



**Chesapeake Bay Program
Management Board
December 12, 2019**

Program Update

CBPO Calendar

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
Jan. 24	Principals' Staff Committee meeting

Updates

McDonnell Named CBPO Science Branch Chief

On Dec. 9, CBPO Director Dana Aunkst announced the appointment of Lee McDonnell as Chief of the Science, Analysis and Implementation Branch of the CBPO effective January 5, 2020. McDonnell is a licensed professional engineer who brings to the position 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

Bay Sees Worst Dead Zone in the Past Five Years

The Maryland Department of Natural Resources recently noted in their September Hypoxia Report that the 2019 dead zone in Maryland's portion of the Chesapeake Bay was the third largest observed since monitoring began in 1985. These findings are in line with the Virginia Institute of Marine Science's (VIMS) recently-released annual Dead Zone Report Card, which covers the entire Bay, although there are slight variations in data collection due to different reporting periods and regions.

Heavy rainfall across the region in 2018 led to stronger river flows and more nutrient and sediment pollution entering the Bay. In addition, the summer of 2019 brought hot temperatures and weak winds, allowing the dead zone to grow larger and last longer into the fall—something that also occurred in 2018. Overall, the 2019 dead zone lasted for 136 days—13 days longer than 2018—and it covered an average of 1.5 cubic miles during the summer, reaching a maximum size of 3.1 cubic miles, compared with an average of 1.2 cubic miles and a maximum of 2.5 cubic miles in 2018. While this announcement

may seem worrisome, this year's dead zone is still considered to be in a normal range for the last 35 years, albeit on the high end. For more information:

https://www.chesapeakebay.net/news/blog/bay_sees_worst_dead_zone_in_the_past_five_years

Conowingo WIP Steering Committee

The Conowingo WIP Steering Committee held a conference call on Thursday, November 21. The focus of the meeting was a discussion about the principles and methodology behind using the "most effective basins approach" for targeting BMP implementation. The Steering Committee members reaffirmed their commitment to prioritize those practices and geographies that are more effective at reducing nitrogen. An update from each of the three Conowingo WIP grantees was also provided.

Contact: Lucinda Power, 410-267-5722

Champions Honored for Protecting and Preserving Chesapeake Forests

Because conserving existing forests and encouraging new tree plantings are crucial to the economic and environmental health of the Chesapeake Bay watershed, the Alliance for the Chesapeake Bay and the U.S. Forest Service recognize individuals who are committed to the mission of forest conservation and reforestation every year. Three Chesapeake Forest Champions were recognized at the recent Chesapeake Watershed Forum in Shepherdstown, West Virginia:

- Anne Hairston-Strang, Associate Director of the Maryland Forest Service, was recognized with the "Greatest On-the-Ground Impact Award" for her work as an advocate, leader and expert on trees and contribution to clean water.
- Jan Gardner, County Executive for Frederick County, Maryland and former president of the Frederick Board of County Commissioners was recognized with the "Most Effective at Engaging the Public." She has played a key role in stopping forest loss due to land conversion and restoring forest cover.
- Pennsylvania farmer Roger Rohrer was given the "Exemplary Forest Steward Award". Rohrer has been a mentor and leader in his community for almost 20 years, educating neighbors and fellow farmers about the importance of buffers. He has hosted countless field days, educational tours, site visits and conference field trips focused on buffer installation and maintenance.

More Information:

https://www.chesapeakebay.net/news/blog/champions_honored_for_their_efforts_to_protect_and_preserve_chesapeake_forests

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.

- Quarterly meeting: 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 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.

- Quarterly meeting: CAC held a quarterly meeting in DC on November 21-22. The members discussed DC Tree Canopy, the STAC report on Microplastics, recent CBP Communication toolkit and updates on BMP verification and milestones at the Bay Program. The CAC hosted a panel on DC Environmental Education and Workforce Development. The members voted Chair Matt Ehrhart and Vice-Chair Julie Lawson to serve a second one-year term.
- 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@cheapeake.org)

Quarterly Meetings:

STAC will hold its final meeting of 2019 on December 18-19, 2019 at the Chesapeake Bay Environmental Center in Queen Anne's County. 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 Watershed workgroup will share the findings of their past discussions and outline their portion of the report. STAC members will also discuss a new title that will accurately capture the intended outcomes of the report and will continue to refine the

