



CHESAPEAKE

DATA

Chesapeake Data Team

STAR Meeting

June 29, 2023

Purpose of *ChesapeakeData*?



ChesapeakeData is designed to provide access to authoritative data, decision support tools and web applications of the Chesapeake Bay Program and its partners.

Why is it being developed?

- Updated technological approach for data sharing.
- Improve the documentation and discovery of resources.
- Address known shortcomings in our decision support tool portfolio.
- Develop a path forward for cross-organizational data and tool discovery.

User Research (2021/22) Findings



Lack of a **central location** for tools ranked highest in a list of issues ...

Stated desires for improvements included...

- Tools organized by outcomes or decisions
- Advanced search capabilities
- Partner tools included with CBP tools

Who is behind *ChesapeakeData*?



ChesapeakeData is a collaborative project of the Chesapeake Bay Program Office and Chesapeake Conservancy

- **Data Center** (Megan Thyng)
- **GIS Team** (John Wolf, Andy Fitch, David Strong, Angie Wei, Renee Thompson)
- **Web Team** (Catherine Krikstan)
- **Chesapeake Conservancy** (Katie Walker, Alicia Sabatino)

The initial site is being developed with planning and site design assistance of **Blue Raster** (Eric Ashcroft, Chigo Ibeh, Sarah Mandanas, Mandelson Fleurival)

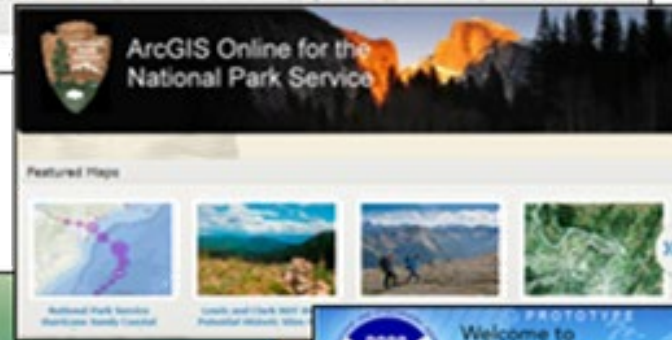
How is *ChesapeakeData* being implemented?



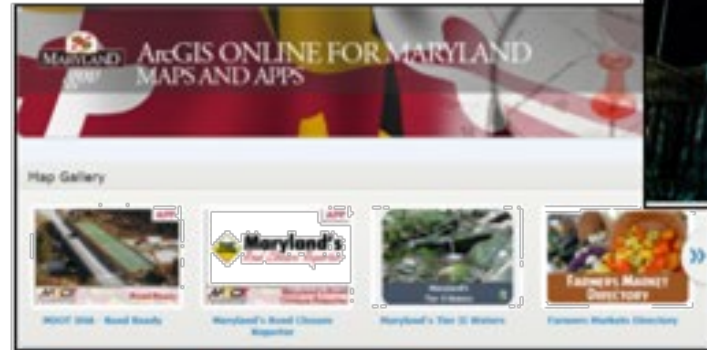
ChesapeakeData is an implementation of Esri's ArcGIS Hub software.

- It extends the capabilities and content of the CBP's existing Open Data Portal (<https://data-chesbay.opendata.arcgis.com/>).
- It leverages the same software and architecture that is used in existing sites of CBP Partner organizations.

