



# Watershed Resources Registry

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# Presentation Overview

- What is the WRR?
- Using the WRR
- Transportation applications

# ▶ What is the Watershed Resources Registry?

- An interactive mapping website that shows:
  - Priority areas for restoration and conservation of resources
  - Agreed upon by state and federal agencies



The screenshot shows the Pennsylvania Registry page of the Watershed Resources Registry. The header includes the logo and navigation links: "Your Registry", "State Registries", "Contact Us", "What is it?", and "FAQs". The main heading is "Pennsylvania Registry" with a breadcrumb trail "Home > Pennsylvania". A "View Map" button is visible. The "Background" section contains text about the WRR's initiation by the US EPA and US Army Corps of Engineers, and a photo of a frog. The "Additional Resources" section features a "Spatial Analyses" box with a "View Here" button. A photo of a deer is shown under "Other partners".

**Watershed Resources Registry** Your Registry · State Registries · Contact Us · What is it? · FAQs

## Pennsylvania Registry

Home · Pennsylvania

**Background**

Pennsylvania's WRR was initiated by US Environmental Protection Agency, Region III and the US Army Corps of Engineers, Baltimore District (Corps). Soon thereafter, members from the Philadelphia and Pittsburgh Corps Districts and Pennsylvania Department of Environmental Protection began exploring the creation of a WRR.



**Additional Resources**

**Spatial Analyses**

Get more information about the spatial analyses and factors selected by the state of Pennsylvania for their models.

[View Here](#)

**Other partners** joined, including Pennsylvania's Department of Conservation and Natural Resources, Pennsylvania Department of Transportation, and the US Fish and Wildlife Service.



The Pennsylvania spatial analyses are different than WRR's in other states, in that they score opportunities within Pennsylvania's Service Areas. These areas were identified by Pennsylvania's Interagency Review Team, formed to address the 2008 Corps and EPA Compensatory Mitigation Rule. Furthermore, the 124 eight-digit watersheds in Pennsylvania will be assigned watershed indices that score historic, current and future threats to their resources. Scores will be used to prioritize watersheds within Service Areas for Pennsylvania's in-lieu-fee program.

## ▶ What does the WRR do?

- Avoid and/or minimize impacts
- Find mitigation sites for impacts
- Find areas to permanently preserve
- Find opportunities for restoration
- Find areas for reforestation to meet TMDL
- Evaluate alignment options for transportation projects

## WRR Spatial Analyses

- Natural Stormwater Management Preservation
- Restore Degraded Infrastructure Systems
- Riparian Zone Preservation
- Riparian Zone Restoration
- Wetland Preservation – *still in production*
- Wetland Restoration

## ➤ Goal of the Analyses

- To find and score locations for Preservation and Restoration
  - Best opportunities will have more 'desirable' traits
  - Combination of absolute and relative factors
  - Scores range from one to five stars

# Wetland Restoration

## Absolute Factors

- Cannot be wetland
- Cannot be open water
- Must show some evidence of having been a wetland in the past, generally as determined by poorly drained and very poorly drained soils (GSSURGO)

## Relative Factors

- In a 303(d) impaired watershed
- Is a potential wetland surrounded by 'not natural' areas
- Is farmed or pasture
- In a 100-year flood plain
- Is a first order stream catchment
- Is in a Pa Natural Heritage core habitat
- Is a watershed for which a 319 plan has been adopted
- In an ACC restoration watershed
- Not within 5 miles of a federally funded airport
- Is a USFWS priority area for endangered species
- Is within an Exceptional Value or High Quality watershed
- Is within use Active River area
- Scored greater than 90 in the FS Forests to Faucets mapping

# Stormwater Restoration

**Watershed Resources Registry** Pennsylvania Version

Find address or place

**Legend**

**Found Opportunities**

**Stormwater Restoration Model Output**

**Stormwater Restoration**

- 1
- 2
- 3
- 4
- 5

**Stormwater Restoration:**

GRDCODE	4
HUC12	020503050404
Watershed Name	Letort Spring Run
ACRES	7.60
County	Cumberland

[Zoom to](#)

Map labels: US Army War College, US Army War College Barracks, Memorial Park, Dickinson College, Dickinson School of Law, Memorial Park, Letort Park, Adkins Cemetery, The Point at Carliste Plaza, Seven Oaks Park, Carliste, South Middleton Twp, North Middleton Twp, Middlesex Twp, Carliste Barracks Golf Course, US Army War College, US Army War College Barracks, Thomwald Park, Carliste Twp.

