

# The University of Maryland Urban Studies & Planning Program and the National Center for Smart Growth's Brown Bag Webinar Series

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# Telling the financing story through the use of graphics

## AURORA, IL

Location: Fox River  
Area: 39.38 square miles  
Founded: 1837  
Population: 199,963

## INCENTIVIZING INVESTMENT

### River Edge Redevelopment Zone



Zoning overlay along Fox River provides state & local tax credits for locating businesses or development, creating jobs, or remediating environmental hazards in the area

### RiverEdge Park

**\$15** million in grants leveraged

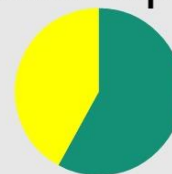
for 30-acre, \$18.5 million park at the core of the 10-year revitalization plan offering public space and natural areas for entertainment and recreation



## DEMONSTRATING IMPACT

### Green Infrastructure Implementation Project

Concentrating . . . planning, outreach, rain garden, a wetland bioswale, and bioinfiltration



Projected to remove more than **13,000** pounds of total suspended solids from the Fox River each year

in **1** square mile of the city

## STORMWATER FEES

### Stormwater Management Fee Fund

Capitlized by . . .

- \$ \$6.90 bimonthly charge to each residential or business water and sewer service account
- \$ state loans
- \$ Clean Water Act grants



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ALL REFERENCES AVAILABLE ON OUR WEBSITE  
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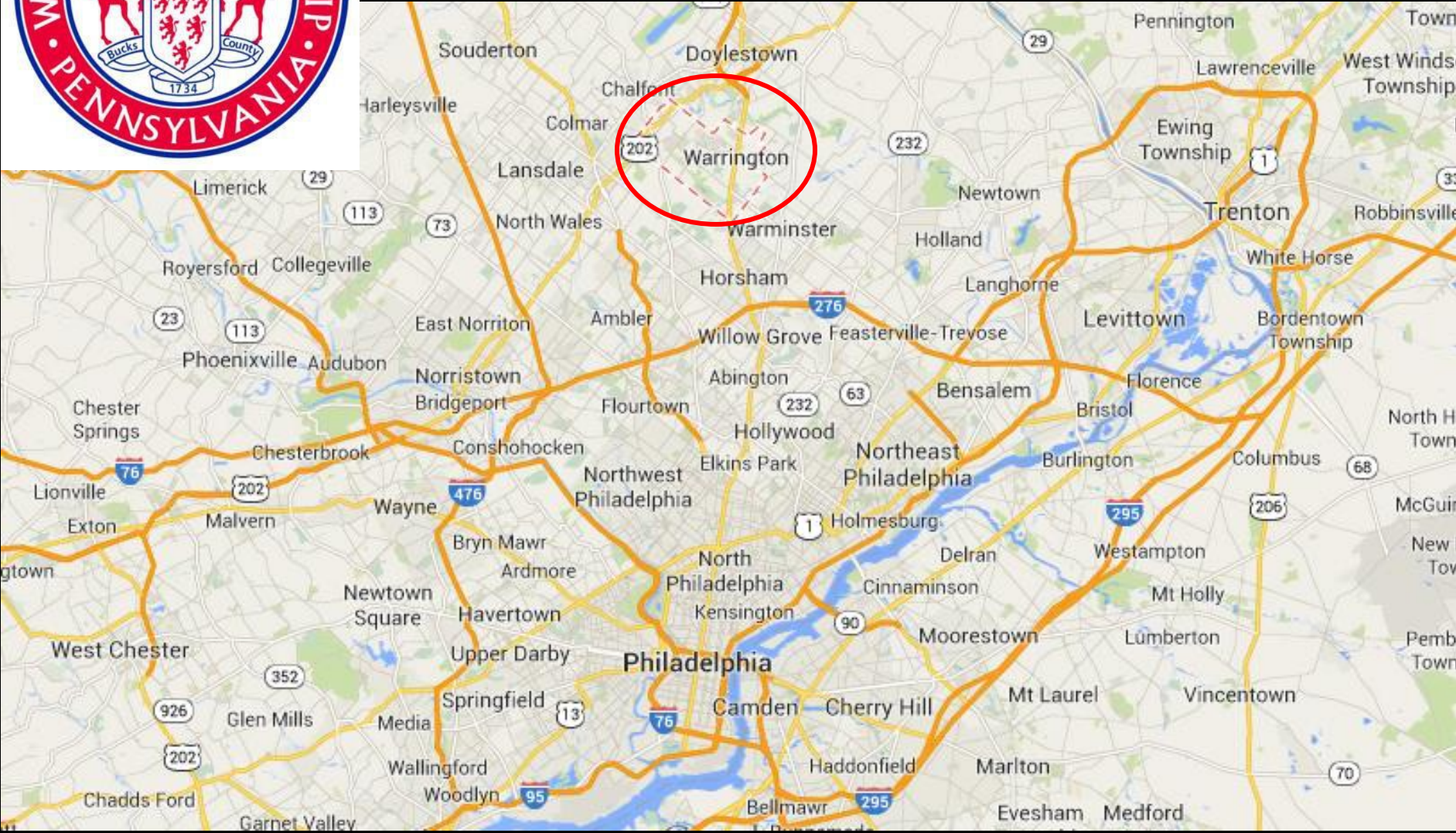




