



**Chesapeake Bay Program
Management Board
January 16, 2020**

Program Update

CBPO Calendar

Jan. 22	Criteria Assessment Protocol Workgroup meeting (Colonial Beach, Va.)
Jan. 23	Scientific, Technical Assessment and Reporting (STAR) meeting
Jan. 24	Principals' Staff Committee meeting (Woodbridge, Va.)
Jan. 27	Climate Resiliency Workgroup in-person meeting
Jan. 29	Budget and Finance Workgroup quarterly meeting
Jan. 29-30	Invasive Catfish Workshop (Charles City, Va.)
Jan. 30	Maintain Healthy Watersheds GIT meeting
Jan. 31	Conowingo WIP Steering Committee meeting
Feb. 5	Communications Workgroup meeting
Feb. 5	Land Use Workgroup conference call
Feb. 10	WQGIT conference call
Feb. 11	Local Leadership Workgroup quarterly meeting (Washington, DC)
Feb. 13	Management Board meeting (Stewardship Cohort SRS QPM)
March 16	Building Cultural Competency training

Updates

FY2020 Appropriations: Additional \$12M in CBP Budget

In mid-December, Congress approved a 16% increase in the CBP's FY 2020 budget, that was signed by the President the week of December 16. Specifically, the Chesapeake Bay Program was given \$85 million for fiscal year 2020, an increase of \$12 million from the previous year. Over 70 percent of the funding will be provided directly to state and local partners for watershed restoration, protection and monitoring and 100% of the \$12 million increase will go to state and local partners.

Funding for the Chesapeake Bay Program Office and its grant programs come directly out of the EPA budget. But many different organizations, including other federal agencies, receive funding for their individual Bay restoration activities. The following are some of the programs that also received funding in the fiscal year 2020 budget, portions of which will be used for Chesapeake Bay protection and restoration efforts throughout the watershed:

- Department of the Interior Land and Water Conservation Fund: \$495,103,000
- Environmental Protection Agency
 - Clean Water State Revolving Fund: \$1,638,826
 - Nonpoint Source Grants: \$172,348,000
 - Pollution Control Grants: \$223,289,000
- National Oceanic and Atmospheric Association
 - Habitat Conservation and Restoration: \$57,125,000
 - Regional Councils and Fisheries Commission: \$40,247,000

- Bay-Watershed Education and Training (B-WET): \$7,750,000
 - National Park Service Chesapeake Bay Gateways and Trails Program: \$3 million
 - U.S. Army Corps of Engineers
 - Section 510 Chesapeake Bay Environmental Restoration and Protection Program: \$100 million
 - Chesapeake Bay Oyster Recovery: \$100 million
 - Poplar Island: \$17,300,000
 - Aquatic Ecosystem Restoration: \$10 million
 - Emergency Streambank and Shoreline Protection: \$8 million
 - U.S. Department of Agriculture
 - Forest Stewardship: \$21 million
 - National Resource Conservation Service: \$829,628,000
 - U.S. Fish and Wildlife Service
 - Cooperative Landscape Conservation: \$12,500,000
 - Habitat Conservation – Coastal Program: \$13,375,000
 - U.S. Geological Survey Ecosystem Science and Monitoring for the Chesapeake Bay: \$14,850,000
- Visit ChesapeakeProgress (www.chesapeakeprogress.com/) to learn more about the Chesapeake Bay Program budget.

EPA Releases Evaluations of Jurisdictions Watershed Implementation Plans

On December 19, EPA released its evaluations the Phase III Watershed Implementation plans for the six Chesapeake Bay watershed states (Maryland, Virginia, Pennsylvania, Delaware, West Virginia and New York) and the District of Columbia. The plans to have all programs and practices in place by 2025 to restore the Bay and its tidal waters.

The comprehensive EPA reviews found that, in large part, the final Phase III Watershed Implementation Plans (WIPs) offer a solid foundation for reaching the 2025 goal supported by the states and the District as members of the Chesapeake Bay Program partnership, providing a path to unprecedented progress in restoring the Bay and improving local waters. The reviews also identified remaining details and enhancements that could be addressed.

