



**Chesapeake Bay Program's (CBP)
Scientific and Technical Advisory Committee (STAC)
December 14-15 Quarterly Meeting Minutes
Webinar Meeting**

Monday, December 14th

Attendance:

Members: Adel Shirmohammadi, Alix Fink, Andy Miller, Brian Benham, Bill Dennison, Chanceé Lundy, Chris Brosch, Deidre Gibson, Ellen Gilinsky, Eric Smith, Greg Noe, Hamid Karimi, Jason Hubbart, Jeremy Testa, JK Bohlke, Kathy Boomer, Kirk Havens, Kenny Rose, Kurt Stephenson, Lara Fowler, Larry Sanford, Leah Palm-Forster, Lee Blaney, Leonard Shabman, Mark Monaco, Martin Lowenfish, Mike Runge, Tess Thompson, Tom Ihde, Tom Johnson, Tony Buda, Weixing Zhu, Zach Easton

Guests: Ann Simonetti (LGAC), Breck Sullivan (CRC, STAR), Caitlyn Johnstone (Alliance, CBP Communications), Carl Fredichs (VIMS, retired), Emily Majcher (USGS), Erik Leppo (Tetra Tech), Garrett Stewart (CRC), Gary Shenk (USGS), Jennifer Starr (Alliance, LGAC), Jessica Blackburn (Alliance, CAC), Julie Lawson (CAC), Karl Blankenship (Bay Journal), Kristen Saunders (UMCES), Lewis Linker (EPA), Liz Feinberg (CalVan Environmental), Lucinda Power (EPA), Matt Robinson (DOEE), Melissa Fagan (CRC), Rebecca Murphy (UMCES at CBP), Sally Claggett (USDA), Scott Philips (USGS), Tim Ellis (APNEP)

Administration: Annabelle Harvey, Denice Wardrop, Meg Cole

Call to Order, Announcements—*Andy Miller (STAC Chair – UMBC)*

Andy Miller (UMBC) called the meeting to order at 1 pm. Miller requested a motion to approve the September 2020 Quarterly Meeting Minutes and the November 2020 Executive Board Meeting Minutes. Both documents were approved.

<p>DECISION: The September 2020 Quarterly Meeting Minutes and June 2020 Executive Board Minutes were approved.</p>

Recap of STAC September 2020 Quarterly Meeting—*Andy Miller (UMBC)*

Miller recalled highlights from the September 2020 STAC Quarterly Meeting including an overview of the STAC June 2020 Quarterly Meeting, 2021 quarterly meeting approved dates, and a recap of the 2020 Executive Council (EC) Meeting. On the morning of Day 1, Virginia Governor Ralph Northam spoke to STAC as the newly appointed Chair of the Chesapeake Bay Program (CBP) EC to discuss current STAC efforts and the priorities of STAC and the EC. Following Governor Northam, Dr. Sacoby Wilson (UMD), Gabrielle Roffe (Chesapeake Conservancy), and Dr. Brandon Jones (NSF) were invited to speak on a panel about the importance of Diversity, Equity, Inclusion, and Justice (DEIJ) in their work. Afterwards, STAC members engaged in a long question and answer session with the panelists.

STAC member Lara Fowler (PSU) presented on twice, first on the commonalities and differences between the Baltic Sea and the Chesapeake Bay in the form of “lessons learned” from her year in Sweden as a Fulbright Scholar. Fowler found there are similar climate change, nutrient, and emerging contaminant challenges afflicting both the Baltic and the Bay. Opportunities highlighted for further research include climate challenges, crop fluctuations, nonpoint runoff, socio-behavioral stressors, contaminants of emerging concerns (CECs), and more. In the afternoon, Fowler facilitated a discussion on the impacts of COVID-19 on the Bay and its management efforts. This conversation was the beginning of a series of FY21 STAC workshops designed to convene Bay Program partners and affiliated groups to consider the pandemic effects on nutrients in the Bay, fisheries, and Bay Program management.

STAC Staff invited the remaining two Chesapeake Bay advisory committees, the Local Government Advisory Committee (LGAC) and the Citizens Advisory Committee (CAC), to present a summary on their current work. Although program activities are impacted heavily by the pandemic, both Ann Simonetti (LGAC Chair) and Julie Lawson (CAC Chair) acknowledged new opportunities for increased engagement with the public during this time. At the end of the first day, STAC members reconvened to continue progression on the Comprehensive Evaluation of System Response (CESR) effort, including a Living Resources Workgroup update and breakout groups.

