**Scientific, Technical Assessment and Reporting (STAR) Team Meeting**
**10:00AM – 1:30PM January 23rd, 2014**

http://www.chesapeakebay.net/calendar/event/21277/

**MINUTES**

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

Announcements:

- National Water Quality Monitoring Council Conference, April 28th – May 2nd, 2014
- Restore America's Estuaries 7th National Summit
- New member to the CBPO and STAR: Jennifer Keisman, Ecosystem Analyst USGS/CBPO – Working on assessing and evaluating trends.
- GIT 4 Updates
    - Mike Fritz retired as coordinator. The new coordinator is Renee Thompson.
    - Membership request for the Healthy Watershed Ad Hoc Team
        - Goal: develop a method to track and report watershed health and protection.
        - Contacts: Tuana Phillips and Renee Thompson
        - Feedback from the group:
            - STAC report – Potential Indicator for Watershed Health
                - Contact: Scott Phillips
            - CBP Indicator – Stream Health – Shows conditions poor through excellent
                - Contact: Scott Phillips

**WQGIT Wastewater Indicator Recommendation Briefing – Nita Sylvester**
Supplemental Wastewater Indicator STAR Brief
Supplemental Wastewater Indicator STAR Presentation

Nita Sylvester briefed STAR on WQGIT recommendation to the Chesapeake Bay Program's (CBP) Management Board (MB) regarding how a new "Partnership-recognized" supplemental wastewater indicator will be reported, who will be responsible for maintaining the new indicator and what to do with current supplemental wastewater indicator.

**Discussion and Questions**

- Why aren't the other states on board with this indicator currently? Isn't this already tracked and reported by the states?
    - There are many reasons, but an important point is that this indicator goes above and beyond what the states track currently, giving "flow normalized" data, which other states may not feel is necessary in the interim because considering the long term TMDL goals, the individual allocations are based on facilities design flow

and the facilities with the appropriate treatment technology will be compliant with their waste load allocation.

- When the indicator is presented on the website managed by the State of Maryland, it should be accompanied by a video or audio file that provides an explanation of the indicator to assist with public understanding.

- If not already completed, Virginia needs to work with the BayTAS team to ensure that their permit limits data is being reported accurately via ChesapeakeStat.

- STAR agrees that access to both the old and new indictor continue to be included on the CBP website.

**Bay Program GIT and STAR WG request for STAR Workshops – All**

STAR requested that GITs and STAR WGs provide feedback for workshops STAR members should be aware of or potential coordinate in 2014.

- March 25-26, 2014 STAC Workshop on new approaches to explaining trends
    - Follow up with the investigators working on the project to take the outcomes of the STAC workshop and discuss how to put it into practice.

- New Chesapeake Bay Agreement
    - Science and monitoring needs in order to track and achieve the new outcomes
    - Meeting between STAC, BASIN, and GITs before and after the agreement is signed.

**Communications Discussion – All**

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

- "New Insights" Science Report from STAR
    - 7 Lessons
    - 3 major points:
        - Long term efforts to reduction pollution have led to local in the air, land, and water.
        - Progress can be overwhelmed by unsustainable transformations to the landscape.
        - Diligent about how and where we use both proven and innovative practices to reduce pollution and improve monitoring
    - Developed a web and social media strategy.
    - Final review is the week of February 5th, 2014.
    - Report, tri-fold, and web release: February 24 – 25th, 2014

- BASIN Review webinars and comparison.

- Communication Team will be contacting the appropriate partners for creating videos for each of the indicators.

- STAC Workshops videos could serve multiple purposes.
    - Explaining Trends WS (February 25 – 26th, 2014) will have three pre-videos supported by UMCES:
        - Human induced drivers of water quality
        - Environmental settings of lag times
        - Chesapeake Bay trends

- Video Contest Idea
    - Funding for prize money?
        - UMCES (Bill Dennison) agreed to put in some funding if the CBP Communications Team would organize.
    - Need to discuss some general rules.
        - Topic
        - Time (3 minutes)
        - Must be specific about the format of the video
    - Possible dates of the contest: May to September
    - **ACTION**: Video contest brainstorming at the March STAR Meeting.
    - **ACTION**: Margaret Enloe will discuss this idea with the Communications Team.

