

Management Board Program Update November 18, 2021

CBPO Calendar

Agriculture Workgroup Conference Call
Diversity Workgroup November 2021 Meeting
Integrated Trends Analysis Team Meeting
Principals' Staff Committee meeting
Goal Implementation Team Chairs
Quarterly GIT Chairs and Leadership Meeting
Citizens Advisory Committee Quarterly Meeting
Communications Workgroup December 2021 Meeting
Land Use Workgroup Conference Call
Watershed Technical Workgroup Conference Call
Coordinator-Staffer Meeting
Local Government Advisory Committee Meeting
Wastewater Treatment Workgroup Meeting
Conowingo WIP Steering Committee Meeting
Scientific and Technical Advisory Committee
Enhance Partnering, Leadership and Management GIT Quarterly Meeting
Toxic Contaminant Workgroup Conference Call
VA Joint Oyster Restoration Workgroup Meeting
Management Board meeting
BMP Verification Ad-Hoc Action Team Meeting
Stream Health Workgroup December Meeting
Water Quality Goal Implementation Team
Joint Climate Resiliency Workgroup and Wetland Workgroup Meeting
Executive Council Meeting

Program Updates

EPA, NFWF to Announce Grants to Benefit Pennsylvania and the Chesapeake Bay

EPA and the National Fish and Wildlife Foundation (NFWF) held a virtual press conference on Wednesday, November 17 to announce more than \$2.5 million for 10 grants in areas of Pennsylvania that will provide the greatest clean water benefit to the downstream Chesapeake Bay. The "Most Effective Basins" grants, when combined with the \$8.5 million in EPA-NFWF grants announced earlier this year for Pennsylvania, will together generate \$20 million in matching contributions for a total conservation impact of more than \$31 million. Region III Administrator Adam Ortiz represented EPA at the press conference.

Contact: Tom Damm, 215-814-5560

Water Quality Team Considers Next Phase of Modeling Tools

The Water Quality Goal Implementation Team (WQGIT) held a two-day virtual meeting on October 25-26, 2021 with over 80 participants each day to discuss priorities and plans for the development and application of the Phase 7 suite of modeling tools. Although some initial polling was completed, the WQGIT requested more time to develop a comprehensive list of potential model updates. In addition, the WQGIT deferred a decision on the timeline and review process for Phase 7 development until prioritization of the Phase 7 model updates is agreed upon. Finally, due to time constraints, the discussion on Chesapeake Bay restoration post-2025 will be scheduled for a later date, although the WQGIT did agree to continue the two-year updates for the Chesapeake Assessment Scenario Tool beyond 2025 and recognized that implementation and Bay restoration efforts post-2025 is a certainty, regardless of whether the 2025 water quality goals are met. Once feedback has been submitted by the WQGIT and other partners on Phase 7 model priorities, the CBP partnership's Modeling Workgroup will draft a work plan to guide the model development process. The Phase 7 suite of modeling tools will likely be available for application in 2026.

Contact: Lucinda Power, 443-863-0657

CBP Goal Team Chairs Meet to Discuss Project Proposals

On Thursday, November 4, the Chesapeake Bay Program's Goal Implementation Team (GIT) chairs, along with coordinators, staffers, workgroup chairs, and CBPO staff met to discuss and score project proposals submitted for funding through the FY2021 GIT Funding Program. Project proposal were submitted in late September and reviews and early scoring started in mid-October. During the meeting, each goal team was given time to briefly present each proposal and take questions. Using a revised scoring process, projects were ranked by the average score of all reviewers through a new, web-based portal system that was opened on October 21. A analysis of which projects will receive funding is underway and should become final in the coming weeks.

Contact: Greg Allen, 410-267-5746

Weather Impacting Bay Water Quality as Models Show Practices Reducing Pollution

The Chesapeake Bay Program announced on October 27, 2021 that an estimated 33% of the Chesapeake Bay and its tidal tributaries met water quality standards attainment during the 2017-2019 assessment period. This score is lower than the previous assessment period (2016-2018), when Bay water quality standards attainment was estimated to be 38%. Experts mainly attribute this decline to unusually wet weather in 2018 and 2019. Water quality in the Bay and its tidal waters can vary year-to-year due to a number of factors including land use, fertilizer and manure use, wastewater and septic discharges, and river flow. The seven watershed jurisdictions, in coordination with local governments, businesses, non-governmental organizations and individuals, have installed pollution-reducing practices to lower the amount of nitrogen, phosphorus and sediment entering waterways. Computer simulations estimate that pollution controls put into place between 2009 and 2020 have lowered overall nitrogen by 13%, overall phosphorus by 14% and sediment by 4%.