Beginning on Day 2, Emily Trentacoste (EPA) provided an SRS (Strategy Review System) update for the Education Workgroup and then Caitlyn Johnstone (Alliance for the Chesapeake Bay, CBP Communications) reviewed tips for writing scientific reports with a higher degree of readability for all audiences. CRC Director, Denice Wardrop (CRC), followed Johnstone in informing STAC on new CRC projects such as Chesapeake U, C-StREAM, the CRC Webinar series, and CRC newsletter. Finally, STAC Member Kathy Boomer (FFAR), presented findings from the STAC FY19 Soil Health and Hydrology workshop, while Matt Robinson (DOEE) provided details on the Plastic Pollution Action Team (PPAT). September 2020 Quarterly Meeting presentations can be accessed on the STAC meeting page [here](#).

Recap of STAC October 2020 Principle Staff Committee Meeting—*Andy Miller (UMBC)*

Miller highlighted important takeaways from the October 8, 2020 meeting of the Chesapeake Bay Program Principle Staff Committee (PSC), which included a report out from each Advisory Committee on their recommendations from the 2020 EC Letters. On behalf of STAC, Miller stressed to the PSC that STAC is looking at potentially significant recommendations on ways to address targets and goals beyond 2025. Miller noted that climate change is mentioned at most PSC and Management Board (MB) meetings and the STAC Synthesis reports on BMP climate resiliency led by Zach Easton (VT) and shallow water dissolved oxygen by Jeremy Testa (UMCES) may have an important role in considering climate going forward. Other items raised at the October PSC meeting was the creation of the Citizen Advisory Board (CAB) and final climate change recommendations including a decrease in nitrogen-load reductions by half until it is increased by 2035 as a result of updates in the Bay Program Model. The Water Quality GIT is finalizing its specific recommendations on addressing climate change from 2035 onward of which acknowledges the importance of open water standards and Bay-model simulation of shallow water. Regarding the reduction in nitrogen, Gary Shenk (USGS) explained this minimal

decrease was found after the Modeling Workgroup and Climate Resiliency Workgroups updated over two dozen factors affecting climate change simulation within the watershed. The Water Quality GIT decided individual jurisdictions should be responsible to reduce their nitrogen and phosphorus loads that were increased by climate change, resulting in more phosphorus loading due to increased rainfall. The Partnership has committed to review this again in 2025. In addition, Lew Linker (EPA) underscored the found relationship between increased sea level rise and reduced hypoxia in the Bay.

Updates from the CBP Advisory Committees:

Local Governments Advisory Committee (LGAC)—*Ann Simonetti (LGAC Chair)*

Citizens Advisory Committee (CAC)—*Julie Lawson (Incoming CAC Chair)*

The Chairs of both the Local Government Advisory Committee (LGAC) and the Citizens Advisory Committee (CAC) were asked to discuss their continuing efforts and recommendations mentioned in their respective 2020 EC Letter. Ann Simonetti (LGAC Chair) described a number of successful projects supportive of the Committee's overarching perspectives of ensuring a vibrant economy, supporting local public health and safety, and maintaining local infrastructure. A new virtual effort designed to provide stormwater training and assistance has started as a result of COVID-19, with 19 local governments taking part in the classes and online discussion. In the Fall 2021, LGAC will host two peer-to-peer exchanges in Maryland and Virginia to tour practices in the Watershed and discuss local management opportunities. In addition, the LGAC has launched a Quarterly Newsletter entitled *Watershed Currents*. The Annual Local Government Forum will take place in June 2021, producing recommendations for the CBP to help resolve issues challenging local governments.

Following Simonetti, incoming CAC Chair, Julie Lawson (CAC), introduced CAC, a group which advocates for the Bay Program to help develop messages and communications that make the restoration effort relevant on the local level. Progress towards cleanup and restoration goals, forest buffers, agricultural BMP implementation, environmental literacy, enhancing DEIJ, and public access to waterways, are areas in which CAC provides consensus advice to the Bay program. Similar to LGAC, CAC will host field trips to view mitigation efforts and specific BMPs in person. At their most recent September 2020 meeting, CAC hosted a panel of climate and public health experts to discuss the importance of environmental quality on public health. The conversation is available [here](#). So far, topics of conversation for 2021 will be the participation in the Bay Program's DEIJ Action Team and active recruitment of more diverse membership and the participation on the Bay Program's BMP Verification Ad hoc Action Team.