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 [December 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:

On November 12-13, 2019, STAC hosted a workshop titled “Increasing Effectiveness and Reducing the Cost of Non-Point Source Best Management Practice (BMP) Implementation: Is Targeting the Answer?”. This workshop provided a forum to inform the development of processes/approaches to identify cost effective selection and placement of BMPs that maximize nutrient reductions of limited funding in the Chesapeake Bay. This workshop was aimed at targeting BMP implementation to areas of the landscape that produce the majority of Bay non-point source pollution as these are essential to achieve pollutant reduction targets given limited funding. More information can be found on the [workshop webpage](#).

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 2, December 17-18, 2019; 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

Upcoming Reports:

STAC reports can be found on the [STAC Publication Database](#).

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. Revising Coastal Land-Water Interactions: The Triblet Connection (FY2017)
6. Chesapeake Bay Program Climate Change Modeling 2.0 (FY2018)
7. Establishment of Multifunctional Riparian Buffers (FY2018)

8. Assessing the Environment in Outcome Units (AEIOU): Using Eutrophying Units for Management (FY2018)
9. Integrating Science and Developing Approaches to Inform Management for Contaminants of Concern in Agricultural and Urban Settings (FY2018)

STAC Website Update

The STAC website underwent a major update and redesign, thanks to GreenFin Studio. The new website improves user interface, incorporates a modern design scheme and adds new functions to the STAC website to improve user experience. This new website is now live and the old website is no longer available. Visit the new STAC website [here](#).

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 [winter biannual meeting for the Sustainable Fisheries GIT planned for January 7-8, 2020](#) will focus on the oyster restoration outcome. The agenda includes presentations and discussions focused on restoration progress, new research supporting restoration, research on oyster reef ecosystem services from restored reefs, intersections with water quality, oysters in nearshore habitats, and ecosystem changes impacting oysters like precipitation and ocean acidification.
- Removal of acoustic telemetry receivers: The Sustainable Fisheries GIT Executive Committee discussed the status and removal plans for the lower Chesapeake Bay acoustic telemetry receiver array, operated and maintained by DOD Navy. Effective January 2020, the network of receivers 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 Executive Committee agreed to develop a proposal detailing the costs over time to maintain an array at some scale in the lower Chesapeake Bay, and will be raising this issue as a science priority for the GIT.
- Webinar: NOAA Chesapeake Bay Office hosted a webinar highlighting ongoing research funded by the Chesapeake Bay Fisheries Research Program. The principle investigators provided updates on six projects related to habitat suitability, inshore-offshore connections, and shallow water habitat use for forage fishes and other important fishery species. Members of the Fish Habitat and Forage

Action Teams were invited to participate in the webinar to engage with the PIs on their preliminary results and potential management applications.

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.

- Wetlands: The Wetland Workgroup will have a meeting on December 9th, which will include presentations on USGS tidal and floodplain wetlands research, as well as updates on the new management strategy and workplan.
- Wetlands: The wetland expert panel report will be presented during the December 9th WQGIT meeting and approval of the report will be sought from WQGIT and HGIT members.
- SAV: A STAC workshop addressing the use of satellite imagery for SAV monitoring will occur at VIMS on December 17th and 18th.
- GIT funding: The 2019 GIT funded project Target Local Outreach for Green Infrastructure in Vulnerable Areas will be having meetings on December 5th and 16th, 2019 to begin the process of selecting target sites before the contractor arrives in February.
- Mid-Atlantic Panel: The Mid Atlantic Panel on Aquatic Invasive Species will be holding a joint meeting with the Northeast Aquatic Nuisance Species Task Force on December 10-11, 2019 at the Five Rivers Environmental Education Center in Delmar, NY.
- Workplans: The period of review for the Stream Health, Brook Trout, Fish Passage, and Fish Habitat, and Wetland Work Groups' work plans has been extended to January 3rd, 2020.

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 November 12. A subset of topics is included below:

- An information update from the Healthy Watersheds GIT to the WQGIT on their watershed assessment.
- A review of the at-large, chair, and vice- chair nomination process laid out in the WQGIT governance protocol.
- A discussion on numeric 2-year milestones based on updates from the October 17th Management Board meeting.
- A presentation on a new BMP cost analysis developed using Maryland data and how the results compare to CAST estimates.

