



# THE ABSTRACT

*A Monthly Update from the Scientific and Technical Advisory Committee*

July 2014

## *Recent STAC News*

### **STAC Workshop: Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed**

**Annapolis, MD  
May 6-7, 2014**

STAC sponsored a May 2014 workshop in an effort to create agreement among practitioners, regulators, and scientists on a common language and assessment methods for designing sustainable stream restoration projects that improve the functional elements of stream health to address water quality, climatological impacts, and physical and biological components within the stream and adjacent riparian zone. The workshop focused explicitly on the stream restoration actions taken at a restoration site, not the process for choosing a site or other associated watershed restoration activities apart from stream-specific restoration.

Attendees were organized into various breakout groups and the agenda was split into separate tracks, during which participants split up to listen to different presentations that were summarized by the groups in later “report out” sessions. The workshop steering committee is currently reviewing workshop notes and will begin drafting a workshop report soon. The workshop report is due to the Chesapeake Bay Program (CBP) by August 5<sup>th</sup>.

### **June 2014 Principals’ Staff Committee (PSC) Conference Call**

**June 9, 2014**

The PSC held a one hour call on June 9<sup>th</sup> to discuss the near-final version of the new Chesapeake Bay Watershed Agreement ahead of the June 16<sup>th</sup> CBP Executive Council (EC) meeting, where the agreement was set to be signed by all EC members.

PSC members discussed CBP Editorial Board changes, the public comment response table, and draft outcome justification documents. They also previewed a draft governance document, with a goal to finalize the document by July 16<sup>th</sup>.

## **2014 Executive Council Meeting and Signing of New Chesapeake Bay Watershed Agreement**

**Annapolis, MD**  
**June 16, 2014**

The EC met at the Maryland State House in Annapolis, Maryland for their annual press event and Partnership hearing. This EC meeting was different in that nearly all of the jurisdiction governors/mayor attended to sign the new Chesapeake Bay Watershed Agreement along with the Environmental Protection Agency (EPA) Administrator, Deputy Under Secretary for the U.S. Department of Agriculture (USDA), Chesapeake Bay Commission Chair, and CBP Director.

Lisa Wainger provided STAC's EC Report at the meeting, highlighting important STAC topics and activities such as: STAC's role in assisting the CBP GITs with development of management strategies and identification of monitoring networks necessary to track progress towards new Chesapeake Bay Watershed Agreement goals and outcomes; behavioral economics research and impacts on environmental policy in the Chesapeake Bay Watershed; importance of shallow water modeling; review of the LSRWA report and continuing examination of the Conowingo Dam sediment issue; FY2014 Forage Fish and Roadside Ditch Management workshops; examination of CBP BMP Protocols and use of Best Professional Judgment (BPJ) in assigning efficiencies; improvement of Phosphorous (P) management and modeling; STAC's Invasive Catfish review; memo for enhanced collaboration with USDA; STAC's Criteria for Science-Based Restoration and Management; among other issues, oyster denitrification, social science, and land-based effects on the Chesapeake Bay Watershed.

## **June 2014 STAC Quarterly Meeting**

**Annapolis, MD**  
**June 17-18, 2014**

STAC met at the Loews Annapolis Hotel on June 17-18, 2014 for the last quarterly meeting of FY2013. STAC's Vice Chair, Lisa Wainger (UMCES), served as STAC Chair and led the Call to Order during Kirk Havens' (VIMS) leave. The March 2014 quarterly meeting minutes were approved. STAC introduced new member Cynthia Jones (ODU). Wainger discussed the STAC election process and allowed STAC members to speak on behalf of new STAC At-Large nominees. The nominees were Shirley Fiske (UMD), Lara Fowler (PSU), Glenn Moglen (VT), Dave Newburn (UMCES), and Jim Shortle (PSU). Of those five, STAC members selected three new members: Lara Fowler, Glenn Moglen, and Dave Newburn; and also, reappointed three current STAC members: Brian Benham (Virginia Tech), Carl Friedrichs (VIMS), and Mark Luckenbach (VIMS).

The June 17<sup>th</sup> morning session featured presentations on Best Management Practices (BMP) Protocols, the future administration of Chesapeake Bay Program (CBP) BMP Expert Panels, the use of BPJ in assigning BMP efficiencies, and a discussion session with CBP Expert Panel

Chairs and representatives. The afternoon session featured updates on the STAC Management Effects on Water Quality Trends workshop and report, the revised draft basinwide BMP Verification Framework, and STAC's Phosphorous Report, followed by a discussion session with CBP Goal Implementation Team (GIT) Chairs/Vice Chairs, and a presentation from Carl Cerco (US Army Corps of Engineers) regarding the Lower Susquehanna River Watershed Assessment (LSRWA).

