

An aerial photograph of a river system, likely the Potomac River, winding through a lush, green forested landscape. A small dam or bridge is visible in the distance where the river narrows. The surrounding land is a mix of dense forest and open fields. The text is overlaid on the center of the image.

# Chesapeake Bay Watershed Data Dashboard

Joint LUWG/FWG Meeting  
December 1, 2023

Ruth Cassilly, University of Maryland  
Kaylyn Gootman, Environmental Protection Agency  
Jackie Pickford, Chesapeake Research Consortium



# Presentation Outline

## **Part 1: Overview of the Data Dashboard**

- I. What is purpose of the Data Dashboard?
- II. What information does it show?
- III. Who is the intended audience?
- IV. How can you use it?

## **Part 2: Live Demo**

- I. Land Policy and Conservation Layer
- II. Land Use Comparison slider tool
- III. Buffer Opportunity Locations (Riparian Corridor Land Use Layer)

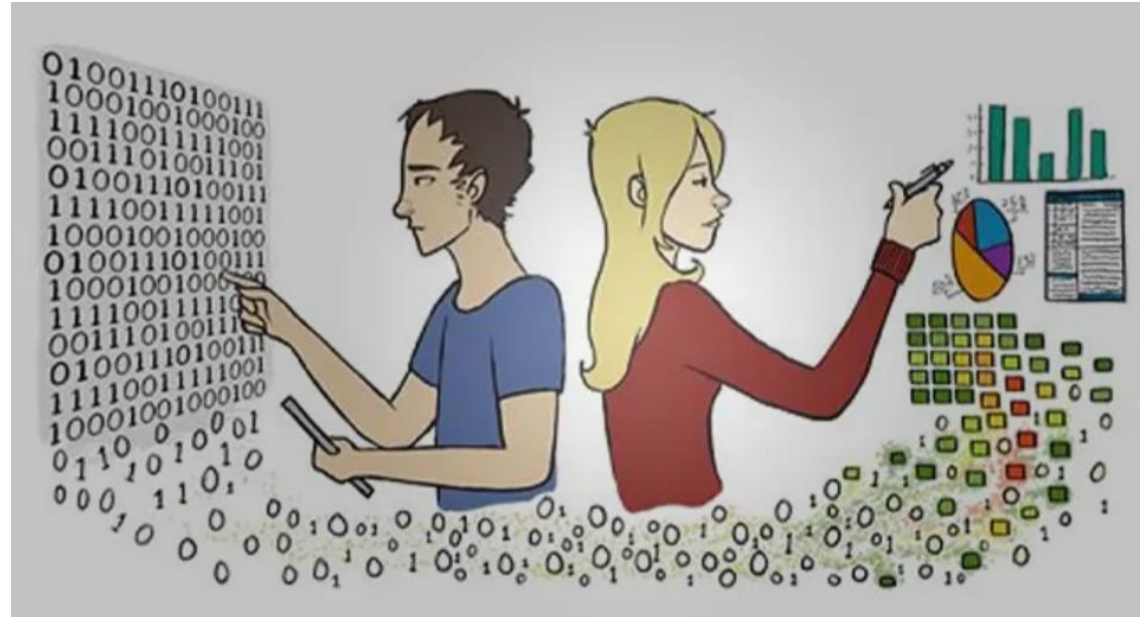
## **Part 3: Feedback from LUWG/FWG - What do you want to see?**

- I. Featuring additional layers, modules, story maps, or other resources

An aerial photograph of a wide, muddy-brown river meandering through a lush, green forested landscape. The river flows from the top center towards the bottom right. In the upper middle, a small bridge crosses the river. The surrounding land is a mix of dense green trees and lighter green or brownish fields. The overall scene is captured in a slightly desaturated, cinematic style.