Chesapeake Bay Program Monitoring Program:

Improving monitoring capacity, SAV Monitoring Workshop—*Peter Tango (USGS)*

Clean Water Cohort Science Needs—*Breck Sullivan (CRC), Emily Majcher (USGS), Scott Phillips (USGS), Sally Claggett (USDA), Lucinda Power (EPA), Peter Tango (USGS)*

Due to a personal emergency, Peter Tango (USGS) could not present to STAC but provided members with a list of relevant questions to review and provide feedback on. Questions are listed below. The Clean Water Cohort Science Needs include both toxic contaminant outcomes, forest buffers, 2025 Watershed Implementation Plans, and water quality standards attainment and monitoring.

Next, Emily Majcher (USGS) reviewed both toxic contaminate outcomes: policy and prevention, and research. The policy and prevention outcome is focused on polychlorinated biphenyls (PCBs) and continually improving practices and controls to reduce the effects of toxic contaminants in the Bay. Research findings should be utilized to evaluate for additional policies and programs for other contaminants that need to be further reduced. Scott Phillips (STAR, USGS) requested input from STAC members on their interest in a STAC workshop proposal on or about the implications of PFAS ecotoxicity, to which a number of STAC members expressed their potential participation in a STAC workshop proposal. Kenny Rose (UMCES) asked for clarification on the usage of “ecosystem effects” and suggested using “ecological effects” instead.

Sally Claggett (USDA) reviewed the Forest Buffer Outcome, which works to continually increase buffers on the landscape by 900 mi/year. Referencing an external survey, Kurt Stephenson (VT) wondered if the possibility of co-benefits impacts an individual’s rate of adoption or implementation of buffers. Similarly, Kathy Boomer (FFAR) recommended the group examine the co-benefits and targeting of both reforested and riparian buffers. Lucinda Power (EPA) reviewed the 2025 WIP Outcome which seeks to have all practices and controls installed to achieve the standards as described in the Chesapeake Bay TMDL document. Currently there is a BMP Ad hoc teams investigating alternative verification methodologies and are tasked with revisiting select credit duration values. Additionally, there is a need to update science and data for CAST 2021, better understanding of co-benefits in planning and implementation, as well as incorporate monitoring and trend data into assessing progress towards the achievement of 2025 WIP outcomes.

Lastly, Phillips reported out on the Water Quality Standards Attainment & Monitoring Outcome. Challenges achieving this outcome are as follows: erosion of the monitoring network, lack of WQS attainment assessments, and consistent funding support. While progressing towards attainment, Phillips suggested the WQGIT and STAR formally incorporate quality assured Citizen Science and nontraditional partner data into WQS attainment assessments, gather a commitment from states, agencies, and institutions to match funds to build monitoring program capacity, and request STAC and STAR work with the management community to extend monitoring capacity. STAC members mentioned spatial resolution as a concern due to the lack of monitoring sites and expressed an additional need for trend explanation. Forthcoming STAC projects that may be helpful include the two ongoing climate change science synthesis efforts.

Database Updates: Science Needs Database and STAC Recommendations Database

Overview—Breck Sullivan (CRC, STAR), Annabelle Harvey (CRC)

Both the STAC Recommendation Database and the CBP Science Needs Database are updated and currently live. The STAC Database includes all recommendations from 2009 until present day. Recommendations are searchable by keywords, author, title, GIT, and/or cohort. Each recommendation includes links to the publication and abstract. STAC members are encouraged to test out the database and send any questions or comments to STAC Staff.

Breck Sullivan (EPA) introduced STAC to the newly published Science Need Database which is associated with the Strategic Science and Research Framework (SSRF). The purpose of this

database is to encourage stakeholders to examine the science needs and identify opportunities to better align resources and engage more interested individuals outside of the Program. Unique to the STAC Database, the Science Needs Database labels each science need by priority, “status of need”, and “status of resources”, to demonstrate the level of funding and resources allocated to a particular science need. Furthermore, each science need is labeled with the corresponding STAC Recommendation in the STAC Recommendation Database.

ACTION: STAC members will review and provide feedback to STAC Staff on the [Clean Water Cohort Science Needs Presentation](#).

- Do you or any of your colleagues have an interest in contributing to addressing one of these needs?
- Do you want more information to come back to STAC from any groups on specific needs/projects?
- Are these needs appropriate? Do you see something missing?
- Do you have recommendations on ways to improve our engagement with you through this process?

ACTION: STAC members will review the CBP Science Needs current database, [accessed here](#). Please send your comments to STAC Staff or Breck Sullivan (bsullivan@chesapeakebay.net) directly. Also, please review the STAC Recommendations Database [found here](#) and similarly provide feedback to STAC Staff.

