

MCD Report # 2014-15

# GREAT MIAMI RIVER CORRIDOR

## A PLANNING ASSISTANCE STUDY







# SECTIONS

---

<b>PREFACE</b>	<b>P-1</b>	<b>5 CASE STUDIES</b>	<b>55</b>
		5.1 Mascoma River Corridor, NH	55
		5.2 Carolina Thread Trail, NC	60
		5.3 Susquehanna Greenway, PA	64
<b>EXECUTIVE SUMMARY</b>	<b>E-1</b>	<b>6 RIVER CORRIDOR SYNTHESIS</b>	<b>69</b>
<b>1 INTRODUCTION</b>	<b>1</b>	6.1 River Corridor Gap Analysis	69
1.1 Setting	1	6.2 River Corridor Problems/Opportunities	70
1.2 Corridor Vision	5	6.3 River Vision	75
1.3 Planning Study Framework	5		
<b>2 SEGMENT ONE</b>	<b>7</b>	<b>REFERENCES</b>	<b>77</b>
(River Mile 130 to River Mile 87.5)		<b>APPENDIX</b>	<b>81</b>
2.1 Overview	7		
2.2 Recreation Resources	9		
2.3 Activity Hubs	13		
2.4 Historical and Cultural Resources	15		
2.5 Flood Risk Reduction	17		
2.6 New Projects	18		
<b>3 SEGMENT TWO</b>	<b>23</b>		
(River Mile 87.5 to River Mile 74.5)			
3.1 Overview	23		
3.2 Recreation Resources	23		
3.3 Activity Hubs	29		
3.4 Historical and Cultural Resources	32		
3.5 Flood Risk Reduction	35		
3.6 New Projects	36		
<b>4 SEGMENT THREE</b>	<b>39</b>		
(River Mile 74.5 to River Mile 31)			
4.1 Overview	39		
4.2 Recreation Resources	41		
4.3 Activity Hubs	45		
4.4 Historical and Cultural Resources	47		
4.5 Flood Risk Reduction	49		
4.6 New Projects	51		

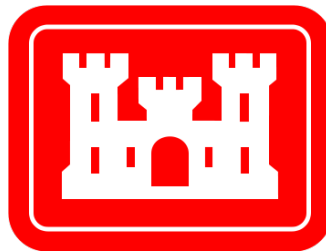




# GREAT MIAMI RIVER CORRIDOR

A Planning Assistance Study

Partners:



4454 Idea Center Boulevard | Dayton, OH 45430

P: 937.461.5660





# PREFACE

This study focuses on approximately 99 miles of the Great Miami River corridor in Ohio, starting near river mile 130 upstream of the city of Sidney in Shelby County to near river mile 31 downstream of the city of Hamilton in Butler County. The purpose of this study is to provide planning assistance for river and riverfront recreation along the Great Miami River corridor. This study has been conducted by U.S. Army Corps of Engineers under the Planning Assistance to States Program, which enables U.S. Army Corps of Engineers to provide planning and technical assistance to state and local jurisdictions. The sponsor for this study was the Miami Conservancy District. This study has benefitted from, and is intended to benefit, a multijurisdictional cooperative effort among 15 communities and agencies along the Great Miami River.

In late 2012, the Miami Conservancy District and the Board of County Commissioners of Montgomery County, Ohio, jointly requested U.S. Army Corps of Engineers to perform this study under the Planning Assistance to States Program. Both the Miami Conservancy District and Montgomery County recognized the potential to maximize riverfront investments and benefit all communities by approaching the river corridor as one connected, regional asset. Both organizations, as well as other local communities, had previously developed and built riverfront recreation facilities or areas. When the request for the study was made, several new riverfront parks or recreation amenities were in various stages of visioning, planning, design, and implementation. Looking beyond the county boundaries, Montgomery County Commissioner Dan Foley noted, “Each project that exists or is built along the river corridor is made better when the next river corridor project is developed.”

To accept the planning assistance offered by U.S. Army Corps of Engineers, the Miami Conservancy District and Montgomery County successfully enlisted the participation and financial support of several river corridor stakeholders: the cities of Sidney, Piqua, Troy, Riverside, Dayton, West Carrollton, Miamisburg, Franklin, Middletown, and Hamilton; Miami County Park District; Five Rivers MetroParks, and MetroParks of Butler County.

Early recreational developments in the Great Miami River corridor were typically individual site-specific projects. Cities, townships, counties, park districts, and nonprofit organizations created individual parks and playgrounds to serve local neighborhoods. A paved bikeway, the Great Miami River Recreation Trail, grew incrementally from a section in Troy and a section in Dayton in 1976 to an extensive, linked trail system today. Many local entities contributed to the

construction and maintenance of these trail sections, but the development was not part of a comprehensive plan.

Growing popularity of the bikeway system spurred greater interest in more comprehensive recreational amenities along the river corridor. In 2001, RiverScape, a collaborative effort of Montgomery County, Five Rivers MetroParks, the Miami Conservancy District, the city of Dayton, and other partners, opened on the river corridor in Dayton. Other cities along the Great Miami River corridor are planning or have developed riverfront parks.

As the trails, parks, and other riverfront amenities grow, cities and private investors are building housing, office buildings, and retail entertainment venues adjacent to the riverfront. Over the past several years, community leaders and investors have realized that more can be accomplished to develop the riverfront through regional collaboration. The total river corridor experience can be greater than the sum of all the separate parts.

To foster greater cooperation and exchange of ideas, communities and partners formed the Ohio’s Great Corridor Association. This membership organization is dedicated to developing a shared regional vision to guide riverfront development.

Alongside the review of current and planned recreation amenities, this study used a comprehensive inventory compiled by the Miami Conservancy District. On December 11, 2013, U.S. Army Corps of Engineers facilitated a meeting of the Great Miami River corridor stakeholder jurisdictions. The findings from this meeting were considered in the study. This study is an important step in developing a shared regional understanding of river and riverfront recreation along the Great Miami River corridor.

This study report:

- Provides a regional perspective, with supporting narrative, photos, and maps
- Analyzes the existing conditions of the river corridor
- Evaluates how projects currently planned along the river corridor will change the existing conditions
- Provides multijurisdictional riverfront and recreational case studies that could develop ideas for new uses.
- Incorporates background inventory information, as well as findings from the December 11, 2013, U.S. Army Corps of Engineers-facilitated meeting





# EXECUTIVE SUMMARY

The Great Miami River Corridor Planning Assistance Study was commissioned, in a team effort with the U.S. Army Corps of Engineers and the Miami Conservancy District, to evaluate existing conditions of a 99-mile stretch of the Great Miami River corridor. Methods used in analyzing the corridor's existing conditions included site visits, photographic inventory, mapping exercises, case study comparisons, and interviews.

The following organizations were partners in the preparation of this report:

- U.S. Army Corps of Engineers – Louisville District
  - Established in 1886, the Louisville District employs approximately 1,300 people in the five-state area of Illinois, Indiana, Kentucky, Michigan, and Ohio out of 60 field offices.
  - The civilian workforce comprises professional engineers, architects, planners, economists, biologists and other specialists, and support staff.
  - The mission of the Louisville District is to provide engineering services to its civil and military customers within the times, budgets, and guidelines established by the Corps, Congress, and the customers. These services are performed productively and are of value and quality as defined by the customer. The district is prepared to provide immediate disaster relief, as required. (<http://www.lrl.usace.army.mil/Missions.aspx>)
- Miami Conservancy District
  - Vision: Thriving communities, a healthy watershed, and a higher quality of life, sustained by well-managed water resources throughout the watershed.
  - Mission: Protecting lives, property, and economic vitality within the Great Miami River Watershed through an integrated and balanced system that provides unfailing flood protection, preserves water resources, and promotes enjoyment of our waterways. (<https://www.miamiconservancy.org/about/mission.asp>)

Results of the research and analysis of the corridor's existing conditions draw attention to the fact that, compared to the three case studies addressed in this report, the Ohio's Great Corridor Association's work with the Great Miami River corridor is on the right path. The Great Miami River corridor includes an extensive trail network of both bikeway and water trails. A variety of sizes of parks with diverse amenities exist along the corridor. Many communities have built, or are planning to build, riverfront parks. There is growing interest in private investment along the corridor. The region offers many opportunities to experience historic and cultural resources.

