

# Group 1

(Day 1) May 7, 2025

# SUBMERGED AQUATIC VEGETATION

Habitat GIT

SAV Workgroup

Presenter: Brooke Landry

## PROPOSED DRAFT OUTCOME LANGUAGE:

Sustain and increase the habitat and ecosystem benefits of SAV in the Chesapeake Bay. Achieve and sustain the ultimate outcome of 196,000 acres of SAV Bay-wide necessary for a restored Bay.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

Sustain and increase the habitat benefits of submerged aquatic vegetation (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 toward this ultimate outcome will be measured against a target of 90,000 acres by 2017 and 130,000 acres by 2025.

# SUBMERGED AQUATIC VEGETATION

Habitat GIT  
SAV Workgroup  
Presenter: Brooke Landry

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Progress toward this ultimate outcome will be measured against a target of 90,000 acres by 2030 and 95,000 acres by 2035.	Update of existing	May 2025
Progress will also be measured against the following targets for each salinity zone: <ul style="list-style-type: none"><li>•Tidal Fresh: 21,330 acres</li><li>•Oligohaline: 13,094 acres</li><li>•Mesohaline: 126,032 acres</li><li>•Polyhaline: 35,790 acres</li></ul>	New	May 2025

# SUBMERGED AQUATIC VEGETATION

Habitat GIT

SAV Workgroup

Presenter: Brooke Landry

- Increasing the ultimate SAV goal to 196,000 acres will align the outcome with water clarity standards and will result in a more accurate reflection of potential SAV extent in each Bay segment.
- Interim targets were determined using linear regression on the Bay-wide totals and assume steady growth.
- The forecasted acreage targets for 2030 and 2035 are based on an **average** 1.1% growth exhibited per year.
- Including specific SAV acreage targets for each salinity zone accommodates the variability in SAV community trends in different parts of the Bay.

# Brook Trout Outcome

Habitat GIT

Brook Trout Workgroup

Presenter: Dan Goetz (WG Co-chair)

## PROPOSED DRAFT OUTCOME LANGUAGE:

Protect and enhance brook trout within the Chesapeake Bay watershed by increasing:

- Occupancy in stronghold and persistent patches by 1% and no net loss in other patches by 2035
- Abundance at 10 (2 per state) sentinel monitoring sites within priority patches by 2035
- Resiliency within stronghold and persistent patches by reducing identified threats by XX% through BMP implementation by 2035

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

Restore and sustain naturally reproducing brook trout populations in Chesapeake headwater streams with an eight percent increase in occupied habitat by 2025.

# Brook Trout Outcome

Habitat GIT

Brook Trout Workgroup

Presenter: Dan Goetz (WG Co-chair)

## PROPOSED TARGET

New Target /  
Update of  
Existing  
Target

Date  
estimate for  
target being  
developed

Occupancy in stronghold and persistent patches by 1% and no net loss in other patches by 2035.

Update of  
Existing

n/a

Abundance at 10 (2 per state) sentinel monitoring sites within priority patches by 2035.

New Target

n/a

Resiliency within stronghold and persistent patches by reducing identified threats by XX% through BMP implementation by 2035.

New Target

Late May  
2025

**Target 1: Occupancy** in stronghold and persistent patches **by 1%** and **no net loss in other patches** by 2035

- Original 8% did not take into consideration the expansion of brook trout stressors
- Actual increase since 2014 was actually +0.5% in occupied brook trout habitat
- Conservation as a new pillar of the Bay Program
- Desire to sustain current brook trout populations

Methodology of tracking:

Jurisdictional monitoring of previously documented brook trout populations.

- Where logistically feasible, and at biologist's discretion, the amount of occupied habitat may be inferred through downstream occupancy, as it was in the Trout Unlimited GIT-funded project to identify +0.5% brook trout occupied habitat.

## Target 2: Abundance at 10 (2 per state) sentinel monitoring sites within priority patches by 2035

- Added Abundance metric to be able to **determine if healthy populations are starting to decline**, and
  - Have the ability to **implement corrective habitat practices** to maintain or increase abundance.
- Sustained or increasing brook trout in stronghold and persistent patches is a **good indicator that land use and stream health are improving**.

### Methodology of tracking:

- Fish counts at sentinel monitoring sites using electrofishing depletion surveys.
- Before, After, Control, Impact (BACI) sampling efforts prior to and following habitat enhancement projects to determine net adult brook trout population increase.



**Target 3: Resiliency** within stronghold and persistent patches by reducing identified threats by XX% through BMP implementation by 2035

- Added Resiliency metric because of the reality of **poor land use practices** and **uncertain changing environmental conditions**

Methodology of tracking:

- Initial GIS analysis to quantify total threats in stronghold and persistent patches.
- Project data, following BMP implementation, will be input into the Chesapeake Bay Habitat Tracker.

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Achieve and maintain suitable shallow water fish habitat in tidal and non-tidal areas for key species through focused water quality, conservation and restoration improvements informed by a synthesis of fisheries science and habitat assessments.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

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.

# Fish Habitat

Sustainable Fisheries GIT  
Fish Habitat Action Team  
Presenter: Bruce Vogt

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Measure (or score) shallow water fish habitat conditions in the 92 tidal segments by 2026 to prioritize areas for water quality improvements, conservation and habitat restoration. Continually assess changes in fish habitat conditions through 2040. [under construction]	New target	2025
Develop status and trends of structured fish habitat including oyster reefs, SAV, tidal wetlands, and shoreline condition within the 92 bay segments by 20xx. [under construction]	New target	2025
Annually evaluate and communicate indicators of forage status and trends that provide information to inform management on the availability of food for key predator species as environmental conditions change. [under construction]	Updated target	2025
Annually (or Continually) track, analyze and communicate the movement and habitat use of striped bass and other species to inform restoration and fishery management decisions.[under construction]	New target	2025
Use the Nontidal Fish Habitat Assessment as output for fish habitat condition. This can be measured as a % improvement from xxxx baseline. [under construction]		
Acid Mine Drainage (share output with Brook Trout) [under construction]		

- Current efforts to improve water quality and restore nearshore and aquatic habitats in the Chesapeake Bay are aimed at improving conditions for fish, however, we don't currently assess and track the condition of fish habitat well.
- The CESR report suggested that more emphasis on improving conditions in shallow water could enhance outcomes for living resources.
- This outcome and associated targets aims to improve fish habitat assessments, inform fishery management, prioritize areas for habitat restoration and support implementation of tiered TMDL.

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Increase, enhance, and protect wetlands to support living resources, including waterbirds and fish, and provide water quality, flood and erosion protection, recreation and other valuable benefits to people.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 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.

