



**Joint Scientific, Technical Assessment and Reporting (STAR)  
& Coordinator/Staffer Meeting  
Theme: Next Generation Stewards SRS Dry Runs  
& Social Science Tools & Indicators**

Thursday, April 28, 2022  
9:30 AM – 12:30 PM

Meeting Materials: [Link](#)

*This meeting was recorded for internal use to assure the accuracy of meeting notes.*

**ACTION ITEMS**

- **Marisa Baldine will follow up with Scott Phillips about how USGS can work with the Communications Team during Chesapeake Bay Awareness Week.**
- **Anyone with particular facts or examples to be showcased during Chesapeake Bay Awareness Week should contact Marisa Baldine at mbaldine@chesapeakebay.net.**
- **Olivia Wisner will send the last few slides of the SRS Dry Run presentations to the SRS planning team to get their feedback on the concrete asks being planned for the Management Board. The SRS planning team will respond to Olivia with their feedback.**
- **Olivia Wisner will communicate with Sherry Witt ahead of the Management Board meeting about framing the meeting and the usage of Jamboard.**

**Meeting Minutes**

**9:30 AM Welcome, Introductions & Announcements – Bill Dennison (UMCES) and Scott Phillips (USGS)-STAR co-chairs, Breck Sullivan (USGS) STAR Coordinator, Peter Tango (USGS) CBP Monitoring Coordinator**

**Announcements**

**Communications Update – Marisa Baldine**

**Summary**

Scott Phillips reminded participants of the upcoming Chesapeake Community Research Symposium and that early bird registration closes on April 30th. Scott reminded attendees about submitting a session proposal for the Chesapeake Watershed Forum.

Marisa Baldine said the Communications Team is releasing a blog on federal commitments for climate change, Loretta Collins and Rachel Felver say thanks to everyone who filled out the poll for their upcoming modeling session at the Chesapeake Community Research Symposium, a press release for the new land cover/land use change dataset will be published on May 20th, and Hilary Swartwood will be publishing a blog on the impacts of climate change and precipitation to the Chesapeake Bay. Marisa announced Chesapeake Bay Awareness Week will

be in June, and the theme this year is Restoration Brings Results. Jurisdictions will be asked to share restoration projects that have been implemented in their communities. Marisa said the social media toolkit for Chesapeake Bay Awareness Week will be distributed to the staffers and the Communications Workgroup. Scott asked how STAR, USGS, and other partners can amplify the message of Chesapeake Bay Awareness Week. Marisa said she will follow up with Scott about this and suggested that anyone with particular facts or examples should reach out to her at [mbaldine@chesapeakebay.net](mailto:mbaldine@chesapeakebay.net). Marisa emphasized that the Communications Team will be amplifying posts and news about the Chesapeake during this week from other organizations and jurisdictions to reach a broader audience.

Bill Dennison provided an update from the Bay Summit the week before, explaining how the conversation focused on environmental justice and environmental report cards. At the summit, Tom Horton talked about the importance of beavers in the watershed for denitrification. Bill suggested watching the videos from Maryland Public Television on Riverkeeper talks on the Potomac, Patuxent, and Easter Shore and the other materials from Maryland's Chesapeake Bay Week. Mark Nardi commented these video segments were somewhat similar to the Tributary Reports.

Meg Cole shared some announcements about upcoming STAC Workshops in the chat:

- 1) On May 4th, there is a virtual STAC workshop on Ammonia and Litter Surveys. This is part of a workshop series on improving modeling and mitigation strategies for poultry ammonia emissions across the Chesapeake Bay Watershed. [More information on this session here](#).
- 2) The final STAC Advanced Monitoring Workshop on Dissolved Oxygen will convene virtually on May 11th at 9am. [Register here](#). [More information on this session here](#).
- 3) The in-person (with hybrid option) STAC PFAS workshop will take place on May 17th-18th at the Historic Inns of Annapolis. [More information on this workshop here](#).

