

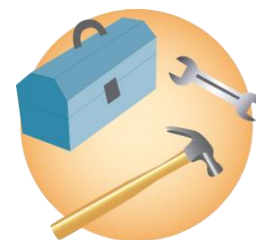
# Land Use Resource Guide

The Chesapeake Bay Program (CBP), through its [Maintain Healthy Watersheds Goal Implementation Team](#), has a goal of maintaining the long-term health of watersheds identified as healthy by its partner jurisdictions.

In addition, under the leadership of the Land Use Workgroup, CBP is working to continually improve our knowledge of land conversion and the associated impacts throughout the watershed. This is a compilation of ongoing initiatives, databases, tools, other resources developed to support local governments and land use managers in designing sustainable landscapes.

## Land Use Planning

Chesapeake Land Use Policy Toolkit: This [toolkit](#) provides information about land use policy tools local governments can use to slow the conversion of farmland, forestland, and wetlands from The National Center for Smart Growth Research and Education (NCSG) at the University of Maryland.



Accounting for Growth: [Factsheet](#) on CBP Land Change Model (CBPLCM)

Chesapeake Bay High-Resolution Land Cover: 2013 1-m and 10-m land cover and land use [data](#)

Chesapeake Phase 6 Land Use Viewer: This data [viewer](#) allows you to explore the high-resolution land cover dataset.

Chesapeake Bay Watershed Data Dashboard: The [Data Dashboard](#) provides information on the economic and community health benefits of pollution reduction and mapped opportunities for land policy, growth management, restoration and conservation practices to help guide watershed planning efforts.

EnviroAtlas: Interactive [tool](#) from EPA that provides geospatial data, tools, and resources related to ecosystem services, their stressors, and human health to help inform policy and planning decisions.

Holistically Analyzing the Benefits of Green Infrastructure: Guidance [document](#) for local governments on how to understand and evaluate the benefits of implementing green infrastructure from the Environmental Finance Center at the University of Maryland. This [article](#) provides a breakdown of the report.

## Healthy Watersheds

Implementation of Chesapeake Healthy Watersheds Assessment in Maryland's Tier II watersheds: (CBP Goal Implementation Team Funding 2020-21, Tetra Tech)



Chesapeake Healthy Watersheds Assessment (CHWA) Literature Review: Summarizing the relationship of landscape characteristics to in-stream stressors and understanding the methods used to evaluate those relationships (Funding provided by USGS: Priority Ecosystems Services)

CHWA Story Map Communication / Introduction: (USGS Priority Ecosystem Services funding and EPA collaboration and hosting support FY 2020)

CHWA Visualization (download / analysis): The creation of a user-friendly web hosted tool to facilitate exploration of the CHWA metrics, access to data at a variety of scales, and statistics such as rankings, percentiles or comparisons of local catchment (CBP EPA Support, Innovate, Inc.)

Contact Renee Thompson, Geographer USGS: [rtompson@chesapeakebay.net](mailto:rtompson@chesapeakebay.net) for more information on Healthy Watersheds projects.

## Wetlands and Habitat

Landowner Attitudes Toward Wetland Restoration: [Report](#) on barriers to wetlands restoration for landowners, the benefits and motivators that could overcome those barriers and specific tools and techniques for more effective landowner outreach.

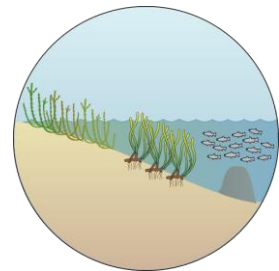
Wetlands Work: This [website](#) launched in 2018 as a resource for landowners who are interested in restoring wetlands on their property.

Accelerating Wetland Restoration Across the Chesapeake Bay: A [report](#) from The Nature Conservancy summarizing common barriers and potential solutions to increase the rate of wetland restoration activity in PA, DE, MD and VA.

Black Duck Decision Support Tool (DST): [Tool](#) to help land managers determine the best way to achieve black duck goals by identifying areas to protect, restore or maintain at the small watershed scale.

Support for Inventory & Evaluation of Environmental and Biological Response Data: Fish habitat assessment and development of a benthic macroinvertebrate tool to identify realistic ecological outcomes in urban stream restorations and determine better successful factors (CBP GIT Funding, Tetra Tech).

Targeted Outreach for Wetland Protection and Restoration: Ongoing 2017 GIT-funded project accelerating the implementation of wetland restoration and protection projects to benefit Black Duck, Water Quality, Black Rail, and Salt Marsh Sparrow.



## Farmland

Farms Under Threat: The State of the States: [Report](#) issued by the American Farmland Trust (AFT) with updated spatial analyses, datasets, refined methods and an extensive analysis of six state policy responses to the forces that lead to agricultural land conversion.



Photo by Will Parson, CBP

## Forests and Tree Canopy

Riparian Forest Buffer Progress in the Chesapeake Bay Watershed: Mapping [tool](#) shows acres of agricultural and urban riparian forest buffers as reported to CBP in 2018.

Chesapeake Tree Canopy Network: [Website](#) with resources and best practices for expanding and maintaining tree canopy.

Contact Sally Claggett, USFS Chesapeake Bay Program: [sally.claggett@usda.gov](mailto:sally.claggett@usda.gov)

## Environmental Justice

EPA EJSCREEN: Environmental justice screening and mapping [tool](#) combining environmental and demographic indicators.

DEIJ in Action: [Guide](#) with recommendations to advance diversity, equity, inclusion and justice strategies for environmental organizations in the Bay watershed.

CBP Diversity Workgroup: [Webpage](#) with projects and reports on community engagement, recruitment and hiring, workforce development opportunities and anti-racism resources.

Contact Tuana Philips, Diversity and Local Engagement Coordinator, EPA: [Phillips.tuana@epa.gov](mailto:Phillips.tuana@epa.gov)

## Climate

Cross-Goal Climate Resiliency Analysis and Decision-Making Matrix and Implementation Methodology: (CBP GIT Funding 2018)

Climate Change Indicators for the Chesapeake Bay Program: An Implementation Strategy, Chesapeake Bay Watershed Climate Data and Mapping



Repository: These projects are aimed at developing a comprehensive and balanced suite of climate change indicators and building a repository of datasets that meet key criteria for developing proposed climate indicators (CBP GIT Funding, Eastern Research Group)

Building a Bay-Wide Scorecard to Track Climate Resilience for Watershed Communities: (in progress, CBP GIT funding, The RAND Corporation)

Social Marketing to Improve Shoreline Management: (in progress, CBP GIT funding, Action Research)

Contact Julie Reichert-Nguyen, Natural Resources Specialist and CBP Climate Resiliency Workgroup Coordinator, NOAA: [julie.reichert-nguyen@noaa.gov](mailto:julie.reichert-nguyen@noaa.gov)

Targeted Outreach for Green Infrastructure (TOGI) in Vulnerable Areas: Work directly with local leaders in underserved communities in Virginia, Maryland, and Pennsylvania facing threats from climate change to identify and design green infrastructure tailored to the specific challenges they face while improving habitat value and climate resiliency. (in progress, CBP GIT funding)

Contact Dan Murphy at [dan\\_murphy@fws.gov](mailto:dan_murphy@fws.gov) for more information

## Coming Soon

Other currently funded and forthcoming project [descriptions](#) (EPA Chesapeake Bay Program Goal Implementation Team funding, Administered by the Chesapeake Bay Trust)

*Symbols from Integration and Application Network, University of Maryland Center for Environmental Science (IAN, UMCES) [Image Library](#); Authors Jane Hawkey, Tracey Saxby and Jane Thomas*

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