

Conservation Innovation

Leveraging Technology to Identify
Conservation and Restoration Priorities

JEFF ALLENBY

Director of Conservation Technology
jallenby@chesapeakeconservancy.org



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INNOVATION
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Precision Conservation



*"Getting the right practices, in the right places,
at the right scale, and
making sure they are working"*

Challenges with Water

Chesapeake Bay Watershed

Water QUALITY driven



Colorado River Basin

Water QUANTITY driven



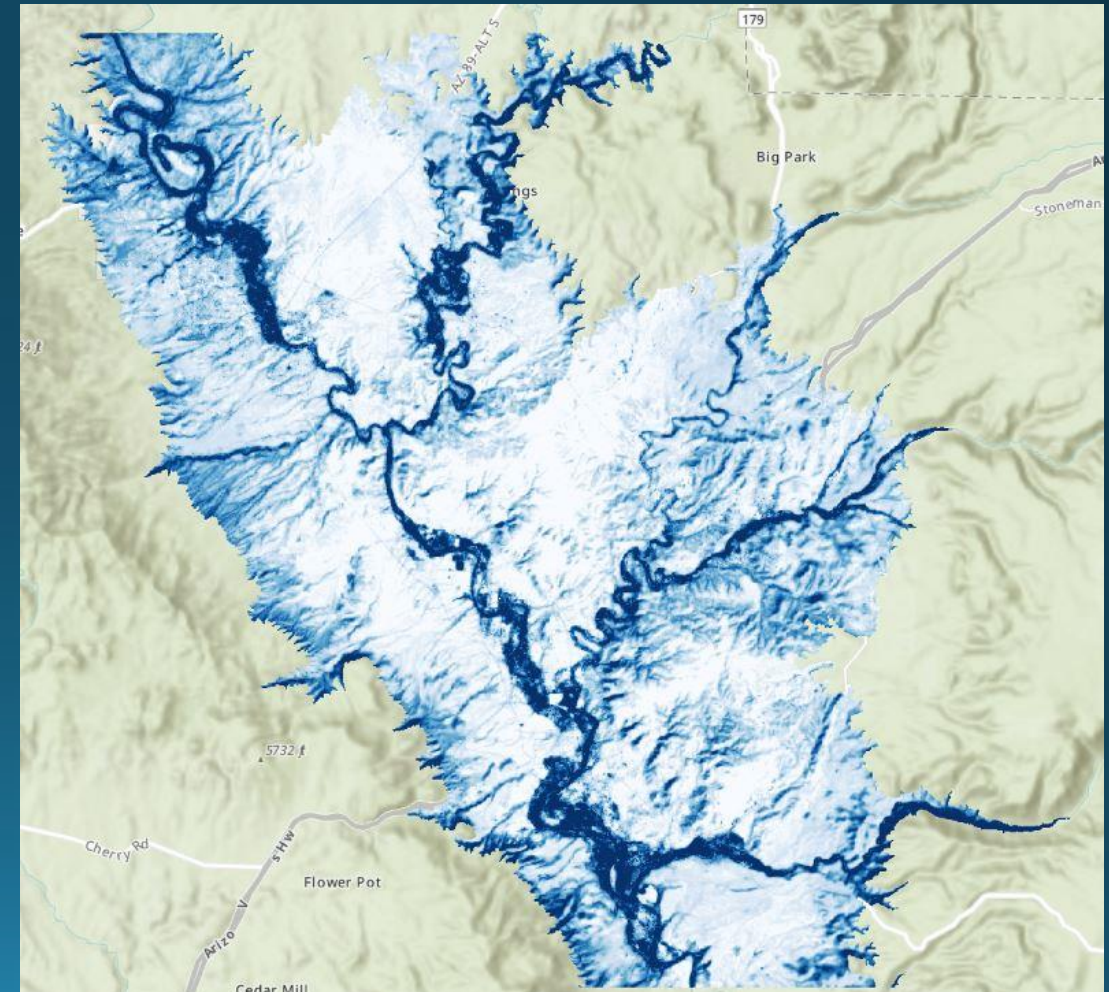
Photo courtesy of US Bureau of Reclamation

