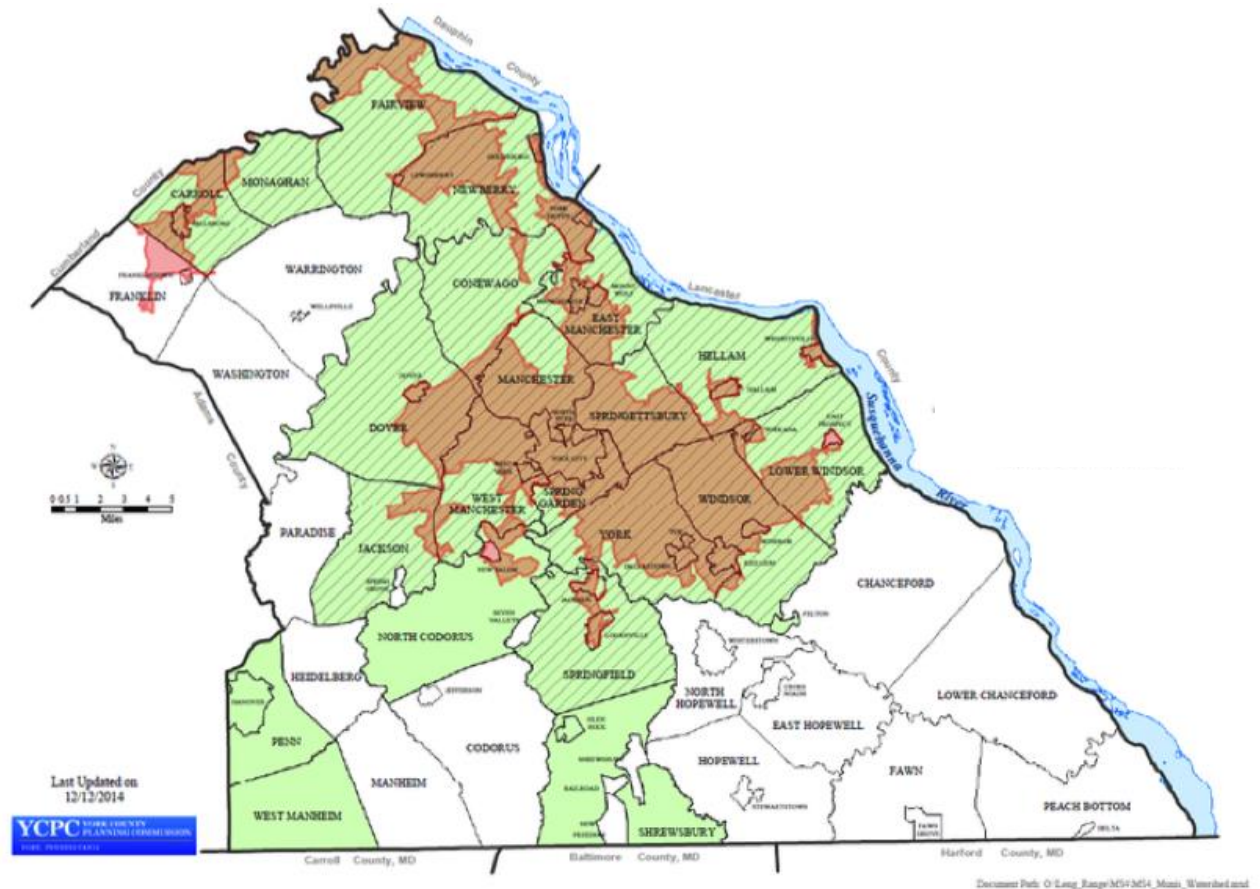


# York County Stormwater BMP Tool

Colin Stief

Senior Applications Designer

Chesapeake Conservancy



- Technology for effective and science-based conservation
- Data, analysis, tools
- Training and support





