

# Welcome to the Full Partners Meeting Spring 2024



**Lancaster**  
CLEAN WATER PARTNERS

# Shared Measurement

## Water Quality & Stream Information

[IBI score needed for delisting](#)

50

Date of IBI Score

2024

[Physical Habitat Assessment Score](#)

122

[Stream Designated Use\(s\)](#)

WWF

Total Stream Length (mi)

1.3

Latest IBI Score

52.8

[Impairment \(source - cause\)](#)

Crop Production (Crop Land Or Dry Land) - Nutrients ; Crop  
Production (Crop Land Or Dry Land) - Siltation

Total Ag Impaired Stream (mi)

1.0



## Geography

Municipalities  
Manor Twp



## Water Quality & Stream Information

[IBI score needed for delisting](#)

50

Date of IBI Score

2024

[Physical Habitat Assessment Score](#)

142

[Stream Designated Use\(s\)](#)

WWF

Total Stream Length (mi)

2.5

Latest IBI Score

48.5

[Impairment \(source - cause\)](#)

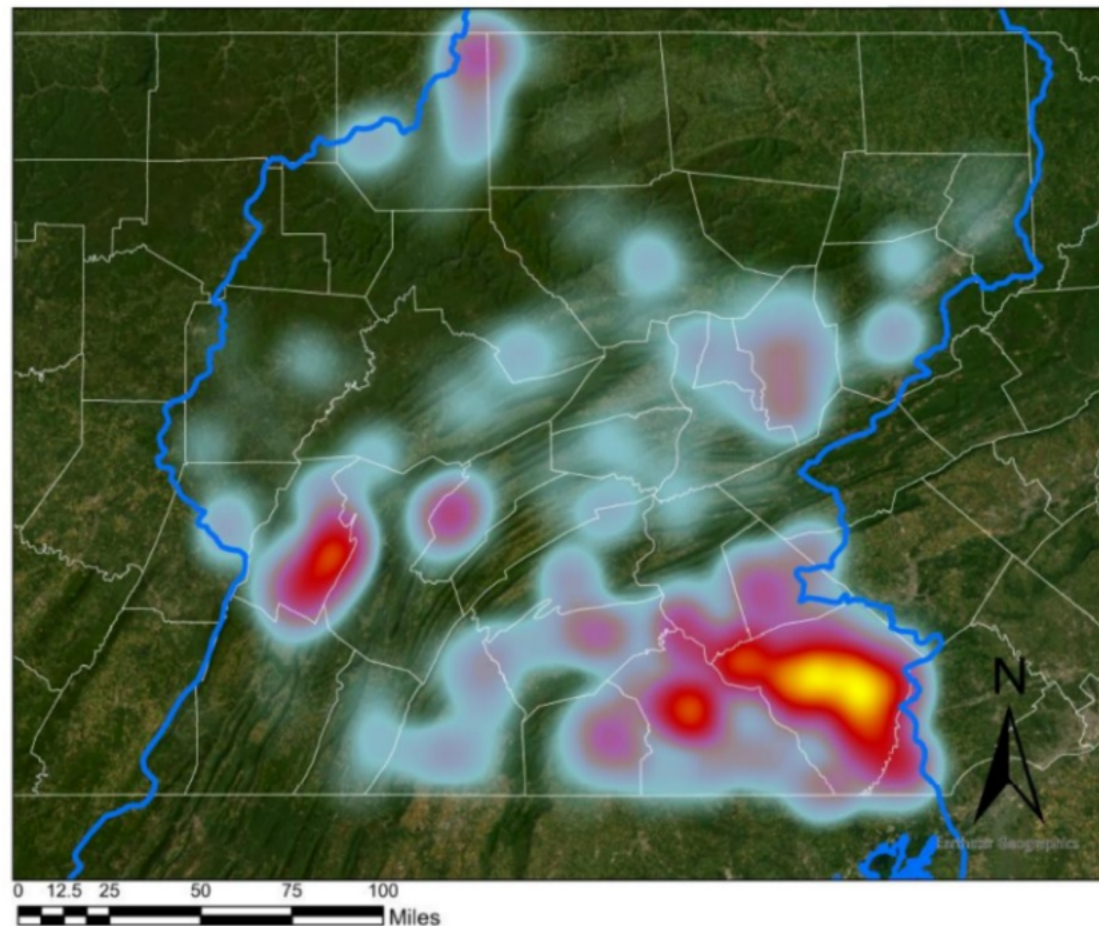
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Total Ag Impaired Stream (mi)