Scott announced the approaches for targeting co-benefits document has been updated and the term habitat now includes fish and wildlife. Scott said that since this document was originally posted, they have met with the Federal Office Directors, the Goal Teams, and NOAA. The document will be presented to the Chesapeake Bay Commission next week. You can find the document on the [STAR webpage here](#).

#### **Upcoming Conferences, Meetings, Workshops and Webinars**

- Mid-Atlantic Coastal Acidification Webinar - [From Pteropods to Oysters: Linking Biological Indicators with Chemical Observations to Understand the Impacts of Ocean Acidification](#) - May 2, 2022, Virtual.
- [Resilient Coastal Wetlands Coastal Communities Multi-Regional Workshop](#) - May 24-25, 2022, Virtual.
- [Joint Aquatic Sciences Meeting](#) - May 14-22, 2022, Grand Rapids, MI.
- [Chesapeake Community Research Symposium](#) - June 6-8, 2022, Annapolis, MD. (Hybrid: virtual and in-person. [Subscribe here for updates](#).)

- [World Seagrass Conference and International Seagrass Biology Workshop](#) - August 7-12, 2022, Annapolis, MD.
- [Global HAB symposium on automated in situ observations of plankton](#) - August 22-26, 2022. Kristineberg, Sweden.
- Chesapeake Watershed Forum - November 4-6, 2022. Shepherdstown, WV. [Session proposals due June 3, 2022](#).
- [A Community on Ecosystem Services](#) - December 12-15, 2022. Washington, D.C. Metropolitan Area.

**9:40 AM**      **[Chesapeake Conservation Atlas](#) – Jake Leizear (Chesapeake Conservancy)**

*Jake Leizear talked about the Public Health goal of the Chesapeake Conservation Atlas, its recent equity-focused updates, and how it relates to conservation, public benefits, and reaching 30x30 goals.*

Summary

Jake began with a brief overview of the Chesapeake Conservation Partnership, the 30x30 goal to protect 30% of lands by 2030, and the four main goals of the Chesapeake Conservation Atlas: farms, forests, heritage, and habitat. These four goals inform the 30x30 priorities. The final goal of the conservation atlas is human health. Jake outlined some of the issues with the human health goal. It is already partially addressed under other goals, however, it did not fully address equity. Thus, the human health goal was revised to be task oriented and focus on equity, and it is now called the Public Health goal. Jake showed some of the data inputs that were integrated into this goal, such as the Chesapeake Data Dashboard, EJ Screen, and trail data. One of the initiatives under this goal is to map neighborhood green spaces (Skeo project), to inform funding prioritization. Jake concluded with some next steps for this initiative and a reminder of the benefits to people from the public health goal: prioritizing underserved communities, both rural and urban; community scale initiatives to help test the effectiveness of these efforts; intentional focus on the neighborhoods, people, and communities of the Chesapeake.

Discussion

Scott Phillips commented this effort seems on target and that the category of public health does a nice job of rounding out the related efforts. Scott added in the chat that [the updated targeting paper](#) includes land conservation items being discussed by Jake. The new information on Public Health would fit nicely under "benefits to people."

Britt Slattery commented that the public health priorities from this tool have been woven into the Protected Lands outcome's logic and action plan. Britt added they are planning on engaging with state representatives to determine how this might look in action in each jurisdiction. Jake replied Chesapeake Conservancy is planning on doing this with the other goals as well to ensure that the entire partnership can use this data in their jurisdictions.

Kristin Saunders commented that from her experience in land conservation, the priority used to be solely on the largest possible number of acres protected. Kristin said under this new plan, there is a real shift in land conservation as considerations of community and equity will take a

much larger role. Kristin said the steering committee, with the insight from the Diversity Workgroup, made a decision to elevate considerations of community in pursuing the 30x30 goal. Jake agreed and said this connects to the shift away from just opportunistic conservation to more targeted conservation and broadening the range of opportunity.

