



Understanding STAC's Perspectives on Environmental Decision Support Tools

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Agenda

- Background
- Decision Support Tools
- User Research
- Discussion

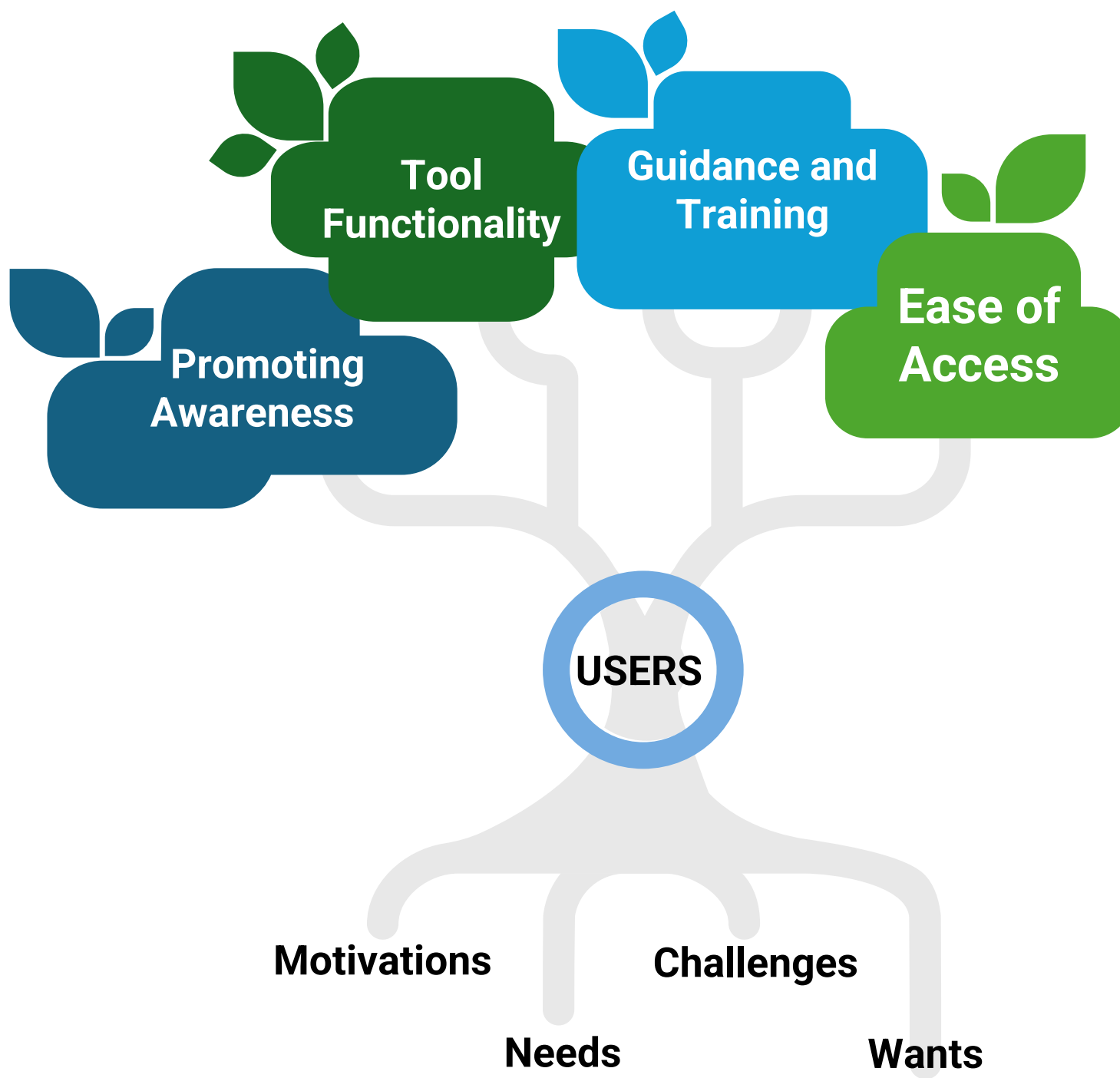
Background



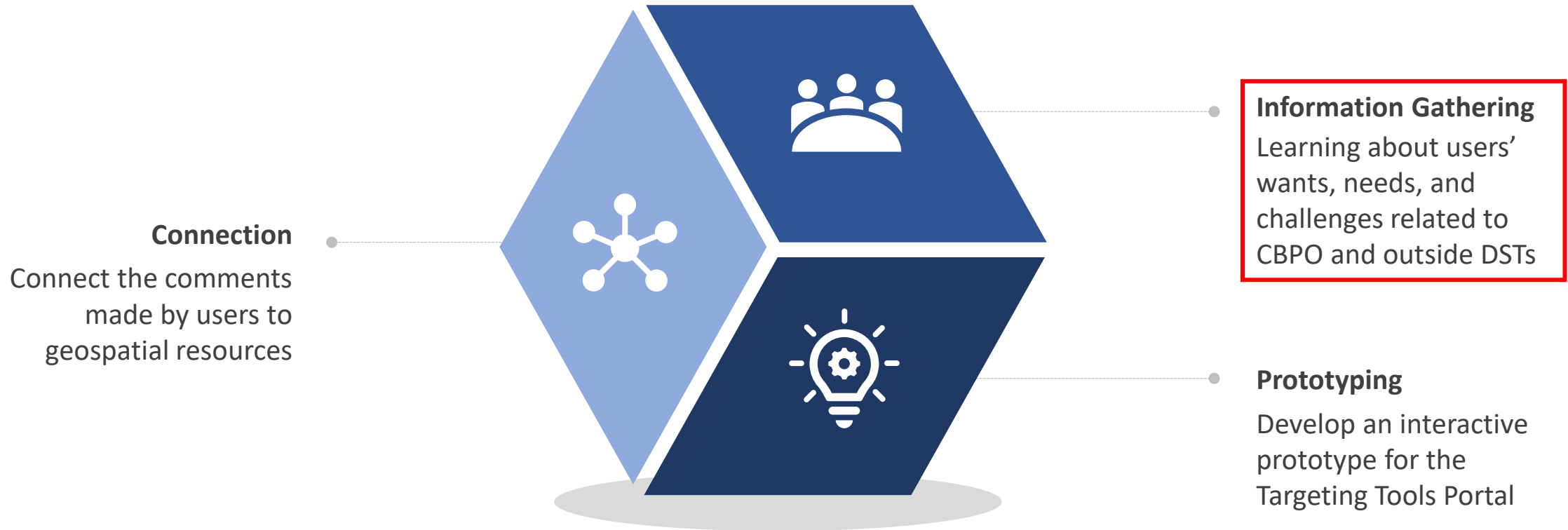
Why User Research? Why Now?

- The Beyond 2025 Steering Committee has expressed that the Chesapeake Bay Partnership needs to **target actions to effectively address local environmental and community concerns**.
 - There is a need to “better target and prioritize resources and to provide technical assistance and communication of outcomes.”¹
- GSAT is reviewing existing resources and identifying potential new resources that can **address the needs** of stakeholders and target audiences.
- User research is needed to **better understand the motivations and needs** of target audiences related to conservation and restoration decisions as we pivot to Beyond 2025.

[1. A Critical Path Forward for the Chesapeake Bay Program Beyond 2025](#), page 12.



