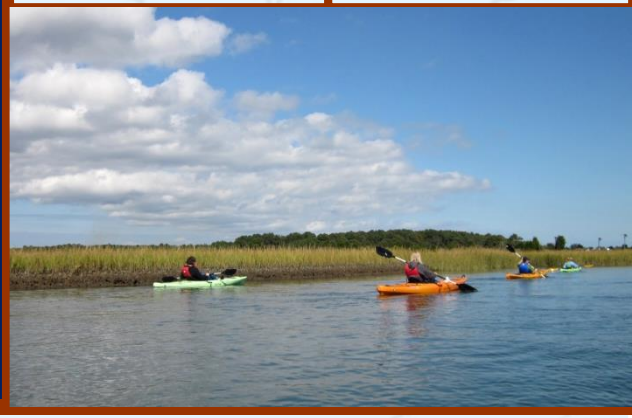
CBP Program Update on Bay Agreement Comments, Final Draft, and 2-Year Milestone Status

Citizens Advisory Committee
May 15, 2014



Jim Edward, Deputy Director
Chesapeake Bay Program, EPA

Chesapeake Bay Program
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Timeline for Evaluation of 2012-2013 Milestones and Development of 2014-2015 Milestones

- **2013/2015 - January 15, 2014:** 2013 programmatic and 2015 programmatic and input decks due to EPA. All received except for VA 2015 programmatic and input deck (agreed to extension until 3/15). Drafts posted on EPA TMDL website.
- **2015 – February 19, 2014:** Virginia submits preliminary programmatic milestones.
- **2015 - March 15, 2014:** Jurisdictions may choose to submit revised 2015 milestone input decks and programmatic commitments based on final 2013 Progress Scenario results.
  - Virginia submits draft milestones (programmatic and numeric) for 14/15

Timeline for Evaluation of 2012-2013 Milestones and Development of 2014-2015 Milestones

- **Mid-April 2014:** Share informal draft evaluation of final 2013 and draft 2015 milestones (both numeric and programmatic) with jurisdictions.
- **2015 - May 15, 2014:** Deadline for jurisdictions to submit final 2015 milestone input decks and programmatic commitments.
- **2015 - May 2014:** EPA removes “draft” designation on the TMDL website for the links to the jurisdictions 2015 milestone input decks and programmatic commitments.
- **End of June 2014:** EPA posts the Evaluation including the review of the final 2013 milestone progress, and the final 2015 milestone commitments on the TMDL website.

Public and Partner Comment Summary

- **Over 2,400 Public Comments (from individuals)**
  - 1,400+ on Climate Change
  - 400 + on Toxic Contaminants
- **Over 70 Sets of Comments from Organizations**
  - Environmental Groups – both local and national
  - Watershed Associations / Riverkeepers
  - Industry Sectors
  - Municipal
  - Citizens Bay Agreement
- **Partner Comments**
  - CBC, MD, NY, VA, WV, EPA, DOI, NOAA
  - CAC, LGAC, STAC

Summary Figures: PRIVATE CITIZENS' Comments received on Watershed Agreement
Updated 03.20.2014

Arranged by:
1. *jurisdiction from which they sent their email or letter*
2. *issues on which they commented*

Does include "form letters" submitted by individuals (ie: from Sierra Club members)
Does not include info from official comment letters from organizations

Total Comments

	Total No. Comments	Md.	Va.	Pa.	D.C.	De.	W.Va.	N.Y.	Unknown	Outside W-Shed
	2420+	925+	1295+	90+	15	4	10	55+	11	55+

Leading Issues

Issue	Total No. Comments	Md.	Va.	Pa.	D.C.	De.	W.Va.	N.Y.	Unknown	Outside W-Shed
Accountability and Enforcement	70+	2	60+	45+			1			5+
Climate Change	1450+	690+	750+		1		1			5+
Education and Environmental Literacy	70+	3	60+				1			5+
Hydraulic Fracturing	65+	1	60+				1			4
Public Access	75+	6	60+	1			1		1	5
Reporting Accuracy	65+		60+							5+
Stormwater Runoff	70+	3	60+		1		1			6
Toxic Contaminants (incl. road salt)	425+	185+	110+	40+	6	4	4	55+	6	15+
Water Quality/TMDL	65+	1	60+							4

