



Progress on 2014 Chesapeake Bay Agreement Outcomes

September 10, 2021

Ann Swanson
Executive Director
Chesapeake Bay Commission





History of Chesapeake Bay Restoration

1960s

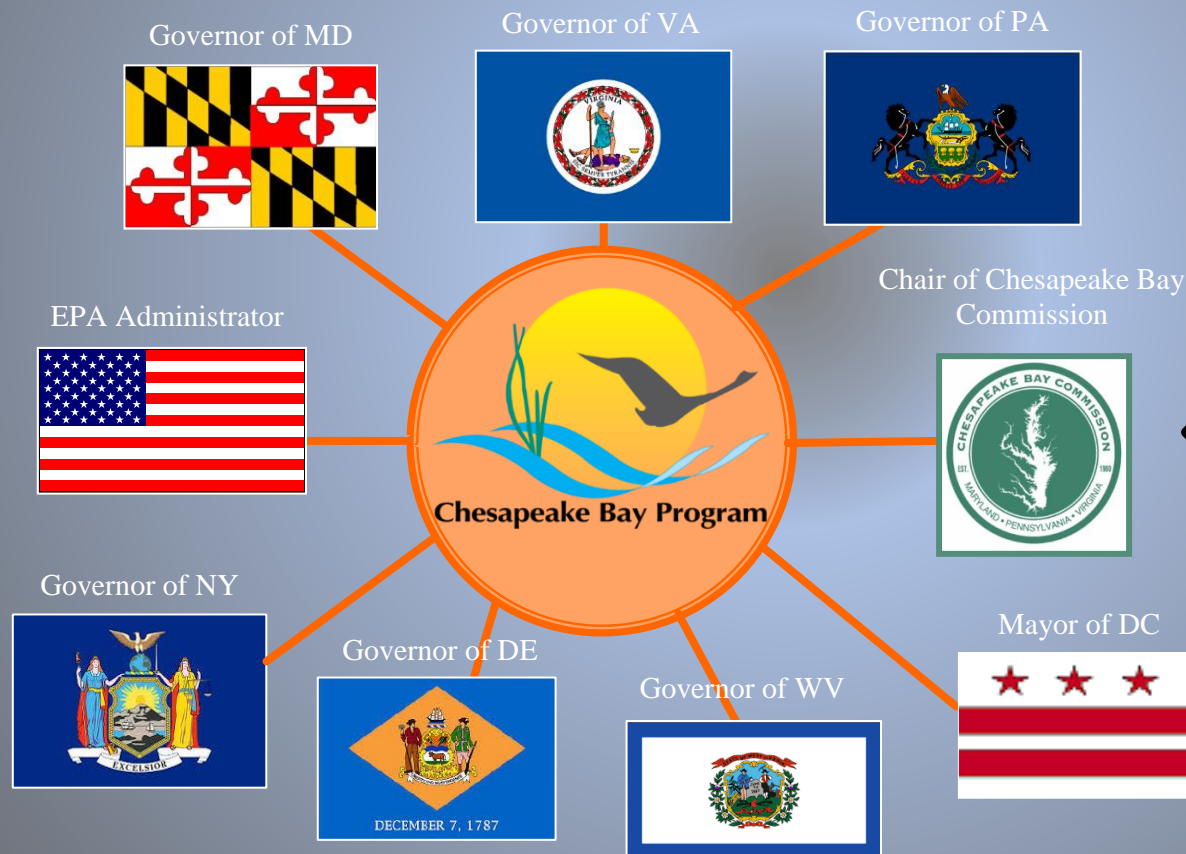


2025

- 1960-70s Visible decline in Bay resources
- 1976-82 EPA conducts 5-year Bay study
- 1980 **Chesapeake Bay Commission established**
- 1983 **First Bay Agreement** – Chesapeake Bay Program created
- 1987 **Second Bay Agreement** – WQ Goals: 40% reduction
- 1992 Amendments to Agreement – Tributary Strategies
- 2000 **Third Bay Agreement** – WQ Focus
- 2008 Acknowledged regulatory approach (TMDL) needed
- 2009 Presidential Executive Order 13508
- 2010 Chesapeake Bay TMDL established
- 2014 **Fourth Bay Agreement** – Verification & Accountability
- 2017 60% of TMDL implemented
- 2025 **TMDL** to be achieved –100% practices & programs in place

CHESAPEAKE BAY PROGRAM

Who's the Leadership?

