



ms consultants, inc.
engineers, architects, planners



WARREN TOWNSHIP

Mahoning River Corridor Plan

Prepared by ms consultants, inc.



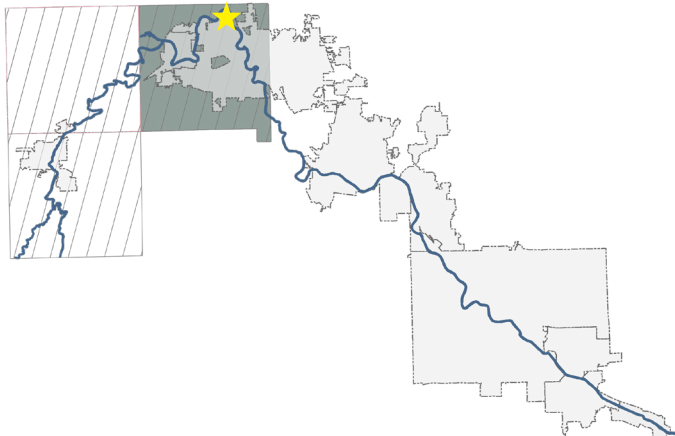
WARREN TOWNSHIP COMMUNITY IMPLEMENTATION TOOLKIT

Overview

The following toolkit explores how the corridor-wide objectives may be specifically applied to the Warren Township river section with an emphasis on the identified opportunity sites. Each community presents its own challenges and potential for revitalization and river restoration. The Community Implementation Toolkits outline these unique traits, provide context on existing conditions, and offer recommendations for the future. The recommendations are supported by action items and potential funding sources to support feasibility and help ensure implementation. The Community Implementation Toolkits should not serve as a stand-alone guide for the local community, but as an additional, specialized resource to the Mahoning River Corridor Revitalization Plan as a whole.

The Warren Township Community Implementation Toolkit includes the following sections:

- Existing Conditions
- Primary Opportunity Site
- Implementation Guide



Existing Conditions

OPPORTUNITIES

The Mahoning River flows across Warren Township, including Leavittsburg, surrounding the western boundary of the City of Warren. At the northern portion of the township, the river runs along the abandoned Copperfield Steel Company site. The Copperweld site presents opportunities for economic growth with a revitalized clean industrial park and wetland protection, while the rest of unincorporated Warren Township - primarily agriculture or rural single-family uses - can provide a healthy riparian edge for the river.

CHALLENGES

Given its location straddling multiple townships and municipalities, as well as a complicated ownership history, site control is a prominent challenge in Warren Township. Environmental considerations, including wetlands and polluted industrial land, also present obstacles to redevelopment.

MAHONING RIVER CORRIDOR RIVERFRONT COMMUNITIES

TRUMBULL COUNTY				MAHONING COUNTY								
Newton Township	Newton Falls	Braceville Township	Leavittsburg	Warren Township ★	Warren	Niles	McDonald	Girard	Youngstown	Campbell	Struthers	Lowellville

8.35	River Miles
RURAL INDUSTRIAL	Character
5,176	People
0	Launches
1.12	Trail Miles

Dam Removal & Riverbank Restoration in Warren Township

Removal of the remaining lowhead dams along the Mahoning River will be a monumental leap forward toward the environmental and recreational goals of the region. Lowhead dams, though small, significantly disrupt the natural flow of water, negatively affecting the river's ecosystem and recreational opportunities.

Lowhead dams pool water behind the dams walls which restricts the success of smaller river species, disrupts natural movement of river sediment, and impedes the migration of fish. In combination, this creates an ecosystem where species that are typically highly successful in unimpeded rivers can't thrive. Reopening the river by removing the remaining lowhead dams will accelerate the recovery of the Mahoning River and expand the diverse species that call it home.