Additional Issues

Issue	Total No. Comments	Md.	Va.	Pa.	D.C.	De.	W.Va.	N.Y.	Unknown	Outside W-Shed
Agriculture	9	6		1	1					1
Conowingo Dam	2	2								
Development	2		1		1					
Environmental Justice	4	1	1		1					1
Fisheries (incl. menhaden)	7	3	3						1	
Fish Passage	2		2							
Forest Buffers	1				1					
Homeowner Incentives	1		1							
Invasive Species	1	1								
Lawn Care	4	1	1						2	
Litter	2	1		1						
Natural Gas (Proposed Terminal)	3	2	1							
Shellfish	10	7	1		1				1	
Submerged Aquatic Vegetation	1	1								
Support for Agreement	10	6	2		1			1		
Wastewater Treatment	1	1								
Wetlands	2			1	1					

Partner Comment Registry

COMMENT PERIOD 2 – Draft Chesapeake Watershed Agreement 11/8/13

Partner Comments (MB, PSC, Jurisdictions, CBC, Fed Agencies/FOD, Advisory Committees, GIT Chairs)

Key	Text Formatting	*Italicized = not in current draft*
	red: strikethrou	highlight = technical change, new goal/outcome recommendation
	green: addition	blue = partner-stakeholder comment theme overlap

Partners that submitted comments include:

CAC, 9/12/13	MD, 3/17/14
CAC 2013 EC Report 12/12/13	New York, 3/14/15
CAC 3/17/14	NOAA, 12/9/13
CBC 12/4/13	STAC 2013 EC Report 12/12/13
DOI, 3/17/14	STAC Recommendations 1/17/14
EPA, 3/17/14	Virginia, 3/17/14
FWS 3/14/15	West Virginia, 12/4/13
LGAC 2013 EC Report 12/12/13	

Row #	Agreement Section Tag	Theme	Comment	Source	Date	Team Assignment	Status (change, no change, pending)	Resolution (explanation of status)
1	Preamble	Address Emerging Threats	Third, there are several emerging threats to sustained Bay restoration progress that we believe must be addressed in the **preamble, operational commitments or in the management strategies** to accompany the Agreement. We recommend language in the Agreement be modified to **include new stresses** facing the Bay restoration from such concerns as **changing climate and sea level conditions, sediment build up behind dams in the watershed, and**	CAC	9/12/13	ERB		
1	Preamble	Statutory clarification	The signatories to this voluntary Agreement commit to achieving the goal of restoring and protecting the Chesapeake Bay ecosystem and its living resources consistent with Section 117 of the Clean Water Act.	EPA	3/17/14	ERB		
1	Preamble	Climate Change	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) climate change.	EPA	3/17/14	IRC-MD		
1	Preamble	Voluntary program	Clarification: The original agreement laid the foundation for a cooperative and voluntary program	EPA	3/17/14	ERB		
2	Vision							
3	Principles	Climate Change	**Climate change** - The current draft only refers to "changing environmental conditions" and does not refer to the many aspects of climate change the Chesapeake region faces. Addressing **climate change was a significant part of the Executive Order 13508 Strategy** with clear commitments from federal agencies. The current draft **Agreement inadequately recognizes climate change and its implications** for communities and achieving protection and	NOAA	12/9/13	IRC-MD		
3	Principles	Climate Change	euphemism "changing environmental conditions" or "changing system". Regardless of your belief of the causes of climate change, science is showing that it is occurring. We understand that climate change is a sensitive political issue and this caused it to be downplayed in the Agreement. However, we believe that **an Agreement that seeks to guide restoration for more than the next decade should openly recognize the need to adapt to climate change. Integrating climate change into all the Management Strategies will hopefully yield implementation practices that look to the future of changing conditions**. As your citizen advisors we believe climate change will be a determining	CAC 2013 EC Report	12/12/13	IRC-MD		
3	Principles	Monitoring	Explicit recognition of the need for sustained physical, chemical, and biological **monitoring to track progress toward identified critical water quality and living resource goals** and to **improve our understanding of the Chesapeake Bay watershed** and estuarine system **to allow refinement of model predictions**. Careful analysis of this **monitoring data is the only way to provide the information necessary for you and the public to**	STAC 2013 EC Report	12/12/13			
			I would also like to reiterate the importance of implementing a **multiple model strategy**, which STAC believes can provide **the most efficient strategy to characterize uncertainty in the model predictions**, and ultimately, to refine our scientific understanding. STAC believes this strategy, coupled with monitoring data to inform the modeling efforts, will help build understanding and confidence in our					