# WETLANDS

Habitat GIT

Wetlands Workgroup

Presenter: Pam Mason, VIMS

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Tidal Wetlands Target - Restore or create 5,500 acres and enhance 15,000 acres by 2035. The Bay Program will continue to calculate and report on wetland losses occurring throughout the performance period to ensure a net positive impact is achieved.	Update of existing	December 2025
Non-tidal Wetlands Target – Restore or create 9,500 acres and enhance 15,000 acres by 2035. The Bay Program will continue to calculate and report on wetland losses occurring throughout the performance period to ensure a net positive impact is achieved.	Update of existing	December 2025
Protection Target - Same as the Protected Lands Outcome and will be tracked under that goal.	New	December 2025
Every two years each jurisdiction implements one large-scale (to be defined by jurisdictions) or equivalent area of several smaller conservation, enhancement, or restoration projects/year.	New	July 2026
Waterbird Target: Under Construction	New	July 2026

- More specificity with separate tidal and nontidal wetlands targets
- Highlighting the benefits of wetlands in the outcome language will create more buy-in
- Protection was not a target before, but is equally important as creation, restoration, and enhancement
- Integration of waterbirds to utilize existing datasets that will aid in indicating wetland health
- We propose a 1% restoration/creation goal (15,000 acres) and a 2% enhancement goal (30,000 acres)

# Fish Passage Outcome

Habitat GIT

Fish Passage Workgroup

Presenter: Nick Staten (WG Staffer)

## PROPOSED DRAFT OUTCOME LANGUAGE:

Improving habitat, water quality, and creating more resilient and sustainable populations of fish and other aquatic organisms throughout the Chesapeake Bay Watershed's coastal and freshwater rivers and streams by removing barriers to restore aquatic organism passage and connectivity to at least 150 miles of aquatic habitat every two years.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

Continually increase access to habitat to support sustainable migratory fish populations in Chesapeake Bay freshwater rivers and streams. By 2025, restore historical historic fish migratory routes by opening an additional 132 miles every two years to fish passage, 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.

\*As amended, January 28, 2020 by the Principals' Staff Committee. See p. 17 for details and online at [https://www.chesapeakebay.net/what/what\\_guides\\_us/watershed\\_agreement](https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement) .



# Fish Passage Outcome

Habitat GIT  
Fish Passage Workgroup  
Presenter: Nick Staten (WG Staffer)

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Restoring connectivity to at least 150 miles of aquatic habitat every two years	Update of Existing Target	n/a

There are two major differences between 2014 and 2025 outcome language:

1. Broaden target from migratory fish to aquatic communities.
2. Increase restoration goal from 132 to 150 miles every two years.

# Fish Passage Outcome

Habitat GIT

Fish Passage Workgroup

Presenter: Nick Staten (WG Staffer)

1. Broaden target from migratory fish to aquatic communities.
  - a. When looking at what constitutes healthy, well connected habitat, the **presence of a few target fish species is not an accurate representation of the system's ecological potential.**
  - b. This does not take away from the importance of alewife, blueback herring, American shad, hickory shad, American eel and brook trout presence, but rather **provides the opportunity to strengthen passage project proposals that benefit multiple aquatic species and is more applicable for all jurisdictions.**

2. Increase restoration goal from 132 to 150 miles every two years.
  - a. **Consistent success of opening 132 miles every two years.**
  - b. Due to **uncertainty of available federal resources** and **professional judgement** of State Fish Passage Coordinators, the Workgroup **conservatively proposes an increase to reconnecting 150 miles** of habitat every two years.

## **Methodology for data collection and tracking of each Target:**

- Chesapeake Fish Passage Prioritization Tool tracks “upstream functional network” opened from a barrier removal.

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Continually improve and protect stream health and ecological integrity, including their living resources, functions, and ecosystem services for people, throughout the watershed using sound science to inform land management, planning, and conservation.

- Improve health and ecological integrity of at least 3% of non-tidal stream miles every 6 years.
- Annually increase the stream miles protected by X% per year or X% over 10 years
- Develop multi-metric stream health indicators to complement the Chesapeake Basin-wide Index of Biological Integrity (Chessie BIBI) by 202X.
- Healthy Watersheds New Measurable Target TBD.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

Continually improve stream health and function throughout the watershed. Improve health and function of ten percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed.

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Improve health and ecological integrity of at least 3% of non-tidal stream miles every 6 years.	Update of Existing	n/a
Annually increase the stream miles protected by X% per year or X% over 10 years.	New Target	May 2025
Develop multi-metric stream health indicators to complement the Chesapeake Basin-wide Index of Biological Integrity (Chessie BIBI) by 202X.	New Target	May 2025
Healthy Watersheds New Measurable Target TBD.	New Target	May 2025

There are a few major changes to the 2014 outcome language:

1. The addition of protection and conservation in the broad statement and developing a metric for protection,
2. Clarifying what we mean by “stream health” and the scope of the Stream Health Workgroup,
3. Changing from “10% above 2008 baseline”, to “3% of non-tidal stream miles every 6 years”,
4. Working with the Protected Lands Workgroup, a new Healthy Watershed target is under construction.
5. The addition of a new time-bound target: the multi-metric assessment of stream health.



## Topics/challenges for Management Board guidance:

Pennsylvania has asserted that they are not supportive of outcome language or metrics as they feel the metrics “are unrealistic and will create unnecessary additional resource needs and reporting burden on jurisdictions that do not align with current existing jurisdiction laws, policies and regulations.”

## Pennsylvania proposes the following language:

Continually improve and protect non-tidal and tidal stream health and ecological integrity throughout the watershed based on sound science, planning, technology and data. (High Level Language)

- Bi-annually measure the health and function of stream miles watershed-wide, utilizing the extensive data provided by each jurisdiction through the required U.S. EPA 305b Integrated Water Quality Reports submitted by each Chesapeake Bay jurisdiction. (Measurable Target).

# Group 2

(Day 1) May 7, 2025

# Blue Crab Sustainability

SUSTAINABLE FISHERIES GIT

CBSAC

Presenter: Bruce Vogt

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Achieve a sustainable bay wide blue crab fishery through cross jurisdictional coordination that supports healthy blue crab populations and thriving fishing communities.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females. Refine population targets through 2025 based on best available science.

