



THE ABSTRACT

A Monthly Update from the Scientific and Technical Advisory Committee

April 2014

Recent STAC News

March 2014 Public Listening Session & Meeting of the Management Board (MB)

**Annapolis, MD
March 13, 2014**

The MB opened the March 13th meeting with a public service announcement video prior to the two-hour public comment period where Chesapeake Bay Watershed stakeholders expressed their opinions and concerns about the Chesapeake Bay Program's (CBP) New Bay Agreement. Topics frequently discussed by stakeholders included: the need for a formal climate change and/or toxic chemicals goal and outcome within the New Bay Agreement, the need for more understanding of important processes like lag times and surface water transport, and how those processes may impact restoration/mitigation efforts in areas of concern across the watershed, such as the Conowingo Dam and highly productive agricultural lands. Stakeholders also discussed the signing of the Citizen's Bay Agreement, which offers its own 25-Step Action Plan to address pollution concerns for the Chesapeake Bay Watershed.

Following lunch, the MB convened its regular meeting that included topics like the FY2014 CBP Operating Budget, MB's role in management strategy oversight, redesigning *ChesapeakeStat*, and updates on CBP Indicator webpages. The MB mentioned that the CBP will hire a Climate Change Coordinator soon, in response to a past STAC recommendation.

The MB Program Update included a recap of the March 5, 2014 Stream Functions Pyramid Framework (SFPF) Workshop which demonstrated how the framework can be used to determine restoration potential and functional lift for stream restoration projects using the Regenerative Design Technique.

The MB Program Update also noted the recent publication of the New Insights Report, developed by the University of Maryland Center for Environmental Science (UMCES) and U.S. Geological Survey (USGS), released on February 25, and the submittal of the 2013 CBP Report to Congress, as required by the Clean Water Act. The public comment period on the U.S. Department of Agriculture's (USDA) Draft Chesapeake Working Lands Conservation Strategy

ended in February 2014 and the draft strategy is available online:

<http://www.chesapeakebay.net/documents/ChesapeakeWorkingLandsConservationStrategy.pdf>.

March 2014 STAC Quarterly Meeting

Annapolis, MD

March 18-19, 2014

STAC held its March 2014 quarterly meeting at the Westin Hotel in Annapolis, Maryland, led by STAC Chair Kirk Havens (VIMS). December 2013 quarterly meeting minutes were approved and Havens introduced three new Executive Board (EB) nominees (Kurt Gottschalk – USDA Forest Service; Bob Hirsch – U.S. Geological Survey (USGS); and Poornima Madhavan – Old Dominion University (ODU)). All three nominees ran unopposed and were elected for positions vacated by Susan Julius (Environmental Protection Agency (EPA)), Margie Mulholland (ODU), and Vikram Pattarkine (PEACE USA), who recently completed their two-year, non-renewable, STAC EB terms.

The March 2014 STAC quarterly meeting featured a presentation on the Albemarle-Pamlico National Estuary Partnership (APNEP) 2012-2022 Comprehensive Conservation and Management Plan and how it compares to the latest CBP New Bay Agreement in terms of goal and outcome structure. A panel followed with introductions and subsequent discussion with Maryland (MD), Pennsylvania (PA), Virginia (VA), and Washington, D.C. jurisdictional managers or representatives including:

- District of Columbia Department of Environment (DDOE) Deputy Director - Natural Resources Administration Hamid Karimi,
- MD Department of Natural Resources (DNR) Deputy Secretary Frank Dawson,
- MD DNR Secretary of Natural Resources Joe Gill,
- MD Department of Environment (MDE) Secretary Robert Summers,
- PA Department of Environmental Protection (DEP) Geologist Ted Tesler,
- PA DEP Deputy Secretary for Water Management Kelly Heffner, and
- VA Deputy Secretary of Agriculture and Forestry Travis Hill

The second portion of presentations to STAC members included: an overview of current GIT3 (Water Quality Goal Implementation Team) activities by CRC staffers Emma Giese and Jeremy Hanson; Carl Hershner's (VIMS) update on STAC's recommendations on CBP New Bay Agreement goal and outcome statements; a GIT Chair update session; an update on management strategy indicators and monitoring; a presentation from Jim Shortle (PSU) on the EPA-supported Center for Integrated Multi-scale Nutrient Pollution Solutions; an update on the Conowingo Dam review request from Kathy Boomer (The Nature Conservancy (TNC)); and a STAC discussion of the USDA Conservation Effects Assessment Project (CEAP) report.