Breck asked about the Skeo community scale conservation project, specifically if the focus is just on identifying areas for green infrastructure investment, or if there will be a focus on helping the community obtain funding for the project. Jake replied this tool will facilitate the scientific and data justification for supporting these particular projects. Jake said they cannot move the money themselves, but this tool should help influence decision makers. Britt said in a different realm, the Protected Lands outcome is working on harnessing the recent influx of federal funding to implement some of these projects.

In the chat, Breck asked if Jake thinks there is an opportunity to look at targeting conservation identified by the public health goal while also looking at neighboring areas in the Chesapeake Bay Watershed that are impaired by toxic contaminants. Breck said the Toxic Contaminants Workgroup has done some work on connecting health with fish consumption advisory projects. Jake replied he thinks there is a possibility for collaboration. In its current state, the Public Health Goal does not look at toxic contaminants. However, the data exists, and it is comprehensive. That kind of overlay could be of interest. Britt agreed. Scott added the Toxic Contaminants Workgroup has information that could help in this overlay.

Amy Handen commented this is such an improvement from the last iteration. Amy and Sally Claggett thanked Jake for the presentation.

Kristin Saunders commented that in the discussions with the jurisdictions about riparian forest buffers, the idea of buying mediocre land and implementing forest buffers to create green conserved spaces where they don't exist right now came up.

**10:05 AM**     [Chesapeake Bay Report Card Indicators](#) - Dr. Vanessa Vargas-Nguyen (UMCES) and Joe Edgerton (UMCES)

*Dr. Vanessa Vargas-Nguyen and Joe Edgerton presented on the new report card indicators that will be included in this year's Chesapeake Bay Report Card, with a focus on the economic indicators.*

### Summary

Vanessa began with an overview of the history of UMCES's Chesapeake Bay report card efforts and the recent focus on the whole watershed and socio-economic indicators. Vanessa and Joe then led an interactive session via Mentimeter to gather audience input on the questions: 1.) "What parts of the economy are the most important in the Chesapeake Bay watershed?" and 2.) "What is the connection between a healthy bay and a vibrant economy?" Vanessa then showed the results of the Mentimeter and compared them to the results of the virtual workshops they have previously held with stakeholders. Some of the overlapping results between this session and the stakeholder sessions are as follows: 1.) fisheries, agriculture, and

recreation & 2.) fisheries. Vanessa said that the input provided at the stakeholder workshops was then converted into a graphic to represent community values. Vanessa explained how UMCES is partnering with CouncilFire, a global management consultancy helping purpose-driven organizations thrive by creating lasting economic, social and environmental value. Community Economy Specialist Michael Shuman is leading the effort at CouncilFire to help UMCES develop economic indicators.

Vanessa provided an overview and description of the four current economic indicators (median household income, affordable housing, inequality, and job growth) and expected indicators (local ownership and diversification). Joe walked through each of the indicators in more detail, specifically how they are calculated, where the data was derived from, and how they are visualized. Joe asked for input on how to grade the economic indicator data: should it be compared to the average of the Chesapeake Bay Watershed or the entire United States?

### Summary

Allison Ng asked about the value of net job growth as an indicator if it is pretty consistent across the region and consistent with national averages. Allison asked if it should be replaced with a different indicator. Michael Shuman replied at one level you would expect job growth to be quite similar across the region because it is heavily influenced by macroeconomic factors, but the differences in the counties are informative about whether or not that county has a growing economy. Bill Dennison said UMCES is planning on posting both the regional and county maps to the Chesapeake Bay Report Card website, so information from both sources will be provided. Bill expressed he was surprised that so many of the reporting regions came out in the intermediate category ([slide 25](#)). Michael added that all of these economic indicators are being considered as this is part of an effort to move away from using GDP as the sole indicator since that is an ineffective metric. Michael emphasized using multiple indicators, like job growth and inequality, can provide more nuanced information that has been in greater demand over the past two years. Michael said that to him, the net job growth indicator represents entrepreneurship and the extent to which individuals are creating businesses. Together, all of these economic indicators answer the bigger question of economic vitality. Bill said he likes this suite of economic indicators because it helps inform the environmental justice aspect of the report card.