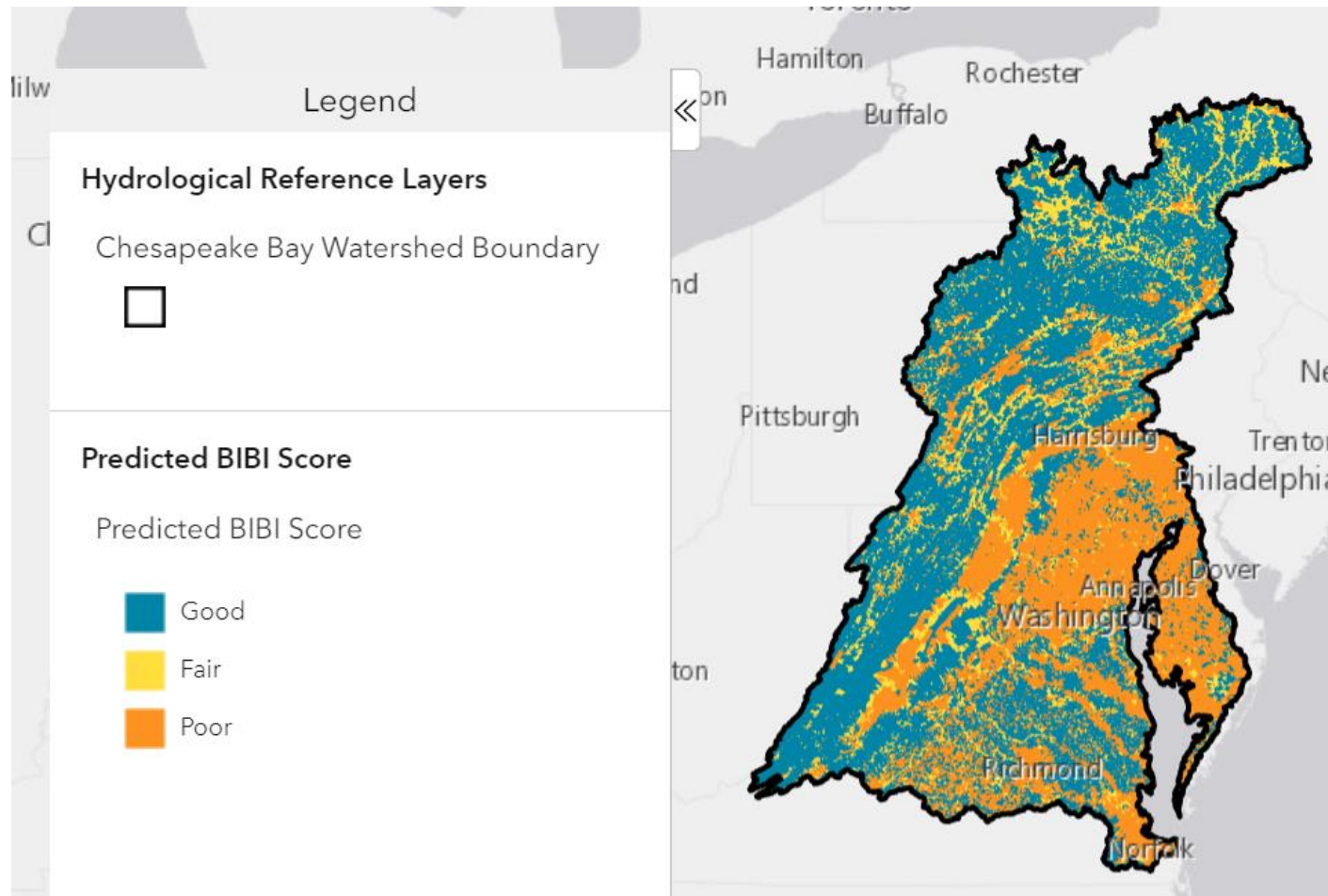
The Modular Approach



Decision Support Tools



Chesapeake Healthy Watersheds Assessment 2.0 (CHWA2.0)



Assessment tool that explores the health and vulnerability of the Chesapeake Bay Watershed.