Challenges still persist within the Great Miami River corridor and the case studies analyzed in this report suggest that every corridor system, no matter the size, can always be improved upon. There are physical and programmatic challenges. Physical challenges include:

- Gaps in the Great Miami River Recreation Trail
- Low-head dams that impact navigability, safety, and water quality
- Lack of facilities that serve as activity hubs
- Levees that create visual and physical barriers to the river
- Need for more lodging and other accommodations for overnight stays
- Improvement needed for some parks

Programmatic challenges include:

- Lack of a strong, unified identity for the Great Miami River corridor
- Promotion of the historic and cultural resources to increase tourism
- Community events that don't currently incorporate the river into events





# 1. INTRODUCTION

## 1.1 SETTING

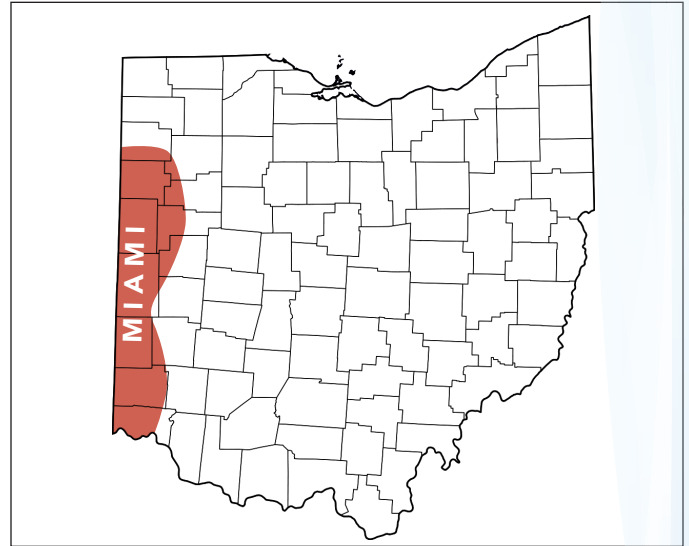
The Great Miami River extends approximately 157 miles from its headwaters near Indian Lake in Logan County, Ohio, to its confluence with the Ohio River. The watershed drains a total of 3,802 square miles in Ohio. The Great Miami River flows through Logan, Shelby, Miami, Montgomery, Warren, Butler, and Hamilton counties before flowing into the Ohio River west of Cincinnati, Ohio. For purposes of this study, the Great Miami River corridor is considered the river, lands that touch the river, and areas directly adjacent to those lands.

### History

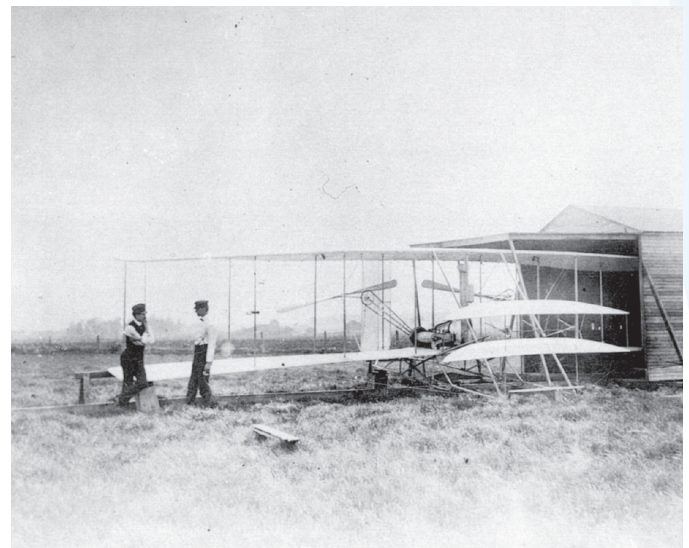
The Great Miami River is named for the Miami tribe, an Algonquian-speaking Native American people who once lived in the region. This and other tribes maneuvered their canoes up and down the Great Miami River. Rivers were the primary thoroughfare, linking the area for trading purposes and settlement. The Great Miami River is linked to the Port of New Orleans through the Ohio and Mississippi rivers.

The region is well known for its history of creativity and invention. Notable Dayton inventions include automotive and aviation innovations. The Wright Brothers, inventors of the first airplane, and Charles Kettering, world-renowned for his numerous inventions, hailed from Dayton. The city was home to the first mechanical cash register. Paul Laurence Dunbar, a famous African American poet and novelist, penned his famous works here in the late 19th century. The Dayton Aviation Heritage National Park was created to recognize the contributions of the Wright brothers and Paul Lawrence Dunbar.

The Miami and Erie Canal stretched from Toledo to Cincinnati, creating a water route from Lake Erie to the Ohio River, with the southern segments of the canal following the Great Miami River corridor. Construction of the canal began in 1825 and was completed in 1845 to support farming, mining, and other industries that dominated the regional economy. The canal also was used to transport passengers. Use of the canal gradually declined during the 19th century because of competition from railroads. It was abandoned after suffering severe damage during the Great Flood of 1913, which was the greatest natural disaster in Ohio history. (<http://parks.ohiodnr.gov/canals/publications>)



Miami Tribe Ohio Territory



Wright Brothers at their Huffman Prairie Hangar



Miami & Erie Canal, Dayton, OH

During a 3-day period, between 8 and 11 inches of rain fell throughout the Great Miami River Watershed. This rainfall, coupled with soils already saturated from the melting of snow and ice from a hard winter, produced more than 90 percent runoff and caused the Great Miami River and its tributary streams to overflow. Every city along the river was inundated with floodwaters. At that time, most of the urban riverfronts along the Great Miami River were privately owned. Factories, mills, houses, and other structures encroached into the river channel to the water's edge.

## Miami Conservancy District

After the Great Flood of 1913, the citizens and community leaders rallied to implement a plan to protect the ravaged cities from future flooding. The result of their efforts is the Miami Conservancy District, a regional, special-purpose district formed in 1915 under the provisions of Section 6101 of the Ohio Revised Code. The Miami Conservancy District flood protection system, completed in 1922, features five large, earthen, dry dams that temporarily hold large volumes of floodwaters and work in conjunction with levees, channel modifications, and preserved floodplains along the Great Miami River. The Miami Conservancy District is legally charged with maintaining the system, which provides a higher level of flood protection to the cities along the Great Miami River than most of the flood protection measures in the country.

Taylorville Dam, one of the five Miami Conservancy District dams, is the only one that crosses the Great Miami River. Like the other four dams, it is considered a dry dam because it has no permanent reservoir or pool of water. Most of the time, the Great Miami River flows unimpeded through fixed openings at the base of the dam. Taylorville Dam only stores water during periods of runoff following rain or snowmelt. The dam temporarily holds the

floodwater to reduce flows downstream through the urban areas and then slowly releases the water over time. Taylorville Dam has stored water, on average, fewer than two times per year since its construction. The river returns to normal flow conditions within 1 to 7 days. Upstream of Taylorville Dam, approximately 11,000 acres are preserved for the temporary storage of floodwaters. Much of the land behind the dam is used for agriculture.

Earthen levees supplemented by concrete floodwalls line both banks of the Great Miami River within the urban areas between Piqua and Hamilton. Right or left bank of the river is defined based upon viewing downstream. The levees protect downtown business districts, residential areas, factories, schools, hospitals, and critical infrastructure from flooding. Before the flood protection system, these areas suffered flooding on a regular basis. Since 1922, none of these areas has flooded from the Great Miami River. The high level of flood protection has allowed for growth and reinvestment in these areas, including along the riverfronts adjacent to the levees. To pass flood flows, the levees are generally set back well away from the river's edge. The levees are primarily covered with mowed turf. To maintain high flood-control standards, levees are typically kept free of trees and other woody vegetation, because the roots can penetrate the embankment and provide seepage paths for floodwater. Woody vegetation can obstruct inspection and maintenance of the levees, and provide shelter for burrowing animals that severely damage levees. Tree canopies can shade the levee and inhibit the growth of grass.

Preserved floodplains are also critical to reducing flood risk. Preserved land upstream of the Miami Conservancy District dams provides significant flood storage. Between the cities, many floodplains are preserved through ownership or easements held by local governments, land trusts, park districts, and the Miami Conservancy District.



Taylorville Dam



Great Miami River Recreation Trail and Levee, Dayton, OH



## Use of Flood Protection Land for Recreation

After the flood protection system was completed in 1922, the Miami Conservancy District promoted use of its land for recreation. The land around the dams was opened to the public as parks, including nearly 1,000 acres at Taylorsville Dam. Between 1924 and 1942, the Miami Conservancy District also planted more than 400,000 trees at the five flood protection dams. Those trees are now mature woodland forests.

In the 1930s, the Miami Conservancy District partnered with the Civilian Conservation Corps, a Depression-era federal public works organization, to improve the park at Taylorsville Dam. Civilian Conservation Corps staff constructed picnic shelters, restrooms, fireplaces, parking areas, and hiking trails. Since the 1960s, the Miami Conservancy District has partnered with the Montgomery County Park District, now known as Five Rivers MetroParks, for professional management of the park lands at several of the dams. Taylorsville MetroPark is an excellent example of this long-standing regional cooperation between the Miami Conservancy District and Five Rivers MetroParks.