In the chat, Peter Tango asked if UMCES will separate out job growth into race/age/sex. Peter said it seems the general metric washes out those issues of equality wanting to be expressed. Michael replied to Peter saying this would be a useful next step, and he needs to look at the Census data to see how easily it is to tease out race/age/gender differences. It is worth exploring. Peter said he appreciates the work on the economic indicators.

Breck asked if there is a way to see the type of job and connect it to the resources to support those jobs that come from the bay and watershed, i.e. tourism, agriculture, fisheries. Michael replied yes, but they need more nuanced data from IMPLAN (which is costly) to get into particular sectors (3-6 digit North American Industry Classification System (NAICS) codes). In

Michigan, they are deploying IMPLAN and starting to look at the specific water employment sectors, but the overall philosophy is that both big picture economic performance and specific water-sector performance are important.

Joe reported that participants had voted with eight in favor of using the Chesapeake Bay Watershed averages for the indicator and only one person preferred the national average. Scott Phillips commented the Chesapeake Bay Watershed averages are probably more applicable. Bill Dennison agreed with Scott, saying the Chesapeake Bay Watershed comparisons are more meaningful. Carin Bisland commented originally she agreed with Scott and Bill that it would make more sense to use the Chesapeake Bay Watershed averages, but then suggested the question of whether to look at national trends vs Chesapeake Bay Watershed trends should be decided by how the indicators would be used. Bill replied that his perspective is they want to maximize the spread of grades across the Chesapeake Bay Watershed, so he is leaning towards those values. Bill said it is helpful to know where the region stands compared to the national average, but he prefers to the region to see key trends. Bill said the big picture is avoiding framing the conflict as environment vs. economic, because that is not productive. Carin agreed with Bill about avoiding that frame. Vanessa replied they feel the same way and can include both maps and sets of comparison on the website. Bill said there is nothing stopping including all the information on the webpage. This conversation was just about what gets used in the report card itself. Scott commented having both maps would be good since the county data is more detailed.

Gary Shenk replied he agrees with Carin's original point about the value of having national trends. Gary thinks it is useful to understand if we have all A's or all F's across the watershed as it answers the question of whether this particular aspect should be a focus.

Peter Tango shared a [recent article on biodiversity](#) impacts that pits production effects against consumption effects and asked if it is possible that this dichotomy can be downsized for environmental effect at the county level for the watershed.

Michael Shuman commented if there are follow-up questions, please e-mail him at [shuman@igc.org](mailto:shuman@igc.org).

**10:35 AM**     **[Strategy Review System Dry Run Presentations of the Next Generation Stewards Cohort](#)** (3 Outcomes)

*Materials: Student Environmental Literacy SRS Dry Run Presentation, Environmental Literacy Planning SRS Dry Run Presentation, and Sustainable Schools SRS Dry Run Presentation.*

There are 3 CBP outcomes, organized under the Next Generation Stewards Cohort, that will be reviewed by the Management Board (MB) on May 12<sup>th</sup>, 2022. The dry run for STAR provides an opportunity for each outcome to provide their MB presentation and get suggestions for improvements. The presentations

should follow the guidelines provided under the Strategy Review System on [Chesapeake Decisions](#).

### Summary

Carin began with some context from the SRS planning meeting, sharing how there was extensive conversation about what the Management Board can do to help this cohort meet their goals. Carin emphasized for this meeting, they are transitioning away from directly asking the Management Board and instead are focusing on sharing and strategizing on how to address challenges the Goal Team and workgroups feel they cannot surmount themselves. Carin asked STAR to keep this in mind when providing comments.

