



**Chesapeake Bay Program  
Management Board  
November 17, 2016**

**Program Update**

**CBPO Calendar**

Nov 16-17 CAC meeting  
Nov 15-18 Ag Networking Forum (Staunton, Va.)  
Nov 28 Water Quality GIT Conference Call  
Nov 29 Goal Implementation Team Chairs Quarterly Meeting  
Dec 1 STAR Meeting  
Dec 1-2 Local Government Advisory Committee Meeting  
Dec 6-7 Sustainable Fisheries GIT Meeting  
Dec 6-7 Scientific and Technical Advisory Committee Quarterly Meeting  
Dec 6 Enhancing Partnering, Leadership and Management (GIT6) Meeting  
Dec 8 Management Board Conference Call  
Dec 13 Principals' Staff Committee in-person meeting

**Updates**

**Regional Administrator and CBPO Director at “Halftime for the Bay TMDL” symposium**

On November 9, Regional Administrator Shawn Garvin gave closing remarks and CBPO Director Nick DiPasquale took part in a panel at the University of Maryland School of Law symposium titled “Halftime for the Bay TMDL” in Baltimore. DiPasquale’s discussion focused on EPA’s accountability framework for the Bay TMDL, state programs to offset for growth and water quality trading, local targeting of priority practices in unregulated sectors, and messages to educate and engage the public about progress and the work of the partnership.

Contact: Nick DiPasquale, (410) 267-5710, [dipasquale.nicholas@epa.gov](mailto:dipasquale.nicholas@epa.gov)

**CBPO Director at NFWF Chesapeake Bay Agricultural Networking Forum**

CBPO Director Nick DiPasquale will participate the National Fish and Wildlife Foundation sponsored biennial Chesapeake Bay Agricultural Networking Forum November 15-18 in Staunton, Va. The forum brings together stakeholders and grantees from throughout the Chesapeake Bay watershed to share innovative practices.

Contact: Julie Winters (410) 267-5754, [winters.julie@epa.gov](mailto:winters.julie@epa.gov)

**CBPO Deputy Director at CBP Citizens’ Advisory Committee meeting**

The CBP Citizens’ Advisory Committee will hold its quarterly meeting on November 16-17 in at the UMCES Horn Point Laboratory in Cambridge, Md. CBPO Deputy Director Jim Edward will give the group a CBP Program Update, including the results of the Diversity Profile results and the Finance Action Team charge. Other items on the agenda include CAC letters to President Obama and the Executive Council, the climate management strategy executive summary, climate monitoring and assessment outcome, and the Executive Council local government resolution.

Contact: Jim Edward, (410) 267-5705, [edward.james@epa.gov](mailto:edward.james@epa.gov)

## **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.*

LGAC Chair Brianne Nadeau has taken on additional duties with DC Council for the balance of 2016. Therefore, LGAC member Bruce Williams (Takoma Park, MD) will represent LGAC at PSC meetings and full-day MB meetings, plus chair the next LGAC Quarterly meeting December 1-2 in Annapolis, MD.

Two LGAC member seats remain open in Maryland, and one each in Delaware, New York and Virginia. Members continue to actively participate in the Local Area Goals/Targets Task Force deliberations, the Local Government Engagement Initiative and, through LGAC Coordinator Mary Gattis, the newly created Action Team addressing the Finance Symposium recommendations.

LGAC Coordinator, Mary Gattis, continues to work with the jurisdictions' technical leads on the Local Government Engagement Initiative. Some of the tools and resources jurisdictions have stated are needed include fact sheets, case studies (with how-to content), web page content, and assistance with graphics. A fact sheet on the midpoint assessment and phase III WIP development, geared towards local government audience, is in draft form. An info-graphic is in development that will serve as a quick, "at a glance" guide to local engagement over the next several years. Work has begun on messaging with the goal of developing a comprehensive messaging document for the states that will include either a page or several bullet points for each of these topics. The next Initiative conference call will be held on November 15 from 1-3 and focus on sharing lessons learned from past engagement efforts, and further refining states local government engagement strategies. Any questions about this Initiative should be directed to Mary at [mgattis@allianceforthebay.org](mailto:mgattis@allianceforthebay.org).

LGAC's next meeting is in Annapolis, MD December 1-2, 2016. To be added to the LGAC's Interested Parties list, please contact LGAC's Program Assistant, Jennifer Starr at [jstarr@allianceforthebay.org](mailto:jstarr@allianceforthebay.org). For other issues please contact LGAC Coordinator, Mary Gattis, at [mgattis@allianceforthebay.org](mailto: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.*

CAC is meeting in Cambridge, MD on Nov 16-17. The meeting theme is climate resiliency. The members will hold CAC Officer Elections for Chair and Vice-Chair. Charlie Stek's term for Chair is ending, but he will remain on the CAC Executive Committee.

CAC sent two letters in October: (1) to Governor McAuliffe asking him to reconsider closing the VA Office of Environmental Education or to reallocate that Office's responsibilities to another Department; (2) to President Obama commending him for issuing the Chesapeake Bay Executive Order and encouraging that his FY18 Budget include enhanced targeting of USDA funds toward farmland areas contributing the most pollution, Dept. of Education and BWET programs to work together for environmental education, and to local governments for restoration work.