Day two presentations began with CBP responses to two STAC reports. Peter Tango (USGS-CBPO) presented the CBP's response to the STAC Umbrella Criteria Report and Peter Claggett (USGS) provided CBP's response to STAC's Crediting Conservation Report. Susan Julius

(EPA) and Jordan Fischbach (RAND) presented modeling work using Robust Decision Making (RDM) in the Patuxent River; Kirk Havens discussed STAC's Six Criteria for Science-Based Restoration and Management; and STAC members voted for workshop proposals to receive funding in FY2014.

All four workshop proposals were approved for funding, with remaining funds available to possibly approve one more workshop. The four workshops are: "Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities" – submitted by the Sustainable Fisheries GIT, Tom Ihde (NOAA); "Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-Making" – Marjy Friedrichs (VIMS); "Re-plumbing the Chesapeake Watershed: Improving Roadside Ditch Management to Meet TMDL Water Quality Goals" – Kathy Boomer; "Exploring Applications of Behavioral Economics Research to Environmental Policy-making in the Chesapeake Bay Watershed" – Charlie Abdalla (PSU).

STAC Workshop: "Enhancing Approaches to Explain Management Effects on Water Quality Trends"

**Annapolis, MD
March 25-26, 2014**

STAC sponsored a workshop to identify improved technical approaches for explaining the effect of management actions and the degree to which they are influencing water-quality changes in the watershed and estuary. More than 70 experts convened at the Westin Hotel in Annapolis, Maryland to hear presentations of modeling and monitoring case studies from the Great Lakes, San Francisco Bay, Gulf of Mexico, and Carolina coastal regions while discussing differences in temporal and spatial scales among them. The two-day workshop featured extended breakout group discussions on both days to allow participants the opportunity to compare ideas and brainstorm key recommendations for the workshop report. The purposes of the breakout sessions were to promote discussion and generate recommendations on three primary topics: (1) Enhancing trend detection methods; (2) Identifying information that is needed to better explain trends; and (3) Suggesting quantitative approaches for an integrated approach to explain trends in the tidal waters and watershed.

Overall, the workshop aimed to answer: (1) How do we better understand the degree to which management practices are improving water quality in the Bay and its watershed? (2) How do we use the knowledge gained from asking this question to guide the actions we take to continue to improve the water quality and ecosystem health of the Chesapeake Bay and its watershed? A report will be produced within 90 days of the workshop.

Future STAC Discussion Issues

STAC Staff will ask STAC members to submit important upcoming issues for inclusion in the newsletter and discussion at future STAC meetings and other CBP-related meetings as necessary.

The issues below, identified from recent communications, include:

- Oysters and Water Quality: What can be said and advocated, and what to avoid, in response to an earlier request from Lisa Kellogg (VIMS) and Jeff Cornwell's (UMCES) presentation and subsequent discussion at the April Modeling Workgroup meeting.
- CBP-proposed STAC activities, 2014-2016 (from Rich Batiuk, EPA)
- Microplastics as a threat to regional waters and biota (suggested by A. Swanson, Chesapeake Bay Commission - CBC)
- Procedures for Expert Panel efficiency estimates (suggested by T. Jordan, Smithsonian Environmental Research Center - SERC)
- STAC role in BASIN Phase III activity (suggested by Kevin Sellner, CRC)

Please submit your suggestions in the coming weeks.

Key Events

- **April 2014 Modeling Quarterly Review**
Date: April 1-2, 2014
Time: 10:00 – 3:00 p.m. (both days)
Location: Joe Macknis Memorial Conference Room
- **Fourth BASIN (Building and Sustaining Integrated Networks) International Long-Term Monitoring Meeting**
Date: April 7, 2014
Time: 9:30 – 11:00 a.m.
Location: Suite 305A Conference Room
- **2014 Mid-Atlantic Environmental Literacy Workgroup Meeting**
Date: April 9, 2014
Time: 10:30 – 3:30 p.m.
Location: Joe Macknis Memorial Conference Room
- **April 2014 Management Board Call**
Date: April 10, 2014
Time: 9:00 – 12:00 p.m.
Location: Joe Macknis Memorial Conference Room
- **Principals' Staff Committee (PSC) Two-Day Retreat**
Date: April 13-14, 2014
Time: 3:00 – 5:30 p.m. (April 13); 9:00 – 3:00 p.m. (April 14)
Location: Cambridge, MD

