Chesapeake Bay Watershed Data Dashboard 2.0

SAV Workgroup Presentation

November 13, 2024

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Presentation Outline

Part 1: Overview of the Data Dashboard

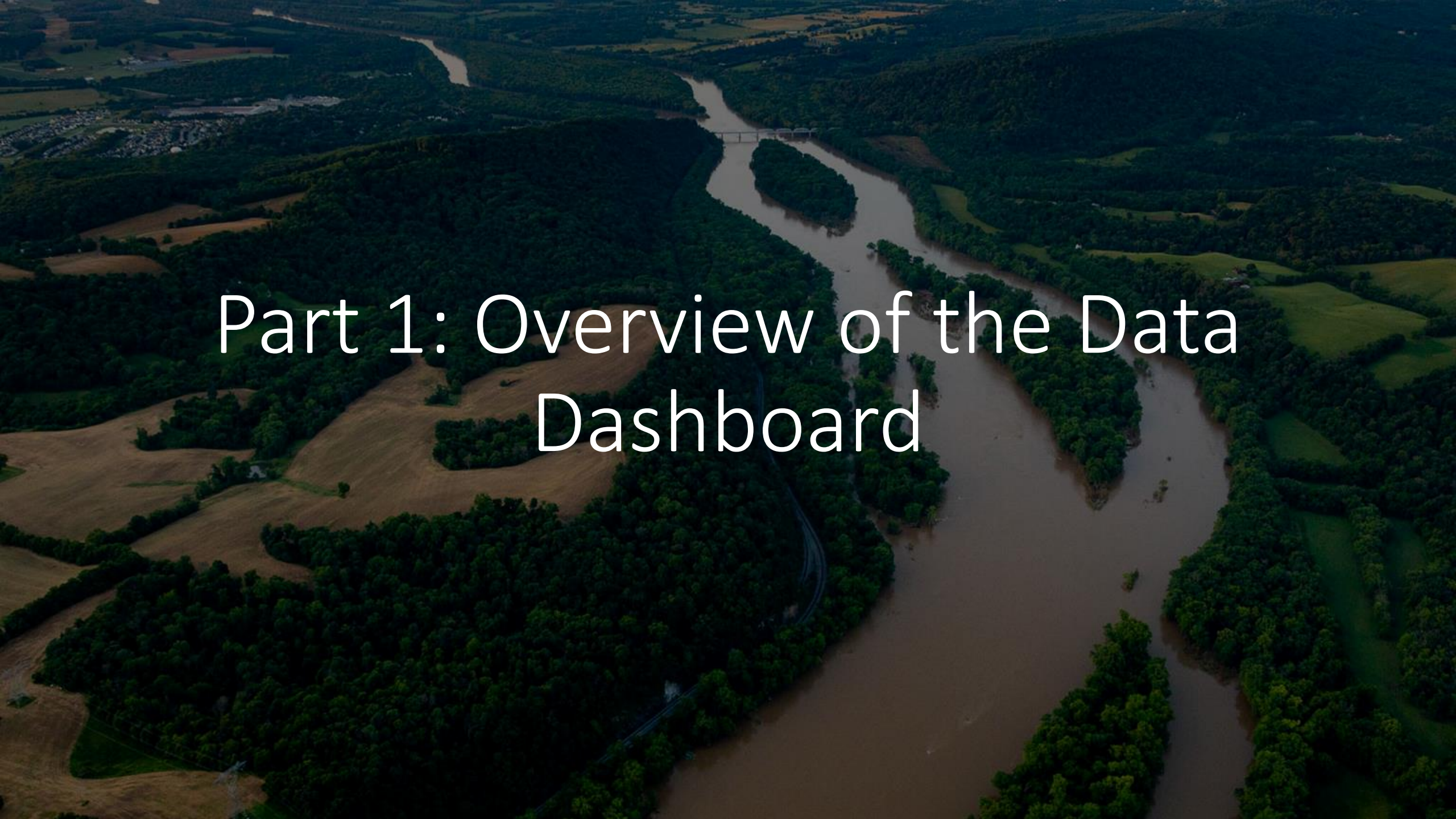
I. What is purpose of the Data Dashboard?
II. What information does it show?
III. Who is the intended audience?
IV. How can you use it?

Part 2: SAV Module Live Demo

I. What We Heard
II. Our Goal
III. Planned Improvements

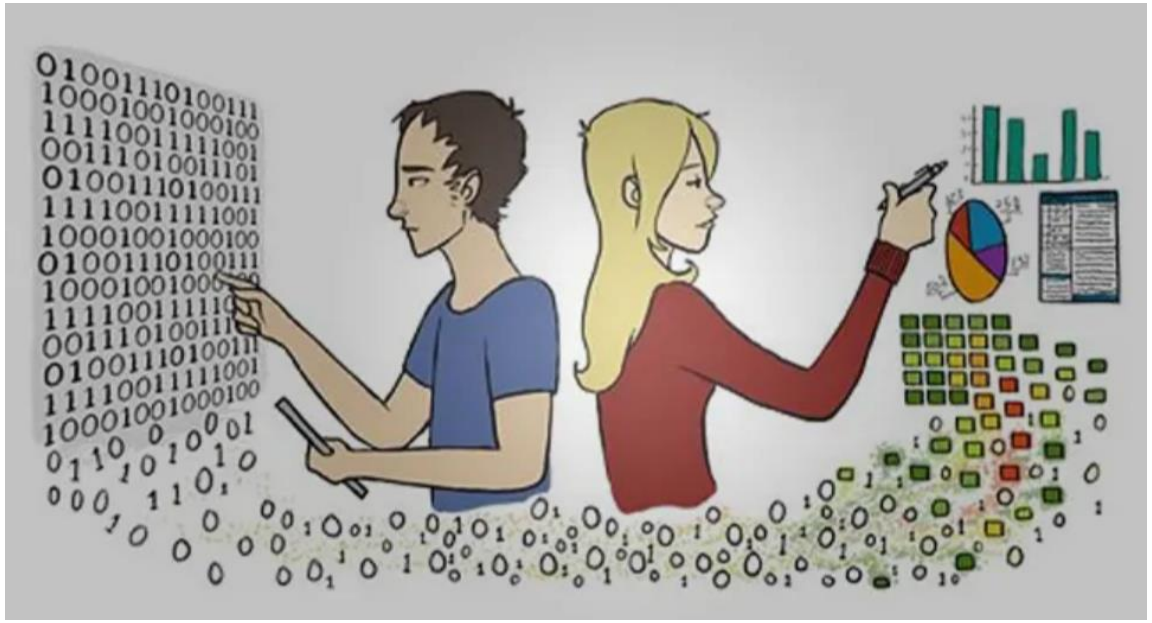
Part 3: Open Discussion

I. Feedback & Suggestions



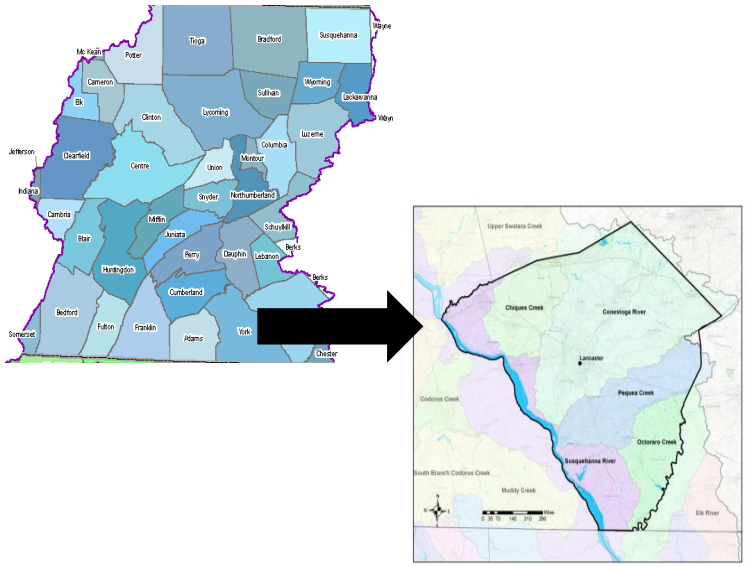
Part 1: Overview of the Data Dashboard

Chesapeake Bay Watershed Data Dashboard



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

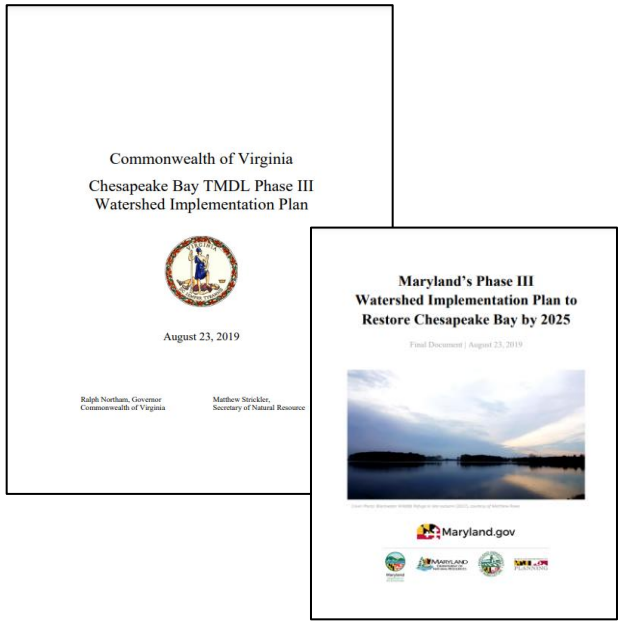


Informs restoration efforts for environmental managers and planners at both state and local levels.

What are you trying to do?
Understand **status of local water quality** and change over time

Example Topics
Current water quality and trends of freshwater rivers and streams
Current water quality and trends of tidal waters
Current status, trends, and explanations for tidal submerged aquatic vegetation

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



Assists with watershed restoration plan development and implementation.