Public Stakeholder Registry

Draft 3/28/14

COMMENT PERIOD 2 - Draft Chesapeake Watershed Agreement 11/8/13

Stakeholder Comments (Public Individuals, Organizations with Standing)

Key	Text Formatting:	*Italicized = not in current draft*
	red: strikethrough	highlight = technical change, new goal/outcome recommendation
	green: addition	blue = partner-stakeholder comment theme overlap

**Comments expressing simple support for what already exists in the agreement have been exported to the 3rd tab.

Row #	Agreement Section Tag	Theme	Comment	Source	Date	Team Assignment	us (change, no change, penc	Resolution (explanation of status)
1	Preamble	Accountability	While the draft Agreement recognizes that "measurable results coupled with firm accountability yield the most significant results,"1 this agreement fails to provide the accountability mechanisms necessary for success.	Conservation Pennsylvania, Choose Clean Water Coalition, Virginia League of Conservation Voters, Potomac Conservancy, Potomac Riverkeeper	3/17/2014, 3/13/2014, 3/13/2014, 3/17/2014, 3/17/2014	IRC		
1	Preamble	Adaptive Management	the Final Draft still lacks a strong statement supporting adaptive management. Plans pursuant to the Agreement must be revised over time as we gain a better understanding of the underlying scientific connection between management practices and water quality response. The only reference to adaptive management relates to internal governance: "Adaptively manage all levels of the Partnership to foster continuous improvement." **VAMWA recommends that the Preamble section of the Final Draft be revised to include a statement in support of adaptive management during the implementation phase of the Bay Agreement.** "Measurable results coupled with firm accountability" suggests we will not have the flexibility to manage differently ten years into implementation if we find an approach that reduces nutrients and/or sediment at a lower-cost or in a more socially acceptable way.	VAMWA	3/17/2014	GIT6		
1	Preamble	Conflict of Voluntary vs Regulatory	Preamble states that "Watershed restoration and protection efforts have shown that measurable results coupled with firm accountability yield the most significant results." VAMWA questions the inclusion of this sentence for several reasons, ... VAMWA believes the partners must break from the traditional paradigm of calling for point source consequences when other sources contribute more in terms of total load and, along those lines, avoid any language in the new agreement that implies consequences for point sources that meet their 2010 TMDL allocations.	VAMWA	3/17/2014	IRC-EPA/GIT3		
1	Preamble	Citizen stewardship	It is also important to recognize in the preamble and in language describing this [Local Stewardship] goal, that the partnership's methods and plan of action will likely change when more diverse participants are included. It should be clear that our intent is to not simply inform but to seek common ground between the needs of the Bay restoration effort and the needs of the watershed's diverse residents. The new Bay agreement currently speaks more to those already involved in and informed about Bay restoration. As the Bay restoration effort seeks to involve more diverse watershed residents it should be understood that our current methods may change due to the new ideas and perspectives of those joining the environmental conversation.	Alliance for the Chesapeake Bay	3/17/2014	IRC-DC		
			Given the specific and direct role that local governments and utilities have in implementation, beyond just being a stakeholder, **we recommend the following addition to the current Preamble text:** "Local governments are key partners as are individual citizens, businesses,					

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

BIN #1: IRC Recommendations to the PSC for possible inclusion in the Final Agreement (require issue papers)

Bin #2: Issues raised that need further consideration/analysis by IRC, GITs, Editorial Board and/or Management Board prior to making recommendations to PSC.

BIN #3: Issues raised in comments that the IRC recommends do not necessitate changes or additions to the Final Agreement.

