Science	Restoration	Partnership
Modeling, Monitoring, Goals & Outcomes	*Conservation, Protection, Progress Reporting*	*Engagement, Communication, Planning,*
C.1 A Climate Adaptive Bay and Watershed: Enhance CBP knowledge and capacity to apply scientific capabilities to respond to climate vulnerabilities, for example, by expanding the climate science support team, integrating climate science into BMPs, and promoting climate education in training materials. Develop new goals that are compatible with anticipated future climate conditions and that support a healthy, equitable, and resilient Bay. Establish more holistic climate adaptation goal(s) and set numerical outcomes. Numeric outcomes are essential for assessing meaningful progress towards a healthy Bay.	**C.2 From Community Vulnerability to Community Resilience:** Identify ways to better incentivize community adaptation through our crediting and accountability framework with an emphasis on practices with multiple benefits (water quality, flood protection, habitat, greenspace, etc.) to communities.	**C.1 A Climate Adaptive Bay and Watershed:** Revise CBP structure (e.g., establishing a climate resilience GIT) to continue the important work of the partnership while prioritizing climate change and promoting cross-partnership work to accelerate implementation of climate adaptation measures across outcomes. Apply decision science (e.g., structured decision making) at all levels of the CBP to support cooperative problem solving and improve outcomes under conditions of uncertainty.
C.2 From Community Vulnerability to Community Resilience: Support research into long-term monitoring of BMPs and other adaptation measures to evaluate real-world performance for community resilience in addition to Bay Program goals. This approach could include consideration of impacts to community resilience and adaptation in other outcome management strategies, creation of a community-level adaptation outcome and principle, and development metrics towards tracking the progress.	**C.3 Carbon Stewardship:** Carbon stewardship could be built into the existing agreement by developing approaches to integrate carbon considerations into management strategies for existing goals or outcomes.	**C.2 From Community Vulnerability to Community Resilience:** Prioritize efforts and resources for adaptation projects in communities most vulnerable to ever-increasing risks or with highest cumulative risk. Improve involvement and outreach by directly engaging communities and supporting efforts to build networks of practice at different scales throughout the watershed
C.3 Carbon Stewardship: Advance understanding of carbon stewardship science, including adopting carbon accounting methods to better target existing above- and below-ground carbon sinks for conservation and management and to inform BMP selection. In addition, a new goal or outcome could be established setting carbon targets to be achieved through conservation and restoration.	**C.4 Healthy Ecosystems in Changing Conditions:** Need a program structure, goals, and success measures that allows for crosswalk between ecosystem services (e.g., habitats, living resources, water quality) that align with community needs under changing climate.	**C.3 Carbon Stewardship:** Develop better incentives for carbon stewardship to improve consideration of carbon in land use planning and decision-making, increase the conservation and stewardship of carbon sinks, and improve BMP selection to support climate mitigation and build soil health. Use decision support frameworks for considering tradeoffs between climate mitigation and other objectives associated with projected climate and land use changes. Improve regional coordination around carbon stewardship using natural climate solutions by convening state and local partners already engaged in these efforts.

C.4 Healthy Ecosystems in Changing Conditions: Advance and support long-term monitoring and assessment of compounding stressors on ecosystem health, including living resources, to improve understanding of the impacts of management and restoration actions and allow for adaptive management. Advance science to target and improve the design of nature-based solutions/green infrastructure to enhance confidence in their use for ecosystem and community resilience.	**C.5 Regenerative Agriculture and Food Systems:** Management strategies for some existing goals and outcomes could be modified to incorporate efforts to build and sustain soil health and support the broader effort to expand regenerative and regional food systems.	**C.5 Regenerative Agriculture and Food Systems:** Increase collaboration with the growing network of producers, processors, distributors, local, state, and federal government, businesses, nonprofits, and institutions working to develop and support a regenerative and regionally based food system. Collaborative efforts could include improved utilization of market-based approaches to deliver systemic change. Use educational, behavioral science and marketing resources to ensure that producers and consumers understand the value of regenerative and locally sourced food for watershed restoration and have mechanisms to effectively support the transition. Develop mechanisms to address issues of regional carrying capacity and nutrient mass imbalance to support healthy and equitable food access and incentivize a circular approach to food and manure waste management.
C.5 Regenerative Agriculture and Food Systems: The current Agreement does not have any goals specific to agriculture. A new goal could be set to promote regenerative and regional food systems, and an associated soil health outcome could be developed.		