Contact: Dana Aunkst, 410-267-5710

Lee McDonnell Begins Tenure as CBPO Science Chief

On January 6, 2020, Lee McDonnell began his tenure as Chief of the Science, Analysis and Implementation Branch of the Chesapeake Bay Program Office. McDonnell is a licensed professional engineer with more than 25 years of experience at the Pennsylvania Department of Environmental Protection (PADEP) in environmental engineering application and implementation, policy development, and administrative management, much of which has been specific to the Chesapeake Bay watershed. He is a former Director of the Bureau of Clean Water at PADEP. Carin Bisland, Lucinda Power, and Lew Linker were all commended for their work in temporary assignments as acting Branch Chief after Rich Batiuk retired in 2018.

Contact: Dana Aunkst, 410-267-5710

EPA and Delaware Sign Pact to Expand Clean Water, Healthy Farms Activities

On Wednesday, January 15, Regional Administrator Cosmo Servidio and Delaware Agriculture Secretary Michael T. Scuse signed a five-year, first-of-its-kind Memorandum of Understanding (MOU) to expand joint activities supporting the agencies' shared goal of cleaner water and stronger farms. The

agreement will be signed at the conclusion of an Agriculture Roundtable with EPA and members of the agriculture community, hosted by Secretary Michael Scuse at the Delaware State Fairgrounds as part of Delaware Agriculture Week. EPA is developing similar MOU agreements with other states in the Mid-Atlantic region.

Contact: Kelly Shenk, 410-267-5728; Tom Damm, 215-814-5560

Tracking Underwater Grasses Via Satellite Imagery

On December 17-18, CBPO's Partnerships and Accountability Branch Chief Carin Bisland attended the second of four sessions of the "Exploring Satellite Image Integration for the Chesapeake Bay SAV Monitoring Program" STAC workshop at the Virginia Institute of Marine Science. The workshops are exploring the use of satellite imagery to identify submerged aquatic vegetation (SAV) beds in the Chesapeake Bay and to develop steps forward to determine if and how it can be integrated with the current aerial surveys of SAV beds in the Chesapeake Bay.

Contact: Carin Bisland, 410-267-5732

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 held its quarterly meeting December 4-5 in Adamstown, Maryland. Members discussed three case studies on innovative partnerships that are providing significant watershed benefits: Turkey Hill Clean Water Partnership (sustainable business), Frederick County Creek ReLeaf (forest retention) and Color on the Creek LLC (local economic development). Members also provided feedback on the Phase III Forest Retention Study and STAC Microplastics Report.
- LGAC's next meeting is March 19-20 in Washington DC.
- LGAC still seeks New York representative.

Questions about LGAC should be directed to LGAC Coordinator Jennifer Starr at jstarr@allianceforthebay.org. To be added to the Interested Parties list, please contact LGAC Staff at lgac@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.

- 2020 meeting dates: Feb 20-21; May 21-22; Sept 17-18 and Dec 3-4 which will be partly held with LGAC.
- Leadership: CAC officers are Matt Ehrhart (PA), Chair and Julie Lawson (DC), Vice-Chair.

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

Scientific and Technical Advisory Committee (STAC)

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.

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

Quarterly Meetings:

STAC will hold its fourth quarterly meeting of FY2019 on March 10-11, 2020 at the Chesapeake Bay Foundation Philip Merrill Center in Annapolis, MD. Members will continue to work on the STAC Scientific Gap Analysis effort (to be renamed). This effort brings together the varied expertise from STAC membership to assess important system limits, knowledge gaps, and research needs to facilitate future dialogue related to the feasibility and consequences of post-2025 policy choices. STAC aims to inform policy-makers, the interested public, and scientific community about the state of the science surrounding the gaps associated with the Bay attaining WQS. The membership is split into three workgroups to closely examine these issues; Watershed, Estuarine and Living Resources. Beyond the science, STAC members are examining the most effective delivery and communication for this body of information. STAC will continue to refine the intent and content of this two-year effort. During this meeting, the Estuarine workgroup will share the findings of their past discussions and outline their portion of the report.

STAC will also hear from STAR for updates on the SRS process and received updates from recent STAC workshops. More information will be made available on the [March Meeting Page](#).