Olivia began with overall context and frontmatter that would apply to all the outcomes in the cohort, since they are all managed by the Environmental Literacy Workgroup. On the day of the Management Board meeting, the presentation will begin by welcoming the education partners, a mindfulness moment to center the conversation, and some context for these outcomes, such as the impacts of COVID and the current funding environment. Olivia then outlined efforts in each of the watershed jurisdictions and the top three high-level needs across the watershed for this cohort.

Olivia asked for feedback on the plan to use [Jamboard](#) for all of the outcomes to get insight from Management Board members in the discussion section. Olivia said they plan on using the Jamboard as a visual at the end of the meeting to highlight the discussion that has taken place. Carin Bisland said a few years ago she would have said they would not have done this, but now they seem likely to engage with this tool. Scott Phillips said he really likes the idea of using Jamboard for the Management Board. Bill Dennison and Kristin Saunders agreed, saying that Jamboard will let the "quieter" voices be heard, which is great. Sean Corson agreed and suggested emphasizing input versus commitment. Sherry Witt said this should work, they just need to set them up for success through appropriate preparation. Sherry said going into the first presentation, set the stage with an opening slide setting expectations for the meeting, like the usage of Jamboard and the awareness slide. Emphasize that Jamboard can serve as a tool to allow for full thoughts, and they can take their time to record their responses. Breck suggested that Olivia change the permissions to make them accessible to anyone who clicks on the link. Olivia agreed. Sherry also encouraged the educators to comment on the Jamboard responses as appropriate. Britt Slattery said one of the reason education officials have been invited is so that they can interact with the Management Board, so we will encourage them to speak with each other to ensure the meeting is not silent after the presentation.

Sean Corson asked if there was any possibility of inviting state education officials to the Management Board meeting. Kristin Saunders replied that invitations went to the state education superintendents. Kristin does not know who responded, but they were invited. Shannon Sprague should be following up with them. Britt replied that Sean's question was considered in the past, but most of the meetings would be content that the education officials will not be connected to that is not pertinent to their work. The compromise was to invite them in when we have topics like this. In case what you meant, Sean, was inviting them to sit on MB

all the time. Tom Ackerman replied most of the education representatives that are joining for this meeting are the deputy superintendent or director level at the states. Sean Corson agreed that targeting invitations based on the agenda would make sense. Ideally, they would have some level of representation for the SRS review. It might help stimulate more exciting Jamboard input.

**10:35**      [Student Environmental Literacy](#) – Tom Ackerman (CBF) and Elise Trelegan (NOAA)

### Summary

Tom Ackerman shared how four years ago they learned that these meetings are more effective with education leaders present because the Student Outcome requires the focus and resources of natural resources, environmental, and educational officials to make progress. Tom began with a reminder that the focus of the Student Outcome is creating Meaningful Watershed Educational Experiences (MWEE) for students K-12 across all jurisdictions in the watershed. Tom set the stage by sharing some data from 2019 on MWEE availability across the jurisdictions for elementary, middle, and high school students. Data was not collected in 2021 due to the severe impact of COVID on schools. Tom explained how COVID was the greatest challenge faced, but despite the difficulties there has been success in keeping actions connected to grant funded work on track and a greater recognition of MWEEs by state departments of education and local school systems. Actions on the horizon include continual virtual professional development, connecting MWEEs and environmental education to other significant education priorities, and focusing on systemic, equitable, and sustainable as framing for MWEE implementation.

The Student Outcome team plans to adapt by building on the momentum for outdoor learning initiated by COVID, addressing the costs associated with systemic and sustainable programs, and aligning with state and local education priorities. The Student Outcome team plans to enhance equitable and inclusive restoration through partners and funders using the Equity Mapper to identify priority geographies, increasing communications among funding entities to more equitably distribute existing funding, and providing funding, grant management and systemic partnership expertise to under resourced districts via the Outdoor Learning Network Initiative.

