



**Chesapeake Bay Program
Management Board Meeting
June 17, 2015**

Program Update

CBPO Calendar

June 18	Federal Leadership Committee Designees Meeting
June 25	Scientific Technical Analysis and Reporting (STAR) meeting
June 30	Jurisdictions finalize BMP Verification Programs
June 30	Management Strategies final
July 9	Management Board Meeting
July 21	Executive Council Meeting (tentative)
Sept 17	Principals' Staff Committee Quarterly Meeting

Program Updates

TMDL Milestones Interim Evaluations Posted

EPA's interim evaluations of the Bay jurisdictions' and federal agencies' progress toward meeting their 2014-2015 Milestones were posted on the [Chesapeake Bay TMDL website](#) on June 11. Draft evaluations have been shared with the states and federal agencies allowing for comment prior to the final posting. The milestones outline steps the Bay jurisdictions and federal agencies are taking toward having all pollution control measures in place by 2025 to fully restore water quality to the Bay, with practices in place by 2017 that would achieve 60 percent of the necessary reductions compared to 2009. The evaluations will include EPA recommendations for actions prior to the end of the milestone period and to be included in the 2016-2017 Milestone commitments to ensure jurisdictions and federal agencies remain on track. The 2016-2017 Milestones are due to be submitted to EPA by January 15, 2016.

Contact: Katherine Antos, antos.katherine@epa.gov

Final EPA Clean Water Rule Released

The U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers released their final Clean Water Rule on May 27. The rule ensures that waters protected under the Clean Water Act are more precisely defined and predictably determined. Included under the new rule are ephemeral streams that may only flow during certain times of the year, but which have a significant connection to downstream waters that were previously protected. Wetlands and waterways that border larger waterbodies will also be covered. Two complex Supreme Court decisions led to nearly a decade of confusion over which waters are covered by the Clean Water Act. While the new rule clarifies which waterways are now protected, it does not expand the scope of the Clean Water Act, and it preserves existing exemptions for irrigation ponds, drainage ditches and other agricultural activities. The new rule will be effective 60 days after publication in the Federal Register; however, pending legislation in both the US House and Senate seek to overturn the rule before it takes effect.

Bernie Fowler Wade-in Best in nearly 20 years

Former Maryland State Senator Bernie Fowler saw his sneakers through 44.5 inches of water at this year's 28th annual Patuxent River Wade-In on June 14. This marks the deepest measurement of the "sneaker index"—the deepest point at which Fowler can still see his shoes as he wades into the water—since 1997. Fowler holds the wade-in each year on the second Sunday in June to bring attention to the polluted waters of the Patuxent River and the Chesapeake Bay. The 1960s sneaker index of 57 inches now serves as the benchmark for a restored Patuxent River. While still well below this target, this year's measurement is close to double last year's depth of 23 inches.

Mid-Shore Rivers Earn Higher Grades on Latest Report Card

Several waterways on the Chesapeake Bay's Eastern Shore saw improvements in water clarity over the past year, helping them earn higher grades in the Midshore Riverkeeper Conservancy's fifth annual report card. Of the sixteen rivers and streams tracked by the Midshore Riverkeeper Conservancy, grades for ten of the waterways improved from the previous year. This includes Tuckahoe Creek, a tributary of the Choptank and historically one of the area's most polluted rivers, which was upgraded from a "D+" to a "C." Increased water clarity and a rebound in underwater grass abundance helped the Choptank overall earn a "B-," up from a "C" last year. Eastern Bay and the surrounding creeks showed modest improvement, all scoring "B" grades or higher. The Miles and Wye Rivers continue to struggle—earning "C" grades overall—due in part to increases in nitrogen pollution and low dissolved oxygen levels. Grades are based on data from more than 100 sampling sites, where volunteers test for water clarity, dissolved oxygen, nutrients and chlorophyll a.

