

# Management Board Program Update

January 12, 2021

### **CBPO Calendar**

Jan 13	January Management Board Meeting
Jan 14	BMP Verification AD Hoc Action Team Conference Call
Jan 18	Urban Stormwater Workgroup Conference Call
Jan 19	Land Use Workgroup Conference Call
Jan 20	Agriculture Workgroup Conference Call
Jan 24	Water Quality Goal Implementation Team Conference Call
Jan 25	Stewardship Workgroup Meeting
Jan 26	Integrated Trends Analysis Team Meeting
Jan 27	Joint C/S/STAR Dry Runs: Stewardship Cohort
Feb 1	Wastewater Treatment Workgroup Meeting
Feb 3	Watershed Technical Workgroup Meeting
Feb 3	Coordinator-Staffer Meeting
Feb 9	Conowingo WIP Steering Committee Meeting
Feb 9	Toxic Contaminants Workgroup Conference Call
Feb 11	BMP Verification Ad-Hoc Action Team Meeting
Feb 17	Management Board Quarterly Progress Meeting: Stewardship Cohort
Feb 24-25	Citizens Advisory Committee Quarterly
Mar 2	Principals' Staff Committee Meeting

### **Program Updates**

## New Suite of Models Introduced at CBP Modeling January Quarterly Review

The January 4-5, 2022 Chesapeake Bay Program (CBP) Quarterly Review introduced a new Phase 7 suite of models to the CBP. Within the suite of models, the state-of-the-science Phase 7 Main Bay Model (MBM) will replace the national award-winning Bay Model that has been successfully used by the CBP for three decades. Along with the MBM will be new and updated models of the watershed, airshed, and future land use, all directed as an integrated model suite to assess challenges to the Chesapeake watershed and Bay beyond 2025. In particular, the Phase 7 Models will assess the 2035 climate risk to the Chesapeake TMDL and its restoration goals. The tasks and timelines of the various models were shared and discussed as part of the process to ensure CBP decision-maker's direction and guidance were included in the Phase 7 Model workplans.

Contact: Lew Linker, 410-267-5741

#### **EPA Receives Draft Amended Phase III WIP for Review from Pennsylvania**

Pennsylvania submitted a draft amended Phase III Watershed Implementation Plan (WIP) to EPA for review on December 30, 2021. The draft amended WIP intends to demonstrate how Pennsylvania will meet the 2025 targets for nitrogen, phosphorus, and sediment and compensate for future climate impacts. Pennsylvania also completed 34 Countywide Action Plans (CAPs) that detail efforts in the counties within the watershed. The amended WIP and the CAPs are <u>available for viewing</u> on Pennsylvania Department of Environmental Protection's website. EPA will formally evaluate the amended WIP to determine if there is confidence that Pennsylvania's planning targets will be achieved by 2025.

Contacts: Tracy Clarke, 215-814-5267 (WD); Lucinda Power, 443-863-0657 (CBPO)

#### **EPA Assumes Leadership of Chesapeake Executive Council**

EPA Administrator Michael S. Regan was elected chair of the <u>Chesapeake Executive Council</u> (EC) at the EC's meeting in Richmond, Virginia on Wednesday, December 15. The EC was established by the Chesapeake Bay Agreement of 1983 to set goals and provide guidance for the Chesapeake Bay Program. The council meets on an annual basis. EPA last chaired the Executive Council in 2012 under former Administrator Lisa Jackson. With the leadership change, Regional Administrator Adam Ortiz will chair the <u>Principals' Staff Committee</u>.