Olivia commented that instead of asking the Management Board for clear, achievable actions, each of the outcomes will be ending with an awareness slide to communicate overarching needs that might not be in the purview of the Management Board. With that context, the goal is to have a conversation with the Management Board about which actions can be taken.

### Discussion



Carin Bisland commented the presentation lasted for 16-17 minutes, so it is the right timeframe but could benefit from being a few minutes shorter, especially considering there is the frontmatter that will be presented by Shannon Sprague.

Carin suggested that Tom emphasize Chesapeake Bay Program help in the COVID section since this is funding that the Goal Teams received that would be beneficial if it is continued.

Peter Tango asked in the chat if Environmental Literacy includes opportunities for students to understand farm-to-table or lake/stream/estuary to table that links production, harvest, handling and availability with individual health, diet and nutrition while coupling to environmental effect of diet choices. Tom replied that in a few of the states, there are health educators and departments of health that partner in these efforts. Tom added the food and agriculture system are definitely part of environmental literacy, but the tricky question is whether it makes it into the state standards and if teachers apply this information. Peter responded his thinking was that if someone catches it, prepares it for cooking, cooks the harvest and eats it. The steps could be done in one event. And if they understand what it takes to get different foods, that is a strong impact lesson in life. Erin Sullivan said there's a piece of food waste, nutrition in sustainable school "pillars." Peter replied, thanks for the insights Erin. Peter is not familiar with the programming details but wondering if the food waste issue is hands on - do they prepare some food and consider portion sizes relative to targeting purchase when shopping? Do they put leftovers in a refrigerator and learn about how long something can be kept before it spoils and what temperature does to that? Hands on, practical lessons? Peter seems this is important life lessons and connections to the great work here even more.

Sean Corson commented that he is glad there is a shift away from the previous type of ask and there is a shift towards generating awareness and engaging in a conversation. This way, even if the Management Board members themselves cannot address the challenges, their jurisdiction is involved. Sean added he thinks this new structure will be productive for this set of outcomes, and it will be worthwhile to consider if this structure should be used for other cohorts. Sean commented the trends in the Environmental Literacy surveys will be interesting to examine once the 2022 data is released since there might be greater understanding from different data points. Sean suggested using a different acronym than Career and Technical Education (CTE) because he was afraid it might get confused with head injuries commonly associated with football. Sean asked about normalizing the data in the environmental literacy survey for each state since the watershed area as the percentage of total area within each state is varied. Sean wanted to make sure the data was representative of the watershed area for states only partially in the watershed, like West Virginia. Tom replied it is variable depending on the state, as Virginia and Maryland want the entirety of the state to be included for these MWEEs, while West Virginia is just focusing on the panhandle. Sean replied he would not want to discourage any of the jurisdictions, but he also wants to make sure we are celebrating the success where they are most impactful within the watershed. Tom agreed and said the three eastern most counties of West Virginia are a

success story that should be emphasized, because they did not have capacity but the Chesapeake Bay Program through this workgroup has brought it to them. Kristin Saunders thanked Sean for recognizing this shift and thinks it will help the dynamic significantly.

Kristin, Sean, and Carin commented excellent work adjusting the presentation to their unique considerations and needs.

Olivia shared a [sample Jamboard link](#) they plan on using for engaging with the Management Board and departments of education representatives at the Quarterly Progress Meeting.

Sherry Witt suggested defining all acronyms as well.