For more information: https://www.chesapeakeprogress.com/clean-water/water-quality

Contact: Rachel Felver, 443-892-0205

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 will next meet December 2 and 3. On December 2 (or prior), each of the members will meet with their jurisdiction PSC member(s) to share LGAC Annual EC Recommendations as well as discuss watershed and local government commonalities. Some of these in-person meetings will include state association representatives and jurisdiction staff to allow a broader conversation. On December 3, LGAC will meet virtually to discuss the outcomes of these conversations. In addition, LGAC has invited EPA Regional Administrator Adam Ortiz to share his thoughts with members and there will be a conversation about new land use data as well as regular business.

Pennsylvania LGAC Members hosted an early morning Lancaster County Roundtable October 15th to discuss local watershed challenges and opportunities.

LGAC still seeks a New York representative.

If there are MB asks or requests to get LGAC feedback during future quarterly meetings, please contact the LGAC Coordinator, Jennifer Starr at jstarr@allianceforthebay.org. To be added to the Interested Parties list, please contact LGAC Staff at jgga@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 CAC is planning their final quarterly meeting of 2021 to be held on Dec 1-2 in Harrisburg, PA. This will be a hybrid meeting with the option for remote participation.
- CAC Subcommittees for Water Quality, Emerging Issues; Stewardship and Engagement continue to meet and discuss their recommendations that will be included in the annual report to the Executive Council.
- There are 2 PA gubernatorial vacancies and 2 DC mayoral vacancies.
- The CAC officers are Julie Lawson (DC), Chair and Ann Jurczyk (VA), Vice-Chair.

To be added to CAC's Interested Parties List, please contact: Adam Bray <u>abray@allianceforthebay.org</u> for program questions, contact Jessica Blackburn <u>jblackburn@allianceforthebay.org</u>

Scientific and Technical Advisory Committee (STAC)

For any inquiries, or to be added to STAC's Interested Parties list, contact STAC Coordinator, Annabelle Harvey (harveya@cheapeake.org)

Visit the STAC website at www.chesapeake.org/stac

STAC September Quarterly Meeting: September 13-14, 2021

- STAC hosted its third meeting of 2021 virtually on September 13-14. Presentations, the agenda, and materials can be found on the <u>STAC September Meeting Page</u>.
- STAC host presenters and engaged in discussion on the Conowingo Dam. Specifically, STAC received
 a summary of previous findings on long-term trends affecting Conowingo Reservoir mass balance,
 brief review of findings from the Lower Susquehanna River Watershed Assessment, STAC review on
 that Assessment, and the STAC workshop on Conowingo Reservoir Infill (2016). Representatives
 from Exelon were available for questions and led to an interesting discussion on the communication
 of Conowingo issues.
- STAC also heard from the STAR team on monitoring needs and how to make connections with the
 outcomes from CESR. There were multiple changes in membership, most notably the rotation of
 Chairs. Andy Miller (UMBC) rotated off as STAC Chair and Kathy Boomer (FFAR) rotated on for a twoyear term. Larry Sanford (UMCES) rotated on as STAC Vice Chair.

STAC December Quarterly Meeting: December 7-8, 2021

 STAC will meet virtually on December 7-8, 2021, to further work on the CESR effort, be updated on recent STAC workshops and membership processes, and strategically plan for the next two years of STAC activities and priorities. More information, agenda, and materials can be found on the <u>STAC</u> December Meeting Page.

Approved STAC 2022 Quarterly Meeting Dates

March 8-7, 2022 June 14-15, 2022 September 13-14, 2022 December 6-7, 2022

Upcoming STAC Workshops: Follow links to workshop webpage for additional information
 November 19, 2021 Improving modeling and mitigation strategies for poultry ammonia
 emissions acrss the Chesapeake Bay Watershed

December 9, 2021 Session 1: Advancing Monitoring Approaches to Enhance Tidal Chesapeake
Bay Habitat Assessment

January 12, 2022 Day 1: Rising Watershed and Bay Water Temperatures—Ecological Implications and Management Responses: A Proactive Programmatic CBP STAC Workshop

March 22 - 23, 2022 **Evaluating a Systems Approach to BMP Crediting: A STAC Programmatic Workshop**

STAC Reports

Upcoming Reports:

STAC is working to finalize the following reports. Information regarding workshops held prior to
January 2018 can be found on the <u>STAC archived workshop homepage</u>. STAC Staff and the Executive
Board are working with leads of reports from prior to FY2018 to potentially produce fact sheets or

other products that would quicken the process of getting recommendations out to the Partnership. Reports in bold are undergoing final review stages and will be released within the next quarter.