Rich Batiuk led the June 18<sup>th</sup> presentations with a recap of the CBP's response to STAC's 2012 Climate Change Report, followed by updates on past and future STAC activities including: the STAC Onsite Septic System workshop report (Glynn Rountree – National Association of Home Builders), a workshop proposal to examine Proprietary BMPs (Dave Sample – Virginia Tech and Norm Goulet – Urban Stormwater Workgroup), the STAC Stream Restoration workshop (Gene Yagow – Virginia Tech), STAC's M3.2: Multiple Management Models workshop and report (Don Weller – Smithsonian Environmental Research Center (SERC)), a STAC memo to enhance USDA collaboration (Gene Yagow), and a presentation on metrics and protocols for National Fish and Wildlife Foundation (NFWF)-funded BMP project types (Gene Yagow).

### **Future STAC Discussion Issues**

Important upcoming issues for inclusion in the newsletter and discussion at future STAC meetings and other CBP-related meetings (please submit topics to STAC Staff as soon as possible).

The issues below, identified from recent communications, include:

- CBP-proposed STAC activities, 2014-2016 (from Rich Batiuk, EPA).
- BMP Verification Protocols – Evaluation of CBP BMP efficiencies by confronting multiple (competing) models with field data (suggested by Kathy Boomer, TNC)
- Procedures for Expert Panel efficiency estimates (suggested by Tom Jordan, SERC) and operating procedures (Brian Benham, Virginia Tech and STAC BMP Verification lead). A STAC group (Benham, Wainger, Sellner, Meisinger) will meet to discuss the CBP Expert Panel public access debate and submit comments to the CBP.
- STAC role in BASIN (Building and Sustaining Integrated Networks) Phase III activity within STAR (suggested by Kevin Sellner, CRC from STAR).
- Social science in the future CBP, 2017 and after (Kevin Sellner, CRC from STAR).
- Global Impacts and Adaptation Program – Office of Research and Development, National Center for Environmental Assessment (NCEA) (Susan Julius, EPA).

Please submit your suggestions to STAC Staff Matt Ellis ([ellism@si.edu](mailto:ellism@si.edu)) in the coming weeks.

## *Key Events*

- **July 2014 Wastewater Treatment Workgroup Call**  
**Date:** July 8, 2014  
**Time:** 10:00 a.m. – 12:00 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21139/>
- **July 2014 Watershed Technical Workgroup Call**  
**Date:** July 9, 2014  
**Time:** 10:00 a.m. – 3:00 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21398/>
- **July 2014 Management Board (MB) Meeting**  
**Date:** July 10, 2014  
**Time:** 10:00 a.m. – 3:00 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21457/>
- **July 2014 Water Quality GIT Conference Call (featuring final discussion of the revised BMP Verification Framework)**  
**Date:** July 14, 2014  
**Time:** 1:30 p.m. – 3:30 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21215/>
- **July 2014 Urban Stormwater Workgroup and Land Use Workgroup Joint Meeting**  
**Date:** July 15, 2014  
**Time:** 10:00 a.m. – 3:00 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21155/>
- **July 2014 Modeling Quarterly Review**  
**Date:** July 22-23, 2014  
**Time:** 10:00 a.m. – 3:00 p.m. (both days)  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21646/>
- **Agriculture Workgroup Meeting (College Park, MD)**  
**Date:** July 24, 2014  
**Time:** 9:30 a.m. – 3:30 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21224/>
- **July 2014 Scientific and Technical Assessment and Reporting (STAR) Meeting**  
**Date:** July 24, 2014  
**Time:** 10:00 a.m. – 1:00 p.m.  
**Details:** <http://www.chesapeakebay.net/S=0/calendar/event/21550/>

\*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 met on May 22<sup>nd</sup> and June 26<sup>th</sup>. At the May 22<sup>nd</sup> meeting, STAR/STAC member Bill Dennison (UMCES) discussed the UMCES Chesapeake Bay Report Card, released on May 23<sup>rd</sup>. The report card is produced every year providing an assessment of the previous year's Bay health. "Health" is defined as progress of seven indicators towards established scientifically derived ecological thresholds or goals. Dennison also gave a presentation on customer expectations for CBP monitoring networks. NOAA-Chesapeake Bay Office representatives Stephanie Westby and Howard Townsend provided presentations on the science underpinning large-scale oyster restoration in the Choptank complex. Peter Tango (USGS) finished the meeting by discussing the envisioned evolution of STAR, including responses to the "Evolution of STAR" draft document.