During the 1940s, the Miami Conservancy District developed Carillon Historical Park along the levee in Dayton. Now operated by Dayton History, Carillon Historical Park celebrates the region's rich heritage of creativity and invention, and is home to the Deeds Carillon, one of Dayton's best-known landmarks.

The levees and river channels in the cities were underused as recreational amenities during the early years of the flood protection system. However, two trends emerged after World War II that caused communities to look at these ribbons of green space for their recreation potential:

- As large numbers of families moved from the cities to the suburbs, recreation priorities changed. Families had large yards and could enjoy picnics and outdoor activities at home. The suburban areas, however, were less walkable than the urban neighborhoods. Venues were sought for walking, jogging, bicycling, fishing, and boating.
- Local, regional, and federal efforts focused on reducing pollution and improving the water quality of the rivers.

In the 1970s, several communities organized river corridor committees to advocate for recreational amenities. Cities, counties, park districts, and the Miami Conservancy District built amenities such as bikeways, lighted walking paths, and low-head dams in the urban river corridors. The first bikeways were planned and partially funded by the Miami Valley Regional Bicycle Council. These trails were part of the nation's first formal bikeway plans.

In 1999, the Miami Conservancy District formed the River Corridor Improvement Subdistrict to consolidate management of river corridor improvements, amenities, and activities along the river. The River Corridor Improvement Subdistrict constructs, operates, and maintains improvements and amenities for recreational use and aesthetic enjoyment of the river corridors, including recreation trails, pedestrian walkways, boat ramps, low-head dams for recreation, river overlooks, and parking areas. The River Corridor Improvement Subdistrict encompasses all or part of nine counties, the Great Miami River, Mad River, Stillwater River, and several tributaries. The subdistrict's income, assets, costs, and obligations are kept separate from the flood protection system.



Deeds Carillon at the Carillon Historical Park



Bicyclists on the Great Miami River Recreation Trail, Dayton, OH





Shelby County Courthouse, Sidney, OH



Downtown Troy, OH



Downtown Dayton, OH



Main Street Bridge in Hamilton, OH

## The Region

The Great Miami River corridor exists within a region that is a hub for commerce, agriculture, education, health care, and industry. Within the region, two of the nation's longest interstate highways—Interstates 70 and 75—intersect just north of Dayton. With a population of 141,527, Dayton is the region's largest city. Other major cities with a population of 50,000 or more include Springfield, Hamilton, and Middletown. Cities that have more than 20,000 people include Sidney, Piqua, Troy, Riverside, and Fairfield. The Dayton metropolitan area has a population of 841,502 as of the 2010 census.

The Great Miami River flows through Sidney, Piqua, Troy, Tipp City, Riverside, Dayton, Moraine, West Carrollton, Miamisburg, Franklin, Middletown, and Hamilton. In between the urban areas are rural communities, agricultural land, and forest. The entire length of the Great Miami River is a state-designated water trail under the Ohio Department of Natural Resources Ohio Water Trails Program. The Great Miami River Water Trail is a recreational route of publicly accessible facilities in and along the river that provide opportunities to fish; launch canoes, kayaks, and other craft; camp; and explore the natural and cultural heritage of the region. Certain stretches of the Great Miami River are deep enough to support small motorized watercraft; however, many stretches are only appropriate for hand-carried boats. Rowing is also popular in several cities where the river is suitable and clubs promote the sport and sponsor regattas and events. The Miami Conservancy District works with owners of public access points to ensure accurate signage and distribute free water-trail maps, which are funded by Miami Conservancy District, the access-point owners, and Ohio Department of Natural Resources. The Miami Conservancy District also maintains an interactive water-trail trip planning website. ([http://newserver.miamiconservancy.org/recreation/documents/GMR\\_RiverMap\\_09web.pdf](http://newserver.miamiconservancy.org/recreation/documents/GMR_RiverMap_09web.pdf))

The Great Miami River Recreation Trail, often referred to as a bikeway, is paved and intended for multiple uses, including bicycling, running, and walking. It follows the Great Miami River corridor. The stretches of recreation trail are managed by the cities of Sidney, Piqua, Troy, and Tipp City; Miami County Park District; Five Rivers MetroParks; the Miami Conservancy District; and MetroParks of Butler County. The long-term vision is an uninterrupted trail from Sidney to Fairfield. Facilitated by the Miami Valley Regional Planning Commission, a regional-trails committee coordinates a regional-trails vision, manages the trail website, and publishes a

map of the trail system. (<http://www.miamivalleytrails.org/great-miami-river-trail>) Bike Miami Valley is an advocacy organization focused on promoting and creating opportunities for all forms of bicycling in the region. (<http://www.bikemiamivalley.org>)

## Water Quality

Water quality is an important consideration for river and riverfront recreation. While many sections of the Great Miami River meet or exceed state standards, some challenges exist. Overall, water quality in the Great Miami River is much improved since the signing of the Clean Water Act in 1972. Improvements to the Great Miami River have been noted by the Ohio Environmental Protection Agency, which concluded in a 1996 report that the river's changes "...rank as some of the most significant improvements observed for any Ohio river or stream in our...experience conducting statewide biological surveys." (<http://www.epa.state.oh.us/portals/35/documents/ugmr94.pdf>) However, elevated nutrients, low oxygen levels, bacteria, and sediment accumulation impact the river in certain areas.

## 1.2 CORRIDOR VISION

Local communities view the Great Miami River as a valuable community asset worthy of riverfront investment. Diverse festivals and special events take place along its banks all year long. Tourists, recreational users, and commuters put its trails to good use. Refurbished and innovative housing options are creating new neighborhoods of urban pioneers. Between the cities, the corridor embraces some of Ohio's most picturesque and productive farmland and exquisite natural areas. World-class arts and entertainment venues draw diverse visitors from outside the region.

The region's vision is that collectively, the Great Miami River corridor helps create a quality of life that is a focus of private investment, job creation, and tourism. The corridor is envisioned to be a mixed-use district, touting vibrant city waterfronts interconnected by land and water trails. The Great Miami River corridor will be a magnet for a talented workforce to live, work, and play.

The vision is embraced by the Ohio's Great Corridor Association, a nonprofit membership organization that promotes river-related opportunities for urban and rural communities. Since 2008, the Ohio's Great Corridor Association and the Rivers Institute at the University of Dayton have organized an annual River Summit. The River Summit focuses on recreation and

tourism, agriculture, economic development, and conservation. The annual gathering of several hundred people helps communities realize the untapped potential the Great Miami River has for the region, both economically and socially.

## 1.3 PLANNING STUDY FRAMEWORK

This study is focused on the recreational opportunities within the Great Miami River corridor and includes a narrative of existing conditions and new projects; case studies of other river corridors; and a synthesis. New projects include efforts that are in various stages of visioning, planning, funding, and implementation.

The study area of the corridor starts near river mile (RM) 130 upstream of the city of Sidney in Shelby County and ends near RM 31 downstream of the city of Hamilton in Butler County. This 99-mile Great Miami River corridor is considered a single regional asset but, for the purposes of this study, is discussed in three segments.

- **Segment One.** RM 130.0 (upstream of Sidney) to RM 87.5 (Rip Rap Road bridge)
- **Segment Two.** RM 87.5 (Rip Rap Road bridge) to RM 74.5 (East River Road boat ramp)
- **Segment Three.** RM 74.5 (East River Road boat ramp) to RM 31 (downstream of Joyce Park)

For purposes of this study, the Great Miami River corridor is considered the river, lands that touch the river, and areas directly adjacent to those lands. The narrative includes an assessment of recreation resources, activity hubs, historic and cultural resources, flood risk reduction, and new projects.

**Recreation Resources.** The Great Miami River corridor has a variety of recreational opportunities. These include:

- Trails
  - Great Miami River Water Trail
  - Great Miami River Recreation Trail
  - Buckeye Trail
  - North Country National Scenic Trail
  - U.S. Bike Route 50
  - Local walkways and hiking trails
- Facilities
  - Family/event facilities
  - Lodging and other accommodations
  - Sports facilities



- Parks (assessed based on relative size, accessibility, and function)
  - Regional destination parks are typically large, iconic parks that draw users from great distances. Uses can vary, which can be seen in the various parks in this grouping.
  - Community parks serve an overall community, such as a town or city. Community parks vary in size and typically provide enough space for multiple activities and recreation resources.
  - Neighborhood parks are small, usually taking up no more than 5 acres. These parks usually have limited parking, a limited number of facilities, and typically cater to a small community within a town or city.
  - Roadside parks tend to be small, generally less than 2 acres. These parks, like neighborhood parks, have limited parking and typically cater to a small community within a town or city. They could be considered more regional in nature, due to their relation to major roads and connections to trails/trailheads.
- Conservation areas/nature centers. These are areas that are reserved for wildlife habitat, ecosystem services, and preservation of natural features and/or facilities that provide nature-related education.