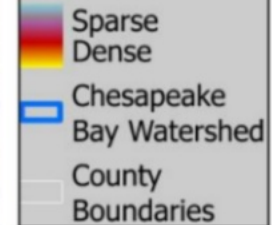
1.0

# Reporting and Outcomes

## BMPs with Lat and Longs for 2023 Progress Year



### Legend



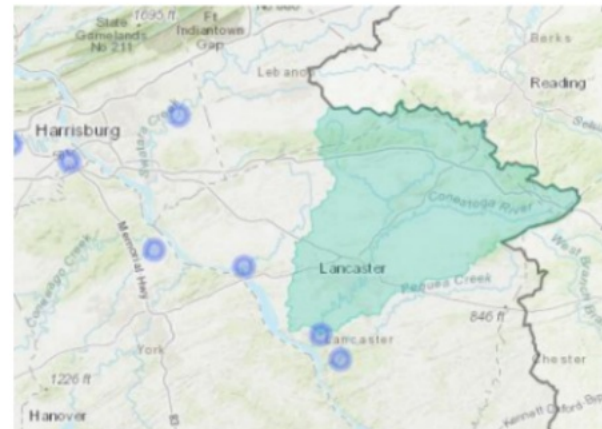
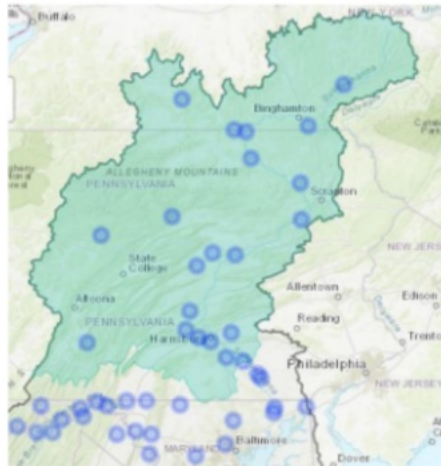
There are 8,178 new BMPs with Latitudes and Longitudes.

# Pennsylvania's Progress

## Monitored and Expected Total Reduction Indicator for the Chesapeake [\(METRIC\)](#)

Compares anticipated modeled results from CAST with water quality monitoring data using the USGS WRTDS Flow-Normalization Method

Demonstrates reductions in nitrogen, phosphorus, and sediment  
Marietta and Conestoga Non-tidal Network (NTN) stations,  
along with other stations throughout Pennsylvania



## WATER QUALITY MONITORING TEAM

The Water Quality Monitoring Action team is a partnership of Lancaster County-focused organizations discussing, planning, conducting, and analyzing water quality data. The team meets quarterly to share tools, resources, and strategies, as well as to prioritize streams for monitoring consideration. The WQMAT aims to provide and share up-to-date high-quality data with the stream restoration community in Lancaster County.

The team is led by Noelle Cudney with Lancaster County Conservation District and Shannon Thomas from the Chesapeake Conservancy.



**Noelle Cudney**

Lancaster County Conservation District



**Shannon Thomas**

Chesapeake Conservancy

### MONITORING TEAM MEETING NOTES





## **A FEW MORE NOTES**

- **Applications for 2025 Watershed Leadership Academy**
- **Clean Water Fund Info Session, April 23**
- **Year-in-Review**
- **2024 Goals**