Coordinates: 77.181 40.204 Degrees

Microsoft | Esri, HERE, Garmin, IGC **esri**



# Wetland Restoration

Watershed Resources Registry Pennsylvania Version

Layer List

- GSSURGO Map Unit Polygons
- PA Service Areas
- 303d Impaired Waters
- Flood Hazard Zones
- Wetlands 2015
- 319 Watersheds
- Site Visits
- State Boundaries
- USGS EROS LandCover NLCD
- Protected Lands
- Wetland Restoration Model Output
- Riparian Preservation Model Output
- Riparian Restoration Model Output
- Stormwater Preservation Model Output
- Stormwater Restoration Model Output
- NPDES Outfalls
- NRCS Soil Data
- Historic Sites
- GSSURGO Component Attributes

**FindOps**

**Find Opportunity**      **Find Visit Information**

Select a county:  
Dauphin

Select a Watershed:  
Swatara Creek-Susquehanna River: 020503050906

Wetland Restoration       Riparian Preservation  
 Riparian Restoration       Stormwater Natural Infrastructure Preservation  
 Stormwater Compromised Infrastructure Restoration

Select Score:      Select Score Operator:

★      >=      Where Acres is Greater Than (>):  
 ★★      >      1  
 ★★★      <      Where Acres is Less Than (<):  
 ★★★★      <=      25  
 ★★★★★

Search

State Boundaries    Wetland Restoration    Found Opportunities

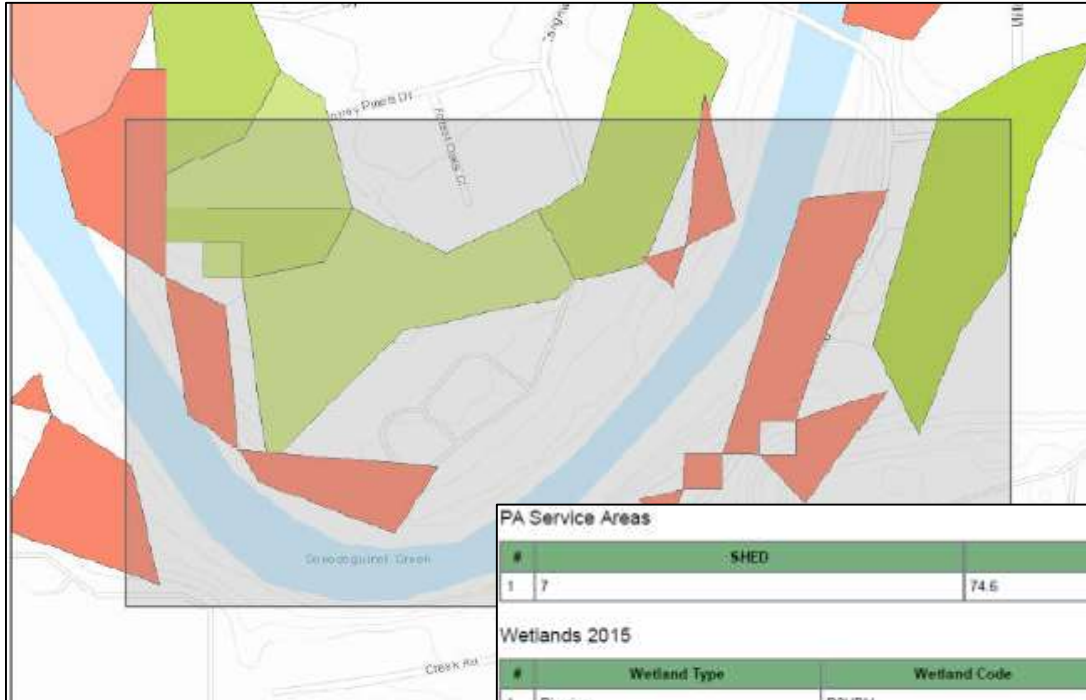
Options    Filter by map extent    Zoom to    Clear selection    Refresh