Tango presented the final "Evolution of STAR" document at the June 26<sup>th</sup> STAR meeting. Also at that meeting, Bill Dennison explained the purpose of customer expectations for the CBP monitoring networks, and Scott Phillips (USGS) provided an overview of the new Chesapeake Bay Watershed Agreement, highlighting specific STAR-related goals and outcomes.

Additionally, STAR remains interested in STAC efforts to embed social sciences into CBP processes as the new Chesapeake Bay Watershed Agreement is enacted through the forthcoming management strategies. On the next STAC Executive Board (EB) call, EB members will discuss planned interactions between STAC and STAR for BASIN and social science.

If you have any questions regarding the BASIN process, or other STAR activities, please contact STAR Coordinator Peter Tango at [ptango@chesapeakebay.net](mailto: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 Fisheries GIT held a full team meeting on June 4-5, 2014 at the Virginia Institute of Marine Science in Gloucester Point, Virginia. The meeting featured presentations on the effects of hypoxia, temperature, and mycobacteriosis on striped bass; updates on the Atlantic States Marine Fisheries Commission (ASMFC) striped bass management options; striped bass nutritional reference points; STAC forage fish workshop; and a panel discussion on climate change impacts on fisheries featuring STAC members Carl Hershner (VIMS) and Donna Bilkovic (VIMS). Day two of the meeting featured Chesapeake Bay Stock Assessment Committee (CBSAC) updates including 2014 Advisory Report and Virginia Marine Resources Commission (VMRC)-proposed management triggers; overview of the Wide Net Project, a program to promote removal of invasive catfish species by providing the low-cost fish to hunger-relief organizations; blue crab research needs; and natural mortality of blue crab populations.

The Fisheries GIT Invasive Catfish Task Force submitted a final report to STAC on April 11, 2014 for peer review. STAC's review of that report will begin in July 2014 with a deadline of October 31<sup>st</sup>. STAC also agreed to fund the Fisheries GIT's FY2014 workshop, "Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities." STAC member Tom Ihde (NOAA) will join Ed Houde (UMCES-Chesapeake Biological Laboratory) to co-chair this workshop. The workshop is tentatively scheduled for November 12-13, 2014 in Solomons, Maryland.

If you have any questions regarding Fisheries GIT activities, please contact Fisheries GIT Coordinator Bruce Vogt at [bruce.vogt@noaa.gov](mailto:bruce.vogt@noaa.gov).

## **Habitats Goal Implementation Team (GIT 2)**

Habitat GIT Chair Mike Slattery (U.S. Fish and Wildlife Service - USFWS) provided a presentation at the June 2014 STAC meeting in Annapolis. He highlighted a number of habitat-related outcomes included in the new Chesapeake Bay Watershed Agreement, like improvement of stream health, brook trout population, fish passage, wetlands, and black duck habitat, and the expansion of submerged aquatic vegetation (SAV), forest buffer, and tree canopy acreage.

The Habitat GIT participated in the STAC-sponsored workshop with the "Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed" workshop, on May 6-7, 2014 at the Sheraton Annapolis Hotel (see STAC News above). The workshop attendees considered expanded spatial and temporal scales for habitat restoration/conservation actions, identified in Management Strategies to be developed under the new Chesapeake Bay Watershed Agreement, and the potential identification of pilot landscapes. The workshop was chaired by Bill Stack (Center for Watershed Protection - CWP) and Rich Starr (USFWS). The workshop objective was to create agreement among practitioners, regulators, and scientists on a common language and assessment method for designing sustainable stream restoration projects that improve the functional elements of stream health in order to address water quality, climatological impacts, and physical and biological components within the stream and adjacent riparian zone.

Slattery also discussed the report from the April 2013 "Designing and Sustaining Coastal Habitats" STAC workshop. The report recommendations were very well received and influenced the Habitat GIT to reconsider the process by which they respond to STAC reports. Slattery said the process still needs to be reviewed by CBP Director Nick DiPasquale and draft protocols must be approved by the MB. The new response process will include steps to respond to each specific STAC recommendation and also to identify CBP groups to take on the necessary actions to implement recommended measures and meet intended goals by a certain date. The responses will serve as a checklist for the Bay Program and STAC to ensure action is taken after the CBP response is submitted.

The Habitat GIT is working with state agencies on a new Chesapeake Habitat Conservation design to delineate targeted areas that represent the ecological processes and priorities from habitat restoration organizations across the watershed/region.



Overall, Slattery provided four main takeaway messages: (1) STAC should work closely with all of the GITs to produce an overarching protocol for applying adaptive management to management strategies; (2) STAC can help the GITs develop metrics to better quantify measurement of outcomes that are poorly understood; (3) STAC will be assisting with the BASIN monitoring assessment, and Slattery stressed that much more investment is needed in monitoring networks to develop efficient systems; and (4) STAC can provide funding for workshops that support the GITs' collective, highest-order needs.