STAC 2020 Quarterly Meeting Dates:

STAC has approved the following dates for their 2020 quarterly meetings:

- March 10-11, 2020
- June 11, 2020
- September 15-16, 2020
- December 14-15, 2020

Workshops:

Now Accepting Proposals for FY2020 Workshops: The Request for Proposals (RFP) for FY2020 STAC workshops was released on December 20, 2019. The RFP announcement can be found [here](#). **Proposals are due February 10, 2020** to STAC Coordinator, Annabelle Harvey (harveya@chesapeake.org).

STAC will be hosting three other workshops in FY2019, listed here in order of date. Planning is underway for all these activities. Information regarding recent workshops- including agendas, presentations, and reports (as they become available) can be found on the [workshop homepage](#).

1. Satellite Image Integration for the Chesapeake Bay SAV Monitoring Program: Session 3, February 25-26, 2020; Virginia Institute of Marine Science (VIMS)
2. Linking In-Field and Edge-of-Field Management to Soil and Watershed Health: January 23-24, 2020; West Virginia University Erickson Alumni Center
3. Incorporating Freshwater Mussels in the Chesapeake Bay Partnership: March 5-6, 2020; Chesapeake Bay Foundation Philip Merrill Center, Annapolis, MD

New Reports:

STAC has recently released two reports. All STAC activity reports can be found on the [STAC Workshop Publications Page](#).

1. Establishment of Multifunctional Riparian Buffers (FY2018)
2. Integrating Science and Developing Approaches to Inform Management for Contaminants of Concern in Agricultural and Urban Settings (FY2018)

Upcoming Reports:

STAC is working to finalize the following eleven reports. Information regarding workshops held prior to January 2018 can be found on the [STAC archived workshop homepage](#).

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)
5. Chesapeake Bay Program Climate Change Modeling 2.0 (FY2018)
6. Assessing the Environment in Outcome Units (AEIOU): Using Eutrophying Units for Management (FY2018)

Goal Implementation Team, STAR and Communication Workgroup Updates

Indicators

Contact: Doreen Vetter, 410-267-5780, vetter.doreen@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.

- GIT Biannual Meeting: The [Sustainable Fisheries GIT biannual meeting](#) took place at VIMS campus January 7-8, 2020, spanning two days of oyster-focused presentations on restoration progress and research. The meeting emphasized the need to work collaboratively in addressing cross-cutting issues (e.g. climate impacts to oysters) and reviewing the oyster restoration BMP Expert Panel report with the Water Quality and Habitat GITs once a draft report is released. Results from NOAA-funded oyster reef ecosystem services research demonstrate the value of restored reefs for benefits in water quality, enhanced nutrient cycling processes, fish and macrofauna utilization. A number of innovative research studies were presented, including chemical techniques to mark oyster larvae for direct setting, relating oyster restoration efforts in Harris Creek to improved water clarity with

satellite data, and combining multiple Chesapeake Bay Program interests (oysters, SAV habitat) for nearshore habitat restoration in the Middle Peninsula region. A meeting summary is being prepared and materials are available online.

- An [Invasive Catfish Workshop](#) is being planned for January 29-30 at VCU Rice Rivers Center. The objective is to bring together stakeholders to develop collaborative solutions that address workgroup objectives and contribute to a management strategy that will guide state management plans. The Invasive Catfish Workgroup Objectives are to coordinate, synthesize, and communicate scientific research on the ecological and economic impacts of invasive catfish in Chesapeake Bay, and develop a science-based management strategy that balances the economic interests of commercial and recreational fisheries with Chesapeake Bay ecosystem health.
- The Sustainable Fisheries GIT is currently working to develop a proposal detailing options to maintain an acoustic telemetry receiver array at some scale in the lower Chesapeake Bay, used to track movements in and out of the Bay for commercially and recreationally important species. Effective January 2020, the network of receivers operated and maintained by DOD Navy will be reduced from the current 119 receivers covering the mouth of the Chesapeake Bay to 30 receivers at the mouth of the James River. The fishery management community expressed that the current array has provided critical data for informing stock assessments and decisions around key species including endangered Atlantic sturgeon, striped bass, and cownose rays. Researchers emphasized that the array has served as a gate for tracking animals moving in and out of the Bay, and to study habitat connections between Chesapeake Bay and mid-Atlantic region, supporting a broader network of researchers along the Atlantic coast. The need for a Chesapeake Bay telemetry receiver array is an emerging science priority for the GIT. The proposed 'backbone' array covering the Bay mouth would have an initial cost of approximately \$142,000 and annual operating costs in the range of \$22,000, which could be reduced by sharing receivers and maintenance efforts among partner institutions that benefit from data provided by the array.