- 1. Linking Wetland Workplan Goals to Enhance Capacity, Increase Implementation (FY2015)
- 2. Assessing Uncertainty in the CBP Modeling System (FY2015)
- 3. Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making (FY2015)
- 4. An Analytical Framework for Aligning Chesapeake Bay Program Monitoring Efforts to Support Climate Change (FY2016)
- Several workshop steering committees are in the process of drafting activity reports and other workshop outcomes that will be distributed to the Partnership over the next few months. More information on recent workshop reports can be found on the STAC past workshop webpage.

Goal Implementation Team, STAR and Communication Workgroup Updates

Sustainable 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.

- Goal Team Membership Meeting: The Fisheries GIT plans to host a virtual membership on January 6th and 7th of 2022. As is the usual winter theme, the meeting will be heavily focused on oyster restoration progress, ongoing oyster science, and emerging science needs/opportunities. A savethe-date will be distributed in the coming weeks.
- SRS: The Fish Habitat Action Team recently submitted their near-final materials for the next iteration of a two year action plan. Simultaneously, the oyster, forage, and blue crab outcomes, are presenting two-year progress at the November Management Board meeting. Action plan drafting will begin in December.
- Hypoxia Collaborative: Coordination continues between NOAA and the Bay Program monitoring team as vertical DO profilers are being deployed for a late fall pilot. The team plans to utilize this initial deployment to gather lessons learned and to take note of operation costs and maintenance requirements. More will be heard about this undertaking during the winter PSC monitoring review

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

Habitat Goal Implementation Team

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

Below are the September program updates for Habitat GIT!

- HABITAT GIT: The Habitat GIT Fall Meeting was held on November 9th and 10th, and featured
 presentations and discussions on workgroup projects and activities, cross-GIT collaboration,
 monitoring, DEIJ, local engagement, social science, urban habitat restoration, and more. The
 Meeting Minutes are being finalized and will be distributed in the near future.
- WORKGROUP UPDATES/EVENTS:

- The Wetland and Climate Resiliency Workgroups are planning a joint meeting scheduled for December 13th and 14th.
- The Wetland Workgroup, Climate Resiliency Workgroup, SAV Workgroup, and EPA ORD staff have been meeting to share research interests and needs and discuss collaboration opportunities regarding Blue Carbon. The next meeting will be held on November 30th.
- A steering committee has been formed to plan the two workshops that will address increasing the implementation of tidal and nontidal wetland restoration.
- The next Stream Health Workgroup meeting is scheduled for December 10th.
- **GIT FUNDING:** The Brook Trout, Fish Passage, Stream Health, and Wetlands workgroups all submitted project proposals for the upcoming GIT Funding Cycle. The scoring period is now over and the final list of proposed projects to fund will be released at the end of November.

• STRATEGIC REVIEW SYSTEM (SRS):

- As part of the Healthy Watersheds Cohort, the Stream Health and Fish Passage workgroups are almost complete with the SRS process. The updated workgroup Logic & Action plans are currently undergoing a Public & Signatory Feedback Period till November 26th, after which the Final Management Materials will be presented to the Management Board on December 9th.
- The Brook Trout Workgroup, also part of the Healthy Watersheds Cohort has been approved for a deadline extension for final deliverables and will now be following the submission deadline calendar for the Aquatic Life Cohort. The workgroup's updated Logic & Action Plan will be submitted for Public & Signatory Feedback in February 2022.
- The SAV Workgroup is part of the Aquatic Life Cohort and is preparing for the Management Board QPM on November 18.
- MANAGEMENT BOARD REQUESTS: The Stream Health and Brook Trout workgroups have submitted specific requests for the Management Board for assistance related to outcome progress.
 Management Board members will be meeting with jurisdictional workgroup members and will be filling out surveys in response to these discussions. More information to follow, as these surveys are due November 18th (Stream Health) and December 17th (Brook Trout), and survey results will be distributed shortly thereafter.

<u>Habitat GIT Contact</u>: Megan Ossmann (<u>ossman.megan@epa.gov</u>) and Katlyn Fuentes (fuentesk@chesapeake.org)

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 a meeting on October 12, 2021. A subset of topics discussed includes:

 James Webber presented findings from a synthesis product with emphasis on strengthening decision making using modeling and monitoring; factors affecting water quality, including climate; and placement/targeting of practices.

- Peter Tango and Qian Zhang presented the water quality standards attainment indicator and attainment deficit results through 2019.
- Rebecca Murphy presented the Potomac tributary summary and story map, as an example linking estuary response to watershed loading.
- Lee McDonnel and Scott Phillips facilitated a discussion on approaches to enhance stakeholder engagement.