Watershed Data Dashboard (Draft)

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

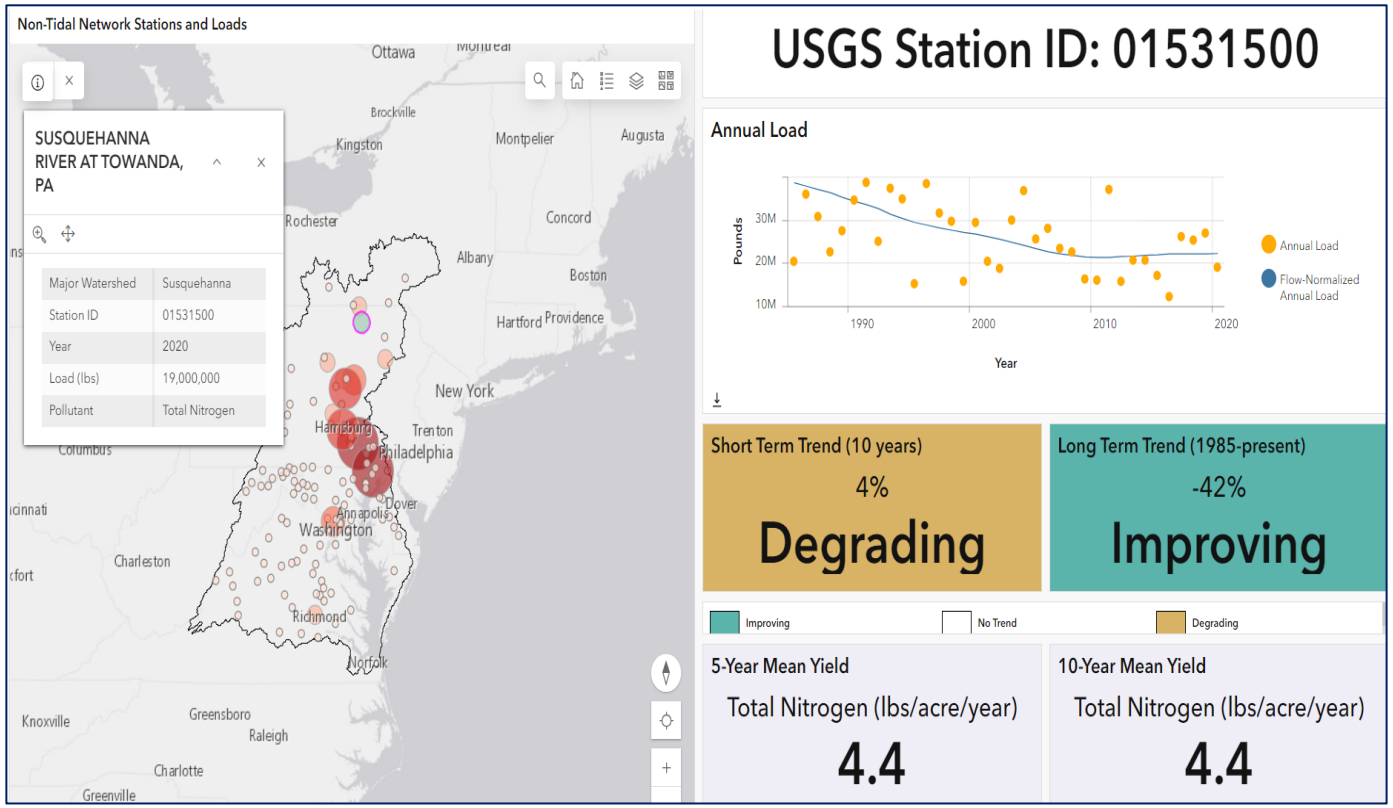
The purpose of the Chesapeake Bay Watershed Data Dashboard is to consolidate and provide accessibility to this information in one cohesive location and to provide

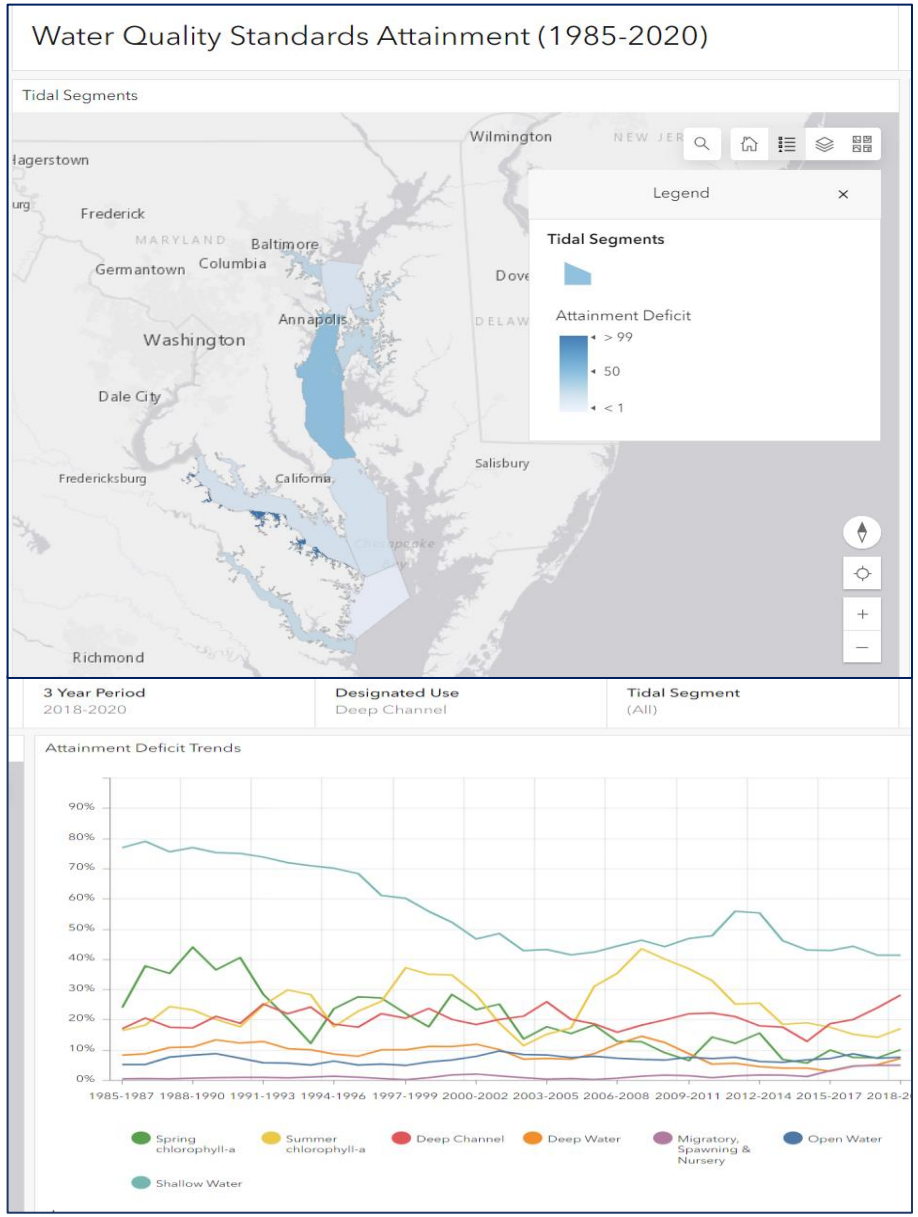
https://gis.chesapeakebay.net/wip/dashboard/

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**



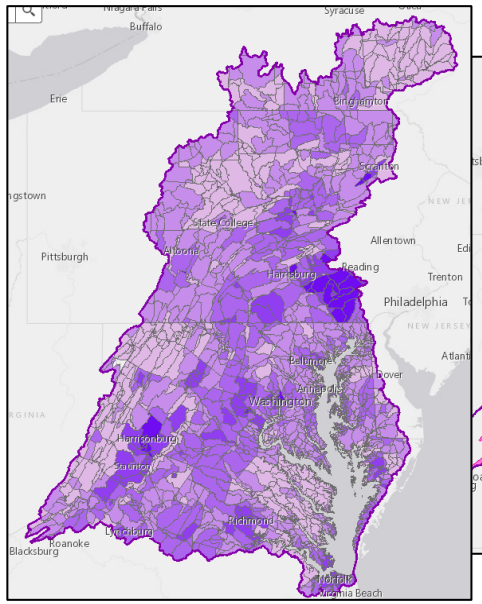


What is the Data Dashboard?

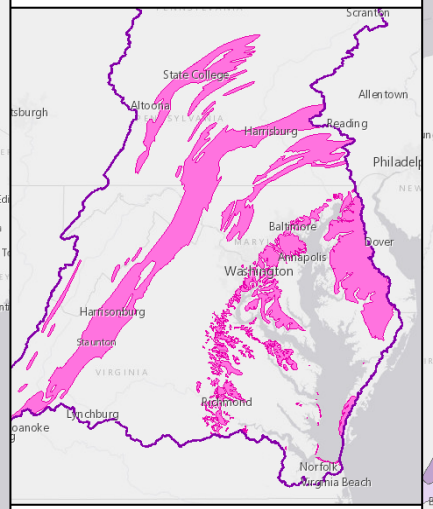
A compilation of information at both state and local levels to inform restoration efforts. It includes:

i. Tidal and watershed water quality monitoring trends

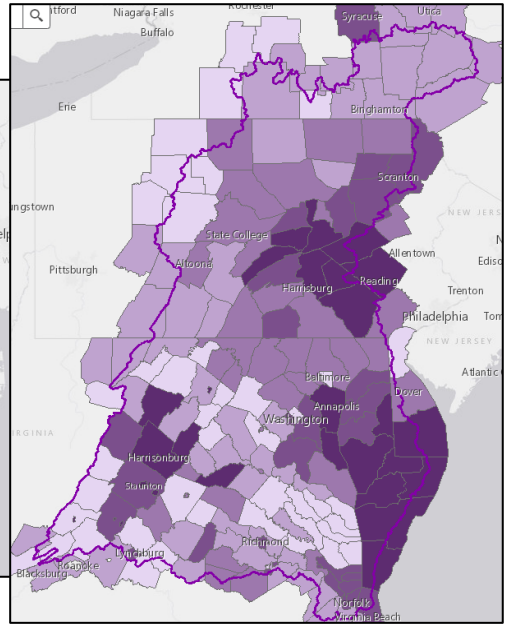
ii. **Information to help geographically target restoration efforts and understand load sources**



Highest Loading Areas (Phosphorus)