Science	Restoration	Partnership
Modeling, Monitoring, Goals & Outcomes	*Conservation, Protection, Progress Reporting*	*Engagement, Communication, Planning,*
CW.1 Accountability Framework: Continue to utilize CAST with the incorporation of multiple lines of evidence into progress evaluations. Explore using social science to better understand and measure how human behavior can drive natural resource use, management and decision-making. New time horizons to meet the targets of the Chesapeake Bay TMDL will require revisions.	**CW.1 Accountability Framework:** Review and revise the accountability framework to improve our effectiveness, particularly in reducing nonpoint source pollution, and increase emphasis on measured outcomes and water quality data in our assessment of progress.	**CW.1 Accountability Framework:** Evaluate efficacy of the Chesapeake Bay Program policies and guidance associated with tracking, evaluating, verifying, and reporting progress. Increase emphasis on mutual accountability from partners, increased focus on innovation, system learning and how we make connections with people through restoration efforts. Explore using social science to better understand and measure how human behavior can drive natural resource use, management and decision-making.
CW.2 Tiered TMDL: Identify a tiered implementation approach to achieving attainment of tidal water quality standards across the Chesapeake Bay TMDL's 92 segments, recognizing pollutant reductions are needed throughout the watershed and can be phased over time consistent with state/regional workplans and resources. Set tiered planning targets based on the segment(s) where efforts are focused.	**CW.2 Tiered TMDL:** Identify a tiered implementation approach to achieving attainment of tidal water quality standards across the Chesapeake Bay TMDL's 92 segments, recognizing pollutant reductions are needed throughout the watershed and can be phased over time consistent with state/regional workplans and resources. New time horizons to meet the targets of the Chesapeake Bay TMDL will require revisions.	**CW.2 Tiered TMDL:** Identify benefits that align with local goals in order to shape the restoration initiatives. Provide opportunities to prioritize system responses to restoration initiatives through pursuing individual pieces of the larger restoration goals. Communicate incremental successes to ensure motivation and momentum.
CW.3 Water Quality Monitoring: Establish and promote effective cross-program coordination for water quality monitoring to inform watershed health and water quality restoration programs focusing on data-driven decision-making. Promote the use of state and local monitoring and assessment for incorporation into program goals, as appropriate, which may include learning, status and trends analyses, and evaluation of meeting water quality and living resource goals. Change the water quality assessment and monitoring outcome to include quantitative measures for expansion of capacity based on increased coordination. Include more than reporting on response metrics but expand language include stressor metrics (e.g., bacteria, pH/AMD, conductivity, toxics, etc.) Incorporate the wealth of community/participatory	**CW.4 Nonpoint Source Implementation:** Provide opportunities to increase nonpoint source implementation and incentivize effective and innovative nonpoint source management across all sectors. Demonstrate measurable ecosystem responses, target and empower small-scale watershed restoration that addresses the needs of the community, and promote outcome-based efforts. Address known challenges associated with nutrient mass imbalances to include fertilizers and unknown sources.	**CW.3 Water Quality Monitoring:** Enhance coordination among local/state/federal partners data collection. Prioritize and focus attention to the work that is conducted by monitoring and assessment working groups.

science into the formal feedback mechanisms used by the partnership to evaluate success and drive focused implementation. Make space for and embrace the different tiers of data that this piece of the partnership collects. This includes development and use of robust feedback mechanisms for the use of this data.		
CW.4 Nonpoint Source Implementation: Data sourcing and compilation to assist with data-driven decision-making at the catchment scale, including the siting and maintenance of additional water quality monitoring stations, and assessing mass imbalances and identifying potential solutions.		**CW.4 Nonpoint Source Implementation:** Increased emphasis on nonpoint source management and demonstration of measurable system response. Build effective coordination and collaboration between the EPA Clean Water Act (CWA) Section 319(h) program, statewide nonpoint source management programs, and the Chesapeake Bay Program (CBP). Leverage understanding of watersheds with the highest nutrient loads and sources driving mass nutrient imbalance and target implementation of nonpoint source BMPs. Encourage awareness of nonpoint source management programs across the Chesapeake Bay Program. Direct interaction and engagement between state resource managers, trusted local partners, and private landowners are critical to successful implementation. Enhance environmental literacy and workforce development through career pathways, readying future generations for jobs in the conservation field.
		CW.5 Local Liaisons: Increased focus on local priorities at a smaller scale than the Chesapeake Bay region. Connect and empower local governments and communities to address the pollution in their back yards, which will ultimately lead to improvements in the Chesapeake Bay. Address the changing environment by planning for and selecting practices with multiple benefits. Strengthen partnerships between trusted local partners, government, and community members and leaders.