## A GREEN INFRASTRUCTURE APPROACH TO LEVERAGING LOCAL PRIORITIES IN WARRINGTON TOWNSHIP, PENNSYLVANIA



# *The Gateway to Bucks County*



# WARRINGTON, PA

Location: Bucks County, PA  
Area: 13.8 square miles  
Founded: 1734  
Population: 17,580



## OPEN SPACE REFERENDUM

Residents vote to borrow



# \$3 Million

To be repaid through a small property tax increase



## Why Open Space?



*COMMUNITY'S DESIRE TO BALANCE GROWTH WITH NATURAL AREAS*

## 4 Priorities

ACQUIRE undeveloped land  
LINK trail system segments

IMPROVE existing parks  
PRESERVE historic lands



# LEVERAGING FOR GREATER IMPACT

## Grants



\$350,000 from Bucks County and pursuing grants and other funding programs stretches local dollars further

## Partnerships

Partnering with the land trust community can expand capacity and reduce the burden to the Township



## Other Local Priorities

Considering open space planning in the context of other community priorities such as stormwater requirements and economic development goals can create efficiencies and reduce implementation costs



### REFERENCES:

OPEN SPACE REFERENDUM INFORMATIONAL BROCHURE  
RESOLUTION 2012-R-28, OPEN SPACE REFERENDUM, LAW OFFICES OF WHRC, JULY 2012



**Project Purpose:** Identify opportunities for the Township get much bigger bang for its buck



## ***Project Outcome –***

**Provided a set of interrelated recommendations for Township to *think* and *act* strategically through:**

- 1) Leveraging outside funding sources**
- 2) Building new relationships and partnerships**
- 3) Visualizing what “*green infrastructure*” looks like and the value it can bring to the community**