Contacts: Tom Damm, 215-814-5560

### **Executive Council Briefed on Progress in Attaining 2025 Outcomes**

CBPO Acting Director Michelle Price-Fay briefed members and designees of the Chesapeake Executive Council on a recent Bay Program report assessing the attainability of each of the 31 outcomes in the *Chesapeake Bay Watershed Agreement*. The assessment found 12 outcomes currently on track to meet their targets, 11 unlikely to be met without implementing significant changes, six with varying degrees of uncertainty, and two considered to have met their targets. The assessment is driving conversations across the partnership as to which of the 2025 outcomes should be prioritized and how challenges will be met. It also provided the foundation for the partnership's <u>Bay Barometer: An Annual Report on the State of the Program and the Health of the Bay</u>.

Contacts: Rachel Felver, 410-267-5740

#### EPA Region III Regional Tribal Operations Committee Holds First Annual Meeting

The first annual meeting of the EPA Region III Regional Tribal Operations Committee (RTOC) was held on Tuesday, December 14, 2021. The RTOC is comprised of tribal representatives (usually Tribal Environmental Directors) from all or a subset of federally-recognized tribes in Region III. The primary purpose of the meeting was to help inform Region III on issues important to tribes and on EPA operations that affect tribes. Opening remarks by EPA leadership included Assistant Administrator Jane Nishida, American Indian Environmental Office Director JoAnn Chase, and Regional Administrator Adam

Ortiz, all of whom stressed the importance of working with tribal communities and the critical role of tribes in environmental restoration. Each Region III federally-recognized tribe provided updates on environmental priorities, which included water quality, land management, rising levels of PFAS, and climate vulnerability. <u>There was particular focus on strengthening engagement in environmental management on tribal lands through increased consultations with federal agencies and partnerships with universities and businesses.</u>

Contacts: Lucinda Power, 410-267-5722

### **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.

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LGAC Chair Jasmine Gore presented LGAC's 2021 Recommendations to the Chesapeake EC at its annual meeting December 15 in Richmond, VA. Recommendations focused on investing in workforce development programs to support green infrastructure design and construction efforts and addressing jurisdiction regulatory bottlenecks related to localized flooding.

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 <a href="mailto:jstarr@allianceforthebay.org">jstarr@allianceforthebay.org</a>. To be added to the Interested Parties list, please contact LGAC Staff at <a href="mailto:jgga@allianceforthebay.org">jgga@allianceforthebay.org</a>.

#### **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 met in Harrisburg, PA on Dec 1-2, 2021. They reelected Julie Lawson as Chair and Ann Jurczyk as Vice-Chair. They heard presentations from SRBC, an update on the County Action Plans from PA DEP and Lancaster Clean Water Partners and progress and challenges for agriculture from the State Conservation Commission. They were briefed on freshwater mussel restoration opportunities and the Keystone 10 Million Tree Partnership. CAC heard updates on the DEIJ Implementation Plan, recent decisions by the PSC and plans for the EC meeting. They met with the new EPA Region 3 Administrator and shared their annual recommendations.

The next CAC meeting will be held virtually on Feb 24-25, 2022.

There are 2 PA gubernatorial vacancies and 1 DC mayoral vacancy.

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 <a href="mailto:abray@allianceforthebay.org">abray@allianceforthebay.org</a> for program questions, contact Jessica Blackburn <a href="mailto:jblackburn@allianceforthebay.org">jblackburn@allianceforthebay.org</a>

### **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 FY2022 Request for Proposals: Proposals due February 16, 2022

The Chesapeake Bay Program's (CBP) Scientific and Technical Advisory Committee (STAC) is accepting proposals for STAC-sponsored workshops for the STAC fiscal year 2022 budget cycle (beginning June 1, 2022). Workshops are convened to gather critically needed scientific or technical information related to protection and restoration of the Chesapeake Bay and its watershed. Workshops funded through this RFP must be convened by May 31, 2023. The total amount allocated by STAC will not exceed \$10,000 for each workshop activity.