Shape	gridcode	County	HUC12	Name River	ACRES	CODE_ACRES	OBJECTID
	5	Dauphin	020503050906	Swatara Creek-Susquehanna River	1.32209879511	5 - 1.32 acres	637086
	3	Dauphin	020503050906	Swatara Creek-Susquehanna River	1.01196177286	3 - 1.01 acres	637182
	4	Dauphin	020503050906	Swatara Creek-Susquehanna River	5.05264033761	4 - 5.05 acres	637282
	3	Dauphin	020503050906	Swatara Creek-Susquehanna River	2.32957889366	3 - 2.33 acres	637936

8 features    1 selected



# Riparian Zone Restoration and Preservation Report



## Summary

Name	Count	Area (acres)	Length (mi)
Wetland Restoration	1	0.01	N/A
Riparian Preservation	10	9.08	N/A
Riparian Restoration	7	17.78	N/A
Stormwater Natural Infrastructure Preservation	32	46.74	N/A
Stormwater Restoration	10	42.98	N/A
PA Service Areas	1	74.6	N/A
Wetlands 2015	2	10.28	N/A
Karst Geology	0	N/A	N/A
303d Impaired Waters	0	N/A	0
HUC 12 Watersheds	1	74.6	N/A
319 Watersheds	0	0	N/A
	1	74.6	N/A
	3	N/A	N/A
ions	16	74.59	N/A
e)	1	N/A	0.54

### PA Service Areas

#	SHEID	Area (acres)
1	7	74.6

### Wetlands 2015

#	Wetland Type	Wetland Code	Area (acres)
1	Riverine	R2UBH	10.14
2	Freshwater Forested/Shrub Wetland	PFO1A	0.14

### HUC 12 Watersheds

#	HUC_12	HUC_12_NAME	Area (acres)
1	020503050406	Conodoguinet Creek-Tingde Spring Run	74.6

### MS4 Municipalities

#	MUNICIPALI	STATUS	COUNTY_NAME	Area (acres)
1	SILVER SPRING	Individual	Cumberland	74.6

### Facilities that Discharge to Water Point

#	SOURCE_ORIGINATOR	Count
1	PA	3

# Site Description Form

**Do you consent to having your contact information being made public?**

Yes  No

**Waterways**

Rivers

Intermittent Streams

Ephemeral Streams

Perennial Streams

Tidal Streams

Braided Streams

**Comments**

Please input 255 characters at most

**Wetlands**

Forested Wetlands

Scrub shrub Wetlands

Emergent Wetlands

Tidal Wetlands

**Comments**

Please input 255 characters at most

**Additional Aquatic Resources Observed Onsite**

Pond

Springs/Seeps

Vernal Pools

**Comments**

Please input 255 characters at most

**Locate on Map**

**First Name \***

**Last Name \***

**Phone**

**Email \***

**Date of Site Visit \***

**Entity \***

**WRR Site Description Form**

First Name TEST

Last Name TEST

Phone

Email tfoye@menv.com

Date of Site Visit 2/6/2018, 1:03 PM

Waterways Rivers, Intermittent\_Streams

Percent Invasive

Entity State

Other - Entity

Organization

Do you consent to Yes

[Zoom to](#)

## ▶ PennDOT's Interest in the WRR

- PennDOT can use the WRR to evaluate impacts
  - proposed impacts (e.g., linear projects)
  - Impact alternatives (e.g., alternate alignments)
  - Site visit pre-screening

## ▶ PennDOT's Interest in the WRR

- PennDOT can use the WRR to evaluate compensatory mitigation
  - Locate a mitigation site
  - Evaluate ecological benefits of a proposed mitigation site
  - Compare different proposed mitigation sites

## ➤ PennDOT's Interest in the WRR

- Improves likelihood of agency concurrence on proposed projects
- Hopeful that working from the same base will result in better mitigation outcomes
- Not just project level, also useful in the development of Long Range Transportation Plans

## Questions? Please Contact:

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