Scientific, Technical Assessment and Reporting (STAR) Team Meeting
10:00AM – 1:00PM June 27th, 2013

Meeting materials:
http://www.chesapeakebay.net/S=0/calendar/event/18840/

ACTION ITEMS

- Follow up with Mike Land to explore options for data visualization with other [than Bay grasses] monitoring data sets. (STAR Leadership)
- STAR Leadership requested a written document of lessons learned during the development process of the data visualization tool from Mike Land. (Mike Land)
- Proposed presentation at an upcoming STAR Meeting – John Wolf will present his visualization work with Ersi. (STAR Leadership and John Wolf)
- Tidal and Nontidal monitoring networks must discuss options for funding reductions within their network. (TMAW and NTWG)
    - Present to STAR at July 22, 2013 special session.

- Organize a joint TMAW and NTWG meeting to discuss short-term cuts (B. Dennison, M. Bennett, S. Phillips, L. Hernandez, and L. Rubin). Include STAC input, and Gary Shenk for model needs.

MINUTES

Welcome Introduction and Updates – Bill Dennison (STAR Chair), Mark Bennett (STAR Vice-Chair), Peter Tango (STAR Coordinator)

STAR Leadership gave an introduction and requested updates from the Goal Implementation Teams and STAR WGs.

- New tool – produced by Opinion Works and the Chesapeake Bay Trust: Participants in citizen science are asked to take a 5 min anonymous survey to determine behavior trends in the Bay region.

Communications Discussion – All

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

Recommendations for the Communications WG:

- The Gulf of Mexico and Chesapeake Bay dead zone forecasts were released by NOAA.
    - The Chesapeake Bay condition forecast is positive, and it's confirmed with monitoring data from the first June Chesapeake Bay Mainstem Cruise.

        - The forecasts are a successful example of linkages between monitoring and modeling.
    - To view Release: http://www.noaanews.noaa.gov/stories2013/20130618_deadzone.html

- 2012 University of Maryland Center for Environmental Sciences (UMCES) Report Card released
    - To view the Report Card: http://ian.umces.edu/ecocheck/report-cards/chesapeake-bay/2012/

- USGS Report on Subsidence in Southern Chesapeake Bay region
    - To view the report: http://pubs.usgs.gov/circ/1392/pdf/circ1392.pdf

- Report on sea-level rise projections – by Don Boesch
    - To view the report: http://ian.umces.edu/pdfs/ian_report_413.pdf

- Climate Summit: Greenhouse Gas (GHG) Reduction Plan
    - Summit Overview: http://www.governor.maryland.gov/blog/?p=8977

- USGS Journal Article – Ground Water Flow Modeling on the Eastern Shore – by Ward Sanford
    - To view the Report: http://pubs.acs.org/doi/pdf/10.1021/es401334k

- Mike Land discussed a pilot data visualization study that was conducted at the Chesapeake Bay Program for Chesapeake Bay Grasses. Data used in this pilot include: water temperature, salinity, turbidity, bay grass species composition per segment per year.
    - To view data visualization tool: www.chesapeakebay.net/visualization/bay grasses/
    - **ACTION**: Follow up with Mike Land to explore options for data visualization with other monitoring data sets. (STAR Leadership)
    - **ACTION**: STAR Leadership requested a written document of lessons learned during the development process of the data visualization tool from Mike Land.
    - **ACTION**: Proposed presentation at an upcoming STAR Meeting – John Wolf will present his visualization work with Ersi.

Monitoring Budget Update – Peter Tango
P. Tango's Presentation

Peter Tango gave a status update of the FY13 monitoring budget shortfalls – near term decision framework on funding work in progress, and the needs from the tidal and nontidal monitoring networks to meet the reduced funding.

Discussion, Comments, and Questions

While making decisions about funding reduction implications, meeting participants insist the Management Board is made aware of/considers the following:

- While making decisions on funding reductions be aware of matching funds, they are not proportional between the tidal and nontidal networks.

- Funding obstacles to overcome concurrently with funding reductions:
    - Quality assurance costs have increased.
    - Fuel costs have increased.
    - Cuts on Maryland 106 Grants
    - Cuts on USGS stream gages
    - Inflationary pressures and a fixed budget.

- The monitoring program must remain flexible in order to provide for the Chesapeake Bay Program adaptive management strategies, by continuing to measure a suite of parameters.

- A decrease in water quality sampling frequency causes an increase in data uncertainty.

- Due to the costly nature of Best Management Practice (BMP) implementation, there needs to be an ability to assess the effects of implementation with monitoring and modeling for land managers.

- The monitoring data is valuable to other organizations outside the Chesapeake Bay Program Partnership.

- A meeting participant suggested the Chesapeake Bay Program collaborate with other organizations and volunteer agencies that are collecting data in the same areas – Using citizen science to integrate non-traditional monitoring partners.
    - Incorporating citizen science has been attempted in the past, but the Chesapeake Bay Program monitoring networks are the backbone: insuring reliable and consistent data, as well as experienced staff.
    - Leadership is requested to articulate the need for quality sampling and analysis that is up to par with the current Chesapeake Bay Programs standards.
        - Liability issues – Quality Assurance of the monitoring data
        - Technology – How would non-traditional partners keep up with improved technology?