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.

- The Stream Health, Brook Trout, Fish Passage, and Wetlands workgroups have submitted their logic and action tables for approval by the Management Board.
- The Stream Health and Wetland workgroups have submitted updated management strategies for approval by the Management Board.
- The Habitat Goal team has begun planning for its spring meeting, expected to occur in Virginia in May of 2020. The group is coordinating with our Virginia representatives on potential venues, site visits, and presenters.
- Mid-Atlantic Panel: On December 10 and 11, the Habitat Goal team staffed the Mid-Atlantic Panel on Aquatic Invasive Species' bi-annual meeting in Delmar, New York. For more

information please contact the Chesapeake Bay Program representative on the Mid-Atlantic Panel, Mark Lewandowski (mark.lewandowski@maryland.gov)

- GIT Funding:
 - The Targeted Outreach for Green Infrastructure in Vulnerable Areas GIT funded project received one proposal through the Chesapeake Bay Trust's RFP. The proposal is currently under review.
 - Development of the "Maryland Stream Crossing Design Guidance: A Fish-Friendly Stream Crossing Design Handbook" GIT funded project received one proposal through the Chesapeake Bay Trust's RFP. The proposal is currently under review.
 - Development of Technical Guidance Manual and Outreach Materials for Small-scale Submerged Aquatic Vegetation Restoration in Chesapeake Bay and its Tidal Tributaries GIT funded project received two proposals through the Chesapeake Bay Trust's RFP. The proposals are currently under review.

Habitat GIT Contact: Jennifer Greiner, jennifer_greiner@fws.gov

Water Quality Goal Implementation Team

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

The WQGIT held a conference call on December 9. A subset of topics is included below:

- Water Quality and Habitat GITs postponed approval of the Nontidal Wetland Rehabilitation, Creation and Enhancement BMP Panel Report based on concerns raised by PA regarding: 1) wetland land use mapping and classification, 2) compensatory mitigation wetlands (eligibility, tracking, and reporting toward TMDL targets), and 3) BMP panel report approval process.
- WQGIT approved the Improving the Application of the Stream Restoration Prevented Sediment Protocol as long as PA' concerns are addressed, and the resolution is presented at the next WQGIT meeting.
- WQGIT postponed approval of the numeric 2-year milestones recommendation document until their January 13th, 2020 meeting.
- For programmatic and numeric milestone submissions to EPA, the WQGIT approved a schedule change to March 1st, 2020, to wait for EPA to release the Phase III WIP evaluations and based on the WQGIT's postponement of approval for the numeric 2-year milestone language until the January 13th, 2020 conference call.

The WQGIT will hold a conference call on January 13. A subset of topics to be discussed includes:

- WQGIT Chair, Vice- chair, and at- large members
- Numeric 2-year Milestones
- Potomac Tributary Report
- Wetland BMP Report
- Habitat based BMPs

Contact: Lucinda Power, 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.

- HWGIT Coordinator and Staffer finished planning and attended the [Conservation Finance Intensive Workshop](#) in West Virginia.
- Staff are continuing to work on finalizing the Chesapeake Watersheds Assessment Project and collaborating with related or "sister" workgroups to help share data and resources.
- The public comment period closed for the Healthy Watersheds cohort, and revisions were made to the Healthy Watersheds and Land Use Methods and Metrics management strategies and logic and action plans. The final materials will be presented at the January 16 Management Board meeting.
- Staff are also drafting the agenda for an upcoming [HWGIT meeting](#) on January 30, 2020 where two new team members from EPA Region 3 will be introduced.

Contact: Renee Thompson; 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.

- Chesapeake Conservation Partnership
 - The Chesapeake Conservation Partnership will be holding a Steering Committee meeting on Monday January 27th from 10:30am - 3pm at the Chesapeake Bay Trust. The Steering Committee will be welcoming new Members and reviewing the most recent draft of the CCP Strategic Plan.
- Citizen Stewardship Team
 - The Stewardship workgroup held a meeting on Monday January 13th where members discussed the status of the stewardship outcome in preparation for the February Management Board Meeting. Co-Chairs Kacey Wetzel and Suzanne Etgen were able to update members on the development of a web-based tool to house and promote the use of the stewardship index data set. This project (generously supported by GIT funding) has made significant progress recently and has positively evolved to ensure the development of a hub for social science tools and information for the Chesapeake Bay Program. The evolution of this effort will ensure existing and future social science tools developed (such as the existing Behavior Change Case Study database or the under development Outreach Program Audit tool) are better integrated into one easy to access location.