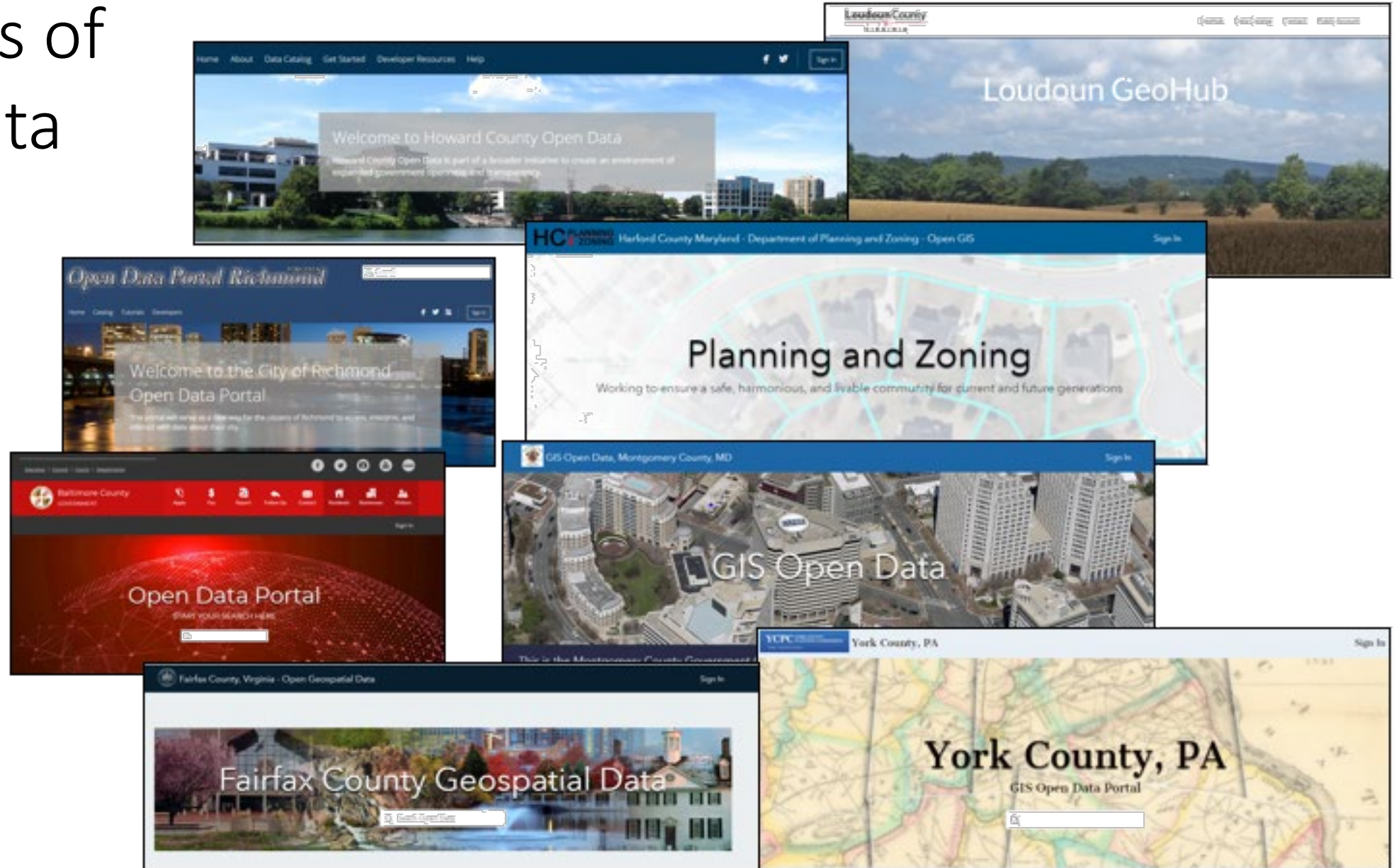
Examples of Open Data Sites - Federal



Examples of Open Data Sites - State

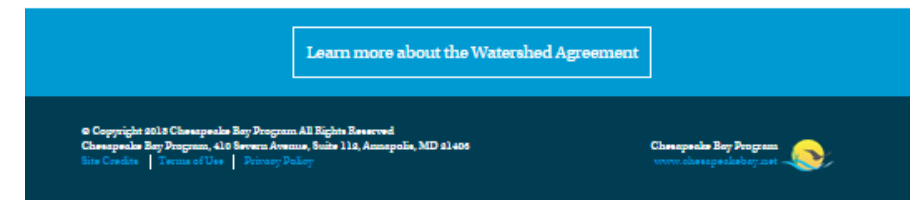
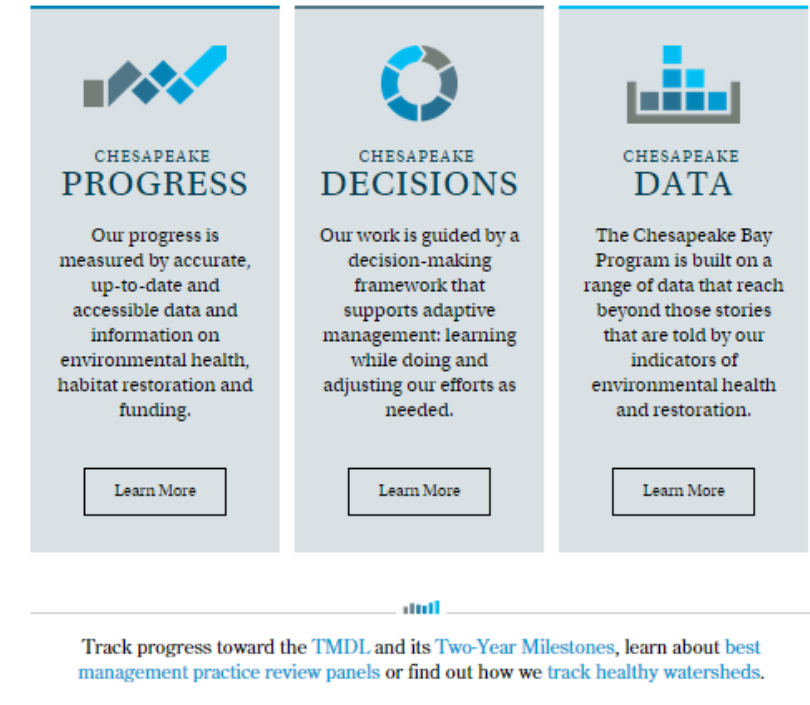
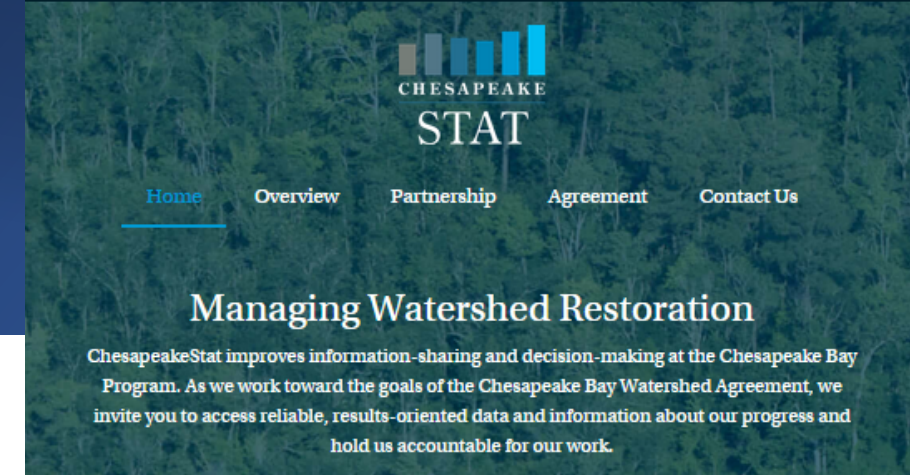


Examples of Open Data Sites - Local



How is *ChesapeakeData* related to other CBP websites?

- ***ChesapeakeData*** is envisioned as the third pillar of ***ChesapeakeStat*** – the umbrella site that currently houses
 - ***ChesapeakeProgress***
 - ***ChesapeakeDecisions***
 - ***ChesapeakeData***