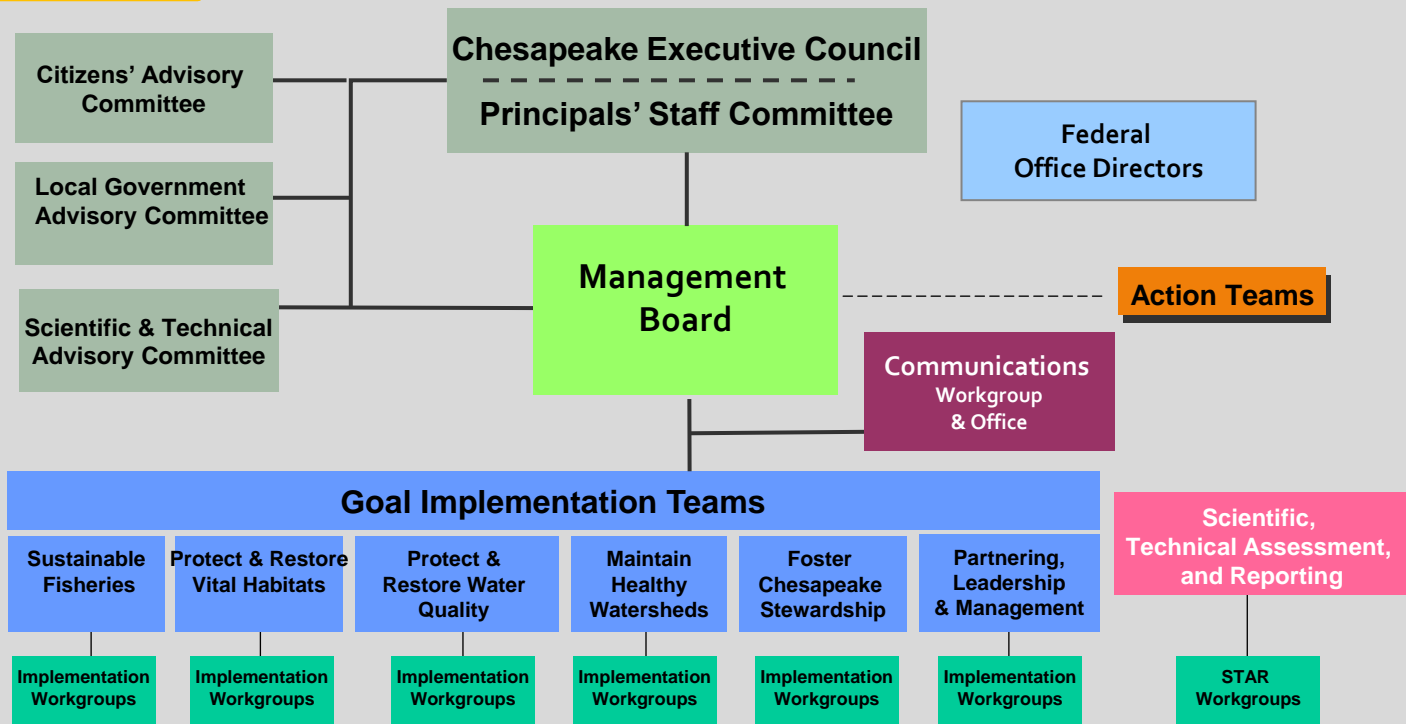


Of all the partners, only the CBC represents the legislatures



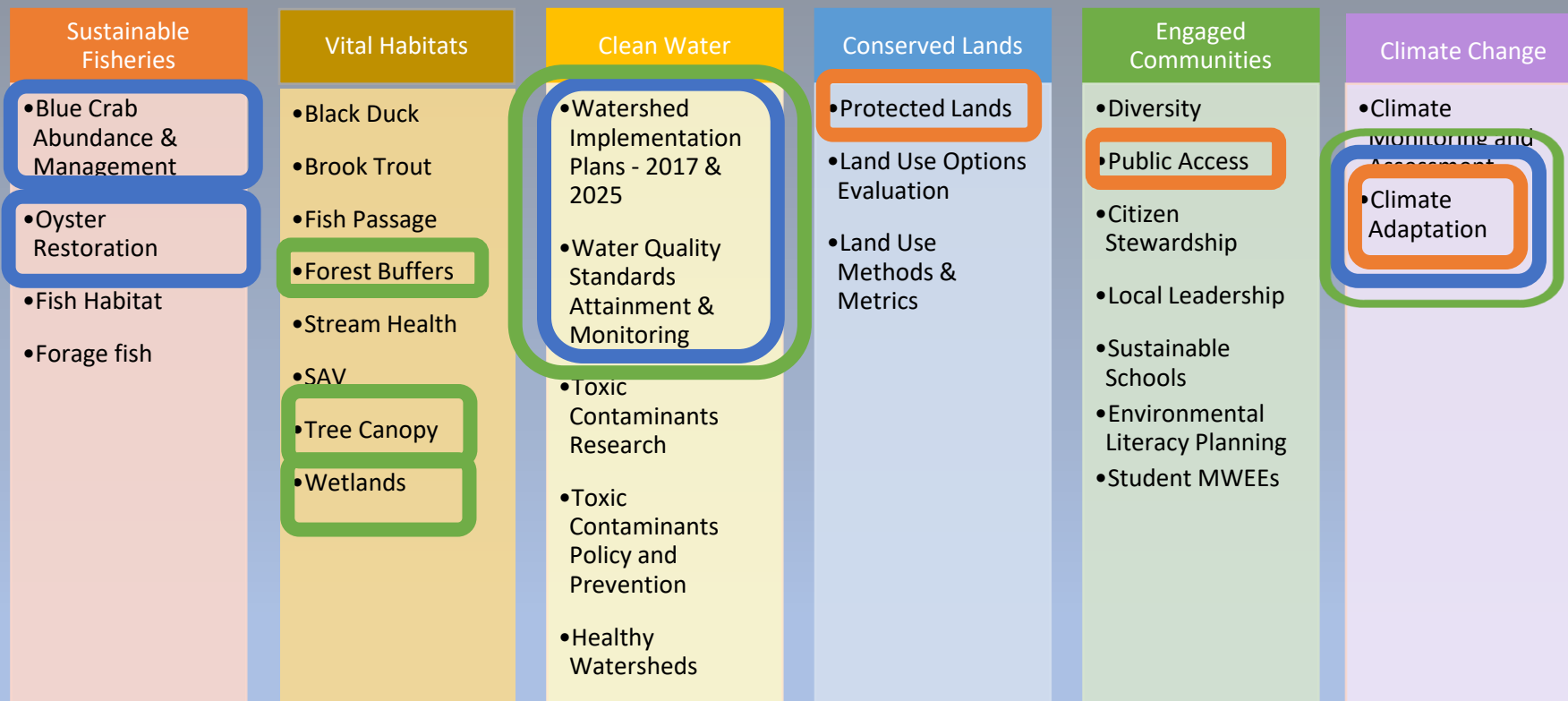
Chesapeake Bay Program
A Watershed Partnership

Chesapeake Bay Program Structure





2014 Chesapeake Watershed Agreement Outcomes



Focus of Chesapeake Bay Commission Discussion

Orange = September

Blue = November

Green = January



Watershed Agreement Outcomes Status toward Achievement by 2025

Blue Crab Abundance	
Blue Crab Management	
Oyster Restoration	
Forest Buffers	
Tree Canopy	
Wetlands	
2017 Watershed Implementation Plans	
2025 Watershed Implementation Plans	
Water Quality Standards Attainment & Monitoring	
Protected Lands	
Public Access	
Climate Adaptation	

Chesapeake
Bay Program
Progress
Assessment
April 2021



2014 Bay Agreement: Sustainable Fisheries

OUTCOME:

Blue Crab Abundance

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.