For more information: <http://midshoreriverkeeper.org/wp-content/uploads/2013/02/MRC-Report-Card-2014-v8-WITHOUTprinter-marks-high-quality-print.pdf>

Advisory Committee Updates

Local Government Advisory Committee

The purpose of the LGAC is to advise the Executive Council on how to effectively implement projects and engage the support of local governments to achieve the goals of the Bay Agreement.

The Local Government Advisory Committee met in Harrisburg, PA on May 20-21, 2015. LGAC's Bylaws were amended to allow the Governors of Delaware, New York and West Virginia to appoint one member each to LGAC. LGAC Chair, Janine Burns (Mathews County, VA) will follow up with PSC members regarding appointments in these jurisdictions. In other business, the members discussed the need for enhanced communication with local government. LGAC's Communications Committee, under the leadership of Sheila Finlayson (Annapolis, MD), will develop recommendations for presentation to LGAC at their September meeting. Bruce Williams (Takoma Park, MD) was elected Vice-Chair, representing the Maryland delegation on the Executive Committee.

LGAC's next quarterly meeting will be held in Shepherdstown WV in conjunction with the Chesapeake Watershed Forum, September 24-25, 2015. A pre-Forum workshop on Integrated Infrastructure Programs is planned. To be added to the Interested Parties list, please contact Amy Robins at arobins@allianceforthebay.org.

Contact: Mary Gattis, mgattis@allianceforthebay.org

Citizens' Advisory Committee

The Citizens Advisory Committee (CAC) is charged with responsibility for representing residents and stakeholders of the Chesapeake Bay watershed in the restoration effort and advising the Chesapeake Bay Program Partnership on all aspects of restoration.

The Citizens Advisory Committee met jointly with the Local Government Advisory Committee on May 21 in Harrisburg, PA. The agenda focused on Land Use and Growth. CAC met for a Business Meeting, a presentation of ChesapeakeSTAT, and discussion on their annual recommendations to the Executive Council on May 22.

Contact: Jessica Blackburn, jblackburn@allianceforthebay.org

Scientific and Technical Advisory Committee

The Scientific and Technical Advisory Committee (STAC) provides scientific and technical guidance to the Chesapeake Bay Program on measures to restore and protect the Chesapeake Bay.

STAC held its first quarterly meeting of FY 2015 on June 9-10, 2015 at the DoubleTree Hotel in Williamsburg, Virginia. Please direct any STAC quarterly meeting follow-up questions to STAC Staff, Renee Kelly at kellyr@si.edu.

STAC held a workshop at the end of May. Information regarding that workshop is below. *Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making* - The workshop objectives are (1) to assess the relative skill of multiple linked hydrodynamic/water quality models in terms of their ability to reproduce observations of multiple variables at select shallow water sites in the Bay; (2) to compare the modeled Submerged Aquatic Vegetation (SAV) computed from an empirical SAV model for each participating hydrodynamic/water quality model; and (3) to compare results of nutrient reduction strategies applied to these multiple estuarine models at these select sites. The workshop took place on May 20, 2015 at the Virginia Institute of Marine Science (VIMS).

FY15 Workshop Proposals Rankings: STAC approved funding for the following seven workshop proposals. Funding began on June 1, 2015 and ends on May 31, 2016.

- 1) Assessing Uncertainty in the CBP Modeling System
- 2) Conowingo Infill Influence on Chesapeake Water Quality
- 3) The Development of Standardized Climate Projections for Use in Chesapeake Bay Program Assessments
- 4) Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making
- 5) Optimization for TMDL Implementation Planning
- 6) Enhancing Capacity to Support the Chesapeake Agreement Outcome through Increased Integration of Regional Science and Management Efforts
- 7) Integrating and Leveraging Monitoring Networks to Support the Assessment of Outcomes in the New Bay Agreement

For additional information about the workshops above, contact Rachel Dixon at dixonra@si.edu or visit the STAC workshop webpage at http://www.chesapeake.org/stac/stac_ws.php.

