THE ABSTRACT

A Monthly Update from the Scientific and Technical Advisory Committee

October 2014

Recent STAC News

STAC Workshop: Exploring Applications of Behavioral Economics Research to Environmental Policy-making in the Chesapeake Bay Watershed

Annapolis, MD
August 27-28, 2014

STAC hosted a small workshop of 20 experts and practitioners at the Socio-Environmental Synthesis Center (SESYNC) in an effort to: (1) Broaden participants' knowledge of behavioral economics and behavioral decision-making and potential applications of these fields in the Chesapeake Bay watershed; (2) Explore in an in-depth manner the potential of applications in the problem areas of non-point source agricultural pollution and household/homeowner land and water management; (3) Increase the exchange of knowledge and expand collaboration between behavioral economics scholars and social science researchers in the region who know the policy-making challenges; (4) Identify and prioritize follow-up strategies for extending the insights gained at the workshop, and communicate this knowledge to state and EPA policymakers and other key audiences. The workshop was largely successful in achieving all goals and a workshop report will be developed by workshop lead Charlie Abdalla (Penn State) and the workshop planning committee by the end of 2014.

September 2014 STAC Quarterly Meeting

Annapolis, MD
September 9-10, 2014

STAC met at the Sheraton Annapolis Hotel for the September 2014 STAC quarterly meeting to hear presentations on the following topics: STAC/Scientific, Technical Assessment, and Reporting (STAR) coordination of Chesapeake Bay Watershed Agreement (CBWA) activities; development of management strategies; CRC Staffer updates; STAC's news column in the *Bay Journal*; discussion of the Chesapeake Bay Watershed Initiative, including analysis of farmer sign-up data and implementation funds and approaches to assess and explain water quality trends in relation to the Farm Bill; BMP accounting tools, including the Investment Framework for Environmental Resources (INFFER), Chesapeake Bay Facility Assessment Scenario Tool

(BayFAST), and a NFWF study to identify metrics and protocols for BMP projects funded by NFWF. Day two presentations involved discussion of the CBP's new Climate Change Coordinator position; a recap of STAC's Behavioral Economics workshop; an update on the Invasive Catfish Review; and follow-up to STAC's Lower Susquehanna River Watershed Assessment (LSRWA) Report Review.

In lieu of the regularly scheduled Goal Implementation Team (GIT) updates, STAC invited CBP GIT leaders to the meeting to discuss future plans for collaboration between the GITs and STAC on management strategy development. The GIT leaders and STAC members organized into breakout groups to address preliminary issues and plan next steps to begin developing strategies with necessary scientific rigor.

The newest STAC members (Lara Fowler – Penn State, Glenn Moglen – Virginia Tech, David Newburn – University of Maryland, and Peter Kleinman – USDA-ARS) were introduced during the Call to Order. STAC Staff made announcements regarding the 2015 STAC quarterly meeting dates (March 10-11, June 9-10, September 8-9, December 8-9), STAC's upcoming 30th Anniversary, and both Kevin Sellner's (CRC) impending retirement and Poornima Madhavan's resignation from STAC. Sellner will retire after 13 years as Chesapeake Research Consortium (CRC) Director and STAC Executive Secretary. Madhavan, formerly the founder and director of the Applied Decision Making Laboratory at Old Dominion University (ODU), will now direct the Board on Human-Systems Integration at the National Research Council of the National Academy of Sciences.

Chesapeake Bay Program (CBP) Management Board (MB) Meeting

Annapolis, MD
September 11, 2014

The CBP MB met on September 11th. Agenda topics included: an overview of GIT stakeholder outreach plans as related to development of CBWA management strategies; basin-wide BMP Verification Framework; continued discussion of management strategy development materials, minimum requirements for management strategies, and STAC/STAR support for management strategy development; community-based social marketing (CBSM) protocols; and an update on implementation of BMPs to meet federal facilities targets.

The next MB meeting will take place on October 9th (see the *Key Events* section below and view the October meeting agenda here): http://www.chesapeakebay.net/S=0/calendar/event/21460/

Principals' Staff Committee (PSC) Meeting

Washington, D.C.
September 22, 2014

The PSC met at the Metropolitan Washington Council of Governments (MWCOG) to discuss process highlights and development issues related to CBWA management strategies. During this session, the PSC discussed CBWA outcomes that do not have metrics and attempted to determine a realistic timeline for metric development prior to the adoption of management strategies in June 2015. Adaptive management was also discussed and PSC members were asked to consider acceptable levels of management strategy "completeness," if adaptive management is embedded in each process. Following the management strategy discussion, Rich Batiuk (EPA-CBPO) provided an update on the basin-wide BMP Verification Framework implementation and communication plans. Jennifer Volk (Water Quality Goal Implementation Team (GIT) Chair/University of Delaware) ended the meeting with a presentation on the Mid-Point Assessment (MPA) of the Total Maximum Daily Load (TMDL).

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:

- *Bay Journal*: STAC News Column (from Karl Blankenship, *Bay Journal*, and Kevin Sellner, CRC). Future article topics needed.