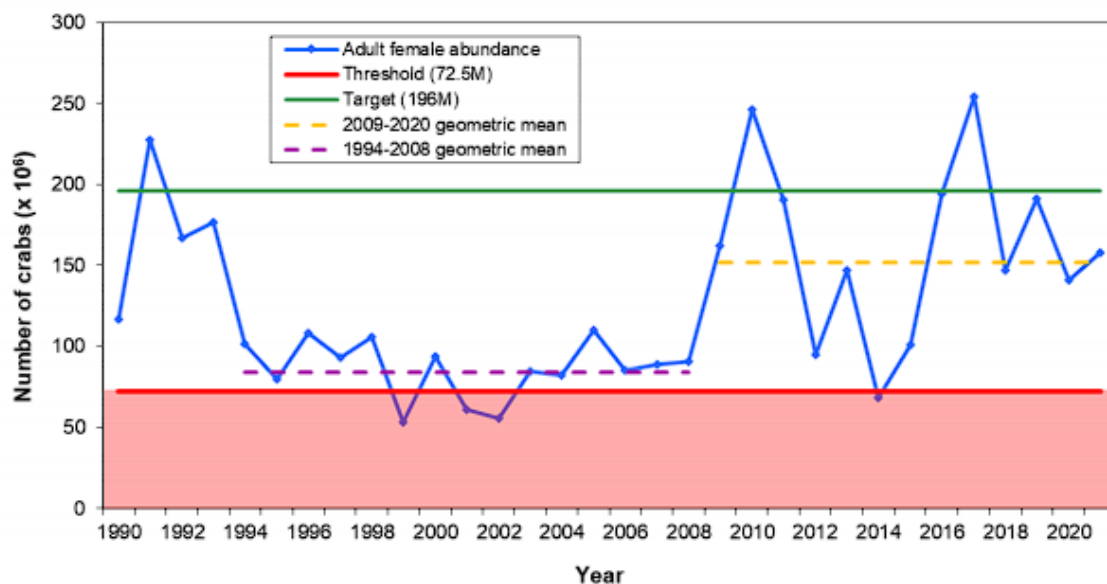


On Track



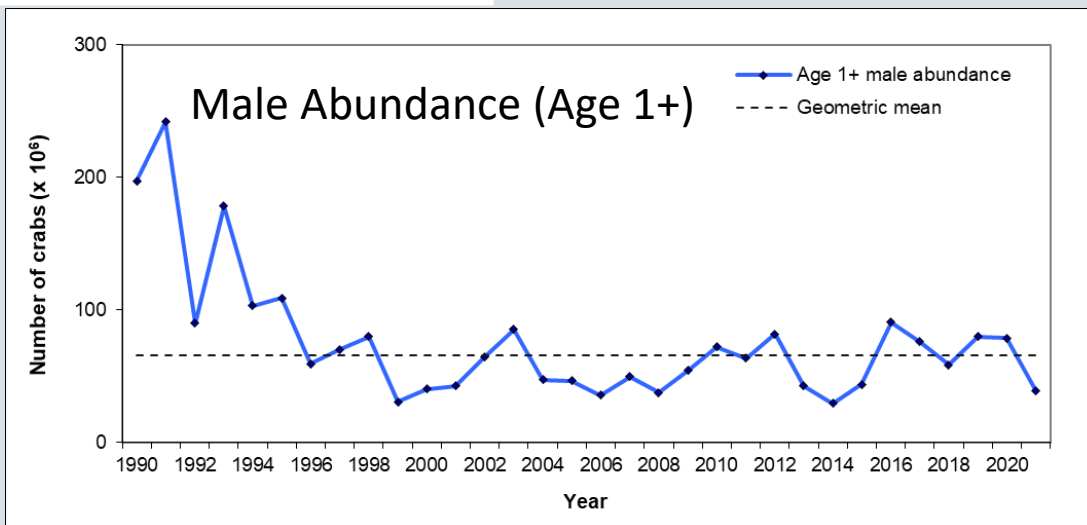
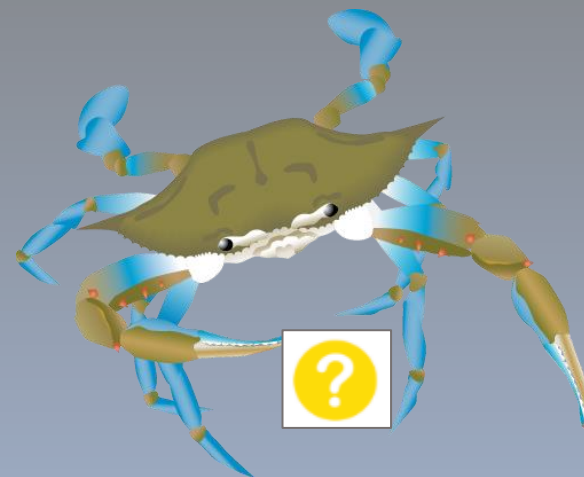
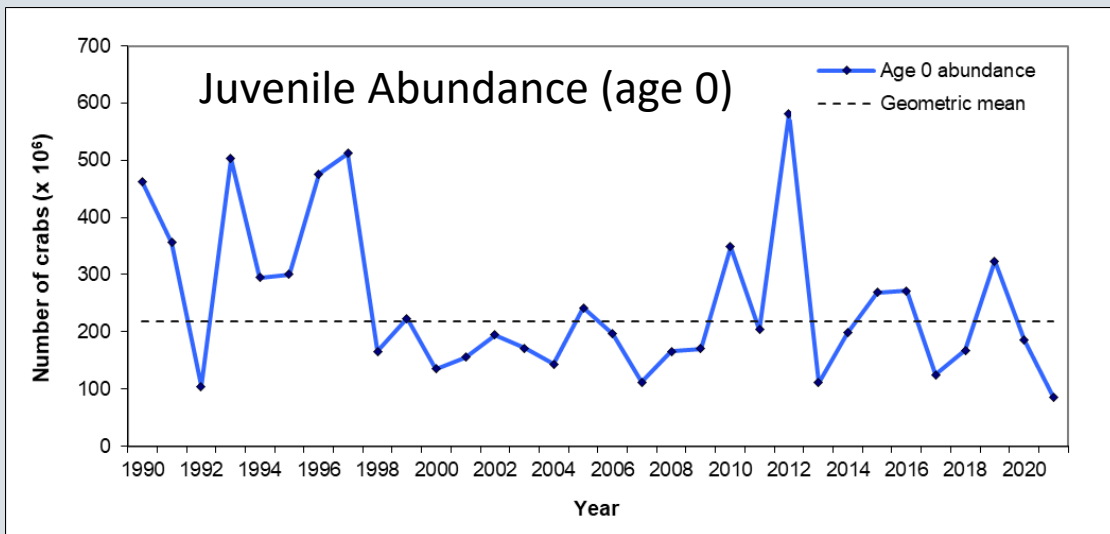
Since female-specific management was implemented in 2008, female abundance has increased and remained above the threshold. In 2020, a new target (196M) and (72.5M) was adopted for female abundance, based on the results of the 2017 stock assessment.