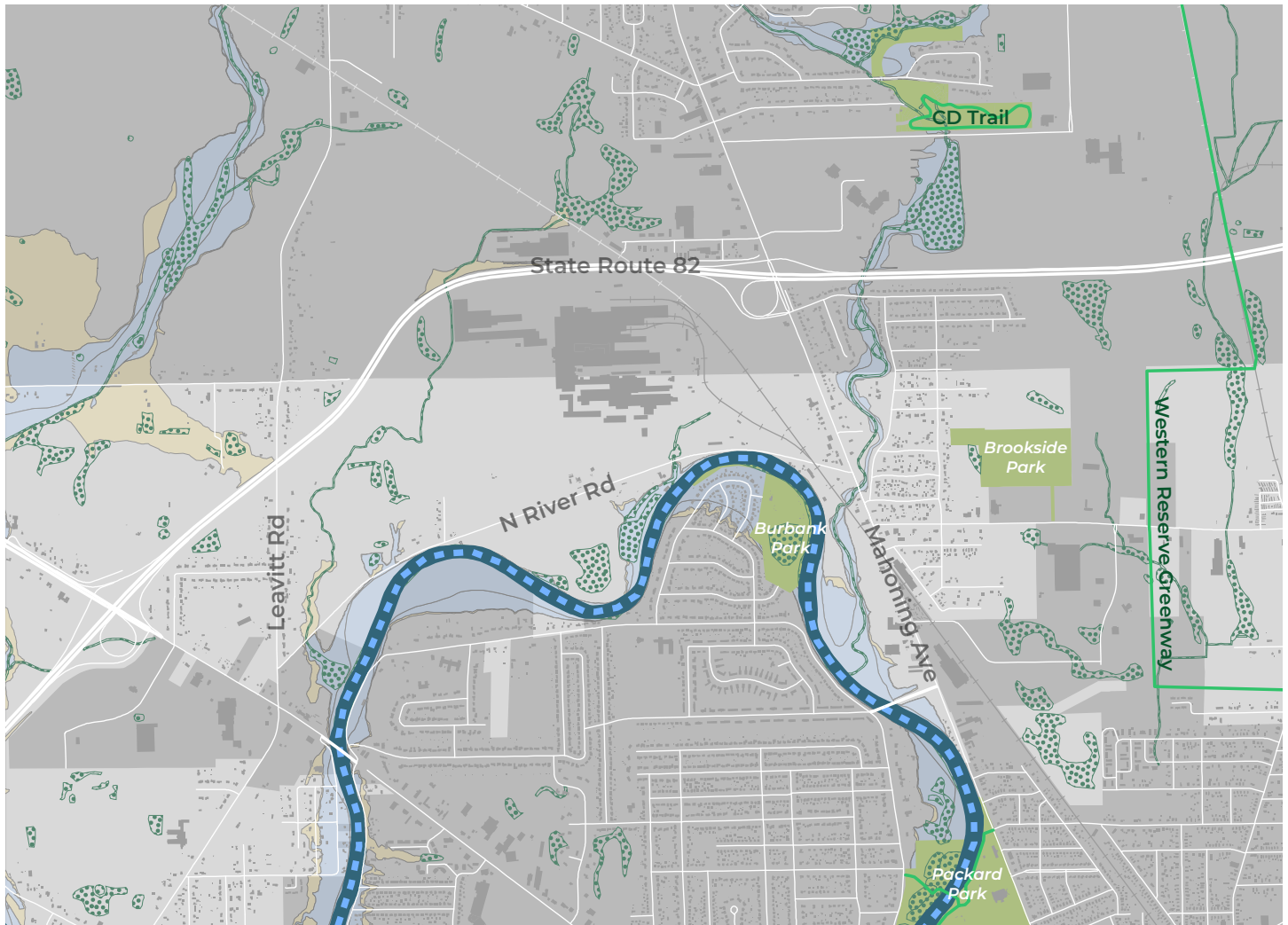
These dams break the Mahoning River into segments requiring kayakers to have to spot and avoid these dams which are often almost impossible to see and are notoriously dangerous drowning hazards. Removal of these dams will also open the River to safer kayaking, fishing, and light boating and could create an economic spark for the communities along the River's banks.

WARREN TOWNSHIP



MAHONING RIVER
Corridor Revitalization
www.mymahoningriver.com

FIGURE1 EXISTING CONDITIONS - ENVIRONMENT



THE ENVIRONMENT

Existing Conditions

The segment of the Mahoning River that passes through Warren Township is one of the water trails most enjoyable sections. Along the River’s banks are large wetlands, lush wooded areas, and two public parks. Warren Township serves as a key piece of the larger Mahoning River Water Trail connection between Newton Falls and Warren, protecting the water and diverse wildlife that call the Township home benefits the region at large.