Science	Restoration	Partnership
Modeling, Monitoring, Goals & Outcomes	*Conservation, Protection, Progress Reporting*	*Engagement, Communication, Planning,*
SW.2 Integrated Modeling and Monitoring: Improve understanding of connectivity and habitat function under changing conditions by expanding Chesapeake Bay and watershed monitoring and modeling to include continuous shallow water habitats. This recommendation will require a more thorough integration of monitoring and modeling efforts, as well as a potential expansion of efforts, to assess shallow water habitat conditions and response to stressors. This may require a rebalancing of resources as well as the development of a comprehensive tracking system for habitat restoration projects. This system should complement the CAST system and not require dual data submissions.	**SW.1 System-Scale Resilient Habitat Restoration:** Design and implement system-scale shallow water habitat restoration to include multiple practices (i.e., oysters, wetlands, SAV, and reforestation) that provides social, economic, and ecological benefits while also providing resilience and connectivity under changing land-use and climate conditions. Changes to the water quality and assessment outcome to require actions described above would catalyze this effort.	**SW.1 System-Scale Resilient Habitat Restoration:** This would require a change in the way habitat restoration is targeted, designed, and implemented and would require better coordination with nearby stakeholders and improved integration with climate change and water quality. To be successful, living resource and climate resilience benefits must be prioritized equally to water quality. The current structure does not promote prioritizing restoration efforts in areas with existing large-scale initiatives and investments or focusing on shallow water habitats vulnerable to climate change. This requires targeting locations to address stressors of shallow water habitats by collecting and using more shallow water habitat data and modeling to guide the appropriate restoration practices.
SW.3 Adaptation Strategy for Habitat Management and Project Planning: Implement an active approach to climate adaptation in shallow water habitats that integrates vulnerability assessments for living resources and communities, alternative future scenarios, community engagement, and learning elements. A clear process for assessing relative vulnerabilities both currently and in the future. Requires revision of the accountability metrics and assessment of outcomes.	**SW.3 Adaptation Strategy for Habitat Management and Project Planning:** Implement an active approach to climate adaptation in shallow water habitats that integrates vulnerability assessments for living resources and communities, alternative future scenarios, community engagement, and learning elements.	**SW.3 Adaptation Strategy for Habitat Management and Project Planning:** Implement an active approach to climate adaptation in shallow water habitats that integrates vulnerability assessments for living resources and communities, alternative future scenarios, community engagement, and learning elements. Requires implementation of a formalized adaptive planning process that includes community engagement elements and room to adapt goals within the context of changing conditions.
SW.5 Governance, Collaboration and Funding: Balance accountability, resources, and effort in an equitable way across the outcomes. We recommend a multi-objective accountability system that tracks outcomes and engages jurisdictions and local government, similar to CAST, but with broader outcomes and an emphasis on incentives versus punitive measures.	**SW.5 Governance, Collaboration and Funding:** Balance accountability, resources, and effort in an equitable way across the outcomes. Manage shallow water habitats as an interconnected ecosystem that leverages collaboration among the Bay Program partnership and organization structure by minimizing rigid bureaucracy without sacrificing inclusivity. Adjusting outcomes and funding accordingly.	**SW.4 Communication and Engagement:** Strengthen the connection between people and shallow water habitats by communicating the importance of these ecosystems and their socio-economic benefits to stakeholders. Develop active and sustained engagement with communities to understand their values and utilize social science strategies to develop stewards of their local waterways.