Adult Female Crab Abundance, 1990 - 2021





2014 Bay Agreement: Sustainable Fisheries





2014 Bay Agreement: Sustainable Fisheries

OUTCOME: Blue Crab Management



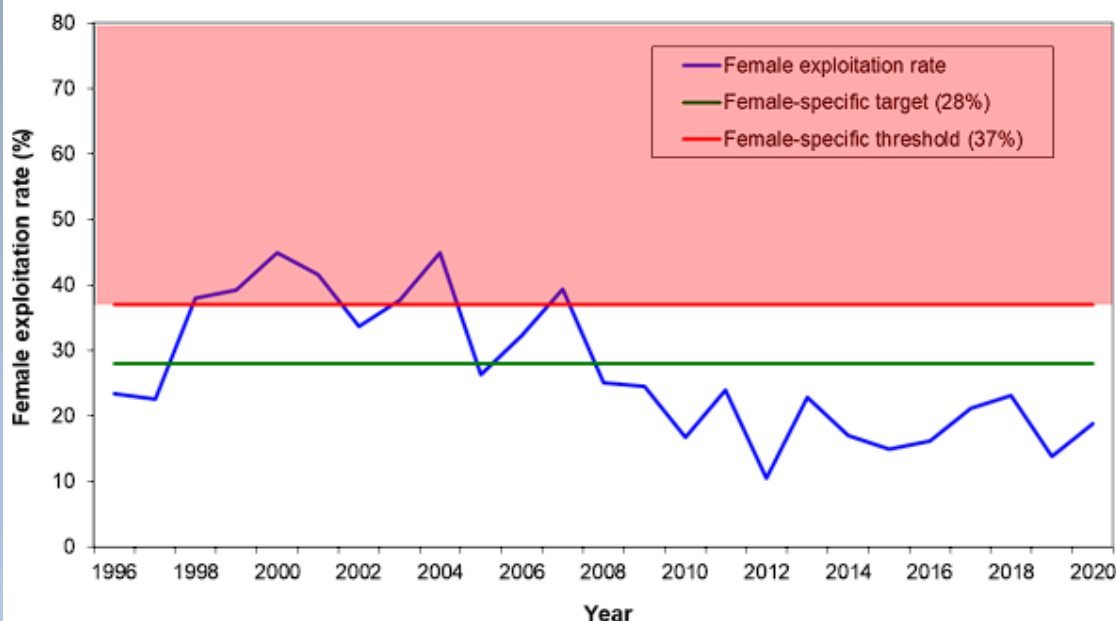
Manage for a stable and productive crab fishery including working with the industry, recreational crabbers and other stakeholders to improve commercial and recreational harvest accountability. By 2018, evaluate the establishment of a Bay-wide, allocation-based management framework with annual levels set by the jurisdictions for the purpose of accounting for and adjusting harvest by each jurisdiction.



On Track

An estimated 19% of the female blue crab population was harvested in 2020. For the 13th consecutive year, this is below the exploitation target (now 28%) and overfishing threshold (now 37%).