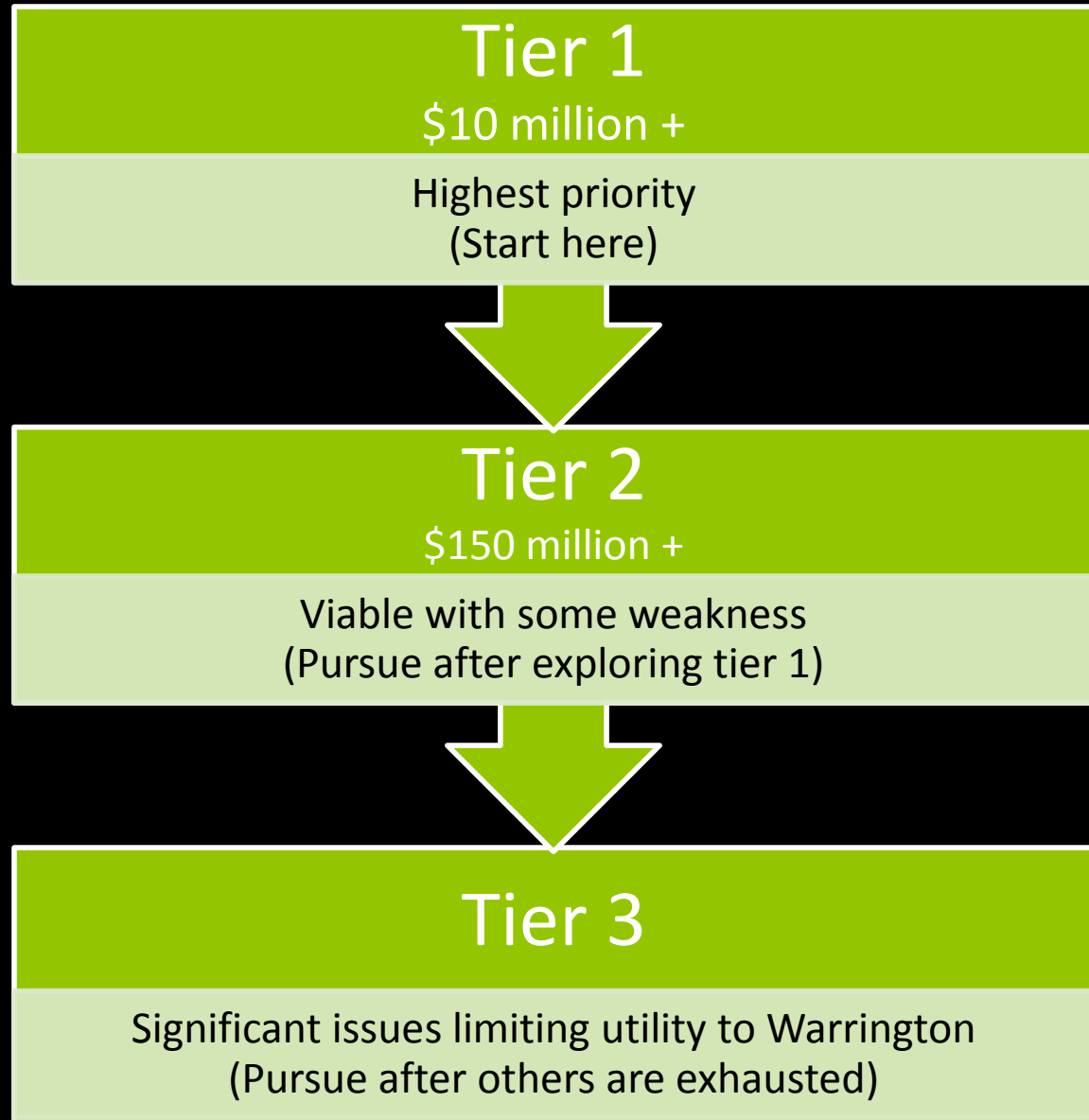
# RECOMMENDATION 1: Leverage Outside Funding Sources



# Tiered Funding Opportunities

*Based on:*

- **Priorities / Goals**
- **Eligibility / Likelihood**
- **Deadlines / Openings**
- **Networks / Partners**
- **Funding Level**
- **Technical Assistance**



A photograph of a garden path with white flowers and green foliage. The path is a light-colored concrete or stone walkway that curves through a lush green garden. In the foreground, there are several white flowers with yellow centers, likely roses, and green leaves. The background shows a well-maintained lawn and more greenery under a clear blue sky.

**RECOMMENDATION 2:  
Develop Strategic Partnerships**

# Planning with the Help of Strategic Partnerships



- Strategic assistance
- Experts in:
  - Open space planning
  - Acquisition
  - Easements
  - Natural resource protection
  - Stewardship & maintenance



*More than just funders*

A group of five people are in a meeting room. Two men in light blue shirts are standing and looking at a large map on the wall. A man in a blue polo shirt is sitting at a conference table, holding a document and pointing at it. A woman with dark hair is sitting at the table, looking at the document. Another woman is sitting at the table, looking towards the man in the blue polo shirt. The room has a large conference table, several office chairs, and a wall with two large maps. One map is a street map, and the other is a green infrastructure map. There are also some framed pictures on the wall and a filing cabinet in the background.

**RECOMMENDATION 3:  
Integrate Green Infrastructure into Project  
Design**

# Landscape Architect Concept-Scale Designs



- Visualizing what green infrastructure and stormwater management *look like* in project design
- Sites utilized as pilot
- Planning and decision making tool

## Introduction & Goals

North Barnes Park provides an opportunity to use green stormwater infrastructure to provide multiple benefits. The goals of this project are to 1) integrate green infrastructure stormwater practices into the site, 2) develop a range of recreational activities, and 3) create a landscape that is connected to the township. Bioretention will allow for infiltration of water from smaller rain events. Integrated tree plantings in the parking lot and as buffers along the edge of the property will enhance the overall quality of the site, provide cooling and shade, and create a model for a well designed parking lot. The proposed master plan provides for a variety of spaces, design elements and uses, while providing for environmental, recreational, and community needs.

## Conditions & Concepts



### Existing Site Conditions

North Barnes Park's close proximity to existing ball fields and residential neighborhoods creates an opportunity to make strong recreational connections that are easily walkable for local residents. The most exciting opportunity for the site is its commanding views of the countryside. The existing South Barnes Park is an additional opportunity to improve pedestrian safety while connecting the two parks.