# Part 1: Overview of the Data Dashboard

# Chesapeake Bay Watershed Data Dashboard

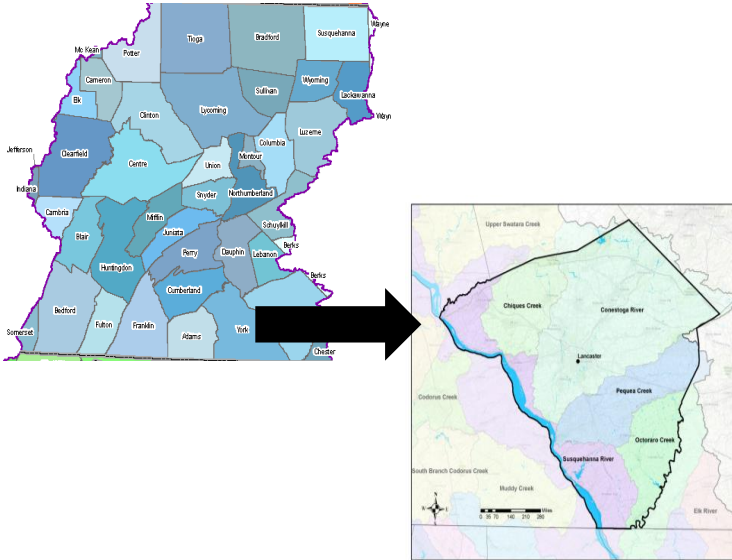


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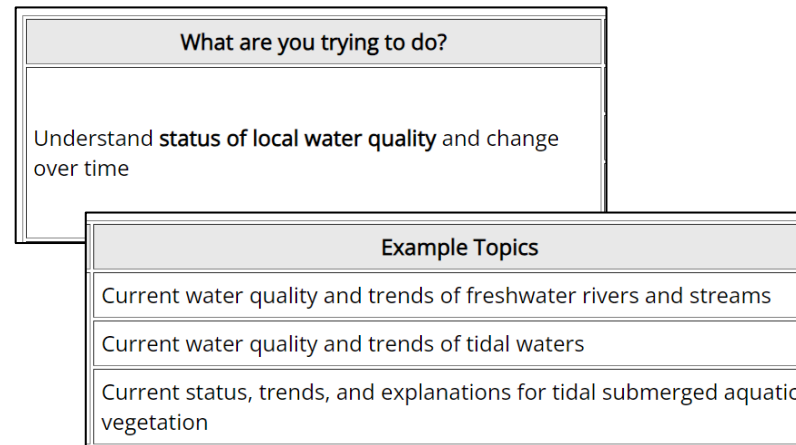
The “Data Dashboard” is an online tool that provides accessibility and visualization of a large amount of scientific data and technical information to help guide water quality and watershed planning efforts.



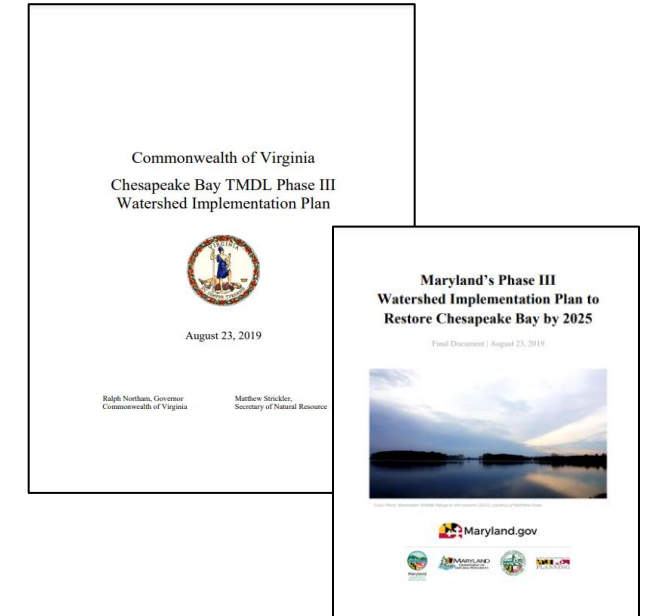
# Chesapeake Bay Watershed Data Dashboard



Informs restoration efforts for environmental managers and planners at both state and local levels.



Provides guidance on how and why the information should be used.



Assists with watershed restoration plan development and implementation.

[Start Here!](#)[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 BMPs

• P implementation and opportunities  
• earth growth and land conservation

The Chesapeake Bay Watershed Data Dashboard is to consolidate and provide accessibility to this information in one cohesive location and to provide the information should be used.