The WQGIT will hold a conference call on December 9. A subset of topics to be discussed includes:

- Numeric 2-year Milestones

- Prevented Sediment (Protocol 1) Memo
- 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 are continuing to participate in the planning of the upcoming [Conservation Finance Workshop](#), as well as working to finalize the Chesapeake Watersheds Assessment Project. Updates to this project were presented to both the Habitat GIT and the Water Quality GIT. Staff have also begun working on how to implement the local engagement strategy to help further Healthy Watersheds outcome progress.
- The [Management Strategy](#) and [Logic and Action Table](#) for the Healthy Watersheds goal and outcome were revised and posted for public comment.
- Watershed Forum: Renee Thompson, Nancy Roth (Tetra Tech), and Nora Jackson authored a [poster](#) about the Chesapeake Watersheds Assessment that was displayed at the Chesapeake Watershed Forum in Shepherdstown, WV in mid-November and won the "Best Poster" award.
- Panel: On December 6, 2019 at the Maryland Water Monitoring Conference, Nancy Roth (Tetra Tech), Renee Thompson (USGS, CBP), Peter Claggett (USGS, CBP) and Kelly Maloney (USGS) presented a very well attended and well received panel on the "Vital Signs or Watershed Health" where they covered topics ranging from: What is Watershed Health and how to measure it?, Using watershed characteristics to assess stream health in un-surveyed areas, landscape changes as signals of watershed vulnerability and resilience and how local and state governments can respond to signals of degradation.

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 at the end of January. The exact date and time of the meeting is still being finalized. 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 continues to advance 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.
 - The West Virginia cohort of the Outdoor Learning Network Initiative (OLNI) convened a group of educators from Berkely, Jefferson and Morgan Counties on November 14th in Charles Town, WV. OLNI works to increase sustained and systemic Environmental Literacy instruction in underserved districts. The OLNI project is advised by the Education Workgroup and consistent with Stewardship GIT goals.
- Public Access Planning Team
 - The Fall Meeting of the Public Access Team was held November 13th where members discussed the status of the public access outcome, 2019 data collection schedule, National Park Service updates on Gateways Program, and refinements to the GIT funding project - surveying the public on access usage.

Diversity Workgroup

- The Diversity Workgroup held an in-person meeting in Arlington, Virginia on November 21. At this meeting, the workgroup went over a summary of progress this year, including:
 - Workgroup members have attended 8 career fairs and similar events since March 2019.
 - Includes participation by MD DNR, CRC, Alliance for the Chesapeake Bay, NPS, EPA CBP, CBF, Chesapeake Conservancy.
 - We have strengthened the relationship with Virginia State University (VSU) thanks to the Memorandum of Understanding (MOU) between VSU, EPA, and Virginia Department of Agriculture and Consumer Services. The MOU was signed in May 2019;

there will be future opportunities for the workgroup to engage with VSU through this MOU.

- Members of the workgroup worked with the Alliance for the Chesapeake Bay to coordinate scholarships for students from Bowie State University. The Alliance also acquired scholarships for students from Morgan State, and members of the Choose Clean Water Program's Young Professionals of Color Mentorship Program.
- The Diversity Workgroup webpage has been updated to include DEI resources and updates to member list.
- The meeting also devoted a large portion to a facilitated discussion on the progress made towards meeting the diversity outcome, including identifying barriers that have limited progress where relevant. This discussion will influence the Biennial Strategy Review System.

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.

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

Quarterly GIT 6 Meeting – Fall 2019

The GIT 6 Winter 2019 Quarterly Meeting took place on Tuesday, December 3 at the CBPO in Annapolis, MD. Agenda topics included: Organizational Analysis updates, Strategy Review System process and facilitation updates and workgroup updates. The GIT 6 Spring Quarterly Meeting will take place in March 2020 at the CBPO's Joe Macknis Memorial Conference Room [also known as the "Fish Shack"] in Annapolis, MD. Contact: Dave Goshorn, david.goshorn@maryland.gov

FY 2019 GIT Funding

In November, the Chesapeake Bay Trust issued a Request for Proposals (RFP) to seek bidders for projects identified by the Goal Implementation Teams and Outcome Workgroups. Contact: Greg Allen, allen.greg@epa.gov or Chantal Madray, madray.chantal@epa.gov