**Activity Hubs.** Activity hubs are centers of activity and interest within the community. These include:

- Parks
- Attractions
- Entertainment/special events

**Historic and Cultural Resources.** Historic districts and events at historic structures in the area. These include:

- Historic buildings, bridges, canals, and transportation corridors
- Archaeological sites

**Flood Risk Reduction.** An extensive flood protection system of levees, earthen dams, and channel improvements is maintained by the Miami Conservancy District. The flood protection system is integrated with recreation amenities throughout the region. Along the Great Miami River, the system includes:

- Taylorsville Dam
- Levees
- Preserved floodplains

**New Projects.** Communities are developing new projects in the corridor, including:

- Public projects
- Private investment



## 2. SEGMENT ONE

SEGMENT MILE (130.0 - 87.5)

### 2.1 OVERVIEW

Segment One is the first of three segments analyzed in this study. This segment includes the four smaller communities of Sidney, Piqua, Troy, and Tipp City, which have their historical downtown business districts linked to the Great Miami River. Between these communities are large swaths of agricultural land and open space. Segment One begins upstream of the city of Sidney (RM 130) and ends at Rip Rap Road Bridge (RM 87.5) north of Dayton.

Native Americans used the Great Miami River as their highway for centuries, and in the industrial era, the Miami and Erie Canal helped mold the area into an industrial and agricultural hub. Remnants of the old canal and associated structures and sites can still be found along this segment of the corridor as historic landmarks.

Agriculture is a driving force in the region. The cities along this stretch of the Great Miami River have a distinct land-use pattern, with a downtown in the “nucleus” of each city and residential neighborhoods bordering the fringe. On the periphery of each community are copious amounts of farmland.

The segment was evaluated for recreation resources, activity hubs, historic and cultural resources, flood risk reduction, and new projects. During August 2014, observations were taken of existing conditions at select sites along the Great Miami River corridor (sites visited shown in blue):

- Johnston Park (RM 128.5)
- **Custenborder Fields (RM 128.0)**
- Tawawa Park (RM 128.0)
- Berger Park (RM 126.9) to Roadside Park, Sidney (RM 126.4)
- Johnston Farm & Indian Agency (RM 116.5)
- Roadside Park, Piqua (RM 116.3)
- Veteran’s Memorial (RM 115.0)
- Heritage Green (RM 115.0)

- **Lock Nine Riverfront Park (RM 113.7)**
- **Proposed Piqua Riverfront Development (RM 113.7–113.0)**
- Garnsey Street/Bridge Street Boat Dock (RM 112.6)
- Goodrich Giles Park (RM 111.7)
- Farrington Reserve (RM 110.3)
- **Twin Arch Reserve (RM 108.8)**
- Covered Bridge Park (RM 108.1)
- **Barbee Memorial Park (RM 108.1)**
- Duke Park (RM 106.2)
- **Proposed pedestrian bridge location (RM 106.0)**
- **Treasure Island Park (RM 106.0)**
- Hobart Arena (RM 106.0)
- **Troy Community Park (RM 105.6)**
- Troy Aquatic Center (RM 105.5)
- Miami Shores Golf Course (RM 104.5)
- Tippecanoe Community Park (RM 99.1)
- Canal Lock Park (RM 98.6)
- Honey Creek Preserve (RM 98.2)
- Kyle Park (RM 97)
- Cassel Hills Golf Course (RM 91.0)
- **Taylorsville MetroPark (RM 91.0)**
- Rip Rap Park (RM 88.3)



Custenborder Fields (RM 128.0)





Lock Nine Riverfront Park (RM 113.7)



Proposed Piqua Riverfront Development (RM 113.7 - 113.0)



Twin Arch Reserve (RM 108.8)



Barbee Memorial Park (RM 108.1)



Proposed Pedestrian Bridge Location (RM 106.0)



Treasure Island Park (RM 106.0)



Troy Community Park (RM 105.6)



Taylorville MetroPark (RM 91.0)



## 2.2 RECREATION RESOURCES

### 2.2.1 Trails

#### Recreation Trails

The parks listed in this segment all connect to the Great Miami River Recreation Trail and to each other via the trail. Local roadways provide easy driving access to the Great Miami River Recreation Trail.

The Great Miami River Recreation Trail, Buckeye Trail, and North Country National Scenic Trail share the same trail alignment from Piqua to Dayton and there is only one trail surface. The trail is paved, some parts in asphalt and others in concrete.

The Great Miami River Recreation Trail extends uninterrupted 54 miles from Piqua downstream through Segment Two and Three to Franklin. The Great Miami River Recreation Trail has multiple access points, activities, and connecting hubs, and accommodates running, walking, or biking. The Great Miami River Recreation Trail connects to the Ohio-to-Indiana Trail, which runs east to west through the city of Piqua.

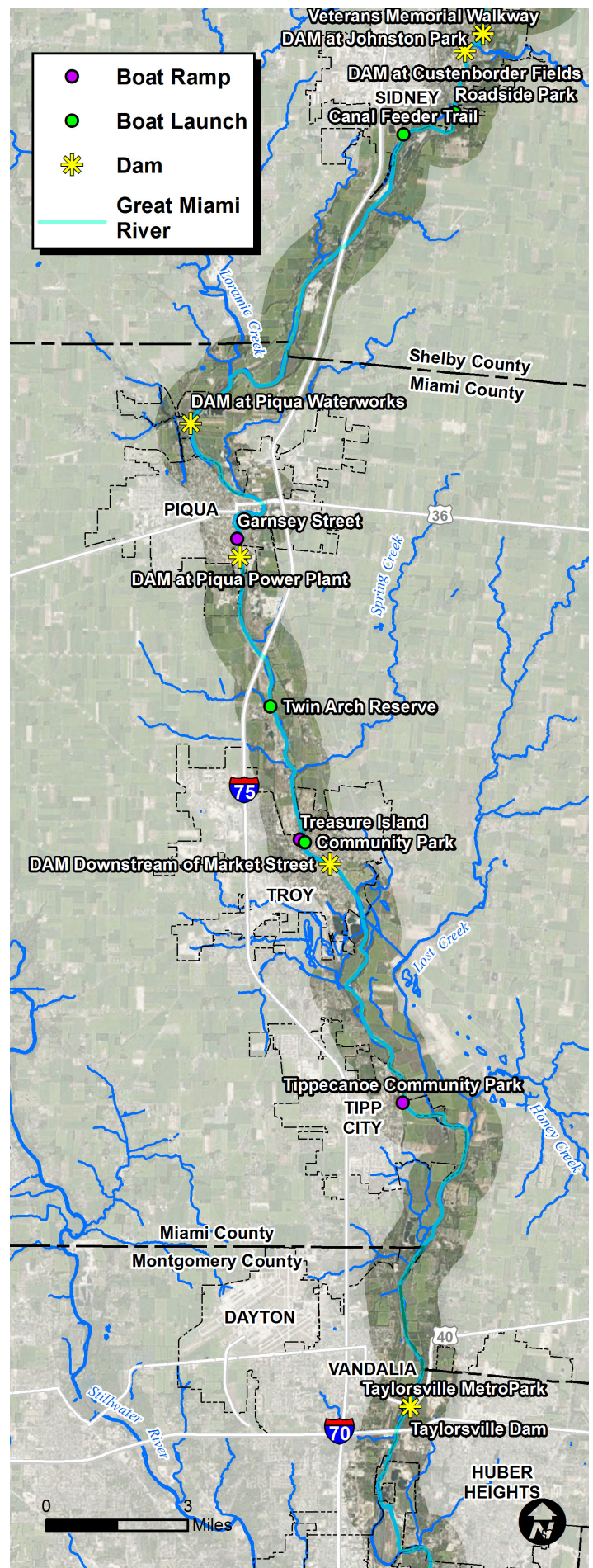
In several cities there are also local segments of trails that connect to parks and other recreational amenities. For example, there is Canal Feeder Trail and Veteran's Memorial Walkway in Sidney, and Linear Park in Piqua.