### Proposed Concepts

The proposed concept transforms North Barnes Park to a park that connects to the existing sports fields across from Bristol Road and communities. The site proposes Low Impact Development (LID) techniques to address the stormwater conditions as well as develop a strong plan for tree canopy development. Incorporating the avic history of the site, the building takes advantage of the commanding views of the beautiful countryside of Warrington.

## Concept Features

- 1 Park Entry at Kelly Road and Bristol Road**  
A proposed park gateway at the intersection of Kelly Road and Bristol Road is located on the southwestern corner of the park. This designated gateway provides access to local neighborhoods - such as local neighbors coming from homes along Cadwallader Road. In addition, this park entry provides a clear destination for walkers and bikers coming from King and Turk Parks located north of North Barnes Park.
- 2 Proposed Ball Fields**  
Four sports fields are proposed for the park. The soccer fields and softball fields are separated by a central parking area and small landscape area that accommodates the park's building facility.
- 3 Green Stormwater Infrastructure Parking Lot**  
Bioretention units in selected bays capture stormwater that route sheetflow westward with overflow directed to proposed storm facilities in the east and west locations of the park. These features allow for integrated green stormwater infrastructure, tree plantings, and additional shrub and annual plantings to provide for exemplary design implementation in the township.
- 4 North Barnes Park Green Airport Tower**  
The proposed airport tower celebrates the unique history of the site while providing needed for interior space for a restroom and other requirements for the park. In addition, a second story lookout provides an iconic feature that celebrates the site. The tower has the potential to also serve important civic functions for community events. In addition, for the growing sport of model planes and drone enthusiasts, the tower and facility could serve as an economic engine and encourage social community engagement and promote this exciting recreational activity.
- 5 Wildlife Walk and Rest Gazebo**  
A wildlife walk located to the east connects to the sports fields. This arful feature promotes environmental habitats by redirecting stormwater from the parking lot to the retention pond. Nearby a gazebo provides shelter and a viewing post for bird watching.
- 6 North and South Barnes Parks Connector**  
The North Barnes Park connects to the existing South Barnes Park recreational fields by a proposed designated pedestrian crossing at Bristol Road. This connector includes traffic calming devices to improve pedestrian safety, an important element to promote the safety and welfare of visitors to the parks.

## Focused User Groups



### Local Neighbors

will likely be some of the most frequent users of the North Barnes Park. Local neighbors biking and walking will be drawn from neighborhoods west of the park. Approaching from Kelly Road, the neighbors in these subdivisions have the closest walkable / bikeable access to the park.



### Active Recreation Users

will take pride in the establishment of an exemplary recreational park that utilizes green infrastructure practices for stormwater. Playing, running, and other athletic activities provide the core experiences afforded by the addition of the sports fields. In addition, the landscape features of the park will provide an opportunity for daily enjoyment and interpretation that will add both stormwater value and overall beauty to the park.



### Model Plane Enthusiasts

might be a new group of users to consider. The celebration of the historical land use of the site that was a small airstrip allows for the consideration for accommodating and celebrating the new and growing sport of flying model airplanes and autonomous vehicles.



### Warrington Township Citizens

will be active users. The circular path surrounding the park will provide opportunities for jogging and strolling in a clear route. In addition, the path around the stormwater facility on the eastern side of the park allows for birdwatching, strolling and viewing of plantings.

## Conceptual Master Plan



## Wildlife Walk and Rest Gazebo Concept

The proposed detention or retention facility is encircled by a paved path to allow for casual walking and strolling activities. A small structure provides for sitting and a place for interpretive information to communicate information about the landscape and reforested areas.



## North Barnes Park Airport Tower Concept

The proposed structure provides needed interior space to meet the needs of a recreation facility including temporary concessions, storage, and restrooms. Stair access is afforded to a deck on the second story level. Here users have a view of the remaining roof planted in a green roof. In addition, users also have commanding views of the ball field and of the surrounding countryside. This feature takes advantage of one of the most valuable assets of the site - a high elevation. Interpretive information could be included that communicates the forest cover in adjacent neighborhoods and helps communicate the value of green infrastructure.



## Playfield Sitting Wall and Bioretention Concept

This feature integrates parking, bioretention, and the path adjacent to the ball field as an integrated design element. Water sheetflows from parking into planted bioretention areas. Overflows from larger rain events are routed to retention or detention areas. The seating walls provide for spectator viewing and resting and provide a buffer separation between parking and ball fields.