- **Water Quality GIT (GIT 3) Conference Call**
Date: April 14, 2014
Time: 1:30 – 3:30 p.m.
- **Sustainable Fisheries GIT (GIT 1) Executive Committee Conference Call**
Date: April 21, 2014
Time: 1:00 – 3:00 p.m.
- **STAC Workshop: The Peculiarities of Perviousness – Workshop Lead: Tom Schueler (Chesapeake Stormwater Network)**
Date: April 22-23, 2014
Location: Sheraton Hotel – Annapolis, MD
- **April 2014 STAR Meeting**
Date: April 24, 2014
Time: 10:00 – 1:00 p.m.
Location: Joe Macknis Memorial Conference Room
- **Designing Sustainable Stream Restoration Projects Within the Chesapeake Bay Watershed – Workshop Leads: Bill Stack (Center for Watershed Protection), Neely Law (Center for Watershed Protection), and Rich Starr (U.S. Fish and Wildlife Service (USFWS))**
Date: May 6-7, 2014
Location: Sheraton Hotel – Annapolis, MD

*Please see the Chesapeake Bay Program Calendar for more specific event times and CBP conference line information: <http://www.chesapeakebay.net/calendar>.

Scientific, Technical Assessment and Reporting (STAR) Updates

STAR's BASIN process is ongoing. Phase II of BASIN is in progress and includes the review, through panel discussions, of how other long-term monitoring programs conduct and fund their network activities.

The third BASIN International Long-term Monitoring Panel was held on Friday, March 14, 2014. This panel featured case studies from Waterway Management Solutions in Australia and the Wisconsin Citizen-Based Water Quality Monitoring Program, and a discussion on sustaining integrated monitoring networks, incorporating lessons learned from the case study presentations. Information can be found at: <http://www.chesapeakebay.net/S=0/calendar/event/21564/>.

The fourth and final BASIN International Long-term Monitoring Panel was held on April 7, 2014 and featured Dr. Shane O'Boyle of the Irish Coastal and Transitional Waters Monitoring Program. More information is available at: <http://www.chesapeakebay.net/calendar/event/21626>.

STAR members also participated in planning and facilitation of the March 25-26, 2014 STAC Workshop: “Enhancing Approaches to Explain Management Effects on Water Quality Trends” (see workshop description above).

STAR’s March 2014 meeting was held on March 27, 2014. STAR members discussed communications plans, including upcoming reports, studies, and videos to recommend to the CBP Communications Workgroup, updates on the envisioned evolution of STAR, and a recap of previous BASIN meetings/panels, as well as next steps and upcoming BASIN meetings. More information can be found on the STAR meeting website: <http://www.chesapeakebay.net/S=0/calendar/event/21546/>.

STAC and STAR will continue to collaborate on BASIN Phase II and Phase III work in 2014. In Phase II, STAR will continue to focus on Chesapeake Bay tidal and non-tidal water quality monitoring programs, and in Phase III, STAC will take a detailed look at overall monitoring needs associated with tracking progress of the Chesapeake Bay Program’s New Bay Agreement goals and outcomes. The Modeling Workgroup and Modeling Team continue to work on 2017 Midpoint Assessment Priorities.

If you have any questions regarding the BASIN process, or other STAR activities, please contact STAR Coordinator Peter Tango at ptango@chesapeakebay.net.

GIT Updates

***The following updates are provided by the Chesapeake Bay Program. Some GITs do not have recent updates to provide at this time.**

Sustainable Fisheries Goal Implementation Team (GIT 1)

The GIT 1 Executive Committee discussed the Invasive Catfish Task Force’s management recommendations on the February 24th GIT 1 Executive Committee call. Representatives from the Pennsylvania Fish and Boat Commission (PFBC), Delaware Department of Natural Resources and Environmental Control (DNREC), and Virginia Department of Game and Inland Fisheries (DGIF) representatives joined the call. Jurisdictions provided positive feedback on all recommendations and will establish points of contact within federal agencies to further develop the recommendations. The Invasive Catfish Task Force is finalizing their report and will send it to STAC for peer review.

Chesapeake Bay Stock Assessment Committee (CBSAC) staff is drafting a charter to better define the roles and responsibilities of CBSAC and its members. CBSAC is preparing for the 2014 Blue Crab Advisory report and review of a proposal to limit re-opening of the blue crab fisheries in Virginia.

Tom Ihde (NOAA/STAC) and the Fisheries GIT submitted a workshop proposal to STAC titled, “Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities.” The workshop proposal was approved at the March 2014 STAC quarterly meeting.

GIT 1 helped plan the April 10th Management Board meeting at Smallwood State Park to coincide with an invasive catfish outreach event hosted by Maryland DNR.

If you have any questions regarding GIT 1 activities, please contact GIT 1 Coordinator Bruce Vogt at bruce.vogt@noaa.gov.