ChesapeakeData - Audience Input



RTI User
Research

Data
Product
Inventory

Card Sort
Exercises

Informed Site Architecture and Navigation

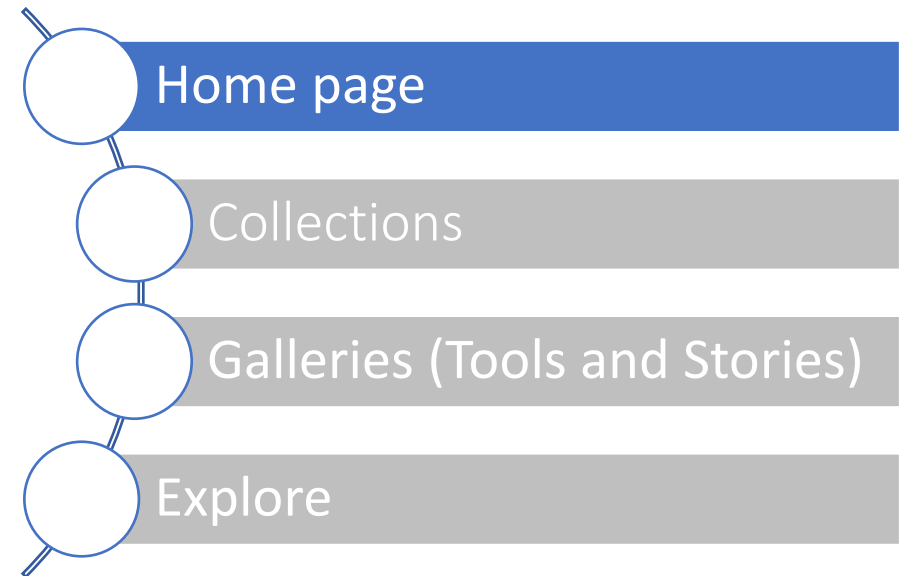
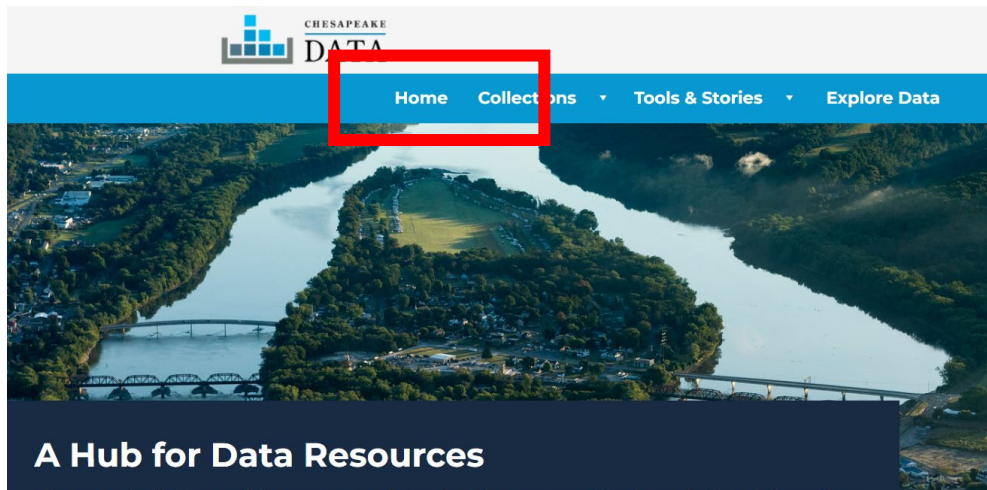
What will *ChesapeakeData* contain?



What will *ChesapeakeData* contain?



1. Home page describing major components of *ChesapeakeData*, featured application, and FAQs



An aerial photograph showing a wide river flowing through a lush green landscape. On the left bank, a small town with numerous houses and buildings is visible. A bridge crosses the river in the lower left. In the center, another bridge spans the river. The right bank is also green with some buildings and a parking lot. The water reflects the surrounding greenery.

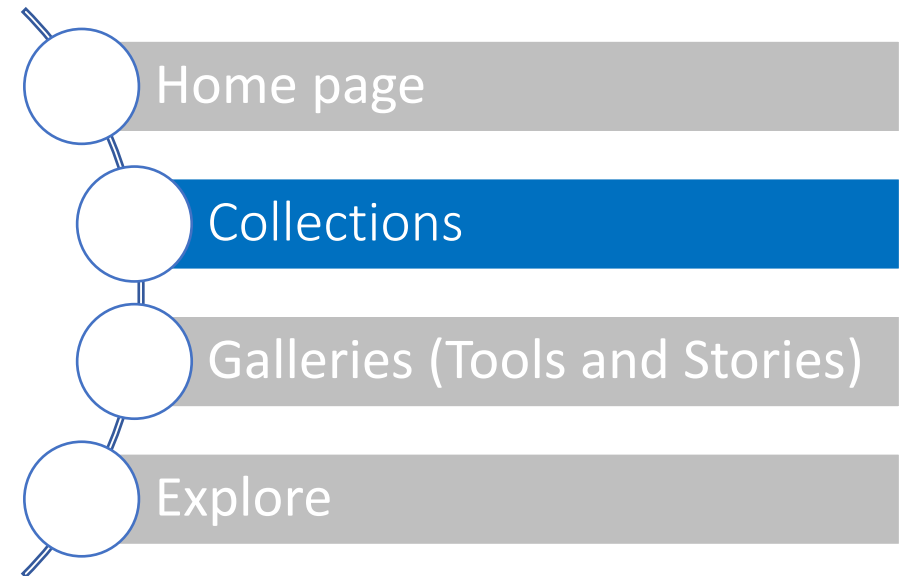
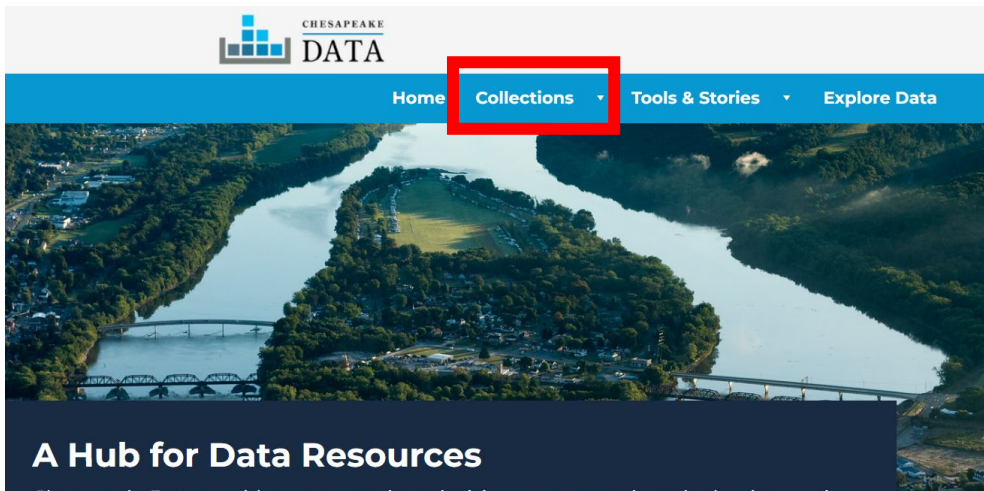
A Hub for Data Resources

ChesapeakeData provides access to data, decision-support tools and other interactive resources from the Chesapeake Bay Program and its partners. These resources reach beyond the program's indicators of environmental health, restoration, conservation, and stewardship to provide a wealth of information about the Chesapeake Bay and its watershed.