		Align actions and funding to these values and socio-economic considerations. Implementing this recommendation would require a shift in operations towards a more meaningful partnership with people and communities, including but not limited to adjusting membership structure, management actions, and funding decisions to prioritize benefits to people and communities.
		SW.5 Governance, Collaboration and Funding: Balance accountability, resources, and effort in an equitable way across the outcomes. collaboration among the Bay Program partnership and organization structure by minimizing rigid bureaucracy without sacrificing inclusivity. A re-envisioning of how the partnership works together and collaborates is necessary, including elimination of redundant or unnecessary processes that do not move the work of the partnership forward. Modification to Program structure is also needed for improved collaboration

Science	Restoration	Partnership
Modeling, Monitoring, Goals & Outcomes	*Conservation, Protection, Progress Reporting*	*Engagement, Communication, Planning,*
P.5 Social Science: Create a budget and staffing allocation plan to support the strategic application of social science best practices, research, and synthesis to advance goal achievement and ensure partnership impact	**P.2 Representative Goals and Outcomes:** Approach the goals and outcomes of the 2014 Chesapeake Bay Agreement with an eye toward the impact on local communities and people. Reframe how the Chesapeake Bay Program measures success and creates and implements evaluation schemes. Increased focus on goals and outcomes that resonate with and are tangible to the public. Potential changes and amendments to the non-water quality goals or additions to the water-quality goals.	**P.1 Governance, structure, accountability framework, and decision-making process:** Utilize an independent expert on equitable and collaborative partnerships to reimagine the governance, structure, accountability framework, and decision-making process of the Chesapeake Bay Program. Overarching governance structure: Engage a broader set of leaders responsible and accountable for each goal area, ensuring that all outcomes have decisionmakers at the table. This would likely change the make-up of the Management Board and/or center leadership at the level of the partnership that can account for this broader group of leaders. Broadening signatories: Ensure stakeholders with significant investments, those representing lead federal agencies, non-profits, and/or local government representatives, have a voice starting with the decision-making process of determining the goals and outcomes. Broadening signatory participation will ensure that the full scope of partners' work for the Program are reflected in tracking progress and decision-making. Advisory Committees: The primary mechanism for receiving input from key constituent groups is currently the advisory committees. The recommendations of these groups need to factor more heavily into agenda setting and conversation for the Principals Staff Committee meetings. Goal Implementation Teams: The GIT level of the partnership has subject matter expertise for the goals and outcomes. The GIT level could be better activated for primary decision-making, resource making, and problem-solving. This would require more leadership from signatories and partners to be effective. The preamble and principles should

		be updated to better align with new learning on community engagement and reflect any changes to the governance structure that have been adopted.
	P.3 Diversity, Equity, Inclusion, Justice: If there is opportunity to revise the Agreement, the Diversity Outcome language will need to be updated, clarified, and made more actionable and appropriate to CBP's function, with forethought given to desired, measurable results. Ensure that advancement of the commitments in the DEIJ Implementation Plan are considered when creating new Outcomes, as a means to achieve multiple goals and outcomes at the same time.	**P.2 Representative Goals and Outcomes:** Increased focus on goals and outcomes that resonate with and are tangible to the public, but have co-benefits with water quality, such as: Land use change; Climate change and resilience, climate adaptation and planning; Recreation and public access; Environmental education, environmental literacy and workforce development; Public health and quality of life. Creates a long-term outreach and engagement strategy for connecting with the public and stakeholders.
		P.3 Diversity, Equity, Inclusion, Justice: Diversity, Equity, Inclusion, and Justice must be the frame from which all work of the Chesapeake Bay Program flows, which can be done by institutionalizing and activating the DEIJ Implementation Plan throughout the partnership's structure and efforts. This will require the Program to provide the capacity and financial resources necessary for effective and sustained implementation of the plan.
		P.4 Networks and Capacity Building: Create intentional partnerships with networks focused on issues related to Watershed Agreement goals to learn from those networks and accelerate outcome attainment in collaboration with their members. Restructure opportunities for engagement and collaboration with networks across the watershed. Create capacity within existing activities for deep listening and investment in audience research. Create new participatory budgeting and priority setting strategies. Existing networks of stakeholders are considered as a partner of the Program rather than an outside entity.

