

Scientific, Technical Assessment and Reporting (STAR) Team Meeting

October 23rd, 2014, 10:00AM – 1:30PM Joe Macknis Memorial Conference Room

Meeting Webpage:

http://www.chesapeakebay.net/S=0/calendar/event/21553/

ACTION ITEMS

- Call for membership for new STAR workgroups (academics, science providers, and jurisdictional representatives). (All)
- STAR will consider the development of a new workgroup under STAR for social science expertise. (STAR Leadership)
- Please contact Lea Rubin (<u>Irubin@chesapeakebay.net</u>), Mark Bennett (<u>mrbennet@usgs.gov</u>), and/or Zoe Johnson (<u>zoe.johnson@noaa.gov</u>) with Climate Change Workgroup membership interest or suggestions. (All)
- Please send any communications items to Amanda Pruzinsky and Margaret Enloe (All)

MINUTES

Welcome, Introduction, and Announcements – William Dennis (UMCES/STAR Co-Chair)

Announcements:

- STAR will now have 3 co-chairs and an enhanced workgroup framework (next agenda item).
- <u>Restore America's Estuaries 7th National Summit</u>, November 1st 6th, 2014.
- <u>American Geophysical Union</u>, December 15th 19th, 2014.

STAR Support for the GITs and Management Strategies - Scott Phillips (USGS/STAR Co-Chair)

Presentation: <u>Evolving STAR to Support the Goal Teams and Management Strategies</u> Supplementary document: Overview of Purpose and Functions of new STAR Workgroup structure Scott reviewed the <u>new STAR Workgroups structure</u>, built for better collaboration with the Goal Teams. The question was brought up of whether STAR should play the "Science inventory role," maintaining the state-of-the-science in the Chesapeake Community.

ACTION: Call for membership for new STAR workgroups (academics, science providers, and jurisdictional representatives).

He also provided an overview of the roles for <u>STAR Liaisons</u>. Which include:

- To collaborate with GITs to address STAC guidance (Translation of STAC materials for GITs as well as communicating GIT needs to STAC)
- To work with GITs to identify additional science providers
- To address cross-cutting issues and needs

Additional News:

- Jennie Gunderson is the new Status and Trends Coordinator (formally Nita Sylvester's position).
- The NOAA Climate Change Coordinator position is expected to be filled in early 2015.

Goal Implementation Team Management Strategies Updates – GIT Coordinators/Staffers

GIT Coordinators and Staffers reviewed the status of management strategy development including any requests for help from STAR. These items are listed below.

Fisheries GIT

• Four Goals (including: blue crabs, oysters, forage fish species, and fish habitat) – no specific requests from STAR at this time.

Healthy Watersheds GIT

- The Goal Team is already interacting with STAR through the GIS Team, working on the development of a tracking tool. The tool development is driven by state designations of "what is a healthy watershed?" and coordinating with jurisdictions for the best available data.
- Land Use Metric Outcomes: the GIT is working with Peter Claggett to develop options for metrics.
- Land Use Option Outcome: Jason Dubough with take the lead.

<u>Stewardship</u>

- Land Conservation: Renee Thompson is playing a major role in developing the metrics for this outcome.
- Public Access: John Wolf and Andy Fitch from the GIS Team are working closely with the GIT.
- *Citizen Stewardship*: Puget Sound colleagues are coming to Annapolis to discuss their success with citizen stewardship with the GIT on <u>November 3, 2014</u>.

<u>Habitats</u>

- **Black Duck:** Support from STAR would be useful in the development of a GIS layer for Black Duck with layers of factors influencing. For example: Black Duck food source, land-use, and climate change.
- **Stream Health:** Reassess the baseline with support for the Chessie BIBI. Also, there is an interest in determining "why?" stream restoration is being implemented and conveying those stories more widely.
- *Wetlands:* Requests support on tracking acreage in the watershed, and the difference between impacts of urban and agriculture on wetlands.

Toxic Contaminants

- **Research and Policy and Prevention**: These outcomes have a potentially large scope, and therefore the goal is to use PCB's as a starting point. STAR can offer support in several ways.
- One area of interest is in monitoring concentrations of PCB's in Fish Tissue. White Perch is a good species option, possible indicator.
- Another area of interest is in GIS mapping. A potential map to display active BMP's implemented to reduce or remove PCB's for management action tracking, where are new TMDL's in place, or to catalogue new technologies (including: capping technology and sediment remediation technologies). This could also include modeling to predict change based on management actions.
- The Workgroup is mostly interested in finding datasets that could be useful for indicator development.

Local Leadership & Diversity

- **Local Leadership:** Workgroup would like STAR to consider better ways of communicating technical work to local leaders, then how they can deliver that information to their citizens.
- *Metrics for Local Leadership Outcome:* How can the group quantify if we are making a difference?
 - One possibility is to engage in Chesapeake leadership training.
 - Many of the storm water permits have requirements for outreach and response. Maybe there is something to gain from the permits for a tracking metric.
 - STAC elected an economist to chair the advisory committee, in order to evolve in a way to support the new priorities of the Chesapeake Bay Partnership, STAR is interested in evolving as well.
 - ACTION: STAR will consider the development of a new workgroup under STAR for social science expertise.

Water Quality

• STAR and the Modeling Workgroup are well integrated in the Water Quality Goal Team and the development of their management strategies.

Climate Change Workgroup and Climate Resiliency Management Strategy Update – Mark Bennet (USGS/STAR Co-Chair) and Zoe Johnson (MD DNR/STAR Climate Change WG Chair)

Mark Bennett and Zoe Johnson provided an update on the status and next steps for the Climate Change Workgroup and the Climate Resiliency Management Strategy. Climate Change is a cross-cutting goal for the partnership and should be incorporated in every management strategy of the Chesapeake Bay Watershed Agreement. Currently, Zoe and Mark are assembling members for the workgroup.