# Blue Crab Sustainability

SUSTAINABLE FISHERIES GIT  
CBSAC

Presenter: Bruce Vogt

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Continually maintain abundance and harvest rate targets as determined by the 2026 benchmark stock assessment. [under construction]	New target	2025
Annually evaluate and communicate stock status through the annual blue crab advisory report and refine targets, as needed, through the next stock assessment. [under construction]	New target	2025

# Blue Crab Sustainability

SUSTAINABLE FISHERIES GIT  
CBSAC

Presenter: Bruce Vogt

- Blue crabs are economically and ecologically important. The blue crab population is assessed Bay wide but the fishery is managed by three separate jurisdictions.
- Blue crab abundance varies year to year and geographically. Blue crabs move across the three jurisdictional boundaries. Therefore, coordination between jurisdictions is key to achieving bay wide population levels and sustainable harvest.
- Science derives population targets that inform management decisions and supports annual population assessments.

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Increase ecosystem benefits from oysters through reef habitat restoration, sustainable harvest, and aquaculture.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

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.

## PROPOSED TARGET

	New Target / Update of Existing Target	Date estimate for target being developed
Restore or conserve at least 1800 additional acres of oyster reef habitat managed as non-harvest reefs, concentrated primarily in restoration focus areas [under construction]	New target	2025
Maintain sustainable oyster abundance and enhance their capacity to improve water quality through the oyster fishery and aquaculture practices [under construction]	New target	2025
Maintain reefs established under the 2014 Chesapeake Bay Watershed Agreement to achieve restoration success metrics [under construction]	New target	2025

- The current outcome will be successfully met.
- Partners have agreed there is a need for additional oyster restoration and conservation. Additional projects are already being planned or underway.
- An update outcome allows for the partnerships and “secret sauce” to continue around a common target.
- The novel fishery target engages oyster fishery and aquaculture and allows for sustainable management of these fisheries to count toward water quality enhancement.



# Group 3

(Day 1) May 7, 2025

# Healthy Forests and Trees

Water Quality GIT

Forestry Workgroup

Presenter: Katie Brownson

## PROPOSED DRAFT OUTCOME LANGUAGE:

Conserve and restore forests and tree cover to maximize benefits for water quality, habitat and people throughout the watershed, with a particular focus on riparian areas and communities.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

*Note the new outcome is consolidating and replacing two outcomes in the 2014 Watershed Agreement.*

**Tree Canopy:** 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.

**Forest Buffers:** Continually increase the capacity of forest buffers to provide water quality and habitat benefits throughout the Chesapeake Bay watershed. Restore 900 miles of riparian forest buffers per year and conserve existing buffers until at least 70 percent of riparian areas in the watershed are forested.

# Healthy Forests and Trees

Water Quality GIT

Forestry Workgroup

Presenter: Katie Brownson

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
<b>Tree Canopy:</b> Working toward a net gain in canopy, reduce the loss of existing canopy and plant and maintain 35,000 acres of community trees by 2035.	Update	Ready
<b>Forest Buffers:</b> Working toward having 75% of riparian areas forested throughout the watershed, plant and maintain 7,500 acres of forest buffers annually. Reduce the loss of existing buffers to achieve no less than 71% of riparian areas forested by 2035.	Update	Ready
<b>Forest Conservation:</b> Working toward a net gain in forests across the watershed, reduce the loss of forests to development and plant and maintain ## acres of new forests by 2035.	New	Summer 25
<b>Forest Stewardship:</b> Under Construction	New	2026?

# Healthy Forests and Trees: Tree Canopy

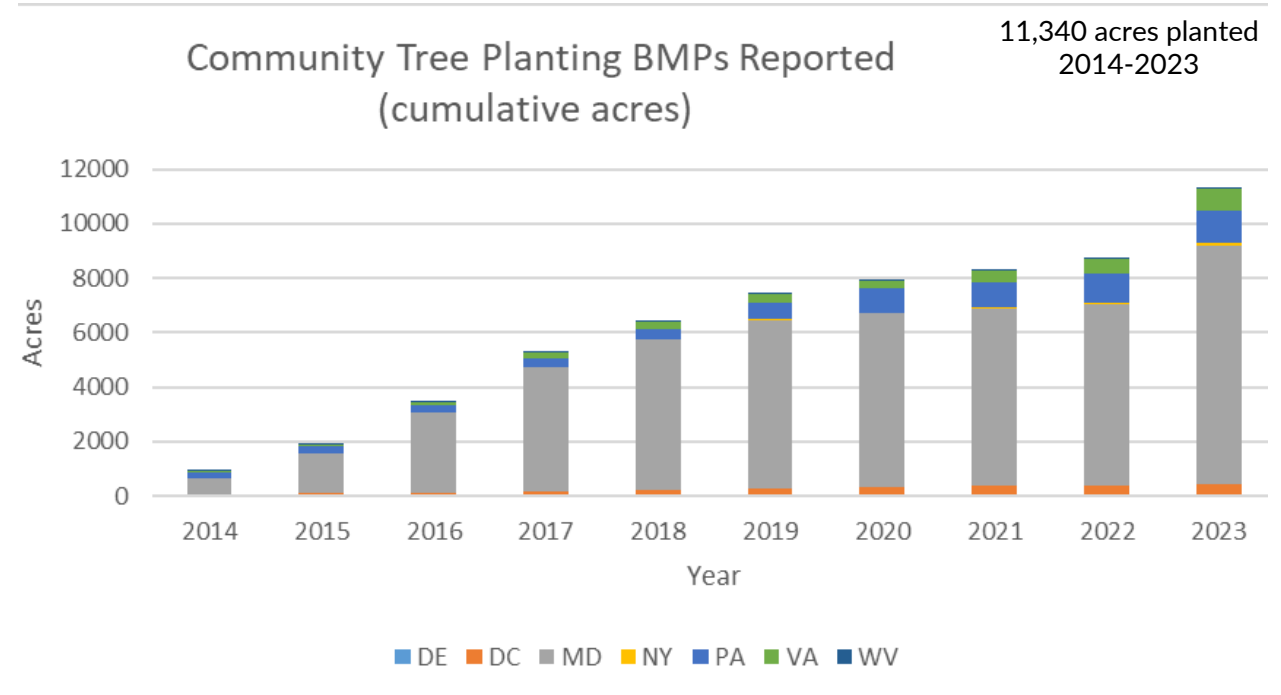
Water Quality GIT

Forestry Workgroup

Presenter: Katie Brownson

*Working toward a net gain in canopy, reduce the loss of existing canopy and plant and maintain 35,000 acres of community trees by 2035.*

- Focuses on efforts within communities (2010 census places)
- On average, 1,134 acres planted annually
  - 2,577 new acres planted in 2023
- 28,908 total acres lost 2013/14- 2021/22
  - On average, 3,755 acres lost annually
- New 35,000 acres target is from a 2014 baseline
  - 23,660 additional acres needed 2024-2035
  - Would require 1,971 acres on average annually
- Achieving net gain will require reducing rate of loss