Data and Water in the West

Pima County, AZ and Denver Metro Area
Ultra-high-resolution Land Cover Mapping



Verde River Valley, AZ
High-resolution Evapotranspiration Analysis

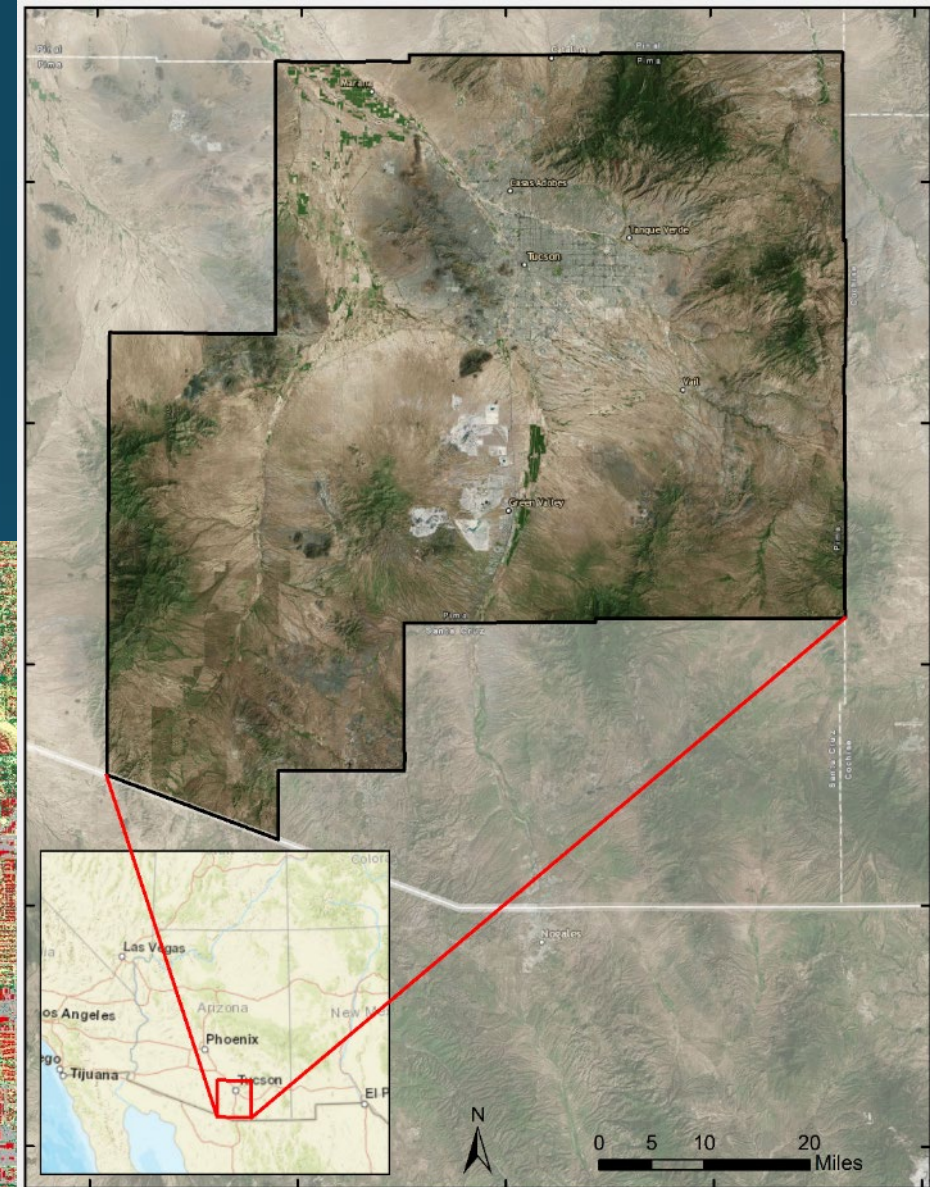
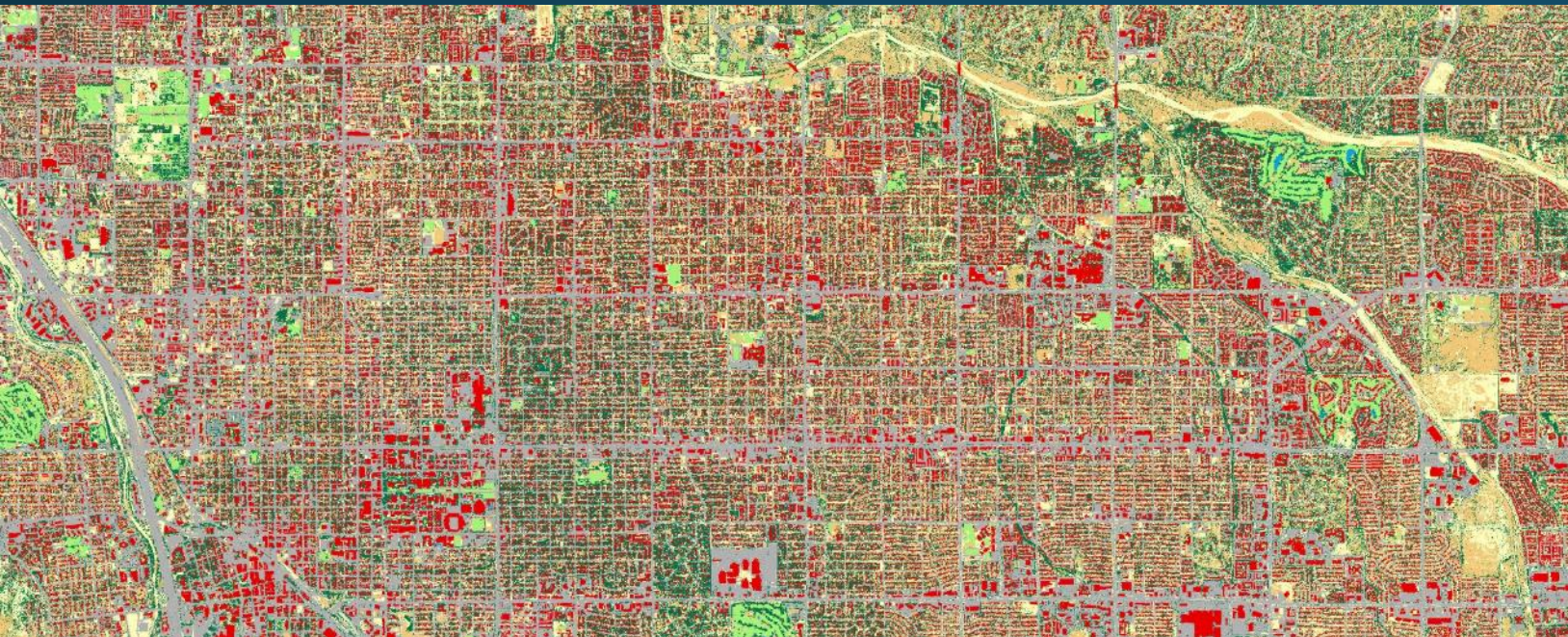