Habitats Goal Implementation Team (GIT 2)

GIT 2 met at North Point State Park in Edgemere, Maryland on February 26th for their winter 2014 meeting. The meeting “focused on a theme of finding synergies among efforts of partners engaged in habitat work around the watershed.” Materials from that meeting can be found at: <http://www.chesapeakebay.net/S=0/calendar/event/21281/>.

If you have any questions regarding GIT 2 activities, please contact GIT 2 Coordinator Jennifer Greiner at Jennifer_greiner@fws.gov.

Water Quality Goal Implementation Team (GIT 3)

GIT 3 members approved the Urban Stormwater Workgroup’s Homeowner BMP Crediting Memo on February 10th, which outlines the recommended protocol to get nutrient reduction credit in the Chesapeake Bay Watershed Model for the installation of verifiable homeowner BMPs.

GIT 3 developed and is currently reviewing an interim governance document to guide the team’s decision making processes until a Partnership-wide policy is in place.

GIT 3 and its workgroups are developing a detailed schedule of activities leading up the 2017 Midpoint Assessment.

In the coming months, GIT 3 will be reviewing BMP panel reports from the Urban, Agricultural, Wastewater, and Forestry sector workgroups.

The BMP Verification Review Panel and the BMP Verification Committee held a joint meeting on April 2nd to systematically review the latest version of the full verification framework.

If you have any questions regarding GIT 3 activities, please contact GIT 3 Coordinator Lucinda Power at power.lucinda@epa.gov.

Maintain Healthy Watersheds Goal Implementation Team (GIT 4)

Renee Thompson, a former CRC Fellow at the CBP, joined the leadership of GIT 4 as Coordinator in January 2014. Renee is a geographer with USGS-CBPO. She holds a B.S. degree from University of Hawaii at Manoa in Global Environmental Science, and a Master’s

degree at the University of Maryland in Urban Studies and Planning with a focus on land use and the environment.

Thompson and GIT 4 Staffer Tuana Phillips (CRC-CBPO) are in the process of forming and convening a Local Engagement Workgroup and a Tracking *Ad Hoc* group to address GIT 4's strategic priorities. The two groups will meet for the first time in April, 2014.

Team members from EPA, Maryland, USFWS, and TNC will be presenting healthy watershed concepts and strategies at the April 3-4, 2014 Maryland Land Conservation Conference.

If you have any questions regarding GIT 4 activities, please contact GIT 4 Staffer Tuana Phillips at Phillips.tuana@epa.gov.

Fostering Stewardship Goal Implementation Team (GIT 5)

Public Access:

- The 2013 data call has been completed and a total of 36 new public access sites were added in 2013. Currently 23% of the goal to open 300 new sites by 2025 has been reached.
- Potential access sites have been approved by the states and are now being assembled and mapped.

LandScope:

- A proposal for a LandScope session at the Restore America Estuaries conference this fall was submitted. This session will demo the system and provide attendees with information on how existing LandScope Chesapeake capabilities can be used to identify priority geographic locations for collaborative conservation.
- LandScope Chesapeake's website is preparing for an architectural change. This change will streamline the data publishing workflow, scale up content by accessing already published material by federal, state, and NGO partners, make the map viewer compatible with mobile browsers, expand interoperability with cloud-based platforms, and redesign the map viewer to make key usability improvements.
- The Healthy Watersheds Data layer generated by GIT 4 will be incorporated into the LandScope data layers.

Conserved Lands:

- Conserved lands data from each jurisdiction have been received and staff is currently assembling GIT layers from the data provided.

Environmental Literacy:

- The Workgroup is preparing to Beta test the Meaningful Watershed Educational Experience (MWEE) Tracking Tool in school districts across the watershed.
- The Bay Backpack teacher resource website will be restructured to reorganize teacher resources and provide more background information on Bay issues and topics.

If you have any questions regarding GIT 5 activities, please contact GIT 5 Coordinator Amy Handen at AMHanden@chesapeakebay.net.

Partnering and Leadership Goal Implementation Team (GIT 6)

GIT 6 has been developing options for Management Board consideration of an ongoing program evaluation function within the Chesapeake Bay Program. A sub-workgroup of GIT 6 is currently developing options for an outline for the ongoing evaluation function, including making a distinction between Program Performance Assessment and Program Evaluation. A briefing to the MB on this work is expected later this spring.

GIT 6 members are involved in the re-design of the *ChesapeakeStat* website. Activities include gathering extensive input from potential *ChesapeakeStat* users to define the target audience and the needs of the target audience. The redesign effort will be ongoing through 2014.

If you have any questions regarding GIT 6 activities, please contact GIT 6 Coordinator Greg Allen at allen.greg@epa.gov.