The WQGIT held a 2-day all-virtual meeting on October 25 and 26, 2021. A subset of topics discussed includes:

DAY 1:

- Dave Montali and Mark Bennett discussed why we use the modeling tools: to improve water
 quality. It is observed data that delists water bodies. However, we need data systems and
 models to track implementation progress and help plan policies, programs, and practices for
 water quality improvements; and to provide those setting the policies (legislators), programs
 (agencies), and practices (local governments, planners, and private entities) a means by which to
 make informed decisions with the latest available scientific data.
- Olivia Devereux discussed what happens in a CAST update versus a Phase update
- Lew Linker and Gary Shenk highlighted key updates/enhancements/functionalities that have been added to the models over the years and the various decisions that drove development of versions of the modeling tools over the years.
- Gary Shenk and Ken Hyer briefed the WQGIT on the role of monitoring data in model development.
- Lew Linker discussed thee plans for the estuarine model to evaluate climate change and shallow water
- Olivia Devereux discussed CAST functionality, with a focus on trends over time, WIP and scenario comparison, tributary summaries, and optimization interface.
- Peter Claggett presented the land change modeling workplan.
- Gary Shenk discussed the current watershed model workplan based on the feedback from other partnership groups.

DAY 2:

- Denice Wardrop and Kurt Stevenson presented STAC's assessment of system response and science needs and recommended strategies for integrating scientific and technical analysis with adaptive management to aid in decision- making under uncertainty.
- James Martin provided an overview of the charge to the Modeling Workgroup by the PSC to assess 2025 climate change conditions by 2025.
- Lew Linker and David Wood presented the management actions and associated deliverable that are responsive to climate change.
- Dave Montali and Mark Bennett provided an overview of the Phase 7 development timeline.
- James Martin and Ed Dunne provided an overview of the Phase 7 review process.
- WQGIT began discussions of the Phase 7 timeline and prioritization list.

The WQGIT will hold a meeting on December 13, 2021. A subset of topic to potentially be discussed includes:

- Phase 7 development timeline, work plan, and prioritization
- BMP Expert Panel Protocols
- Ag Mortality BMP Expert Panel Report
- WQGIT chair, vice- chair and at- large nominees

Water Quality GIT Contact: Hilary Swartwood (swartwood.hilary@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.

- The HWGIT has updated our Management Strategy and Logic & Action Plan. Our Management Strategy has been updated to include language on our commitment to The Chesapeake Executive Council's Diversity, Equity, Inclusion and Justice (DEIJ) Statement. The HWGIT Logic & Action Plan has been updated with current efforts, gaps, and metrics.
- Table 1 for our GIT proposal, Chesapeake Healthy Watersheds Assessment 2.0 (CHWA 2.0) has been submitted. This project will further improve, refine, and finalize the Chesapeake Healthy Watersheds Assessment. The outcomes of the CHWA 2.0 include updated metrics for all Chesapeake Healthy Watersheds Assessment data layers, improved visualization, analysis, and filtering functionality to meet user needs, computed change statistics for appropriate metrics related to land use and vulnerability metrics and user customized fact sheets including interpretation of results. Lastly, we have been working on a Maintain Healthy Watersheds Story Map collection. Within the collection there are five Story maps including one on Chesapeake Healthy Watersheds, Adaptive Management, Chesapeake Healthy Watersheds Assessment, and Co-Benefits and Collaboration.

Healthy Watersheds GIT Contact: rthompso@chesapeakebay.net

Fostering Chesapeake Stewardship Goal Implementation Team

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

Chesapeake Conservation Partnership / Protected Lands Workgroup

- The Protected Lands Workgroup is developing it's new Logic and Action Plan after the Quarterly Progress Meeting which was held in August. The revised Logic and Action Plan is available for public comment until November 26th, 2021.
- The CCP is hosting a three-part annual meeting on November 8th, 10th, and 17th. The annual
 meeting has been designed to foster discussion around operationalizing the CCP commitment to
 conserving 30% of the watershed by 2030, fostering richer strategic thinking that serves multiple
 outcomes, deepening the connection between conservation and equity, and helping CCP
 partners prepare for new funding opportunities.

- The CCP is proceeding with the FY20 GIT Funded Project titled "Developing Standards and Metrics to Target the Conservation of 'Green Spaces' in Diverse and Low-Income Urban Communities."
- The workgroup continues to add Chesapeake Conservation Success Stories to its new platform success.chesapeakeconservation.org. Management Board Members can email Olivia Wisner (wisnero@chesapeake.org) if they have a Conservation Success Story that they'd like to be developed.