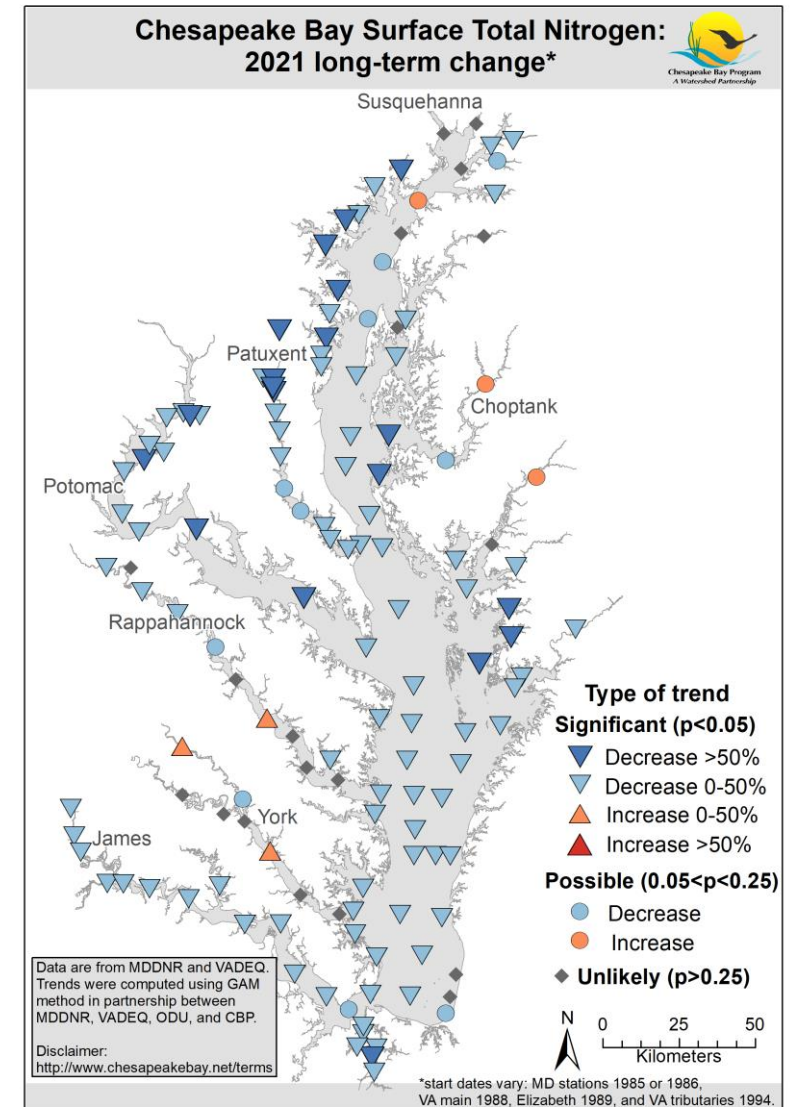
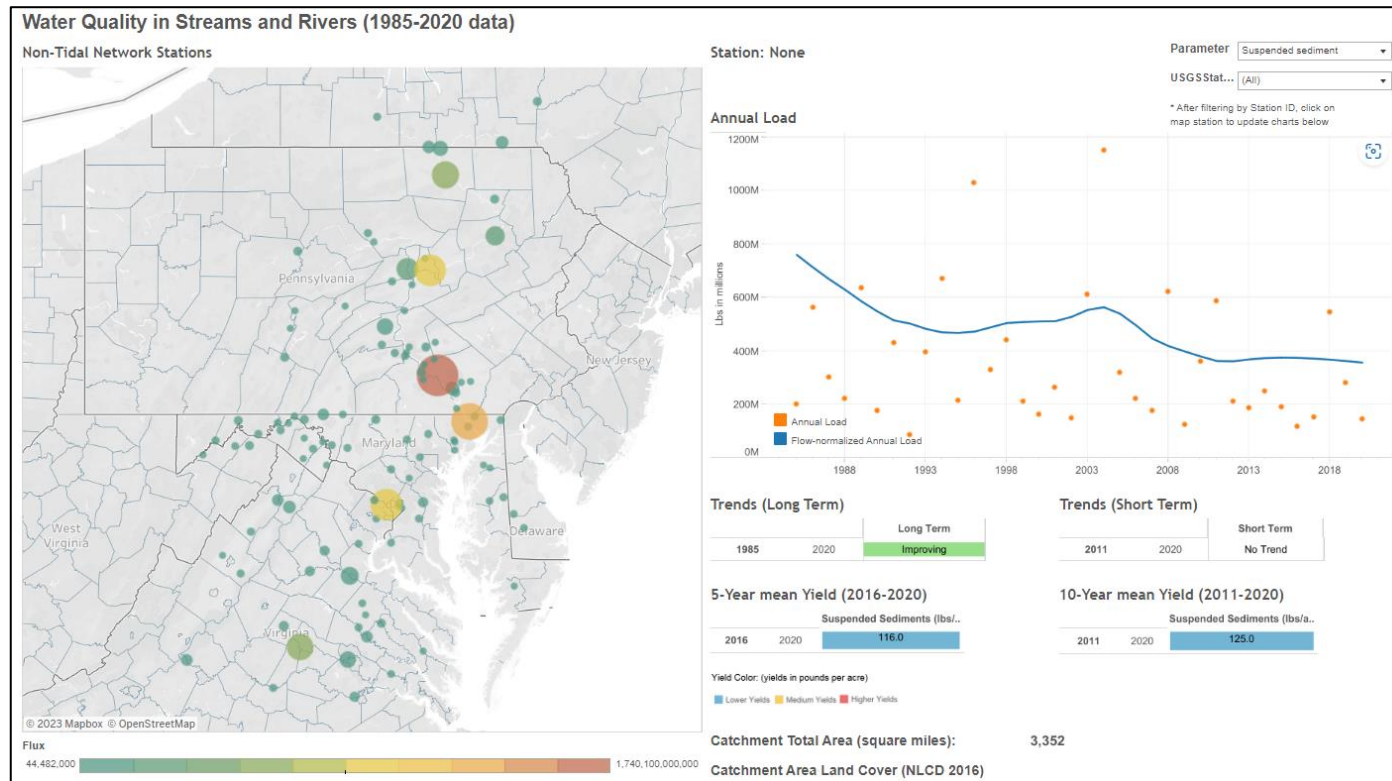
Note: This layout may be slightly different after the updates are published.