STAC is in the process of finalizing five workshop reports. Below is a list of reports that STAC will distribute over the next few months.

- 1) Exploring Applications of Behavioral Economics Research to Environmental Policy-making in the Chesapeake Bay Watershed.
- 2) Re-plumbing the Chesapeake Bay Watershed: Improving Roadside Ditch Management to Meet TMDL Water Quality Goals.
- 3) Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities.
- 4) Evaluating Proprietary BMPs: Is it time for a State, Regional, or National Program?
- 5) Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making.

STAC distributed two workshop reports in May 2015. The first report entitled "Estimating Land Management Effects on Water Quality Status and Trends" was distributed on May 8, 2015. This report provides a summary of recommendations related to the most promising analytical approaches and corresponding data needs for detecting linkages between management practices on the land and changes in water quality within the Chesapeake Bay Watershed. The report can be found on the STAC publications database at: http://www.chesapeake.org/pubs/336_Keisman2015.pdf. The second report entitled "Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed" was distributed on May 26, 2015. This report provides recommendations for the development of a function-based process to implement sustainable stream restoration projects. The report can be found on the STAC website at: http://www.chesapeake.org/stac/workshop.php?activity_id=232.

Finally, STAC is working closely with CBP representatives to plan for the upcoming CBP Partnership requested STAC sponsored independent scientific peer reviews. The ~8 remaining reviews will take place between now and 2016. The STAC reviews will help inform the Partnership's 2017 mid-point assessment.

Goal Implementation Team, STAR and Communication Workgroup Updates

Fisheries Goal Implementation Team

The Sustainable Fisheries GIT focuses on advancing ecosystem-based fisheries management by using science to make informed fishery management decisions that cross state boundaries.

- The full Fisheries GIT met on June 1-2nd, 2015 at CBF's Brock Environmental Center in Virginia Beach, VA. The meeting addressed multiple GIT priorities including striped bass, forage, habitat and blue crabs. GIT members also discussed management strategy public comments and next steps for developing work plans. Thanks to all the presenters for the really fantastic, compelling presentations!
- The meeting featured updates on two projects funded by the EPA-CBP GIT funding: development of a striped bass health indicator and development of forage indicators.
- All meeting materials (agenda, presentations) can be found [here](#).
- During the public comment period at the Fisheries GIT meeting, Sonja Fordham of Shark Advocates International requested that the Fisheries GIT support a workshop to discuss the best available science on cownose rays. The concern is that cownose rays are being killed using bow and arrow during tournaments, but potential effects this might have on their populations are not known. Cownose rays are considered to be nuisance by some because of perceived population increases and predation on oyster reefs and clam aquaculture. NOAA Fisheries has written a letter on this issue to Congressman Wittman, who has concerns over effects to aquaculture. The letter from former Chief Scientist, Steve Murawski, stated NOAA Fisheries had concerns over developing a

fishery for cownose rays based on their life history and ecology. NCBO has funded research on basic biology and potential predation of oysters by cownose rays. The Fisheries GIT agreed to review a workshop proposal Sonja Fordham is developing.

- The Chesapeake Bay Stock Assessment Committee (CBSAC) met in-person on May 15th to discuss the Winter Dredge Survey results and draft the 2015 Blue Crab Advisory Report. They presented their draft report to the Fisheries GIT on June 2nd and are in the process of finalizing the report.
- The blue crab management jurisdictions worked with stock assessment scientists on CBSAC to finalize the draft terms of reference (TORs) that will guide the next blue crab benchmark stock assessment, which is currently scheduled to be complete in late 2016/early 2017. Stock assessment scientists are currently developing a cost estimate based on the TORs.
- The Fisheries GIT Executive Committee will have their next monthly conference call on Monday, July 20th.

Contact: Bruce Vogt, bruce.vogt@noaa.gov

Habitat Goal Implementation Team

The Habitat GIT is restoring a network of land and water habitats to afford a range of public benefits and to support priority species.