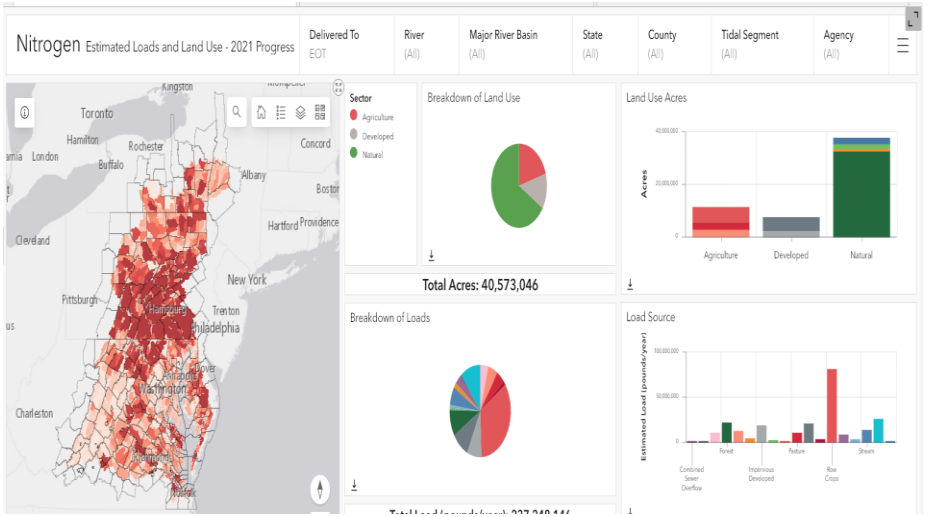


Vulnerable Groundwater

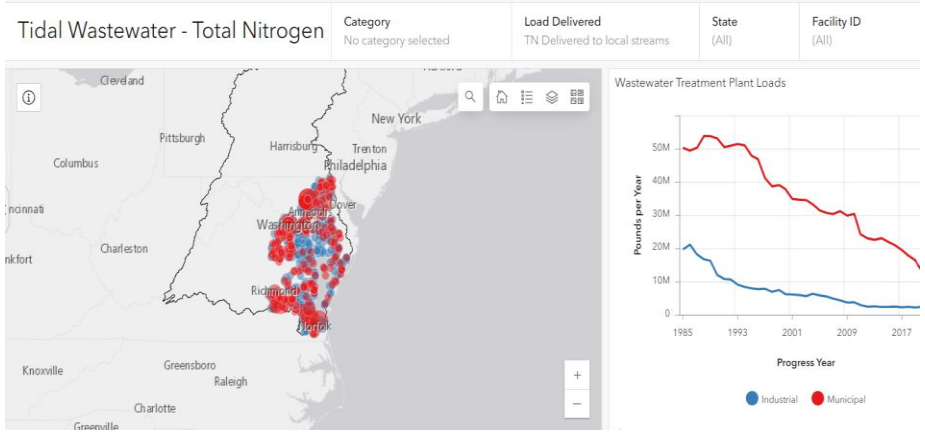


Estimated Soil Phosphorus Content on Agricultural Lands

CAST Annual Progress Model Data



Wastewater Treatment Plants



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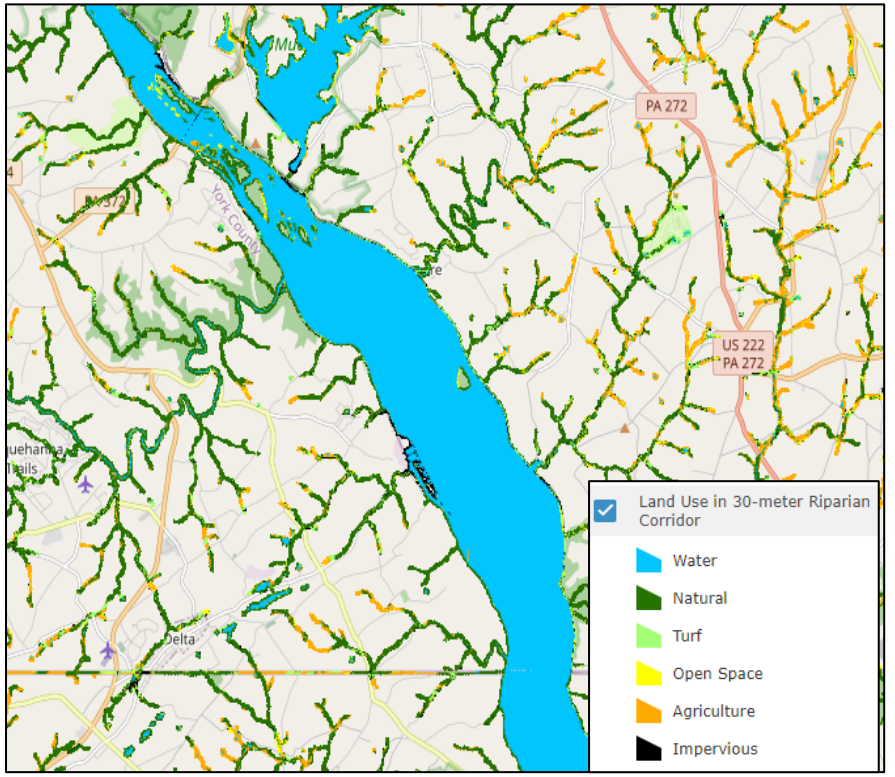
i. Tidal and watershed water quality monitoring trends
ii. Information to help geographically target restoration efforts and understand load sources
iii. Information to help choose BMPs

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



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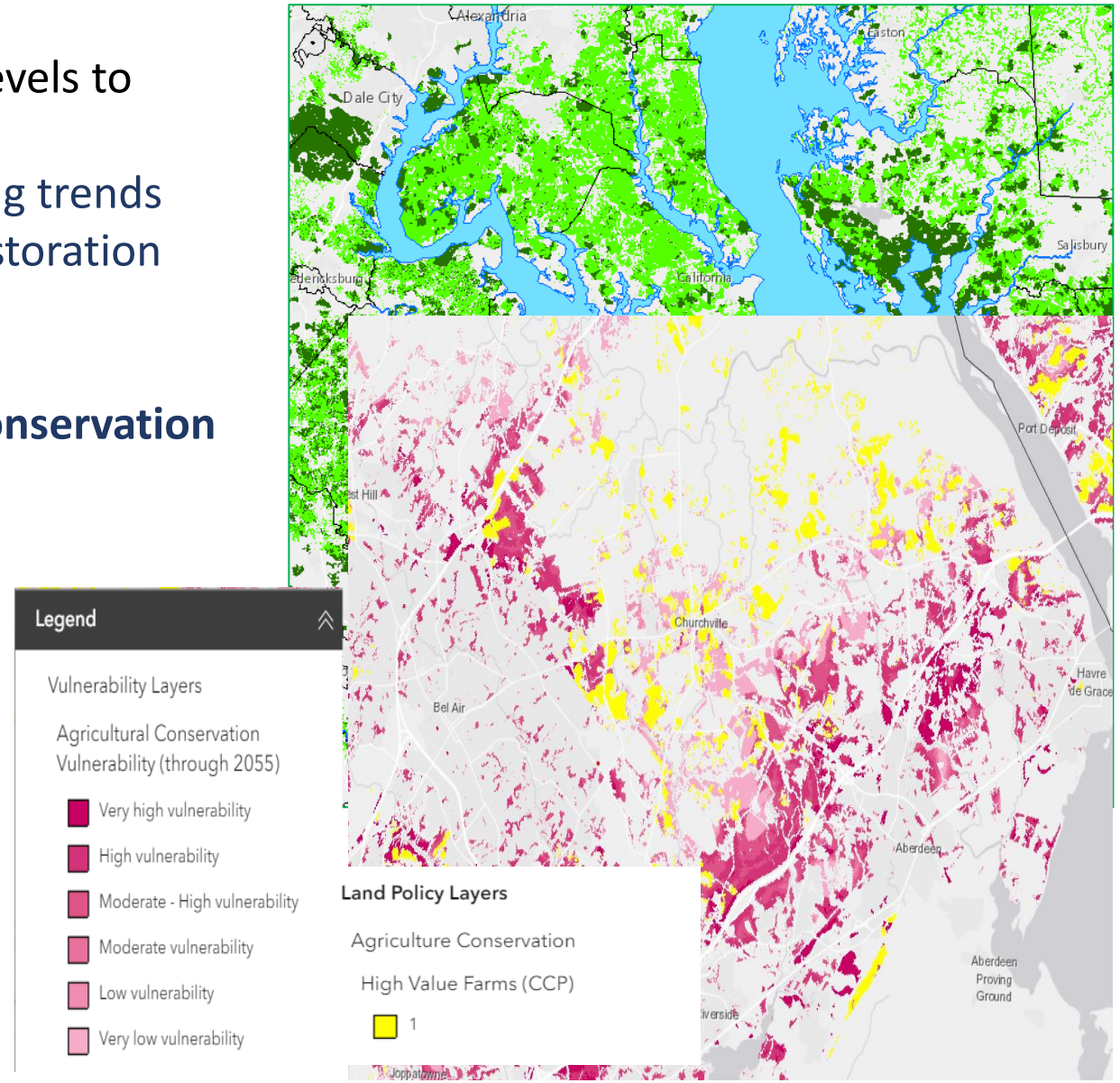

