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(Includes PSC-agreed changes through 4/29/14)

Chesapeake Bay Watershed Agreement



PSC Working Draft

Includes Changes through 4-29-14

2013 Chesapeake Bay Watershed Agreement

PREAMBLE

The Chesapeake Bay watershed is one of the most extraordinary places in America. The nation's largest and most productive estuary and its vast network of streams, creeks and rivers hold tremendous ecological, cultural, economic, historic and recreational value for the region and its citizens. Its' more than 180,000 miles of creeks, streams and rivers flow through six states and the District of Columbia. Nearly 18 million people live, work and play on the diverse landscape draining into this magnificent body of water.

To restore and protect this national treasure, the Chesapeake Bay Program partnership (the Partnership) was formed in 1983 when the Governors of Maryland, Virginia, Pennsylvania, the Mayor of the District of Columbia, the Chair of the Chesapeake Bay Commission and the Administrator of the Environmental Protection Agency signed the first Chesapeake Bay agreement. That agreement recognized the "historical decline of living resources" in the Chesapeake Bay and committed to a cooperative approach to "fully address the extent, complexity, and sources of pollutants entering the Bay." For the past 30 years, this regional partnership has implemented policies, engaged in scientific investigation, and coordinated actions among the states, the federal government and the District of Columbia. The Partnership is recognized as one of the nation's premier estuarine restoration efforts.

Much progress has been made, but there is more to do—especially in the face of continued challenges such as changes in population, loss of farm and forest lands and changing environmental conditions. Through this Chesapeake Bay Watershed Agreement (Agreement), the Partnership recommits to the Bay watershed restoration effort that continues to be guided by science and the lessons learned from our experiences.

One of the most important lessons learned from the past three decades is that, while watershed-wide partnerships help to coordinate and catalyze, implementation happens locally. Local governments are key partners as are individual citizens, businesses, watershed groups and other non-governmental organizations. Working together to engage, empower and facilitate these partners will leverage resources and ensure better outcomes.

Watershed restoration and protection efforts have shown that measurable results coupled with firm accountability yield the most significant results. The Partnership stands ready to embrace new ideas, technologies and policies that will help meet its goals. The Partnership is committed to improving verification and transparency of its actions to strengthen and increase public confidence in its efforts.

The original agreement laid the foundation for a cooperative program that will now include New York, West Virginia and Delaware, as well as the original signatories, as full partners in the Chesapeake Bay Program and the Chesapeake Executive Council. Due in part to a 2009 Presidential Executive Order, more than 12 federal agencies have also reaffirmed and augmented their longstanding and shared commitment to restoring and protecting the Chesapeake Bay.

This Agreement acknowledges that the Partnership cannot address every issue at once and that progress must be made in a strategic manner, focusing on efforts that will achieve the most cost-effective results. Watershed restoration and protection have the potential to become integral drivers of the region's economy. To that end, the Partnership is committed to achieving restoration success while maximizing the economic benefits to local communities across the region. *The signatories to this voluntary Agreement commit to achieving the goal of restoring and protecting the Chesapeake Bay ecosystem and its living resources.* [April 29: Agreed to by all but WV; pending final approval by WV governor's office]

VISION

The Chesapeake Bay Program partners envision an environmentally and economically sustainable Chesapeake Bay watershed with clean water, abundant life, conserved lands and access to the water, a vibrant cultural heritage, and a diversity of engaged citizens and stakeholders.

PRINCIPLES

The following principles are an overarching framework by which the Partnership commits to operate. They encompass the Partnership's collective core values and are intended to help guide us in our work as the Partnership develops policy and takes actions to achieve the Agreement's goals and outcomes.