<https://gis.chesapeakebay.net/wip/dashboard/>

# What is the Data Dashboard?

A compilation of information at both state and local levels to inform restoration efforts. It includes:

i. **Tidal and watershed water quality monitoring trends**



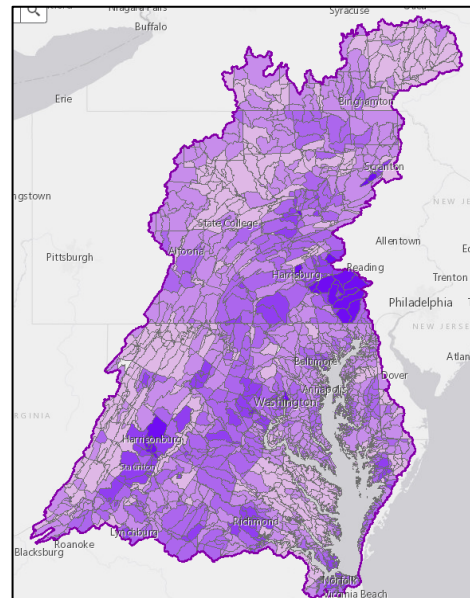


# What is the Data Dashboard?

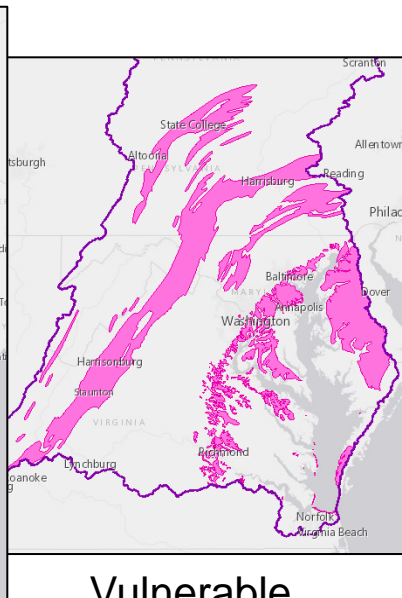
A compilation of information at both state and local levels to inform restoration efforts. It includes:

- Tidal and watershed water quality monitoring trends
- Information to help geographically target restoration efforts**

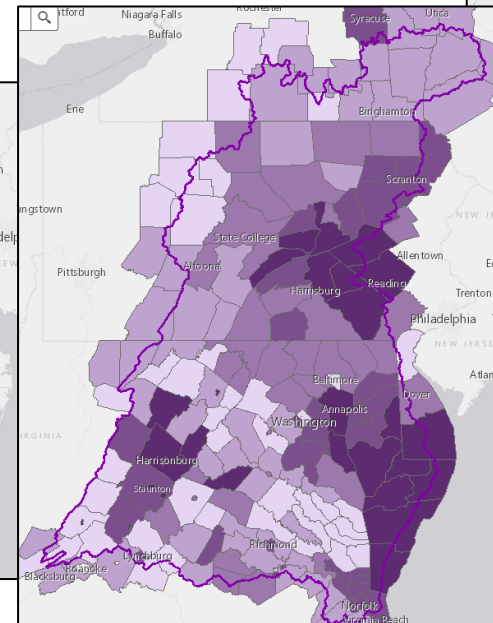
## CAST Annual Progress Model Data



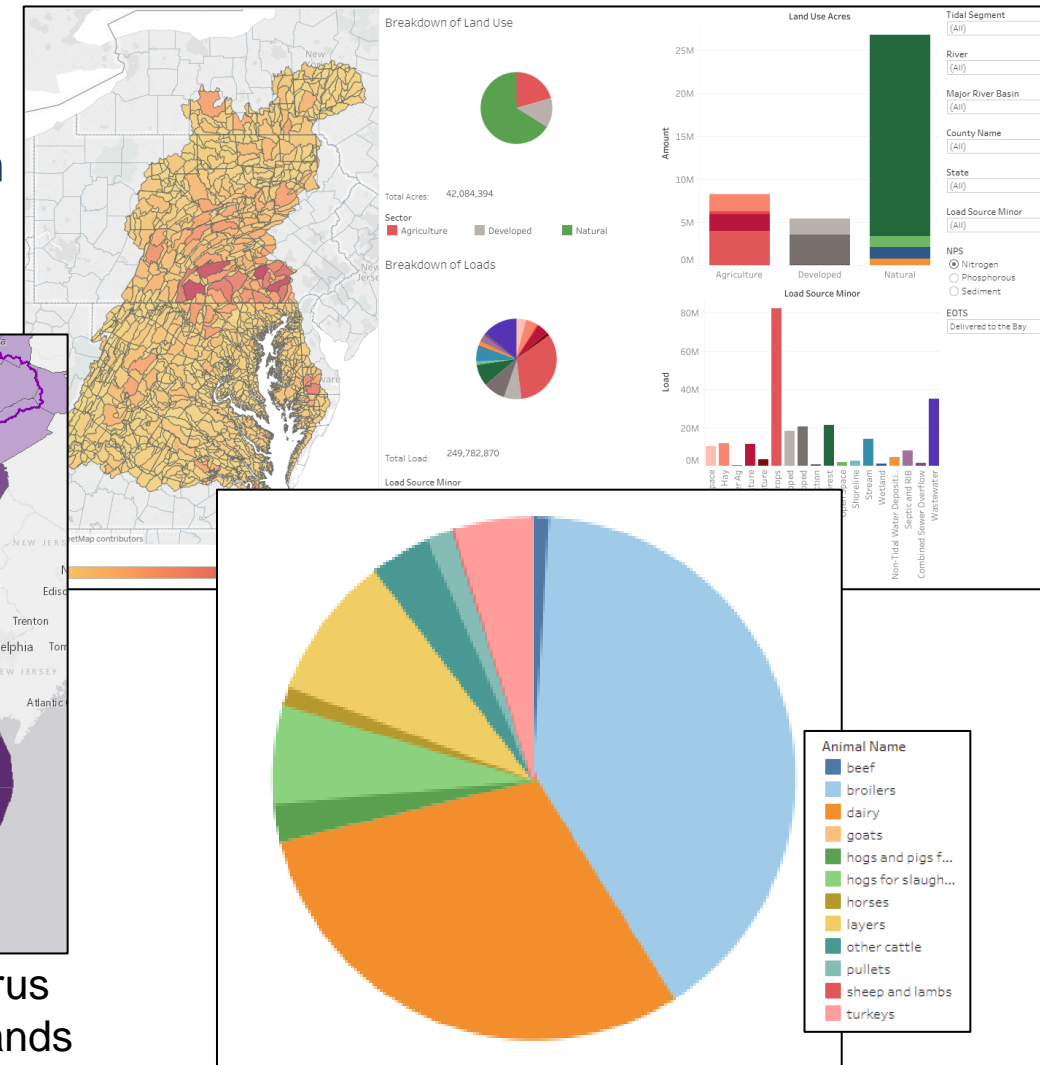
Highest Loading Areas  
(Phosphorus)