Budget and Finance Workgroup

The Budget and Finance Workgroup (BFWG) Fall 2019 Quarterly Meeting took place on November 4, 2019 at the CBPO's 305 Conference Room. Agenda topics included feedback on the EFAB Webinar, the

SAV Finance Report and Finance Forum planning. Contact: Jim Edward (Co-Chair), edward.james@epa.gov; Dr. Elliott Campbell (Co-Chair), elliott.campbell@maryland.gov

Local Leadership Workgroup

The Local Leadership Workgroup (LLWG) Fall 2019 Quarterly Meeting took place on November 6, 2019 at the Harrisburg Area Community College in Gettysburg, PA. Agenda topics included feedback on tree canopy resources, consolidating CBP outcomes requiring local engagement and workgroup membership. In 2020, 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

The most recent CAP WG meeting was held on 3/8/2019. Topics were:

- **James River chlorophyll *a* criteria updates.** The proposed updates to the James River chlorophyll-*a* criteria summarizing work from a seven year study have been published to the Virginia register of regulations <http://register.dls.virginia.gov/vol35/iss11/v35i11.pdf> . Tish Robertson (VADEQ) reviewed the proposal highlighting the remaining time for input as the public review and comment period was closing on 3/22/19.
- **Status of restoration variances – dissolved oxygen.** Gary Shenk (USGS) provides a summary of the process underway documenting the most recent variances that will be needed for 303d listing assessments and therefore also updating in the Chesapeake Bay Water Quality Standards Indicator score assessments.
- **K_d Regression Updates** – In 2018, the CAP WG highlighted a desire to revisit the K_d regressions used for water clarity acres assessments. The workgroup action item is documenting the updated technique on local calibration over regional calibration.
- for producing water quality acres assessments. **Assessing possible advances in SAV acreage assessment: a STAC workshop proposal** – Brooke Landry (MD DNR, Chair of SAV Workgroup) highlighted directions for advancing new protocols and procedures through workshop support. We anticipate some members on the workgroup will be participating in those workshop meetings if the proposal is funded.

Climate Resiliency Workgroup

The Climate Resiliency Workgroup (CRWG) hosted a discussion with Peter Claggett from the Land Use Workgroup during their November 18, 2019 meeting to identify land use mapping layers that would benefit analyses for evaluating progress towards meeting climate resiliency goals. Suggestions focused on the following three topics: adaptation/resilience tracking, mitigation tracking, and community

impacts. A summary of the workgroup's suggestions is available [here](#). The CRWG is also planning to host a cross-GIT/workgroup meeting during their in-person meeting early in the new year to prioritize which new climate indicators to focus development on that would also be useful for other goals and outcomes in the Watershed Agreement. The climate indicator work will build on the [implementation strategy](#) designed in 2018 in collaboration with the Eastern Research Group, Inc.

Modeling Workgroup

The CBP Modeling Team is actively working to complete, by the close of 2019, a fully operational model assessment system of the influence climate change has on Chesapeake water quality. During the October Quarterly Review Meeting, Modeling WG approved the changes to the model proposed by the modeling team. The [next Modeling WG meeting](#) will be held on December 5th delivering the final climate assessment result.

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

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

Nov. 12 – Jan.3	Public and Signatory Review of Management Strategies and Logic & Action Plans
Nov. 14-15	14th annual Chesapeake Watershed Forum (Shepherdstown, WV)
Nov. 18	Climate Resiliency Workgroup conference call
Nov. 21	Conowingo WIP Steering Committee Meeting
Nov. 21	Scientific, Technical Assessment and Reporting (STAR) meeting
Nov. 21-22	Citizens Advisory Committee meeting (Washington, DC)
Dec. 3	Enhance Partnering, Leadership and Management GIT quarterly meeting
Dec. 4	Joint Land Use Workgroup and Forestry Workgroup meeting
Dec. 4-5	Local Government Advisory Committee meeting (Adamstown, MD)
Dec. 9	Wetland Workgroup meeting
Dec. 9	Water Quality GIT conference call
Dec. 10-11	Scientific and Technical Advisory Committee meeting
Dec. 12	Management Board meeting