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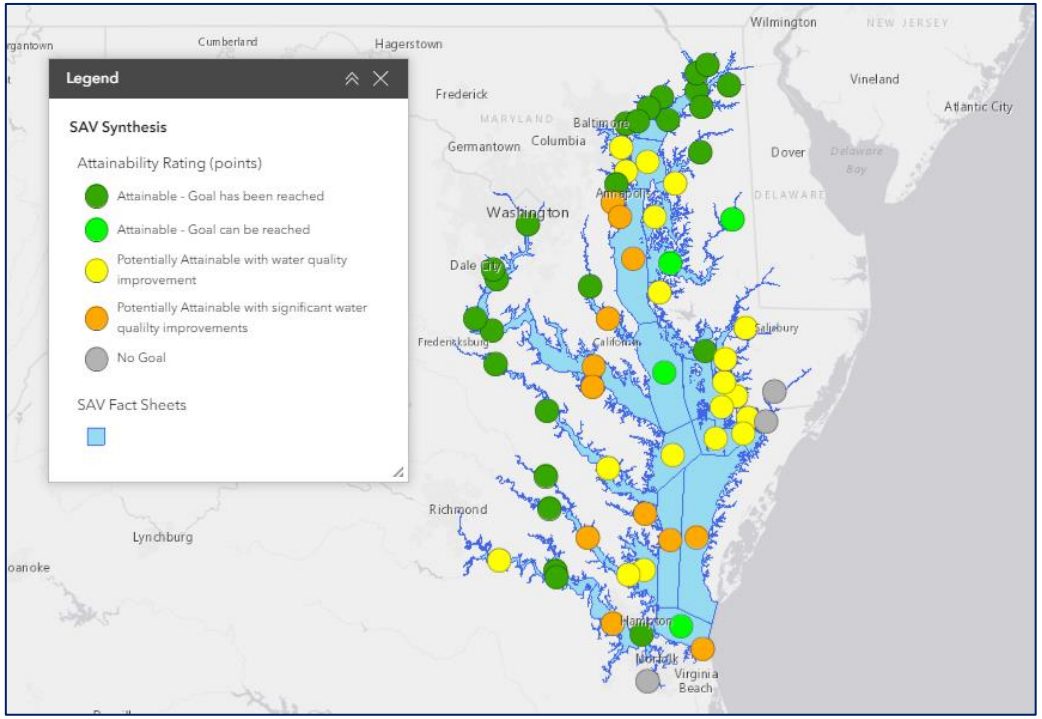
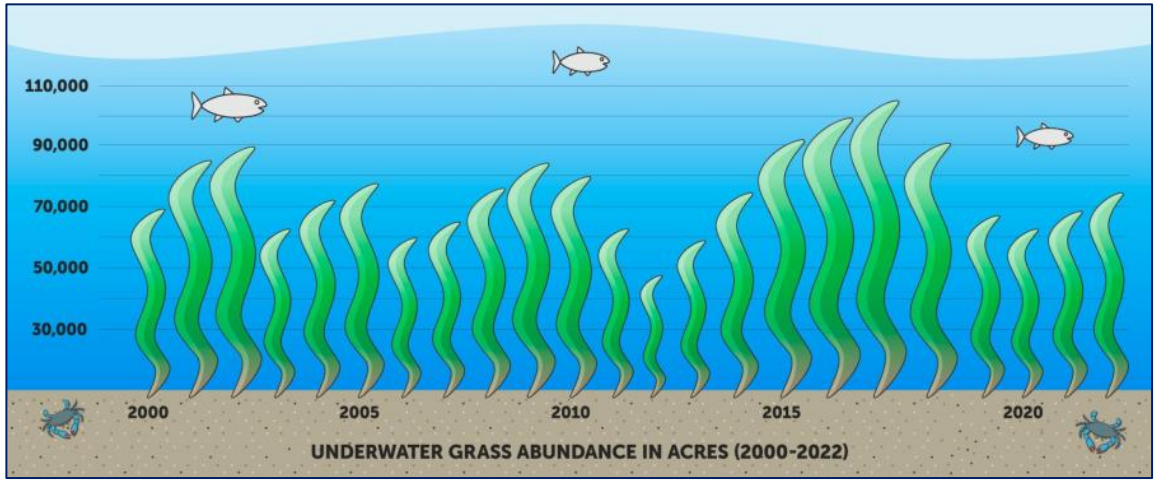
iv. Opportunities for smart growth and land conservation and understand load sources
v. Living resources trends and explanations





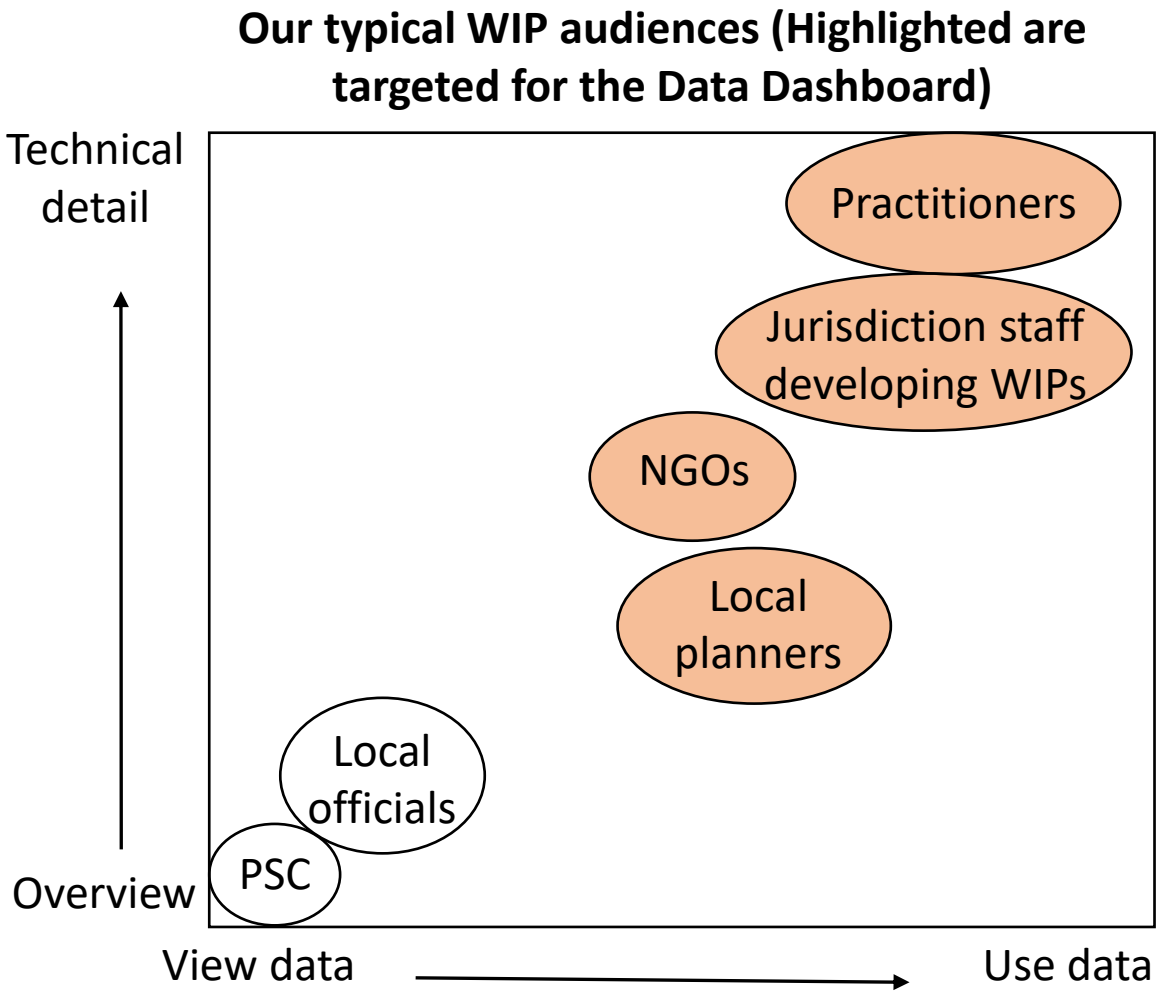
How much underwater grass is in the Chesapeake Bay?

Who should use the Data Dashboard?

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

Possible users include:

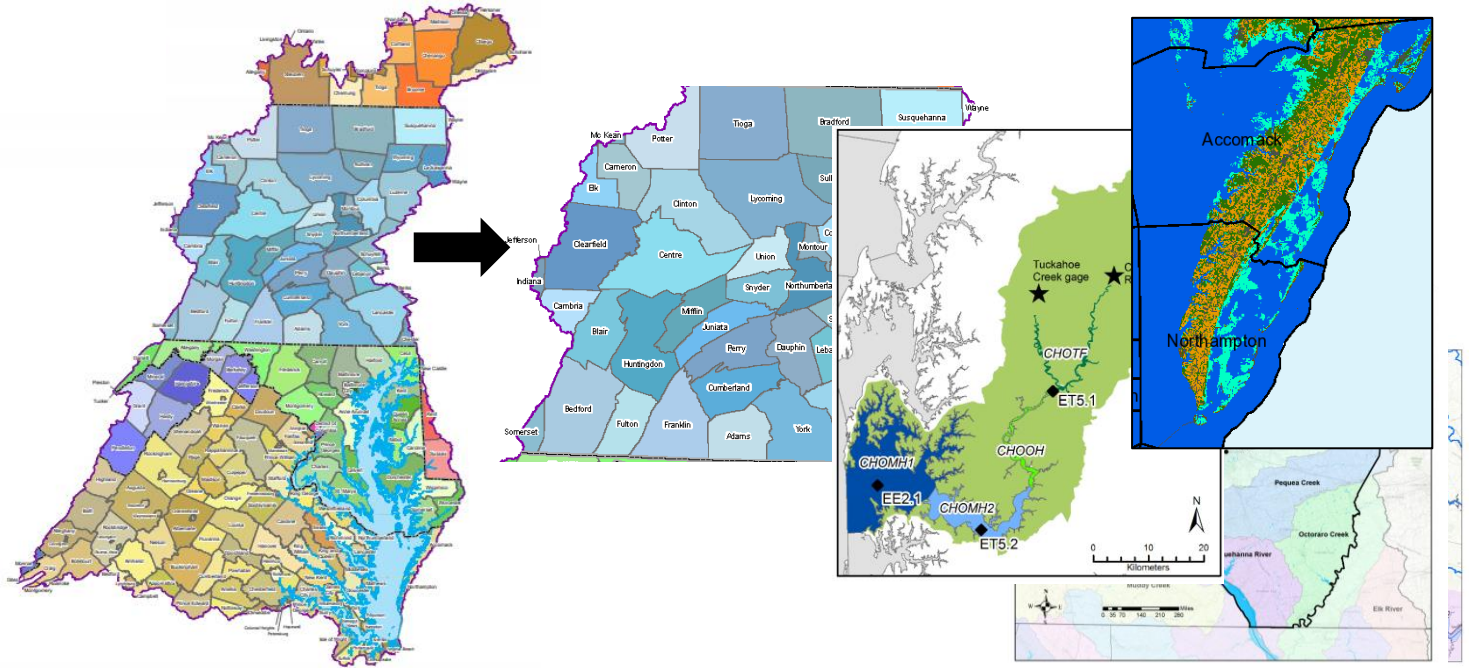
- State agency staff
- NGO partners
- Local planners (e.g. municipality level, soil conservation district level, county level, etc.)
- Watershed organizations