- CBP Climate Change Assessment (from Gary Shenk, EPA-CBPO).

- CBP-proposed STAC activities, 2014-2016 (from Rich Batiuk, EPA).

- Best Management Practice (BMP) Verification Protocols – Evaluation of CBP BMP efficiencies by confronting multiple (competing) models with field data (suggested by Kathy Boomer, TNC).

- STAR/STAC Collaboration on CBWA Activities – embedding social sciences into CBP processes now, by the 2017 MPA, and leading up to the 2025 Goal Line.

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

Key Events

- **October 2014 Modeling Quarterly Review**

    Date: October 1, 2014
    Time: 10:00 a.m. – 3:30 p.m.
    Details: http://www.chesapeakebay.net/S=0/calendar/event/21917/

- **October 2014 Communications Workgroup Call**

Date: October 2, 2014
Time: 9:45 a.m. – 11:00 a.m.
Details: http://www.chesapeakebay.net/S=0/calendar/event/21442/

- **October 2014 Watershed Technical Workgroup Meeting**

  Date: October 2, 2014
  Time: 10:00 a.m. – 12:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21401/

- **October 2014 Wastewater Treatment Workgroup Call**

  Date: October 7, 2014
  Time: 10:00 a.m. – 12:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21142/

- **October 2014 Water Quality Goal Implementation Team (GIT) Face-to-Face Meeting**

  Date: October 7-8, 2014
  Time(s): Tuesday, 10:00 a.m. – 5:00 p.m.; Wednesday, 9:00 a.m. – 3:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21218/

- **October 2014 Agriculture Workgroup Meeting**

  Date: October 9, 2014
  Time: 9:30 a.m. – 3:30 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21227/

- **October 2014 CBP Management Board Meeting**

  Date: October 9, 2014
  Time: 10:00 a.m. – 12:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21460/

- **October 2014 Trading and Offsets Workgroup Call**

  Date: October 15, 2014
  Time: 10:00 a.m. – 12:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21196/

- **October 2014 Sustainable Fisheries GIT Executive Committee Call**

  Date: October 20, 2014
  Time: 1:00 p.m. – 3:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/22002/

- **October 2014 Habitat GIT Fall Meeting**

  Date: October 21-22, 2014
  Time: not yet provided
  Details: http://www.chesapeakebay.net/S=0/calendar/event/22102/

- **Urban Stormwater Workgroup Meeting**

Date: October 21, 2014
Time: 10:00 a.m. – 3:00 p.m.
Details: http://www.chesapeakebay.net/S=0/calendar/event/21158/

- **October 2014 Scientific, Technical Assessment and Reporting (STAR) Team Meeting**

  Date: October 23, 2014
  Time: 10:00 a.m. – 1:00 p.m.
  Details: http://www.chesapeakebay.net/S=0/calendar/event/21553/

Upcoming STAC FY2014Workshops:

- **Re-plumbing the Chesapeake Watershed: Improving roadside ditch management to meet TMDL water quality goals**

  Date: October 9-10, 2014
  Time(s): Day 1: 9:00 a.m. – 5:30 p.m.; **Day 2:** 8:30 a.m. – 3:30 p.m.
  Details: http://www.chesapeake.org/stac/workshop.php?activity_id=235

- **Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities**

  Date: November 12-13, 2014
  Time(s): Day 1: TBD **Day 2:** TBD
  Details: http://www.chesapeake.org/stac/workshop.php?activity_id=234

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

STAR Updates

STAR and STAC have been collaborating to assist the CBP GITs with their management strategy needs, as well as activities related to the customer expectations portion of BASIN and the BASIN phase III: monitoring beyond water quality. STAR held a meeting on September 29th to hear a presentation from Nick Salafsky (Co-Director, Foundations of Success; Co-Chair, Conservation Measures Partnership - CMP) on Adaptive Management and the Miradi Adaptive Management Software for Conservation Projects. Salafsky explained the project cycle-based approach to adaptive management and described the CMP Open Standards for the Practice of Conservation. The CMP Open Standards help Miradi users: (1) define project scope, (2) define project team members, (3) develop the conceptual model of the system including threats, targets, and factor interaction, (4) plan actions and monitoring to target efforts efficiently, (5) implement actions and monitoring, (6) analyze, use, and adapt, and (7) capture results and share learning. While the Miradi software is beneficial for visualizing the steps of adaptive management, some STAC members have raised concerns that the software does not necessarily allow users to fully understand the concepts behind drivers and actions, and how to adaptively manage them.

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 Sustainable Fisheries GIT is providing guidance for the development of management strategies for all fisheries outcomes and identification of appropriate stakeholders to include in that process. The Chesapeake Bay Stock Assessment Committee (CBSAC) met on September 25th to discuss blue crab summer survey data, gear efficiency in the winter dredge survey, and the future stock assessment. The Sustainable Fisheries GIT also held a call on September 29th to recap the CBSAC meeting, present the draft Blue Crab Allocation white paper, and discuss the December 2014 full GIT meeting at Horn Point Laboratory in Cambridge, Maryland.