## **11:00**      [Sustainable Schools](#) – Erin Sullivan (EPA)

### Summary

Erin began with a brief description of the Sustainable Schools Outcome and some data from [ChesapeakeProgress](#) about the status of the outcome. Erin said there has been slow and steady growth in certified sustainable schools in the watershed from 2015-2019, and the 2021 data will be updated on ChesapeakeProgress soon. Erin set the stage about the challenges resulting from COVID, such as school closures, an increase in disposable items, and the perception of sustainability projects as “extras.” Erin also shared some of the silver linings from COVID, such as increased recognition of the benefits of outdoor learning and more conversations related to climate change as a result of being outdoors. Looking to the future and reflecting on the recent past, Erin expressed that there is potential to engage in more outside learning given the scientific messaging from COVID and fiscal resources from emergency relief and the recent infrastructure law. Erin said that to take advantage of these opportunities, consistent messaging and harnessing of funds will be required. Erin added that policy impacts from COVID have been variable across the jurisdictions.

Erin shared what the Sustainable Schools outcome team plans on doing, such as administering the Environmental Literacy Survey, returning to sustainability projects, focusing on connections between outdoor learning and socio-emotional learning, and strategically engaging additionally resources coming from the current presidential administration. To advance equitable and inclusive restoration, the outcome team plans on aligning with environmental justice and climate change priorities, prioritizing sustainable efforts in all schools with a focus on underserved communities, and determining how to incorporate data related to health disparities and social determinants of health.

Erin said the outcome team hopes the Management Board will be aware by continuing to look for opportunities to apply for and spend bipartisan infrastructure law money to create healthier schools; assist with the White House’s “Action Plan for Building Better School Infrastructure” to upgrade public schools with modern, clean, energy efficient

facilities and transportation; and supporting the new “No Child Left Inside Act,” co-authored by MD Congressman Sarbanes, which could provide \$150M annually through 2027.

### Discussion

Carin commented the presentation was 8 minutes and 45 seconds so it is well within the time and allows for the opportunity to expand on more components of the presentation. Carin and Sherry Witt commented on defining acronyms like Water Infrastructure Improvements for the Nation act (WIIN).

Bill commented that examples of what a sustainable school is would be helpful, as the term sustainable schools can be vague. Sharing concrete examples with the Management Board, like reducing food waste and single use water bottles, would help with communication.

Sherry Witt suggested an example to include from the challenges of COVID could be the shift to single use water bottles instead of the water fountain. Olivia replied that is a good example and she has incorporated it into the presentation.

Olivia said [this is a good example](#) of new funding being used to support outdoor learning

Kristin suggested spending more time on the bipartisan infrastructure law reference as Management Board members are spending a lot of time thinking about how to access that money. Kristin said they may not be thinking about education in this context, so explaining how schools can play a role in this funding by providing funding could be really helpful. Kristin also suggested the examples should go beyond just water quality, as recently the Management Board has been challenged to actively consider all of the outcomes under the Chesapeake Bay Watershed Agreement. This could be a good opportunity to expand horizons.

Peter Tango commented like the WIIN grants, if you have more of those target items to give the Management Board a head start on where they can help make links with the infrastructure law, that could be helpful.

### **11:25**      [Environmental Literacy Planning](#) – Olivia Wisner (CRC)

#### Summary

Olivia began with a review of the outcome language and then showed environmental literacy preparedness data from 2019 by jurisdiction and total gauge of preparedness from 2015-2019. Before outlining successes and challenges, Olivia gave a reminder that the last time this outcome came up was May of 2020, so COVID had just started, and this entire period was influenced by COVID. Olivia shared some successes included resources tailored to state priorities, the Mid-Atlantic Environmental Education Network, Outdoor Learning Network Initiative, and Leadership Summit. There still is more work left to do to figure out a sustainable funding model and collecting and distributing examples. On the horizon, Olivia identified funding opportunities, like NOAA

B-WET grants and potential for large, short-term influx of funding to school districts, and implementing State Networks in the Mid-Atlantic Environmental Literacy Network.