Contact: Jennifer Greiner, Jennifer_greiner@fws.gov

Water Quality Goal Implementation Team

The Water Quality GIT works to evaluate, focus and accelerates the implementation of practices, policies and programs that will restore water quality in the Chesapeake Bay and its tidal tributaries to conditions that support living resources and protect human health.

The WQGIT held conference calls on May 11 and June 8:

- The WQGIT received an update on the jurisdictional review period for the Phase 6 land use categories as well as an overview of the overall timeline for land use decisions. They also approved the updated 2015 land use projections for 2015 progress. Land use projections are not final at this point; this revision is an interim step intended to improve the projections, and approval represents an endorsement of the revision.
- On May 11th, the WQGIT received a briefing from the April Modeling Workgroup quarterly meeting. They were also given an update from the Agriculture Workgroup on its proposed BMP expert panel approval process, and the proposal and timeline for finalizing agricultural loading targets.
- The WQGIT approved the Federal Facility Targets Protocol.
- On June 8th the WQGIT received a briefing on the STAC peer review process, and an overview of the draft Ambient Water Quality Criteria Technical Addendum that has been prepared for CAP WG and CBP-STAC review this summer.

Upcoming WQGIT Topics for June 22nd conference call:

- Seeking approval of revised WQGIT Governance Protocols
- Update on Phase 5.3.2 Nutrient Management BMP expert panel report
- Update on Building Environmental Intelligence Report (formerly the BASIN report)

Contact: Lucinda Power, power.lucinda@epa.gov

Toxic Contaminants Workgroup

Management Strategies

Comments that were received on the two Toxic Contaminants Management Strategies have been reviewed and the workgroup is updating the strategy documents and beginning work on the workplans.

Mercury Deposition and Loading

The Toxic Contaminants Workgroup recently heard from leading mercury researchers regarding trends in mercury deposition and loads to the Bay and watershed. While some of the long-term monitoring stations show decreases in mercury deposition, others do not. Regulatory actions and market forces should reduce loads. Funding is needed to maintain long-term monitoring and modeling to better understand trends and to determine whether additional controls are needed.

Contact: Greg Allen, allen.greg@epa.gov

Healthy Watersheds Goal Implementation Team

The goal of the Maintain Healthy Watersheds Goal Implementation Team (GIT 4) is to maintain local watershed health across a range of landscape contexts. With this goal, GIT 4 intends to bring attention to the challenge of protecting streams and watersheds that are healthy today. This initiative complements the "dirty waters" approach which focuses on restoring impaired waters.

GIT Members met on April 30th for a face-to-face meeting. Presentations, discussions, and decisions included:

- Participants discussed some of the public and partner comments received on the Healthy Watersheds and Land Use Options Evaluation Management Strategies.
- Participants suggested edits to improve the Healthy Watersheds Management Strategy, including how to better align the Gaps with the Management Approaches.
- Participants heard an update on the Landscape Pilot Forest Retention Demonstration project in the Rappahannock river basin. This study will assess growth trends in the region and evaluate the spatial variability of forest ecosystem service value. By simulating the loading impact of the alternative development scenarios and comparing the cost of additional urban BMP implementation to offset the loads, the aim of the project is to demonstrate the cost-benefit relationship of forestland retention.
- Participants also heard about the status of the Land Use Options Evaluation Management Strategy, ongoing cross-GIT coordination efforts and the new vision of the Goal Team's Tracking Workgroup.

GIT leaders and select members responded to and incorporated comments received during the public input period on the Healthy Watersheds, Land Use Options Evaluation, and Land Use Methods and Metrics Management Strategies.

Contact: Tuana Phillips, Phillips.tuana@epa.gov

Foster Stewardship Goal Implementation Team

The Fostering Stewardship GIT promotes individual stewardship, supports environmental education for all ages, and assists citizens, communities and local governments in undertaking initiatives to achieve restoration and conservation in the Chesapeake region. It aims to build public support of restoration efforts and increase citizen engagement and active stewardship.