STAC is conducting a review of the Invasive Catfish Task Force's final report to be completed in October 2014. STAC is also hosting a Sustainable Fisheries GIT-proposed workshop titled, "Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities." The workshop will be held at the Chesapeake Biological Laboratory in Solomons, Maryland on November 12-13, 2014 (see "Upcoming STAC FY2014Workshops" under *Key Events*).

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

Habitats Goal Implementation Team (GIT 2)

The fall Habitat GIT meeting is scheduled for October 21-22, 2014 at the Pennsylvania Fish and Boat Commission (PFBC) Office in Harrisburg, Pennsylvania. The purpose of the meeting is to engage state fish and wildlife experts in a Chesapeake Bay watershed landscape conservation planning and design effort to demonstrate scalable, strategic habitat conservation in action. The meeting will also inform participants about the opportunity to influence CBWA management strategies related to habitat outcomes.

The Restore American Estuaries (RAE) Summit will feature a presentation on the Pilot Brook Trout Habitat Prioritization model for the Chesapeake Bay watershed. The summit will take place in Washington, D.C. on November 1-6, 2014. The Eastern Brook Trout Joint Venture met on September 8-10 at the National Conservation Training Center (NCTC) in Shepherdstown, West Virginia.

Neely Law (Center for Watershed Protection – CWP) is coordinating the Wetland Expert Panel. The Wetland Workgroup met on September 11th to discuss the CBWA wetlands outcome, how wetlands are tracked and credited, and the scope of work for the Wetland Expert Panel. The Wetland Workgroup appointed Amy Jacobs (The Nature Conservancy) and Erin McLaughlin (MD DNR) as workgroup co-chairs.

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

Water Quality Goal Implementation Team (GIT 3)

The Water Quality GIT is reviewing four upcoming BMP Expert Panel reports on the following topics: (1) Riparian Buffers, (2) Shoreline Management, (3) Oyster Aquaculture, and (4) Stream Restoration. The Water Quality GIT also began discussing a Toxic Contaminants strategy and formation of a Toxics Workgroup in September. By early fall, the Water Quality GIT will assess and approve the Phase 6.0 land use classifications proposed by the Land Use Workgroup.

An in-person Water Quality GIT meeting is scheduled for October 7, 2014. The meeting, located at the Liberty Mountain Resort and Conference Center, will be used to review progress and determine next steps leading up to the 2017 MPA. Please contact Water Quality GIT Staff Emma Giese (egiese@chesapeakebay.net) if you have any questions about the meeting.

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

Maintain Healthy Watersheds Goal Implementation Team (GIT 4)

The Maintain Healthy Watersheds GIT is working to identify key stakeholders that should be involved in the development of management strategies for the CBWA Healthy Watersheds outcome and Land Use Options Evaluation Outcome. The Maintain Healthy Watersheds GIT leaders presented a Healthy Watersheds session at the September 26-28, 2014 Chesapeake Watershed Forum in Shepherdstown, West Virginia.

If you have any questions regarding Healthy Watershed GIT activities, please contact Healthy Watershed GIT Coordinator Renee Thompson at rthompso@chesapeakebay.net.

Fostering Stewardship Goal Implementation Team (GIT 5)

LandScope and Land Conservation Progress:
- A proposal was submitted for a LandScope session at the RAE Summit in Washington, D.C. 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 going through 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.

Public Access:
- The Public Access team evaluated 19 project proposals submitted to the National Park Service (NPS) Chesapeake Bay Office for Chesapeake Bay Gateways and Trails financial assistance awards. Those awarded projects will contribute to the goal of adding 300 more public access sites in the Chesapeake Bay watershed by 2025. For more information, contact John Davy, john_davy@nps.gov.

Environmental Literacy:
- The Environmental Literacy Workgroup finished Beta testing the Meaningful Watershed Educational Experience (MWEE) Tracking Tool in school districts across the watershed in August, and will edit the MWEE definition this fall.

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

Enhancing Partnering, Leadership, and Management Goal Implementation Team (GIT 6)

There is $862,000 available in FY 2014 funding to support 17 projects proposed by the CBP GITs. Two projects proposed by the Enhancing Partnering, Leadership, and Management GIT will be funded using that money. The Enhancing Partnering, Leadership, and Management GIT proposed the formation of a new Financing Workgroup to provide guidance on a range of issues related to funding with the purpose of continually improving coordination, innovation, and expert peer review of budgets throughout the CBP. This workgroup will consider all funding issues at the state and federal level, and not just EPA funding.

The Enhancing Partnering, Leadership, and Management GIT is also in the process of developing a set of options for future CBP MB consideration on the concept of an annual program performance review meeting. The options will be presented to the MB in fall/winter 2014. The GIT has also been maintaining a list of potential revisions to the PSC-approved governance document, and will consider those revisions during a December 2014 review of GIT governance.

The MB placed the CBWA Local Leadership Outcome under the Enhancing Partnering, Leadership, and Management GIT, and the GIT began planning approaches for stakeholder outreach and management strategy development at their September 2014 GIT meeting.

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.