# Adam Ortiz, EPA Region 3 Administrator

Lake Erie



Watershed  
Boundary →

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Spring 2024



Chesapeake Bay →



Atlantic Ocean

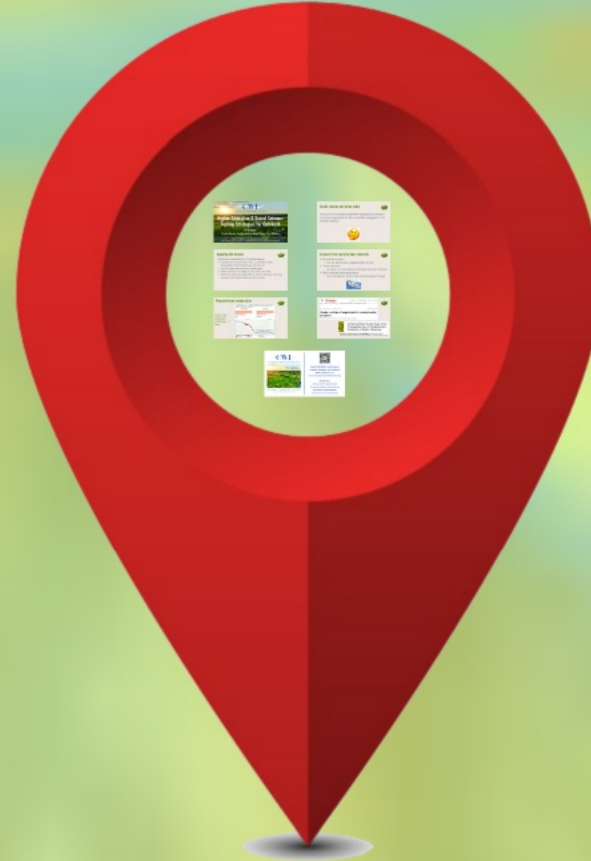


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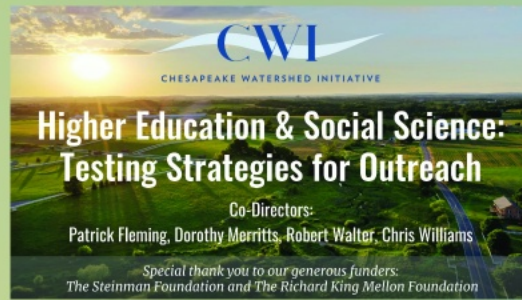
Chiquas



# Indian Run Catchment



Dr Patrick Flemming



## Social science and clean water



How can we incentivize landowner engagement and multi-property cooperation for the sustainable management of a shared resource?



## Applying the lessons



Catchment council in the Little Conestoga:

- Landowners invited to join (Mar '23) & tasked with a measurable environmental goal (by Jul '24)
- \$10,000 performance bonus if goal is met
- Additional \$20,000 budget at council's discretion
- Sufficient information provided to achieve the goal, including property-level erosion data relative to peers

## Lessons from social science research



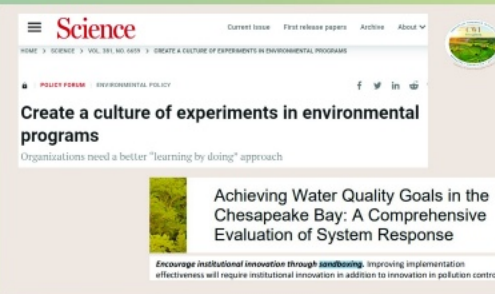
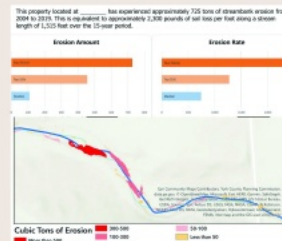
- Incentives matter
  - Pay-for-performance, Agglomeration bonuses
- Trust matters
  - Local peer-to-peer outreach, listening, long-term relations
- Information framing matters
  - Peer comparisons, social norms motivate behavior change



## Property-level erosion data



Erosion rates presented in comparison to catchment norm





# Higher Education & Social Science: Testing Strategies for Outreach

Co-Directors:

Patrick Fleming, Dorothy Merritts, Robert Walter, Chris Williams

*Special thank you to our generous funders:  
The Steinman Foundation and The Richard King Mellon Foundation*