[Outreach and Communications Update](#)—*Caitlyn Johnstone and Rachel Felver (Alliance for the Chesapeake Bay, CBP Communications)*

Caitlyn Johnstone and Rachel Felver (Alliance for the Chesapeake Bay, CBP Communications) presented an overview on the Chesapeake Bay Program Communications Office and the various products, engagement and outreach the Communications Office and Communications Workgroup offers. Overall, the Communications Workgroups fosters cross-jurisdictional communication among CBP partners, provides targeted messaging, offers expert advice to address the communications needs of each group, and engages in regular communications trainings with members. STAC members are encouraged to reach out to the Communications Office with new information, research papers, report, or discoveries that you may want to reach a specific audience. As an addition, Felver expressed a concerted effort on behalf of the Communications Team to bring behavior change and social science practices into the Bay Program work. Multiple STAC members reiterated the importance of the work the Bay Program Communications Team to engage the public with Bay Program science.

[CBP’s Integrated Trends Analysis Team \(ITAT\): Summary of tidal water quality long-term trends](#) – *Rebecca Murphy (UMCES at CBP), Jeni Keisman (USGS), Jon Harcum (Tetra Tech)*

On behalf of the CBP’s Integrated Trends Analysis Team (ITAT), Rebecca Murphy (UMCES at CBP) presented a summary of 2019 tidal water quality trends and visualization tool. Using a package called ‘[baytrends](#)’, tidal water data is updated by state annually to run General Additive Models (GAMs). This information is then submitted to the CBP and Bay-wide products are generated such as long-term (1980s-2019) and short-term change (2010-2019) of total nitrogen and total phosphorus (annual; surface and bottom), Secchi depth (annual and April-October), and dissolved oxygen (summer; surface and bottom) among others. For each of these

result sets, both observed/non-adjusted results and flow- or salinity-adjusted results are generated, or in other words, a comparison of what is currently seen in the estuary versus what could be if management actions were implemented can be estimated. Initial reactions show Total Nitrogen (TN) and Total Phosphorus (TP) decrease long-term at most stations but short-term fluctuations are mixed. Long-term degradation of Secchi at many stations is obvious, whereas in the shorter-term, the number of degradations is much lower. Murphy suggests there are many competing factors impacting Secchi Depth by location, evidence supported by the wide range of GAM fits over time. Like Secchi, Chlorophyll-a patterns differ greatly by region. Noting a shift in Secchi, Chlorophyll-a, and nutrients in the flow-adjusted, Bill Dennison (UMCES) questioned what factors might be causing these changes. Murphy commented they may vary by location and parameter but proposed there aren't limiting conditions in some areas. Lew Linker (EPA) and Jason Hubbart (WVU) both raised the scattering of light and lengthening of wavelength due to Secchi, though Dennison and Murphy explained there is a conversion for this phenomenon. Responding to a question Fowler asked in the Zoom chat box about seasonal temperature change, Murphy stated the approach interaction between season-term and long-term change to allow for seasonal cycles to change over time; this is evident in the Chlorophyll-a example which has a flexible seasonal cycle.

Erik Leppo (Tetra Tech) outlined the previously discussed [baytrendsmap](#) and the post process output. Using the maps from the previous presentation, Leppo detailed the process to build maps using a [Live Demo](#) and Jon Harcum (Tetra Tech) shared the [baytrendsmap code](#) with the group. Harcum underscored the value in providing the trend results in a public facing environment so that stakeholders may better engage with the data and utilize the models for additional opportunities other than trend analysis. STAC members with ideas for additional ways to use the baytrendsmap can contact the presenters with this information. Wardrop suggested this tool could be used for educational purposes for a wide set of stakeholders; Wardrop hypothesized using this tool as possible climate change model by inputting climate scenarios instead of adjusting for flow.

ACTION: STAC members are encouraged to contact the CBP's Communication Team with any new research papers, reports, and/or discoveries they would like communicated to the public.

ACTION: STAC members, any questions regarding ITAT and the 2019 tidal results, please contact Rebecca Murphy (rmurphy@chesapeakebay.net) and Jeni Keisman (jkeisman@usgs.gov). Inquiries about the [baytrendsmap](#), contact Erik Leppo (erik.leppo@tetrattech.com).