- Karen Rice (USGS VA Water Science Center)
    - Submitted a journal article to the Journal of Climate Change, currently under review
    - 80 years of stream temperature record
    - Potential STAR Seminar

- UMCES Climate Change Reliance Indicator
    - The idea is the incorporate it into the report card

**STAR Workgroup 2014 Work Plan Reviews – STAR WG Chairs and Coordinators**

STAR Workgroups presented their individual 2014 work plans.

Analytical Methods and Quality Assurance Workgroup (AMQAW) – Mary Ellen Ley
Indicators Workgroup (IWG) – Nita Sylvester
Nontidal Water Quality Workgroup (NTWG) – Scott Phillips
Tidal Monitoring and Analysis Workgroup (TMAW) – Peter Tango
- **ACTION**: SAV Workgroup Update mid-year

Criteria Assessment Protocol Workgroup (CAP WG) – Peter Tango
Modeling Workgroup – Amanda Pruzinsky
- STAR supports the proposal for STAC Workshops on Climate Change and Conowingo

GIS and Data Management – John Wolf and Megan Thynge (could not attend, will update at February Meeting)
STAR, Assess and Evaluate Water Quality Trends – Scott Phillips and Jeni Keisman

**BASIN Review/STAR Workplan Update – STAR Leadership**

STAR Leadership updated STAR members on the status of Building and Sustaining Integrated Networks (BASIN).

- Completed:
    - BASIN Review 1
    - BASIN Review 2

- Next Steps:
    - February 14th, 2014: BASIN Review 3
    - February 27th, 2014: Costumer Expectations
        - After the STAR Meeting.
        - Invite STAC Members and panelists to attend.
    - March 18th and 19th, 2014: STAC Meeting
    - Summer 2014: Phase III: Optimization

**ABC is no longer as easy as 123. Advances in school report cards that are applicable to ecological health report cards – Dr. Simon Costanzo (Science Integrator, UMCES)**

In a world overflowing with information, report cards have remained central to tracking the progress of students' academic abilities. Their ability to synthesize and communicate information quickly and easily to a wide range of people have seen report cards expand outside the school domain, and into a range of other public, private and government sectors. It is not uncommon now to see report cards that assess and track e.g. health departments, retirement funds, insurance companies and more recently the ecology of natural environments. Ecological health report cards have become an important tool for integrating diverse physico-chemical and biological data types into simple scores that can be communicated to decision-makers and the general public on a routine basis. This approach was pioneered by the Integration and Application Network at the University of Maryland Center for Environmental Science. Report card popularity and influence on natural resource management decisions have to date been the only (indirect) measures of their success and effectiveness. There has been a push recently to develop more direct measures of the effectiveness of ecological health report cards. The commonality and universal acceptance of school report cards has resulted in much of the research into the effectiveness and continued development of report cards, to have come from the schooling sector. This presentation outlines recent advances in school report card design, function and research and how these findings can be applied to improve the delivery, reception and effectiveness of ecological health report cards as tools for environmental management.

**Discussion and Questions**

- What are the recommendations for adjusting for annual weather conditions?
    - These report cards are showing the current conditions of water quality, no matter what the reason. How do we buffer the scores against these environmental events?
        - Do we produce two reports cards or adjust for management actions? How do we communicate that information?
        - Use models to show what the water quality would have been without the management actions.
        - Reliance indicator to show the "bounce back" from environmental events.
        - Communicate the effect of timing in considering extreme weather events.
        - Must use adaptive management.
            - The trajectory changes the standards.
            - Maybe we have to plan for the extreme condition not the average condition and what happens when the extreme conditions become more extreme?

    - Can we score for effort as well as the conditions to show that managers are working hard even if the weather conditions are bringing down the scores? Compare WIP plans and actual implementation?
    - Could provide an indicator of the gap between flow and load.

- Suggest think about ecosystem services and functions instead of a particular species. For example, in terms of climate change, instead of looking at a particular type of sea grass, look at the function that it is providing. Is there another type of sea grass that can perform that function at different temperatures? Could also include functions of the management actions.

- Suggest that the report card should include pressure, state, and response.

- EPA and others are tracking the population and although environmental groups see that the rate of pollution loading is often staying the same or decreasing while population increases, we need to better communicate this to the public.

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