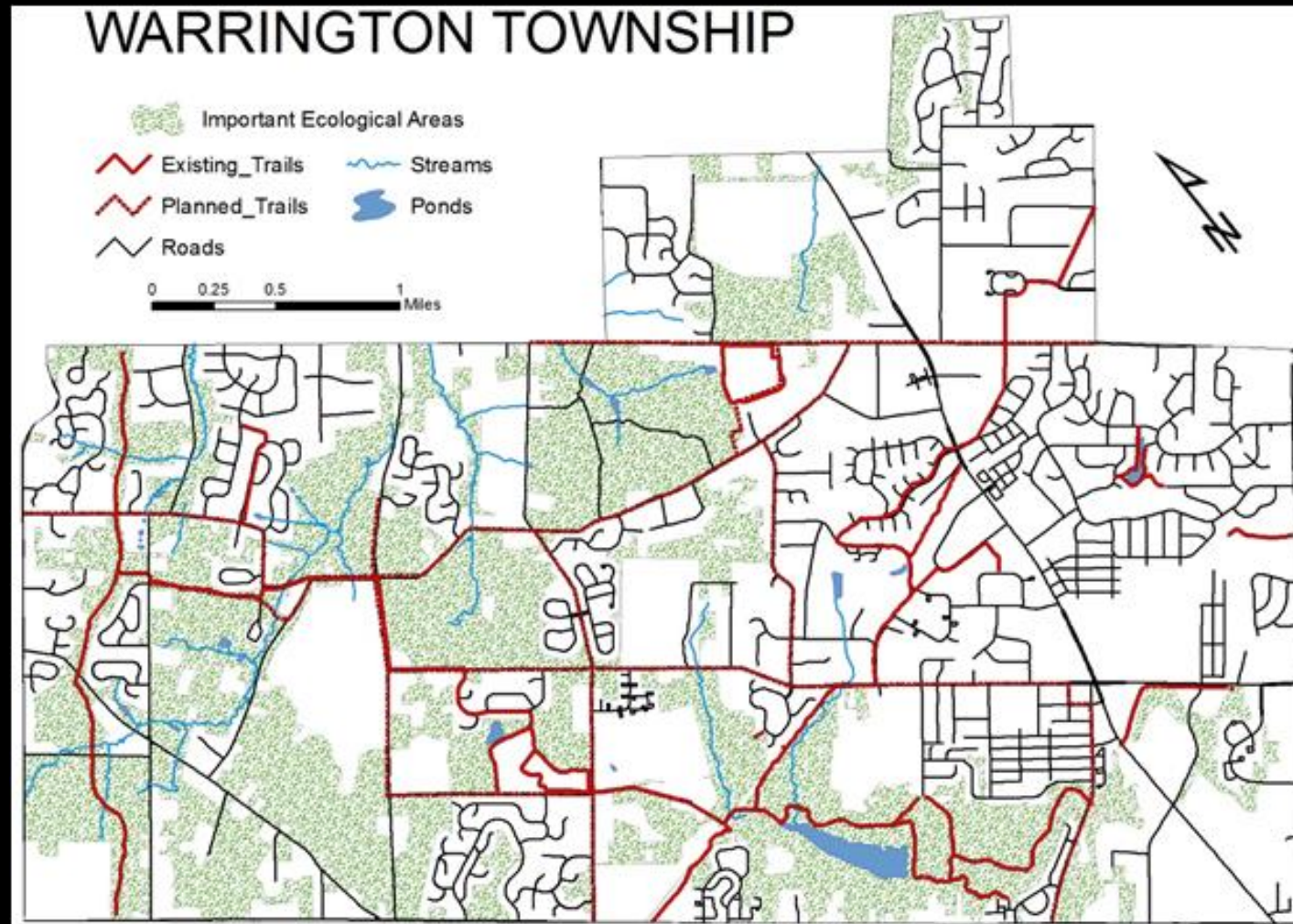


# Green Infrastructure Strategy

Developed by the USEPA Region 3's Office of Environmental Information & Analysis

*Prioritize areas for open space preservation that maximizes the ecological and environmental impact*

*Develop an interconnected network of natural and "undeveloped" lands and waters*



A scenic view of a river flowing through a lush green landscape. The river is surrounded by dense vegetation, including tall grasses and trees. Large rocks are scattered throughout the river, creating a rocky stream. The water is clear and reflects the surrounding greenery. The overall scene is bright and vibrant, suggesting a healthy and natural environment.

# Looking Ahead

**Incorporate a holistic green infrastructure approach**  
**Cultivate a local champion**

# Need More Information? Contact Us!



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