Stewardship Workgroup

- The Stewardship Workgroup anticipates the release of the Chesapeake Behavior Change webtool which will house and promote the use of the stewardship index data in the coming months.
 This project (generously supported by GIT funding) will ensure the development of a hub for social science tools and information for the Chesapeake Bay Program.
- The Stewardship Workgroup's next meeting will be held on January 25th, 2022.
- The Stewardship Workgroup is currently seeking a chair to lead the workgroup alongside current chair Suzanne Etgen, Anne Arundel County Watershed Stewards Academy. Details for the voluntary position can be found on the Stewardship Workgroup webpage. Please distribute this opportunity to appropriate candidates. The deadline is extended until the position is filled.
- The workgroup is proceeding with the FY20 GIT Funded Project titled "Chesapeake Bay Program Social Science Assessment and Integration Road Map Development" which will determine ways to strategically integrate social science into the Chesapeake Bay Program.

Education Workgroup

- The Education Workgroup continues to develop the Regional Outdoor Learning Network (ROLN).
 ROLN aims to 1) increase communication across partners and local implementation networks to
 support environmental literacy, including more and better designed MWEEs and 2) increase the
 number of teacher-supported systemic environmental literacy programs occurring in priority
 school districts.
- The Education Workgroup has been working closely with the Chesapeake Bay Program Web
 Team to update elements of <u>baybackpack.com</u>, an Environmental Literacy teaching resource for
 formal and non-formal educators in the watershed.
- The NOAA Chesapeake Bay Office and Education Workgroup are supporting the inaugural Chesapeake Bay Program Youth Initiative hosted by the National Park Service Chesapeake Bay Office. The Student Ambassadors will be meeting with the Management Board members to share their perspective on the work of the Chesapeake Bay Program at the Oct Management Board meeting.
- The Outdoor Learning Network Initiative (OLNI) was launched in September, 2019 to increase
 sustained and systemic Environmental Literacy instruction in underserved districts. The first
 local networks included (1) Berkely, Jefferson and Morgan Counties, WV, and (2) Lancaster
 County, PA. The geographic locations of the second round of geographic locations will be
 announced in 2021. OLNI project is advised by the Education Workgroup and consistent with
 Stewardship GIT goals.

Public Access Workgroup

• The Public Access Workgroup is proceeding with the FY20 GIT Funded Project titled "Public Access Research - Benefits and Barriers Across the Watershed" which will determine how

- residents in the Chesapeake Bay Watershed utilize public access sites and what barriers prevent traditionally underserved populations from utilizing public access sites. A small subset of the workgroup has agreed to work with the selected contractor OpinionWorks to advise this project as it goes forward.
- The Public Access will be conducting it's annual call for newly opened public access sites in December of this year.
- The Public Access workgroup is coordinating with the Protected Lands Workgroup to determine appropriate connections between their GIT Funded Projects (FY20 Scope #1 and Scope #10), to find efficiencies and avoid duplication. Both projects address equity at community levels and involve identifying under-resourced communities, to help with decision-making on future project priorities for practitioners.

Fostering Chesapeake Stewardship contact: Olivia Wisner; wisnero@chesapeake.org

Diversity Workgroup

• The Diversity Workgroup is hosting their quarterly meeting on November 19, 2021 from 9 am – 12 pm. We are preparing our materials for the SRS meeting in February. The Diversity Workgroup continues to support the DEIJ Action team in their efforts to finalize the implementation plan. We are working with the Water Division to host allyship trainings starting in January 2022.

Diversity workgroup contact: Briana Yancy (Staffer)

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.

- 2021 GIT Funding Program Following an extensive review of the GIT Funding Program by a volunteer team of stakeholders, GIT 6 has finalized the 2021 GIT Funding Program Manual. Changes for the coming round of funding include allowance for one project request per Outcome in the Chesapeake Bay Watershed Agreement and an expanded set of project evaluation criteria. The Scoring and Funding Decisions meeting was held on November 4, 2021, providing project overviews followed by a brief Q&A. Project scores were due in the Trust portal on November 10, 2021. Project decisions will be made in Winter 2021.
- Governance Document Action Team (GDAT) The GDAT meets biweekly to work through needed
 adjustments to the CBP Governance Document. A draft of the revised document and proposed
 language will be presented to the Management Board for concurrence at the November 2021 QPM
 meeting. Example changes to the document include insertion of the DEIJ Directive, clarified
 responsibilities regarding the Strategy Review System and refinement of guidance on decision
 making.
- Organizational Analysis A plan has been developed to use a published survey instrument to
 measure the culture of trust across the CBP. This initiative responds to several occasions when GIT 6
 has gotten feedback that trust is an important factor in CBP member perceptions of the program. In
 addition, trust is known to be one of the essential factors in efficient, high-performing organizations.
 The survey is targeted to be released to CBP leaders and members in Fall 2021.