ChesapeakeData connects users with curated collections of resources that support different Chesapeake Bay Program priorities. Users can browse our collection of

What will *ChesapeakeData* contain?

2. Detailed **collections** curated collections of resources that support different Chesapeake Bay Program priorities and projects



What will *ChesapeakeData* contain?

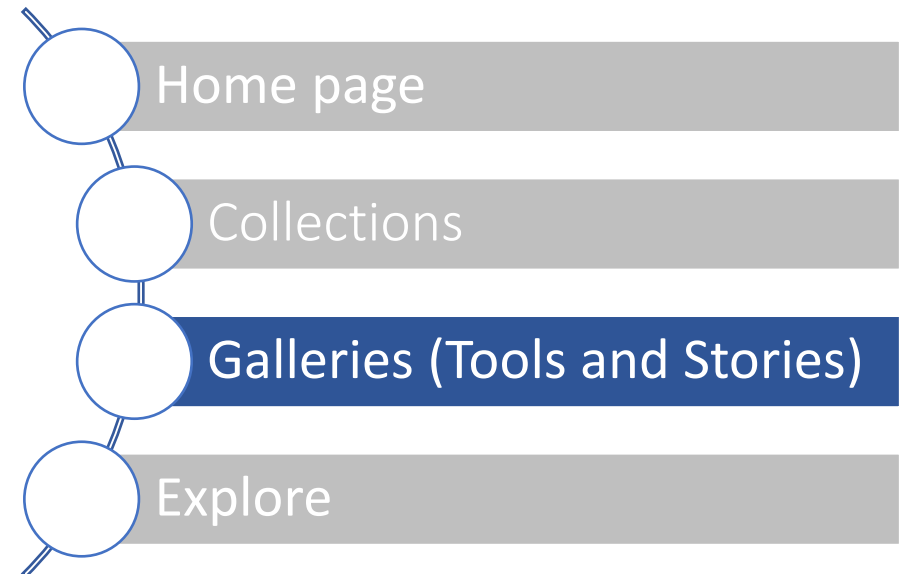
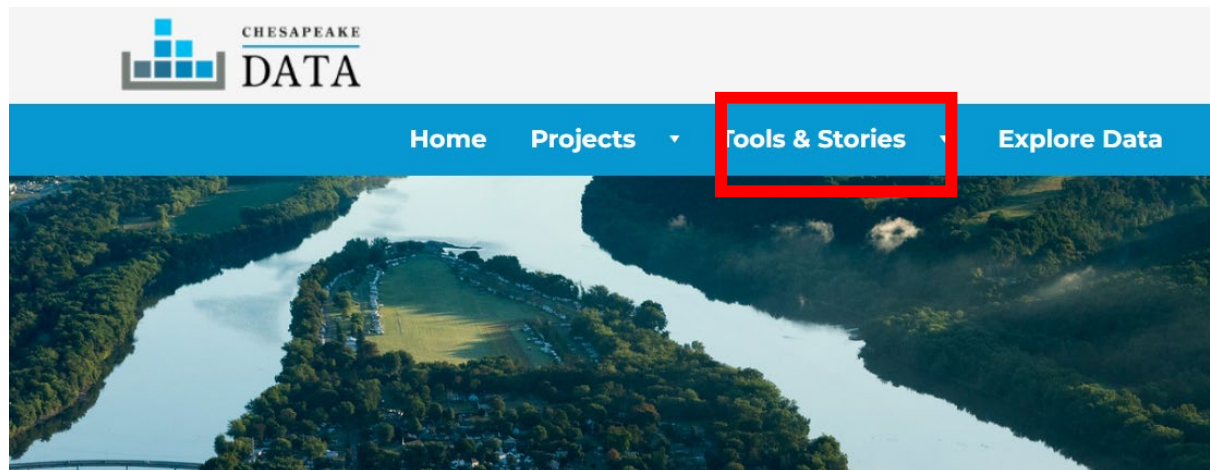


Initial collections under development and consideration:

- Protected Lands
- Healthy Watersheds
- Diversity, Equity and Inclusion
- Targeting Tools Portal
- Most Effective Basins
- Priority Agricultural Watersheds
- Chesapeake Conservation Atlas
- Watershed Data Dashboard

What will *ChesapeakeData* contain?

3. Curated **galleries** of tools and stories frequently used by CBP Partners



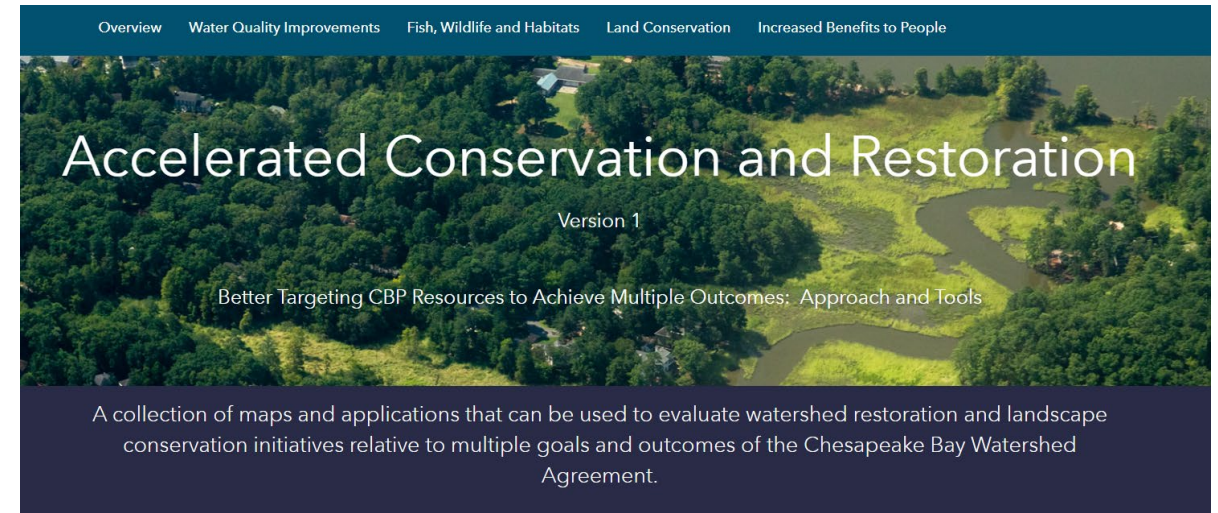
Curated Galleries

- Decision Support Tools

- Monitoring and Modeling
- Resource Targeting
- Environmental Equity and Stewardship
- Programmatic Planning