Vulnerable  
Groundwater



Estimated Soil Phosphorus  
Content on Agricultural Lands



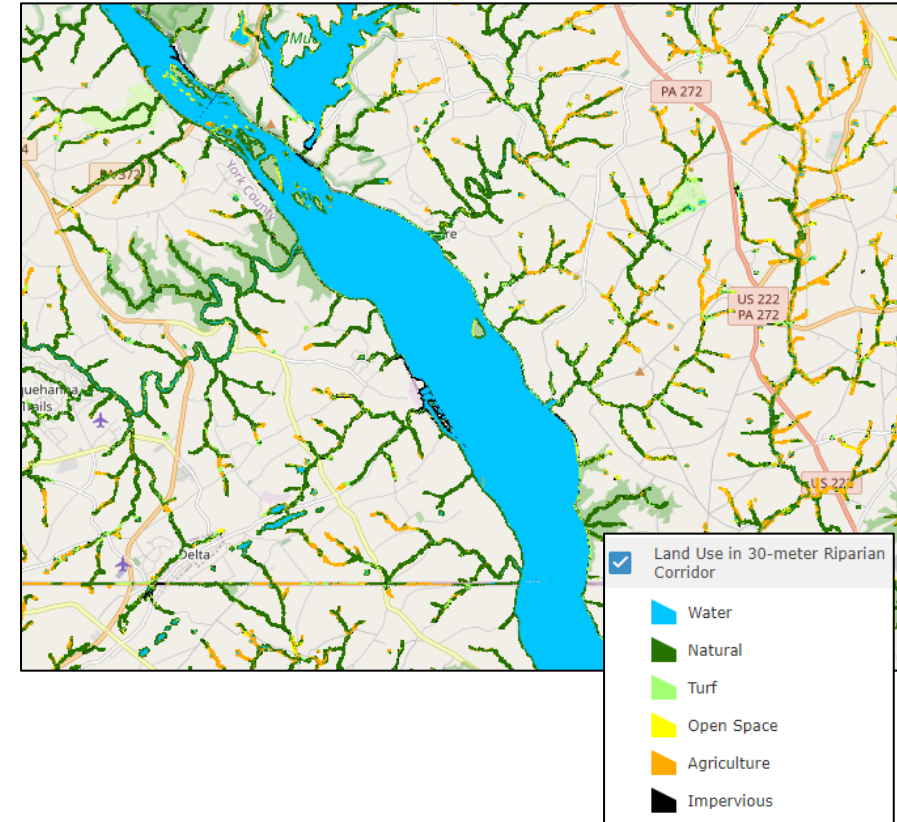


# What is the Data Dashboard?

A compilation of information at both state and local levels to inform restoration efforts. It includes:

- i. Tidal and watershed water quality monitoring trends
- ii. Information to help geographically target restoration efforts
- iii. **Information to help choose BMPs**