# Healthy Forests and Trees: Forest Buffers

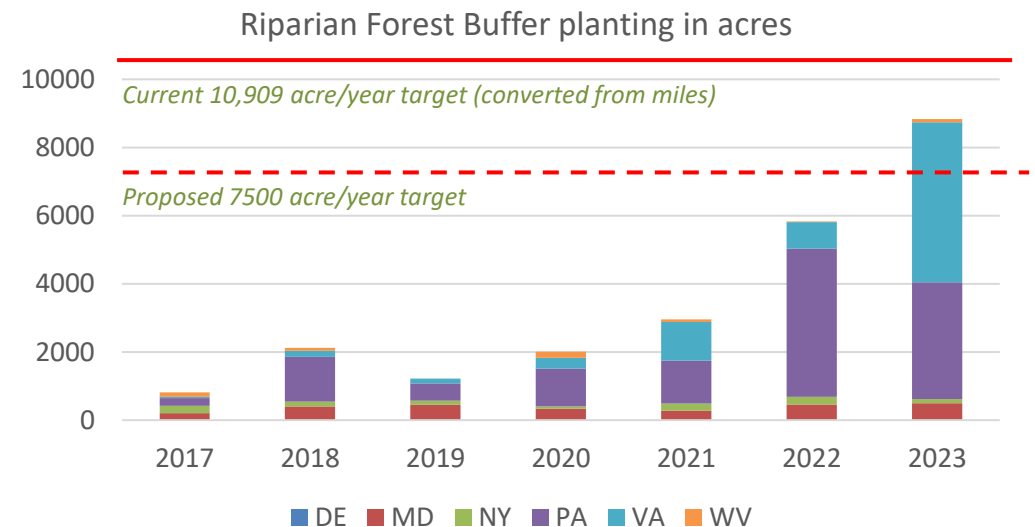
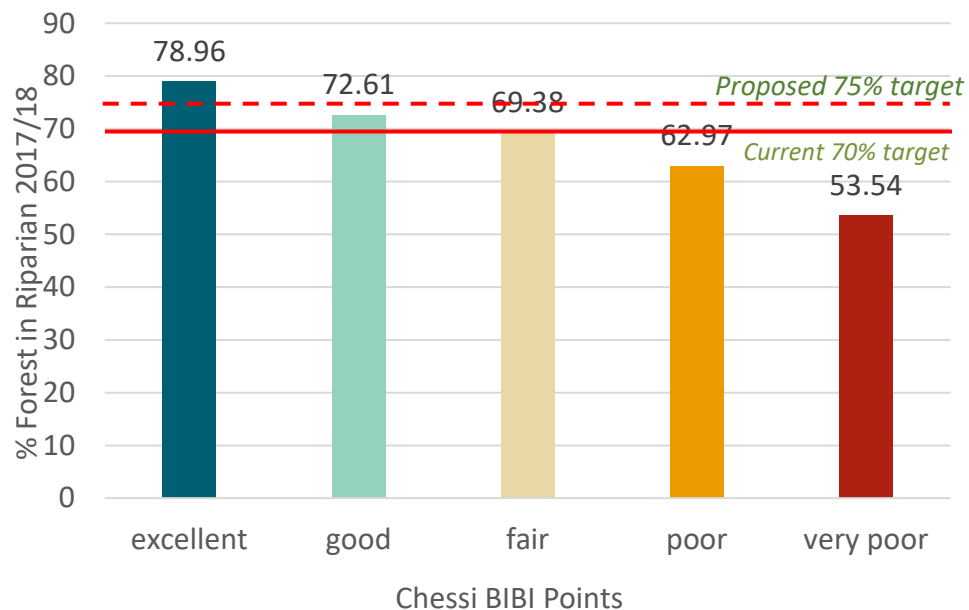
Water Quality GIT

Forestry Workgroup

Presenter: Katie Brownson

*Working toward having 75% of riparian areas forested throughout the watershed, plant and maintain 7,500 acres of forest buffers annually. Reduce the loss of existing buffers to achieve no less than 71% of riparian areas forested by 2035.*

- As of the 21/22 LULC data, the riparian area is 69.96% forested watershed-wide
- Average annual rate of loss: 5587 acres
- If we plant **7500 acres/year**, by 2035 we could achieve **71% forested** if we reduce the rate of loss by ~50%, putting us on a trajectory to achieve a net gain in riparian forest cover



# LAND USE DECISION SUPPORT OUTCOME (*Replacing LUOE*)

GIT 4 – Healthy Watersheds  
Land Use Workgroup  
Peter Claggett, USGS

## PROPOSED DRAFT OUTCOME LANGUAGE:

Develop and disseminate relevant and actionable landscape information to organizations involved in local and regional land use planning on past, present, and future landscape conditions and the potential environmental consequences of landscape change.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

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 them in continually improving their capacity to 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 others' efforts in reducing these rates by 2025 and beyond.

# LAND USE DECISION SUPPORT OUTCOME

GIT 4 – Healthy Watersheds  
Land Use Workgroup  
Peter Claggett, USGS

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
By 2040, continually increase the number, variety, and/or geographic scope of use cases (e.g., watershed protection, aquatic connectivity, stormwater, tree canopy, redevelopment) for landscape information.	New Target	December 2025

