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.

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.

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.

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.

Sustainable Fisheries

Habitat loss, poor water quality 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.

<u>Goal</u>: 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 working with the industry, recreational crabbers, and other stakeholders to improve commercial and recreational harvest accountability. Evaluate the establishment of a Bay-wide, allocation-based management framework with annual levels set by the jurisdictions that will provide stability for crabbing businesses and accountability of the harvest for each jurisdiction.
- *Oyster Outcome*: Restore native oyster habitat and populations in 10 tributaries by 2025 to recover the benefits of fish habitat and water quality improvements that healthy oyster reefs provide.
- **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 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 highpriority 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 wetland habitats to support a wintering population of 100,000 black duck, a species representative of the health of tidal marshes across the watershed.
- **Stream Health Outcome**: Restore stream health and function by 10% above the 2008 level* throughout the watershed by 2025. *Note: baseline will be re-assessed.
 - o **Brook Trout**: Restore naturally reproducing brook trout populations in Chesapeake headwater streams with an 8 percent increase in occupied habitat by 2025.

- *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. 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.

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.

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 quality and/or high ecological value.

• *Healthy Waters Outcome*: By 2025, 100% of state-identified currently healthy water and watersheds remain healthy.

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: By 2015, develop a Chesapeake Bay watershed-wide methodology and metrics for measuring the rate of land conversions of agricultural and forest lands, and for measuring the extent and rate of change in impervious surface coverage.
- Land Use Options Evaluation Outcome: By 2017, evaluate policy options and identify potential incentives, resources and other tools that could assist local governments in their efforts to better manage and, when possible, reduce the rate of consumption of agricultural and forest lands, and rate of conversion of porous landscape to impervious surface.

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

- **Meaningful Watershed Educational Experience Outcome:** Increase the number of students participating in teacher-supported meaningful watershed educational experiences in elementary, middle and high school.
- **School and School System Model Development Outcome:** Support and highlight models of sustainable schools and local education agencies that use system-wide approaches for environmental education.
- **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.

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.

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.

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)