Tuesday, December 15th

Members: Adel Shirmohammadi, Alix Fink, Andy Miller, Brian Benham, Bill Dennison, Chanceé Lundy, Chris Brosch, Deidre Gibson, Ellen Gilinsky, Eric Smith, Greg Noe, Hamid Karimi, Jason Hubbart, Jeremy Testa, JK Bohlke, Kathy Boomer, Kirk Havens, Kenny Rose, Kurt Stephenson, Lara Fowler, Larry Sanford, Leah Palm-Forster, Lee Blaney, Leonard Shabman, Mark Monaco, Martin Lowenfish, Mike Runge, Tess Thompson, Tom Ihde, Tom Johnson, Tony Buda, Weixing Zhu, Zach Easton

Guests: Caitlyn Johnstone (Alliance, CBP Communications), Carl Fredichs (VIMS, retired), Dave Goshurn (MDE), Garrett Stewart (CRC), Gary Shenk (USGS), Katie Brownson (USFS), Kristen Saunders (UMCES), Ken Hyer (USGS), Lew Linker (EPA), Melissa Fagan (CRC), Rebecca Murphy (UMCES), Scott Philips (USGS)

Administration: Annabelle Harvey, Denice Wardrop, Meg Cole

STAC Comprehensive Evaluation of System Response (CESR): Review of sections 1-3

– *Kurt Stephenson (VT), Zach Easton (VT)*

Stephenson and Zach Easton (VT) provided a summary of the current draft document and next steps moving forward. The general outline of the document is as follows: Section 1: Introduction, Section 2: Gaps and Uncertainties in System Response to Meet Water Quality Standards, Section 3: Watershed Response, Section 4: Estuary Response, Section 5: Living Resource Response, and Section 6: ‘A Knowledge Base for Bay Management Uncertainty’.

Objectives of Section 1 include the following: identify gaps and uncertainties in system response that impact attainment water quality standards, identify recent scientific development and uncertainties in system response to advance attainment, recommend research strategies to improve understanding of system response, and recommend strategies for integrating scientific and technical analysis with active adaptive management. Section 2 summarizes final and intermediate policy goals and implementation, defines “response gap” and “uncertainty”, and introduced the terms decision-relevant uncertainty” and “Active adaptive management”. Section 3 focuses on the nonpoint source challenge, delivery of nutrients and sediments to the Chesapeake Bay, challenges and uncertainties in managing nutrient & sediment loads, and finally, understanding and managing watershed system response: adaptation in the face of uncertainty. Larry Sandford (UMCES) raised concerns from the perspective of the Estuarine group, stating their end goal is not water quality standards although the objective of the CESR report seems to working to that end.

The next step for all STAC members is to review and comment on the draft document posted on Google Drive using suggestion mode. Steering Committee and Workgroup leads should meet to discuss and coordinate integration across the sections, discuss themes and topics for the last section, and establish timelines for next sections. In response to the overall emphasis on agriculture, Boomer argued urban areas and developed areas may have equal impacts on water resources. Easton agreed and suggested incorporating a call out box in the text to add detail. Adel Shirmohammadi (UMD) suggested a social scientist be included in writing the report to incorporate a policy perspective relevant for operational and stakeholder involvement. To this point, Miller proposed including subsidiary diagrams to add extra detail not found in the main flow chart.

Adaptive Management in the Chesapeake Bay Program: Past, Present and Future

—*Carl Hershner (VIMS, retired), Kirk Havens (VIMS)*

Carl Hershner (VIMS, retired) and STAC member, Kirk Havens (VIMS) were invited to discuss adaptive management as it pertains to decision relevant uncertainty. Hershner previously served as Chair of STAC and the Virginia Chesapeake Bay TMDL Advisory Panel, Governor’s

Wetlands Initiative Task Force, Maryland Chesapeake Bay Restoration Program Advisory Board, Mid-Atlantic Wetlands Workgroup, EPA Coastal Elevations and Sea Level Rise Advisory Committee, and National Climate Assessment Technical Inputs Team. During the early-2010s, Hershner described a push for the Bay Program to become accountable for its use of public resources and actions being undertaken. The Program began to engage in a form of active adaptive management to better understand which interventions were most effective through careful monitoring and assessment. From here, the decision-making framework was adopted to provide a logical and consistent strategic development for all workgroups. Hershner stated the main challenge for the Bay Program is identifying the metrics to evaluate the actions undertaken in those strategies, although STAC, could help provide this expert, practical guidance needed to inform ongoing Bay activities, aid in the achievement of the 2025 objectives, and help in “reformulating and reimagining” the program beyond 2025.