Tree Canopy Fact Sheets

The screenshot shows the website for the Chesapeake Tree Canopy Network. The header is dark blue with the logo on the left and navigation links on the right. The main content area is white with a light map background. It features a breadcrumb trail, a main heading, introductory text, a link to a data guide, and a featured resources section with two items. At the bottom, there's a section for Cumberland County, PA, with statistics and a map.

Chesapeake Tree Canopy Network

SIGN UP | NEWSLETTER ARCHIVE | ABOUT US | CONTACT US | CHESAPEAKEFORESTBUFFERS.NET

WHY TREE CANOPY? | UNDERSTAND YOUR CANOPY | EXPAND YOUR CANOPY | MAINTAIN YOUR CANOPY

Home » Understand your Canopy

Understand your Canopy

The first step in working toward a tree canopy goal is understanding what you have. Thanks to the investments of Chesapeake Bay Program partners, we are fortunate to now have ready access to "wall-to-wall" high resolution land cover/land use data for the entire watershed, for the 2013/14 and 2017/18 time periods. Updated data based on 2021/2022 imagery are anticipated in 2024.

New county fact sheets are now available for all Chesapeake watershed counties sharing tree cover status, benefits (from i-Tree) and change information over the 2013/14 to 2017/18 time periods. Use the map viewer below to find your county's fact sheet. Municipal fact sheets will be produced later in 2023.

Visit the [Data Guide](#) for more information on the data sources included in the fact sheets, as well as additional resources. Access to land use/land cover map viewers, GIS datasets, and detailed methods documentation are available from [Chesapeake Conservancy](#).

Tree Cover Status & Change FOR CUMBERLAND COUNTY, PA

43.6% Total Percent of County with Tree Cover	\$42.6 Million Annual Benefits provided by Tree Cover (in reduced air pollution, climate, & carbon dioxide)	-791 Acres Net Loss of Tree Cover on Developed Land, 2013 to 2017
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How is tree cover changing on developed and developing lands?

Understanding how your tree cover changes over time can inform the sustainable management of forests and community trees. The map to the left shows where your county has lost or gained tree cover from 2013 to 2017, focusing on land that is already or newly developed.

Tree cover can be lost quickly due to human activities (e.g., construction) or natural events (e.g., severe weather).

Tree cover can be gradually increased through tree planting and natural regrowth, but these

Featured Resources

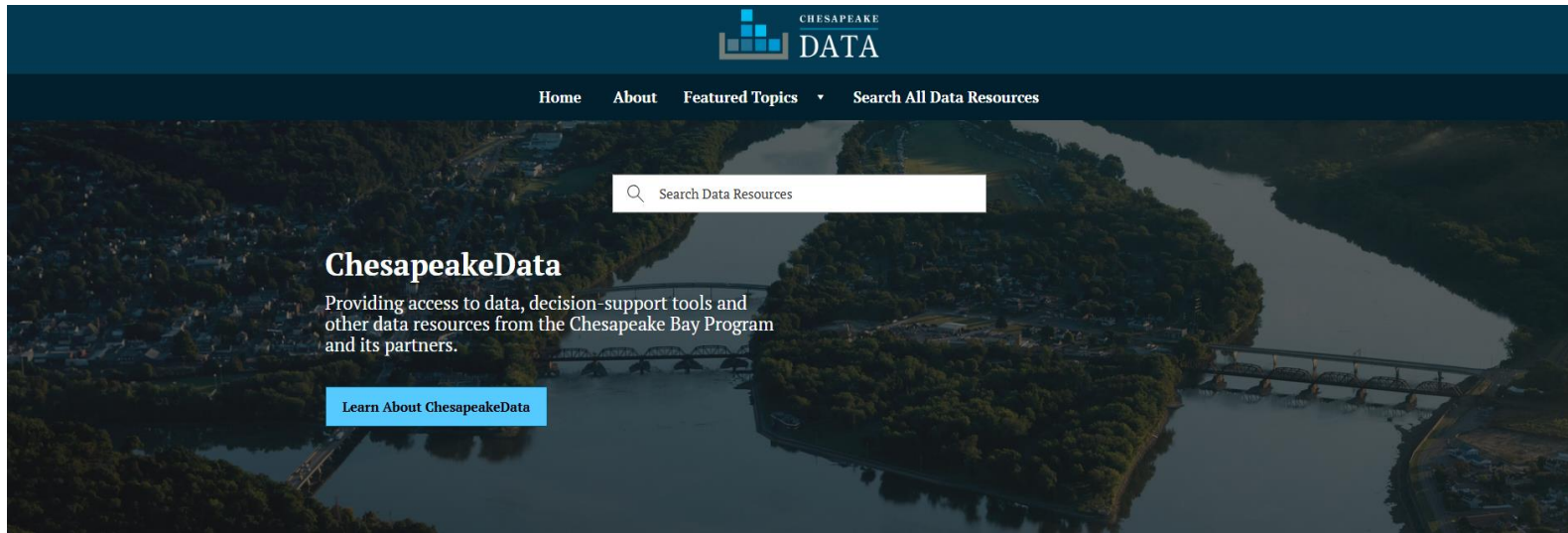
Tree Cover Fact Sheet Data Guide
[LEARN MORE »](#)