- Story maps

- Expands upon the Targeting Tools Portal launched last year

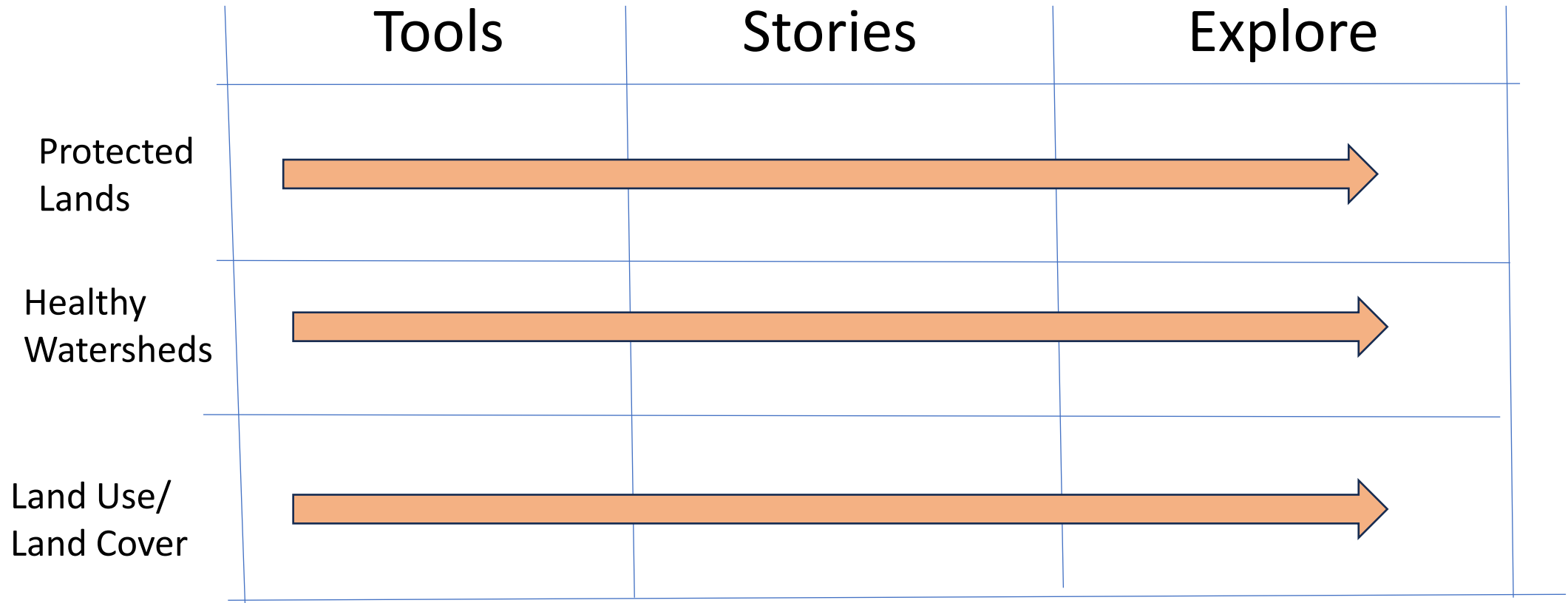


Chesapeake Data Example Architecture - Collections



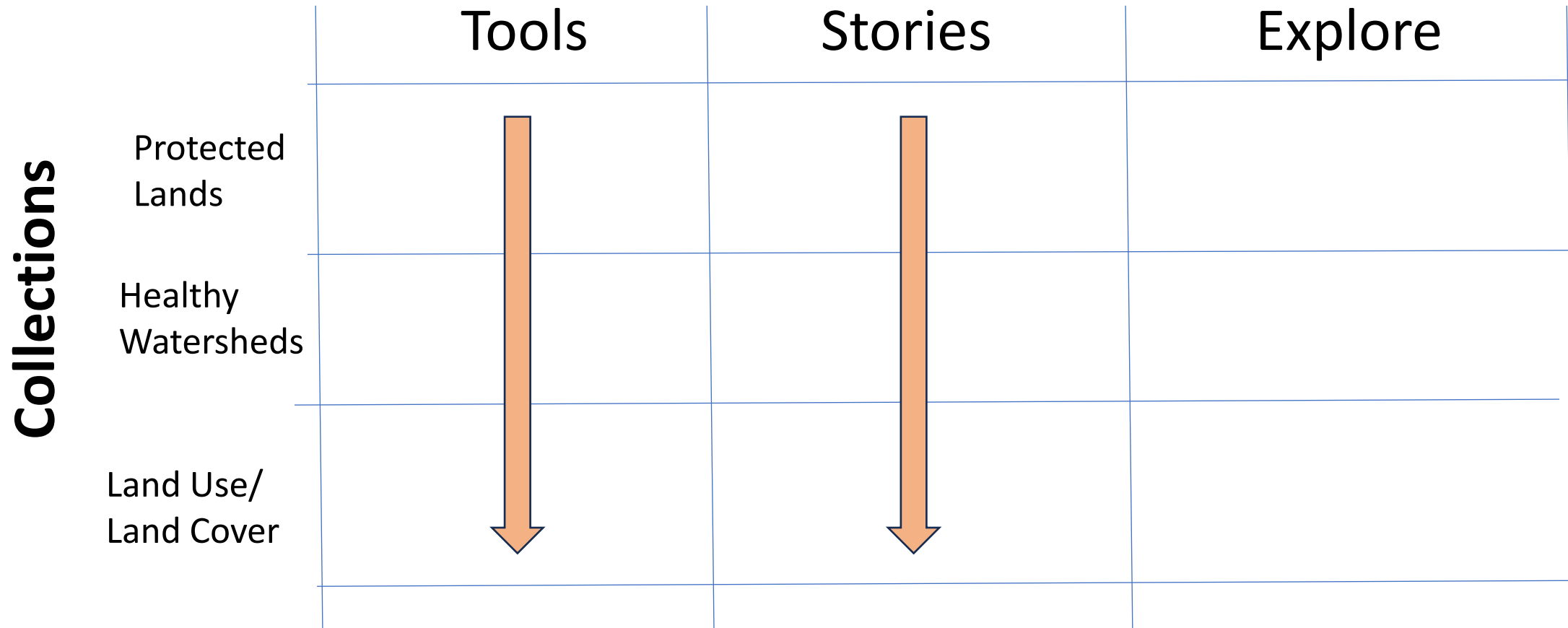
Galleries

Collections



Chesapeake Data Example Architecture - Galleries

Galleries



Chesapeake Data Example Architecture - Explore



Galleries

Collections

		Tools	Stories	Explore
Collections	Protected Lands			
	Healthy Watersheds	Based on User Criteria	"Choose your own adventure"	
	Land Use/ Land Cover			

Card Sort Results

Data
Tools/Apps
Metadata
Dashboards/Depositories
Story Maps

Organization
Documentation
Communication
Decision Support
Data

GIT
Outcome
Watershed/Bay/Air
Ecosystem/Human
Data/Tool/Story/Report Repository
Ag/Urban/Natural

Water Quality
Habitat