The Partnership will:

- **Work collaboratively** to achieve the purposes of this Agreement.
- **Achieve goals and outcomes** in a timely way and at the least possible cost to our citizens.
- **Represent the interests of people** throughout the watershed fairly and effectively, including a broad diversity of cultures, demographics and ages.
- **Operate with transparency** in program decisions, policies, actions and progress to strengthen public confidence in our efforts.
- **Utilize science-based decision making and seek out innovative technologies** to support sound management decisions in a changing system.
- **Maintain a coordinated watershed-wide monitoring and research program** to support decision-making and track progress and the effectiveness of management actions.
- **Acknowledge, support and embrace local governments** and other local entities in watershed restoration and protection activities.
- **Anticipate changing conditions**, including long-term trends in sea level, temperature, precipitation, land use and other variables.
- **Adaptively manage** all levels of the Partnership to foster continuous improvement.

- **Seek consensus** when making decisions.
- **Use place-based approaches**, where appropriate, that produce recognizable benefits to local communities while contributing to larger ecosystem goals.
- **Engage our citizens** to increase the number and diversity of people who support and carry out the conservation and restoration activities necessary to achieve the goals and outcomes of the Agreement.
- **Explore the application of social science** to better understand and measure how human behavior can drive natural resource use, management, and decision-making.
- **Promote environmental justice** through the meaningful involvement and fair treatment of all people regardless of race, color, national origin, or income in the implementation of this agreement.

[April 29: PSC approved a new environmental justice principle]

GOALS AND OUTCOMES

The commitments contained in this section are the goals and outcomes the signatories collectively will work on to advance restoration and protection of the Chesapeake Bay ecosystem and its watershed. The goals articulate the desired high-level aspects of our vision; while outcomes related to each goal are the specific, time-bound, measureable targets that directly contribute to achievement of the goals. Signatories will participate in achieving the outcomes of this Agreement in the manner described in the “management strategies development and implementation” section below. [April 29: Agreed to by all but WV; pending final approval by WV governor’s office]

The management strategies, further described in the next section of this Agreement, articulate the actions necessary to achieve the goals and outcomes identified below. This work will require effort from many, including all levels of government, academic institutions, non-governmental organizations, watershed groups and individual citizens. Local government will continue to play a unique and critical role in helping the Partnership realize the shared vision for the Chesapeake Bay. As the Partnership identifies new opportunities and concerns, goals and outcomes may be adopted or modified.

Except for those outcomes required by law and related to the implementation of the Chesapeake Bay Total Maximum Daily Load (TMDL) under the water quality goal, each signatory may exercise its discretion to participate in the development and implementation of individual outcomes’ management strategies depending upon relevance, resources, priorities, or other factors. Partnerships with other agencies, organizations, and stakeholders will be identified as appropriate. Signatories may decide to adjust their level of participation in the implementation of strategies as circumstances warrant.

While the goals and outcomes are described here by topic areas, they are interrelated. Improvements in habitat and water quality lead to healthier living resources. Environmentally literate citizens are stewards of the Bay's healthy watersheds. Better water quality means swimmable, fishable waters for Bay residents and visitors. Increased public access to the Chesapeake inspires people to care for critical landscapes and honor the region's heritage and culture. Healthy fish and shellfish populations support a vibrant economy for a spectrum of fishing-related industries. Examples like these are infinite. The signatories emphasize that all aspects of the ecosystem are connected and acknowledge that the following goals and outcomes support the health and the protection of the entire Bay watershed.

Any changes or additions to goals are approved by the Executive Council. Changes or additions to outcomes are approved by the Principals' Staff Committee, although significant changes or additions will be raised to the Executive Council for approval. Proposed changes to goals and outcomes or the addition of new goals or outcomes are open for public input before being finalized. Final changes or additions are publicly posted to the Bay Program website. [April 29: PSC approved new language]

Sustainable Fisheries

Habitat loss, poor water quality **non-native and invasive species, toxics** and fishing pressure continue to threaten the sustainability of the Chesapeake Bay's fisheries. Sustaining fish and shellfish populations contributes to a strong economy and maritime culture and supports a healthy ecosystem for all Bay watershed residents.

Goal: Protect, restore, and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.