The city of Piqua was recently named a Trail Town by the North Country Trail and Buckeye Trail associations. Designated trail towns support hikers with services, promote the trail to citizens, and embrace the trail as a resource to be celebrated and protected. (<http://www.buckeyetrail.org/trailtowns.php>)

#### Water Trail

Throughout this segment, the Great Miami River is a state-designated water trail. There are two locations where visitors can rent a canoe or kayak and seven public boat ramps. The following sites contain public boat ramps along Segment One:

- Custenborder Fields
- Roadside Park, Sidney
- Garnsey Road/Bridge Street in Piqua
- Twin Arch Reserve
- Treasure Island Park
- Tippecanoe Community Park
- Taylorsville MetroPark



Segment One Boat Launch and Boat Ramp Locations



Navigability along this segment of the water trail is restricted by five low-head dams at river miles 128.5, 128.3, 116.3, 112.1, and 105.1. To get around the low-head dams, portage is required. Providing safe portage, modifying low head dams, or removing the dams could improve continuity and open more miles of the river to boating. In addition, providing safe portage around Taylorsville Dam would improve a boater's ability to safely cross over the dam. Portages can be simple routes, such as trails, made of soil, gravel, or concrete; or may be built structures, such as staircases with chutes or slides. Safe portage should include adequate signage.

## 2.2.2 Facilities

### Family/Event Facilities

In this segment, there are three facilities that cater to family-oriented water play. Sidney Municipal Pool is an Olympic-sized pool with slides and diving boards. Troy Aquatic Park and Tippecanoe Family Aquatic Center are both substantial aquatic parks. Troy Aquatic Park offers two water slides, a spray area, Olympic-sized swimming pool, and a kiddie pool. Tippecanoe Community Park also offers two water slides, a spray area, and an Olympic-sized swimming pool.

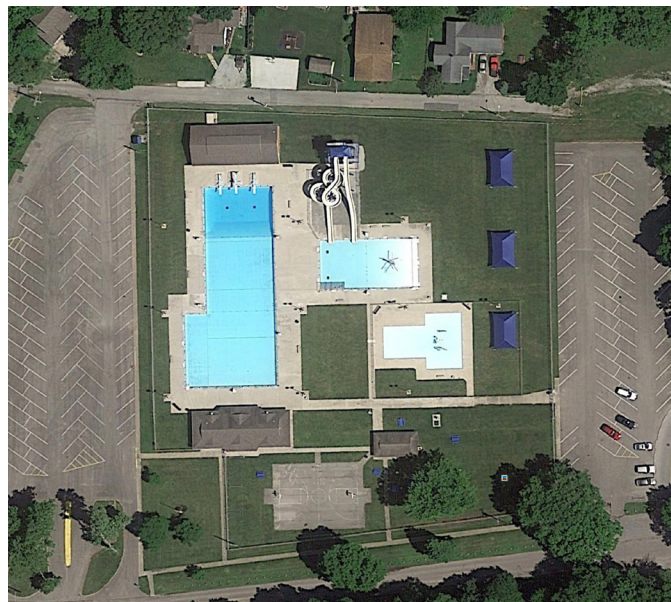
Segment One is lacking in outdoor family/event facilities (e.g. pavilions, band shells, and amphitheaters). There is sufficient land that could be repurposed for such uses.

### Lodging and Other Accommodations

In Segment One, there are multiple opportunities to stay overnight. Two camping locations are currently available and there is an ample amount of suitable land for future campground development. A private business, Adventures on the Great Miami River, allows camping, as does Taylorsville MetroPark. Camping is also planned for Farrington Reserve. In 2013, the Miami Conservancy District granted permission for overnight camping along the levees in Troy for the Gentlemen of the Road weekend event. Hotels and other overnight facilities are available near the Great Miami River corridor. Boat and/or bicycle storage during overnight stays would enhance options for lodging and other accommodations.

### Sports Facilities

Parks along this segment of the Great Miami River corridor provide many options for sports activities, including softball, baseball, soccer, disc golf, basketball, and tennis. These parks include Custenborder Fields, Tawawa Park, Berger Park, Duke Park, Troy Community Park, Tippecanoe Community Park, and Kyle Park. This segment of the corridor also includes two public golf courses, Miami Shores and Cassel Hills.



Sidney Municipal Pool



Taylorsville MetroPark



Custenborder Fields

## Playgrounds and Picnic Grounds

There are multiple facilities with playgrounds and picnic grounds. For example, Tawawa Park in Sidney has 15 shelters, four modular play structures, and several individual play pieces. Taylorsville MetroPark has eight shelters and has many natural areas in which to play.

### 2.2.3 Parks

#### Regional Destination Parks

Segment One attracts visitors to several regional destination parks with multiple amenities.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Johnston Farm & Indian Agency	x	x		
Tawawa Park	x	x	x	x
Twin Arch Reserve	x			
Treasure Island Park	x	x	x	x
Hobart Arena	x	x		
Tippecanoe Community Park	x	x	x	x
Honey Creek Preserve	x	x		x
Kyle Park	x	x	x	x
Taylorsville MetroPark	x	x	x	x

- These regional parks provide more than 20 athletic facilities, including baseball/softball fields and outdoor basketball courts.
- All nine parks are easily accessible by major roads and by reservation-only public transit. Taylorsville MetroPark is within a short walking distance of Greater Dayton Regional Transit Authority Route 17.
- All of the parks in this group, except Honey Creek Preserve and Tawawa Park, provide access to the Great Miami River Recreation

Trail. Johnston Farm & Indian Agency is a short distance from the northern terminus of the Great Miami River Recreation Trail in Piqua.

- Three of the nine parks in this group were visited as part of this study.

#### Community Parks

A variety of community parks serve the cities along the river corridor in Segment One.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Johnston Park	x			
Custenborder Fields	x	x	x	x
Tawawa Park	x	x	x	x
Veteran's Memorial				
Heritage Green				
Lock Nine Riverfront Park	x			
Goodrich Giles Park	x			
Covered Bridge Park	x	x		
Duke Park	x	x	x	x
Troy Community Park	x	x	x	x
Troy Aquatic Center	x	x	x	x
Miami Shores Golf Course	x	x		
Canal Lock Park	x			
Cassel Hills Golf Course	x	x		

- These community parks provide a large assortment of amenities, including playgrounds, picnic areas, shelters, restrooms, drinking water, and more than 30 soccer, baseball fields, softball fields, and outdoor basketball courts. Two are public golf courses.



- All 14 parks are accessible by major roads and by reservation-only public transit.
- With the exception of Cassel Hills Golf Course, all of the parks in this group provide access to the Great Miami River Recreation Trail. Sidney parks provide access to recreational trails within the Great Miami River corridor.
- Three of the 14 parks were visited as part of this study.

### Neighborhood Parks

There are just two neighborhood parks in Segment One.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Berger Park	x		x	x
Rip Rap Park	x			

- Both parks are fairly limited in size, facilities, and amenities. Berger Park has sports fields and courts, and Rip Rap Park has sports fields.
- Both parks provide access to the Great Miami River Recreation Trail.
- Both parks are accessible by major roads and by reservation-only public transit.
- Neither park was visited during this study.

### Roadside Parks

Segment One has three roadside parks. Two are named Roadside Park, one at RM 126.4 and one at RM 116.3. The other is Barbee Memorial Park, located north of Troy, across from the Miami County Fairgrounds.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Roadside Park (Sidney)	x			x
Roadside Park (Piqua)	x			x
Barbee Memorial Park	x			x

- All three parks are limited in size, facilities, and amenities. The parks have picnic shelters.
- Piqua Roadside Park provides access to the Great Miami River Recreation Trail.
- Each of the parks is accessible by major roads and by reservation-only public transit.
- Barbee Memorial Park was visited during this study.

### 2.2.4 Conservation Areas/Nature Centers

There are several conservation areas within parks in this segment, including Tawawa Park, Farrington Reserve, Kyle Park, Honey Creek Preserve, and Taylorsville MetroPark. There are no nature centers.

### 2.2.5 Recreation Resources Synopsis

The Great Miami River Recreation Trail has sections in each city, but is not continuous along Segment One. Continuity on the Great Miami River Water Trail is challenged by five low-head dams and the Taylorsville Dam, which limits paddlers to only a few miles before having to portage. Segment One has several aquatic centers, but is lacking in outdoor family/event facilities (e.g. pavilions, band shells, and amphitheaters). The parks in Segment One include many athletic fields. This segment includes all the park types. Several parks include conservation areas, but none offer nature centers. Most facilities are only accessible by reservation-only public transit. Taylorsville MetroPark is within a short walking distance of Greater Dayton Regional Transit Authority Route 17.







### 2.3.3 Entertainment/Special Events

The local communities along this segment also provide venues for theater, live music, shows, and other events.