Just north of the River’s crest sits Copperweld, a key, large industrial site that can be a key site of development for the community. Due to its close proximity to the river, protecting and preserving the wetlands and riparian zones along the River’s banks will be a key aspect of future industrial development plans.








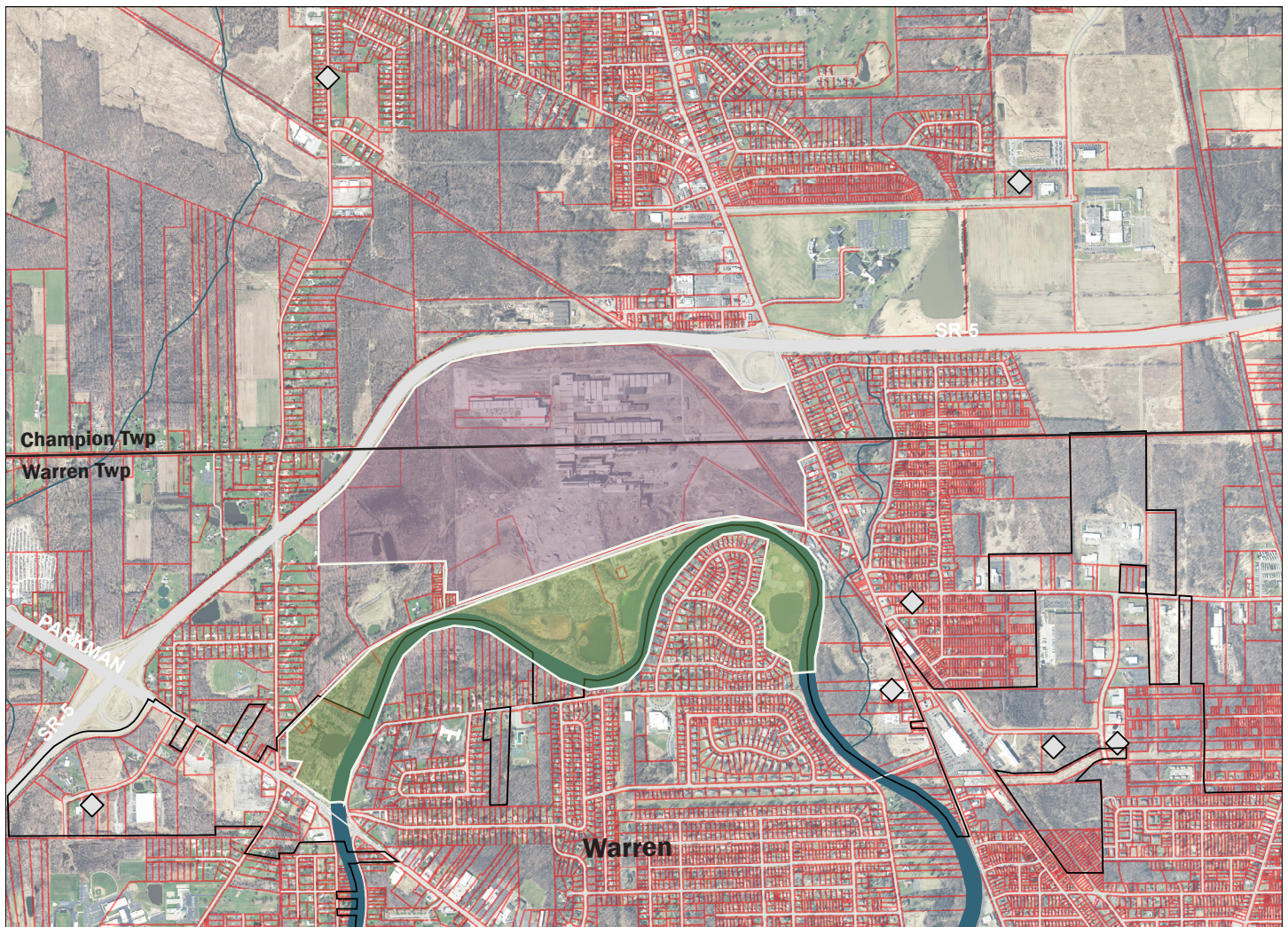
LEGEND	
	Mahoning River Water Trail
	Existing Trail
	Public Park
	Wetland
	100-year Floodplain
	500-year Floodplain
	Warren Township Boundary