Female Crab Harvest, 1990 - 2020





2014 Bay Agreement: Sustainable Fisheries

OUTCOME: Oysters

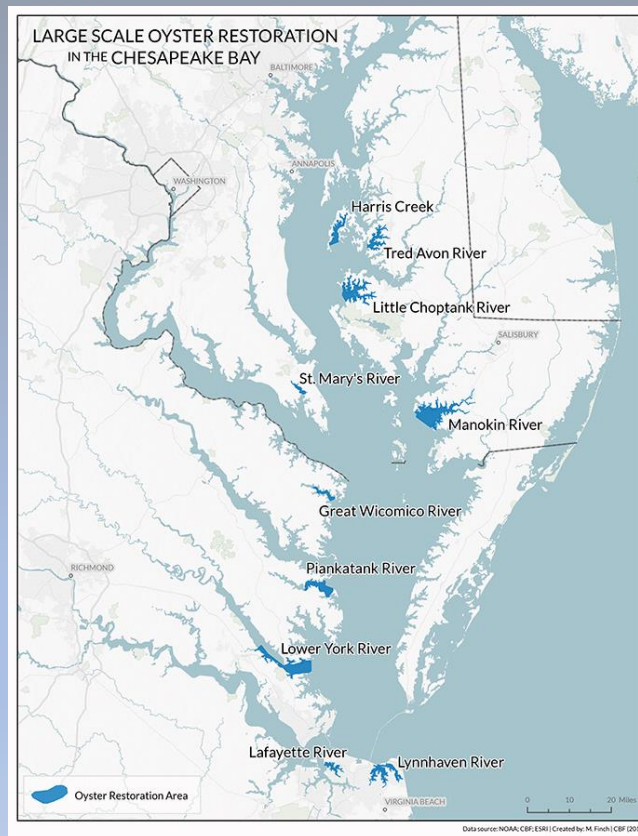


Continually increase finfish and shellfish habitat and water quality benefits from restored oyster populations. Restore native oyster habitat and populations in 10 tributaries by 2025 and ensure their protection.



Achievement Uncertain

10 tributaries have been selected for oyster reef restoration. Each of the 10 tributaries is at a different level of progress.





2014 Bay Agreement: Sustainable Fisheries



Oyster Reef Restoration Progress

Tributary	Restoration Plan	Reef Construction and Seeding	Completed/Target Acreage
Harris Creek (MD)	Completed	Completed	351/351
Little Choptank (MD)	Completed	Completed	358/358
Tred Avon (MD)	Completed	Completed	130/130
Manokin (MD)	Completed	On Track	15.3/441
St. Mary's (MD)	Completed	On Track	14.2/60
Lafayette (VA)	Completed	Completed	82/80
Piankatank (VA)	Completed	Completion expected in September	438/438
Great Wicomico (VA)	Completed	Completion expected in September	123/123
Lower York (VA)	Completed	On Track	46/200
Lynnhaven (VA)	Completed	On Track	114/152
Elizabeth (VA)	Completed	Completed	24/24

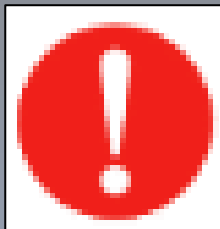


2014 Bay Agreement: Forest Buffers

OUTCOME: Forest Buffers



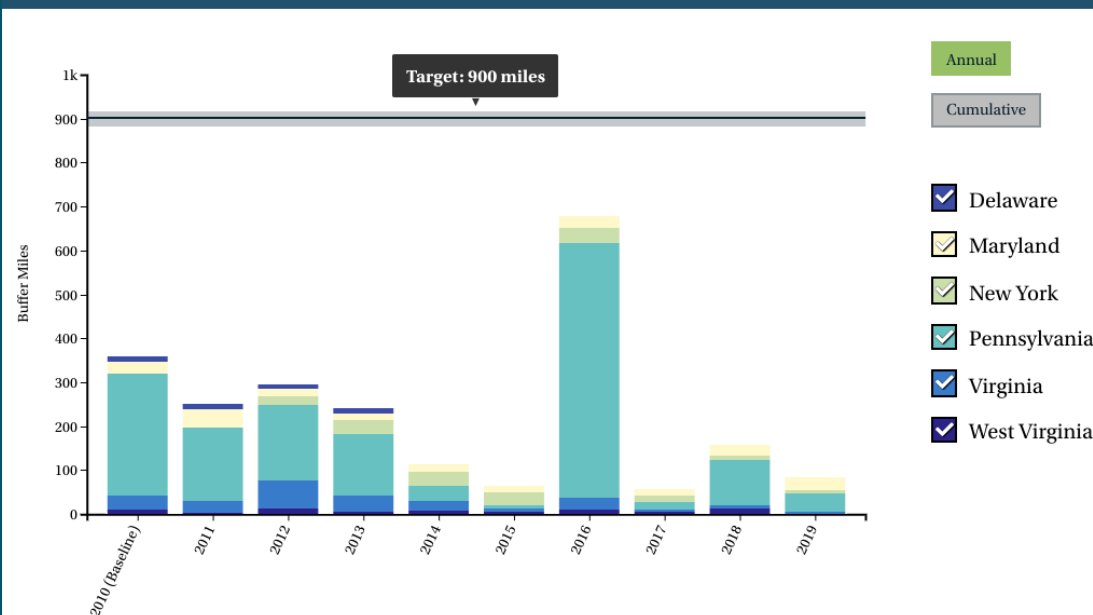
Continually increase the capacity of forest buffers to provide water quality and habitat benefits throughout the Chesapeake Bay watershed. Restore 900 miles of riparian forest buffers per year and conserve existing buffers until at least 70 percent of riparian areas in the watershed are forested.



Not on Track

Between 2017 and 2018, about 158 miles of forest buffers were planted along rivers and streams, followed by about 83 miles in 2019.

Forest Buffers Planted (2010-2019)