Benefits of Land Cover

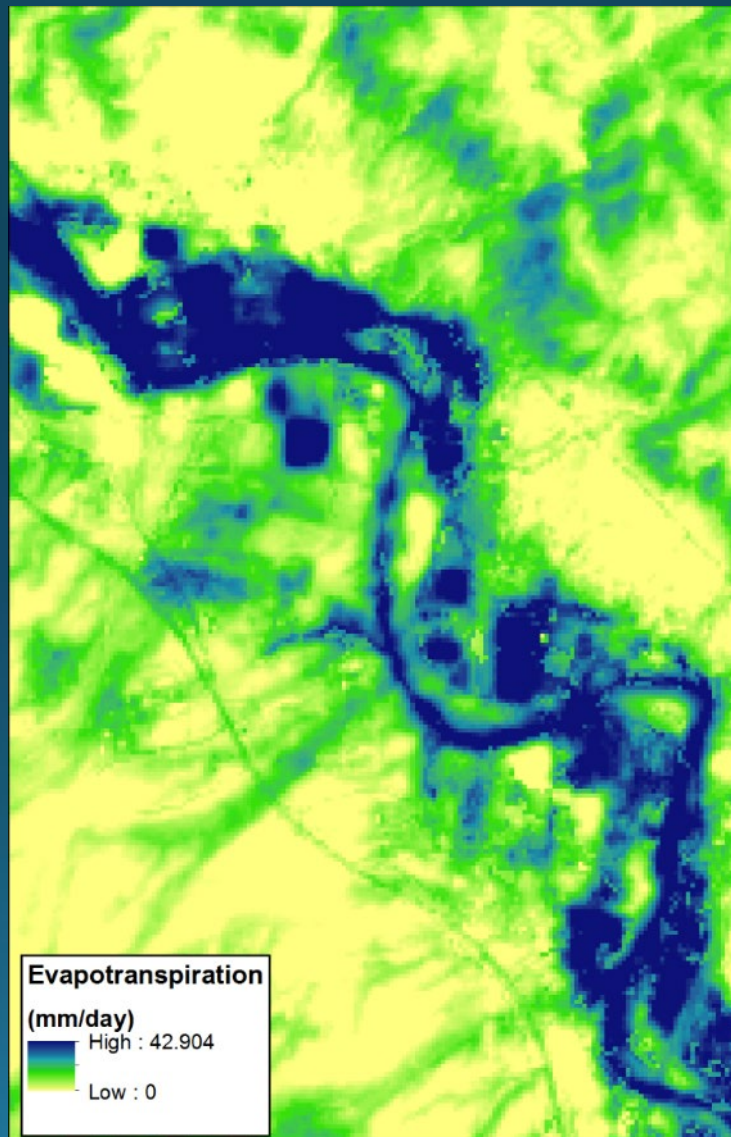
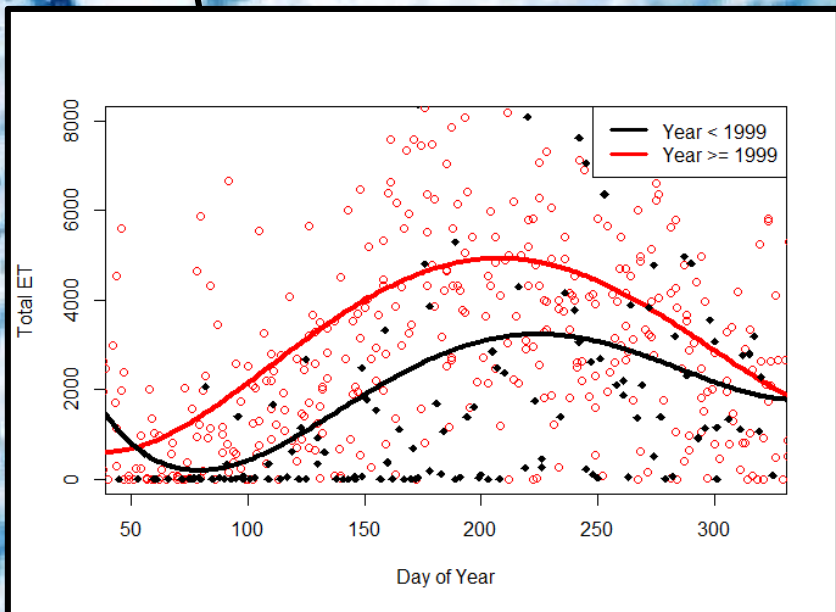


Better data leads to:

- More precise quantification of features in the landscape that impact water consumption
- Identifying specific priorities for management
- Increased accountability that programs are having their intended impacts