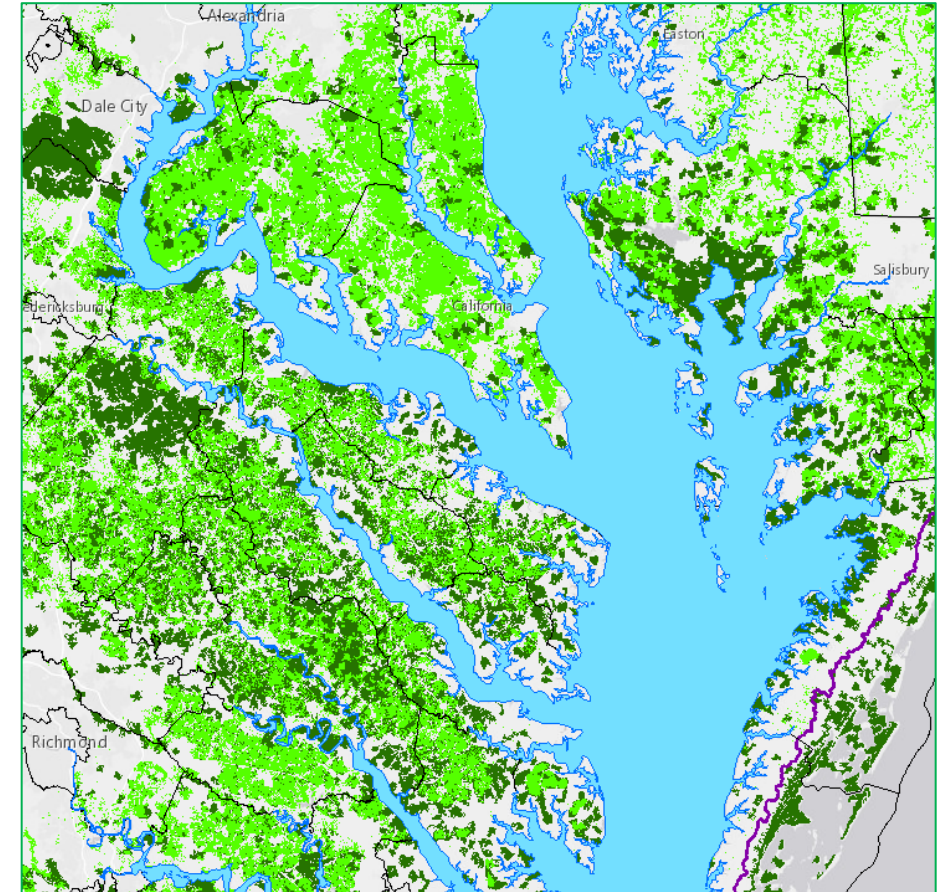
BMP	Avg. Nitrogen \$/lb reduced/..	Avg. Phosphorus \$/lb reduced/..
Horse Pasture Management	0.00	614.83
Low Residue Tillage	0.00	0.00
Nutrient Application Manag..	0.00	602.23
Nutrient Application Manag..	0.00	390.85
Nutrient Application Manag..	0.00	1,075.80
Nutrient Application Manag..	0.00	1,272.27
Urban Nutrient Management	3.55	65.26
Pasture Alternative Wateri..	3.57	20.81
Alternative Crops	7.51	-123.67
Urban Forest Planting	8.65	76.13
Grass Buffers	13.03	197.14
Tree Planting	15.27	208.99



# What is the Data Dashboard?

A compilation of information at both state and local levels to inform restoration efforts. It includes:

- i. Tidal and watershed water quality monitoring trends
- ii. Information to help geographically target restoration efforts
- iii. Information to help choose BMPs
- iv. **Opportunities for smart growth and land conservation**