FIGURE2 EXISTING CONDITIONS - ECONOMIC & COMMUNITY DEVELOPMENT



ECONOMIC & COMMUNITY DEVELOPMENT

Existing Conditions

Former industrial sites in Warren Township, particularly the former Copperweld/Warren Holdings site on its northern boundary, are liabilities to the community that can be revitalized to catalyze new economic prosperity. Economic and community development tactics at the site are vast and complicated - a collaborative approach is being utilized by the Western Reserve Port Authority, Trumbull Neighborhood Partnership, CUDC, YSU, Youngstown-Warren Chamber of Commerce, local officials, and state and federal agencies. Adding to the issue of various ownership, parcel splits are random and do not translate well to sale and redevelopment.

Plans for the site are ongoing, but presently include environmental clean up and preservation around the River with new industrial uses north of N River Rd. The site is located in an opportunity zone and eligible for new market tax credits.

LEGEND	
	Available Properties*
	Parcel Lines
	Vacant Industrial
	Parks and Vacant Open Space
	Warren Township Boundary

**Identified by Team NEO (JobsOhio) and/or the Warren Township-Warren Regional Chamber at the time of this plan*

WARREN TOWNSHIP: PRIMARY OPPORTUNITY SITE

Copperweld

FIGURE3 SITE LOCATION WITHIN WARREN TOWNSHIP

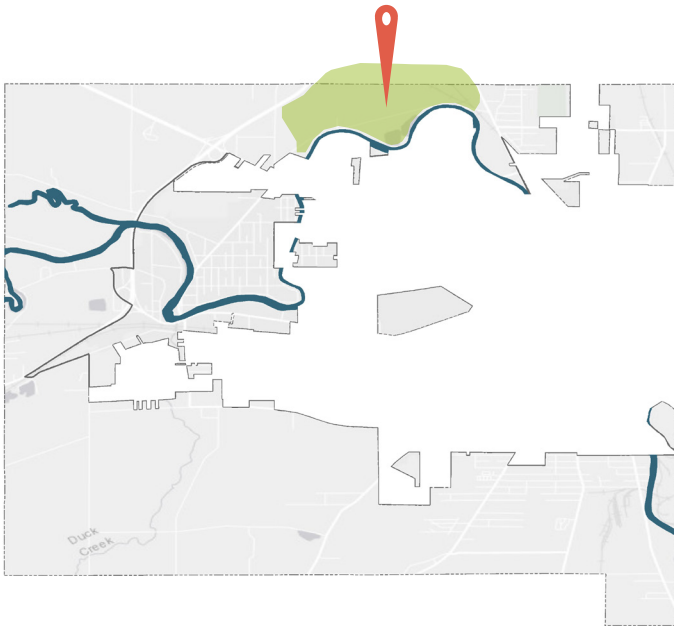


FIGURE4 EXISTING IMAGERY



EXISTING CONDITIONS

OWNERSHIP	Varied
CURRENT LAND USE	Vacant Industrial
LOCAL ZONING	Industrial, Warehouse
RIVER ACCESS	N/A
SIZE	≈ 681 Acres

Additional Notes:

- Ongoing remediation & planning efforts by Trumbull Neighborhood Partnership, CUDC, and YSU
- New Kent State hospital being developed northeast of the site
- Northern portion of the site is located in Champion Township
- The designated Mahoning River Water Trail flows past the site

The river segment in Warren Township flows through natural forested land, the Leavittsburg community, and abandoned industrial property.



Primary Opportunity Site Overview

The vision for the future of the primary opportunity site on the Mahoning River in Warren Township is a revitalized light industrial park with international attraction and first-class environmental protection. New office and industrial space support growth opportunities for existing businesses while remediation and streetscape improvements create marketing tools to retain new employers. The Mahoning River can be safely and conveniently enjoyed by workers directly at the site and by users of the regional greenway. For additional recreation opportunities, a path through the wetland conservation area extends natural access to Warren’s Burbank Park.