- **Blue Crab Abundance Outcome:** Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females and continue to refine population targets through 2025 based on best available science.
- **Blue Crab Management Outcome:** ~~Improve the ability to~~ Manage for a stable and productive crab ~~population and~~ fishery ~~by including~~ working with the industry, recreational crabbers, and other stakeholders to improve commercial and recreational harvest accountability. **By 2018,** evaluate the establishment of a Bay-wide, allocation-based management framework with annual levels set by the jurisdictions **for the purpose of accounting for and adjusting harvest by each jurisdiction.** ~~that will provide stability for crabbing businesses and accountability of the harvest for each jurisdiction.~~

[April 29: PSC approved revised outcome]

- **Oyster Outcome:** Restore native oyster habitat and populations in 10 tributaries by 2025 **and ensure their protection** to recover the benefits of fish habitat and water quality improvements that healthy oyster reefs provide. [April 13-14: PSC approved edit]
- **Forage Fish Outcome:** By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay.
- **Fish Habitat Outcome:** Continue to identify and characterize critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.

Vital Habitats

Pressures from increasing needs for land and resources have resulted in fragmentation and degradation of many habitats across the watershed while also challenging the health of many Bay watershed species. Conserving healthy habitats and restoring the **connectivity and** function of degraded habitats is essential to the long-term resilience and sustainability of the ecosystem and the region's quality of life.

Goal: Restore, enhance, and protect a network of land and water habitats to support fish and wildlife ~~high-priority-species~~ and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.

- **Wetlands Outcome:** Create or re-establish 85,000 acres of tidal and non-tidal wetlands and enhance function of an additional 150,000 acres of degraded wetlands by 2025. These activities may occur in any land use (including urban) but primarily occur in agricultural or natural landscapes.
 - **Black Duck:** By 2025, restore, **enhance and preserve** wetland habitats **that ~~to~~** support a wintering population of 100,000 black duck, a species representative of the health of tidal marshes across the watershed. **Refine population targets through 2025 based on best available science.**
- **Stream Health Outcome:** Restore stream health and function by 10% above the 2008 level* throughout the watershed by 2025. *Note: **a 2008** baseline will be **re-assessed** **established by 2015.**
 - **Brook Trout:** Restore **and sustain** naturally reproducing brook trout populations in Chesapeake headwater streams with an 8 percent increase in occupied habitat by 2025.

[April 13-14: PSC approved edits]

- ***Fish Passage Outcome:*** By 2025, restore historical fish migratory routes by opening 1,000 additional stream miles, with restoration success indicated by the presence of alewife, blueback herring, American shad, hickory shad, American eel and/or brook trout. (2011 baseline year)
- ***Submerged Aquatic Vegetation (SAV) Outcome:*** Achieve and sustain the ultimate outcome of 185,000 acres of SAV Bay-wide necessary for a restored Bay. Progress towards this ultimate outcome will be measured against a goal of 90,000 acres by 2017 and 130,000 acres by 2025.
- ***Forest Buffer Outcome:*** Restore 900 miles per year of riparian forest buffer and conserve existing buffers until at least 70% of riparian areas throughout the watershed are forested.
- ***Tree Canopy Outcome:*** Expand urban tree canopy by 2,400 acres by 2025.

Water Quality

Excess amounts of nitrogen, phosphorus and sediment in the Bay and its tributaries have resulted in many portions of the Bay being listed as “impaired” under the Clean Water Act. The Chesapeake Bay Total Maximum Daily Load (TMDL) is driving nutrient and sediment reductions as described in the Watershed Implementation Plans (WIPs) adopted by the states and the District of Columbia and establishes the foundation for water quality improvements embodied in this Agreement. These plans set nutrient and sediment reduction targets for various sources -- stormwater, agriculture, air deposition, wastewater and septic systems. Restoring these waters is critical to overall Bay watershed restoration because clean water is the foundation for healthy fisheries, habitats and communities across the region.

April 13-14: PSC directed the Editorial Board to revise this introductory language to be more public-friendly.

Goal: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.