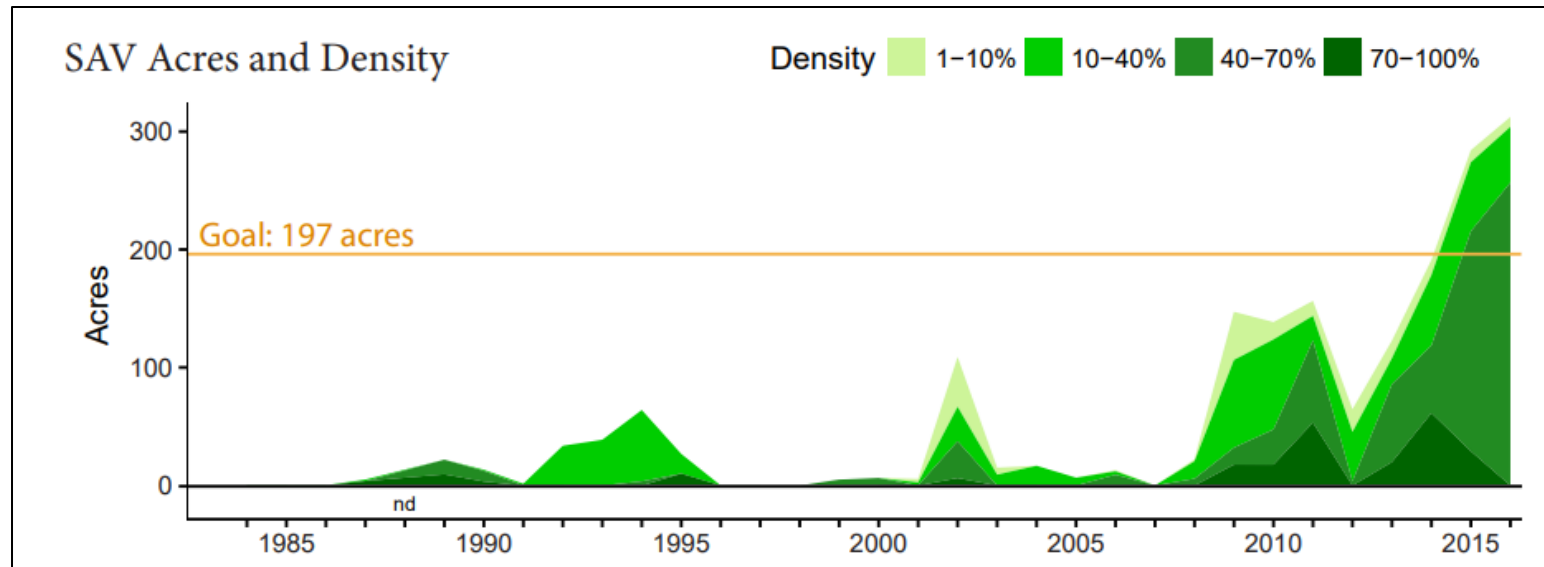




# What is the Data Dashboard?

A compilation of information at both state and local levels to inform restoration efforts. It includes:

- i. Tidal and watershed water quality monitoring trends
- ii. Information to help geographically target restoration efforts
- iii. Information to help choose BMPs
- iv. Opportunities for smart growth and land conservation
- v. **Living resources trends and explanations**

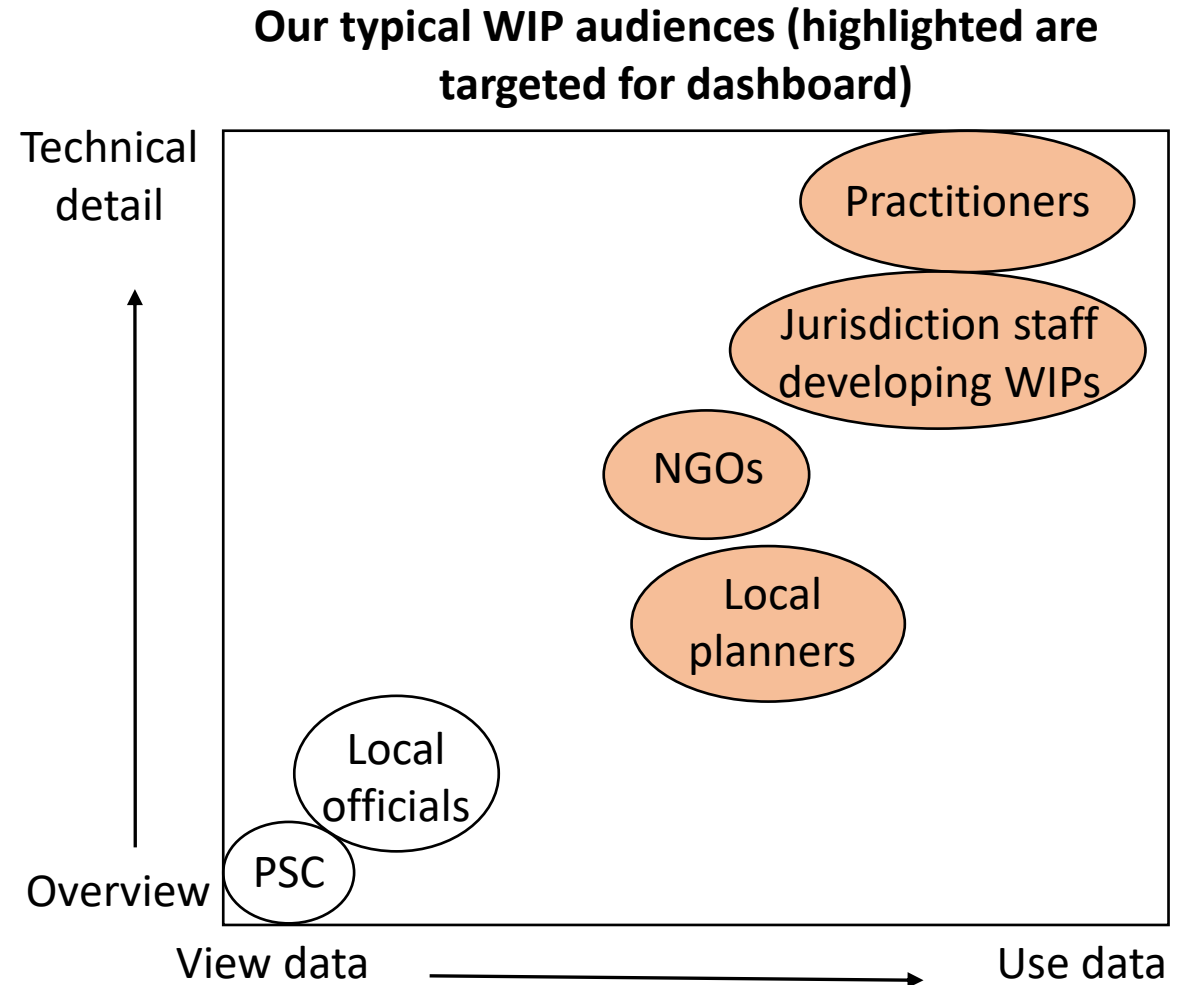


# Who should use the Data Dashboard?

Anyone seeking information that can aid in their planning process for water quality restoration.