## High-res Data

Land cover

Flow paths



## Web Applications

All sectors

Local, state, national

# High-res Data: Land cover



Freely available  
1-meter resolution  
100,000+ square miles





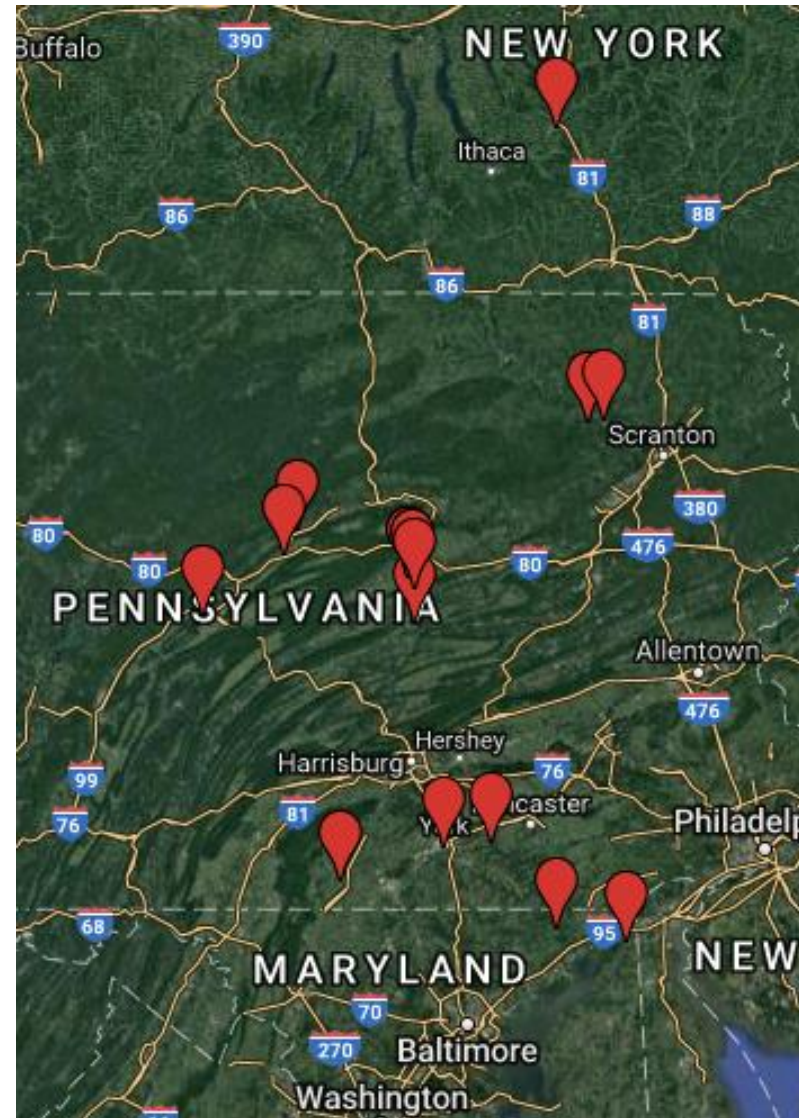
# High-res Data: Flow paths



*Saving the Chesapeake's Great Rivers and Special Places*

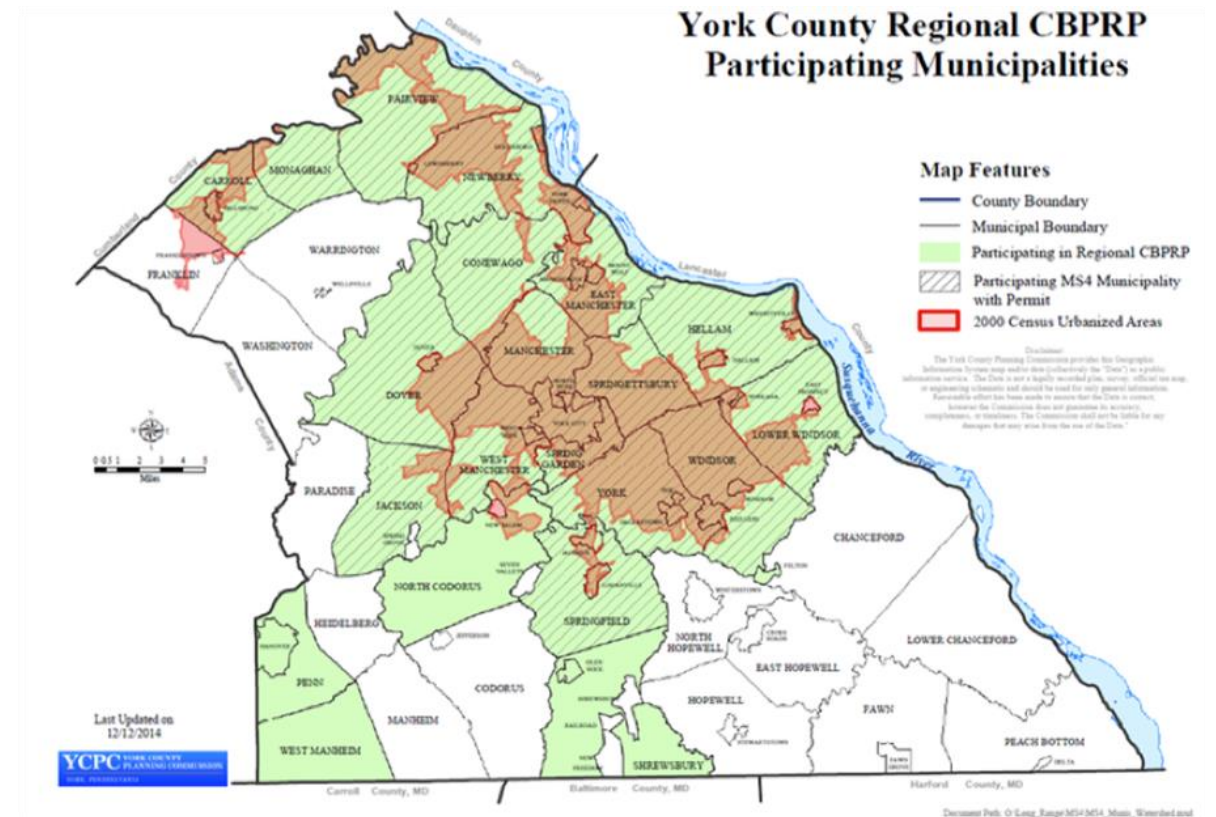


# Outreach: Data workshops



- Gettysburg, PA
- Tunkhannock, PA
- Darlington, MD
- Wrightsville, PA
- Elkton, MD
- Selinsgrove, PA
- Annapolis, MD
- Annapolis, MD
- Lock Haven, PA
- Lewisburg, PA
- Lewisburg, PA
- State College, PA
- Lewisburg, PA
- Tunkhannock, PA
- Lewisburg, PA
- Mill Hall, PA
- Cortland, NY
- York, PA

- Over 40 MS4 regulated municipalities
- Inconsistent reduction calculation
- Reporting process outdated



# York County Web Application



1. Site-level data



2. Reporting system



1. Submit basic information  
about proposal/project



2. Calculate pollution  
reduction estimates



3. Review and submit  
proposal/project



# BayFAST reduction calculator

## Urban Land BMP Worksheet

\* required fields

Select the BMP you would like to add\*

Bioswale

Select the land use or land use group you would like to apply the BMP to\*

Regulated urban

Land cover



“Treatment area”



Enter an amount and select a unit for the BMP\*

?



acres treated



percent