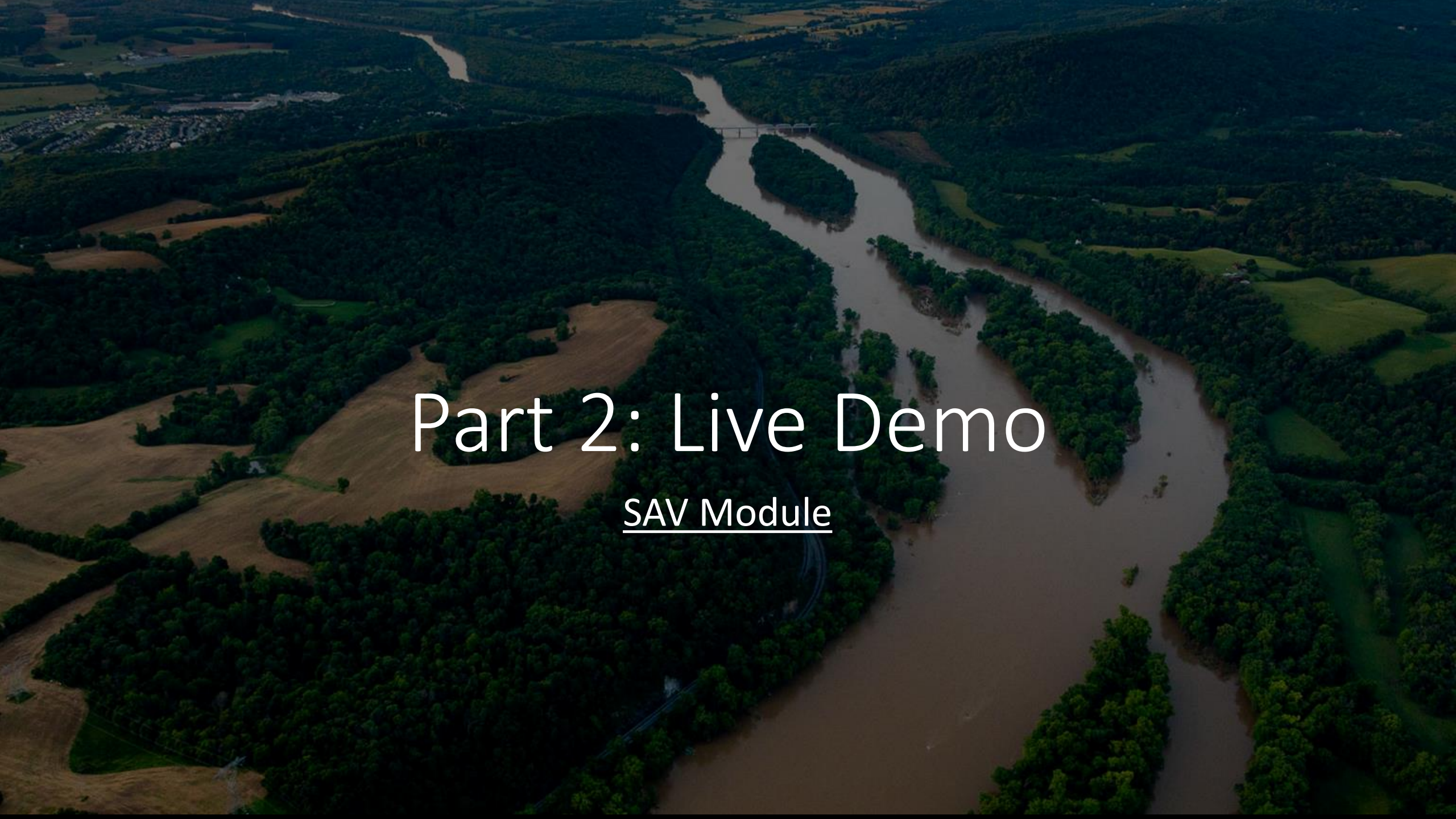


What can you do with it?

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





Part 2: Live Demo

SAV Module

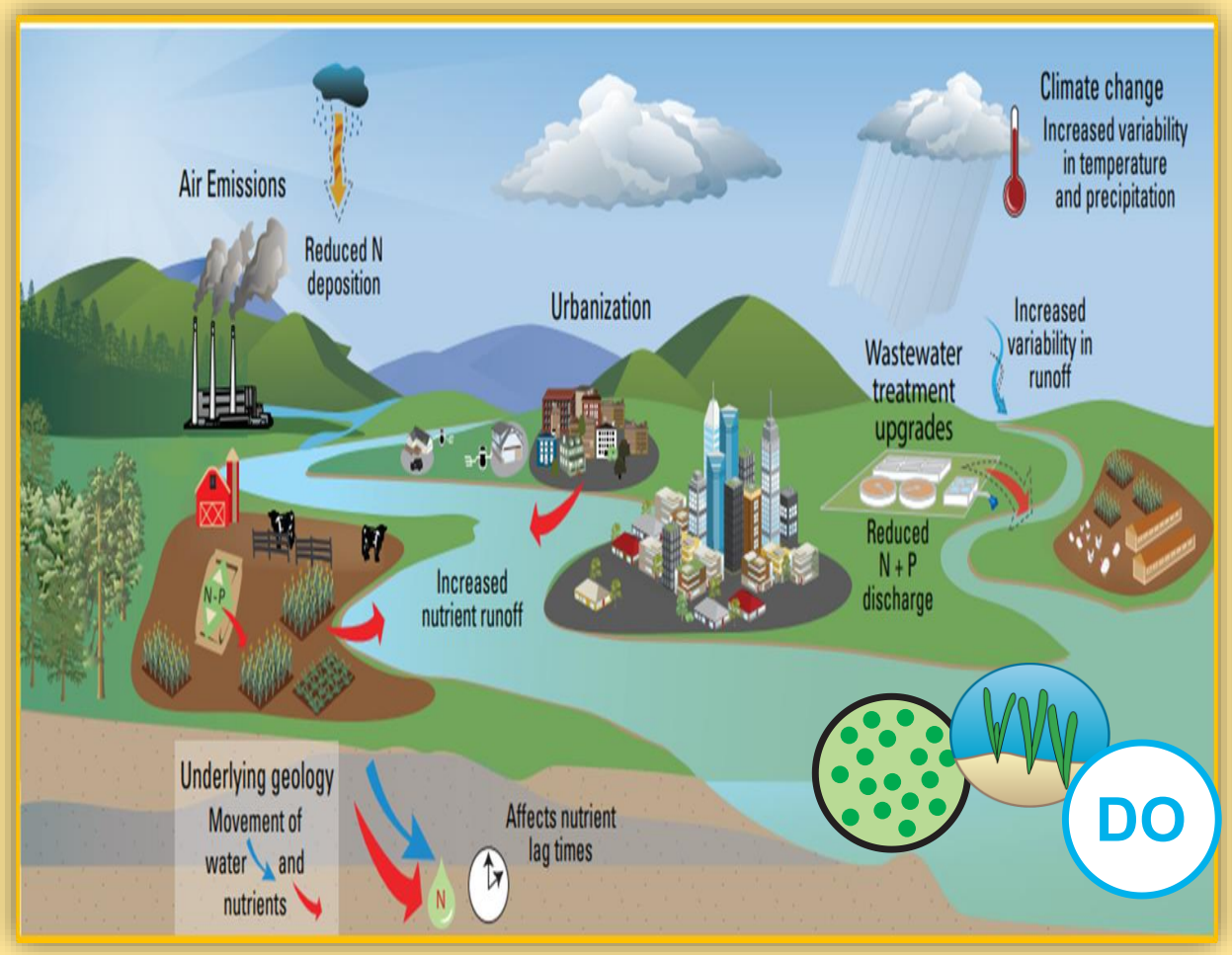
What We Heard

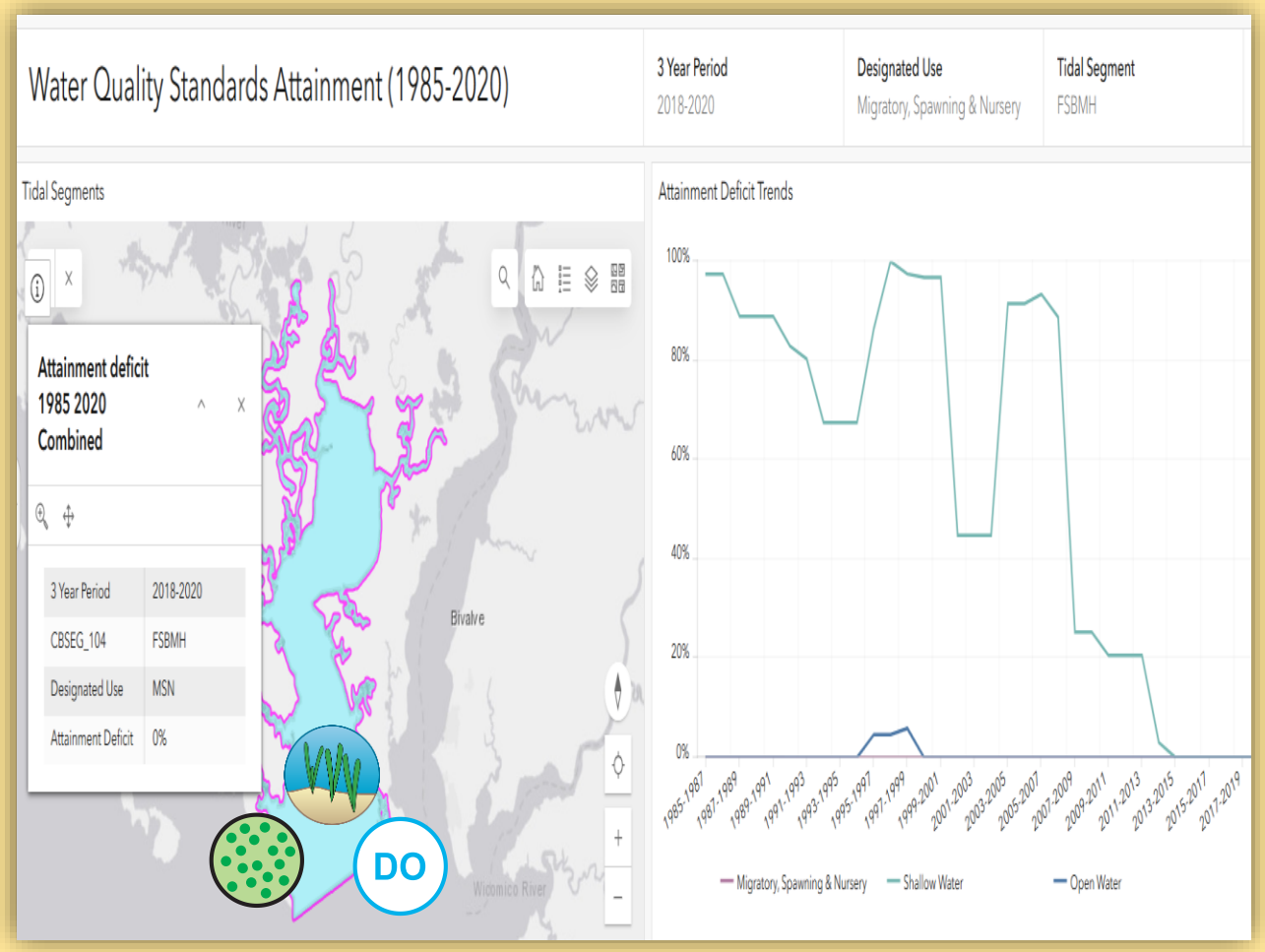
- SAV module provides local scale information to the public
- Can inform local management actions that influence living resources
- Being able to link SAV status to local pollutant sources and landscape is critical