Chesapeake Land Cover/Land Use Data & Viewers
[LEARN MORE »](#)

Tree Equity Score Mapping Tool

County fact sheets for Chesapeake watershed counties sharing tree cover status, benefits (from i-Tree) and change information over the 2013/14 to 2017/18 time periods.

Chesapeake Data Portal



Collection of the latest data and geographic content from Chesapeake Bay Program Partners.

Watershed Data Dashboard

Watershed Data Dashboard

Rivers & Streams


Tidal Waters

Targeting Restoration

Management Practices

Land Policy & Conservation

Prioritizing Other Benefits



Welcome to the Chesapeake Bay Watershed Data Dashboard!

What is the Dashboard?

What can you do with it?

How can I get started?

Updates

What is the Dashboard?

The Chesapeake Bay Watershed Data Dashboard is an online tool that provides accessibility and visualization of data and technical information that can help guide water quality and watershed planning efforts.

A large amount of scientific and technical information is available to environmental managers and planners at both state and local levels to inform restoration efforts. Much of this information has been updated or newly generated in recent years and can inform watershed restoration plan development and implementation. This information includes, but is not limited to:

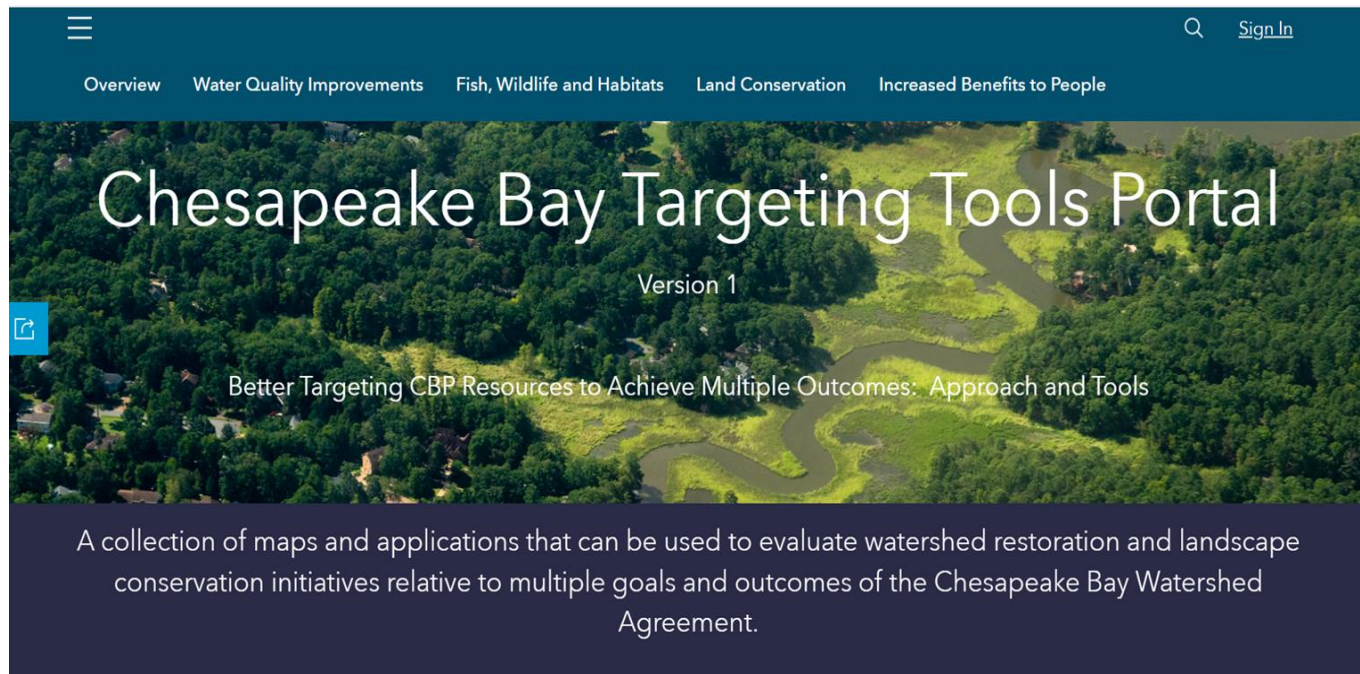
- Tidal and watershed water quality monitoring trends
- Living resources trends and explanations
- Information to help geographically target restoration efforts
- Information to help choose best management practices (BMPs)
- Current reported BMP implementation and opportunities
- Opportunities for smart growth and land conservation