Possible users include:

- State agency staff
- NGO partners
- Local planners (e.g. municipality level, soil conservation district level, county level, etc.)
- Watershed organizations

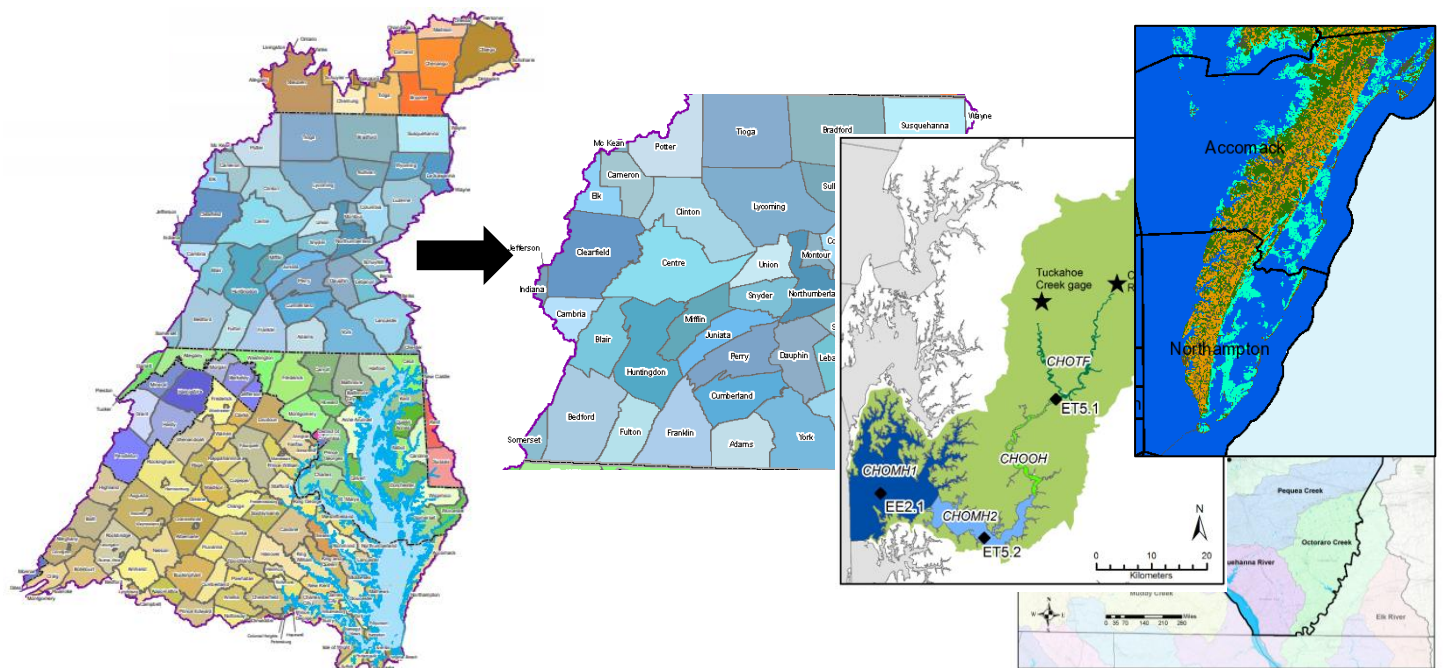




# What can you do with it?

The Dashboard contains information that can be useful to many different users involved in restoration and conservation planning including local planners, state agencies, watershed groups, etc. Some uses include:

- Targeting restoration and conservation efforts geographically, by sector, or by practice
- Chesapeake Assessment Scenario Tool (CAST) scenario development
- Outreach and communication of water quality information
- Building local watershed stories to engage with stakeholders



An aerial photograph of a wide, muddy-brown river meandering through a lush, green forested landscape. The river flows from the top center towards the bottom right. In the upper middle section, a small bridge or dam structure crosses the river. The surrounding land is a mix of dense green trees and patches of brown, cleared fields. The overall lighting is somewhat dim, giving the image a moody, naturalistic feel.

# Part 2: Live Demo





# Part 3: Feedback from LUWG/FWG

Riparian Forest Buffer Opportunity layer

Featuring of the “plantable space layer” being developed by CC and FWG, forest indicators, story map info as a module or additional resources

# Contact Information

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