2014 Bay Agreement: Tree Canopy



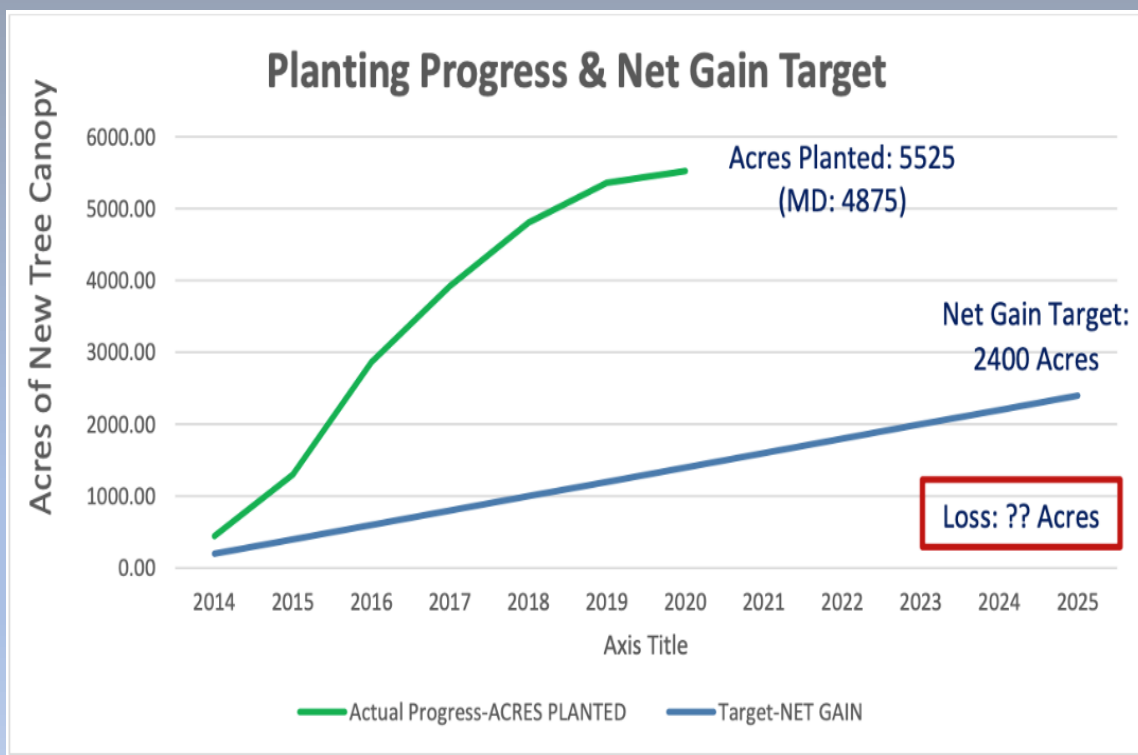
OUTCOME: Tree Canopy

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.



Achievement Uncertain

Between 2014-2020, states reported 5,525 acres of tree planting BMPs on developed lands, with most of those acres (4,875) reported by Maryland.





2014 Bay Agreement: Wetlands

OUTCOME: Wetlands



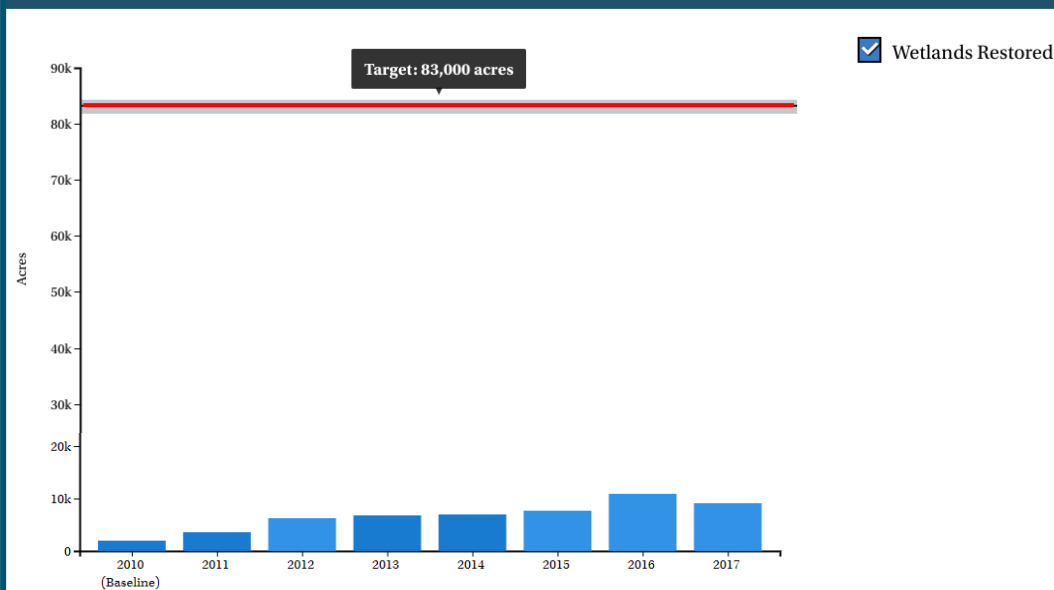
Continually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or reestablish 85,000 acres of tidal and non-tidal wetlands and enhance function of an additional 150,000 acres of degraded wetlands by 2025. These activities may occur in any land use (including urban), but primarily occur in agricultural or natural landscapes.



Achievement Uncertain

Between 2010 and 2017, 9,103 acres of wetlands were established, rehabilitated or reestablished on agricultural lands.

Wetlands Restored on Agricultural Lands (Cumulative) (2010-2017)





2014 Bay Agreement: Protected Lands



OUTCOME: Protected Lands

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.

