

# Chesapeake Bay High Resolution Land Cover Project

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An aerial photograph of a coastal area, likely a city or town, with a large, semi-transparent red overlay covering most of the land. The overlay has a pixelated or blocky appearance. In the bottom right corner, there is a small red circular icon with a white location pin inside. The text 'Previously Available Data' is overlaid in white at the bottom of the image.

Previously Available Data



An aerial photograph of a city, likely Washington D.C. based on the street grid and landmarks like the Pentagon and Arlington Memorial Park. The map is overlaid with a red grid pattern, possibly representing a cadastral or land use data. Green areas represent parks and undeveloped land. A network of black lines represents the road system. The text 'New Data' is overlaid in white at the bottom center.

# New Data



# Supports Management Efforts of All Bay Agreement Goals and Outcomes

**1. Sustainable Fisheries**

**2. Vital Habitats**

**3. Water Quality**

**4. Toxic Contaminants**

**5. Healthy Watersheds**

**6. Stewardship**

**7. Land Conservation**

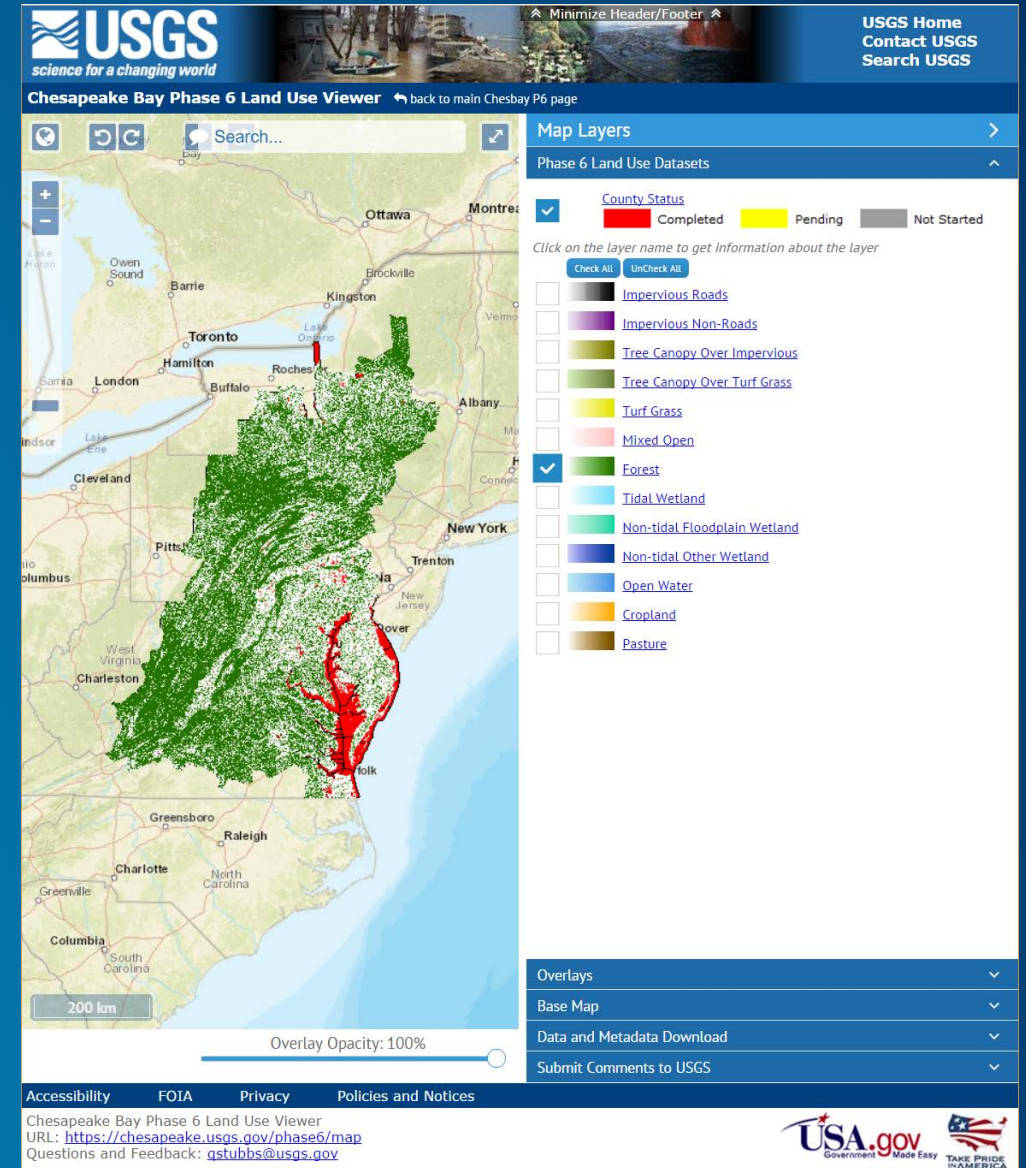
**8. Public Access**

**9. Environmental Literacy**

**10. Climate Resiliency**

# Significance to CBP Management Efforts

- Provides higher resolution inputs for the Chesapeake Bay Program's Phase 6 suite of models
- Provides a baseline for watershed-wide tracking:
  - *Development trends*
  - *Conversion of forest and agricultural lands*
  - *Wetland loss*
- Increases the resolution of, and allows for, project scale GIS-based management and prioritization efforts
- Engages local governments through the review process and provides them with actionable data products





# LIDAR-Derived Concentrated Flow Path Mapping





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# Precision Conservation in the Susquehanna Watershed

<http://envisionthesusquehanna.org/precision-conservation-data-and-tools/>





# Precision Conservation in the Susquehanna Watershed

## RESTORATION REPORTS

Precision conservation for your property

**Restoration Reports** details specific locations on your land where you can install best management practices.

Parcel ID: No ID available  
In the Bald Eagle Creek watershed

### Restoration on your Property

This report identifies locations on your property where restoration could be most effective. The highest restoration priorities are areas next to streams without trees, shrubs, or wetlands. We suggest planting **riparian forest buffers** in these areas to filter water before it enters a stream. If there are no streams on your property, planting native trees and shrubs can provide many of the same benefits described in this Restoration Report because rainwater that falls onto your property ends up in nearby streams.