- ***2017 Watershed Implementation Plans (WIP) Outcome:*** By 2017, have practices and controls in place that are expected to achieve 60% of the nutrient and sediment pollution load reductions necessary to achieve applicable water quality standards compared to 2009 levels.
- ***2025 WIP Outcome:*** By 2025, have all practices and controls installed to achieve the Bay’s dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll a standards as articulated in the Chesapeake Bay TMDL document.

- ***Water Quality Standards Attainment and Monitoring Outcome:*** Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water-quality standards and trends in reducing nutrients and sediment in the watershed.

April 29: PSC agreed to new WQ Standards Attainment outcome.

Toxic Contaminants

Toxic contaminants harm fish and wildlife in the Bay and its watershed, and create risks to human health that limit the amount of fish that people can eat. Reducing the impacts of toxic contaminants is critical to improve the health of fish and wildlife, thereby improving their recreational value for citizens.

Goal: Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.

- ***Toxic Contaminants Research Outcome:*** Continually increase our understanding of the impacts and mitigation options for toxic contaminants. Develop a research agenda and further characterize the occurrence, concentrations, sources and effects of mercury, PCBs and other contaminants of emerging and widespread concern. In addition, identify which BMPs might provide multiple benefits of reducing nutrient and sediment pollution as well as toxic contaminants in waterways.
- ***Toxic Contaminants Policy and Prevention Outcome:*** Continually improve practices and controls that reduce and prevent the effects of toxic contaminants below levels that harm aquatic systems and humans. Build from existing programs to reduce the amount, and effects, of PCBs in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs, practices for other contaminants that need to be further reduced or eliminated.

[April 13-14: PSC agreed to a separate goal with 2 outcomes

April 29: PSC approved final outcome language]

Healthy Watersheds

Many small watersheds in the Bay region are currently healthy but are at risk of degradation as the demand for local lands and resources increases. Promoting the long-term conservation and protection of healthy watershed systems through stakeholder engagement, collaboration and education is critical to the health of the larger ecosystem.

Goal: Sustain state-identified healthy waters and watersheds, recognized for their exceptional high quality and/or high ecological value.

- **Healthy Waters Outcome:** ~~By 2025,~~ 100% of state-identified currently healthy water and watersheds remain healthy. [April 13-14: PSC approved edits]

Stewardship

The long-term future success of the Chesapeake Bay restoration effort will depend on local leadership; local action that depends primarily on a strong citizen stewardship. Building a larger, broader, and more diverse constituency of stewards for watershed restoration is needed to achieve the many other goals and outcomes outlined in this Agreement. Stewards bring the ACTION element for implementing the rest of the Agreement. There are over 600 local conservation and watershed organizations in our region that are educating and empowering citizens to restore and protect their local streams and rivers. There are tens of thousands of local citizen volunteers who donate their time and talent to our shared goals.

Goal: Increase the number and diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams and a vibrant Chesapeake Bay.

- **Citizen Stewardship Outcome:** Increase the number and diversity of trained and mobilized citizen volunteers with the knowledge and skills needed to enhance the health of their local watersheds.
- **Stewardship Metrics Outcome:** By 2015, work with Chesapeake Bay Program partners and other wide ranging academic, local government and citizen organizations to develop a metric for evaluating progress in citizen stewardship.
- **Local Leadership Outcome:** Continually increase the knowledge and capacity of local officials on issues related to water resources and in the implementation of economic and policy incentives that will support local conservation actions.
- **Diversity Outcome:** Identify minority stakeholder groups who are not currently represented in the leadership, decision making and implementation of the current conservation and restoration activities and create meaningful opportunities and programs to recruit and engage them in the partnership.

April 29: The PSC is still considering whether there should be a separate Stewardship Goal in the agreement; however, they approved adding local leadership and diversity outcomes and introductory language.

Land Conservation

The landscapes around the Bay and its tributaries are ecologically, culturally, historically and recreationally valuable to the people and communities of the region. Stimulating, renewing and

expanding commitments to conserve priority lands for use and enjoyment is an integral part of furthering the watershed's identity and spirit.