Science	Restoration	Partnership
Modeling, Monitoring, Goals & Outcomes	*Conservation, Protection, Progress Reporting*	*Engagement, Communication, Planning,*
HW.1 Data, Tools, and Monitoring: Using partnership-approved monitoring data, assessments, and tools, characterize and track watershed health at various scales to inform and increase implementation. Reframes our assessment and monitoring of watershed health to the local watershed (subwatershed or catchment scale) as well as the entire basin. Includes landscape integrity metrics from land use and land cover data along with other water quality data to fully characterize local watershed health. Enhances the utility of data investments and cooperation across departments and organizations. Incentivizes implementers of BMPs, land use planners, and land conservationists to cooperate to improve and maintain ecosystem services. Coordinate with non-traditional partners (e.g., public health agencies, planning commissions, municipalities, floodplain managers, drinking water utilities, local interest groups) focused on improving local waterways. Modifications to the watershed health, stream health, protected lands, and land use options evaluation outcomes may be required to achieve greater integration and efficiency.	**HW.4 Watershed Actions:** Integrate land conservation and stewardship more explicitly into the goals of the Bay Program. Conservation and stewardship could also be elevated as key guiding pillars for the Program (alongside science, restoration, and partnership). Leverage knowledge of local, state, and federal programs to conserve 30% of the land by 2030, achieve longer-term goals, and build an interconnected network of conserved landscapes. Couple land protection with restoration to restore ecosystem function, promote species resiliency, and provide ecosystem services to communities. Prioritize and improve coordination of efforts to manage and steward protected and restored areas. The long-term stewardship needed to protect investments in restoration and conservation includes the management of public (federal, state and local) and private lands that provide critical wildlife habitat, public access, and watershed health benefits. Expand and enhance publicly accessible natural lands through the creation, stewardship and improvement of more parks and trail networks. This will enhance the livability and land values for local communities, particularly underserved communities.	**HW.2 Planning:** Support strategic green infrastructure planning for watershed health at multiple scales. The partnership must leverage tools, data, expertise, and funding for more intentional work and support for local/regional planning. Planning occurs on at least 2 levels: 1) Local watersheds, 2) Comprehensive Bay-wide. Places more partnership emphasis on landscape integrity, green infrastructure concepts across local watersheds, not just implementation of individual BMPs. Will require partnership funds to work with local communities to incorporate watershed actions into local planning processes and facilitate cross-jurisdictional plan integration. Include funding incentives for local implementation of integrated watershed plans.
HW.2 Planning: Modifications to consolidate or interconnect existing goals and outcomes may be considered for improved understanding and efficiency.		**HW.3 Local Engagement:** Increase the reach and effectiveness of Local Community and Partner Engagement through capacity building. More intentional use of existing programs that communicate from the community/local level up through the jurisdictional and federal level.
HW.4 Watershed Actions: Watershed Agreement goals and outcomes could be modified where appropriate to explicitly address the importance of conserving and stewarding all watersheds, expanding the focus beyond state-identified healthy watersheds.		**HW.4 Watershed Actions:** Broadening the scope of the partnership's work to integrate conservation and stewardship as key strategies for improving watershed health would be a fundamental shift that would ultimately include reconsidering how resources are allocated. On a local scale, use a "network of networks" approach to

		build local capacity and support green infrastructure practices including: land protection, restoration, wildlife conservation and the maintenance of community tree canopy and other nature-based solutions.
HW.5 Measure Watershed Outcomes: Expand use of progress measures: Move beyond CAST to utilize "multiple lines of evidence" with tools such as the Chesapeake Healthy Watersheds Assessment (CHWA), and state data for a picture of watershed health. Improve the Bay Program's crediting framework to better incentivize practices that will improve watershed health and ecosystem services outcomes, including land conservation and stewardship. Shift to an outcomes-based approach to promote protecting, restoring, and maintaining watershed health. The agreement provides broad authority to create an accountability process. There is no need to modify the agreement to include a refreshed approach to measuring progress. A watershed health approach may consolidate goals and outcomes and reduce silos. Track impactful outcomes, not just outputs. Reduce the number monitored for efficient tracking. Employ a multi-disciplinary approach to goal setting.		**HW. 5 Measure Watershed Outcomes:** Create a more robust, action-oriented and partner engaged Strategic Review System (SRS).