There are high-quality designated streams within 0.5 mile of your property.

#### Example: Identifying restoration areas



**1. Land cover includes:** forests, shrubs, and wetlands; impervious surfaces (structures, driveways, and roads); low vegetation (lawns, farm fields); and barren (exposed dirt). **Low vegetation and barren are most readily restorable.**



**2. We focus on flow paths,** or where rainwater accumulates and travels downslope before a stream is formed and continues as the stream itself.



**3. Areas along flow paths** that are restorable can filter water from upstream **drainage areas** before it enters a stream. These **flow path restoration areas** are the highest priority for **riparian forest buffer** restoration.

Acres of land cover within your parcel					Most readily restorable		Total acres
Tree canopy	Canopy over impervious	Shrub or wetland	Water	Impervious	Low vegetation	Bare	
3.04	0.07	0	0	4.35	171.35	0	178.81

Restorable land within a 35 ft. distance of flow paths intersecting your parcel are called **Flow Path Restoration Areas**.

1.49



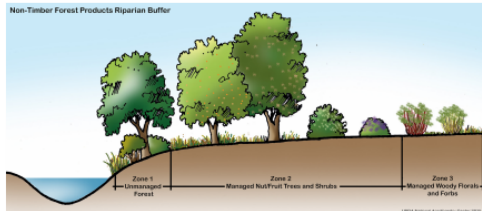
The 1.49 acres of **flow path restoration area** intersecting your property have a total **drainage area** of 129.17 acres from your property and your neighbors' property, including 0 acres of bare earth, 5.61 acres of impervious surface, and 120.98 acres of low vegetation.

### Riparian Forest Buffers

**Riparian forest buffers** are the strips or multiple-row plantings of trees, shrubs, and grasses along waterways.

**Typical trees:** black willow, redbud, silver maple

**Typical shrubs:** serviceberry, mountain laurel, rosebay rhododendron



Start over

### 1. Explore your property

PARCEL IDENTIFIER: No ID available  
WATERSHED: Bald Eagle Creek

#### LAND COVER COMPOSITION (ACRES)

Land cover type	Within parcel
Tree canopy	3.04
Tree canopy over impervious surface	0.07
Shrubs and wetland	0
Low vegetation	171.35
Bare earth	0
Impervious surface	4.35
Water	0

ACREAGE OF RESTORATION AREA  
1.49 acres

ACREAGE OF DRAINAGE THROUGH RESTORATION AREA  
129.17 acres

### 2. Select your management priorities



#### Agricultural production

Restoration can help manage nutrients and improve soil and livestock health.



#### Recreation

Hunting, fishing, and exploring your property safely.



#### Wildlife

Young and mature forests and the species that inhabit them.