Contact: Greg Allen (Coordinator), allen.greg@epa.gov; and Kristin Saunders (ksaunders@umces.edu)

Budget and Finance Workgroup - The Budget and Finance Workgroup (BFWG) Summer Quarterly Meeting took place on July 28, 2021 as a conference call. During the meeting, Maggie Cunningham from Region 03 presented on a new EPA Grant program and provided an update from the STAC/Local government mini workshop that took place in May. The workgroup adopted the BFWG charge. Agenda topics included: a discussion on the workplan draft, an update on the Citizen's Advisory Committee (CAC) 2020 EC Recommendation, a discussion on the USDA-NRCS-EPA Collaborative Grant Conditions Memo, and an update on the Conowingo Finance Strategy Update. The BFWG Fall Quarterly meeting was postponed due to lack of substantive updates.

Contact: Martha Shimkin (Co-Chair), shimkin.martha@epa.gov; Dr. Elliott Campbell (Co-Chair), elliott.campbell@maryland.gov

Local Leadership Workgroup The Local Leadership Workgroup (LLWG) held its quarterly meeting on November 9, 2021 themed around Land Use. The meeting explored how new land use data can support local government decision-making, identified tools and resources for strategic land use planning, and included speakers on policy toolkits and a land use case study. The dates for the 2022 LLWG quarterly meetings will be announced shortly. Efforts to roll out A Local Government Guide to the Chesapeake Bay continue in partnership with state agencies and local government associations.

Contact: Caroline Johnson (Staffer), johnson.caroline@epa.gov; Laura Cattell Noll (Coordinator), Inoll@allianceforthebay.org; Shannon Moore (Chair), SMoore@FrederickCountyMD.gov; or Heidi Bonnaffon (Vice Chair), hbonnaffon@mwcog.org

GIT 6 Contact: Caroline Johnson (Staffer) johnsonc@chesapeake.org

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.

Scientific, Technical Assessment and Reporting Team (STAR)

• The theme for the October STAR meeting was the Aquatic Life Cohort dry run presentations in compliance with the Strategy Review Systems (SRS). The four outcomes in this cohort (Oysters Outcome, Blue Crab Abundance Outcome, Forage Fish Outcome, and Submerged Aquatic Vegetation Outcome) practiced their presentations for the Management Board and received constructive feedback and suggestions for improvements from members. Peter Tango also presented on the Principals' Staff Committee's (PSC) monitoring needs update and Breck Sullivan reviewed potential Coastal & Estuarine Research Federation (CERF) conference sessions of interest to members. The next STAR meeting is on November 16th, 2021, and will focus on the 2020 Tidal Trends, continued conversation on the PSC monitoring needs update, and the highlights of the Healthy Watershed Assessment StoryMap.

Modeling Workgroup

• The Modeling Workgroup completed its <u>October Quarterly Review</u> of CBP Modeling and Analysis. The 12 presentations ranged from optimization efforts, to the initial set up of the James and

Patuxent Estuarine Models, to an overview of the Phase 7 Watershed Model options. Throughout the two-day meeting, discussion of the resolution and scale of the Main Bay Model, Multiple Tributary Models, Watershed Model, and Airshed Model were considered. Modelers also presented at the two-day Water Quality Goal Implementation Team (WQGIT) meeting and discussed the Phase 7 Watershed model options. The Modeling Ad Hoc team met to debrief and review feedback from the WQGIT. The next modeling quarterly meeting is in January 2022.

Integrated Trends and Analysis Team (ITAT)

• ITAT now has two new coordinators, Breck Sullivan, USGS, and Vanessa Van Note, EPA, who have taken over the role of coordinator from Jeni Keisman, USGS. The October Integrated Tends and Analysis Team (ITAT) meeting included sharing which ITAT members who would be presenting at the CERF conference and the Chesapeake Community Research Symposium, a review and discussion of the feedback informing ITAT's future work received from the Water Quality Goal Implementation Team (WQGIT) Monitoring Meeting, and a discussion with attendees about the formation, including membership, logistics, and purpose, of a small group to explore and develop "Insights on Change" sections for the Tributary Summaries. The next meeting is scheduled for November 19th and will focus on the 2020 tidal trends and updates on the Rappahannock Tributary Summary.