Data for the Targeting Restoration and Best Management Practice (BMP) Implementation modules come from the Chesapeake Assessment Scenario Tool ([CAST](#)). CAST provides access to the datasets and reports behind these modules, as well as tools for [exploring trends over time](#) for watershed conditions such as animal populations, nutrient applications, land use acres, and nutrient and sediment loads. Users can also track [BMP implementation](#), [target BMP placement](#) and view jurisdictional [progress towards WIP goals](#) and [Planning Target reductions](#) needed to achieve the Chesapeake Bay Total Maximum Daily Load (TMDL).

Questions, comments, concerns? Reach us at: datadashboard@chesapeakebay.net

A tool that provides accessibility and visualization of data and technical information that can help guide water quality and watershed planning efforts.

Chesapeake Bay Targeting Tools Portal



A collection of maps and applications that can be used to evaluate watershed restoration and landscape conservation initiatives relative to multiple goals and outcomes of the Chesapeake Bay Watershed Agreement.

User Research



Who are we talking to?

State governments

Local governments

Land trusts

Non-
profits/NGOs/Advocacy
Organizations

Scientists

Common Themes (Preliminary)

- Strong interest in parcel scale metrics
- Interest in BMP implementation suitability maps
- Desire for greater recognition of implemented conservation and restoration actions, through increased spatial representation
- Relatively frequent use of CBP/CIC 1m LULC data
- Request for datasets to include case studies and lessons learned in how to apply each resource

Next steps

- Final report – Summer 2025
- Share findings with partners – Summer 2025
- Prototyping of new decision support portal – Summer and Fall 2025
- User testing of new decision support portal – Fall and Winter 2025

Discussion



Discussion Questions

- 1.What Bay Program resources (including, but not limited to geospatial tools) do you currently use, if any?
- 2.What factors motivate you to use decision support tools in general?(e.g., spatial scale, ease of use)
- 3.What type of technical assistance do you like to have when learning a new dataset or tool?
- 4.How can the Bay Program better support your work?