Wild celery and other bay grasses grow in the Susquehanna Flats south of Havre de Grace, Md. (Photo by Will Parson/Chesapeake Bay Program)

Our Goal

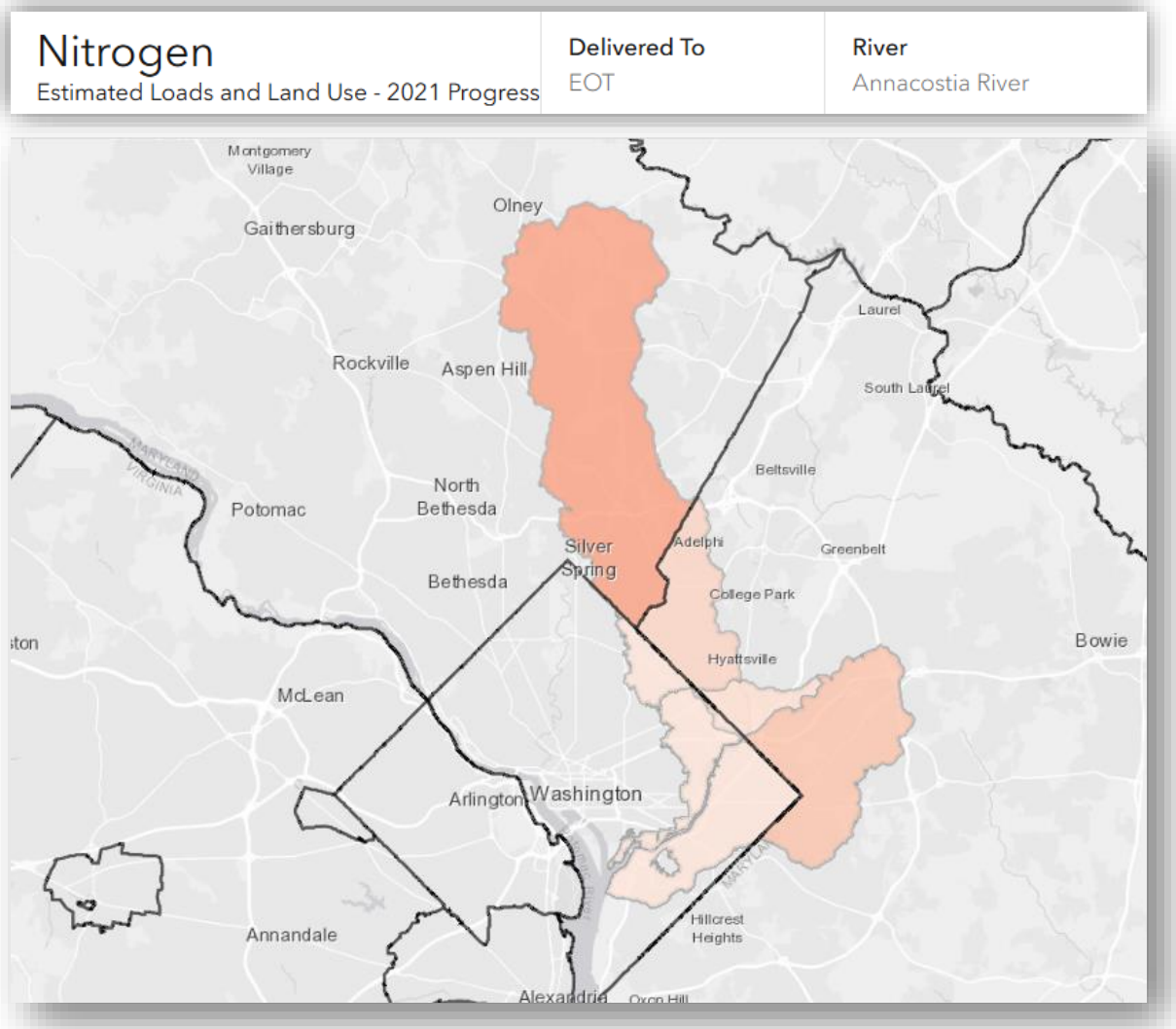
- Showcase how land-use decisions, land cover, pollutant loads, and management actions impact SAV
- Connect to Bay water quality status at the Tidal segment level