As an independent advisory committee to the entire Chesapeake Bay Partnership, STAC reserves funds for two categories of workshops:

- 1. **Programmatic Workshop:** Workshop outcomes will provide the CBP and the Partnership with actionable recommendations. Workshop participants will assess where, when, who, and how science can be implemented within the Partnership and prioritize these recommendations. Recommendations should follow the 'SPURR' format. This will provide the CBP Partnership with a clear next-step to take action on the recommendations.
- State of the Science Workshop: A STAC Workshop with the focus on gathering various stakeholders to examine a topic from an interdisciplinary perspective with an aim to assess the state of the science, gaps in knowledge, and science needs. Recommendations should include research recommendations and strategies to address gaps in the science.

The current STAC membership list can be found here.

Proposals are due to STAC Coordinator, Annabelle Harvey (<a href="https://harveya@chesapeake.org">harveya@chesapeake.org</a>) by COB February 16, 2022.

Materials linked on STAC Website:

- STAC Workshop FY2022 Request for Proposals (also attached)
- STAC Workshop Overview
- STAC Workshop Protocol
- STAC Publications Protocol

# STAC December Quarterly Meeting: December 7, 2021

STAC will met virtually on December 7, 2021. The membership furthered work on the CESR effort, were updated on recent STAC workshops and membership processes, and strategically planned for the next two years of STAC activities and priorities. STAC also heard from the new EPA Region 3 Director, Adam Ortiz. More information, agenda, and materials can be found on the <u>STAC December Meeting Page</u>.

#### **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

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 hosted a virtual membership meeting on January 6th and 7th of 2022. The meeting focused on oyster restoration progress, ongoing oyster science, and emerging science needs/opportunities.
- SRS: The Fish Habitat Action Team submitted their final materials for the next iteration of a two year action plan for acceptance at the December 9 Management Board Meeting. The oyster, forage, and blue crab outcomes, presented two-year progress at the November Management Board meeting. Action plan drafting for these outcomes is in progress.
- 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.

• **HABITAT GIT:** The Habitat GIT will be holding a Workgroup Co-Chairs meeting on March 3rd from 10:00-12:00 ET. Additional meeting information will be sent out in the near future.

#### WORKGROUP UPDATES:

- O **Brook Trout Workgroup:** the workgroup will be holding a meeting on possible collaborative opportunities between the workgroup, National Fish & Wildlife Foundation (NFWF), and Trout Unlimited. This meeting will be held on January 10th, and additional details will be sent out this week.
- O Stream Health Workgroup: the workgroup is putting together a Steering Committee to draft and implement a new STAC Workshop proposal. The RFP deadline is 02/16. The workshop will be titled "The State of the Science and Practice of Stream Restoration in the Chesapeake: Lessons Learned to Inform Better Implementation, Assessment and Outcomes" more information on this workshop will be sent out in the coming weeks.
- GIT FUNDING: The Brook Trout, Fish Passage, Stream Health, and Wetlands workgroups were all
  approved for GIT Funding. The workgroups are currently working on their Table 2 Proposal, which
  will be submitted by 01/14, after which they will receive edits/comments from the Chesapeake
  Bay Trust.

#### STRATEGIC REVIEW SYSTEM:

- O As part of the Healthy Watersheds Cohort, the Stream Health and Fish Passage workgroups have completed the SRS process. The updated workgroup Logic & Action plans were accepted by the Management Board, and can be found on the CBP website.
- O The Brook Trout Workgroup's updated Logic & Action Plan will be submitted for Public & Signatory Feedback in February 2022.
- The SAV Workgroup's revised Logic & Action Plan will be submitted for Public & Signatory Feedback in February 2022.

#### • OTHER:

• The steering committee has been meeting weekly to plan the workshops that will address increasing the implementation of tidal and nontidal wetland restoration.

<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 Water Quality Goal Implementation Team has no updates at this time.

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 Healthy Watersheds Goal Implementation Team has no updates at this time.