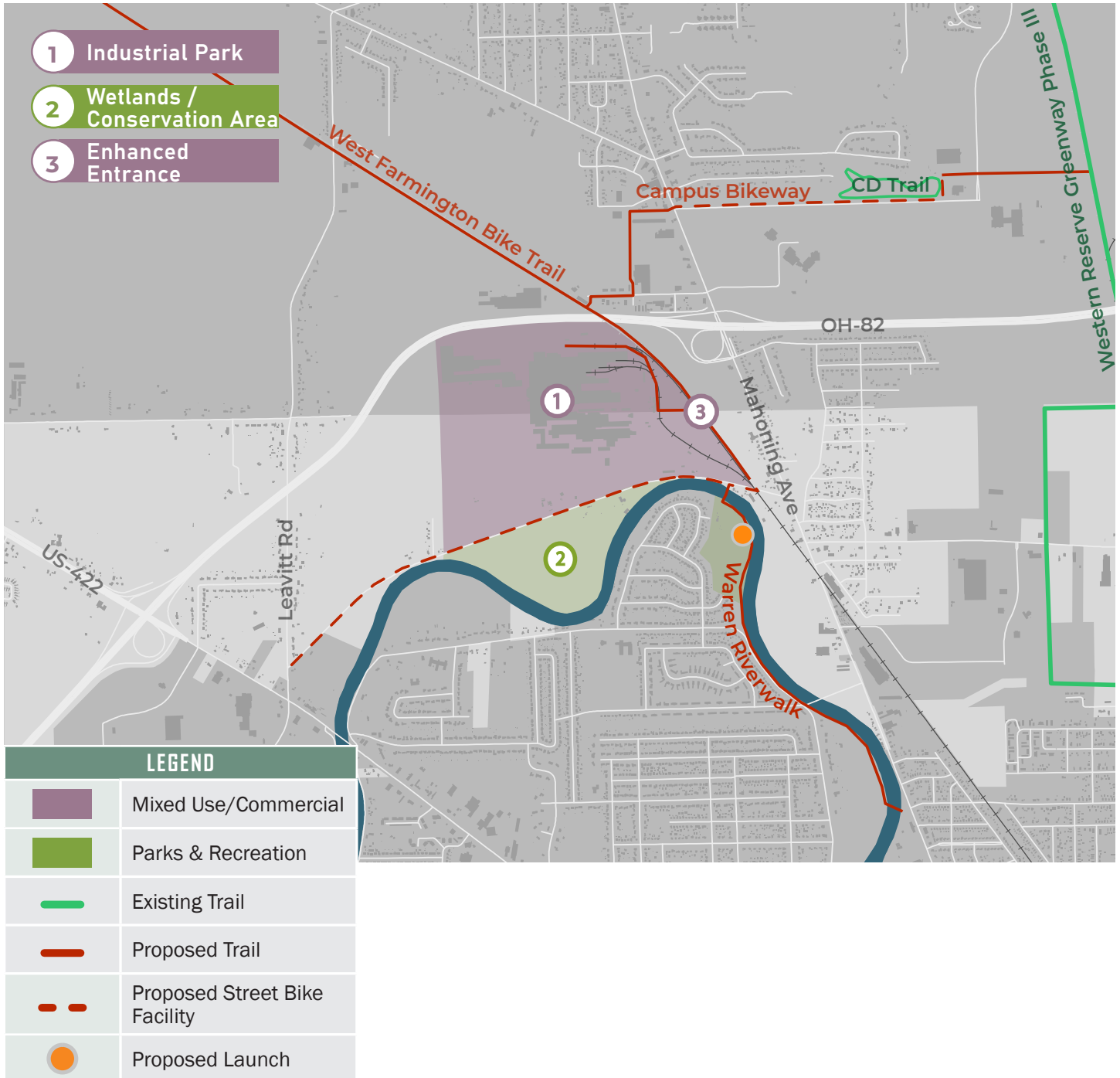
FIGURE 5 PRIMARY OPPORTUNITY SITE: FUTURE RENDERING



WARREN TOWNSHIP: PRIMARY OPPORTUNITY SITE

Copperweld

FIGURE 6 PRIMARY OPPORTUNITY SITE: PROPOSED





Proposed Character:

- The remediated site provides quality jobs in light industrial and clean manufacturing
- Existing businesses may expand operations



Proposed Character:

- Cleanup and conservation of wetlands
- A buffered edge protects natural area from industrial operations
- Bicycle infrastructure connects the site to nearby attractions



Proposed Character:

- Signage, lighting, landscaping, and repaired roadway welcome visitors to the site and showcase the area's economic development opportunities