Info

Partners

Resources





# YCSWC BMP Reporting Tool: Site-level data

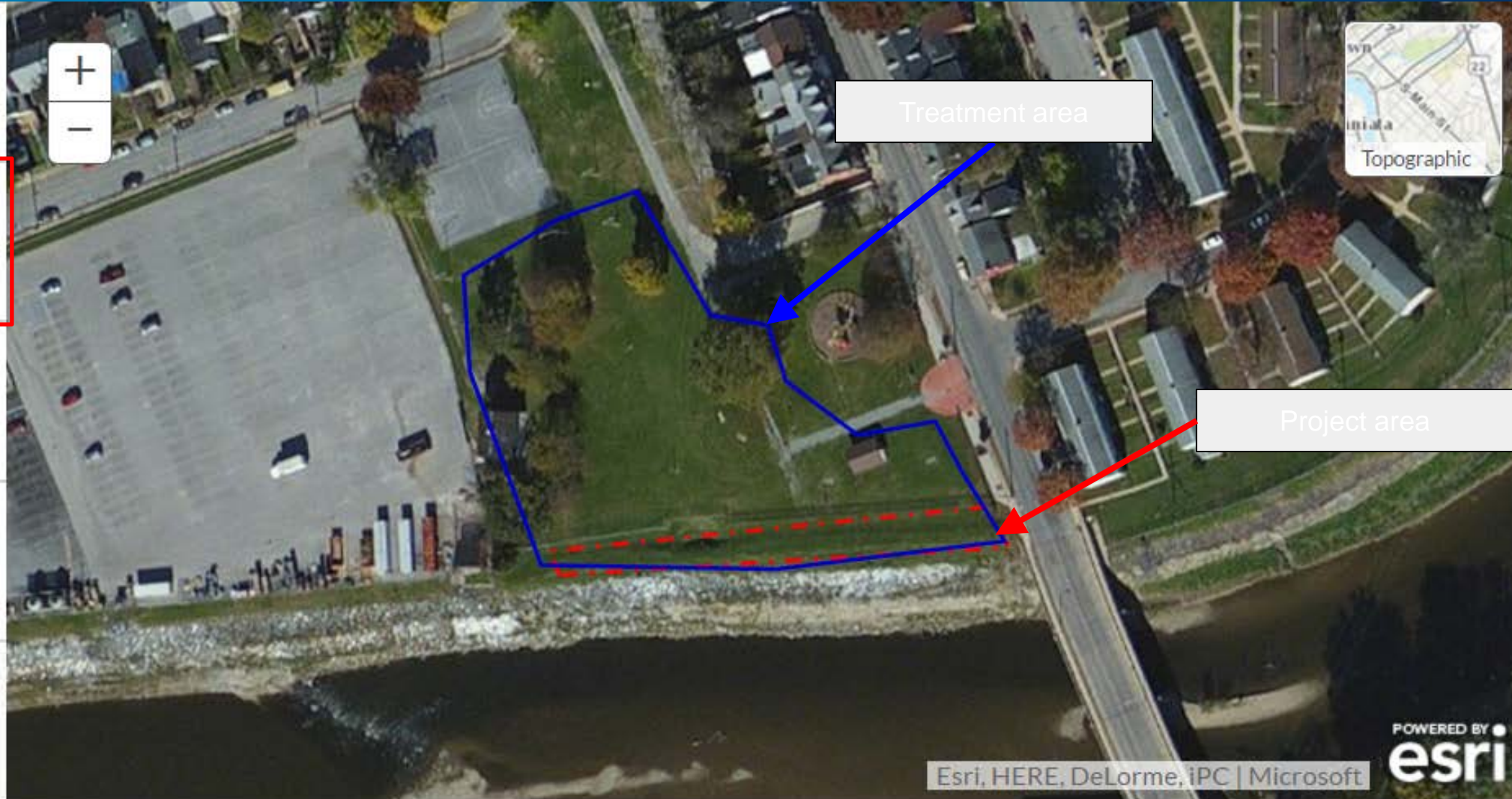
3. Draw Project Area

4. Generate Treatment Area

5. Adjust Treatment Area (Optional)

6. Calculate Land Use/  
Land Cover Values

7. Save Data





# YCSWC BMP Reporting Tool: Site-level data

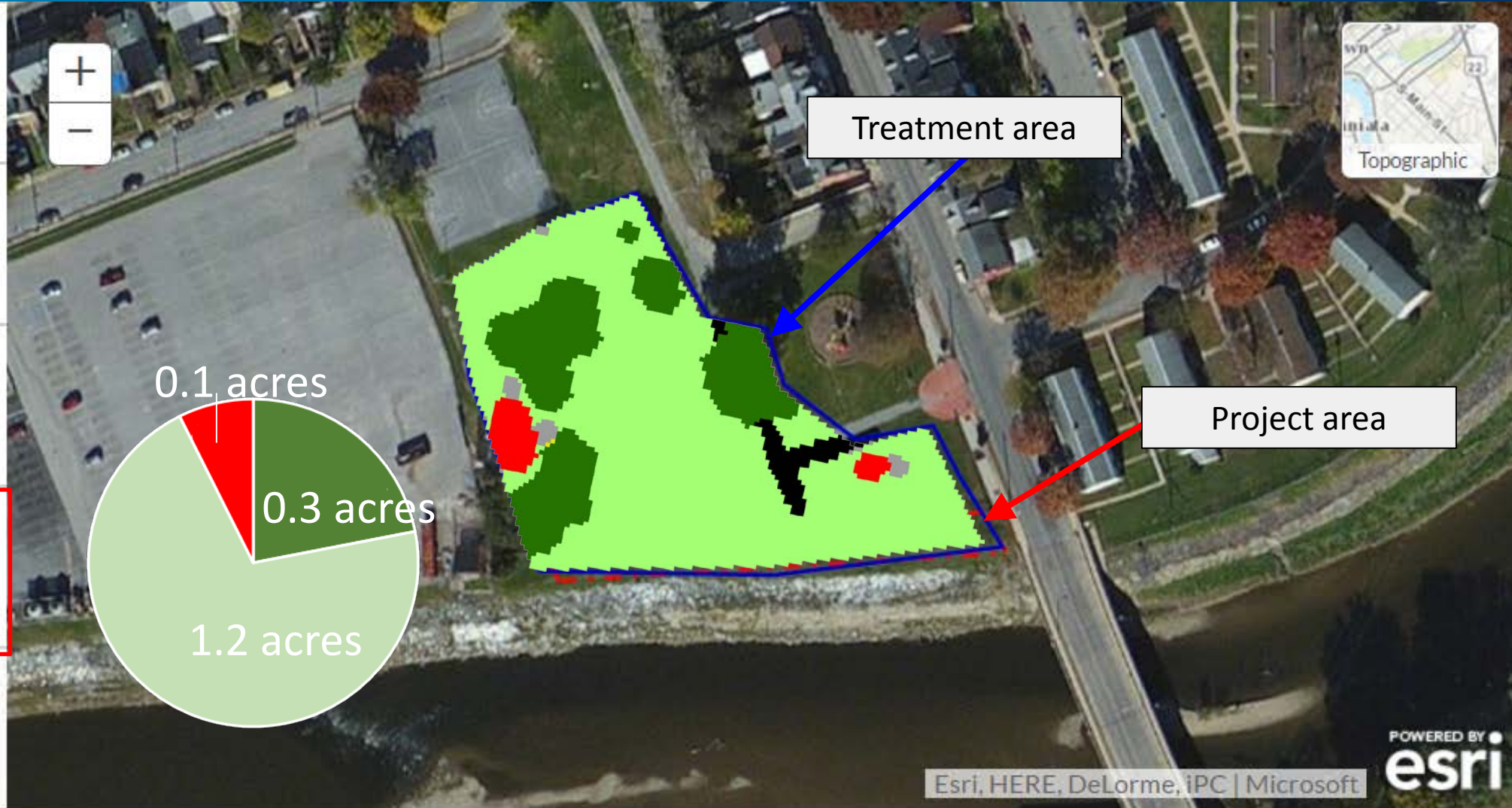
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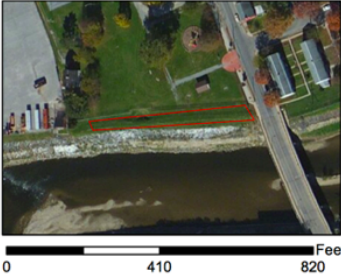
# YCSWC BMP Reporting Tool: Reporting system

A213
Planned
Timeline: Long





### Project

Bioswale  
York City



General	
Ownership:	Both
Secured funding	No
Secondary benefits:	Yes
Designs:	No
Project area (acres):	0.19
Length (ft):	N/A
Cost (\$):	34534



Location	
Longitude	-76.73472
Latitude:	39.95378
Publicly accessible:	No
Impaired:	Yes
NPDES permit req:	Yes
HUC 12:	020503060705

### Description

This is a project that demos the data and tools made available by the York County Planning Commission and the Chesapeake Conservancy. It is not a real project and will not be completed.

### Notes

This is a demo project that will not be completed. Please do not distribute this report, it is only for presentation purposes.

Pollutant Reduction Information	
Nitrogen reduction (lbs/yr):	34
Phosphorus reduction (lbs/yr):	2
Sediment reduction (lbs/yr):	1235
Total pollutant reduction (lbs/yr):	1271
Cost (\$) / lb:	27.17

Complete report  
for every project

Estimated  
reductions &  
cost per pound





[www.chesapeakeconservancy.org/CIC](http://www.chesapeakeconservancy.org/CIC)