Governor Hogan recently appointed Michael Haire as a new Maryland CAC member. Michael will replace Jeff Holland, the West and Rhode Riverkeeper.

Contact: Jessica Blackburn, [jblackburn@allianceforthebay.org](mailto: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.*

#### Quarterly Meeting:

STAC will hold its third quarterly meeting of FY2016 on December 6-7, 2016 at the Crowne Plaza Hotel in Annapolis, MD. Please direct any STAC quarterly meeting questions or inquiries to STAC staff, Renee Kelly at [kellyr@si.edu](mailto:kellyr@si.edu) and Elaine Hinrichs, [hinrichse@chesapeake.org](mailto:hinrichse@chesapeake.org).

#### FY16 Workshops:

Planning is underway for the following four workshops in FY2016. All workshops are being scheduled for the spring of 2017. For additional information about the workshops below, contact Renee Kelly at [kellyr@si.edu](mailto:kellyr@si.edu).

- An Analytical Framework for Aligning Chesapeake Bay Program Monitoring Efforts to Support Climate Change
- Legacy Sediment, Riparian Corridors, and Total Maximum Daily Loads
- Quantifying Ecosystem Services and Co-Benefits of Nutrient and Sediment Reducing Best Management Practices (BMPs)
- Understanding and Explaining 30+ Years of Water Clarity Trends in the Bay's Tidal Waters

#### Upcoming Reports:

STAC distributed a workshop report entitled "The Development of Climate Projections for Use in Chesapeake Bay Program Assessments" on October 21, 2016. The report is a product of a March 2016 workshop focused on assessing the applicability of available climate data, downscaling techniques, projections, and scenarios to establish an approach for climate analysis in Chesapeake Bay Program (CBP) assessments. The final report is posted at: [http://www.chesapeake.org/pubs/360\\_Johnson2016.pdf](http://www.chesapeake.org/pubs/360_Johnson2016.pdf)

STAC is working to finalize five reports from the following FY2015 workshops. The workshop steering committees are in the process of drafting activity reports that will be distributed to the Partnership over the next few months. Information regarding each workshop - including agendas, presentations, and reports (as available) - can be found on the STAC workshop webpage at: [http://www.chesapeake.org/stac/stac\\_ws.php](http://www.chesapeake.org/stac/stac_ws.php).

- 1) Linking Wetland Workplan Goals to Enhance Capacity, Increase Implementation
- 2) Assessing Uncertainty in the CBP Modeling System
- 3) Cracking the WIP: Designing an Optimization Engine to Guide Efficient Bay Implementation
- 4) Integrating and Leveraging Monitoring Networks to Support the Assessment of Outcomes in the New Bay Agreement
- 5) Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making

For more information, contact STAC Coordinator Rachel Dixon at [dixonra@si.edu](mailto:dixonra@si.edu).

#### Reviews:

STAC distributed a review report entitled “Scientific and Technical Advisory Committee Peer Review for the James River Chlorophyll-a Criteria Re-evaluation” on November 7, 2016. The report outlines the panel’s findings and recommendations from the review of two reports related to the state of Virginia’s numeric water quality criteria for chlorophyll-a in the tidal portion of the James River. The report can be found on the STAC review webpage at

[http://www.chesapeake.org/pubs/362\\_Harris2016.pdf](http://www.chesapeake.org/pubs/362_Harris2016.pdf). [http://www.chesapeake.org/stac/stac\\_rev.php%23](http://www.chesapeake.org/stac/stac_rev.php%23). STAC has four additional review activities currently in progress:

1. Chesapeake Bay Water Quality Criteria Addendum  
The STAC Criteria Addendum review panel is still finalizing its review of the 2015 Chesapeake Bay Water Quality Criteria Addendum. The review panel suggested a clarifying re-write of the addendum and then requested additional revisions to the updated document. The review panel is in the process of working with CBP to produce a new and improved document incorporating the panel’s comments.
2. Phase 6 Chesapeake Bay Watershed Model  
The review panel completed their review of the requested documentation in late October and have finalized a report of their recommendations. The report is currently under review by STAC staff and is undergoing preparation to be distributed to the Partnership within the next month.
3. General Additive Models (GAMs) Approach on Tidal Trends  
A review panel was assembled in October and the review is currently underway. The panel is working to complete its review and finalize the report by mid-December.
4. Boat Wake Wave Impacts on Shoreline Erosion  
STAC approved the Chesapeake Bay Commission (CBC) requested STAC technical review of potential impacts of boat generated waves on shoreline stability and attendant ecosystem properties, and provide advice on available policy actions to minimize adverse effects. The panel completed their requested review in late October and have assembled a draft report of their recommendations. The report has been sent out for external review, and the panel aims to incorporate feedback and finalize the report over the next few months.

#### Upcoming Reviews:

STAC is working closely with CBP representatives to plan for approximately four additional STAC-sponsored independent scientific peer reviews between now and 2017. These STAC reviews will help inform the Partnership’s 2017 Mid-point Assessment. The remaining review requests are expected in the coming months.