WARREN TOWNSHIP: IMPLEMENTATION GUIDE

Preparing for the Future Now

The recommendations provided within the Mahoning River Corridor Revitalization Plan represent goals for the region over the next few decades. The future vision for the Warren Township river segment should be pursued strategically by breaking down the ideal long-term state into manageable short-and immediate-term projects. The Implementation Guide provides further insight to assist local decision-makers in working together to achieve a revitalized downtown river district with best practices, industry standards, and potential funding sources. Though the guide is designed to be a simple and straightforward reference, these guidelines should not be treated so rigidly as to prevent adaptation should unforeseen circumstances arise during implementation. The Implementation Guide is not an exhaustive list and should be pursued in concert with the corridor-wide objectives identified in the larger Mahoning River Corridor Revitalization Plan. Regional collaboration and coordination is highly encouraged.

To learn more about funding opportunities, visit Chapter 05 Next Steps of the Mahoning River Corridor Revitalization Plan.

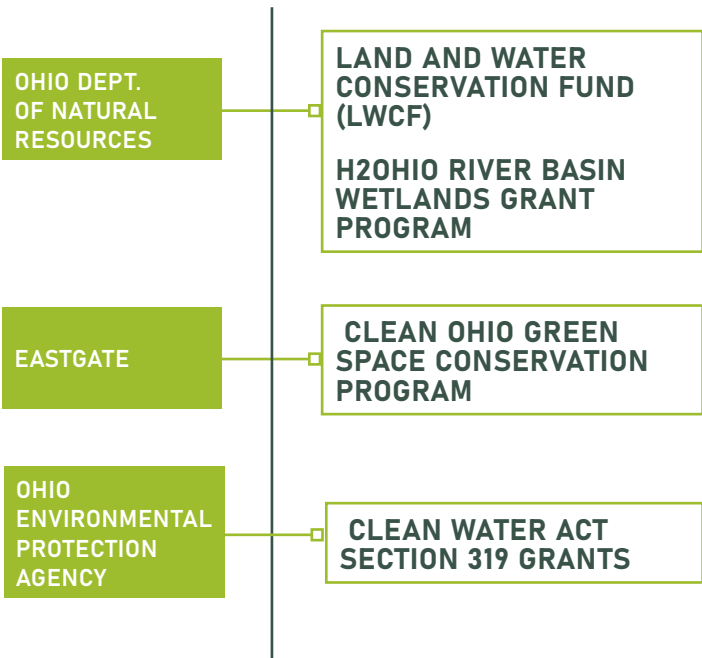
WETLAND CONSERVATION

Inventory of Township's Wetlands

Wetlands are defined as areas where water covers soil all or part of the time. Due to their high and long-term capacity to filter pollutants, wetlands are often referred to as “earth’s kidneys”, and are critical the health and biodiversity of all watersheds.

Warren Township and its core communities of Leavittsburg and Warren contain over eight miles of the Mahoning River. Development in these communities is anchored along the River, and protecting it is vital for maintaining the positive momentum these communists have built over the past decade. Lining the rivers banks and in the Townships low lying areas are 1.2 sq miles of land designated as wetlands, just over 8% of the entire Township. Protecting and preserving these areas in essential to the long term health of the Mahoning River and its tributaries.

Funding Opportunities



Elements of Wetland Protection

IDENTIFYING CAUSES OF DEGRADATION

Existing sources of non-point source pollution, like highways and industrial land use, should be addressed using best management practices to protect the areas.

ANTICIPATE FUTURE CHANGES

Changes in land use, travel patterns, and weather can affect these ecosystems in many ways. Excess stormwater runoff from changes in surrounding development should be understood in the context of its impact on the surrounding environment.

MONITOR AND MAINTAIN

Wetlands and riparian zones require little maintenance. Establishing and executing a routine plan for monitoring the biodiversity and water quality of the wetlands and removing invasive plant species is a key part of protecting and preserving wetlands.

PARTNERSHIPS

Its recommended that communities partner with universities, government agencies, or private nonprofit organizations to establish a long range monitoring and maintenance plan.



The H2Ohio River Basin Wetlands Grant Program reimburses up to \$500,000 for projects focused on nutrient reduction and water quality improvement within the Ohio River Basin. Comparable projects in the Lake Erie basin include the St. Joseph Confluence Wetland Reconnection (pictured above).