# LAND USE DECISION SUPPORT OUTCOME

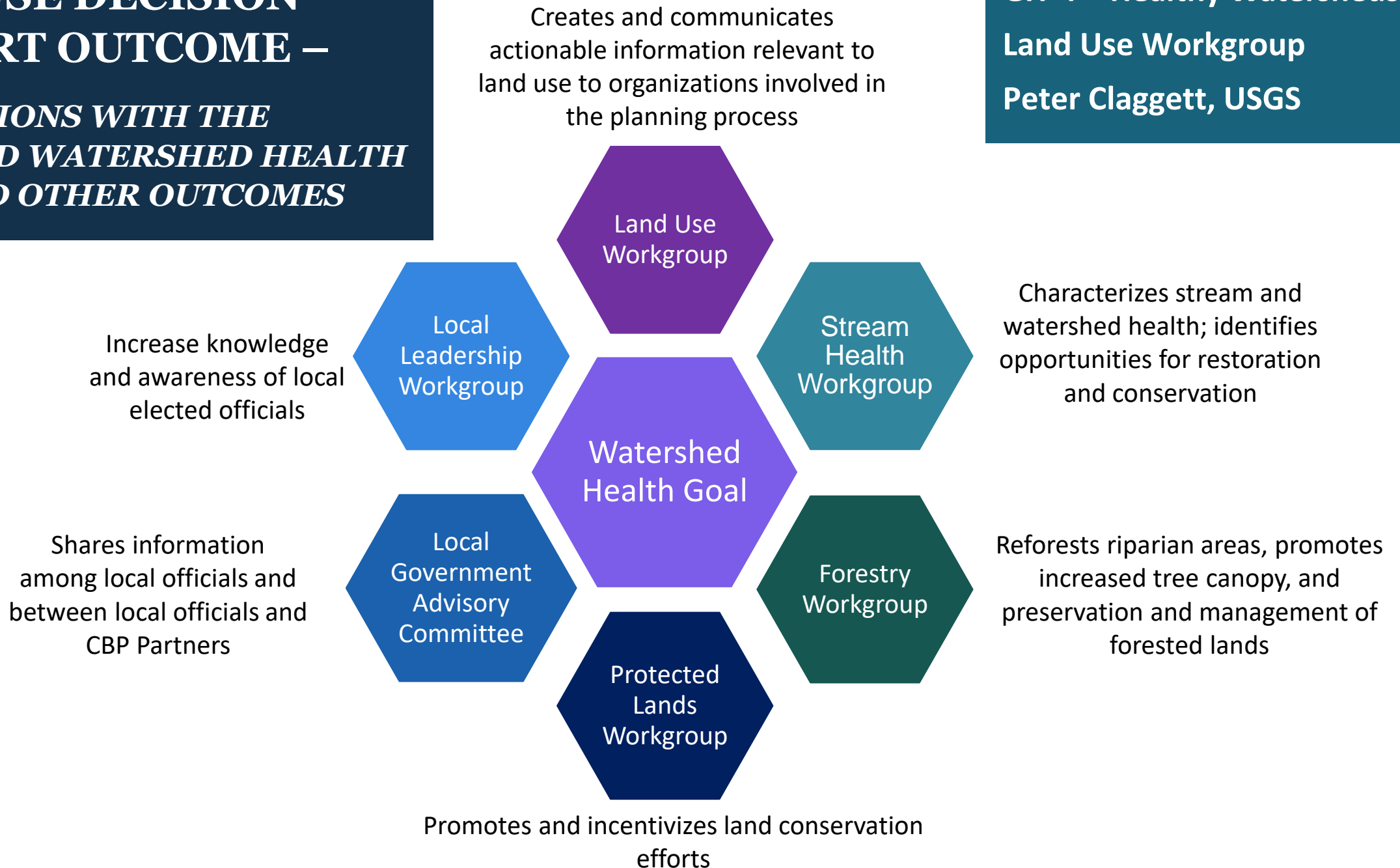
GIT 4 – Healthy Watersheds  
Land Use Workgroup  
Peter Claggett, USGS

- **Rationale and context for proposed draft outcome language:**
  - This outcome leverages and adds value to the CBP Partners' substantial investment in high-resolution landscape information by making the data relevant and actionable for local and regional scale decisions.
- **Methodology for data collection and tracking:**
  - Applications of the data will be voluntarily tracked and, with permission, shared with organizations involved in land use planning. The lessons learned will inform tool development for broader dissemination and replication of use cases to address CBP and local objectives (e.g., identifying opportunities for urban redevelopment to reduce the rate of land conversion which could address the need for affordable housing).
- **Additional recommendations:**
  - Reconstitute the Land Use Workgroup as a community of practice for land use planning
  - Form a Land Use Technical Advisory Committee under the Modeling Workgroup
  - Implement the new [CBP Land Use Strategy](#)
  - Develop and disseminate actionable land use and ecosystem service information and solicit feedback on related issues important to local and regional planners and decisionmakers
  - Formally integrate land use mapping, monitoring, and derived metrics into the management strategies of relevant outcomes



# LAND USE DECISION SUPPORT OUTCOME – *CONNECTIONS WITH THE PROPOSED WATERSHED HEALTH GOAL AND OTHER OUTCOMES*

**GIT 4 – Healthy Watersheds**  
**Land Use Workgroup**  
**Peter Claggett, USGS**



# PROTECTED LANDS OUTCOME

STEWARDSHIP GIT (GIT 5)

Protected Lands Workgroup

Presenter: Aurelia Gracia

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Conserve and protect critical landscapes within the Chesapeake Bay Watershed to protect water quality, enhance biodiversity, support sustainable livelihoods and honor cultural heritage.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

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.

# PROTECTED LANDS OUTCOME

STEWARDSHIP GIT (GIT 5)  
Protected Lands Workgroup  
Presenter: Aurelia Gracia

## PROPOSED TARGET

### New or Update of Existing

### Date estimate for target

**Protected Lands:** By 2040, permanently protect an additional 1.5M-2M acres of lands throughout the watershed at the federal, state or local level.

Update Existing

August 2025

**Forests:** By 2040, conserve a total of \_\_\_ acres of forest, \_\_\_% of which are in riparian areas.

Update Existing

August 2025

**Wetlands:** By 2040, conserve a total of \_\_\_ acres of wetlands focusing on the protection of buffer zones.

Update Existing

August 2025

**Watershed Health:** By 2040, maintain the health of \_\_\_% of the highest functioning sub-watersheds by targeting \_\_\_% of the protected lands' outcome acreage in those areas.

New Target

August 2025

**Tribal Lands:** Support the sovereignty and duty of care of Tribal Nations and communities by securing protection status and/or co-management agreements for a total of \_\_\_ acres of tribal homelands.

New Target

August 2025

**Agricultural Lands:** By 2040, protect a total \_\_\_ acres of agricultural lands within the Chesapeake Bay watershed.

New Target

August 2025

**Urban Lands:** By 2040, protect a total \_\_\_ acres of urban and near-urban lands within the Chesapeake Bay watershed.

New Target

August 2025

# PROTECTED LANDS OUTCOME

STEWARDSHIP GIT (GIT 5)

Protected Lands Workgroup

Presenter: Aurelia Gracia

- State representatives have identified a total acreage goal of 1.5 million to 2 million acres, considering current challenges related to funding, staffing capacity, and administrative priorities.
- We have decided to expand the outcome language to include targets for specific conservation areas, such as forests, wetlands, agricultural lands, urban lands, tribal lands, and watershed health. Workgroup members and stakeholders are continuing to discuss the numerical metrics for each target.
- We estimate that by August 2025, the workgroup will be able to confirm the numerical metrics for each target, and the most appropriate methods for tracking and reporting. The 2024 Protected Lands Indicator data is expected to be completed by June 2025, and it will inform this process.

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Increase the capacity for pursuing nature-based solutions to improve planning and response to changing conditions while balancing long-term resiliency of watershed communities, economies, and ecosystems.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

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.

# Adaptation Outcome

STAR  
Climate Resiliency Workgroup  
Presenter: Julie Reichert-Nguyen

## PROPOSED TARGET

By 2040, at least seven subwatershed areas have benefited from knowledge-sharing and technical assistance to identify adaptation options with nature-based solutions. These solutions include restoration and protection projects that will help address risks to people, infrastructure, and habitats from changes in temperature, precipitation, and landscapes.