Healthy Watersheds GIT Contact: rthompso@chesapeakebay.net; swaterman@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 CCP hosted a Steering Committee meeting Monday January 10th. The Steering Committee of the CCP serves as the Protected Lands Workgroup. Part of the January agenda was dedicated to Protected Lands Workgroup business.
- 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 has identified two new Chairs- Michael Weyand, Watershed Restoration Specialist with the City of Gaithersburg and Ashley Traut, Senior Advisor for the Greater Baltimore Wilderness Coalition.
- The Stewardship Workgroup's next meeting will be held on January 25th, 2022.

- 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 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 next Education Workgroup Full Membership meeting will be held February 16th from 9:00 12:00 pm.
- 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 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 second local networks are in their early stages and include Baltimore City, MD
  and Hampton Roads, VA. OLNI project is advised by the Education Workgroup and consistent
  with Stewardship GIT goals.

### **Public Access Workgroup**

- The Public Access Workgroup is in the process of preparing for it's Quarterly Progress Meeting with the Management Board.
- The Public Access Workgroup is currently collecting data on Public Access sites opened in 2021.
- 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 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** 

At the January CBPO All Hands meeting, Briana Yancy, Allison Ng, and Vanessa Van Note will give a brief presentation to announce our intent to host quarterly allyship trainings in 2022.

The Diversity Workgroup is preparing our SRS materials for the Management Board meeting in February. This meeting has been moved from 2/10 to 2/17 to accommodate the CBT Stewardship / Behavior Change Forum. Finally, The Diversity Workgroup is preparing our draft Table 2 document for the FY22 GIT-Funding project titled *Equitable Grants and Funding in the Chesapeake Bay Watershed*.

<u>Diversity workgroup contact</u>: Briana Yancy; <u>yancy.briana@epa.gov</u> (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. An EPA GIT Table 2 Training was held on December 14, 2021 to review the GIT Funding Manual for Phase 2: Refinement of Project Ideas into Scopes of Work (Table 2) and Table 2 drafts are due January 14, 2022. Chesapeake Bay Trust will provide reviews and comments on Table 2 drafts and send them out January 21, 2022. Final Phase 2 Scopes of Work will be due February 21, 2022.
- Governance Document Action Team (GDAT) The GDAT meets biweekly to work through needed adjustments to the CBP Governance Document. GIT 6 approved the recent proposed edits regarding roles of staff and grammatical edits to EC Leadership language. A draft of the revised document and proposed language will be presented to GIT 6 for concurrence at the March 16, 2022 meeting and later presented to Management Board. 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 Spring 2022.

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. BFWG Fall Quarterly meeting was postponed due to lack of substantive updates. BFWG will hold its next quarterly meeting in Spring 2022. Contact: Martha Shimkin (Co-Chair), <a href="mailto:shimkin.martha@epa.gov">shimkin.martha@epa.gov</a>; Dr. Elliott Campbell (Co-Chair), <a href="mailto:elliott.campbell@maryland.gov">elliott.campbell@maryland.gov</a>

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 LLWG will hold its spring quarterly meeting on February 22, 2022. 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), <u>johnson.caroline@epa.gov</u>; Laura Cattell Noll (Coordinator), <u>Inoll@allianceforthebay.org</u>; Shannon Moore (Chair), <u>SMoore@FrederickCountyMD.gov</u>; or Heidi Bonnaffon (Vice Chair), <u>hbonnaffon@mwcog.org</u> GIT 6 Contact: Caroline Johnson (Staffer) <u>johnson.caroline@epa.gov</u>

### 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 <u>December</u> STAR meeting began with a summary of the <u>2021 Hypoxia report</u> and a call for mentors needed for the University of Maryland, Baltimore County (UMBC) Interdisciplinary Consortium for Applied Research in the Environment (ICARE) program. Liz Chudoba presented on the partnership between the Chesapeake Monitoring Cooperative (CMC) and the National Fish and Wildlife Foundation (NFWF) to develop a volunteer friendly monitoring protocol for targeting restoration projects. The rest of the STAR meeting focused on the <u>Science Needs</u> of the Aquatic Life Cohort. While Outcome Leads did announce new science needs, they also provided updates to current science needs and shared how multiple of them are being met through the CBP and our partners. STAR members suggested potential resources to meet the new science needs. The next STAR meeting is on January 27th, 2022 and will focus on the Strategy Review System Dry Run Presentations for the Stewardship Cohort.