# Social science and clean water



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# Applying the lessons



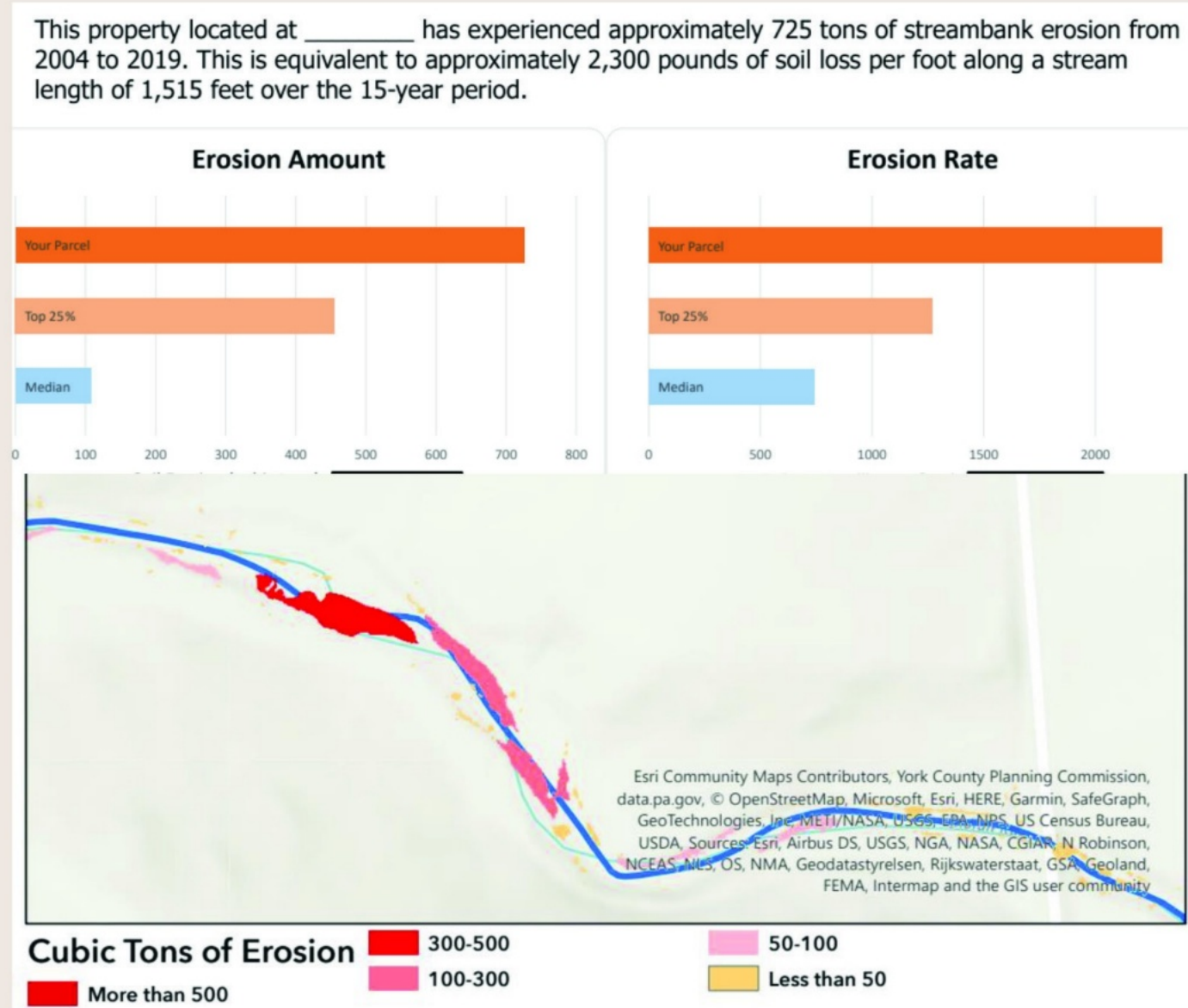
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# Property-level erosion data

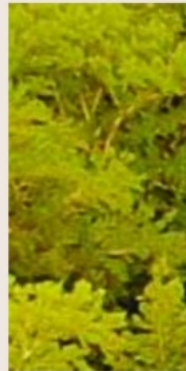


Erosion rates  
presented in  
comparison  
to catchment  
norm



# Create a culture of experiments in environmental programs

Organizations need a better “learning by doing” approach



## Achieving Water Quality Goals in the Chesapeake Bay: A Comprehensive Evaluation of System Response

**Encourage institutional innovation through sandboxing.** Improving implementation effectiveness will require institutional innovation in addition to innovation in pollution control