Measuring Evapotranspiration



Decision Support Tools

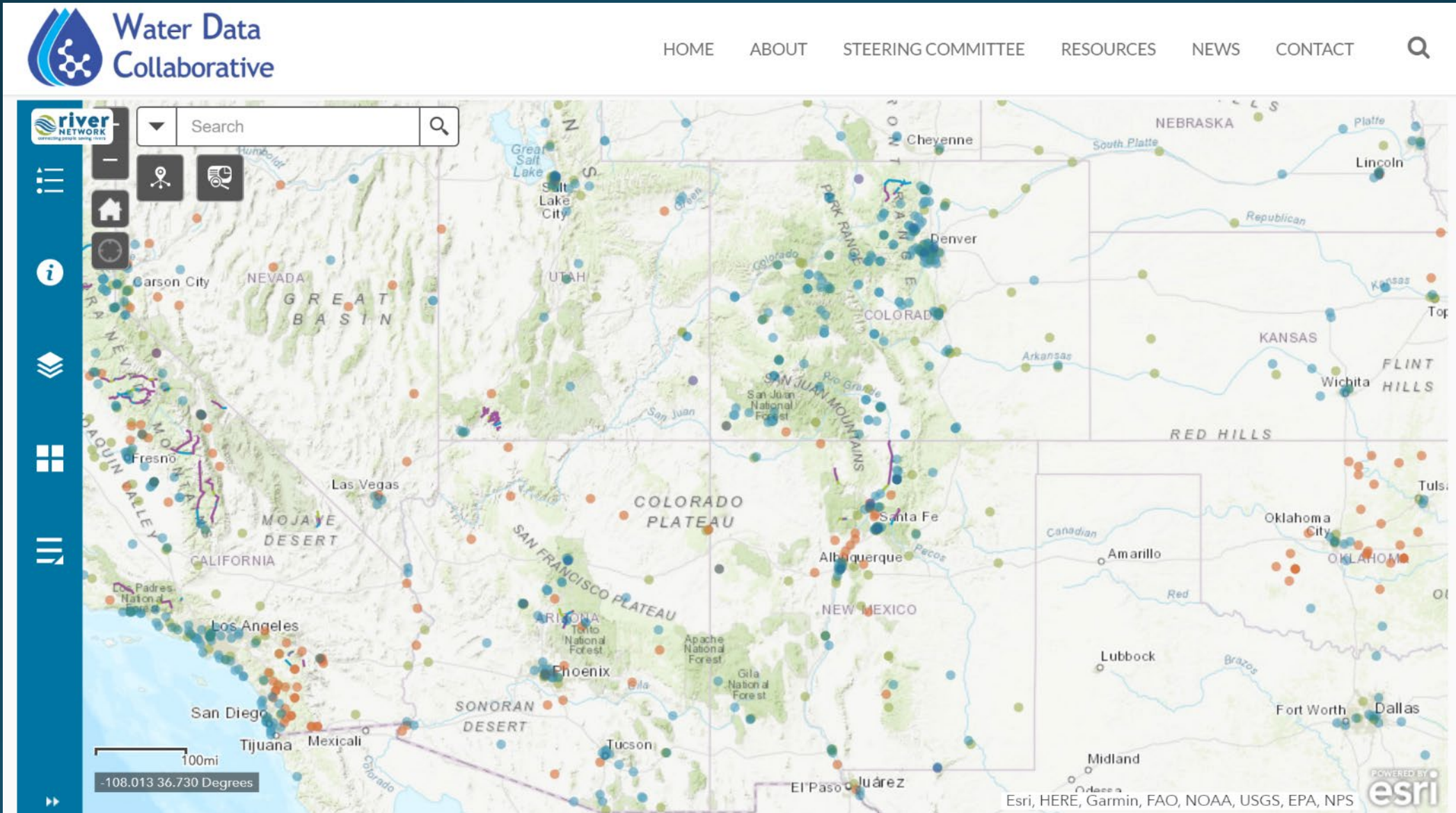
- Decreases barriers to using GIS in daily work
- Allows staff to complete complex analysis tasks from the field
- Reduces costs to identify and implement projects
- We are leveraging our data in analysis tools for:
 - *Federal Agencies*
 - *State Agencies*
 - *Local Governments*
 - *NGOs*
 - *Private*

The screenshot displays a web-based GIS interface. On the left, a map shows a coastal region with a blue overlay representing a specific data layer. A legend titled "Display by percentile rank" is overlaid on the map, showing a color scale from 0 (light blue) to 100 (dark blue) for the "Left map" and a similar scale for the "Right map (submit query)". The interface includes a "Menu" button in the top left and an "Account" button in the top right. On the right side, a configuration panel titled "4. Specify weight(s)" lists various factors with their respective weights and signs:

Factor	Sign	Weight
Distance from wet flats	Negative	5
Distance from dry flats	Negative	5
Grid CaCO3 content	Positive	5
Grid Soil depth	Positive	5
Grid Imperviousness	Negative	5
Grid Slope	Positive	5
Species American woodcock	Positive	5
Pasture/hay	Negative	5
Cultivated crops	Negative	5
Forest Cover	Positive	5

Each factor has a "Remove" button next to it. The interface is powered by Earthstar Geographics and Esri.