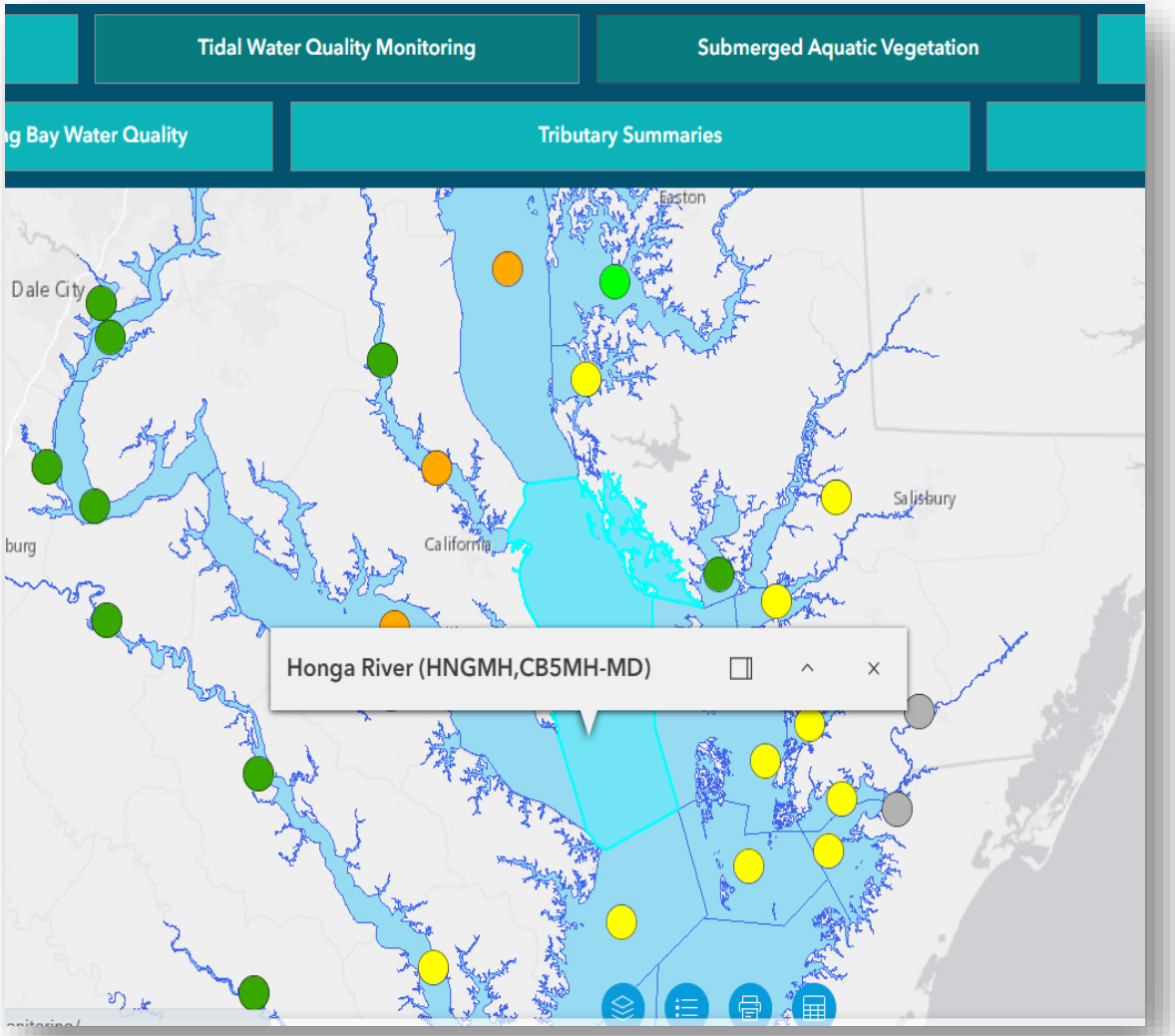




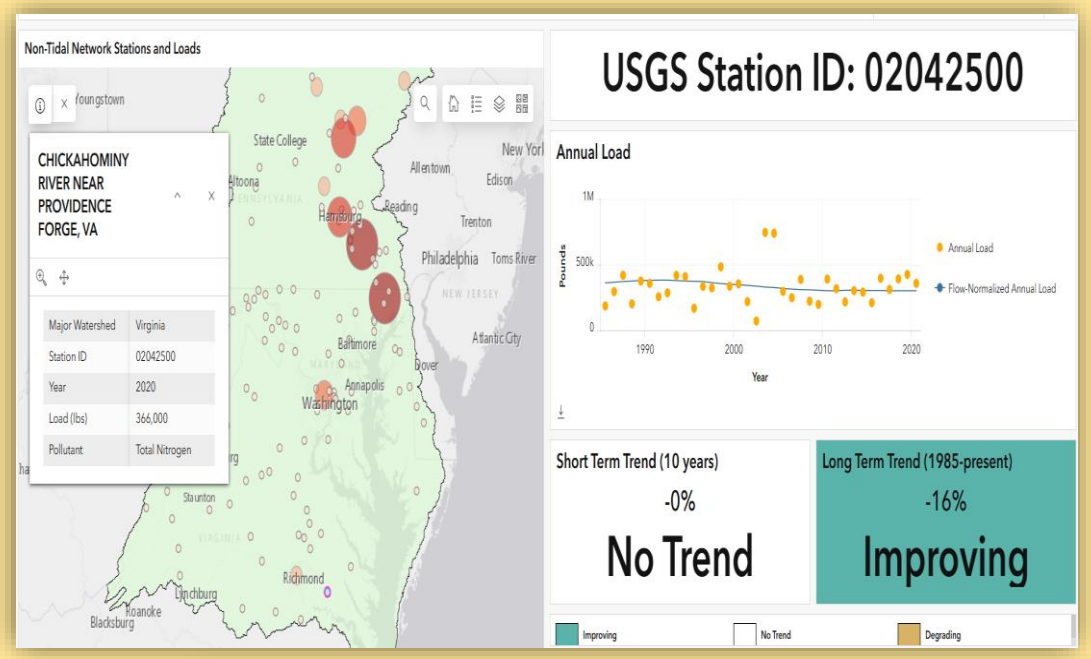
Planned Improvements

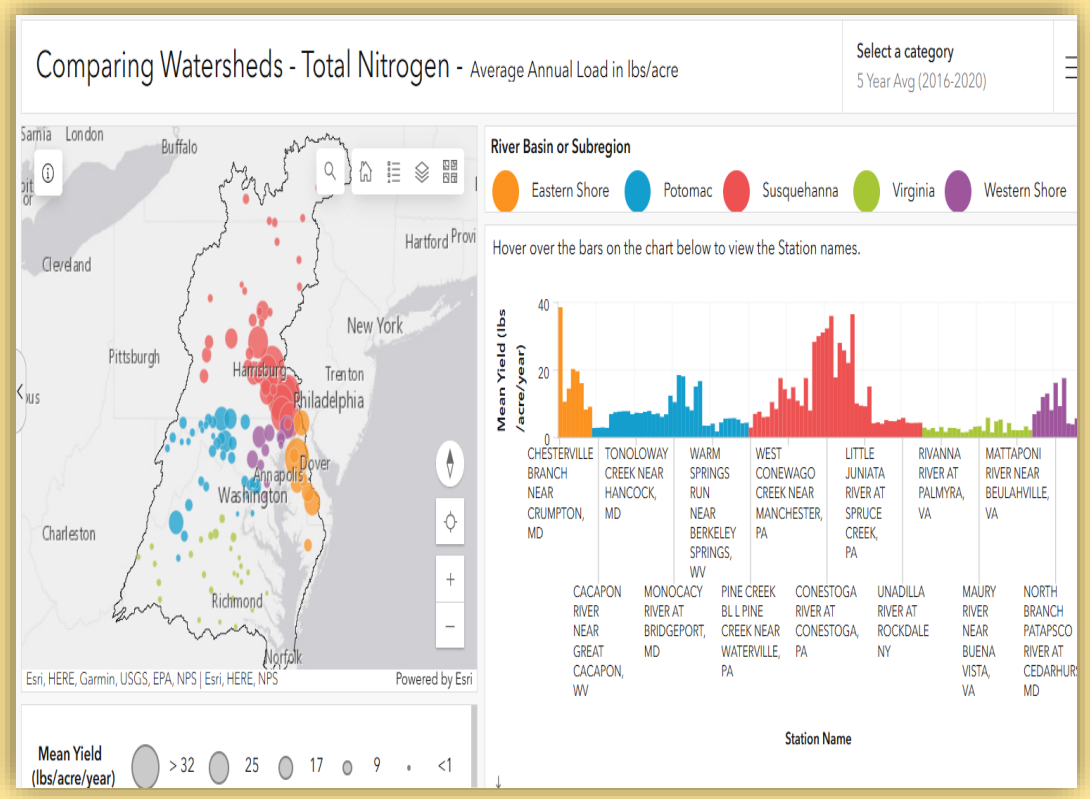
Show land-river segments that drain to each tidal segment

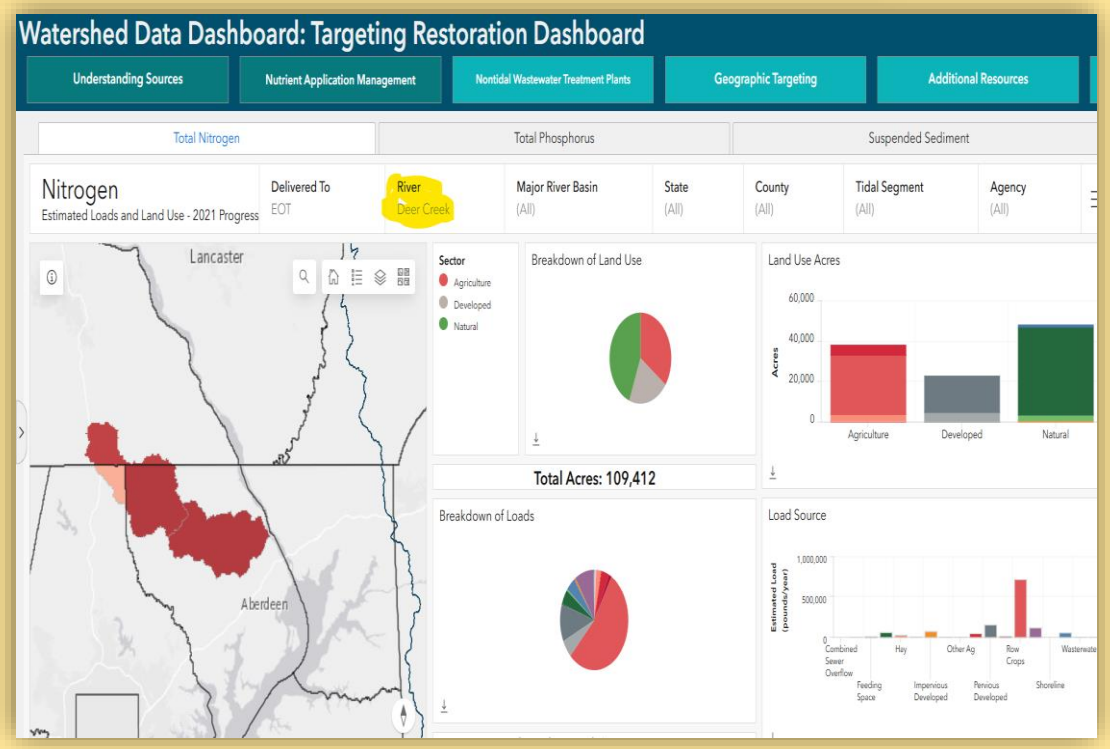




Highlight local land-uses, modeled loads and monitoring trends of rivers draining to tidal segments