Climate Resiliency Workgroup (CRWG)

- The October Climate Resiliency Workgroup meeting was a two day, joint meeting with the Urban Stormwater Workgroup. During the first day, Annie Neale and Jessica Daniel presented information on EnviroAtlas, and metrics related to flooding, precipitation, tree canopy, and carbon sequestration. Jeremy Hanson and Zach Easton provided an update on the synthesis review of BMP performance uncertainty under changing climate conditions for nature-based, agriculture, and stormwater BMPs, funded by the Cooperative Agreement between U.S EPA and the Chesapeake Research Consortium and NOAA. David Wood outlined the key findings from a series of four memos on maintaining the resilience of stormwater Best Management Practices (BMP). Jon Hathaway presented the latest research on climate change implications for stormwater BMP performance and design. Tom Schueler and David Wood proposed a framework for local adaptation strategies to promote urban watershed resilience. The first day concluded with a discussion of the proposed urban watershed resilience framework, which includes developing pilot "next generation Bay-wide design specifications", as well as other topics from the day.
- The second day continued with an overview of the newly completed climate change-informed intensity duration frequency (IDF) curves by Michelle Miro. Jon Butcher presented work on projecting climate change-informed IDF curves in Maryland, including practical consequences of the predicted changes in precipitation and runoff related to BMP performance, flood risk, and channel instability. Scott Lowe and Ward Oberholzer presented on the impacts of climate change on stream restoration design. Jason Coleman and Tom Schueler discussed how the proposed changes in IDF curves would affect current and future flood boundaries from the perspective of floodplain managers. The final session included Michelle Miro, Alan Cohn, and Ben McFarlane sharing options for watershed managers interested in applying projected IDF curves in their stormwater programs or implementing alternative resilient design principles.
- The next CRWG meeting is a joint meeting with the Wetland Workgroup and will be held on December 13th and 14th focused on living shoreline and marsh adaptation projects.

Data Integrity Workgroup

• The Data Integrity Workgroup does not have any new updates since last month. The Data Integrity Workgroup held its quarterly virtual meeting on September 30, 2021. The meeting materials have been uploaded and can be found here. The meeting was presided by Cindy Johnson from VADEQ. All jurisdictions provided an update on monitoring efforts during the pandemic and plans moving forward. Peter Tango provided an overview of the presentation given to PSC on funding for the water quality monitoring program. The response to PSC comments, coordinated by STAR will address questions about the core monitoring networks for tidal water quality, nontidal nutrient and sediment, submerged aquatic vegetation, tidal benthic organisms, and citizen monitoring efforts. The final product delivered to PSC is expected to include a summary of the extended network portfolios and long-term budget needs. Caroline Donovan provided updates for the citizen science groups working with CMC as well as current progress on QAPPs, data uploads, and audits. Potential uses for Chlorophyll A data collected by groups were also discussed. Caroline requested workgroup members to provide input on prioritization areas that CMC could address over the term of their second EPA-funded award. Durga Ghosh provided an update on the status of audits and other QA considerations for the water quality monitoring program. Mike Mallonee presented the coordinated split sample results for the Chesapeake Bay mainstem and tributaries. CBL performance testing blind audit program schedules were provided by Jerry Frank. The next quarterly meeting is tentatively scheduled for January 2022.

• Bay Oxygen Research Group (BORG) - 4-D Water Quality Interpolator

The Leadership Team met in October to discuss insights from October's Water Quality GIT meeting, to provide a documentation status update, and to determine next steps. A case study is underway by the analysts. Exploratory tests of methods are being conducted to inform a decision on the interpolator development path going forward. Development of a requirements document is ongoing, and the Leadership Team plans to meet again in December or January to 1) review progress on the case study, 2) revisit the interpolator development timeline, 3) revisit capacity to support interpolator development based on any changes regarding the development timeline, and 4) discuss a plan, outline an agenda, and propose a date for the next full BORG meeting in 2022.

Nontidal Network Workgroup

• The October meeting started with updates from Peter Tango on the PSC Monitoring Review and a following discussion. The workgroup then listened to Jamie Shallenberger present on the Susquehanna River Basin Commission's (SRBC) new StoryMap "Stories in Water Data". Workgroup members provided feedback on the StoryMap and explored connections with their work. The next Nontidal Network Workgroup meeting is on Wednesday November 17, 1:00-2:30. The agenda is still being finalized at this time.

Criteria Assessment Protocol Workgroup

• Planning for the STAC workshop Advancing Monitoring Approaches to Enhance Tidal Chesapeake Bay Habitat Assessment Water Clarity/SAV is moving forward. This is a STAC workshop with invited technical and management personnel convened to review and determine the gaps and cost challenges limiting habitat assessments as outlined by the water quality standards under the TMDL for dissolved oxygen, water clarity/SAV and chlorophyll a. The objective is to develop actionable recommendations on adaptive monitoring and assessment for the next generation Chesapeake Bay Program tidal monitoring program. This workshop will include three separate sessions on dissolved oxygen, water clarity/SAV and chlorophyll a, and a final two-day synthesis effort (four sessions total). The first session on Water Quality/SAV will be a one-day virtual meeting on December 9th. It will focus on continuing the exploration of satellite image integration for the Chesapeake Bay SAV Monitoring Program and quantification of blue carbon burial in seagrass ecosystems from high resolution commercial imagery. If interested in participating in the workshop, please reach out to Peter Tango (ptango@chesapeakebay.net) or Meg Cole (colem@chesapeake.org.) The Criteria Assessment Protocol Workgroup is scheduled for Wednesday November 17, 10:00-12:00. The agenda is still being finalized at this time.