CHESAPEAKE WATERSHED INITIATIVE



FRANKLIN & MARSHALL  
COLLEGE

RESEARCH | EDUCATION | ACTION

Funded by the Richard King Mellon Foundation



**Scan the QR Code or look us up on  
Linkedin, Instagram, and Facebook!**

**Email:** [CWI@fandm.edu](mailto:CWI@fandm.edu)

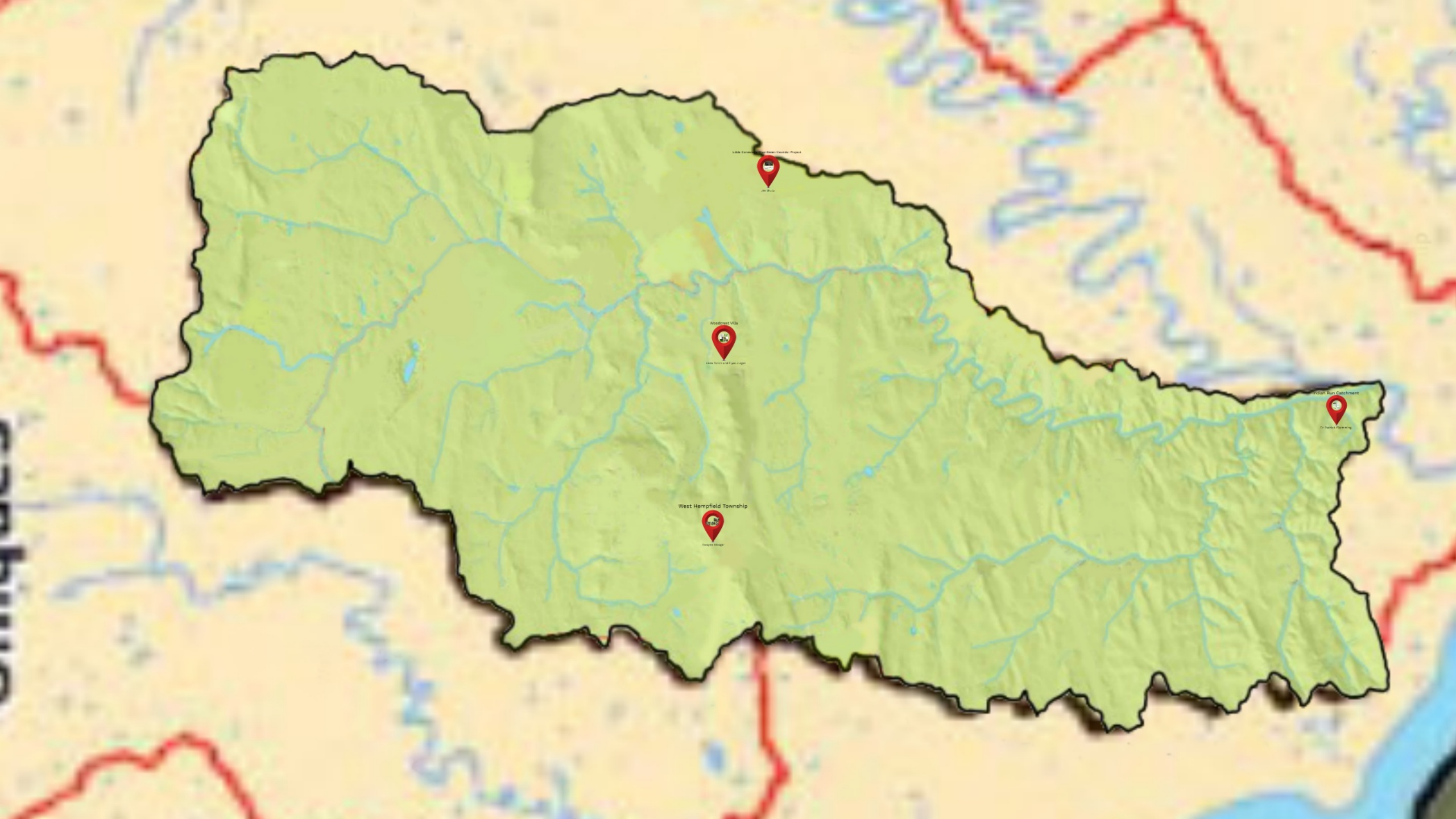
[www.chesapeakewatershedinitiative.org](http://www.chesapeakewatershedinitiative.org)

