



## Scientific, Technical Assessment and Reporting (STAR) Team Meeting

11:00AM – 2:00PM May 22<sup>nd</sup>, 2014

<http://www.chesapeakebay.net/S=0/calendar/event/21548/>

### NEXT MEETING

#### June 2014 STAR Meeting

Date: June 26<sup>th</sup>, 2014

Time: 10:00AM – 1:00PM

Location: Joe Macknis Memorial Conference Room (Fishshack) CBPO

Conference Line: 1-866-299-3188 code 410-267-5731

Adobe Connect: <https://epa.connectsolutions.com/star2> (enter as guest)

Event webpage: <http://www.chesapeakebay.net/S=0/calendar/event/21549/>

### MINUTES

**Welcome, Introduction, Updates, and Announcements – William Dennison (STAR Chair), Mark Bennett (STAR Vice Chair), Peter Tango (STAR Coordinator)**

STAR Leadership will give an introduction and request updates from the Goal Implementation Teams (GITs) and STAR Workgroups.

- [Chesapeake Modeling Symposium – Annapolis, MD May 28<sup>th</sup> – 29<sup>th</sup>, 2014](#)
- [Conference on Ecological and Ecosystem Restoration – New Orleans, Louisiana July 28<sup>th</sup> – August 1<sup>st</sup>, 2014](#)
- [IWA Specialized Conference on Watershed and River Basin Management – San Francisco, CA September 9<sup>th</sup> – September 12<sup>th</sup>, 2014](#)
- [Chesapeake Watershed Forum – Shepherdstown, WV September 26<sup>th</sup> – 28<sup>th</sup>, 2014](#)
- [Mid-Atlantic Regional Water Conference – Shepherdstown, WV September 24<sup>th</sup> – 25<sup>th</sup>, 2014](#)
- [Restore America's Estuaries 7<sup>th</sup> National Summit – Washington, D.C. November 1<sup>st</sup> – 6<sup>th</sup>, 2014](#)
- Four new employees through UMCES:
  - Web developer, Web Designer, Cloud Computing Expert, and Data Analyst.
- [Fisheries GIT Meeting – June 4<sup>th</sup>, 2014](#)
  - Location: Virginia Institute of Marine Science, Gloucester Point, VA
  - One of the main topics is the climate change effects on fisheries.
- The Fisheries GIT has been working to organize an initial review of the winter dredge survey in March when the data is first available.
  - **ACTION:** Once Rebecca Murphy (the new Data Analyst) is here, STAR and the Fisheries GIT should bring this back to a meeting to discuss the possibilities of this.
  - Is the discussion of trends vs. progress confusing for the public? STAR should aligning the dates better to produce a story with the results in order to help the public understand.

- [Watershed GIT Meeting – June 12<sup>th</sup>, 2014](#)
  - Location: Virginia State Arboretum at Blandy Farm
  - Two new workgroups – Track Ad Hoc WG and Local Engagements WG
- [EC Meeting to sign the new Bay Agreement – June 16<sup>th</sup>, 2014](#)
  - Location: State House in Annapolis, MD
- [National Water Quality Council Meeting](#)
  - Range of citizen science monitoring and continuous monitoring presentations.
  - UMCES and CBP are currently working on an RFP to work with high resolution data.
  - Connect universities to expand their statistical training to deal with continuous data.
- Conowingo Dam Update
  - Working with Exelon to improve monitoring at the Conowingo Dam.
  - USGS monitored the storms over the past weekend at all 3 stations and a couple of the tributaries.
  - MDNR trained the Exelon contractors. For the monitoring they will be using the same SOPs, equipment, and the same protocols as the non-tidal network sites, which consist of monthly samples plus eight storm events. The samples will be analyzed in the MDNR labs.

### **Communications Discussion – All**

STAR members will discuss communication ideas including upcoming reports, studies, and videos to recommend to the Communications Workgroup.

#### **Discussion**

- NOAA Habitat Blueprint – Choptank has been selected as a habitat focus area. There are potentially opportunities for collaborative projects. The effort will begin with oyster restoration, but NOAA is also interested in other issues, such as water quality monitoring, fish passage, wetland restoration, etc. Bruce Vogt will send out a one-pager to STAR.
  - **ACTION:** Contact Tom Fisher about a possible STAR Seminar about the Choptank.
- Meeting on the effects of population growth on Chesapeake Bay restoration Town Creek. Date: Mid-January. Contacts: Tom Horton and Karl Blankenship.

### **UMCES Chesapeake Bay Report Card Release – Bill Dennison**

#### [Attachment A](#)

Bill Dennison gave STAR a sneak peak at the UMCES Chesapeake Bay Report Card. The report press release is May 23<sup>rd</sup>, 2014 at 8AM. A report card is released each year providing an assessment of the previous year's health. Health is defined as progress of the seven indicators towards established scientifically derived ecological thresholds or goals.

#### **Discussion**

- **ACTION:** Contact Robert Hirsch and Heath Kelsey to determine whether the flow adjustment method in the Chesapeake Bay Report Card similar to the USGS method.

- It was suggested that UMCES compare the Chesapeake Bay Report Card results with population growth and urbanization data.

### **Customer Expectations for the CBP Monitoring Networks – Bill Dennison**

#### [Attachment B](#)

The purpose of the Customer Expectations portion of BASIN Phase II is to gain feedback on the usefulness of the products derived from the CBP monitoring networks. At the April STAR Meeting leadership provided an overview of the next steps. Bill Dennison will review the draft questionnaire for feedback.