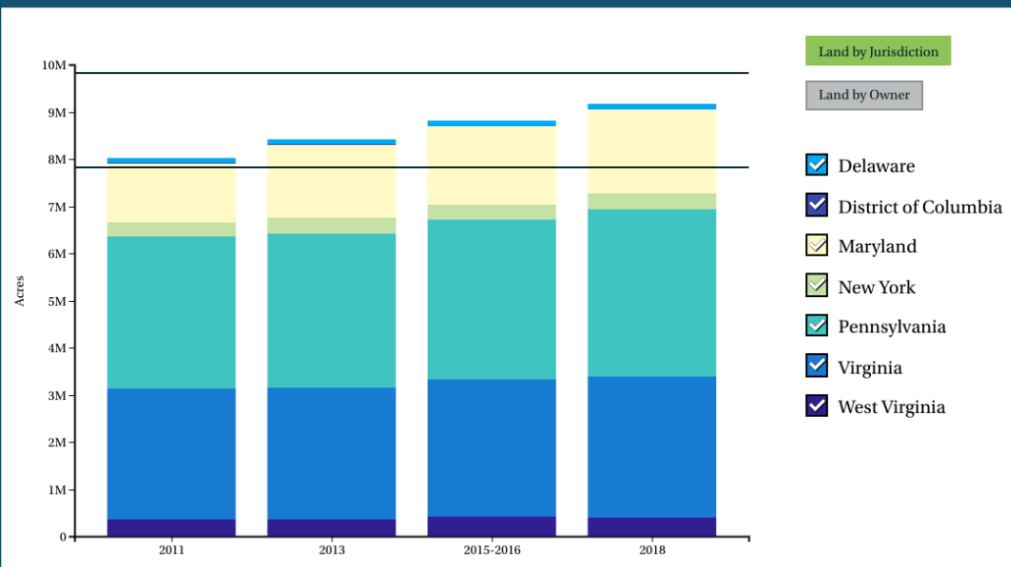


On Track

As of early 2019, nearly 1.36 million acres of land in the Chesapeake Bay watershed have been permanently protected since 2010. This marks an achievement of 68% of the land conservation goal for a total of 9.16 million acres protected in the watershed.

Protected Lands (Cumulative) (2011-2018)

Some increases in acreage can be attributed to newly protected parcels of land. Other increases can be attributed to the addition of previously protected but newly digitized, corrected or refined parcels.





2014 Bay Agreement: Public Access



OUTCOME: Public Access Site Development

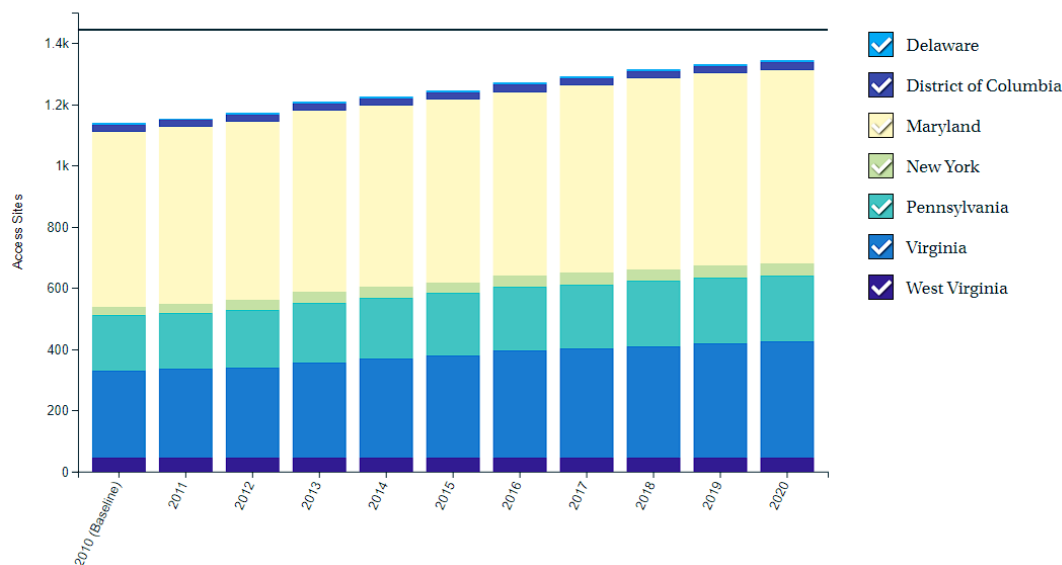
By 2025, add 300 new public access sites, with a strong emphasis on providing opportunities for boating, swimming and fishing, where feasible.



On Track

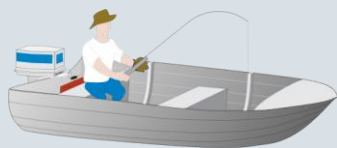
Between 2010 and 2020, 206 boat ramps, fishing piers and other public access sites were opened on and around the Chesapeake Bay. This marks a 69% achievement of the outcome and brings the total number of access sites in the region to 1,345.