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

BIN #1: IRC Recommendations to the PSC for possible inclusion in the Final Agreement (require issue papers)

1. Toxic Contaminants – add outcomes to Agreeemnt
   Champion: Adhoc Toxics Team: Greg Allen, EPA; Scott Phillips, USGS; Russ Baxter, VA & Ann Swanson

2. Climate Change - resiliency, adaptation, preparedness
   Champion: MD

3. Participatory Language - must sign up as part of agreement or develop management strategies in advance of signing the agreement. Report annually.
   Champion: WV, NY, MD, EPA

4. TMDL/WIPs – address agriculture, stormwater, and atmospheric deposition in agreement.
   Champion: EPA & GIT 3

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

BIN #1: continued

5. Impervious surface - related to land use outcomes
   Champion: CBC & GIT 3

6. Stewardship – Add goal/outcomes
   Champion: D.C., GIT 5

7. a. Environmental Justice – Need to address in Agreement
   b. Diversity goals for committee structure
   Champion: MD

8. Conowingo Dam – Address in Agreement
   Champion: MD

9. Governance – the EC should make all changes to outcomes, not the PSC. Can't change goals and outcomes without public comment period
   Champion: CBC

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

Bin #2: Issues raised that need further consideration/analysis by IRC, GITs, Editorial Board and/or Management Board prior to making recommendations to PSC.

1. Urban Tree Canopy Outcome – increase (or decrease) the outcome
   Assignment: GIT 2

2. Land Conservation Goal – increase to 2.5 million acres (or decrease)
   Assignment: GIT 5

3. Public Access Goal & Outcome
   a. Increase the number of sites b. Recognize private partners **Assignment**: GIT 5

4. Environmental Literacy Outcomes – strengthen & broaden **Assignment**: GIT 5

5. Fish Passage Outcome – highlight dam removals and focus on hydro electric dams
   Assignment: GIT 2

6. Freshwater Fisheries Outcome – add new outcome **Assignment**: GIT 1

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

Bin #2: continued

7. Forage Fish Outcome – management should follow study results
   Assignment: GIT 1
8. Oyster Outcome – protect existing oyster reefs **Assignment**: GIT 1
9. Wetlands Outcome – needs a no net loss commitment **Assignment**: GIT 2
10. Trash – refer to citizen stewardship group & water quality sections **Champion**: D.C. & MD
11. Water Quality Standards Attainment Outcome – add new outcome, tabled issue from Fall PSC meeting **Assignment:** EPA
12. Funding/Financing
    a. Emphasize technical/funding assistance to local governments
       Assignment: MB, IRC, EB
    b. Integrated affordability concepts into management strategies
       Assignment: Goal Implementation Teams
    c. Create a Financial Advisory Committee
       Assignment: Management Board. **Discussion at IRC**: Post PSC retreat.

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

Bin #2: continued

13. Accountability/Verification/Independent Evaluation
    Assignment: GIT 6, IRC

14. Explanation needed for how numeric goals, outcomes and baselines were developed (including net increase issue). **Assignment**: Editorial Board/GITs

15. STAC comments
    Note: GITs should consider potential revisions to their outcomes based on STAC recommendations if possible at this stage, and consider in developing Management Strategies. **Assignment**: Goal Implementation Teams

16. Numerous comments on Principles to be considered by IRC and Editorial Board
    Assignment (text): Editorial Board; **Assignment** (policy): IRC.

"Bins" for IRC Review of Public and Partner Comments on Draft Agreement

BIN #3: Issues raised in comments that the IRC recommends do not necessitate changes or additions to the Final Agreement.

- Some issues in Bin #1 or #2 will be moved down into Bin #3.
- Additional issues will be included in Bin #3 from both public and partner comments.
- This Bin would include issues raised that Partnership believes could be considered in developing Management Strategies and/or revising CBP Governance Document.

1. Hydrologic Fracking – IRC recommendation for PSC (March 26, 2014 meeting)

Issues Paper Format

- Current Language
- Options (IRC recommendations highlighted in yellow)
- Partner Comments
- Stakeholder / Public Comments
- Background

*** Issue Papers Developed for all Bin #1 Issues ***

Version: 5-8-14
(PSC-agreed changes to public comment version through 5-6-14 mtg.)

Chesapeake Bay Watershed Agreement

Chesapeake Bay Program
Science. Restoration. Partnership.

PSC Working Draft

Includes Changes through 5-6-14

Version: 5-8-14
(PSC-agreed changes to public comment version through 5-6-14 mtg.)