- Education Workgroup
 - The Education Workgroup is preparing for the 2020 Environmental Literacy Forum on January 22-23, 2020 at the National Conservation Training Center in Shepherdstown, West Virginia. The Forum will host 200 teachers and environmental education professionals. Participants will develop skills in planning and delivering Meaningful Watershed Educational Experiences (MWEEs) at the classroom or school district level in order to better understand, advocate for, and deliver these important programs. Ensuring that all students participate in MWEEs in elementary, middle, and high school is a key piece of the 2014 Chesapeake Bay Watershed Agreement
- Public Access Planning Team
 - The Public Access Team continues to collect 2019 data recording new public access sites throughout the watershed. This information, along with other feedback from members, is being used to prepare for the SRS Quarterly Review Meeting in February.

Diversity Workgroup

- The Diversity Workgroup is currently evaluating their work over the past 2 years in preparation for the Strategy Review System. The workgroup met in November to discuss progress made towards the Diversity Outcome thus far, and is now developing materials to share with the Management Board in February.
- Workgroup staff have been coordinating with the Habitat Goal Implementation Team on a GIT funded project, *Targeted Outreach for Green Infrastructure*. The early steps of this project involve using GIS to identify areas for outreach based on potential impact for the communities.
- Chesapeake-Student Recruitment, Early Advisement, and Mentoring (C-StREAM), an internship for underrepresented university students interested in careers in environmental research and management, is now open to applicants for its third year.
- A contractor, ERG, has been working to update the Diversity Indicator based on demographic information collected in the Chesapeake Bay Program's 2019 Diversity Profile.
- Building Cultural Competence training (Monday, March 16) – This training is part of the DEI Strategy GIT Funded project and will be conducted by Michael J. Lythcott of Skeo Solutions. Management Board members are encouraged to attend.

Diversity workgroup contact: Francesca King; king.francesca@epa.gov

Contact: Amy Handen; amy_handen@nps.gov

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.

Chesapeake Bay Program Strategy Review System

ChesapeakeDecisions was launched in July 2019 in support of the Strategy Review System (SRS). [ChesapeakeDecisions](#) is a tool that promotes transparency and guides the Chesapeake Bay Program's [Goal Implementation Teams \(GITs\) and Management Board members](#) through the Strategy Review System; a structured process that applies adaptive management to our work toward the *Chesapeake Bay Watershed Agreement*. All SRS documents, including schedules and materials relating to the Quarterly Progress Meetings, can be found on ChesapeakeDecisions.

The next cohort to go through the SRS process is the Stewardship Cohort. Their “dry run” presentations will take place on January 23, 2020 and their Quarterly Progress Meeting will take place on February 13, 2020.

Contact: Doreen Vetter, vetter.doreen@epa.gov

Quarterly GIT 6 Meeting – Fall 2019

The GIT 6 Spring 2020 Quarterly Meeting will take place on March 18, 2020 at the CBPO in Annapolis, MD. Agenda topics will include: Organizational Analysis updates, Strategy Review System process and facilitation updates and workgroup updates. Contact: Dave Goshorn, david.goshorn@maryland.gov

FY 2019 GIT Funding

The process of reviewing GIT Funding proposals, to select the most qualified contractor to perform each project, is currently underway. Reviewers must submit their feedback to the Chesapeake Bay Trust (CBT) by January 22, 2020.

