

Outcome: Protected Lands

Principles For Phase III Watershed Implementation Plans

Growing the Green Infrastructure of Protected Lands for Local Economies, Human Health, and Reduced Reliance on Built Infrastructure

The values found around the landscape of the Chesapeake Bay landscapes have generated over a century of efforts by governments at all levels, non-profit organizations, private landowners, and more recently by for profit companies to conserve and restore them for the benefit of current and future generations.

These values are collectively called our "Green Infrastructure" and are viewed as increasingly essential to maintaining and growing various local economies; restoring human health and the social fabric of communities; ensuring the survival of wildlife and other species critical to the future of all living things; providing buffers and pathways for flooding and storm inundation; providing a "platform" to achieve Total Maximum Daily Load (TMDL) nutrient and sediment reduction goals in certain areas of the watershed; and providing opportunities for offsets to future growth and development (and their attendant built infrastructure costs) in certain areas of the watershed.

There are 41 million acres of land in the watershed. The 2014 Chesapeake Bay Watershed Agreement established a goal of permanently protecting an additional two million acres of land by 2025 over the 7.8 million acres preserved as of 2010. As of the end of 2016, approximately one million additional acres had been preserved, thus increasing the total acres preserved to 8.8 million. The members of the Chesapeake Conservation Partnership (CCP) and other allied entities have collectively met just over 50 percent of the goal with eight years remaining to conserve the balance of the acres needed (995,423 acres). Approximately 11 percent of the total acres in the watershed (or 4.73 million acres) are "developed" (e.g. in residential, commercial, and industrial uses, and public works of all types).

There are many economic assessments of how property values of residential developments are enhanced by adjoining nearby parks, trails, and other open spaces. Economic benefits are also generated by the outdoor recreation industry to states across the country, as well as, preserving working farmlands and forestlands to regional, state and local economies. Local economies are buoyed by tourism to preserved historic, cultural and heritage sites and landscapes. The availability of private markets in allocating capital for environmental restoration, often in tandem with acquiring interests in lands or using already preserved lands for restoration, also provide attendant economic benefits to local economies. Finally, a growing body of science demonstrates the many links between maintaining and restoring human health and well-being regularity of spending time in nature.



Almost nine million acres are permanently protected in the Chesapeake watershed, including significant forest lands and farm lands along the Susquehanna. Photo: Nicholas Tonelli



Conservation efforts date back to the mid-19th century resulting in tremendous public resources like the 186 mile long Chesapeake and Ohio Canal National Historical Park on the Potomac River. Photo: Chris Spielmann

There is one recent development, which if successfully implemented, will provide additional resources and means to further the conservation of certain lands in the watershed. Given the Chesapeake Bay Program's recent approval of projected growth and development scenarios around the watershed, the program is now perfecting for the first time a set of new "Conservation Plus best management practices (BMPs)" with estimated pollution load reductions for the retention of high quality forest and agricultural lands, as well as another set for growth management. These new BMPs will be available for localities projected to experience future growth and development to consider in preparing their Phase III WIPs.

Best Management Practices with Protected Lands in Mind

The Chesapeake Conservation Partnership has developed maps depicting the most valued forests, agricultural lands, habitats, and heritage areas within the Bay Watershed. Please see the link to these maps in the section below on Tools and Resources. Using these maps for land conservation actions going forward, will serve as one resource for states and counties seeking to target conservation actions with multiple co-benefits. See the table below for Protected Lands BMPs that have several co-benefits*