2014 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

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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. [PSC approved 5-6-14]

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.

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- ***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. [PSC approved 4-29-14]

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. [PSC approved 5-6-14]

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, businesses [PSC approved 5-6-14] 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.~~ [PSC approved 4-14-14]

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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.~~ [PSC approved 5-6-14] 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. [PSC approved 4-29-14]

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 r~~Refine population targets through 2025 based on best available science. [PSC approved 5-6-14]

- ***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.~~ [PSC approved 4-29-14]

- ***Oyster Outcome***: Continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations. 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~~. [PSC approved 5-6-14]

- ***Forage Fish Outcome***: Continually improve the capacity to understand the role of forage fish populations in the Chesapeake Bay. By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay. [PSC approved 5-6-14]

- ***Fish Habitat Outcome***: ~~Continue to~~ Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing 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. [PSC approved 5-6-14]

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. [PSC approved 4-14-14]

- ***Wetlands Outcome:*** Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. 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. [PSC approved 5-6-14]

    - ***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. [PSC approved 5-6-14]

- ***Stream Health Outcome***: Continually improve stream health and function throughout the watershed. Improve ~~Restore stream~~ health and function of ~~by~~ 10% of stream miles above the

2008 baseline for the Chesapeake Bay watershed ~~level~~ throughout the watershed by 2025. *Note: a 2008 baseline will be ~~re-assessed~~ established by 2015. [PSC edits 4-14-14; approved 5-6-14]

- ***Brook Trout***: Restore and sustain naturally reproducing brook trout populations in Chesapeake headwater streams with an 8 percent increase in occupied habitat by 2025. [PSC approved 5-6-14]

- ~~***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) [PSC approved 5-6-14]~~

- **Fish Passage Outcome**: Continually increase available habitat to support sustainable migratory fish populations in Chesapeake Bay freshwater rivers and streams. By 2025, restore historical fish migratory routes by opening 1,000 additional stream miles, with restoration success indicated by the consistent presence of alewife, blueback herring, American shad, hickory shad, American eel, and brook trout, to be monitored in accordance with available agency resources, and collaboratively developed methods. [Consensus language reached between GIT2 and STAC 5-7-14]

- ***Submerged Aquatic Vegetation (SAV) Outcome***: Sustain and increase the habitat benefits of SAV in the Chesapeake Bay. 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 target ~~goal~~ of 90,000 acres by 2017 and 130,000 acres by 2025. [PSC approved 5-6-14]

- ***Forest Buffer Outcome***: Continually increase the capacity of forest buffers to provide water quality and habitat benefits throughout the watershed. 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. [PSC approved 5-6-14]

- ***Tree Canopy Outcome***: Continually increase urban tree canopy capacity to provide air quality, water quality, and habitat benefits throughout the watershed. Expand urban tree canopy by 2,400 acres by 2025. [PSC approved 5-6-14]

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

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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. [PSC approved 4-14-14; directed the Editorial Board to revise this 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. [PSC approved 5-6-14]

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. [PSC approved 4-14-14]

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. [PSC approved goals and outcomes 4-29-14; agreed to separate goal 5-6-14]

- *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.~~ [PSC deleted 5-6-14]

- **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.

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. [PSC approved 4-29-14]

- ***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 continually improve their capacity to the reduce the rate of conversion 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. [PSC approved 5-6-14]

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 student~~s~~ 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. [PSC approved 4-29-14]

- ***~~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 target of at least one meaningful watershed educational

experience in elementary, middle and high school depending on available resources. [PSC approved 5-6-14]

- ~~*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-let protection and restoration projects. [PSC approved 5-6-14]

- **Environmental Literacy Planning Outcome:** Each participating 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. [PSC approved 5-6-14]

- ~~*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.~~

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.
[PSC agreed to Goal with 2 outcomes; "changing environmental conditions" will remain in the Preamble, Principles, and Management Strategies sections. 4-14-14] [PSC approved final wording 5-6-14]

Version: 5-8-14
(PSC-agreed changes to public comment version through 5-6-14 mtg.)

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. [PSC approved 5-6-14]

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.

Version: 5-8-14
(PSC-agreed changes to public comment version through 5-6-14 mtg.)

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. [PSC approved 5-6-14]

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)