**Red Barn (Troy Civic Theatre).** The Red Barn, located within the Troy Community Park, has provided live entertainment to the Miami Valley since 1965. Its productions include comedies, musicals, dramas, tragedies, and children's theater. (<http://www.troycivictheatre.com>)

**Hobart Arena.** The arena, located adjacent to the Troy Community Park and Aquatic Center, provides residents—and the greater Miami Valley community—a large venue for a variety of events and entertainment. This unique community asset provides a public ice rink open for skating and hockey, and offers concerts, circuses, and a diversity of shows that are programmed throughout the year. Since 1950, Hobart Arena has provided quality entertainment and generated millions of dollars for the greater Troy area. (<http://www.hobartarena.com>)

**Tipp Roller Mill.** Once a grist mill, the Tipp Roller Mill is adjacent to Canal Lock Park and is an important historical landmark for Tipp City. Set on the site of what was once the Miami and Erie Canal lock number 15, the mill is now a popular venue for live music performances. (<http://www.tipprollermill.com>)

The **historic downtown business districts** of Sidney, Piqua, Troy, and Tipp City line the banks of this segment of the Great Miami River. These districts act as large activity hubs, providing art, culture, entertainment, shopping, and dining, along with seasonal events such as parades, fireworks, concerts, and festivals all within walking distance of the river. Some of the larger activities in these communities include:

- Apple Fest (Sidney)
- Rock Piqua Concert Series, Bike Fest, Taste of the Arts, Groovy Gourd Bike Tour (Piqua)
- Strawberry Festival, Taste of Troy, Festival of Nations (Troy)
- Mum Festival, HarvestFest (Tipp City)

**Miami County Fairgrounds.** The fairground highlights the region's agricultural heritage and is located directly across County Road 25-A from the Great Miami River. The county's agricultural fair is hosted annually here along with special events such as the Harvest Moon Balloon Fest.



Troy Civic Theatre



Hobart Arena



Tipp Roller Mill



Mum Festival



Harvest Moon Balloon Festival (Miami County Fairgrounds)



**Special Events.** Larger, statewide, and national events have been hosted by these communities in the past and have drawn regional attention. Some of these events included Hovercraft Championships in multiple years, The Gentlemen of the Road Concert Tour 2013, the National Wading Championship 2014, and the Great Ohio Bicycle Adventure 2013.

### 2.3.4 Activity Hubs Synopsis

There are a variety of activity hubs with a diversity of events in the riverfront communities of Segment One. Most of these hubs do not take full advantage of their proximity to the river. The river has always been a presence, but rarely has the river been more than a visual element. Attractions and events need to incorporate the river, provide direct linkages from the river to activity hubs, and market the corridor. Additionally, there should be special events that focus directly on the river.

Currently, there is not a dominant central activity hub within the individual communities in Segment One. Some of the proposed projects will develop these central activity hubs. Such a focal point would bring more people to the corridor, enhance the local economy, and improve opportunities to preserve and revitalize riverfront communities' downtowns.

## 2.4 HISTORIC AND CULTURAL RESOURCES

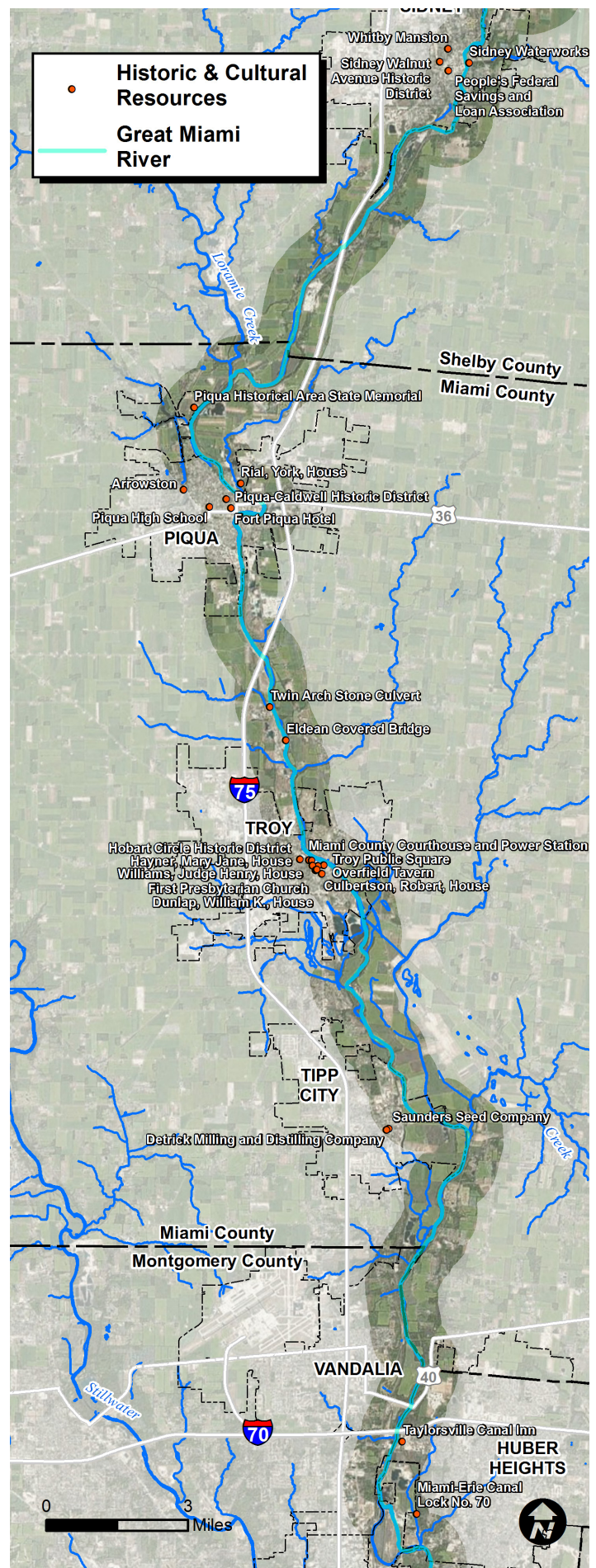
### 2.4.1 Historic Districts

Sidney, Piqua, Troy, and Tipp City all have historic districts. Piqua and Troy's historic districts are close to the Great Miami River.

## 2.4.2 Historic Buildings and Structures

**Fort Piqua Plaza.** Only two blocks from the Great Miami River, the Fort Piqua Hotel was renovated and renamed Fort Piqua Plaza in 2008. The large sandstone structure, built in 1891, has provided lodging to multiple presidents, as well as John Philip Sousa and Harry Houdini. It was a meeting place for the Women's Christian Temperance Union and the Anti-Saloon League during prohibition. The building was also the site of a 1947 staged sit-in at its lunch counter. The building currently houses the Piqua Public Library, a banquet center, stores, and restaurants. ([http://www.piquaoh.org/hotel\\_restoration\\_project.htm](http://www.piquaoh.org/hotel_restoration_project.htm))

**Troy-Hayner Cultural Center.** Mary Jane Hayner built the residence along Main Street in Troy after her husband's death in the early 1900s. After



Segment One Notable Historic and Cultural Resources (Visit [www.nps.gov/nr](http://www.nps.gov/nr) for a Full List of this Area's National Register of Historic Places Sites)





Fort Piqua Plaza



Miami County Courthouse



Overfield Tavern



Eldean Covered Bridge

her death in 1942, the building served as a library for many years. Today, Troy-Hayner Cultural Center hosts art exhibits, concerts, meetings, parties, live entertainment, and many community events for children and adults. Its famous whiskey collection is just one of the features in the mansion's 10-plus rooms. The Hayner Mansion was left by Mrs. Hayner to become a resource for the betterment of the community. ([http://tdn-net.com/news/home\\_top-news/3584435/A-gift-that-keeps-giving](http://tdn-net.com/news/home_top-news/3584435/A-gift-that-keeps-giving))

**Miami County Courthouse.** One of the most majestic courthouses along the Great Miami River, the Miami County Courthouse was built in 1885. The building has high, arched windows and prominent columns at the main entrance. Towers anchor the four corners and a central clock tower and dome rise from the center of the structure. The three-story Neo-Renaissance style courthouse stands 183 feet tall with its cast-iron domes and copper statue of justice. It was added to the National Register of Historic Places in 1975. (<http://m.visitmiamicounty.org/attractions/troy.php>)

**Overfield Tavern.** The Tavern was built in 1808, becoming the center of action in the small settlement community of Troy. It was a place to meet area residents and travelers, to find society, comfortable lodging, and good food and drink. Until 1811, the County Court met in an upstairs room of the tavern. The tavern also housed the local Masonic Lodge, one of the first in the state of Ohio. The tavern has been restored and is now a museum open to individuals, groups, and school classes. (<http://overfieldtavernmuseum.com>)

### 2.4.3 Historic Bridges, Canals, and Transportation Corridors

In Segment One, historic bridges, canals, and transportation corridors include the Twin Arch Stone Culvert at Twin Arch Park, the Eldean Covered Bridge at Covered Bridge Park, the Miami and Erie Canal, and the Big Four Bridge in Sidney. The Piqua Historical Area–Johnston Farm & Indian Agency provides interpretive canal boat rides on the “General Harrison” along a restored portion of the Miami and Erie Canal. Lock Nine Riverfront Park includes interpretive signage of the history of the Miami and Erie Canal in Piqua and remnants of a canal lock. The Village of Tadmor was a major transportation crossroads, but was abandoned in the early 20th century, when the Taylorsville Dam was constructed. A marker sign is located along the Great Miami River Recreation Trail describing the village.