Citizen Stewardship

A subset of the Citizen Stewardship Outcome Team met on April 27th to work on the development of an index that will provide a metrics for the citizen stewardship outcome. At this meeting a rough framework for an indicator was shared, research and examples from related work was presented, and priorities to shape the Chesapeake Citizen Stewardship Indicator were discussed. Following this meeting the group then self-assigned themselves into smaller working groups, to focus on the different levels of citizen engagement in the engagement framework. These working groups met on May 14th to prioritize and discuss methods for collecting metrics. Please contact Amy Handen at Amy_Handen@nps.gov for more information.

Environmental Literacy

The Education Workgroup met on May 8th to discuss management strategy updates and public comments, the draft agenda for the upcoming Environmental Literacy Summit being held at NCTC on November 9 & 10, and NOAA / CBT capacity building projects to support the environmental literacy goal and outcomes. The Education Workgroup Leadership team will meet on June 1st. Please contact Shannon Sprague at Shannon.Sprague@noaa.gov for more information.

Public Access

The Public Access team is continuing to make progress on the Public Access site development Management Strategy and Workplan. For more information please contact John Davy at John_Davy@nps.gov.

Land Conservation

The Chesapeake Conservation Partnership continues to advance key priorities including streamlining online conservation mapping and analysis platforms and exploring a coordinated mitigation approach to minimize the impact of infrastructure development on conserved lands. Planning is also underway for the 2017 Rivers of the Chesapeake LWCF funding proposal. In the coming months the Partnership will be preparing for the 2015 Annual Meeting which will be held on October 5-6 at the National Conservation Training Center. For more information on the Chesapeake Conservation Partnership contact Kate_Baker@partner.nps.gov.

Contact: Amy Handen, ahanden@chesapeakebay.net

Enhance Partnering, Leadership, and Management Goal Implementation Team

The goal of the Enhance Partnering, Leadership, and Management GIT is to continually improve the governance and management of the CBP Partnership.

Governance Document

At the June 2 PSC meeting, all of the updates to the Governance Document were accepted with a few small editorial changes. Goal Team 6 plans to update the Governance Document and deliver it to the MB and PSC as final. Goal Team 6 is also planning on initiating discussions with the other goal teams to support them in any necessary changes to their team operations.

FY 15 GIT Funding

An RFP was released in early 2015 for an organization to administer FY15 GIT Funds. Proposals are now being reviewed.

Local Leadership

The Local Leadership Management Strategy was recently finalized and is now out for fatal flaw review by internal partners. In moving forward to develop the workplan, Goal Team 6 plans to bring together a formal workgroup, and is now discussing membership needs for that group.

Face to Face Meeting

Goal Team 6 is planning a face to face meeting that will occur September 2, 2015. We plan to set the strategic direction of our goal team for the next year at this meeting, and we will discuss varied issues including: local leadership workplan development, CBP performance review, and CBP independent evaluator and the Chesapeake Bay Accountability and Recovery act. The location of this meeting is has not yet been determined, but will likely take place somewhere in Pennsylvania. The goal team is actively developing an agenda for this meeting.

Contact: Greg Allen, allen.greg@epa.gov

Scientific, Technical Assessment, and Reporting Team

The purpose of STAR (Scientific, Technical Analysis and Reporting) is to facilitate productive deployment of scientific resources, to provide timely, quality information to managers, and to expand communication between workgroups.

The Scientific Technical Assessment and Reporting (STAR) Team reorganized their workgroup framework for the purpose of providing the needed science support to the Goal Team's to meet the 2014 Watershed Agreement priorities. Two of the efforts that are underway include the Indicator Assessment Team and the Integrated Trends Analysis Teams, updates below. STAR will keep the Management Board apprised of the other efforts as progress is made.