**Researchers:**

Dorothy Merritts, Robert Walter,  
Christopher Williams, Patrick Fleming

**Outreach & Communication:**

Hannah Connuck and Alice Fodor



Little Conowingo River Catchment



Woodcrest Villa



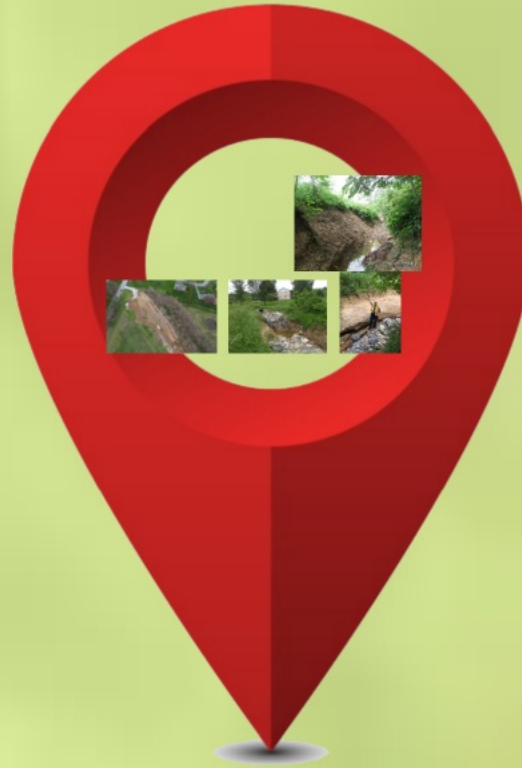
West Hempfield Township



Little Conowingo River Catchment



# West Hempfield Township



Dwayne Steager





06/06/2018



06/06/2018



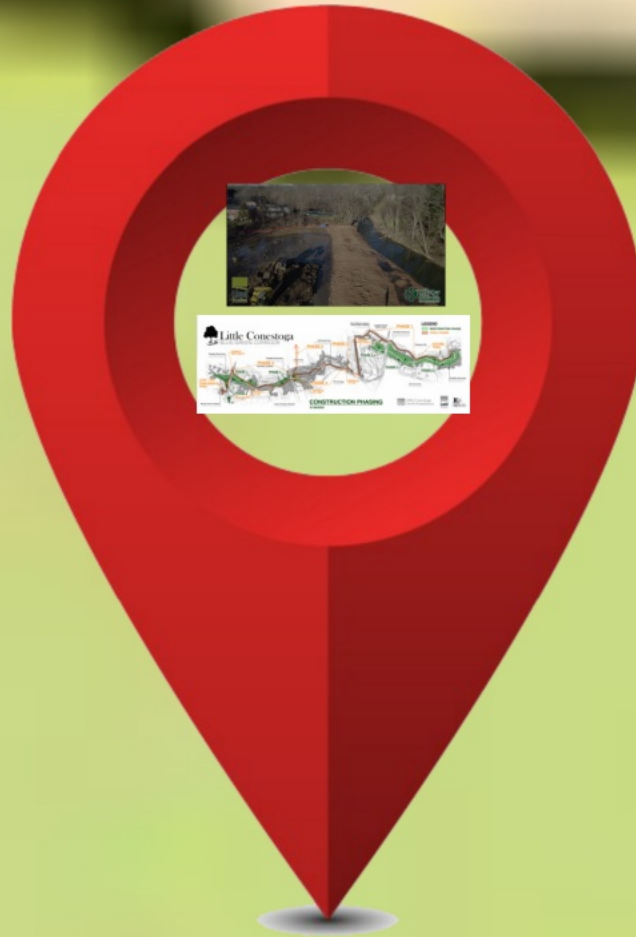




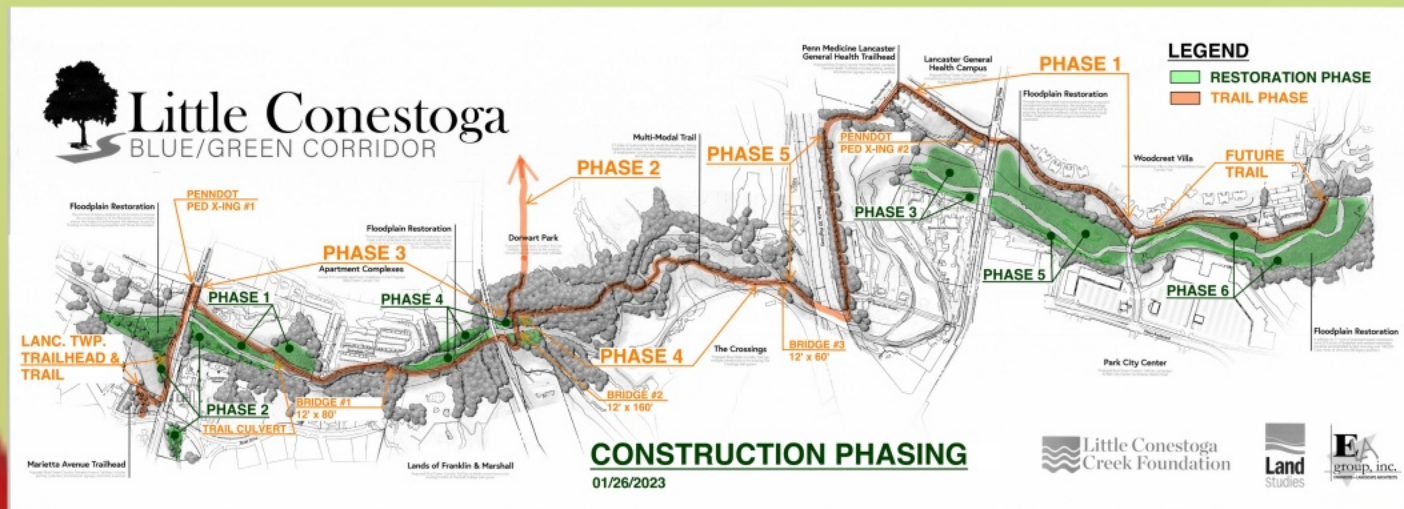
# Chiques



# Little Conestoga Blue-Green Cooridor Project



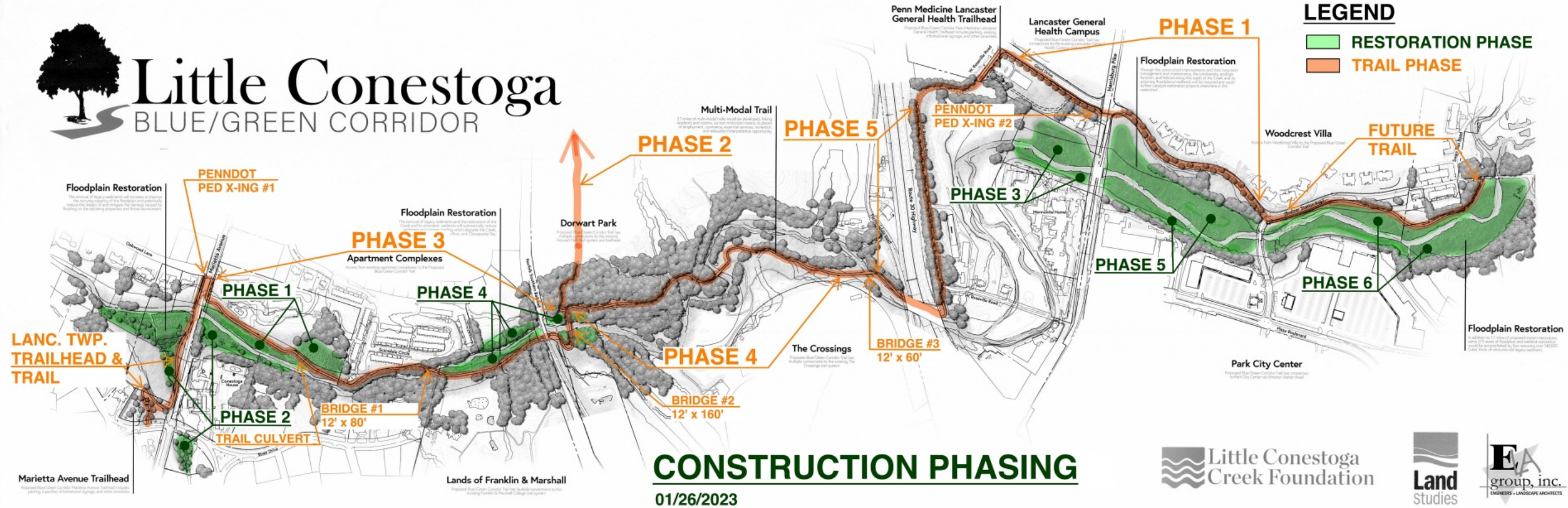
Jim Shultz





# Little Conestoga

## BLUE/GREEN CORRIDOR





# Chiques



# Woodcrest Villa



Linda Ferich and Elyse Jurgan



**CREWS' TRAINING | Conservation Landscaping**  
Presentation by: Linda Farich and Elyse Jurgen  
LCWP Meeting, 4/16/24

**Lancaster Clean Water Partners** **COMMUNITY WILDLIFE HABITAT** **WAXWING ECOWORKS CO.** **LANCASTER CONSERVANCY**

Creating  
Multi-Functional Native  
Habitat Where We  
LIVE, WORK, PLAY,  
LEARN, and WORSHIP

**COMMUNITY WILDLIFE HABITAT**

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"Rebuild Biodiversity In  
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**WAXWING ECOWORKS CO.**  
GROWING ECOLOGICAL GARDENS

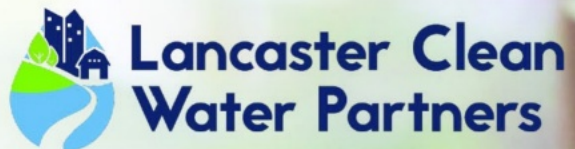






## **CREWS' TRAINING | Conservation Landscaping**

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COMMUNITY WILDLIFE  
**HABITAT™**