Empowering Local Partners



Making Data Accessible

RESTORATION REPORTS

Precision conservation for your property

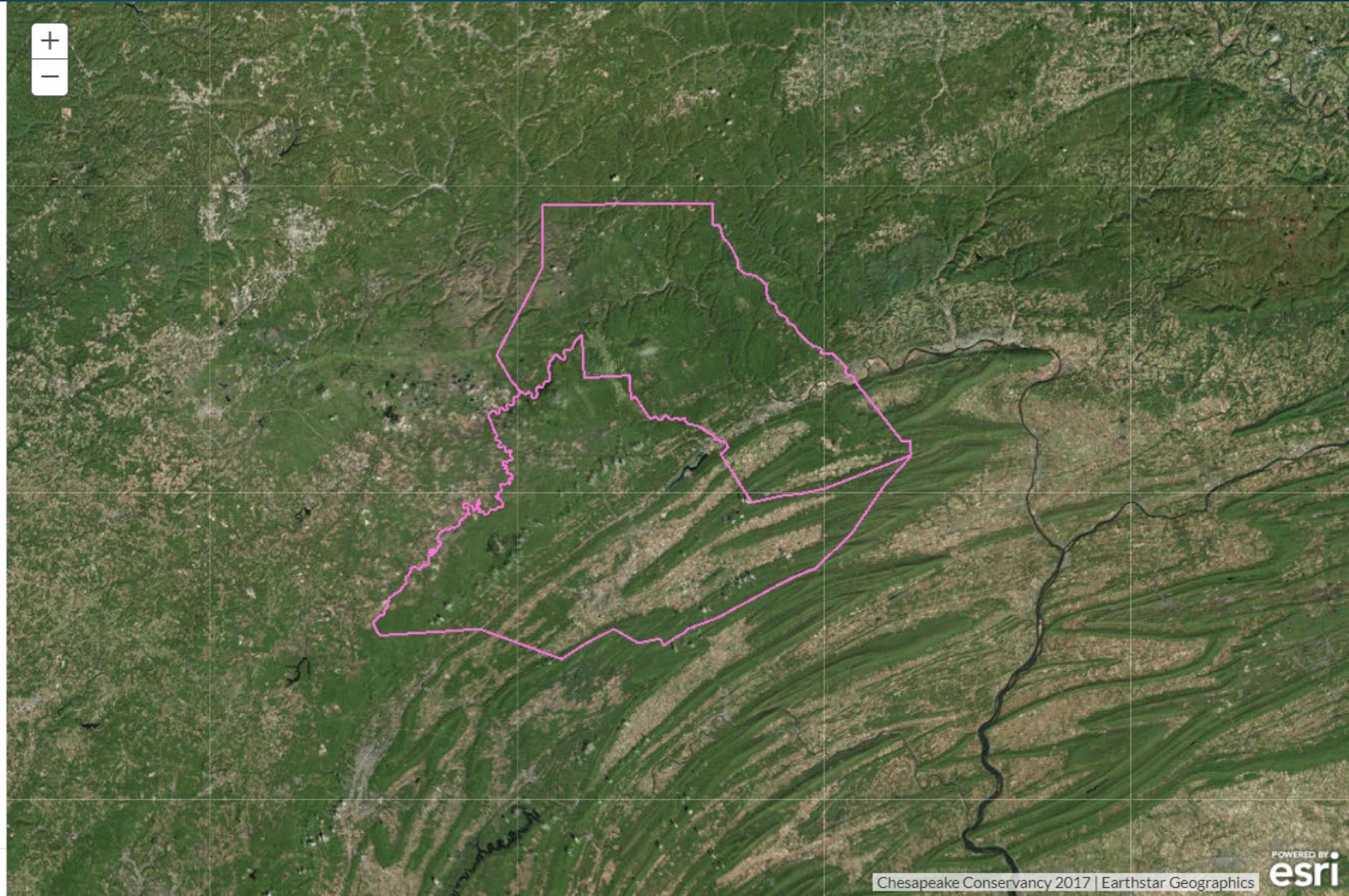
If you are a landowner in Clinton or Centre Counties, Pennsylvania, this free, confidential tool can help you get information about the restoration opportunities on your property that can improve the ecological conditions you care about.

Using state-of-the-art data analysis, Restoration Reports generates a customized report for your property, including the watershed you are a part of, the wildlife species that may live on your property, and whether you are in close proximity to an impaired stream.

You can then select your management priorities, for example, improving the hunting and fishing on your property, or supporting your agricultural land uses.

Get started

restorationreports.com





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