#### 2.4.4 Archaeological Sites

Fort Pickawillany was a trading post and stockade fort erected by English colonists to protect their claim from the French. A marker commemorating Fort Pickawillany is located on Hardin Road in Piqua.

#### 2.4.5 Historic and Cultural Resources Synopsis

The region's heritage has the potential to attract visitors to the corridor. Historic districts and structures in the area attract activity to the riverfront, and interpretation of historic transportation routes in the area (particularly the Miami and Erie Canal) attracts tourists. The most prominent of these sites is the Piqua Historical Area–Johnston Farm & Indian Agency, which provides interpretive canal boat rides on the "General Harrison" along a restored portion of the Miami and Erie Canal. Other sites, such as Lock Nine Riverfront Park and Twin Arch Stone Culvert, include interpretive signage of the history of the Miami and Erie Canal and remnants of canal structures.

### 2.5 FLOOD RISK REDUCTION

#### 2.5.1 Overview

The Miami Conservancy District owns and maintains the flood protection system that reduces the risk of flooding to areas of Piqua, Troy, and Tipp City within Segment One. The dams, levees, and modified channels play a key role in the development of recreation along the Great Miami River corridor.

#### 2.5.2 Dams

Four of the five Miami Conservancy District dams are on tributaries to the Great Miami River. The fifth, Taylorsville Dam, is located across the Great Miami River within Segment One at RM 90.9. The dam is a

dry retention dam, and the inundation zone at peak storage volume can cover 11,000 acres and reach 14 miles upstream to State Route 41 in Troy. The area behind the dam is encompassed by Taylorsville MetroPark, a 1,083-acre regional destination park featuring forested floodplain, preserved wetlands, the Great Miami River Recreation Trail, historic sites, and other amenities. Boaters on the Great Miami River must take out upstream of the dam and portage to the downstream side.

There are five low-head dams in Segment One, but they do not contribute to flood risk reduction. These dams are maintained for water supply and/or recreation purposes.

#### 2.5.3 Levees

##### Sidney

The Great Flood of 1913 caused an estimated \$212,000 in property damage (1913 dollar value) and no deaths in Sidney and Shelby County. The levees in Sidney are not part of the Miami Conservancy District flood protection system. The levee at Custenborder Fields is a grass-covered embankment and barely noticeable.

##### Piqua

The Great Flood of 1913 caused 49 deaths and an estimated \$1 million in property damage (1913 dollar value) in Piqua. The flood protection system at Piqua today provides risk reduction to approximately 307 acres containing 1,400 properties valued at more than \$111 million and a population of nearly 3,800.

The flood protection system at Piqua includes three separate levees totaling 2.8 miles. The levees are typically grass covered, but in some areas, concrete revetment lines the riverside slope. Many of the levees



Taylorsville Dam



Old Piqua Power Plant Low-Head Dam

are high and steep, and difficult for pedestrians to cross. Stairways at several locations provide pedestrian access to the levee tops, and levee-top benches provide wide vistas of the river channel below. The levees and river channel provide the location for the Great Miami River Recreation Trail, as well as the Garnsey Street/ Bridge Street boat ramp. Lock Nine Riverfront Park, a community park, is situated atop the levee at the bend of the river immediately upstream of Linear Park.

## **Troy**

The Great Flood of 1913 caused 19 deaths and an estimated \$600,000 in property damage (1913 dollar value) in Troy. The flood protection system at Troy today provides risk reduction to approximately 709 acres containing 3,800 properties valued at more than \$230 million and a population of nearly 10,100.

The flood protection system at Troy includes two levees totaling 3.5 miles. The levees are typically grass covered, but in some areas, concrete revetment lines the riverside slope. Many of the levees are high and steep, and difficult for pedestrians to cross. Concrete floodwalls supplement the earthen levees in several areas. Stairways and bikeway ramps at several locations provide pedestrian and cycling access to the levee tops and river channel.

Treasure Island, a regional destination park, is situated on a grass-covered and forested area between the river and the right-bank levee toe. On the left bank, the levee top between Adams Street and Market Street is 100-foot wide and serves as a community park featuring trees, benches, and a lighted path. The levee top has been the site of events and festivals. It is connected to the river channel via two stairways and a paved bike ramp. The river channel in this area is also the site of community activities, including annual high school cross-country meets, and camping for community events. The first section of the Great Miami River Recreation Trail was built atop the levees in Troy.

## **Tipp City**

The Great Flood of 1913 caused minimal property damages and no deaths in Tipp City. The flood protection system at Tipp City today provides risk reduction to approximately 77 acres containing 350 properties valued at nearly \$35 million and a population of more than 900.

The flood protection system at Tipp City includes one levee totaling 1.2 miles. The levee is typically grass covered. Concrete floodwalls supplement the earthen levees in several areas. Some areas of the levees are high and steep, and difficult for pedestrians to cross. Part of the Great Miami River Recreation Trail runs along the toe of the levee.

## **Preserved Floodplains**

Several parks in Segment One were created in floodplains, including Custenborder Field, Barbee Memorial Park, Treasure Island, Tippecanoe Community Park, Kyle Park, and Taylorsville MetroPark. Flooding in these areas can occasionally affect these parks and temporarily affect their use. Use of floodplain land for parks allows public access to natural areas and prevents development in flood-prone areas.

### **2.5.4 Flood Risk Reduction Synopsis**

Dams, levees, and preserved floodplains help reduce flood risk. The Taylorsville Dam is included in Segment One. One of the corridor's largest parks, Taylorsville MetroPark is located in the area around Taylorsville Dam. Boaters on the Great Miami River must take out upstream of the dam and portage to the downstream side. Levees in Piqua, Troy, and Tipp City create opportunities for trails, parks, and event locations. However, some levees create visual and physical barriers for accessing the river. Floodplain lands also create spaces to locate recreational amenities, but can be subject to flooding.

## **2.6 NEW PROJECTS**

### **2.6.1 Public Projects**

Several new riverfront parks or recreation amenities are in various stages of visioning, planning, design, and implementation throughout Segment One. New amenities in Segment One range from Great Miami Recreation Trail extensions to riverfront parks, river access points, and campsites. The following is a description of new projects and their stage of development as of October 2014.

#### **Low-Head Dam Portage at Custenborder Fields**

**(RM 128).** The city of Sidney plans to construct a new, safe portage around the low-head dam at Custenborder Fields. The project is in its visioning stage. A designated portage area will improve navigability.

#### **Sidney Trail Connectors (RM 128.0 to RM 126.4).**

The city of Sidney plans to construct linkages from downtown to existing parks (Custenborder, Tawawa, and Roadside Park) to the existing recreation trail and the Great Miami River corridor. The project is in its visioning stage.

#### **Great Miami River Recreation Trail section from Sidney to Piqua (RM 122.8 to RM 116.3).**

There is currently a gap in the recreation trail between Sidney and Piqua. Filling this gap is envisioned but not yet planned or funded. To date, there is no lead agency for this project in Shelby County. Miami County is looking