New Target /  
Update of  
Existing Target

Date  
estimate for  
target being  
developed

New

June 2026

By 2040, workgroup activities will inform and lead to an increase in the implementation of adaptation strategies that integrate nature-based solutions in the above subwatershed areas.

New

June 2026

# Adaptation Outcome

STAR

Climate Resiliency Workgroup

Presenter: Julie Reichert-Nguyen

## Rationale and context

- MB consensus reached: Placed-based watershed approach (tidal and nontidal areas) with measurable and time bound targets to support planning, design, and implementation of nature-based solutions

## Topics/challenges for Management Board guidance

- Selection of areas: Base on criteria for adaptation and capacity needs (not defaulting to one per jurisdiction). What would this mean if area is not selected in a jurisdiction?
- Programmatic resources, structure, and expertise: How to effectively implement outcome to cover partnership adaptation interests in tidal/nontidal, aquatic/terrestrial, and rural/urban areas?

## Methodology for data collection and tracking of each Target

- Development will occur as part of workgroup's management strategy and workplan

## Examples of activities for targets

- Determine method for selecting subwatershed areas that align with partnership priorities
- Facilitate knowledge-sharing with local stakeholders and nature-related outcomes when identifying and planning adaptation strategies
- Provide technical assistance for project proposals/design of nature-based solutions
- Develop metrics and share best practices learned to further build capacity/confidence for nature-based solutions

# Group 4

(Day 1) May 7, 2025



# Water Quality Standards Attainment and Monitoring

STAR

CAP/ITAT/NTN/Modeling  
WG/DIWG

Presenter: Breck Sullivan

## PROPOSED DRAFT OUTCOME LANGUAGE:

Capture improving water quality conditions to enhance ecosystem health by maintaining monitoring and assessment, evaluating attainment of established water quality standards (DO, Clarity, Chl-a) in the Bay, and strengthening scientific understanding of patterns in nutrients (N & P), sediment and other parameters in the watershed and Bay.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

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.

# Water Quality Standards Attainment and Monitoring

STAR  
CAP/ITAT/NTN/Modeling  
WG/DIWG  
Presenter: Breck Sullivan

\*WQSAM is seeking guidance on target language

## PROPOSED TARGETS : All Under Construction, Conceptual Topics

Water Quality Standards Attainment Method

Water Quality Standards Attainment

Nutrient and Sediment Trends in Watershed

Factors Impacting Tidal Waters

# Water Quality Standards Attainment and Monitoring

STAR

CAP/ITAT/NTN/Modeling  
WG/DIWG

Presenter: Breck Sullivan

- CCSR report:
  - Attaining water quality standards was not showing signs of needed improvement or happening at an acceptable rate
  - We have not seen this improvement because nutrient loads need to be lower
- No where in the current Watershed Agreement is there language speaking to a specific point of attaining water quality standards
- EC Charge requests SMART Outcomes
- WQSAM is proposing quantitative SMART targets that will address water quality patterns needed to enhance ecosystem health. Seeking guidance on the language.

# Water Quality Standards Attainment and Monitoring

STAR

CAP/ITAT/NTN/Modeling  
WG/DIWG

Presenter: Breck Sullivan

Target Topic	Example SMART Target :	Example Activity Target :
Water Quality Standards Attainment Method	Establish partnership approved approaches to assess all criteria (DO, Clarity, CHLA) in all designated uses using all available data. For DO, have it approved by 2028 and reported on in 2030.	
Water Quality Standards Attainment Results	Through actions supporting the WIP Outcome, sustain CB water quality standards attainment at historical rates of at least 20% - 40% percent per year as generated and reported by the multimetric water quality standards indicator.	Report on water quality standards attainment annually.
Nutrient and Sediment Loads and Trends in the Watershed	In coordination with the WIP, see improving trend conditions in X%, Y%, Z% in nitrogen, phosphorous, and sediment respectively by 2030.	On an annual basis for RIM stations, produce load and trend analysis. Conduct the same analysis for the nontidal network on a biennial basis.
Factors Impacting Tidal Waters	Need to speak with subject matter experts.	On an annual basis for tidal Bay and tributary stations, produce trend analysis.

# REDUCING EXCESS NUTRIENTS AND OUTCOME\*

Water Quality Goal  
Implementation Team  
Suzanne Trevena, Chair

## PROPOSED DRAFT OUTCOME LANGUAGE:

- Bay Program partners will have practices and controls installed throughout the watershed to reduce excess nitrogen, phosphorus and sediment and achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation, and chlorophyll-*a* water quality standards. **OR**
- Install practices and controls that will reduce excess nitrogen, phosphorus, and sediment to support living resources and protect human health by achieving water quality standards.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

- **2025 Watershed Implementation Plans (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.

\*Formerly known as WIP Outcome

# REDUCING EXCESS NUTRIENTS AND SEDIMENT OUTCOME

Water Quality Goal  
Implementation Team  
Suzanne Trevena, Chair

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Through 2030, continue installing practices and controls to reduce excess nutrients and sediment to achieve the <a href="#">interim water quality targets</a> . Partners may meet this target by implementing the Phase III Watershed Implementation Plans (WIPs), the two-year milestone commitments, or other innovative strategies.	Update	2025
By Dec. 2028, complete updates to the CBP partnership Phase 7 modeling tools and set updated water quality targets	New	2025
By Dec. 2030, develop updated WIPs/strategies to meet the water quality targets developed with the Phase 7 modeling tools and address potential growth in loads and changing environmental conditions	New	2025
By Dec. 2030, update this outcome with a longer-term implementation timeline to meet the updated water quality targets for nutrients and sediment	New	2025
Demonstrate net reductions in nitrogen, phosphorus, and sediment toward meeting the <a href="#">interim water quality targets</a> , through multiple lines of evidence, including annual progress reporting and monitoring data [in coord w/ WQSAM]	Update	2025?

# REDUCING EXCESS NUTRIENTS AND SEDIMENT OUTCOME

Water Quality Goal  
Implementation Team  
Suzanne Trevena, Chair

- There was not full WQGIT consensus on the proposed language for the outputs/targets.
- Timelines are included in the outputs, for now. Once updates to the modeling tools are complete, the partnership can develop a longer term, accountability timeline.
- The end of 2030 is suggested as a date to revise/update this outcome and outputs upon completion of the Phase 7 model (2026, review in 2027, in use 2028), the partnership to approve new water quality targets (~2028), and for partners to update WIPs or other strategy documents as agreed upon by partnership (~2029-2030) to meet water quality targets.
- Do you support renaming this outcome to more accurately reflect the intended result?