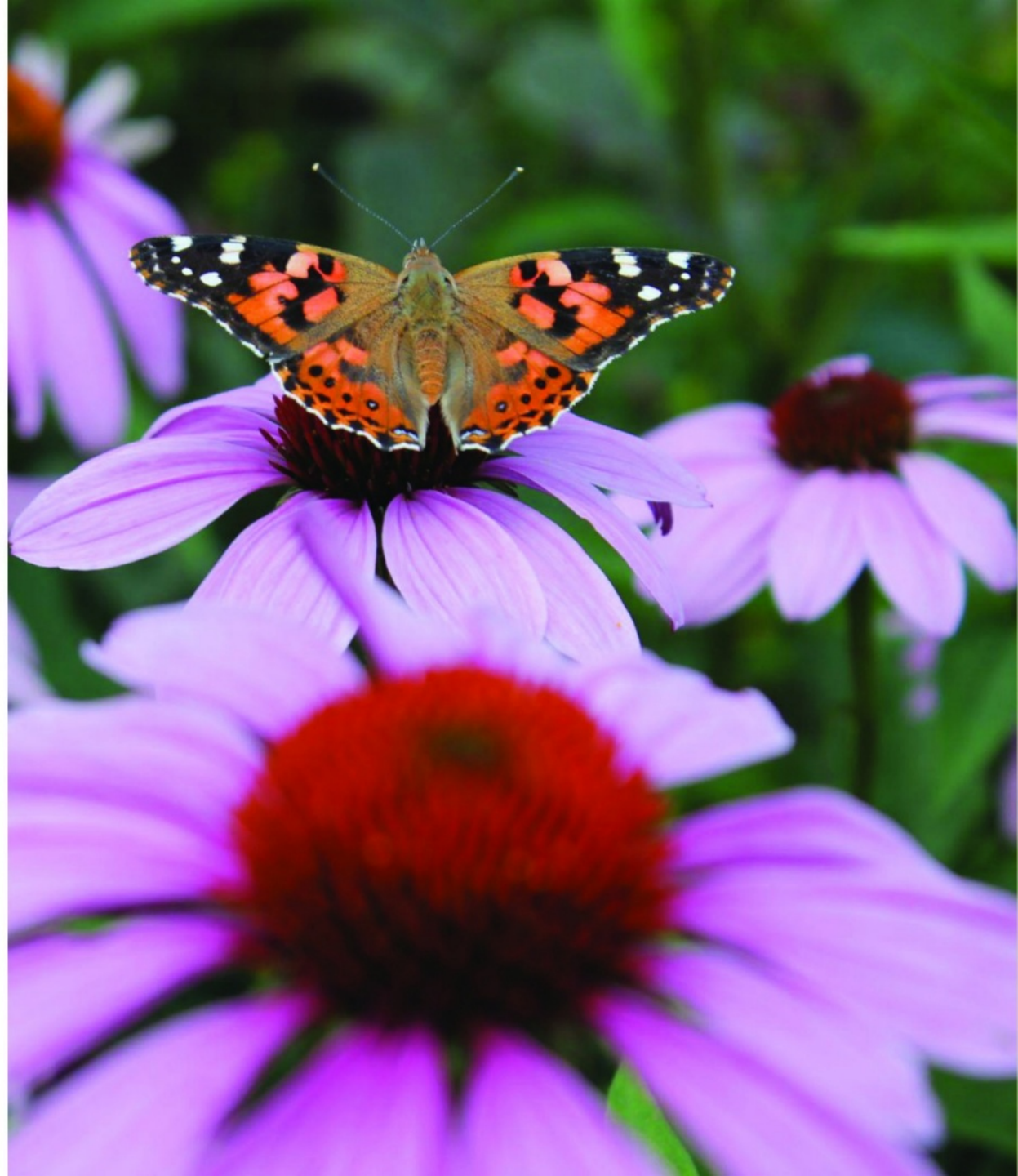
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GROWING ECOLOGICAL GARDENS






# Chiques





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A close-up, profile shot of a man wearing a blue jacket and glasses, pointing his right hand towards a field of white fence posts. The background is a blurred landscape with trees and a utility pole under an overcast sky. A semi-transparent blue banner is at the bottom of the frame.

of our collaborative work

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CLEAN WATER PARTNERS

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**Thank you!**



# **Lancaster Clean Water Partners, LLC**

## **Conflict of Interest Policy**

The purpose of the Conflict of Interest Policy is to protect the interest of the Lancaster Clean Water Partners when it is contemplating entering into a transaction or arrangement that might benefit the private interest of an Officer, Trustee, or committee member of the Partners or might result in a possible excess benefit transaction. This Policy is intended to supplement, but not replace, any applicable state and federal laws governing conflict of interest applicable to a Pennsylvania Limited Liability Company.

Watershed  
Boundary



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