Benefits to People
Land Use
Spatial Data
Conservation
Data Production

Coding Focus
Maps Focus
Data/Database Focus
Miscellaneous/Organizational

Reports
Story Maps
Interpretive
Spatial Data
Applications

ChesapeakeData Discovery Options

- Primary (top) navigation
 - Gallery groupings
 - Search Categories
 - Search Keywords

Goal is to have content discoverable through one or more “channels”

Sample Gallery Display



[Home](#) [Collections](#) ▾ [Tools & Stories](#) ▾ [Explore Data](#)

Stories

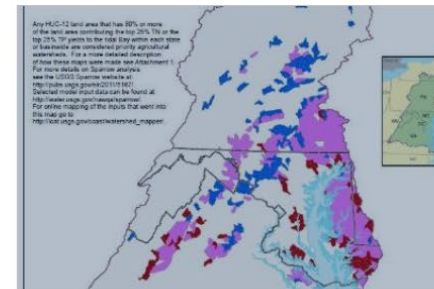
Interactive story maps/geonarratives describing programs and projects of the Chesapeake Bay Program partnership



Cross-GIT Mapping Project



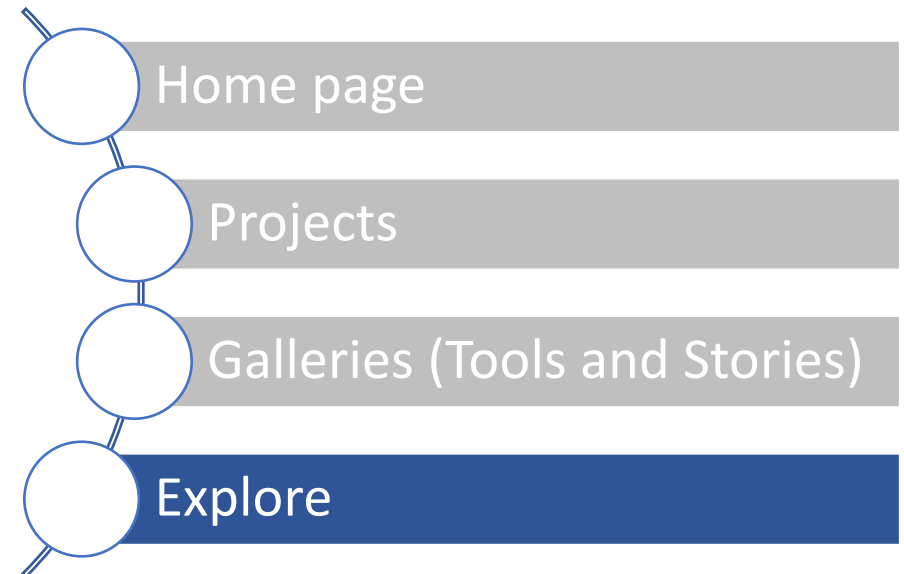
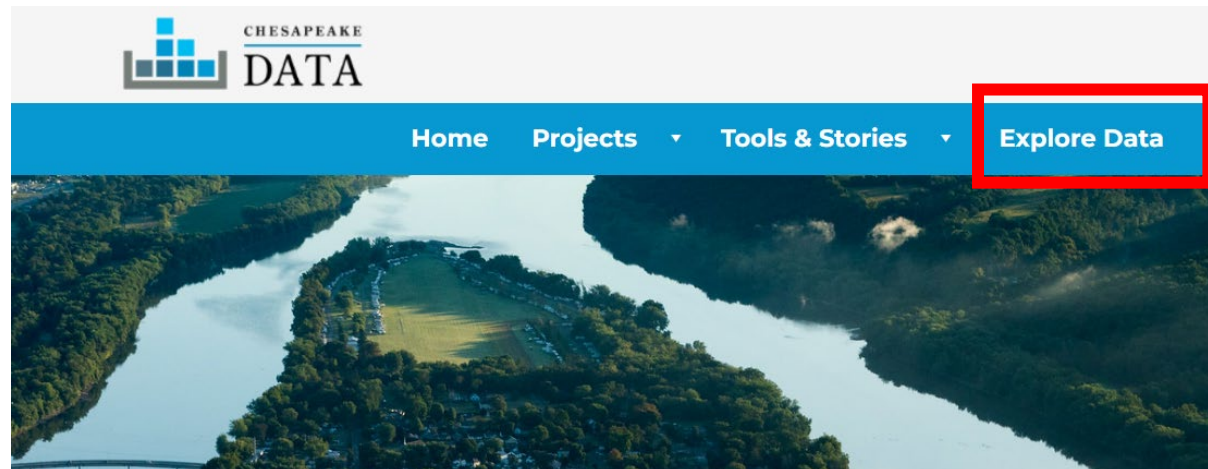
Chesapeake Conservation Atlas