Status and Trends Workgroup (STWG) update

• The workgroup had a meeting on October 4th that revisited our workplan with a focus on establishing timeframes for action items, specifically those that are related to the four priority items approved by STAR in February 2021. The workgroup plans to meet again on November 12th to focus on a theme of developing new indicators and approve the workplan. Once finalized, the workplan will be posted to the workgroup page on chesapeakebay.net, along with other existing documents that are of use to members such as the indicator update process, and indicators. Additional topics for the November meeting include updates for the Land Use Methods and Metrics indicator and developing and implementing indicators for more qualitative outcomes.

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November 2021 Management Board Indicators Update

• The Diversity Workgroup is hosting their quarterly meeting on November 19, 2021 from 9 am – 12 pm. We are preparing our materials for the SRS meeting in February. The Diversity Workgroup continues to support the DEIJ Action team in their efforts to finalize the implementation plan. We are working with the Water Division to host allyship trainings starting in January 2022.

<u>Contact</u>: Katheryn Barnhart, barnhart.katheryn@epa.gov

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.

Communications Workgroup

 On November 3, the Communications Workgroup hosted the monthly workgroup meeting. Ola-Imani Davis, Alliance for the Chesapeake Bay, provided an overview of the Diversity, Equity, Inclusion and Justice Terminology Guide. Drew Robinson, Choose Clean Water Coalition (CCWC), provided an overview of the Choose Clean Water Coalition Workgroup Directory. The directory lists the name, contact and area of knowledge for communications professionals in the CCWC Workgroup and the Bay region. Shared messaging focused on Native American Heritage Month and #OptOutside day.

Meeting materials can be found here:

https://www.chesapeakebay.net/what/event/communications workgroup november meeting1

Communications Office:

- On October 1, the Communications Office posted the Executive Council press release:
 https://www.chesapeakebay.net/news/pressrelease/chesapeake_executive_council_acts_on_climate_change
- On October 12, the Communications Office posted the NFWF grant announcement:
 https://www.chesapeakebay.net/news/pressrelease/nfwf epa announce 10 million in grants to restore the chesapeake bay waters
- On October 26, the Communications Office posted the RPI/WQS press release:
 https://www.chesapeakebay.net/news/pressrelease/weather_continues_to_impact_chesapeake_b
 ay water quality
- Over the past year, the Communications Office completed a web content audit and inventory Two sub-contractors reviewed 700+ pages on chesapeakebay.net, assessing the value and condition of each page. The Communications Office and Web Team will use the suggestions provided by the subcontractors to make improvements to the content on chesapeakebay.net and to produce a content strategy which will define a schedule for ongoing updates.

Published blogs:

The following blogs were published in October:

- The Chesapeake Bay Program takes action on climate change
 https://www.chesapeakebay.net/news/blog/the chesapeake bay program takes action on clima te change
- A tiny fuzzy bat calls Chesapeake trees home https://www.chesapeakebay.net/news/blog/a tiny fuzzy bat calls chesapeake trees home
- From 'Red and Dead' to Class A Fishery, West Branch Susquehanna rebounds
 https://www.chesapeakebay.net/news/blog/from_red_and_dead_to_class_a_fishery_susquehanna_west_branch_rebounds
- 5 reasons to fall in love with autumn in the Chesapeake https://www.chesapeakebay.net/news/blog/5 reasons to fall in love with autumn in the chesapeake
- Projects to improve stream health, reduce urban runoff and restore fish passage receive funding https://www.chesapeakebay.net/news/blog/nfwf grant awards 2021
- A not so impossible sustainable beef operation demonstrates success
 https://www.chesapeakebay.net/news/blog/a_not_so_impossible_sustainable_beef_operation_demonstrates_success
- The monarch butterfly is celebrated from the Bay to Mexico
 https://www.chesapeakebay.net/news/blog/the monarch butterfly is celebrated from the bay to mexico
- Virginia's largest seabird colony thrives amid rush hour traffic https://www.chesapeakebay.net/news/blog/virginias largest seabird colony thrives amid rush hour traffic
- Bay water quality declines, but work on the ground gives hope for the future
 https://www.chesapeakebay.net/news/blog/bay water quality declines but work on the ground gives hope for the future
- Six lighthouses in the Chesapeake Bay with eerie pasts
 https://www.chesapeakebay.net/news/blog/six_lighthouses_in_the_chesapeake_bay_with_eerie_pasts

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