#### **Modeling Workgroup**

The Modeling Workgroup completed its <u>January Quarterly Review</u> of CBP Modeling and Analysis. The January 4-5, 2022 CBP Modeling Quarterly Review introduced the new Phase 7 suite of models to the CBP. Within the suite of models, the state-of-the-science Phase 7 Main Bay Model (MBM) will replace the national award-winning Bay Model that has been successfully used by the CBP for three decades. Along with the MBM will be new and updated models of the watershed, airshed, and future land use, all directed as an integrated model suite to assess challenges to the Chesapeake watershed and Bay beyond 2025. In particular, the Phase 7 Models will assess the 2035 climate risk to the Chesapeake TMDL and its restoration goals. The tasks and timelines of the various models were shared

and discussed as part of the process to ensure CBP decision-maker's direction and guidance were included in the Phase 7 Model workplans. Specifically, the 13 presentations ranged from optimization efforts, to the initial set up of the James and Patuxent Multiple Tributary Models (MTMs), to an outline of the initial the Phase 7 Watershed Model workplan and the progress on Phase 7 development thus far. Throughout the two-day meeting, the feedback from the WQGIT, STAC, and other GITs was incorporated into the planning discussions for Phase 7. Going forward, the Modeling Ad Hoc team will meet weekly to continue working on improving the workplans and coordination among the Phase 7 suite of models. The next CBP Modeling Quarterly is a two-day meeting on April 5th and 6th, 2022.

### **Integrated Trends and Analysis Team (ITAT)**

The <u>November</u> Integrated Tends and Analysis Team (ITAT) meeting began with a presentation by Rebecca Murphy on the 2020 Tidal Trends in the Chesapeake Bay, in which she also summarized observed changes from the 2019 Tidal Trends and COVID-19 related impacts to the water quality sampling process. The 2020 Tidal Trends results and <u>a summary document, entitled "Tidal Water Quality Change"</u>, are available on the ITAT webpage, <u>here</u>. Mike Lane is currently authoring the Rappahannock Tributary Summary and shared his progress. ITAT members provided feedback on the summary as requested. The meeting concluded with a discussion of recommendations and considerations from the Modeling Team regarding the tributary summaries. ITAT did not meet in December and the next meeting is scheduled for January 26th, 2022.

In efforts to disseminate the tributary summaries to interested parties, ITAT has presented information and examples on how to use the information to inform management decisions to multiple groups including STAC, CBP Modeling Workgroup, and Anacostia Watershed Community Advisory Committee. If interested in having the Tributary Summaries presented at your jurisdictional or local meetings, please contact Breck Sullivan (<a href="mailto:bsullivan@chesapeakebay.net">bsullivan@chesapeakebay.net</a>) and Vanessa Van Note (<a href="VanNote.Vanessa@epa.gov">VanNote.Vanessa@epa.gov</a>).