Public Access Site Development, 2010 - 2020



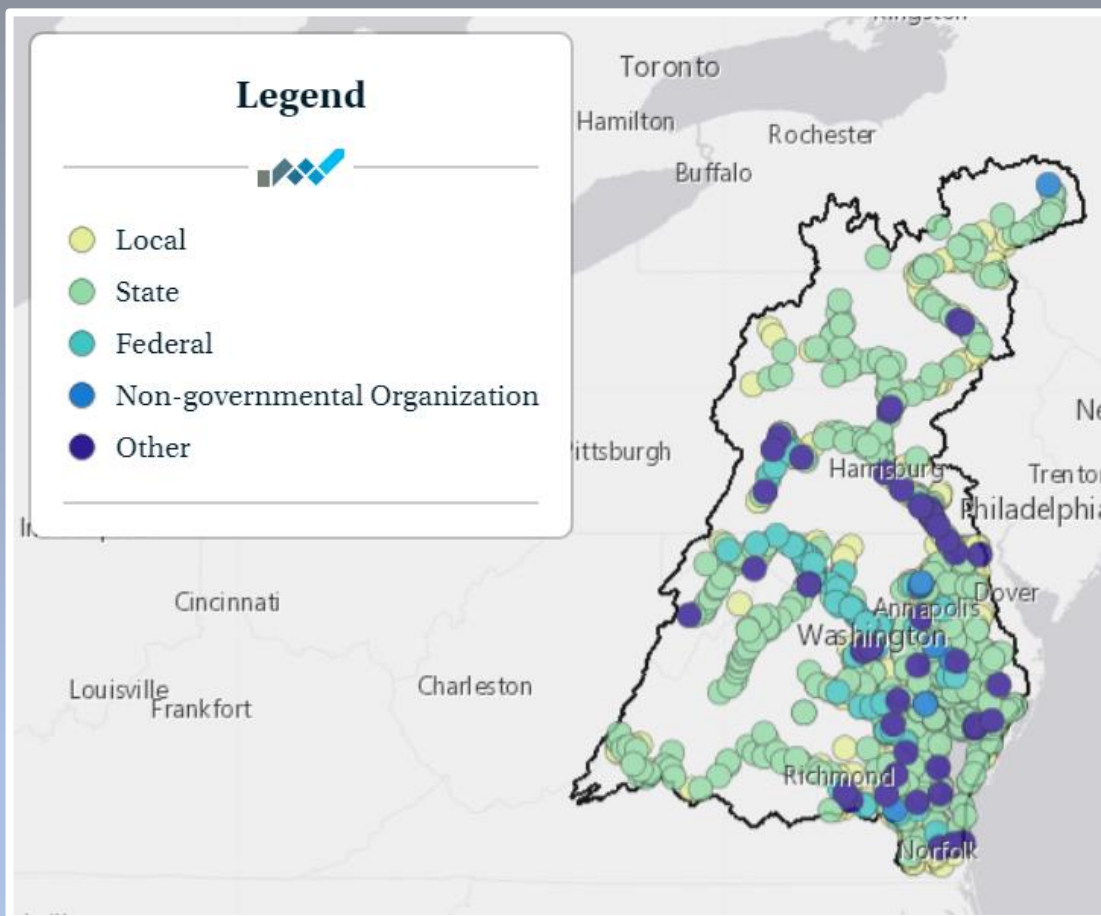


2014 Bay Agreement: Public Access



Existing Public Access Sites

- Delaware: 8
- District of Columbia: 24
- Maryland: 634
- Pennsylvania: 214
- Virginia: 380
- West Virginia: 46
- New York: 39





2014 Bay Agreement: Climate Adaptation

OUTCOME:

Climate Adaptation

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.



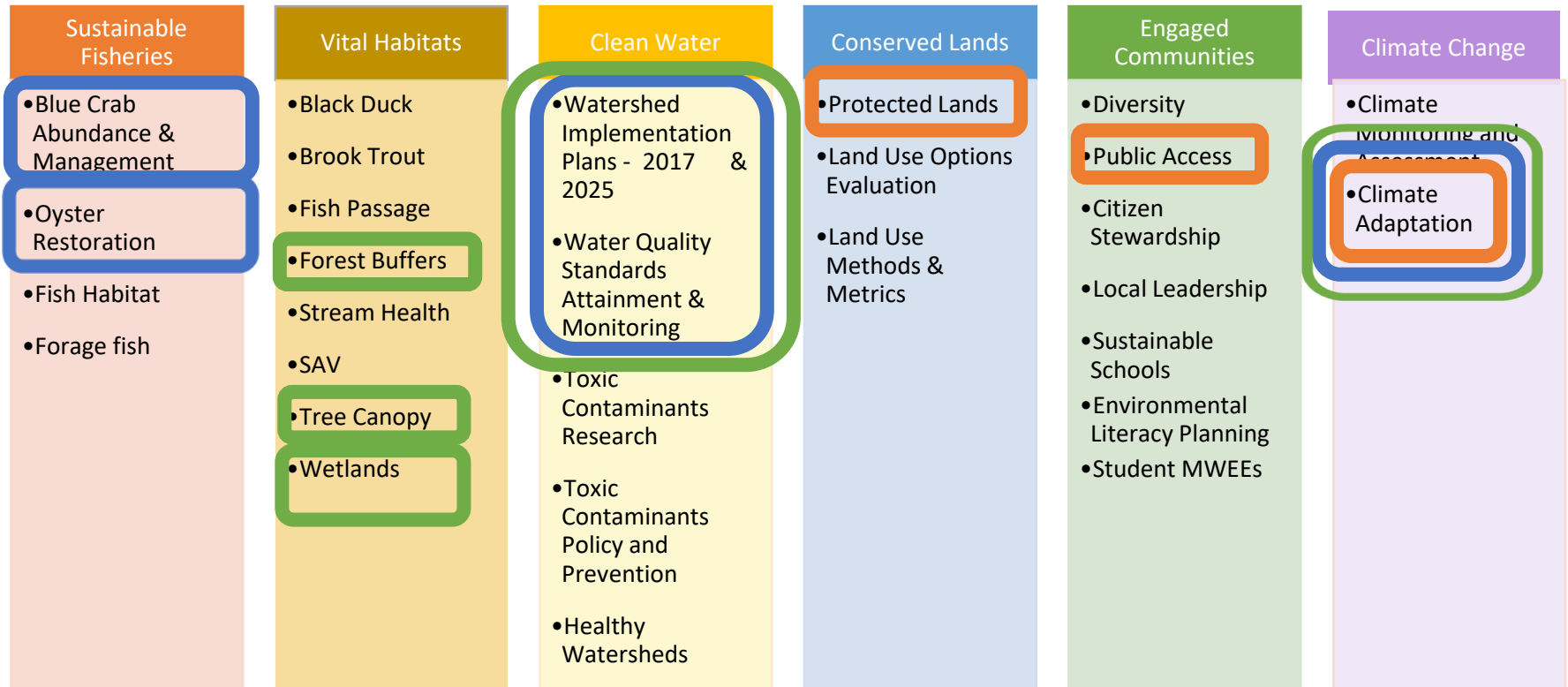
Achievement Uncertain

- ✓ Executive Council Climate Directive (8/21)
- ✓ Ongoing Research
 - Next generation models examining 2035 risk
 - Climate influences on the watershed and tidal areas
 - BMPs most resilient to climate change
 - Changing water oxygen dynamics technical synthesis
 - Rising temperatures ecological implications and management responses STAC Workshop
 - Climate change indicators



Commission Feedback and Discussion

2014 Chesapeake Watershed Agreement Outcomes



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