Contact: Greg Allen, allen.greg@epa.gov or Chantal Madray, madray.chantal@epa.gov

Budget and Finance Workgroup

The next Budget and Finance Workgroup (BFWG) Quarterly Meeting will take place on January 29, 2020 in the CBPO's 305 Conference Room. Agenda topics will include Finance Forum updates, the CBPO budget, and GIT Funding updates. Contact: Jim Edward (Co-Chair), edward.james@epa.gov; Dr. Elliott Campbell (Co-Chair), elliott.campbell@maryland.gov

Local Leadership Workgroup

The next Local Leadership Workgroup (LLWG) Quarterly Meeting will take place on February 11, 2020 at the Metropolitan Washington Council of Governments in Washington D.C. Agenda topics will include processes for vetting shareable content, 2020 conference deadlines and costs, workgroup capacity for conference speaking and workplan updates. This year, the workgroup plans to create cross-outcome watershed educational materials for elected officials through a new GIT-funded project and is excited to start sharing these and other vetted resources via workshops, panels and roundtable discussions in collaboration with trusted sources. Contact: Laura Cattell Noll (Coordinator), lnoll@allianceforthebay.org; Matt Pennington (Chair), MPennington@region9wv.com

GIT 6 Contact: Chantal Madray, madray.chantal@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.

CAP Workgroup

CAP WG will hold an in-person meeting on January 22nd at Potomac River Fisheries Commission Building in VA.

Data Integrity Workgroup

The Data Integrity Workgroup held its quarterly meeting on July 18 at the Chesapeake Bay Laboratories in Solomons. The meeting materials have been uploaded and can be found [here](#). The meeting was presided by the co-chair Bruce Michael, DNR. A summary of the Summer Hypoxia results was presented to the group by Bruce with specific details from the June monitoring cruise results. Also discussed was the Mid-Bay Hypoxia study. A brief update on the status of Tier III water quality monitoring program was provided by Caroline Donovan (UMCES). Two new groups, Arundel Rivers Federation and MDE are already collecting Tier III data, with Shore Rivers being targeted as a likely candidate in the near future. An assessment of Data Quality Indicators as a performance measuring tool for watershed-wide data was presented by Durga Ghosh, Chesapeake Bay Program QA Coordinator. Rebecca Murphy (UMCES) presented data from historical pH trends and posed the question of method/lab changes affecting these trends. Jerry Frank (CBL) discussed the Spring 2019 Blind Audit Results. Results for the Coordinated Split Sample Program were presented by Mike Mallonee (CBP Water Quality Data Manager), and USGS Reference Sample results Breck Sullivan (STAR staffer). The next quarterly meeting is tentatively scheduled for October 2019.

Climate Resiliency Workgroup

The Climate Resiliency Workgroup (CRWG) met on [December 16, 2019](#) where Peter Tango informed the workgroup on the status of developed climate indicators on [Chesapeake Progress](#) followed by a discussion on potential new climate indicators. The CRWG is hosting a cross GIT/workgroup meeting on [January 27, 2020](#) from 10 AM - 3 PM with Healthy Watersheds, Sustainable Fisheries (Fish Habitat and Fish Forage Action Teams), and Habitat (SAV, Wetlands, and Forestry Workgroups) to learn about their indicator efforts and how to connect the future climate indicator work to help assess climate resiliency progress related to the goals and outcomes in the Chesapeake Bay Watershed Agreement. Discussions during this meeting will help the CRWG strategize which climate indicators to pursue funding for.

Two internship opportunities are available with the Climate Resiliency Workgroup this summer. Please share these announcements with your networks:

- NOAA Chesapeake Bay Summer Internship Program in partnership with the Chesapeake Research Consortium (applications due February 20, 2020): [Climate Change Indicator Development Support](#)
- C-StREAM (applications due February 15, 2020): [GIS Analysis of Flooding and Sea Level Rise Impacts on Land Use and Communities](#)

STAR

STAR December meeting was held on December 17th. STAR had a discussion on the updated science needs of the Aquatic Life Cohort, planned actions moving forward, and potential opportunities to address needs. STAR had a continued discussion on how outputs of hypoxia forecasting may be used to improve fish and other living resource habitat condition assessments, and the communication strategy planning for reporting hypoxia. Next STAR meeting will be held on January 23rd with Dry Runs of Stewardship Cohort presentations.

Modeling Workgroup

The Modeling WG held Quarterly Review on Jan 7th and 8th, wrapping up efforts assessing a fully operational model system of the influence climate change has on Chesapeake water quality. The next step forward is to communicate results to Water Quality GITs. For 2020, Modeling WG will work on developing hydrologic model to lay the foundation for next generation Chesapeake Bay model development. Next Quarterly Review will be held on April 7th and 8th.