Indicator Assessment (IA) Team

The Indicator Assessment (IA) Team meets with Management Strategy (MS) leads to review the monitoring and assessment strategy for tracking status and progress towards outcomes and determine what (if any) needs can be met through the STAR support framework. Upon meeting with approximately half of the MS leads, the development of the monitoring programs has been found to vary. Some outcomes have well established monitoring, including the Water Quality and Protected Lands outcomes. Others have plans for monitoring but do not have identified indicators, while others are in the preliminary stages of a monitoring plan. The MS leads also indicated missing monitoring data that would be useful to them. The IA team will continue to meet with the remaining MS leads, and the monitoring progress plans, indicators, and data gaps will continue to be recorded. STAR then plans to meet with the GIT chairs to prioritize their needs and determine how best to assist the Goal Teams moving forward.

The IA Team is a team led effort by Peter Tango (USGS), Mindy Ehrich (UMCES), Jennifer Gundersen (EPA), Lea Rubin (CRC), Kevin DeBell (EPA), Doreen Vetter (EPA), Guy Stephens (UMCES), and Catherine Krikstan (UMCES). IA Team meetings are held weekly.

Integrated Trends Analysis Team (ITAT)

The Integrated Trends Analysis Team aims to combine the efforts of Chesapeake Bay Program analysts with those of investigators in governmental, academic, and non-profit organizations to identify potential research synergies and collaborations that will enhance our understanding of spatial and temporal patterns in water quality. More specifically, we plan to: (1) Gather researchers and analysts from various governmental, academic, non-profit, and private organizations for biannual meetings to

identify the broad scope of on-going work related to trends and patterns of water quality in the Chesapeake watershed and estuary; (2) Discover previously un-identified linkages among the ongoing research activities of participating individuals and organizations; (3) Develop a standard set of analysis tools that can be applied in any relevant ecosystem within the Chesapeake watershed and estuary; (4) Foster increased collaboration and awareness of ongoing research; (5) Provide a forum for bringing findings to the broader Chesapeake Bay management community.

The Integrated Trends Analysis team is co-chaired by Jeremy Testa (UMCES) and Joel Blomquist (USGS). Jeni Keisman (USGS) serves as the coordinator. The team held its inaugural meeting on November 12, 2014 at the USGS MD-DE-DC Water Science Center. It was attended by approximately 40 individuals from across federal, academic, state, and other partner organizations. An equally well-attended conference call was held on March 17, 2015 and meeting on June 1, 2015.

Topics covered and progress made to date:

- Updates were provided on progress in the development and refinement of novel statistical methods to advance the explanation of trends in water quality;
- Preliminary results providing confidence intervals around the latest estimates of trends in nitrogen, phosphorus, and sediment loads from the RIM stations to the Bay were presented;
- Maps were produced illustrating trends in nitrogen, phosphorus, chlorophyll-a, and water clarity all long-term Chesapeake Bay monitoring stations;
- A survey was conducted that solicited input from meeting participants on key topics to be addressed by the ITAT;
- Contacts were generated and information exchanged, resulting in new collaborations among several groups of researchers from different participating organizations.

Meeting materials and related information can be found on the Integrated Trends Analysis Team website at http://www.chesapeakebay.net/groups/group/integrated_trends_analysis_team.

Contact: Peter Tango, ptango@chesapeakebay.net

Communications Workgroup

The Communications Workgroup provides strategic planning and expert advice to support the communication needs of the Chesapeake Bay Program partners, and spur public action through consistent messaging, expanded media coverage, use of multimedia and online tools, comprehensive branding and promotion, outreach to stakeholders, and coordinated internal and external communications.

Contact: Margaret Enloe, menloe@chesapeakebay.net

Recent Meetings and Events

June 16	1 year anniversary of Chesapeake Bay Watershed Agreement signing
June 9-10	STAC Quarterly Meeting (Williamsburg, VA)
June 2	Principals' Staff Committee Meeting
May 28	Management Board Meeting
May 26	GIT Chairs meeting
May 21-22	LGAC/CAC Quarterly Meeting