INDUSTRIAL & OFFICE SITE DESIGN

Defined Project(s)

COPPERWELD INDUSTRIAL PARK

The decline of the steel industry and heavy industrial in the Mahoning Valley has created several brownfield sites across the region, including in Warren Township. Once remediated and safe to occupy, these sites are generally best suited for industrial or business parks.

As regional partners continue to collaborate on the future of the Copperweld site, it will be important to promote a site design which showcases a high quality of development and can serve to encourage similar development styles across the Valley.

Parking should be relegated to the side or rear of buildings, well-screened, and well-lit. Individual curbcuts should be limited to promote access safe and efficient roadway access. For smaller sites in Warren Township, shared parking is encouraged. Sidewalks and paths are encouraged, where appropriate, to promote connectivity within and between uses.

It is especially desirable for pedestrian connections to offer public access to the Mahoning River for residents and workers. Landscaping and green space should be integrated throughout the site. Green infrastructure, including retention basins and parking islands, are also encouraged.

Design Elements

Light industrial, clean manufacturing, and office parks should be designed with respect to the area's environmental constraints and as a catalyst for regional economic transformation.



Rain gardens, bioswales, permeable pavement, street trees, etc. support environmental design.



Open space is integrated throughout and campuses are well-connected with internal paths and external connections.



Parking is screened, well-lit, and landscaped.

MULTI-USE CONNECTIONS

Defined Project(s)

COPPERWELD INDUSTRIAL PARK

The Copperweld Industrial Park currently sits north of the Mahoning River while Burbank Park is nestled between parts of the river. Surrounding this area are some street bike facilities that promote an active transportation mindset throughout Warren.

However, a safe, reliable, and well connected multi-use path on the perimeter of this industrial park does not exist. This plan promotes many miles of a multi-use connection that would allow users to travel past the industrial park by personal choice of transportation to then enter Burbank Park. This park promotes the extension of the regional multimodal network and also gives access to the riverfront. Connecting this path to the park and to the communities beyond allows users to enjoy the natural resources and amenities. A launch site is proposed within part of the green space and further connected by the proposed multi-use paths.

Funding Opportunities

OHIO DEPT.
OF NATURAL
RESOURCES

CLEAN OHIO TRAILS FUND
(COTF)
RECREATIONAL TRAILS
PROGRAM (RTP)

EASTGATE

CONGESTION MITIGATION
AND AIR QUALITY
IMPROVEMENT PROGRAM
(CMAQ)

Design Elements

Proposed connections for Warren Township are shown in Figure X and may include different facility types, based on further feasibility analysis and community input. Examples of appropriate infrastructure include:



Sharrows are a shared environment, indicated by road markings, in which bicycles are entitled to full access of the travel lane. The simplicity in design translates to low implementation costs, but for safety and comfort, should be limited to low volume roads.



Protected bike lanes are designed for separate bike travel adjacent to automobile traffic, protected by a physical barrier such as planters, bollards, or parking. The barriers can improve safety and user comfort.



Multi-use paths are dedicated infrastructure for two-way travel of non-vehicular uses distinctly separate from vehicular travel. Paths may be used to establish connections beyond the existing roadway network or parallel to heavily trafficked streets.

PRIORITY ACTIONS FOR IMPLEMENTATION

ENVIRONMENTAL & RECREATION

- A.1** Pursue Clean Ohio designation for floodplain and wetland preservation.
- A.2** Conduct a feasibility study for proposed bicycle infrastructure at the priority site.
- A.3** Develop a collaborative regional entity responsible for long-term maintenance of restored wetland habitats.
- A.4** Identify and design a riparian zone.



Fairview Industrial Wetlands in Salem OR demonstrates how industrial and office land uses can coincide with wetland protection. The site features several businesses and a sanctuary for native species of plants and animals with a mile of trails.

ECONOMIC & COMMUNITY DEVELOPMENT

- B.1** Create a property cut sheet with information on utilities, environmental constraints, available incentives, and regional workforce for the Warren Holdings/Copperweld site.
- B.2** Explore implementation of tax-increment financing to help fund streetscape and infrastructure improvements.
- B.3** Identify opportunities to consolidate and/or split parcels to support site redevelopment.
- B.4** Conduct a market analysis to identify gaps in the regional marketplace.