# Web applications: BMP Tool

The screenshot displays the BMP Tool web application interface. On the left is a vertical sidebar with seven steps, each with an icon and a text label. Step 4, 'Generate Treatment Area', is highlighted with a red border. The main area on the right shows an aerial satellite view of a residential area with a parking lot and a road. A blue polygon outlines a 'Treatment area' in a grassy field, with a blue arrow pointing to it. A red dashed line outlines a larger 'Project area' that includes the treatment area and extends to the road, with a red arrow pointing to it. In the top left of the map area are zoom in (+) and zoom out (-) buttons. In the top right is a 'Topographic' map inset. At the bottom right of the map area, there is a 'POWERED BY esri' logo and a text string 'Esri, HERE, DeLorme, iPC | Microsoft'.

- 3. Draw Project Area
- 4. Generate Treatment Area
- 5. Adjust Treatment Area (Optional)
- 6. Calculate Land Use/ Land Cover Values
- 7. Save Data

Treatment area

Project area

Topographic

POWERED BY esri

Esri, HERE, DeLorme, iPC | Microsoft



# Web applications: BMP Tool

3. Draw Project Area

4. Generate Treatment Area

5. Adjust Treatment Area (Optional)

6. Calculate Land Use/  
Land Cover Values

7. Save Data

Treatment area

Project area

0.15 acres

0.32 acres

1.02 acres

Topographic

POWERED BY  
**esri**



Esri, HERE, DeLorme, iPC | Microsoft






## York County BMP Tool

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

Estimated reductions  
and cost per lb

# DEMO