, what will be lost.
- Land surface loadings, changes (agriculture, wastewater treatment, development, etc.)
- *Robin Tyler*: Long-term seaweed monitoring – an important indicator of eutrophication. Last done in 2012. Suggest doing it every five years?
- Monitoring in South Bethany:
 - ~12 Citizen Monitoring Program stations there (salinity, temp, clarity, DO); three sites monitor bacteria and nutrients; three continuous monitors
 - The town collects and analyzes data
 - Local tide gages are monitored and analyzed (sea level rise)
- *Jim Sadowski*: There has been no follow-up on actions taken in the Bays (e.g. NRG plant changes, dredging) to determine if expected impacts have happened. Only short-term studies. We must know if management actions have worked.
- Monitoring to determine the impact of oyster farming.
- *John Clark*: DFW tracks fish kills (since 1981)
- Microbial source tracking
- Phytoplankton monitoring: biomass (chl A), trends, changes in community composition

Historical Data Sources: South Bethany WQ Committee, Robin Tyler and DNREC Environmental Laboratory Section, Division of Watershed Stewardship, Bill Ullman

Key to coordination is educating all partners on what others are doing. CIB needs to do this on an ongoing basis, through workshops, symposia, special STAC meetings, etc.