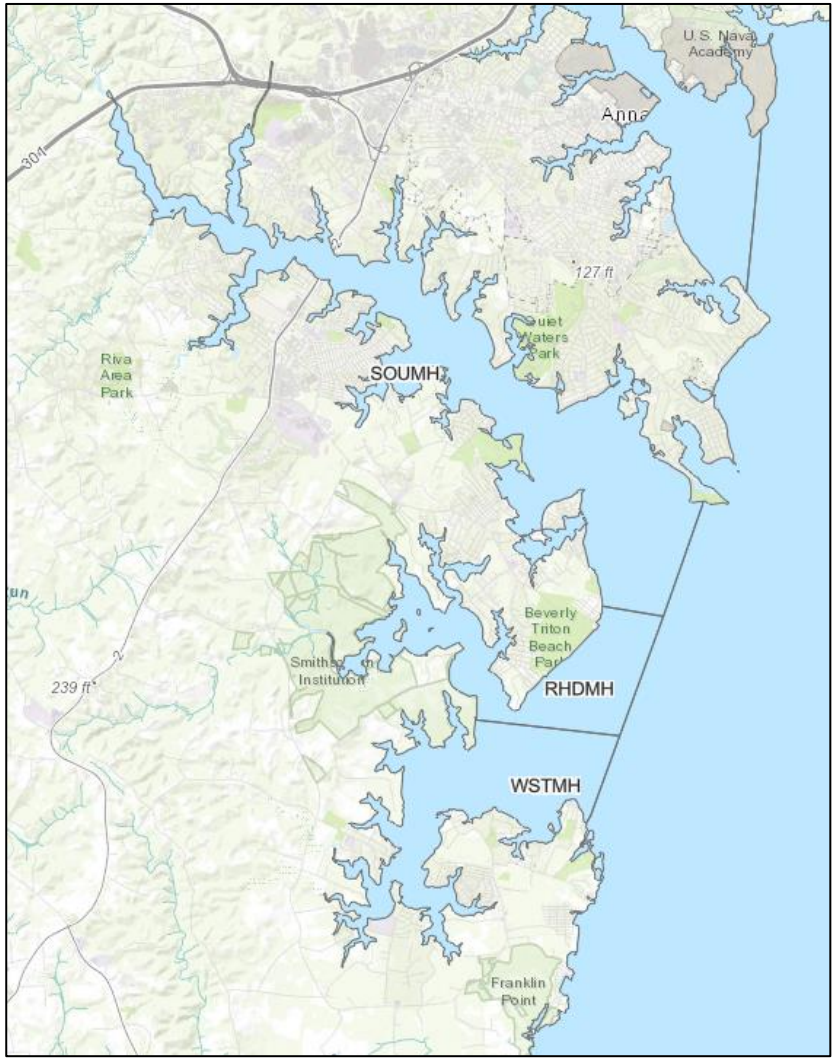
Ridgely's Reserve, Harford Co. Md

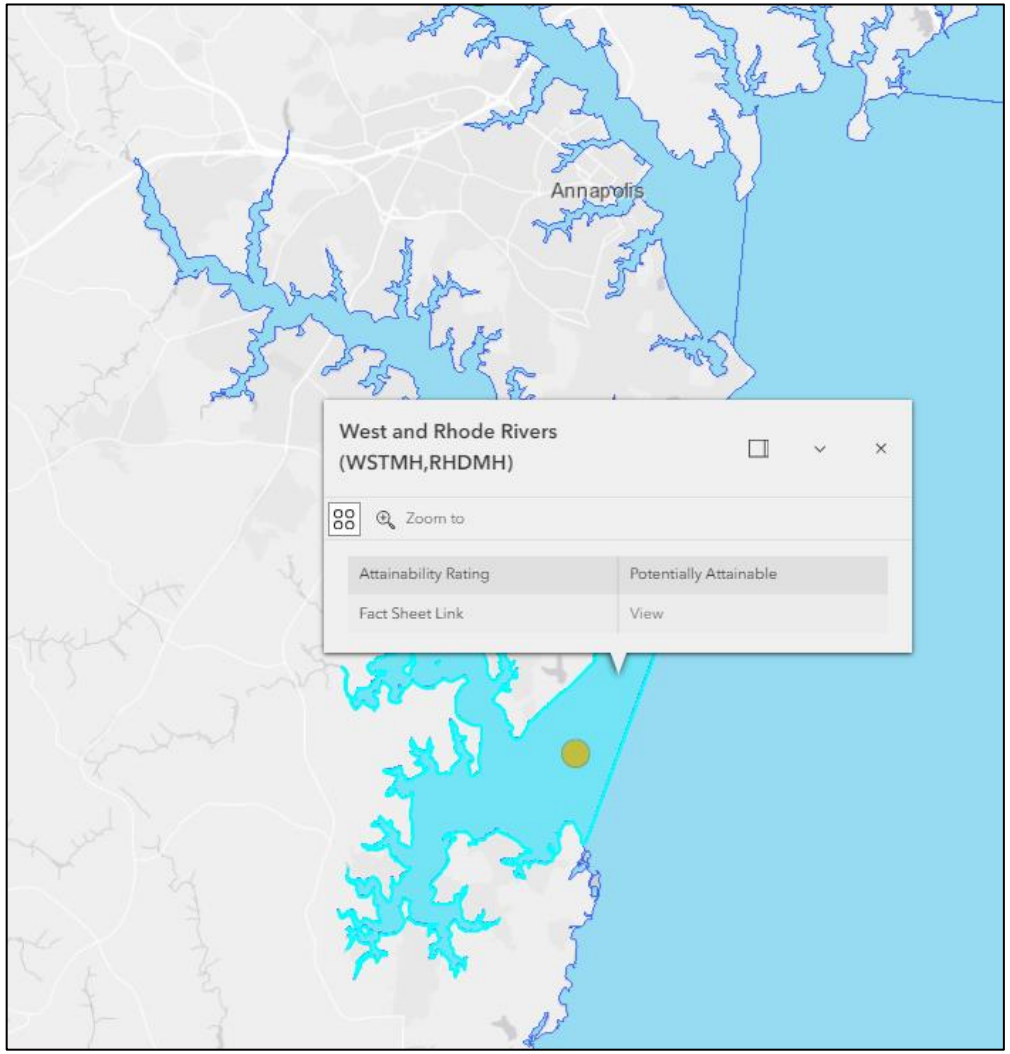
Gunpowder River- SAV's disappear

Making meaningful connections

Planned Improvements

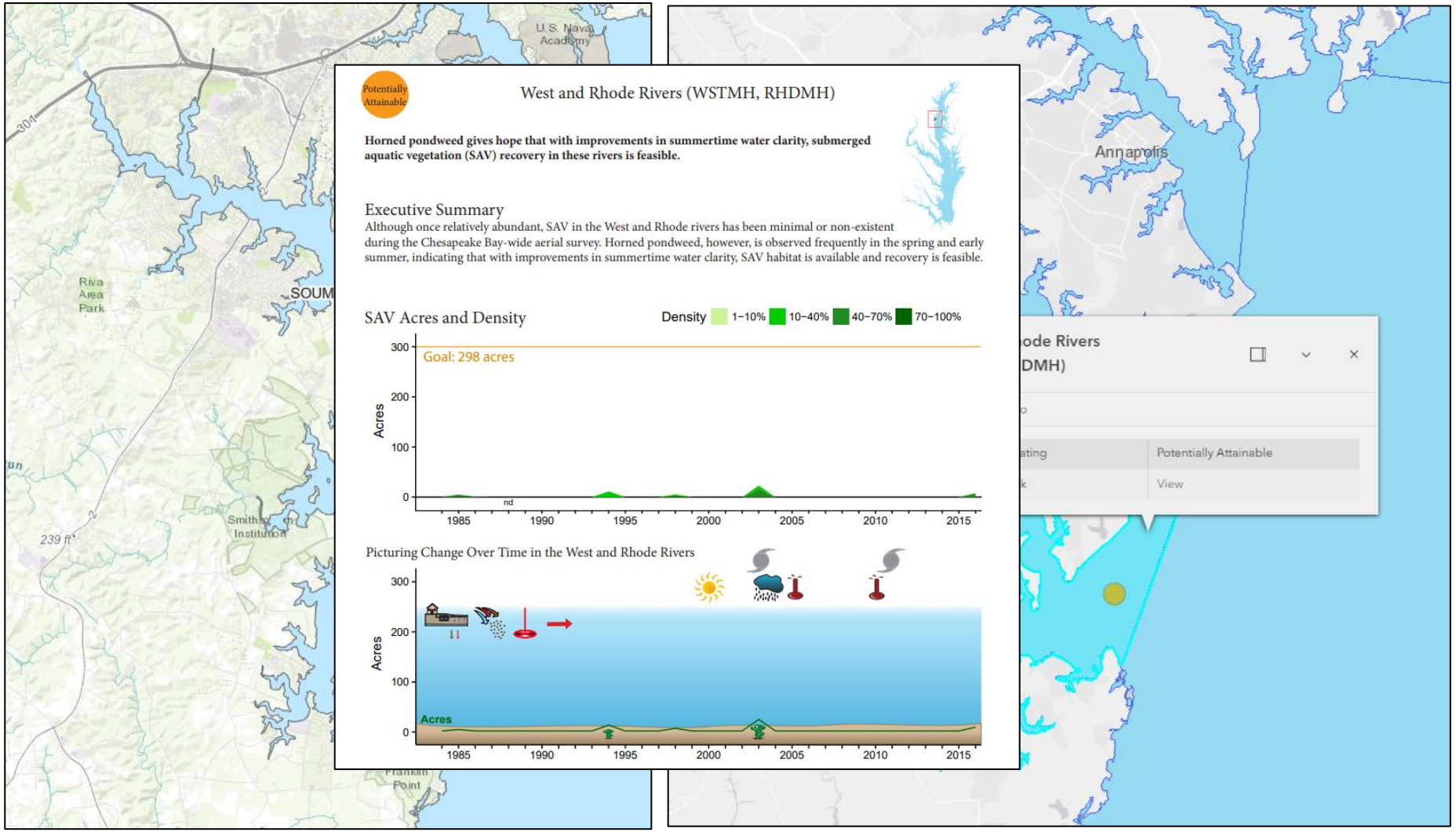
- Increase number of factsheets from 64 to 92





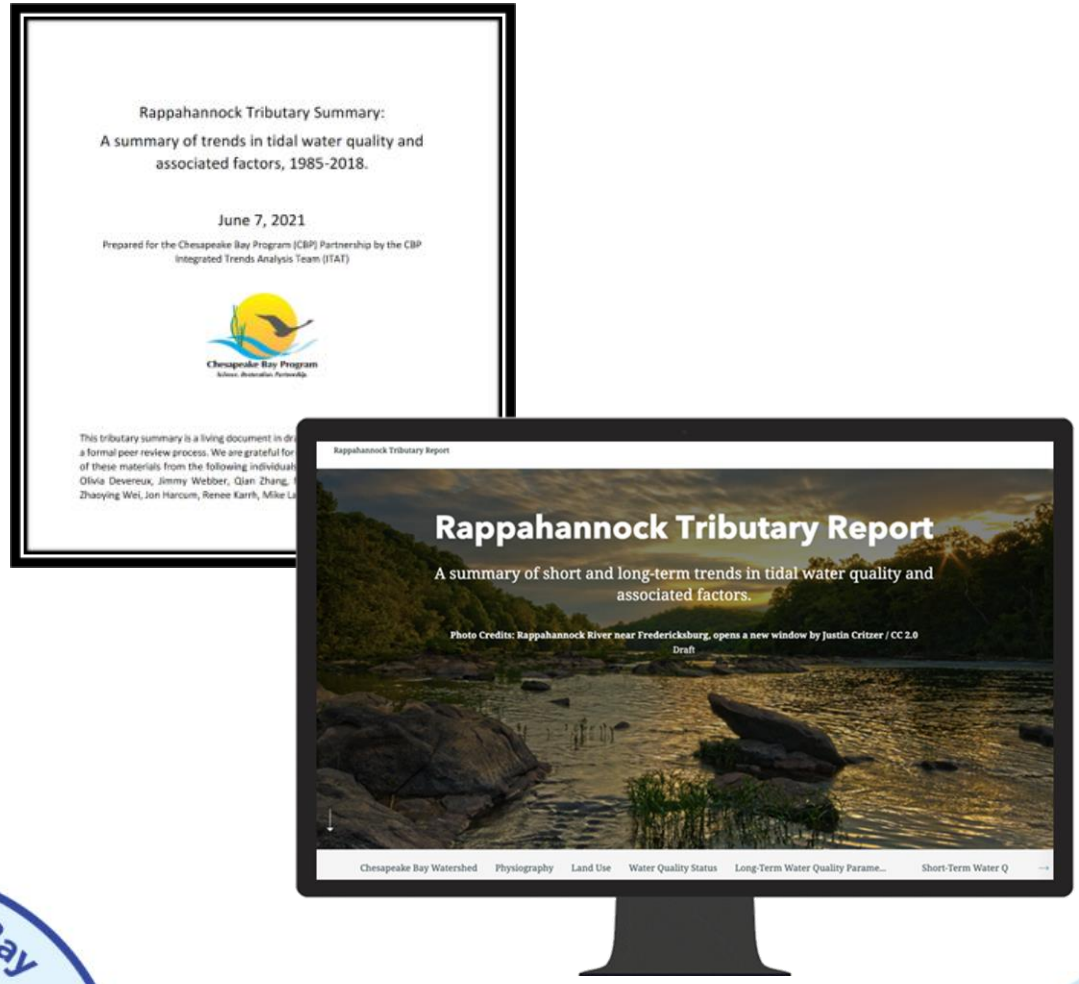
Planned Improvements

- Increase number of factsheets from 64 to 92
- Updated factsheets



Planned Improvements

- Better linkage to Tributary Summary reports
- Connect to SAV Watchers database



Chesapeake Bay SAV WATCHERS

Part 3:
Open Discussion

Contact Information

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