- 1) Application of WRTDS to watershed WQ trend analysis and explanations
- 2) Chesapeake Bay Water Quality/Sediment Transport Model (WQSTM)
- 3) Approach being taken to factor climate change considerations into the 2017 Chesapeake Bay TMDL Midpoint Assessment
- 4) Phase 6 Land Use Hind Cast Methodology

For more information regarding the reviews above, contact STAC Coordinator Rachel Dixon at [dixonra@si.edu](mailto:dixonra@si.edu) or visit the STAC review webpage at: [http://www.chesapeake.org/stac/stac\\_rev.php](http://www.chesapeake.org/stac/stac_rev.php).

## **Goal Implementation Team, STAR and Communication Workgroup Updates**

### **Status and Trends (Previously Indicators) Workgroup:**

*The Workgroup will use the Indicators Framework to evaluate how our existing indicators support our needs under the new Agreement, identify gaps, assist in developing new indicators, and ensure we have updated indicators for all of our Partnership products.*

### **Indicators**

No indicators were updated between October 13 and November 17. The following indicators were updated before the October 13 Management Board meeting:

<i>Indicator</i>	<i>Statement of Progress</i>	<i>Link</i>
Water Quality Standards Attainment	During the 2013 to 2015 assessment period, an estimated 37% of the Chesapeake Bay and its tidal tributaries met water quality standards. This marks an almost 10% increase from the previous assessment period, but is far below the 100% attainment needed for clean water and a stable aquatic habitat.	<a href="http://www.chesapeakeprogress.com/clean-water/water-quality/water-quality">http://www.chesapeakeprogress.com/clean-water/water-quality/water-quality</a>
Nitrogen, Phosphorus and Sediment Loads and River Flow	Between October 2014 and September 2015, river flow to the Bay measured a below-average 41 billion gallons per day. During this same time period, approximately 217 million pounds of nitrogen, 9.8 million pounds of phosphorus and 2.9 billion pounds of sediment reached the Bay: a 25%, 44% and 59% drop from the previous year, respectively.	<a href="http://www.chesapeakeprogress.com/clean-water/water-quality/water-quality">http://www.chesapeakeprogress.com/clean-water/water-quality/water-quality</a>

Indicators that will be updated before or close to the next Management Board meeting include:

- Protected Lands (November 2016)
- Wetlands Restored on Agricultural Lands (November 2016)
- Juvenile Striped Bass Abundance (Fall 2016)
- Bottom Habitat (Fall 2016)

Contact: Laura Free, 410-267-5713, [free.laura@epa.gov](mailto:free.laura@epa.gov)

### **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 [Sustainable Fisheries Goal Implementation Team](#) (Fisheries GIT) will be hosting their [biannual full goal team meeting](#) on December 6<sup>th</sup> at the Chesapeake Bay Foundation's Philip Merrill Environmental Center and December 7<sup>th</sup> at the Chesapeake Bay Foundation's Fish Shack in Annapolis, MD. Meeting topics will focus on oyster restoration, ecosystem services, and research in the Chesapeake Bay, as well as blue crabs, forage, and fish habitat.

The [September 2016 Fisheries GIT newsletter](#) was released. This newsletter informs the full team and broader Chesapeake Bay Program community of the team's efforts and accomplishments towards achieving their outcomes under the 2014 Chesapeake Watershed Agreement.

The Chesapeake Bay Program Office approved two Fisheries [GIT-funded projects](#), which are set to be awarded to bidders this December. These two projects include a study on oyster shell/habitat loss dynamics in the Bay and an evaluation of ecosystem factors on the blue crab population. In addition, the Fisheries GIT collaborated with the Habitat GIT for a project on citizen monitoring of SAV beds, which includes a pilot study component to test forage sampling gear.

An oyster indicator and dashboard are in development by the Fisheries GIT. The dashboard seeks to communicate progress toward the [Oyster Restoration Outcome](#) of restoring 10 tributaries by the year 2025. This dashboard names all selected tributaries, quantifies the amount of completed in-water restoration acreage and target acreage and reports the progress of each tributary. The proposed indicator is acres of in-water restoration, defined as reef construction or seeding practices in tributaries. These metrics and communication tools will be available online at [Chesapeake Progress](#).

### **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.*

- The Interstate Commission on the Potomac River Basin (ICPRB) has finished compiling the data sets of recent stream macroinvertebrate counts, habitat scores, and water quality measurements submitted by federal, state and local monitoring staff from across the Chesapeake Bay basin. An updated non-tidal benthic database is being sent to the CBP Data Center in early July. It holds biological data for more than 25,000 sampling events collected since 1986. A refinement of the Chessie BIBI (Basin-wide Index of Biotic Integrity) is well underway. The important taxa-specific attributes (e.g., feeding guilds, habit preferences, tolerance values) needed to calculate some metrics were updated with the help of a Technical Advisory Group. R-scripts to evaluate the raw data and calculate the Chessie BIBI are nearly complete; they could eventually be expanded to calculate individual, program-specific metrics and indices. A reference-based approach is being used to establish thresholds for scoring individual metrics. Genus-level metrics are being added to the original, family-level metrics in the index. Preliminary results show the new index is sensitive to habitat and water quality degradation. It can correctly identify Reference or Degraded sites about 80% of the time despite the natural variability in stream populations. When the BIBI refinement is complete, the Stream Health Workgroup will need to decide how to use the index in measuring and reporting progress towards attainment of the CBP stream health goal. A draft report is being reviewed within the technical advisory group of the project in November, with a wider release anticipated in the coming months.
- [The Habitat GIT held their Fall 2016 meeting](#) at the National Conservation Training Center in Shepherdstown, WV on November 14<sup>th</sup>, 2016. Building upon the momentum created at the Spring meeting, the GIT will be moving forward by coalescing the state actions and tools shared into a watershed-wide, landscape-scale vision to further the Chesapeake Conservation Design concept. The North Atlantic Landscape Conservation Cooperative (NALCC) Regional Conservation Opportunity Areas (RCOAs) project was presented with use case scenarios aimed at answering specific habitat conservation/restoration questions. Outcomes from the meeting are expected soon.