# Toxic Contaminants Mitigation Outcome

Water Quality GIT

Toxic Contaminants Workgroup

Presenter: Keith Bollt, EPA

## PROPOSED DRAFT OUTCOME LANGUAGE:

An increased understanding by CBP toxic contaminants reduction practitioners of the impacts of and mitigation options for toxic contaminants such as PCBS, plastics and microplastics, mercury, and PFAS, in order to increase their capacity to reduce the amount and effect of these materials on the people, living resources, lands and waters of the Chesapeake Bay watershed.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

- Current 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 best management practices might provide multiple benefits of reducing nutrient and sediment pollution as well as toxic contaminants in waterways.
- Current Toxic Contaminants Policy & 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 on existing programs to reduce the amount and effects of polychlorinated biphenyls (PCBs) in the Bay and watershed. Use research findings to evaluate the implementation of additional policies, programs and practices for other contaminants that need to be further reduced or eliminated.



# Toxic Contaminants Mitigation Outcome

Water Quality GIT

Toxic Contaminants Workgroup

Presenter: Keith Bollt, EPA

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
<b>A common information sharing agenda among toxic contaminants reduction practitioners, and between practitioners and scientists, on toxic contaminants science, policy, management and communication lessons learned and best practices.</b>	Updating of existing	At regular WG meetings

# Toxic Contaminants Mitigation Outcome

Water Quality GIT

Toxic Contaminants Workgroup

Presenter: Keith Bollt, EPA

- The draft outcome language is based on MB feedback from the March MB meetings:
  - The Bay Program partnership is best suited to be a convenor of practitioners rather than the place where toxics are directly reduced (SMT without A&R)

Topics for conversation:

- Is the MB comfortable with the tradeoffs of this proposal?
  - CWA § 117 and the 2014 Agreement direct “reducing or eliminating” toxic contaminants
  - This proposed language is based on TCW’s current resources and added value
  - An alternative is to reassess the role and function of the TCW.
- Resources for indicators?
- Thoughts on name?
- What goal team?
- PPAT?
- Priorities for topics & environmental media?
- More member engagement & ownership/open chair positions

# Group 5

(Day 2) May 8, 2025

# PUBLIC ACCESS OUTCOME

STEWARDSHIP GIT (GIT 5)

Public Access Workgroup

Presenter: Aurelia Gracia

## PROPOSED DRAFT OUTCOME LANGUAGE:

By 2040, enhance new and existing public access sites to the Bay and its tributaries through a combination of actions aimed at improving recreational opportunities and accessibility while addressing barriers to access by increasing the number, quality, and geographic distribution of sites.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

By 2025, add 300 new public access sites, with a strong emphasis on providing opportunities for boating, swimming and fishing, where feasible.

# PUBLIC ACCESS OUTCOME

STEWARDSHIP GIT (GIT 5)

Public Access Workgroup

Presenter: Aurelia Gracia

## PROPOSED TARGET

New or Update  
of Existing

Date estimate  
for target

New Access Sites: By 2040, add 100 new public access sites with a strong emphasis on providing opportunities for recreation where feasible.

Update Existing

N/A

Improving ADA/ABA Accessibility: By 2040, improve 3% of existing public access sites by adding ADA/ABA accessible features where feasible to meet the needs of the communities.

New Target

N/A

Improving Existing Site Grounds and Structures: By 2040 improve 100 existing public access sites by adding or improving the grounds or structures - including signage, parking, seating, and public facilities.

New Target

N/A

Addition of Recreation Types: By 2040, increase the number of active and passive recreation types offered at existing public access sites - including but not limited to kayaking, boating, piers, courts, trails, designated wildlife viewing, seating and picnic amenities.

New Target

N/A

Expanding Access to Community Lands: By 2040, increase access to \_\_\_ % of community lands identified in the Protected Lands data set. An initial baseline study is to be conducted by 2025-2026 to determine appropriate numeric targets for this metric.

New Target

May 2026-  
2027

# PUBLIC ACCESS OUTCOME

STEWARDSHIP GIT (GIT 5)

Public Access Workgroup

Presenter: Aurelia Gracia

- Based on feedback from state representatives within the Public Access Workgroup and stakeholders in the Chesapeake Conservation Partnership, we have decided to expand the outcome language to include specific targets for access and recreation. These targets will include identifying new sites, improving accessibility, enhancing existing sites, promoting various types of recreation, and expanding access to community lands.
- Since the workgroup has primarily focused on water-based public access sites, the expansion of access to community lands will require an initial baseline study. This study should incorporate data on protected lands to identify the current acreage available in community settings. Additionally, it should establish terminology and criteria for access to community lands and green spaces, ensuring that state representatives and workgroup members feel comfortable tracking and reporting on this target in the future.

# **SCHOOL DISTRICT PLANNING OUTCOME**

*(Environmental Literacy Planning Outcome)*

Stewardship GIT (GIT5)

Education Workgroup

Presenter: Tom Ackerman, CBF

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

### **SCHOOL DISTRICT PLANNING OUTCOME:**

Continually increase the number of school districts that have policies and practices in place that support environmental education and sustainable schools.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

### **ENVIRONMENTAL LITERACY PLANNING OUTCOME:**

Each participating Bay jurisdiction should develop a comprehensive and systemic approach to environmental literacy for all students in the region that includes policies, practices and voluntary metrics that support the environmental literacy Goals and Outcomes of this Agreement.

# SCHOOL DISTRICT PLANNING OUTCOME

*(Environmental Literacy Planning Outcome)*

Stewardship GIT (GIT5)  
Education Workgroup  
Presenter: Tom Ackerman, CBF

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
By 2040, all jurisdictions reach their target for the number of school districts that are well prepared to deliver a comprehensive and systemic approach to environmental literacy.	Updated Target	Complete
By 2040, XX% of school districts in [INSERT JURISDICTION] are well prepared to deliver a comprehensive and systemic approach to environmental literacy.	New Target(s)	May 2025



# SCHOOL DISTRICT PLANNING OUTCOME

*(Environmental Literacy Planning Outcome)*

Stewardship GIT (GIT5)

Education Workgroup

Presenter: Tom Ackerman, CBF

- Emphasizes school districts as focus of the effort
- Reflects the reclassification of Sustainable Schools Outcome to a metric of success
- Additional metrics to track:
  - *Early markers of progress (e.g. % of districts with environmental literacy leads).*
  - *Number of sustainable schools.*
  - *State commitments and contributions towards the overarching target.*

# STUDENT EXPERIENCES OUTCOME

*(Student Outcome)*

Stewardship GIT (GIT5)

Education Workgroup

Presenter: Tom Ackerman, CBF

## PROPOSED DRAFT OUTCOME LANGUAGE:

### STUDENT EXPERIENCES OUTCOME:

Continually increase the number of students who participate in inquiry-based environmental literacy instruction with a target of at least one Meaningful Watershed Educational Experience in each elementary, middle, and high school.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

### STUDENT OUTCOME:

Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported meaningful watershed educational experiences and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.