Goal: Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.

- **Protected Lands Outcome:** By 2025, protect an additional two million acres of lands throughout the watershed currently identified as high-conservation priorities at the federal, state or local level, including 225,000 acres of wetlands and 695,000 acres of forest land of highest value for maintaining water quality. (2010 baseline year)
- **Land Use Methods and Metrics Development Outcome:** Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a Chesapeake Bay watershed-wide methodology and local-level metrics for characterizing the rate of farmland, forest, and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds, and communities. Launch a public awareness campaign to share this information with local governments, elected officials, and stakeholders.

[April 29: PSC agreed to revised language]

- **Land Use Options Evaluation Outcome:** By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives, and planning tools that could assist local governments in their efforts to strategically track, manage and continually improve their capacity to the reduce the rate of conversions of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious. Strategies should be developed for supporting local governments and other efforts in reducing these rates by 2025 and beyond.

April 29: the PSC agreed on the intent of this outcome, but directed the ERB to work with WV, CBC and GIT5 to refine the wording to better reflect the intent. This revised language will be discussed at the next PSC meeting.

Public Access

Physical access to the Bay and its tributaries is very limited with real consequences for quality of life, local economies, and long-term conservation. Increasing public access to local waterways for fishing, swimming, boating, and other activities fosters a shared sense of responsibility and increased stewardship that supports Bay watershed restoration goals.

Goal: Expand public access to the Bay and its tributaries through existing and new local, state and federal parks, refuges, reserves, trails and partner sites.

- **Public Access Site Development Outcome:** By 2025, add 300 new public-access sites, with a strong emphasis on providing opportunities for boating, swimming and fishing, where feasible. (2010 baseline year)

Environmental Literacy

The future well-being of the Chesapeake Bay watershed will soon rest in the hands of its youngest citizens—more than three million students in kindergarten through 12th grade. Establishing strong, targeted environmental education programs now, provides a vital foundation for these future watershed stewards.

Goal: Enable every students in the region to graduate with the knowledge and skills to use scientific evidence and citizenship skills to act responsibly to protect and restore their local watershed.

- **Meaningful Watershed Educational Experience Student Outcome:** Continually increase the number of students' age appropriate understanding of the watershed through participation in participating in teacher-supported meaningful watershed educational experiences and rigorous inquiry instruction with a goal of at least one meaningful watershed experience in elementary, middle and high school depending on available resources.
- ~~School and School System Model Development Sustainable Schools Outcome:~~ Support and highlight models of sustainable schools and local education agencies that use system-wide approaches for environmental education. Continually increase the number of schools in the region that reduce the watershed, environmental and human health impact of their buildings and grounds through best practices, including student-led protection and restoration projects.
- **Environmental Planning Outcome:** By [2016], each Bay jurisdiction will develop a comprehensive and systemic approach to environmental literacy for all graduates in the region that should include policies, practices and voluntary metrics that measure the outcomes and goal of this agreement.
- ~~Environmental Literacy Metrics Outcome:~~ By 2014, develop baseline metrics to establish and measure outcomes related to student participation in teacher-supported meaningful watershed educational experiences and related activities.

April 29: No decision was reached on outcomes. May 2: The Virginia-led workgroup with other jurisdictions and the Stewardship Goal Team has developed alternative outcomes.]

Resiliency

Changing climatic and sea level conditions may alter the Bay ecosystem and human activities, requiring adjustment to policies, programs and projects to successfully achieve our restoration and protection goals for the Chesapeake Bay and its watershed. This challenge requires careful monitoring and assessment of these impacts and application of this knowledge to policies, programs and projects.

Goal: Increase the resiliency of the Chesapeake Bay watershed including its living resources, habitats, public infrastructure and human communities to withstand adverse impacts from changing environmental and climate conditions.