#### Climate Resiliency Workgroup (CRWG)

The December 2021 joint meeting with the Wetland Workgroup took place December 13th and 14th and focused on nature and nature-based features (NNBFs), living shorelines, and marsh adaptation projects. The first day of the meeting included presentations from Pam Mason (VIMS), Gina Hunt (MD DNR), and Justin Shapiro (CRC/NOAA); topics presented included: research developing GIS layers and webapps mapping NNBFs, living shorelines, and hardened shorelines; the development of outreach materials to aid in the adoption of living shorelines based on previous research investigating social behaviors influencing shoreline management; and the development of management tools to identify regions that would benefit from the implementation of living shoreline, marsh restoration and conservation, and NNBFs. The second day of the meeting included presentations from Molly Mitchell (VIMS), Amanda Guthrie (VIMS), and Karen Duhring (VIMS). Topics presented included: an update to the "Synthesis of Shoreline, Sea Level Rise, and Marsh Migration Data, for Wetland Restoration Targeting" project, which complies and provides datasets for marsh management purposes; research investigating property owner motivations, perceptions, and drivers when it comes to choosing shoreline modifications; and a presentation of the Shoreline Management Model, which aims to help decisionmakers with management decisions when choosing where and how protect shorelines. Discussions highlighted collaborative efforts that may be developed within communities and amongst governmental and non-governmental organizations to help with outreach efforts and research expansion.

Upcoming CRWG-supported meetings and events include the STAC Rising Water Temperature Workshop on January 12th, 2022 and the February meeting on February 14th, 2022. The topic of the February CRWG meeting is yet to be determined but will be updated on the CBP calendar as soon as it's finalized.

### **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 December to chart a path and timeline regarding a case study test of GAMs method applications to support the new 4D interpolator. The Leadership Team plans to meet again on January 14, 2022 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. The full BORG meeting on the case study showcase and 4D developments will be coordinated as the 3<sup>rd</sup> event in the STAC Advanced Monitoring Workshop event underway this year. Tentative plans are targeting April/early May 2022.

#### **Nontidal Network Workgroup**

The December 2021 NTN meeting was a planning session for subset of members discussing 2022 meeting themes and input on funding priorities being presented in the STAR-supported monitoring review for the PSC. The next Nontidal Network Workgroup meeting is scheduled for January 19th, 2022. The agenda is being developed to include a summary of the status of the PSC report, 2) NTN specific items in the report for sustaining the existing network, and 3) proposals for expanding continuous monitoring of RIM sites.

#### **Criteria Assessment Protocol Workgroup**

The CAP WG participated in the first event of the STAC workshop on Advancing Monitoring Approaches to Enhance Tidal Chesapeake Bay Habitat Assessment focused on advances in estuarine SAV assessment. 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. Plans for the second STAC workshop session for late winter/early spring 2022 are being targeted at the state of research for satellite-based assessment of chlorophyll and water clarity. CAP WG members will be asked to provide foundation perspectives on the existing protocols for reference to compare to new opportunities evolving with aerial/satellite-based sensors. If interested in participating in the workshop, please reach out to Peter Tango (ptango@chesapeakebay.net) or Meg Cole (colem@chesapeake.org.) The next Criteria Assessment Protocol Workgroup meeting is being scheduled for later this winter. Topics are anticipated to include a brief recap of the STAC Advanced Monitoring workshop event and input on plans for the remaining 2 workshop sessions as well as DO and CHLA criteria considerations for the future.

### Status and Trends Workgroup (STWG) update

The workgroup had a meeting on <u>November 12th</u> that focused on establishing metrics for more qualitative outcomes and progress on the new Land Use Methods and Metrics Indicator. There were also a few final comments made on the workplan and they are currently being incorporated. Once finalized, the workplan will be posted to the workgroup page on <u>chesapeakebay.net</u>, along with other existing documents that are of use to members such as the <u>indicators framework</u>, <u>indicator update</u> <u>process</u>, <u>and guiding questions for GITS when developing new indicators</u>. The workgroup will meet again on January 10th to approve the finalized workplan, discuss the role of indicators in adaptive management, and discuss influencing factors indicators

<u>STAR Contacts</u>: Breck Sullivan; <u>bsullivan@chesapeake.org</u> (Coordinator), Amy Goldfisher (Staffer); agoldfisher@chesapeake.org, Alex Gunnerson (Staffer); gunnersona@chesapeake.org

#### January 2022 Management Board Indicators Update

#### January MB Indicators Update

Since the December MB meeting, we have not updated any additional indicators on ChesapeakeProgress.