- An extension of the Habitat GIT meeting took place on November 15<sup>th</sup> and 16<sup>th</sup> at NCTC for members of the SAV Work Group and the Black Duck Action Team as Tetra Tech and the [Climate Resiliency Workgroup present decision making workshops](#) on their Climate Resiliency Assessment and Decision-Making Matrix project. Goals of the workshop were to:
  - Clarify related management/restoration actions of importance goal/outcome
  - Identify and gather relevant Chesapeake Bay climate change vulnerability research/data
  - Identify strategies, actions, restoration/enhancement techniques to achieve goals/outcome.
- The Wetland Workgroup approved the Wetland Expert Panel's preliminary report with noted caveats and comments that were provided. Four categories of wetland BMPs will be included in the beta calibration and Phase 6 Watershed Model: Creation, Restoration, Rehabilitation, and Enhancement. Creation and Restoration will be a land use change plus treatment of a set ratio of upland acres to each acre of wetland; Rehabilitation and Enhancement are functional gain categories and will treat a set ratio of upland acres to each acre of wetland with no land use conversion. The retention efficiency and acres treated numbers from the WEP will be included in the beta calibration. Those for Restoration may be adjusted during the comment period for the full Expert Panel report; those for Creation, Rehabilitation, and Enhancement (averages of the existing values) will not be able to be adjusted until a new Expert Panel is formed in the future. The Panel's full report is expected to be distributed to the Partnership just before Thanksgiving with a brief comment window closing on December 7<sup>th</sup>. Final approval of the report will be sought in after the comment period in December.

Contact: Kyle Runion, [runion.kyle@epa.gov](mailto:runion.kyle@epa.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.*

### **Summary of Actions from the Water Quality Goal Implementation Team Meeting held on October 24-25, 2016**

- **ACTION:** Chesapeake Bay Program Office (CBPO) staff will share the Local Governments Engagement Initiative's Midpoint Assessment schedule with Water Quality Goal Implementation Team (WQGIT) members and interested parties.
- **ACTION:** It is highly recommended that the WQGIT review the results, (i.e. Model outputs) of incorporating Conowingo, climate change and land use into the next beta version of the Phase 6 modeling tools in the January timeframe, given these are major changes to the Partnership's modeling tools.
- **ACTION:** Lucinda Power will develop a bulleted summary of upcoming WQGIT and Management Board Midpoint Assessment decisions (similar to the two-page summary of upcoming Principals' Staff Committee Midpoint Assessment decisions).
- **DECISION:** The WQGIT agreed to recommend to the Management Board that the Partnership apply the same methodological approach to establishing the Phase III WIP planning targets as was used by the partners in the development of the jurisdictions' major river basin allocations



under the 2010 Chesapeake Bay TMDL, recognizing the need to update the No Action and Everything by Everyone Everywhere (E3) scenarios as well as estimates of relative effectiveness to reflect the Partnership's suite of Phase 6 models and greatly expanded list of Partnership-approved BMPs.

- **DECISION:** The WQGIT agreed to recommend to the Management Board that the Partnership continue to make allowances for special cases and consideration of special circumstances, for example those provided to New York, West Virginia and Virginia's James under the original set of 2010 Chesapeake Bay TMDL decision rules, during the Partnership's development of Phase III WIP planning targets. These adjustments are intended to allow for adjustments to the allocation methodology necessary to meet local WQ standards or to ensure the partnership's principals of equity and fairness are met.
- **ACTION:** The CBPO Modeling Team will post on the Modeling Workgroup's website the detailed data output results (e.g., all sources and all scales) from the scenarios presented to the WQGIT that compared runs through the Beta 3 versions of the Partnership's suite of models with runs through the 5.3.2 models.
- **ACTION:** WQGIT members are asked to review the various data visualization tools presented and provide feedback to John Wolf (jwolf@chesapeakebay.net) on recommended enhancements to and expansion of the data visualization and other functionality of these tools by COB November 23, 2016.
- **ACTION:** Olivia Devereux will provide a listing of fixed/corrections that have been made to the Phase 6 Watershed Model Beta Versions data input visualization tools and post this listing in the documentation 2 section of the appropriate web page(s). **Update:** The data visualization application for the Phase 6 model inputs has been updated to include a list of data and functionality upgrades: <https://mpa.chesapeakebay.net/Phase6DataVisualization.html>
- **ACTION:** WQGIT members should continue to review Phase 6 Model inputs, using the data visualization tool presented by Olivia Devereux, and contact Matt Johnston ([mjohnston@chesapeakebay.net](mailto:mjohnston@chesapeakebay.net)) with any questions or comments.
- **DECISION:** The WQGIT agreed on the proposed path forward as described by John Wolf for better visualizing model scenario outputs from the full suite of Partnership models, specifically, by using a comparative approach (Phase 5.3.2 to Phase 6) for next beta and final versions of the models.
- **ACTION:** The Modeling Workgroup will oversee the running of the 2015 Progress scenario, as well as some form of the Bay TMDL and/or Phase II planning targets scenarios through the most recent beta version of the Partnership's suite of models by the CBPO Modeling Team.
- **DECISION:** The WQGIT agreed that we currently have an understandable story to tell about the effect of the infill of Conowingo Dam and Reservoir on Chesapeake Bay water quality.
- **ACTION:** CBPO staff will develop a briefing document including the range of six options for allocating the additional loads as a result of the infill of Conowingo Dam and Reservoir for