- **Monitoring and Assessment Outcome:** Continually monitor and assess the trends and likely impacts of changing climatic and sea level conditions on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects
- **Adaptation Outcome:** Continually pursue, design, and construct restoration and protection projects to enhance the resiliency of bay and aquatic ecosystems from the impacts of coastal erosion, coastal flooding, more intense and more frequent storms and sea level rise.

April 13-14: PSC agreed to include a Resiliency and Restoration Goal with 2 outcomes; “changing environmental conditions” will remain in the Preamble, Principles, and Management Strategies sections.

April 29: Introductory language, goal and outcomes language approved, but for the use of the word “climatic/climate; pending approval by PA.

MANAGEMENT STRATEGIES DEVELOPMENT AND IMPLEMENTATION

Within one year of the Agreement, Goal Implementation Teams will develop management strategies for the outcomes supporting the Agreement goals. These strategies will outline the means for accomplishing the outcome, monitoring, assessing and reporting progress and coordinating actions among partners and stakeholders, as necessary. Where appropriate, management strategies should describe how local governments, nonprofit and private partners will be engaged; where actions, tools or technical support are needed to empower local governments and others to do their part; and, what steps will be taken to facilitate greater local participation in achieving the outcomes.

Participation in management strategies or participating in the achievement of outcomes is expected to vary by signatory, based on differing priorities across the watershed. This participation may

include sharing knowledge, data or information; educating citizens or members; working on future legislation; and developing or implementing programs or practices. Management strategies, which are aimed at implementing outcomes, will identify participating jurisdictions and other stakeholders, including local governments and nonprofit organizations, will be implemented in two-year periods. The signatories and other partners shall thereafter update and/or modify such commitments every two years. Specific management strategies will be developed in consultation with stakeholders, organizations and other agencies, and will include a period for public comment and review prior to final adoption. The Principals' Staff Committee will report on adoption of management strategies at the next Executive Council meeting and report on implementation of management strategies every two years. [April 29: Agreed to by all but WV; pending final approval by WV governor's office]

Management strategies may address multiple outcomes if deemed appropriate. Goal Implementation Teams will reevaluate biennially and update strategies as necessary, with attention to changing environmental and economic conditions. Partners may identify policy changes to address these conditions and minimize obstacles to achieve the outcomes.

Stakeholder input will be incorporated into the development and reevaluation of each of the strategies. The Chesapeake Bay Program will make these strategies and reports on progress available to the public in a transparent manner on its websites and through public meetings of the appropriate Goal Implementation Teams and Management Board. The Management Board will approve these strategies.

If the Management Board determines that any strategy or plan developed prior to the signing of this Agreement meets the requirements of a management strategy as defined above, no new strategy needs to be developed. This includes, but is not limited to, the strategies and plans for implementing the Chesapeake Bay TMDL.

AFFIRMATION AND SIGNATURES

As Chesapeake Bay Program partners, we recognize the need to accelerate implementation of actions necessary to achieve the goals and outcomes outlined herein and realize our shared vision of a healthy and vibrant Chesapeake Bay watershed.

As Chesapeake Bay Program partners, we acknowledge that this agreement is voluntary and subject to the availability of appropriated funds. This agreement is not a contract or an assistance agreement. We also understand that this agreement does not pre-empt, supersede or override any other law or regulation applicable to each signatory. [April 29: Agreed to by all but WV; pending final approval by WV governor's office]

We the undersigned members of the Chesapeake Executive Council, reaffirm our commitment to support the goals of this Agreement and to work cooperatively in its implementation. We agree to work both independently and collaboratively toward the goals and outcomes of this Agreement and to implement specific management strategies to achieve them. Every citizen of this great watershed is invited to join with the Partnership, unite as a region and embrace the actions that will lead to success.

Date: _____

For the Chesapeake Bay Commission

For the Commonwealth of Pennsylvania

For the Commonwealth of Virginia

For the District of Columbia

For the State of Delaware

For the State of Maryland

For the State of New York

For the State of West Virginia

For the United States of America (EPA Administrator to sign on behalf of the Federal Government and the Federal Leadership Committee)