### **Discussion**

- **ACTION:** Check on IRB approval – STAR may be able to gain this through UMCES.
- **ACTION:** Incorporate both monitoring AND modeling into the survey questions.
- **ACTION:** STAR will work with Guy Stephens and Catherine Krikstan from the CBP Communications Team to improve the questions.
- **ACTION:** Change the questions to think outside of the past and current uses/needs and start thinking about the future needs (i.e. New Bay Agreement needs, etc.).
- Other comments were incorporated directly into the document and sent out to STAR members and interested parties. This survey will be revisited at upcoming STAR Meetings.

### **Science underpinning large-scale oyster restoration in the Choptank Complex – Stephanie Westby (NOAA CBO) and Howard Townsend (NOAA CBO)**

[Attachment C](#) – Harris Creek Oyster Restoration Tributary Plan

[Attachment D](#) – Presentation: Science Guiding Large-Scale Oyster Restoration

[Attachment E](#) – Presentation: Assessing the Ecosystem Services of Oyster Restoration

The oyster goals in the soon-to-be-signed Chesapeake Bay Agreement and Executive Order 13508 call for large-scale, tributary-based oyster restoration. The first several tributaries selected for action are Harris Creek, the Tred Avon River, and Little Choptank River-- collectively called the 'Choptank Complex'. This talk described how benthic habitat characterization, oyster surveys, and public and scientific community input are being used to inform restoration site selection, and how post-restoration monitoring is being implemented to track progress against the bay-wide oyster restoration success criteria established by the Chesapeake Oyster Metrics workgroup. A long-term multi-agency study, led by NOAA, is also underway to quantify some oyster reef ecosystem services, including denitrification and fish utilization.

Stephanie Westby coordinates oyster activities and manages grants related to oyster restoration for the NOAA Restoration Center and the NOAA Chesapeake Bay Office. Previously, Stephanie oversaw the oyster restoration program and served as the technical and policy lead for Maryland fisheries at the Chesapeake Bay Foundation. She holds a master's degree from Johns Hopkins University in environmental science and policy.

Howard Townsend leads the NOAA Chesapeake Bay Office modeling team; the team's goal is to support holistic, ecosystem-based fisheries management by developing and implementing ecosystem models and other analytical tools. These tools help managers understand the trade-offs in ecosystem services under different management scenarios. Howard also provides administrative coordination of NCBO programs at the Cooperative Oxford Laboratory. Prior to joining the office, he conducted statistical analysis for the health care industry. Howard has a Ph.D. in biology from Wake Forest University.

## **Discussion**

- Maryland Oyster Restoration WG was convened by the Sustainable Fisheries GIT and they report to them annually.
- In the annual oyster surveys is NOAA assessment of spat set or recruitment?
  - Yes, spat set is not directly an oyster metric, but use the MDNR fall oyster dredge survey.
- Is NOAA conducting an assessment of the development pressure along the shorelines?
  - Considered current land-uses.
  - Future development pressures were considered, but it needs to be incorporated into the design.
- The Layeffet is a source for a large toxic algae bloom and that information should be brought back to NOAA if they are not already aware of this.
- There are some issues with poaching in the oyster sanctuaries, but NOAA is working with the fish community and others to work on the problems.
- The idea is to use these board ecosystem service analyses to eventually include the economics of these systems and processes such as denitrification.
- What types of fish would benefit from a large scale restoration: striped bass, white bass, blue crabs, summer flounder, and others.
- The sanctuaries are open to harvest of species other than oysters. Another ecosystem services that the oyster sanctuaries will provided are that they are protected spanning stocks for other tributaries (i.e. Elizabeth North's oyster transport model).
- NCBO would like to include more than oysters counts. There are collaboration opportunities for water quality and effects on other species, etc.
- Annual progress results are posted on the NCBO website.
- Are you considering ocean acidification and sea level rise and other climate change effects?
  - NCBO is working with the NOAA Ocean Acidification team to determine what can be done to monitoring ocean acidification in the Chesapeake Bay.
  - UMCES is creating a Climate Resilience Indicator that could be useful.

## **Envisioned Evolution of STAR – Peter Tango**

### **[Attachment F](#)**

At the April STAR Meeting, STAR discussed answers to the role of STAR survey provided to all of the GITs. STAR Leadership used these responses to edit the “Evolution of STAR” document and will provide an overview of the changes made and request final feedback.

## **Discussion**

- The new analyst that is starting is for the tidal and non-tidal networks. There are on-going discussions about hiring another analyst, possibly to support the GITs in their adaptive management needs.
- One of the recommendations from the STAC Workshop on Designing Sustainable Coastal Habitats is to form a habitat modeling group. STAR supported the recommendation for specific modeling support for needs outside of water quality.
  - The current Modeling Team may not have the expertise or resources to support this effort, but the results should be presented to the Modeling Workgroup
  - If the Modeling Laboratory is funded, this could be supported through it.
- Other recommendations from the STAC Workshop on Designing Sustainable Coastal Habitats are to further analyses on economics and lag times.
- Explain Ecosystem Trends Workgroup with sub-groups for specific items.
- STAR Leadership will be meeting June 6<sup>th</sup>, 2014 to discuss this document further and it will be brought back to the group at the [June 26<sup>th</sup>, 2014 STAR Meeting](#).