WQGIT approval and presentation to the Management Board in advance of its November 17th meeting.

- **ACTION:** During its November 14th conference call, the WQGIT will work to reach consensus agreement on a recommendation on its preferred option for allocating the additional loads resulting from the infill of Conowingo Dam and Reservoir for presentation to the Management Board at its November 17th meeting.
- **DECISION:** The WQGIT agreed on the Modeling Workgroup's proposed modeling approach for simulating the infill of Conowingo Dam and Reservoir in the Partnership's full suite of Phase 6 modeling tools. The Conowingo Dam and Reservoir's trapping of nutrients and sediment would be turned 'on' for pre-2000 years, and turned 'off' for post-2000 years. The default condition for future progress scenarios and most management scenario would be for Conowingo Dam and Reservoir trapping to be turned 'off'.
- **ACTION:** Peter Claggett will work with Mary Gattis to schedule a presentation on the 2025 forecasted conditions for the Partnership's Local Government Advisory Committee.
- **DECISION:** The WQGIT agreed on the Land Use Workgroup's recommended timeline and process for reaching a decision on whether to use 2025 forecasted conditions in the Phase III WIPs by Spring 2017, including presentations to the WQGIT of the estimated 2025 growth in loads for each of the seven jurisdictions in the January/February 2017 timeframe as well as the proposed methodology for crediting conservation of land. EPA clarified that the jurisdictions' use of 2025 forecasted conditions in the Phase III WIPs would satisfy EPA's expectation for accounting for growth.
- **ACTION:** Mary Gattis will explore options for linking work on the Local Government Engagement Initiative with the Scientific, Technical, Assessment and Reporting (STAR) Team's Integrated Trends Analysis Team (ITAT) explaining trends work to identify these localized success stories and directions for further development of the presented data visualization tools. 3
- **DECISION:** The WQGIT agreed to the proposed process for having the ITAT Jurisdictional Team lead the Partnership through the continued development and communication of the explanation of the observed trends long term in tidal and watershed water quality and biological resource monitoring in order to help better inform management actions.
- **ACTION:** Over the next three months, the Modeling Workgroup will provide the WQGIT with their best quantification of uncertainty around the simulated effects of climate change on modeled watershed loads and Chesapeake Bay water quality responses based on 2025 and 2050 climate change estimates.
- **DECISION:** The WQGIT agreed to recommend to the Management Board that the Partnership adopt the Climate Resiliency Workgroup's proposed range of options for when and how to factor climate change considerations into the Mid-point Assessment in preparation for final decisions in spring 2017.

- **DECISION:** The WQGIT agreed on the Climate Resiliency Workgroup’s proposed next steps, timeline and upcoming climate change related Partnership decisions (PSC approval dates listed below):
  - **December 2016\*:** Proposed climate change assessment procedures.
  - **December 2016\*:** Proposed ranges of options for when and how to factor climate change considerations into the jurisdictions Phase III WIPs with decisions in spring 2017 informed by the outcomes of the proposed climate change assessment procedures.
  - **May 2017\*:** When and how to incorporate climate change considerations into the Phase III WIPs as the partners work on the draft Phase III WIP planning targets due in June 2017.
  - **December 2017:** Final Phase III WIP planning targets fully reflect partnership decision regarding how and when to incorporate climate change considerations.
  
- **DECISION:** The WQGIT agreed to recommend to the Management Board that:
  - The WQGIT agreed to use the term “Local Planning Goals” instead of “Local Area Targets”;
  - Local planning goals should be established at a scale below the State-major river basin;
  - The WQGIT’s Local Planning Goals Task Force will develop language to address concerns over the transfer of accountability to local jurisdictions, using the language from the Partnership’s Federal Facility Targets Protocols as a template. Additional language will be added to the Task Force question 1 recommendation.
  - Jurisdictions retain full flexibility in how they delineate local scale and define local planning goals in accordance with task for recommendations for Question 2;
  - Local planning goals be expressed in one or more of the ways as defined by the Task Force in their recommendation for Question 3; and
  - The Task Force’s revised recommendations will be presented to the WQGIT for approval in December and incorporated directly as written into EPA’s January 2017 revised draft Phase III WIP Expectations document.
  
- **ACTION:** The WQGIT requested that the Watershed Technical Workgroup further consider and development of recommendations for the data collection, verification and potential reporting in NEIEN of manufactured treatment devices (MTDs). Data will not be used for progress reporting or receive model credit at this time.
  