We anticipate finalizing the following indicator updates in advance of the February MB meeting:

• Forest Buffers – update with 2020 data

<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**

The Communications Workgroup is taking a short break while we reassess its direction.

#### **Communications Office**

On December 15, the Executive Council meeting took place in Richmond, Virginia. Environmental Protection Agency (EPA) Administrator Michael Regan was appointed as the Chair of the Executive Council. Executive Council members, designees and plus-one's had a private lunch with representatives from each Advisory Committee. During the public meeting, Executive Council members, designees and guest speakers discussed the <u>Diversity, Equity, Inclusion and Justice Implementation Plan Strategy</u> and outcome attainability updates from the <u>Bay Barometer: State of the Chesapeake Bay Program</u>.

- Access the press release:
   https://www.chesapeakebay.net/news/blog/celebrating\_deij\_and\_climate\_successes\_with\_the
   chesapeake\_bay\_program
- Access the blog: <a href="https://www.chesapeakebay.net/news/blog/celebrating-deig-and-climate\_successes-with\_the-chesapeake-bay-program">https://www.chesapeakebay.net/news/blog/celebrating-deig-and-climate\_successes-with\_the-chesapeake-bay-program</a>
- Access the Bay Barometer: <a href="https://www.chesapeakebay.net/documents/2021">https://www.chesapeakebay.net/documents/2021</a> State of the Program.pdf

# **Social Marketing to Inform Shoreline Management**

A two-phased GIT funding project (2018, 2019) wrapped up at the end of 2021. The project sought to develop a community-based social marketing strategy (CBSM) to encourage shoreline property owners to adopt environmentally-sensitive practices in relation to shorelines, based on identified barriers and benefits to shoreline management within the Chesapeake Bay. Both phases of the project were awarded to Action Research, with oversight by the Fish Habitat and Communications workgroups. A series of products were developed and will be posted on the new Chesapeake Behavior Change website at <a href="https://www.chesapeakebehaviorchange.org/campaigns">www.chesapeakebehaviorchange.org/campaigns</a>. The next steps of this project will be to pilot the CBSM strategy.

The following blogs were published in December:

- Wildlife managers race against the clock to protect centuries-old trees
   <a href="https://www.chesapeakebay.net/news/blog/wildlife\_managers">https://www.chesapeakebay.net/news/blog/wildlife\_managers</a> race against the clock to protect centuries old trees
- The world's largest oyster restoration project is completed in Virginia
   https://www.chesapeakebay.net/news/blog/the\_worlds\_largest\_oyster\_restoration\_project\_is\_completed\_in\_virginia
- West Virginia tourist town confronts flooding with green infrastructure
   <a href="https://www.chesapeakebay.net/news/blog/west\_virginia\_tourist\_town\_confronts\_flooding\_w\_ith\_green\_infrastructure">https://www.chesapeakebay.net/news/blog/west\_virginia\_tourist\_town\_confronts\_flooding\_w\_ith\_green\_infrastructure</a>
- Celebrating DEIJ and climate successes with the Chesapeake Bay Program
   https://www.chesapeakebay.net/news/blog/celebrating\_deij\_and\_climate\_successes\_with\_the\_chesapeake\_bay\_program
- Maximizing a short supply of black duck habitat <a href="https://www.chesapeakebay.net/news/blog/maximizing">https://www.chesapeakebay.net/news/blog/maximizing</a> a short supply of black duck habita
   t
- The Chesapeake Bay Program's guide to reducing holiday waste
   https://www.chesapeakebay.net/news/blog/the\_chesapeake\_bay\_programs\_guide\_to\_reducing\_holiday\_waste
- The Chesapeake's stand-out stories of 2021 https://www.chesapeakebay.net/news/blog/the\_chesapeakes\_stand\_out\_stories\_of\_2021
- Year in photos: The Chesapeake watershed in 2021

https://www.chesapeakebay.net/news/blog/year in photos the chesapeake watershed in 2 021