Based on lessons learned, the Environmental Literacy Planning Outcome plans on providing technical assistance to strengthen and diversify environmental literacy networks, assess the impact of COVID through the Environmental Literacy Survey, and determine the cost of MWEE implementation, among other actions. Work towards equitable and inclusive restoration will include updating the Diversity Dashboard, encouraging states and other funders to use that data in identifying priority geographies, supporting the Outdoor Learning Network Initiative, and increasing state and regional network development. The major point of awareness Olivia conveyed was the critical gap at the Chesapeake Bay Program for addressing the youth who have graduated high school but have yet to settle into a career path. Olivia noted that while there is a focus on youth still in high school, the Chesapeake Bay Program's lack of focus on this youth population creates a gap in workforce conversations.

### Discussion

Carin commented this presentation was completed in 11 minutes and 35 seconds, so there is still some time available for when Shannon Sprague is giving the presentation. Carin said that in relation to the awareness point made, since it is not technically covered under a particular outcome, the conversation might need to be approached differently. Breck suggested a meeting between herself, Olivia, and Denice Wardrop of CRC to discuss how academic institutions can help address this gap. One of CRC's goals is to diversify the environmental workforce, so this could be a fruitful connection. Olivia replied this connects to one of the three asks they are asking of the Management Board is nominating a person to participate in a conversation about filling this CTE gap and how the Chesapeake Bay Program can play a role. Carin suggested that in addition to emphasizing STEM, other subjects should be prioritized as well. Olivia said the reason why they included STEM and went beyond CTE because those are the priorities of the states involved. Tom Ackerman suggested the broader conversation can involve many different folks and emphasized Sean's point in the chat about success with STEM in Pennsylvania. Breck suggested potentially asking the education representatives if they could share a list of universities that they have a Memorandum of Understanding (MOUs) about hosting trainings and career events that are put on by both government agencies and universities. Britt commented this is a good idea and can help with the teacher pre-service preparation as well as bringing content experts to help provide instruction.

Bill Dennison asked if there is a correlation between environmental literacy by state and progress toward Watershed Implementation Plans (WIPs). Kristin Saunders replied that could be a future indicator for the report card and might help invest states in this work more directly. Sean Corson replied some of the jurisdictions struggling with the Total Maximum Daily Load (TMDL) are accelerating progress in the environmental literacy space. For example, Pennsylvania network development is expanding rapidly, and it would be nice for PA to be able to take a bow and show leadership in education to

balance some of the important but less positive news around the TMDL. Bill replied, the correlation between environmental literacy and WIP progress points to the importance of environmental literacy.

Tom Ackerman stated how it was during the SRS meeting in 2020 that the PA Education leaders offered to host the 2021 Environmental Literacy Leadership Summit.

Scott commented the key will be to what discussion can engage the Management Board. Scott said the idea to focus less on an ask and more on a conversation should be an improvement. Carin agreed and said that by including the state education representatives, this should lead to a well-rounded conversation.

Bill Dennison commented these presentations were well done and would be a good way to introduce the topics to the Management Board and expand their horizons.

**11:50 AM**      **Coordinator/Staffer meeting**

**12:30 PM**      **Adjourn**

**Participants:** Alexander Gunnerson, Allison Ng, Amy Goldfischer, Amy Handen, Aurelia Gracia, Bill Dennison, Breck Sullivan, Carin Bisland, Caroline Johnson, Chris Moore, Doreen Vetter, Doug Austin, Erin Sullivan, Garrett Stewart, Gary Shenk, Greg Allen, Greg Barranco, Jake Leizear, Jamileh Soueidan, Jennifer Starr, Joe Edgerton, John Wolf, Katie Brownson, Katheryn Barnhart, Katlyn Fuentes, Kristin Saunders, Laura Cattell Noll, Marisa Baldine, Mark Nardi, Meg Cole, Michael Shuman, Ola-Imani Davis, Olivia Wisner, Peter Tango, Rachel Felper, Renee Thompson, Sally Claggett, Scott Phillips, Sean Corson, Sherry Witt, Sophie Waterman, Tom Ackerman, Vanessa Vargas-Nguyen.