- **DECISION:** The WQGIT agreed to extend the deadline for submission of all Phase 6 model inputs to December 31, 2016 including the jurisdictions’ submission of historical BMP data and the source sector 4 workgroup’s submission of final BMP expert panel reports which directly impact Phase 6 model calibration. BMP expert panel reports submitted to and approved by the WQGIT after the December 31, 2016 deadline will be available to partners for crediting the BMPs through the Phase 6 suite of models starting in 2017.
  
- **ACTION:** The WQGIT will seek a decision on the revised Phase 6 Nutrient Management BMP Expert Panel’s final report during their November 14th conference call in order to accommodate Pennsylvania’s request for more time to consider the Agriculture Workgroup’s approved amendments to the Panel’s final report. [Based on a poll of the WQGIT members participating in the October 24-25 meeting in person and on the conference call line, all of the remaining members indicated their support for approval of the Panel’s final report.]

- **DECISION:** The WQGIT agreed to proceed forward with an updated Phase 6 version of the Partnership's Everything by Everybody Everywhere (E3) scenario based on the following:
  - Additional work is needed to characterize the "E3" scenario. The TMDL includes multiple contradictory characterizations of the scenario.
  - Approval of application of the more rigorous, originally proposed urban stormwater E3 scenario components developed by the Urban Stormwater Workgroup's Chair and Coordinator and presented to the WQGIT;
  - Approval of application of the proposed updated agriculture E3 scenario components previously approved by the Agriculture Workgroup and presented to the WQGIT, with the recognition that: Further updates may be made based on approval by the Agriculture Workgroup as new information is available on manure transport BMPs and the Phase 6 land cover and land use data; and
  - The Agriculture Workgroup will work with the Forestry Workgroup to enhance the domain of acres eligible for forestry BMPs under the agriculture and forestry E3 scenario components;
  - Approval of application of the proposed updated wastewater treatment E3 scenario components previously approved by the Wastewater Treatment Workgroup and presented to the WQGIT;
  - Agreement on the need to add missing E3 scenario components for shoreline management and in-situ BMPs (i.e. algal flow way technologies, oyster aquaculture).
- **ACTION:** CBPO staff will work with the Habitat GIT chair and coordinator as well as the appropriate workgroup chairs to define the missing E3 scenario components for shoreline management and in-situ BMPs (i.e. algal flow way technologies, oyster aquaculture).
- **ACTION:** The WQGIT will schedule a future discussion on the wastewater treatment decision rules for the Phase III WIP planning target methodology—whether to change the total nitrogen concentrations of 4.5 mg/L and 8 mg/L and the total phosphorus concentrations of 0.22 mg/L and 0.54 mg/L which define the two wastewater treatment 'hockey stick' lines within the existing methodology to better reflect the more recently reported concentrations by hundreds of municipal wastewater treatment facilities across the watershed and the new E3 definition developed by the Wastewater Workgroup.

Contact: Lucinda Power, [power.lucinda@epa.gov](mailto:power.lucinda@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.*

Last month, the Healthy Watershed GIT had meetings with the leads for both of their FY15 GIT Funding projects to check on the status of the projects and assist with progress. On November 3<sup>rd</sup>, the GIT presented to the Communications Team on their communication needs and how the Communication Team could assist. Healthy Watershed GIT's next meeting will be on Friday, November 18<sup>th</sup> in Harrisburg, PA. At this meeting, STAC workshop opportunities, future GIT funding projects, and the status of goal team action items will be discussed.

Contact: Renee Thompson, [rthompso@chesapeakebay.net](mailto:rthompso@chesapeakebay.net)

## **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

- The Stewardship Goal Team met on November 1<sup>st</sup>. The agenda included discussions on the Cross-Goal Team Project: Identifying Geographic Areas that Benefit Multiple CBP Outcomes and the Biennial Strategy Review Process. The group also shared work plan and GIT funded project updates. The Stewardship Indicator Sub-Workgroup met in September to view the updated analysis of the stewardship performance and stewardship factors influencing indicator based on last meeting's discussion. The stewardship indicator tool is near completion and baseline data will be collected in 2017. The survey will ultimately track stewardship performance to develop a type of stewardship index. A similar study will be done for Anne Arundel County. More resources from this meeting can be found at <http://www.chesapeakebay.net/calendar/event/24464/>

For more information, please contact Amy Handen at [Amy\\_Handen@nps.gov](mailto:Amy_Handen@nps.gov)

### Environmental Literacy

- The full education workgroup will hold a meeting on November 10th to update and engage the workgroup on new and ongoing projects concerning School Grounds for Learning, the urban stormwater project, the Environmental Literacy Indicator Tool (ELIT), and the MWEE How to Guide.
- The Environmental Education Leadership Workgroup will convene at the National Conservation Training Center (NCTC) in Shepherdstown, WV on the 14<sup>th</sup> and 15<sup>th</sup> of December to receive state workplan updates, revisit the ELIT, and review a grant assigned to state and regional sustainable schools. Other materials from the two meetings can be found at [http://www.chesapeakebay.net/groups/group/education\\_workgroup](http://www.chesapeakebay.net/groups/group/education_workgroup)

For more information, please contact Shannon Sprague at [Shannon.Sprague@noaa.gov](mailto:Shannon.Sprague@noaa.gov)

### Public Access

- The Public Access team is continuing to make progress on the Public Access site development. The team will meet November 18<sup>th</sup> to review management strategies and progress towards the 300 site goal. Topics of interest include development of boat-in campsites and providing access for a diverse population. Compiling the challenges, we are facing in creating new public access sites will help determine next steps moving forward. Other materials from the upcoming meeting can be found at [http://www.chesapeakebay.net/groups/group/public\\_access\\_planning\\_action\\_team](http://www.chesapeakebay.net/groups/group/public_access_planning_action_team)

For more information, please contact John Davy at [John\\_Davy@nps.gov](mailto:John_Davy@nps.gov).