    - A meeting participant suggested the evaluation of the USFWS and Local County and Government park systems data quality for potential inclusion of their data in the Chesapeake Bay Program long-term monitoring data set.

- Be aware of what land/water managers are going to need for the 2017 TMDL re-evaluation and should effect what parameters and stations should/should not be cut from the networks.
    - In order to calculate the 2017 TMDL mid-point assessment towards the 2025 TMDL, the monitoring networks must be able to sample all segments to calculate 2012-2016 Water Quality Standards (WQS) attainment assessments for all segments.
    - Maintain a balance between collecting spatially and temporally data (vertical profilers vs. fixed stations for sampling) to most effectively capture the most representative data for Chesapeake Bay water quality conditions.

- The expansion of the Nontidal monitoring network was not based on assessing towards the 2017 TMDL Mid-point Assessment, but based on assessing towards the 2025 TMDL.

Guiding principles for the Tidal and Nontidal Monitoring Networks when discussing near-term options to meet the funding shortfall:

- Tidal and Nontidal networks are a jointly loosing funding; networks are not in competition for funding,
- Consider [grant] match funding implications, and
- The products that come out of each networks data and analysis work.

Guiding principles for the Tidal and Nontidal Monitoring Networks when discussing long-term strategy for sustainable funding:

- The new Bay agreement will bring new outcomes for each CBP GIT, what monitoring needs will be required to assess towards the new outcomes?

- Have the goals and objectives of the managers changed since the development of the monitoring networks?

- **ACTION**: Tidal and Nontidal monitoring networks must discuss options for funding reductions within their network.
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Seminar: Enhancing the Chesapeake Bay report card with new indicators and new methods – Caroline Wicks, Integration and Application Network Program Manager UMCES

C. Wicks' Presentation
IAN Seminar Series 2013 – *to view seminar recording*

New indicators and new methods of analysis are being explored in the 2012 Chesapeake Bay report card. For the past six years, the Chesapeake Bay report card has included three water quality and three biotic indicators. In 2012, five water quality and two biotic indicators will be averaged into the Bay Health Index. Three fisheries indicators have also been evaluated and will be presented separately from the Bay Health Index. Flow adjusted scores and trajectories will be discussed. These new analyses help to provide a complete story of Chesapeake Bay health in 2012.

Caroline Wicks graduated from the University of Maryland with a Master of Science in Biological Oceanography in 2005. Since then she has worked for the Integration and Application Network (IAN) as a science communicator and Program Manager. Most of her projects focus on Chesapeake Bay health assessments, science communication, and most recently climate change mitigation and adaptation.

Discussion, Comments, and Questions

- USGS is working on flow adjusted trends to remove the variability of water quality conditions due to flow (i.e. weather).
- Meeting participant requested river specific report cards to include the same parameters as the IAN Bay Report Card for comparison.
- In the trajectories map (viewed in C. Wicks' presentation) the mid-Bay is the only section that seems to be on a negative trajectory, yet it is the basis of Water Quality Standards attainment baywide.
- A suggestion made by a meeting participant was to include the WQS Indicator in the IAN Bay Report Card to view next to the attainment of measured water quality parameters.

LEADERSHIP:

Bill Dennison (Chair)	UMCES	dennison@umces.edu
Mark Bennett (Vice-Chair)	USGS	mrbennet@usgs.gov
Peter Tango (Coordinator)	USGS/CBPO	ptango@chesapeakebay.net
Amanda Pruzinsky (Staff)	CRC/CBPO	apruzinsky@chesapeakebay.net
Lea Rubin (Staff)	CRC/CBPO	lrubin@chesapeakebay.net

PARTICIPANTS:

Anna Stuart Burnett	CRC/CBPO	aburnett@chesapeakebay.net
Beth Ziniker	USGS/CBPO	bzinecker@chesapeakebay.net
Bruce Michael	MD DNR	bmichael@dnr.state.md.us
Bruce Vogt	NOAA/CBPO/Fisheries GIT Coordinator	Bruce.Vogt@noaa.gov
Caroline Wicks	UMCES IAN	cwicks@umces.edu
Catherine Krikstan	Alliance for the Chesapeake Bay/CBPO	ckrikstan@chesapeakebay.net
Cristina Lyerly	UMCES	clyerly@ca.umces.edu
Emilie Franke	CRC/CBPO	emilie.franke@noaa.gov
Gary Shenk	EPA/CBPO	GShenk@chesapeakebay.net
Jenna Valente	CRC/CBPO	Jvalente@chesapeakebay.net
Joel Blomquist	USGS	jdblomqu@usgs.gov
Liza Hernandez	UMCES	lhernandez@chesapeakebay.net
Mary Ellen Ley	USGS/CBPO	MLey@chesapeakebay.net
Mike Land	NPS/CBPO	mland@chesapeakebay.net
Mike Mallonee	ICPRB/CBPO	mmallone@chesapeakebay.net
Nita Sylvester	EPA/CBPO	Sylvester.Nita@epamail.epa.gov

NEXT MEETING

Date: Thursday July 22th, 2013 – STAR Leadership Special Session
Location: Joe Macknis Memorial Conference Room (Fish Shack) CBPO Annapolis, MD
Event Calendar: http://www.chesapeakebay.net/S=0/calendar/event/18841/