If you have any questions regarding Habitat GIT activities, please contact Habitat GIT Coordinator Jennifer Greiner at [Jennifer\\_greiner@fws.gov](mailto:Jennifer_greiner@fws.gov).

### **Water Quality Goal Implementation Team (GIT 3)**

The Water Quality GIT held a conference call on June 9<sup>th</sup>. Lucinda Power (EPA-CBPO) sent out a template for identification of official Water Quality GIT and associated workgroups' voting representatives and alternates. The voting signatories will complete and submit their templates by June 23<sup>rd</sup>. GIT members were also asked to provide final "fatal-flaw" comments on revised BMP Protocols to Lucinda Power by the same date. The protocols discuss the issue of Expert Panel transparency, which STAC was asked to comment on, and that issue will again be discussed during the July 14<sup>th</sup> Water Quality GIT conference call (see "Upcoming Events" for details). The Water Quality GIT and other invited GIT members were asked to identify any remaining issues with the 12 recommended elements for basinwide implementation in the revised BMP Verification Framework, and send to Jeremy Hanson ([jhanson@chesapeakebay.net](mailto:jhanson@chesapeakebay.net)) and Rich Batiuk ([batiuk.richard@epa.gov](mailto:batiuk.richard@epa.gov)) by June 30<sup>th</sup>.

Water Quality GIT members approved both the Urban Filter Strips Panel report and the proposed SAV goal alignment of 192,000 acres.

The Water Quality GIT decided to hold an in-person meeting in October 2014 with further details to be announced as soon as possible.

If you have any questions regarding Water Quality GIT activities, please contact Water Quality GIT Coordinator Lucinda Power at [power.lucinda@epa.gov](mailto:power.lucinda@epa.gov).

### **Maintain Healthy Watersheds Goal Implementation Team (GIT 4)**

The full Healthy Watersheds GIT met on June 12<sup>th</sup> at the Virginia State Arboretum at Blandy Farm. The meeting included reports from the Tracking *ad-hoc* group and Local Engagement workgroup; a discussion of the Chesapeake Bay Watershed Agreement; cross-GIT coordination, collaboration, and funding; a local presentation from Clarke County Natural Resource Planner Alison Teetor highlighting efforts to protect healthy watersheds; and a workplan roadmap for development of GIT management strategies.

If you have any questions regarding Healthy Watershed GIT activities, please contact Healthy Watershed GIT Coordinator Renee Thompson at [rthompso@chesapeakebay.net](mailto:rthompso@chesapeakebay.net).

## **Fostering Stewardship Goal Implementation Team (GIT 5)**

### LandScope:

- A proposal was submitted for a LandScope session at the Restore America Estuaries conference this fall. The proposed session will demonstrate the LandScope system and provide attendees with information on how existing LandScope Chesapeake capabilities can be used to identify priority geographic locations for collaborative conservation.
- Chesapeake's LandScope website is preparing for an architectural change to streamline data publishing workflow, scale up content by accessing already published material by federal, state, and non-government organization (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 the Healthy Watershed GIT will be incorporated into the LandScope data layers.

### Environmental Literacy:

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

If you have any questions regarding Stewardship GIT activities, please contact Stewardship GIT Coordinator Amy Handen at [AMHanden@chesapeakebay.net](mailto:AMHanden@chesapeakebay.net).

## **Partnering and Leadership Goal Implementation Team (GIT 6)**

The Partnering and Leadership GIT is working on a final draft of an overarching GIT governance document to be presented at the next MB meeting on July 10<sup>th</sup>.

Partnering and Leadership GIT members are also involved in the re-design of the ChesapeakeStat website. Re-design activities include gathering extensive input from potential ChesapeakeStat users to define the target audience and the needs of that group. An outside consultant was helping the GIT to determine how to best present scientific and technical information online, and there will be another information gathering session to better improve the website. The redesign effort will continue through 2014.

Partnering and Leadership GIT Chair Mike Foreman said it would be helpful for the GITs to conduct a call with STAC members to discuss best methods for the development of management strategies. Foreman said the GITs want to ensure that a management strategy development process is consistent across all GITs. STAC will identify key members to assist with this process, and assign them to a specific GIT based on STAC expertise (see Havens' e-mail of June 12, 2014).

If you have any questions regarding Partnering and Leadership GIT activities, please contact Partnering and Leadership GIT Coordinator Greg Allen at [allen.greg@epa.gov](mailto:allen.greg@epa.gov).