Priority Agricultural Watersheds

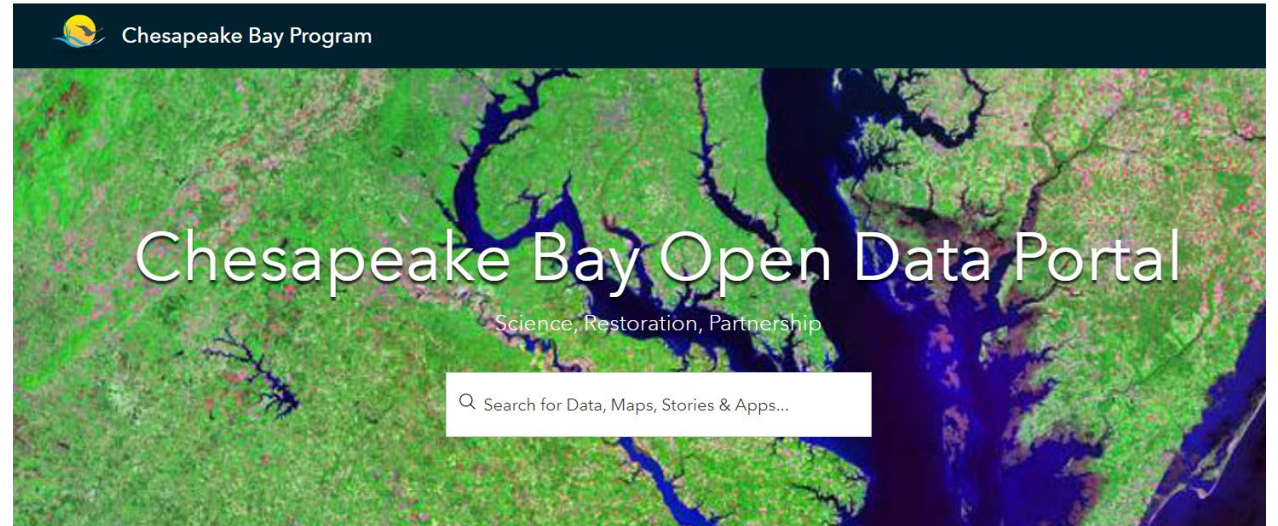
What will *ChesapeakeData* contain?

4. Searchable **inventory** of data, applications, and story maps developed by CBP and Partner organizations



Searchable Inventory

- Extends the Chesapeake Open Data Portal
- Includes “categories” of content based on card sorting results
- Will eventually include partner sites



Q most effective basins

1. Search Term

Filters

Reset

1 - 20 of 50 results

Relevance

Content Type

☐ Document Link

☐ Feature Layer

Source

☐ Chesapeake Geoplatform

☐ U.S. Geological Survey, SOUTHEAST REGION

☐ U.S. Geological Survey

☐ Virginia Institute of Marine Science (VIMS)

Categories

Data

Agriculture Most Effective Basins 2020

Chesapeake Geoplatform | ChesapeakeBayProgram

EPA will provide the **most effective basins** funding for nitrogen reduction from the most cost-effective BMPs in the agricultural sector to the Chesapeake Bay watershed jurisdictions that have...

Type: Feature Layer

Last Updated: April 26, 2023

Rows: 49

Tags: most effective basins, Nitrogen, Water Quality

Data

Most Effective Basins 2022 V2 (August 2022)

Chesapeake Geoplatform | ChesapeakeBayProgram

2. Select Result

Most Effective Basins 2022 V2 (August 2022)

Chesapeake Bay Program
Chesapeake Geoplatform

Summary

Most Effective Basins 2022 V2 (August 2022)