ACTION: Please contact Lea Rubin (<u>lrubin@chesapeakebay.net</u>), Mark Bennett (<u>mrbennet@usgs.gov</u>), and/or Zoe Johnson (<u>zoe.johnson@noaa.gov</u>) with Climate Change Workgroup membership interest or suggestions.

Discussion

- STAC December Quarterly meeting will address Climate Change issues.
- There is climate resiliency evaluation method used by the Army Corps of Engineers which bounded the effect and timeframe for a climate resiliency baseline. A report will be released soon, demonstrating how to focus on specific climate change issues amongst a large array of management priorities. For example: what impacts are coming first?
- The Modeling Workgroup is focused on integrating climate change parameters into the next phase of the model. The Modeling Workgroup wants to ensure there is good communication between them and the new Climate Change Workgroup.

The Goal Teams were asked "what are your climate resiliency concerns?"

Fisheries

- Considering climate interactions with fisheries, such as ocean acidification.
- They are also interested in tools similar to the NOAA fisheries climate tool.
- Governor O'Malley appointed an Ocean Acidification task force for the Chesapeake Bay. Will there be freshwater implications?

Black Duck, Brook Trout, and Wetlands

- Sea level rise and wetland loss is of interest to the Habitats GIT, as well as resources for restoration targeting based on sea level rise and development changes.
- The research on Brook Trout is currently considering the impacts of climate change.

Healthy Watersheds

• The Goal Team has concerns about loss of protected lands from sea level rise, and how this could impact on management actions.

Toxic Contaminants

• How does climate change impact contaminants as stressors?

Climate Change Resiliency Index: UMCES Report Card – William Dennison (UMCES/STAR Co-Chair)

Bill Dennison presented part of the UMCES Report Card, the <u>Climate Change Resiliency Index</u>, which could be a useful resource for the development of the CBP Climate Resiliency Management Strategy.

Building and Sustaining Integrated Networks – Peter Tango (USGS/STAR Coordinator) and Lea Rubin (CRC/STAR Staffer)

Peter Tango and Lea Rubin presented the status of Building and Sustaining Integrated Networks (BASIN) Phase II and next steps which include the release of two communication products and the initiation of the Citizen Science Project. The two communication products include 1) The Water Quality Report, summarizing the BASIN process and STAR's major recommendations, and 2) An executive summary trifold of insights gained from the Global Seminar Series.

Also, an <u>Innovative Monitoring Workshop</u> is scheduled for December 8, 2014 to discuss some of the best approached that came out of the Global Seminar Series, and their applicability to the Tidal Monitoring Network.

Now, STAR is moving forward with BASIN Phase III, which include the evaluation of monitoring and assessment to support the new Chesapeake Bay Watershed Agreement.

WQGIT Meeting Update – Peter Tango (USGS/STAR Coordinator)

Peter Tango discussed the recent <u>WQGIT Meeting outcomes</u> related to STAR. Please see the WQGIT Meeting <u>event page</u> for more information.

Communications Discussion – All

There was no time in the meeting for this agenda item.

• ACTION: Please send any communications items to Amanda Pruzinsky and Margaret Enloe.

Choptank Complex Habitat Focus Area – Bruce Vogt (Acting Deputy Director/NOAA Chesapeake Bay Office)

The seminar presentation is available on the IAN website: here.

Seminar Description

The <u>Delmarva/Choptank River Complex</u>, which includes the Choptank and Little Choptank Rivers, is located on Maryland's Eastern Shore. This area is a treasured part of the Chesapeake Bay ecosystem, representing critical habitat for spawning striped bass and river herring, as well as historically abundant oyster reefs. Residents of the watershed—including many families who have lived there for multiple generations—have traditionally been employed in agriculture or commercial fishing.

But times are changing in this region. Continued human population growth and land development threaten key habitats for fish and aquatic resources. The historical loss of wetlands in the upper

Choptank River sub-watershed is estimated to be 47,400 acres—approximately 11% of the total watershed area. Climate change and sea level rise, combined with land subsidence, further threaten losses of nearshore marshes and coastal environments. While the rivers and Bay have supported major annual seafood harvests in previous years, fishery resources are at risk.

By designating the Choptank Complex as a Habitat Focus Area, NOAA will concentrate agency resources and leverage the many activities already under way in this watershed to improve and sustain ecological health.

Focus Area Objectives at a Glance:

- Restore degraded oyster reef habitat and significantly increase native oyster populations
- Rebuild and sustain important fish populations (including striped bass, shad, herring, American eel and other species)
- Document and quantify the benefits oyster reefs and associated habitats provide
- Improve the decision making and resilience of coastal communities by improving the delivery of NOAA's habitat and climate science

DISCUSSION: How can we design a collaborative monitoring network to track changes in ecosystem health as restoration efforts move forward?

Presenter Biography

Bruce Vogt is the Acting Deputy Director for the NOAA Chesapeake Bay Office and the coordinator for the Sustainable Fisheries Goal Implementation Team. As Deputy Director he is responsible for overseeing the Chesapeake Bay Interpretive Buoy System, Fisheries Science, Oyster Restoration, Field operations and partnership development activities. As the Fish GIT coordinator he helps advance ecosystem based fisheries management by connecting science with bay fishery managers. He has worked at NCBO and with the Chesapeake Bay Program since 2009. He is a graduate from the Virginia Institute of Marine Science and has worked extensively on marine policy since being as a Knauss Fellow in 2004.

Discussion

- This could be an interesting location for a citizen science pilot study.
- USGS is piloting a number of sensor technologies and may be able to coordinator with Bruce to enhance the Choptank study. (contact: Mark Bennett)

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