# STUDENT EXPERIENCES OUTCOME

*(Student Outcome)*

Stewardship GIT (GIT5)  
Education Workgroup  
Presenter: Tom Ackerman, CBF

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
By 2040, state targets are reached that result in XX% of public school students being enrolled in a school district that offers a MWEE for all students.	New Target	May 2025
By 2040, XX% of public school students in [INSERT JURISDICTION] will be enrolled in a school district that offers a MWEE for all students.	New Target	May 2025

# STUDENT EXPERIENCES OUTCOME

*(Student Outcome)*

Stewardship GIT (GIT5)

Education Workgroup

Presenter: Tom Ackerman, CBF

- Conveys other types of inquiry-based instruction contribute to student stewardship and MWEEs
- Places emphasis on ensuring every school district has one MWEE
- Additional metrics collected through ELIT survey:
  - *Environmental education experiences that are not MWEEs.*
  - *Percentage of the public school student population who are receiving MWEEs in each grade band (e.g. elementary, middle, and high).*
  - *State commitments and contributions towards the overarching target.*

# STEWARDSHIP OUTCOME

STEWARDSHIP GIT (GIT 5)

Stewardship Workgroup

Presenter: Britt Slattery

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Equip partners and the regional network of practitioners with the social science data, technical assistance and support needed to develop and carry out programs that train and mobilize individuals and communities to improve the health of our land, water, living resources and people.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

Increase the number and diversity of trained and mobilized volunteers who have the knowledge and skills needed to enhance the health of their local watersheds.

## PROPOSED TARGET

Metrics to be determined; need baseline assessment.

### 1. Measure how well we are supporting partners

*Continually increase partners' ability to develop and carry out programs that enable people and communities to participate in stewardship.*

New or  
Update

Estimate when  
target  
developed

New  
target

Dec. 2025

### 2. Measure on the ground stewardship work.

*Through 2040, support achievement of the targets identified [SMART targets to be set\*\*] that ultimately increase both individual and community level stewardship actions that advance certain Watershed Agreement outcomes, e.g., Healthy Forests and Trees, Workforce, Water Quality, etc.*

EXAMPLE: “By 2040, XXXX number of acres of urban or suburban forest will be stewarded by individuals or communities.” Assist the WG by connecting stewardship partners to help with implementation, and assist in the process to track the metric.

New  
target

Set SMART  
targets  
with other  
outcome  
teams by  
Dec. 2025

- **Outcome's ultimate intent:**

- Increase and normalize public participation in stewardship actions that contribute to achieving environmental results.

- **What's new?**

- Build capacity: equip partners and stewardship practitioners with data, tools, technical assistance and support; work through the network of stewardship practitioners to engage with the public.
- Expand the scope of stewardship actions promoted to better align with and help achieve more of the outcomes in the Watershed Agreement.
- More emphasis on collective, community-scale efforts as well as individual (greater impact).

- **Challenges:**

- Need more time to identify targets, numeric metrics and means to measure. Stewardship results take a long time to realize. We need small bites.
- If the on the ground metrics live under those other outcomes, then the Stewardship WG would assist the other WGs with data, tools, social science best practices guidance, and partnerships to support implementation; and help with tracking the metrics.
- Effective stewardship methods and strategies for partners would be informed by data collected through an updated Stewardship Index (survey) and analysis.

# WORKFORCE OUTCOME

STEWARDSHIP GIT (GIT 5)

Workforce Action Team

Presenter: Julie Patton Lawson

## PROPOSED DRAFT OUTCOME LANGUAGE:

Increase the ability of all watershed residents to understand, participate in, and succeed in environmental career pathways to close gaps in achieving Bay Program outcomes.

## EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:

N/A. This is a new outcome.



# WORKFORCE OUTCOME

STEWARDSHIP GIT (GIT 5)

Workforce Action Team

Presenter: Julie Patton Lawson

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
<b>Understanding:</b> By 2040, action team* activities will inform and lead to an increase in the implementation of strategies that help job seekers to become aware of and understand environmental careers and the pathways to them.	New Target	March 2026
<b>Participating:</b> By 2040, [X] post-secondary institutions will offer programs providing industry-recognized credentials that support Agreement outcomes.	New Target	March 2026
<b>Succeeding:</b> By 2040, action team* activities will inform and lead to an increase in the hiring and retention of workers trained in fields necessary to support Agreement outcomes.	New Target	March 2026

\*Pending Management Board guidance regarding establishing a new workgroup

# WORKFORCE OUTCOME

STEWARDSHIP GIT (GIT 5)

Workforce Action Team

Presenter: Julie Patton Lawson

The action team considered what is within the control of the Program and what value the partnership provides. In order to constrain the scope to a manageable and relevant body of work, the action team will focus on workforce needs related directly to achieving *Agreement* outcomes.

## Topics/challenges for Management Board guidance:

- How will the work of this Outcome be operationalized? Will a Workforce Workgroup be created?
- Identification of the jurisdictional agencies and partners to bring into this work. What is the process for enlisting their participation and commitment?

## **PROPOSED DRAFT OUTCOME LANGUAGE:**

Continually increase the knowledge and capacity of local government leaders to empower them to make decisions and implement local actions that support the Chesapeake Bay Watershed Agreement.

## **EXISTING 2014 AGREEMENT OUTCOME LANGUAGE:**

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.

PROPOSED TARGET	New Target / Update of Existing Target	Date estimate for target being developed
Increase the percentage of local government leaders reporting water resource management actions biennially.	Update of Existing Target	2025

Possible alternative Targets:

- Directly engage with # local government leaders through training and education opportunities annually. (New Target | 2026)
- Indirectly engage with # local government leaders through online publications annually. (New Target | 2027)
- Support outcomes that have identified local government audiences in their management strategies and work plans in effectively engaging and educating local governments annually. (Update of Existing Target | 2026)

- Updated language:
  - Recognizes the critical role local governments play in the success of the Watershed Agreement and respects local decision making.
  - Positions the LLWG to support the Partnership in effectively engaging and educating local governments
- Data collection and tracking processes to support this target are already in place, with established baselines drawn from ongoing efforts of the Local Leadership Survey.
  - Baseline and progress were used to update the [Local Leadership Indicator on Chesapeake Progress](#).