View Full Details

Download

Details

Dataset
Feature Layer

April 26, 2023
Info Updated

April 26, 2023
Data Updated

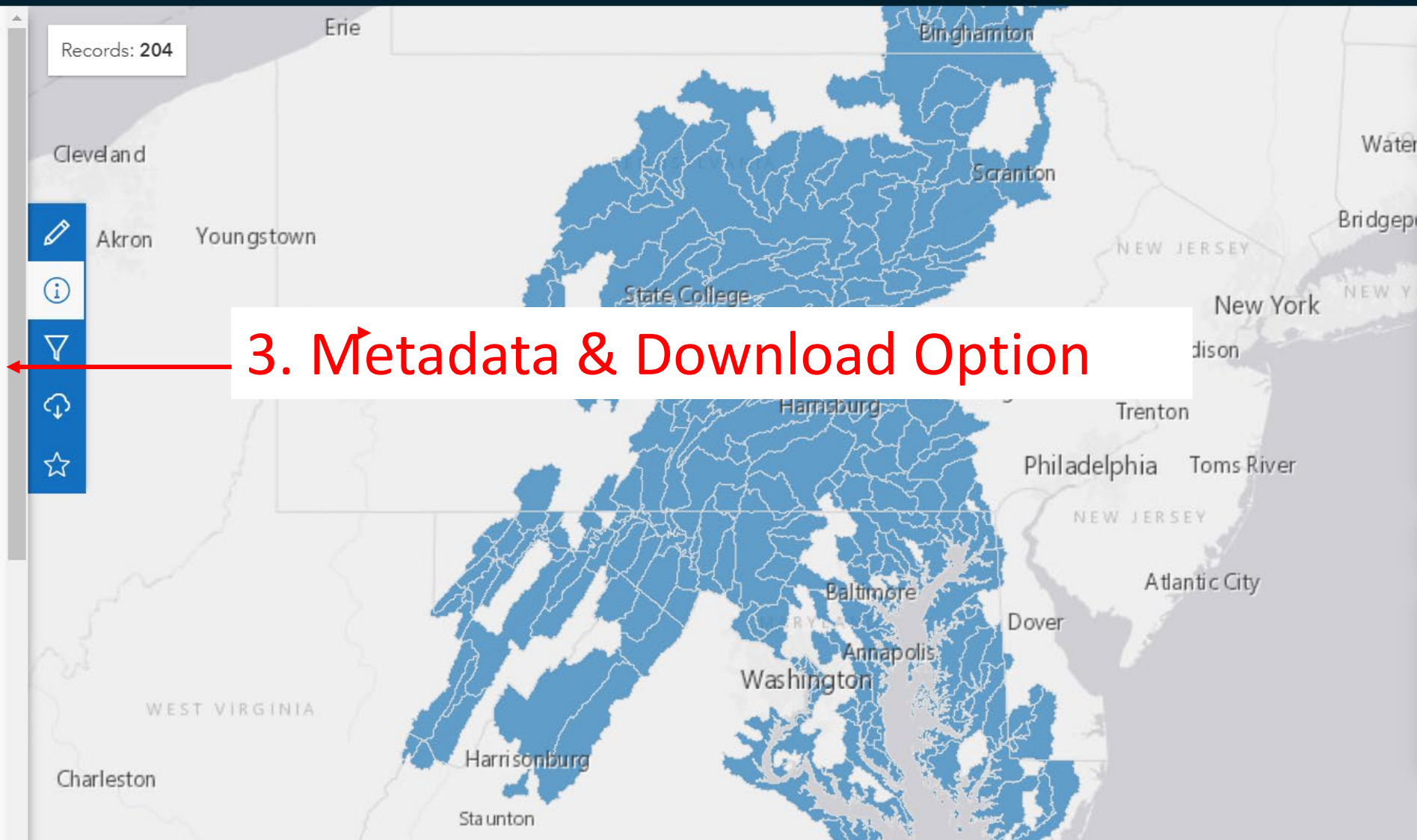
April 26, 2023
Published Date

Records: 204
View data table

Records: 204



3. Metadata & Download Option





New ▾



John ▾



Chesapeake Bay Program



Most Effective Basins 2022 V2 (August 2022)



Chesapeake Bay Program

Chesapeake Geoplatform

View Map

Download

More ▾

Summary

Most Effective Basins 2022 V2 (August 2022)

Most effective basins based on relative effectiveness (nitrogen) based on revised delineation including Virginia changes as of August 2022.. This version was used to focus Infrastructure Investment and Jobs Act (IIJA) funding.

The Infrastructure Investment and Jobs Act (IIJA), signed into law on November 15, 2021, has authorized significant additional funding for Chesapeake Bay restoration. For Fiscal Year (FY) 2022

Details



Dataset

Feature Layer



April 26, 2023

Info Updated



April 26, 2023

Data Updated



April 26, 2023

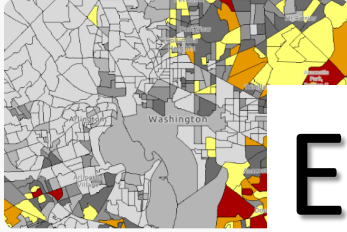
Searchable Inventory



- Initially will feature CBPO and Chesapeake Conservancy content and decision support tools used by GITs and Workgroups
- Currently working to integrate relevant content from other organizations (e.g., USEPA, USGS)
- Future – integrate content from jurisdictional partners

Discovering Curated Content from Partners (examples)

Chesapeake Bay Program



EJScreen Environmental Justice Indices (EPA 2020)

SEGS Admin

EPA

Summary
This EPA content item depicts the EJSCREEN environmental justice indices by census block group (2020).
Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, or national origin in the development, implementation, and enforcement of environmental laws, regulations, and policies.

Details
Map
Map Service
September 27, 2022
Date Updated

Chesapeake Bay Program

Sea Level Rise Viewer

✓ Authoritative

NOAA OCM Inundation
NOAA GeoPlatform

Summary
A visual tool that displays potential future sea levels, provides simulations, communicates the uncertainty of mapped levels, models marsh migration, overlays social & economic data, and examines an increase in tidal flooding.

[View Full Details](#)

Details
Application
Web Mapping Application
August 25, 2022
Date Updated
November 27, 2013
Published Date

NOAA

[GET STARTED](#)

Chesapeake Bay Program

Chesapeake Bay Nontidal Monitoring Network Loads and Trends

Private Member
U.S. Geological Survey

Summary
Short-term nutrient and sediment loads and trends, results through water year 2020

[View Full Details](#)

Details
StoryMap
StoryMap
January 18, 2023
Date Updated
November 12, 2021
Published Date
Public
Anyone can see this content
Custom License
[View license details](#)


USGS

Chesapeake Bay Nontidal Monitoring Network Loads and Trends

Sediment loads and trends, results through water year 2020

Virginia and West Virginia Water Science Center, U.S. Geological Survey

Chesapeake Bay Program



#Fridaysonthefarm: Conservation Partnership Benefits Chesapeake Bay and Producers

Private Member
USDA NRCS ArcGIS Online

Summary
In this #Fridaysonthefarm, NRCS meets producers and partners in Maryland and Virginia - who are implementing voluntary conservation practices that improve water quality and strengthen the economic bottom line.
From the kitchen table to the boardroom table, the USDA Natural Resources Conservation Service (NRCS) brings people together across the nation for: healthier food, natural resources and people; a stronger agricultural industry; and economic growth, jobs and innovation.

Details
Map
Web Map
March 20, 2019
Date Updated
June 8, 2017
Published Date

NRCS

Next Steps

- Finalize architecture
- Assemble initial Federal Partner content
- Content development and clean up
 - Collection descriptions
 - Clarify process for adding content to "Explore" tab
 - Consistent tagging and metadata
- Review and testing by Communications and Web Team
- Launch tentatively planned for Fall 2023

Potential Upcoming Roles for STAR



- Establish ***ChesapeakeData*** content liaison(s) for STAR
- Nominate potential science **Collections** and identify subject matter experts
- Participate in user testing

Questions for GITs



- What audiences should this site reach?
- What are we missing in Phase 1? Are there ideas we should consider for future content and functionality?
- How would you like to be kept informed of the evolution of ***ChesapeakeData***?
- What should be the role of STAR?
 - Nominate content?
 - Compose and curate Collection content?
 - Serve as liaison to identify Science content of other partners that should be included?