### Land Conservation

- The Chesapeake Conservation Partnership's steering committee held its annual meeting this past October to discuss what is required collectively and individually to "bend the curve" and increase acres conserved and other conservation outcomes. Federal and state partners

discussed the status of funding mechanisms available to expand on approaches for increasing revenue for land conservation

- The group continues to work to credit land conservation in the TMDL formula and develop messaging about the partnership's goals using a "network of networks" approach
- John Griffin, former Secretary of Maryland Department of Natural Resources, was introduced as the Partnership's new Program Manager and will help the group achieve its next steps. Other materials from the meeting can be found at <http://www.chesapeakebay.net/calendar/event/24556/>

For more information, please contact Kate Baker [kbaker@chesapeakeconservancy.org](mailto:kbaker@chesapeakeconservancy.org)

### **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.*

### **CBP Biennial Strategy Review System**

The GIT has been working with Goal Teams, STAC, and other members of the Partnership to develop a Biennial Strategy Review System (SRS). The system is being designed to fulfill the expectations set forth in the 2014 Chesapeake Watershed Agreement for a two-year cycle that updates the program's management strategies. A draft version of the SRS was presented to the Management Board (MB) on September 15, 2016 for review and comment, and to the Principals' Staff Committee (PSC) on October 26, 2016. Next steps include expanding on key system meeting details, developing system templates, etc. The Goal Team plans presents a final recommendation to the MB in December 2016.

Contact: Dave Goshorn, [david.goshorn@maryland.gov](mailto:david.goshorn@maryland.gov)

### **GIT Budget and Finance Workgroup**

The Budget and Finance Workgroup has formed an Action Team to coordinate the Program's response to UMD Environmental Finance Center's "Environmental Finance Symposium Report and Recommendations." The Action Team includes members from various groups within the partnership, and has been charged with developing a proposal on how to proceed with high priority recommendations. The Action Team will report periodically to the MB and the PSC on their progress. The Action Team has chosen Jag Khuman as the Chair. Jag Khuman is the Director of the Maryland Water Quality Financing Administration (MWQFA) since 2004. The MWQFA is responsible for the Water Quality Revolving Loan Fund, the Drinking Revolving Loan Fund, and the Maryland Bay Restoration Fund, which provide environmental infrastructure financing. Mr. Khuman has been with the State of Maryland since 1989 and has also served as the Engineering Manager for capital programs and the Program Manager for MWQFA. He has served on the Board of Directors for the Maryland Government Finance Officer Association (MD-GFOA) and the Council of Infrastructure Financing Authorities (CIFA). Mr. Khuman holds an MBA and a M.S. in Engineering Management from the University of Louisiana at Lafayette and B.S. in Chemical Engineering from the University of Mysore, India.

Contact: Jag Khuman, [jag.khuman@maryland.gov](mailto:jag.khuman@maryland.gov)

### **GIT Local Leadership Workgroup**

The Local Leadership Workgroup is working with a small group of members, contractors (EcoLogix), and external parties with experience in local outreach to develop a series of survey questions aimed at understanding the information needs and preferred delivery mechanisms of local elected officials in the Bay watershed. The workgroup is planning to use existing forums within Bay jurisdictions (i.e. Maryland

Association of Counties), as well as targeted outreach to individuals, to conduct “focus group” style sessions in an effort to gather responses from a diverse set of local elected officials.

Contact: Reggie Parrish, [parrish.reginald@epa.gov](mailto:parrish.reginald@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.*

### **STAR**

STAR is supporting the Cross GIT Mapping project, utilizing monthly meetings to solicit feedback on mapping priorities from the Goal Teams and next steps. [See Workplan](#). STAR is also playing an active role in presenting indicator options for tracking progress towards meeting outcomes of the Chesapeake Bay Agreement. See [presentations on indicators](#) from the September 22 STAR meeting.

### **Status and Trends Workgroup**

In October, the workgroup approved a workplan for 2016-2017. This workplan, and the greater role that the workgroup will have in the Partnership, was reviewed and discussed at the October STAR meeting. The workgroup will also continue to support groups developing indicators. In November’s meeting, the workgroup heard from the Diversity team on their new indicator to be presented at an upcoming Management Board meeting.

### **Data Integrity Workgroup**

DI Workgroup members completed on-site audits of five agencies that collect Tidal and Nontidal water quality samples. There were no significant findings in the tidal programs assessed, but corrective actions were required in the Nontidal programs. USGS staff from Maryland and Virginia provided follow-up training in Pennsylvania (September 26-27th) and in Delaware (October 19th) to ensure consistent Nontidal sampling across jurisdictions. EPA provided support for the training and other improvements that stemmed from the audit recommendations.