The Integrated Trends Analysis Team (ITAT)

- Between April and June 2019, ITAT organizers will work with STAR to establish future priorities and activities based on outcomes from the SRS process.
- Monthly ITAT jurisdiction webinars on research findings relevant to Chesapeake Bay management continue. The purpose of these webinars is to communicate management-relevant research findings to the CBP Partnership's natural resource managers. December 2018 – March 2019 presentation topics included:
 - Agricultural Conservation Practice Implementation in the Chesapeake Bay Watershed Supported by the U.S. Department of Agriculture (Dean Hively, USGS)
 - A pilot implementation of high frequency nutrient monitoring to assess effects of large storms (Lora Harris, UMCES)
 - Assessing urban BMP function, performance, and delivery of co-benefits to stream ecosystems (Rosemary Fanelli, USGS)

Contact Jeni Keisman (jkeisman@usgs.gov) for more information.

Integrated Monitoring Network

The Non-tidal Network Team of the Integrated Monitoring Network Workgroup met on October 22nd to provide an [overview](#) of the high flows of 2019 and interactive “Freshwater Flow into Chesapeake Bay” [website](#) by the USGS. They also discussed having less than one year to accommodate funding to sustain the Conococheague monitoring station which is one of the most historic sites. The Team is considering a face-to-face annual meeting in June 2020 in Shepherdstown, WV. Topics for the annual meeting will be finalized over the next few months.

STAR Contact: Cuiyin Wu; cwu@chesapeakebay.net

Communications Workgroup

The Communications Workgroup provides strategic planning and expert advice to support the communication needs of the Chesapeake Bay Program partners, and spur public action through consistent messaging, expanded media coverage, use of multimedia and online tools, comprehensive

branding and promotion, outreach to stakeholders, and coordinated internal and external communications.

Communications Workgroup:

The Communications Workgroup held its monthly meeting on December 4. We coordinated shared messaging around eco-friendly tips for winter and National Trivia Day (January 4). We also shared our 2020 meeting schedule, discussed successes and challenges from the past year, and introduced a survey that has been sent out to members to assess their interests and priorities.

Rachel Felver, Communications Workgroup coordinator, presented the WIP Engagement Action Team's "Beyond Environmental Benefits" toolkit to the Citizen's Advisory Committee at their November meeting.

Communications Office and Web Team:

The Communications Office published the following blogs in November:

- [Making way for the blueback's comeback](#): Efforts are underway to restore the endangered herring's population
- [Outdoor cats ruffle feathers](#): Billions of birds are threatened by outdoor cats each year
- [A growing dairy looks to the future](#): Fair Hill Farm has grown in size and its commitment to stewardship
- [How rising temperatures put our well-being at risk](#): A hotter climate can lead to serious health consequences
- [Eight literary figures with ties to the Chesapeake region](#): Several writers over the years have called the Bay watershed home
- [Pining for the lost loblolly](#): Rising sea levels chase loblolly pines inland
- [Seven critters that call wetlands home](#): By restoring wetland on your property, these critters could become regular visitors
- [Bay health impacted by record flows](#): Largest amount of fresh water to enter the Chesapeake Bay since 1937
- [Honoring native peoples through community engagement](#): Baltimore community center uses stories to preserve American Indian cultures
- [Champions honored for their efforts to protect and preserve Chesapeake forests](#): Three award winners were celebrated at annual Chesapeake Watershed Forum

Communications Contact: Rebecca Chillrud; rchillrud@chesapeakebay.net

Recent Meetings and Events

Dec. 10-11	Scientific and Technical Advisory Committee meeting
Dec. 12	Management Board meeting
Dec. 16	Climate Resiliency Workgroup conference call
Dec. 17	Scientific, Technical Assessment and Reporting (STAR) meeting
Dec. 18-19	Scientific and Technical Advisory Committee (STAC) meeting (Grasonville, Md.)
Dec. 19	Conowingo WIP Steering Committee Meeting

Jan. 2-3	Chesapeake Bay Commission quarterly meeting (Annapolis)
Jan. 7-8	Winter 2019-2020 Sustainable Fisheries GIT biannual meeting (Gloucester, Va.)
Jan. 13	WQGIT conference call
Jan. 16	Management Board meeting