Stephenson asked Hershner about any additional barriers to more effective management and Hershner explained the Program’s inability to synthesize existing efforts is a significant weakness. Deciding which management effort is important enough to proceed with has a significant impact on the future Bay realities. Hershner described this as a level of existing uncertainty in which we are unlikely to reduce during a decision timeframe (between now and 2025) unless the current suite of goals are modified with a more realistic strategy. Boomer reflected that is sometimes a resistance to modeling within the Program and the Goal Implementation Teams (GITs), causing the Program to not take full opportunity to leverage or utilize the role of models in thinking of uncertainty, and where uncertainty impacts our ability to make good decisions. Carl agreed but cautioned over parameterizing the model with information not relevant to management decisions. Miller, Havens, and Hershner all expressed the view that although there may be some uncertainty, there is a need for practical expert advice.

[Identifying Decision-Relevant Uncertainty: Expected Value of Information](#)—Mike Runge (USGS)

Following Hershner’s presentation on decision relevant management decisions, Mike Runge (USGS) spoke about the importance of identifying decision-relevant uncertainty to not just make well calibrated predictions, but to choose actions to implement that are best able to achieve the goal we have set. As this relates to the CESR exercise, CESR Workgroups can look at uncertainties and gaps that have been identified so far and ask, are these decision-relevant? Would resolution of this uncertainty cause a reallocation of funds? Would actions on the ground be different? Runge argued adaptive management is identifying decision-relevant uncertainty and being able to change what you do as you resolve some of that uncertainty.

Leonard Shabman (Resources for the Future) inquired whether these concepts could be included in the CESR report in practical ways. Runge said yes, qualitatively. Using a few qualitative questions, report authors could test sources of uncertainty in a short amount of time and gauge whether these uncertainties matter. For example: Would eliminating uncertainty change the management decision? How much uncertainty do we have? And can we reduce the uncertainty?

Regarding BMP targeting issues, JK Bohlke (USGS) observed that there may be some spatial variability in outcomes and by improving on your knowledge of spatial heterogeneity in the watershed, you could optimize outcomes by choosing one action over another. If both conditions were true, the user could optimize the outcome on both ends. This could be true if the user does not have any uncertainty, but often it is more layered. For example, there could be an uncertainty in the driving variable, Runge responded.

At the Chesapeake Bay Program level, Wardrop discussed the overwhelming number of actions in most CBP GIT logic and action tables. Groups do not often specify how information changes their action, and do not go further to describe actions as decision-relevant. This conceptual framework could have great utility with Program groups as they would be able to rank knowledge or information gaining actions. Runge suggested examining gaps or uncertainties from this perspective by investigating the decision context.

CESR: Key messages, linkages, and preparing for facilitator in March—Andy Miller (UMBC)

Miller closed out the meeting with a membership-wide hour dialogue on key message, linkages, and facilitation for CESR. Alongside Wardrop and Fowler, Miller stressed the need to have clear takeaway messages for managers and decision makers about STAC's recommendations. Beyond this, a consensus is needed to transition from one section of the report to another. Miller stated he expects Workgroups will need to produce shorter documents for the governors and Cabinet Secretaries involved in the Partnership to consult; documents will be created with the help of the CBP Communications Workgroup. The document should 1) set clear expectations about the condition of the Bay and its living resources going forward, and 2) identify the most important benefits of restoring the Bay and its watershed system, as well as our ability to measure and manage them.

ACTION: STAC members, continue to review the CESR document and edit using suggestion mode.

Wrap Up

The next [March STAC quarterly](#) meeting will be remote and take place on March 23rd and 24th. At this meeting, STAC Staff will discuss STAC membership updates and the STAC FY21 Workshop Request for Proposals (RFPs). The Climate Change and Resiliency Cohort will speak to membership on their science needs, including the Wetlands, Black Duck, Climate Monitoring & Assessment, and Climate Adaption outcomes. The Diversity, Equity, Inclusion and Justice (DEIJ) Action Team Co-Chairs are invited to speak on the work of the Action Team, draft DEIJ implementation plan, and the formulation of the Community Advisory Board (CAB). At the end of Day 1, there will be a report-out on the FY19 STAC Workshop Report entitled *Exploring Satellite Image Integration for the Chesapeake Bay SAV Monitoring Program*. Day 2 will be reserved for the ongoing STAC project, *A Comprehensive Evaluation of System Response (CESR)*. After an introduction and draft product review, STAC members will be sorted into mixed CESR workgroup breakouts to discuss major themes, conclusions, and next steps. The meeting will end with a whole-group facilitated discussion to review breakout findings.