Field audits were completed for two citizen monitoring groups: Blue Water Baltimore and the Nanticoke Watershed Alliance. Water quality monitoring procedures were reviewed on-site to assess their comparability with published CBP sampling protocols. Findings were overall positive and final reports and recommendations are forthcoming.

Results from two Nontidal Network comparability studies were presented at the November 3rd DIGW meeting: 1) Change in monitoring organizations at six Maryland stations and 2) Change in sampling equipment and procedures at two Delaware stations. Some differences were found between samples analyzed by Maryland and Pennsylvania; no significant differences so far for Delaware. Findings and conclusions will be determined and documented in the Data Analysis Issues Tracking System.

### **Integrated Monitoring Networks Workgroup**

The **Citizen-Based and Nontraditional Monitoring Project group (aka the Chesapeake Monitoring Consortium)** held a Prioritization Workshop hosted by the Alliance for Aquatic Resource Monitoring in Carlisle, PA on October 13, 2016. At this workshop, the Chesapeake Monitoring Cooperative asked attendees to contribute guidance on priority areas that will help focus networking efforts on monitoring integration. An overview of this multi-year collaboration to integrate volunteer and nontraditional data in to the Chesapeake Bay Program Partnership will be provided at an upcoming meeting.

### **Climate Resiliency Workgroup**

A workplan action item related to the Midpoint Assessment to develop a list of possible options for incorporating climate considerations in Phase III WIPs is now on the [website](#).

A [climate change webinar](#), hosted by the STAR Team's Modeling Workgroup and Climate Resiliency Workgroup Co-Chairs and Coordinators, discussed recent climate change analyses for sea level rise projections, projected changes in water column temperatures, estimates for wetland inundation, and the changes in the climatology and hydrology in the watershed.

The Climate Smart Habitat Restoration Structured Decision-Making Workshops for Submerged Aquatic Vegetation and Wetlands are scheduled for Nov. 15 and 16, 2016 at the National Conservation Training Center in Shepherdstown, West Virginia. If attending this workshop, please review the pre-workshop [webinar](#).

### **Criteria Assessment Protocols Workgroup**

During July 2016, the CBP charged the CAP Workgroup to reconvene with the task of 1) critically reviewing the existing tidal waters chlorophyll *a* criteria assessment procedures, and 2) providing consensus recommendations on any alternatives to consider in revision of the existing procedures. Three meetings were conducted during August and September. A final copy of recommendations was developed and delivered to CBP. STAC completed and delivered a review on a [related set of documents](#) regarding chlorophyll *a* criteria reevaluations, and criteria assessment protocols, to CBP on Nov 8, 2016. A final set of recommendations will be presented to the WQGIT and VADEQ during autumn 2016.

### **Modeling Workgroup**

Development of the Phase 6 Beta 4 version of the Watershed Model, will be unveiled at the December Quarterly Meeting, updates are ongoing. The documentation for Beta 3 has been updated and can be found on the Modeling Workgroup's [website](#) under the *Projects & Resources* tab. The date for an upcoming webinar that will further explain changes to the Beta 3 version of the Watershed model is still to be determined.

### **Integrated Trends Analysis Team**

An ITAT email summary was recently sent out to team members, and included information on synthesis efforts ranging from water clarity and work on the Potomac River Basin to tidal water quality and SAV. Further updates on the Generalized Additive Model (GAM) trend assessment R package development, new team members, and recent published Chesapeake Bay water quality research were also provided in the email blast. Contact Jeni Keisman ([jkeisman@usgs.gov](mailto:jkeisman@usgs.gov)) to have your journal article or upcoming presentation listed in the next email blast.

### **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.*



At its October and November meetings, the Communications Workgroup heard presentation from the GITs, as well as the Diversity and Climate Resiliency Workgroups about their ongoing and upcoming projects to identify communications needs and offer support. They also heard updates related to the Executive Council communications action items and Local Government Engagement Initiative.

The Communications Office put out a blog post (link below) on the high-resolution land cover datasets currently available for local government review, explaining what they are and encouraging local governments to submit feedback. Data will become available for local government review in late October/early November, and formally released to local governments and the public in December. Later in November, it will submit Strategic Communications Plan for the Chesapeake Bay Program to the Management Board for review and approval. The Communications Office is pleased to welcome its newest team member, Caitlyn Johnstone, who will serve as the office's Outreach Coordinator.

Contact: Joan Smedinghoff; [jmedinghoff@chesapeakebay.net](mailto:jmedinghoff@chesapeakebay.net)

Blog post:

[http://www.chesapeakebay.net/blog/post/county\\_by\\_county\\_land\\_use\\_data\\_available\\_for\\_review\\_by\\_local\\_governments](http://www.chesapeakebay.net/blog/post/county_by_county_land_use_data_available_for_review_by_local_governments)

#### **Recent Meetings and Events**

Sept 19	Principals' Staff Committee conference call (EC Prep)
Sept 19	Sustainable Fisheries Goal Implementation Team meeting
Sept 22	STAR meeting
Sept 26	Water Quality Goal Implementation Team meeting
Sept 29-30	LGAC meeting (Shepherdstown, W.V.)
Sept 29-Oct 2	Chesapeake Watershed Forum (Shepherdstown, W.V.)
Oct 4	Chesapeake Executive Council meeting (Boyce, Va.)