Best Management Practice	Protected Lands	Additional Co-Benefits							
		Biodiversity and Habitat	Wetlands	Healthy Watersheds	Land Use Methods and Metrics	Fish Habitat	Climate Adaptation	Forest Buffers	Recreation
Ag Forest Buffer	3.5	4	3.5	4	4	4.5	2.5	5	4
Forest Conservation	5	5	2.5	5	3.5	4	3.5	3.5	3.5
Urban Forest Buffers	3.5	5	3.5	3.5	4	4	3.5	5	3
Urban Growth Reduction	5	4.5	1	4	5	3	2	2	3
Urban Shoreline Management	4.5	4	4.5	2	2.5	4.5	4	2.5	4.5
Wet Ponds	3.5	3.5	4.5	1.5	2	1	2	1	2.5
Wetland Restoration	3.5	3	5	1	4	3.5	1	1	2
Wetlands	4	3	5	1.5	2	2	2	1	3

*Values were taken from the [Quantification of BMP Impact on the Chesapeake Bay Program Management Strategies](#) study by Tetra Tech. [Appendix E](#) Final Impact Scores evaluates BMP effects on outcomes on a scale of +5 (very beneficial) to -5 (very harmful). **This table shows BMPs that scored a 3.5 or higher and -3.5 or lower for the Protected Lands Outcome.**



Guiding Principles for Phase III Watershed Implementation Plan

WIP Development

1. Review the Bay Program's projected growth and development scenarios to determine where impacts are projected to occur.
2. Review the new "Conservation Plus BMPs" to determine if any of the growth management policies can be scheduled for inclusion in local WIPs.
3. If conservation Plus BMPs are included in a local WIP, the WIP should select BMPs in each of the three categories to reflect a balanced approach.
4. Consult partners (elected officials, state and federal agency representatives, land trusts, and others) in the development of WIP strategies. If land conservation is one of the BMPs pursued, determine capacity to reach out to land owners in areas targeted for conservation.

WIP Implementation

1. If land conservation is one of the BMPs selected for inclusion in a local WIP, conduct an outreach effort to confirm an initial level of landowner interest in each target area if not already known.
2. Focus on areas for land conservation which reflect the co-benefits shown in the CCP maps under "Tools and Resources."
3. Take advantage of the growing number of resources and entities available for implementing land acquisition (and in some cases, restoration) of lands identified in local WIPs.

Tools and Resources

- Chesapeake Conservation Partnership Website: <https://chesapeakeconservation.org>.
- Chesapeake Conservation Partnership Maps: <https://landscape.org/chesapeake/Priorities>
- Conservation Land-Use Policy Tool Kit / Webinar and Healthy Watersheds Forestry TMDL Forest Retention Study: both can be found on "Maintain Healthy Watersheds Team" page at: https://www.chesapeakebay.net/who/group/maintaining_healthy_watersheds_goal_implementation_team
- "Chesapeake: A Network of Conservationists Across 64,000 Square Miles" Jonathan L. Doherty and Suzanne E. Copping, *The George Wright Forum* Vol. 33, No. 2 (2016), pp. 185-198 <http://www.georgewright.org/332doherty.pdf>
- Outdoor recreation economy generates \$887B in consumer spending annually and supports 7.6M in jobs. See state by state data. <http://oia.outdoorindustry.org/e/51282/7-outdoor-rec-economy-resource/8hcywd/493072607>
- Report by Forest Trends summarizing the \$8.2 B in private investment raised and committed in the last decade for a variety of renewable, sustainable, environmental restoration, and conservation projects and another \$3.2 B raised and planned to be committed over the next 2 to 3 years: <http://www.forest-trends.org>
- Private Capital for Working Lands (Farms and Forests) Conservation: A Market Development Framework. The Conservation Finance Network: www.conservationfinancenetwork.org
- Economic Benefits of Parks-- State and National Surveys of Parks and Other Natural Assets: www.conservationtools.org/guides/98-economic-benefits-of-parks
- BBC Earth-How nature is good for our health and happiness. <http://www.bbc.com/earth/story/20160420-how-nature-is-good-for-our-health-and-happiness>
- Call to the Wild: This is Your Brain on Nature. National Geographic. <https://www.nationalgeographic.com/magazine/2016/01/call-to-wild/>

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