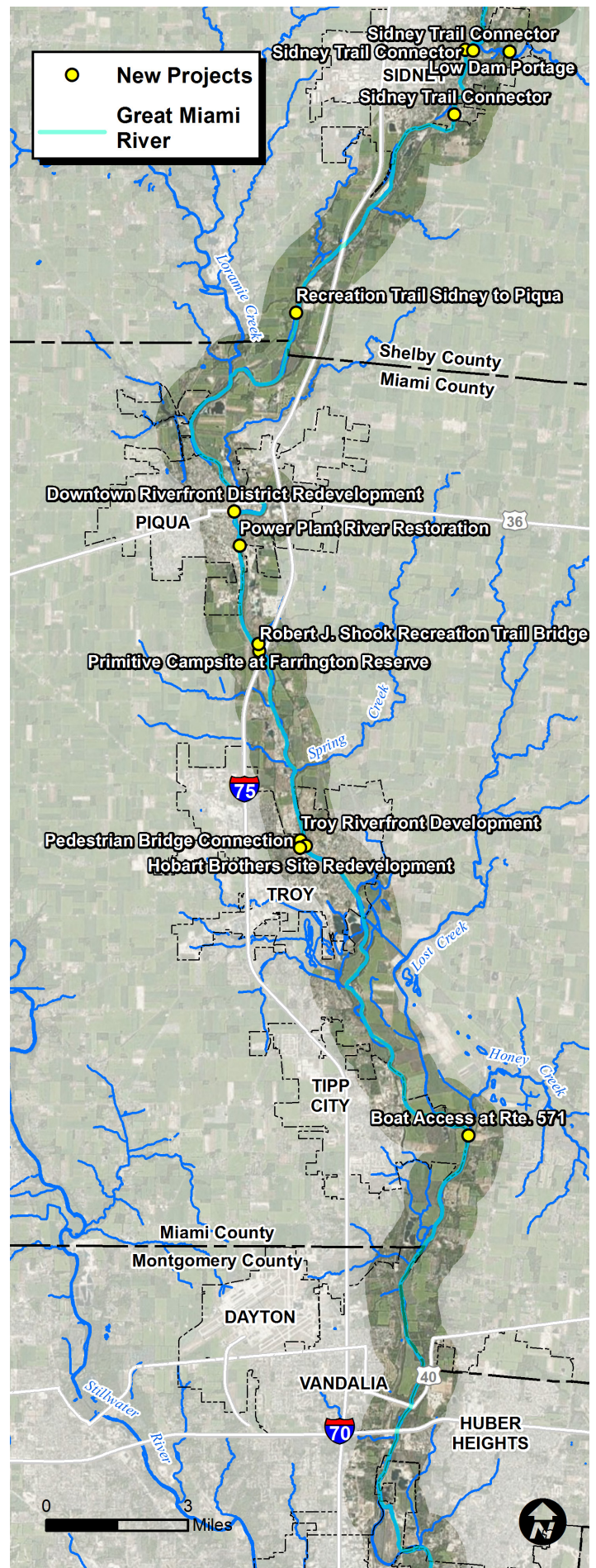
at planning for the section from RM 122.8 to RM 120. Once the gap in the recreation trail is connected from Sidney to Piqua, significant progress will be made to a continuous trail along the Great Miami River corridor.

**Piqua Downtown Riverfront District Redevelopment Project (RM 113).** The city of Piqua has completed a master plan that calls for the demolition or redevelopment of several buildings along the riverfront, and park improvements to transform several blocks around Main and Water Streets into a more walkable place. Tentative plans call for a new amphitheater, a riverfront park, and more avenues for walking, biking, and boating. ([piquaoh.org/feature\\_downtown\\_riverfront\\_redevelopment\\_planning.htm](http://piquaoh.org/feature_downtown_riverfront_redevelopment_planning.htm)) The concept plan was presented in February 2014. The redevelopment project will increase the amount of open space provided in downtown, while strengthening the connectivity and accessibility to the river in a central location. The project is located at the crossroads of the Great Miami River Recreation Trail and the Ohio-to-Indiana Trail. Plans also include the opportunity to highlight the history of the Miami and Erie Canal that used to run through the site. These projects will develop an activity center that ties the community's art, culture, entertainment directly to the river.

**Piqua Power Plant River Restoration Project (RM 112.1).** The city of Piqua plans to modify the existing low dam to enhance river recreation opportunities. The dam was built to provide cooling water to the now-decommissioned power plant. This section of the river is popular for waterskiing. A dam modification is in the visioning stage. A scenic overlook was completed in October 2014 along the Great Miami River Recreation Trail.

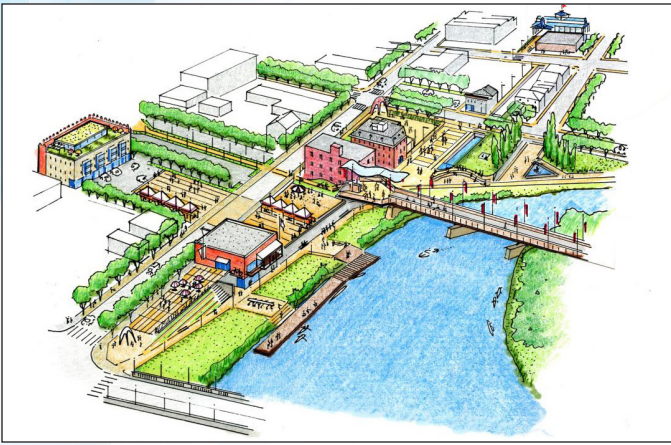
**Robert J. Shook Recreation Trail Bridge (RM 110).** The dedication of the Robert J. Shook Bridge between the cities of Piqua and Troy completed a continuous trail connecting Piqua to many miles of recreation trail to the south. The official bridge dedication ceremony took place on October 3, 2014, at the bridge located in Farrington Reserve.

**Primitive Campsite at Farrington Reserve (RM 110).** The Miami County Park District is planning to designate a new primitive camping site along the left bank of the Great Miami River. The park district owns the property and expects to allow primitive camping by permit in 2015. Currently, there are only two designated camping areas within this segment of the river, at river miles 94 and 91. The proposed primitive campground would add an additional site to the north of Troy.



Segment One New Project Locations





Piqua Downtown Riverfront District Redevelopment Project



Piqua Power Plant River Restoration Project



Troy Riverfront Development (Treasure Island Improvement Plan)



Hobart Brothers Factory Demolition/Future Redevelopment Site

**Troy Riverfront Development (RM 106).** The city of Troy is planning to update Treasure Island and Marina and the Hobart Arena. The plan is to rehabilitate a marina building and redesign a park with a river walk, lighthouse, play features for children, shelters, a natural river corridor ecosystem landscape, and boating and canoe launch areas. The proposed plan also includes a possible loop trail and pedestrian connector bridge over the Great Miami River to Treasure Island and Duke Park. In September 2014, the Troy City Council approved funding for consultants to design improvements for Treasure Island Park and Hobart Arena, the Marina building construction work, and parking lot reconstruction at Treasure Island Park. Council also approved consultants to complete plans and bidding documents for the marina building and construction administration.

The Treasure Island project will improve river interaction for the community because it is the primary location at which the community can engage the river directly. The project will improve an existing resource by updating community space at the marina and adding picnic areas, pavilion, new playground, and an amphitheater. The marina has the potential to become a major hub along the corridor by providing space for bicycle and watercraft rentals, along with a snack shop.

Improvements of Hobart Arena will extend the life of this 1950 facility, upgrade interior space, and help broaden current sports and entertainment programming. A second sheet of ice would provide opportunities for large competitions for hockey and skating programs, and provide programming flexibility while the main arena is being used for events.

**Pedestrian Bridge Connecting Treasure Island and Marina to Duke Park (RM 106).** A pedestrian bridge over the Great Miami River has been proposed to connect the Great Miami River Recreation Trail and Treasure Island on the right bank to Duke Park on the left bank of the river. This has been a concept and no formal planning or feasibility studies have been implemented yet. This project will provide a complete 3.5-mile trail loop on either side of the river within the city of Troy, linking a majority of the city parks and amenities along the Great Miami River with neighborhoods on both sides of the river. Treasure Island Park has the opportunity to become a major activity hub for the community, with its proposed improvements and linkages. One way to accomplish this is to improve linkages back to downtown, which could open opportunities for redevelopment of the former Hobart Brothers Company Building and pedestrian linkages along the right river embankment between Treasure Island Park and Market Street Bridge.

**Boat Access at Route 571 (RM 97).** The Miami County Park District plans to build a new Americans with Disabilities Act-compliant boat ramp on the bank of the Great Miami River. The park district owns the property, which is 1.8 miles downstream from the existing boat ramp near Tippecanoe Community Park. A design and funding have not been secured.

### 2.6.2 Private Investment

The synergy of the corridor continues to grow with the development of activity hubs, enhancement of parks, and integration of trails into the surrounding community. The communities in this segment are exploring opportunities to encourage private investment and redevelopment or reuse of their riverfronts. This is an opportunity to link the communities' art, culture, entertainment, and economy with the river and to preserve and revitalize the historic downtown business districts.

#### **Piqua Downtown Riverfront District**

**Redevelopment Project.** In conjunction with the proposed public spaces mentioned previously, there are plans to encourage private investment of the surrounding buildings. The revitalization and reuse of these buildings are expected to complement the vision for the area. Some options for reuse of the space include restaurants with river views, event or entertainment space, commercial and residential space, and outdoor equipment rental.

#### **Hobart Brothers Building Site Redevelopment.**

Troy is exploring options to redevelop the site to complement downtown and current riverfront plans. The old factory is being demolished. The property is a major linchpin for the community because of its location in downtown Troy and near Treasure Island Park, the Great Miami River Recreation Trail, and the new Adams Street Bridge over the Great Miami River. The Adams Street Bridge connects the project site to Hobart Arena, Troy schools' athletic stadiums, the Aquatic Center, and Community Park.

**Small Businesses.** Private businesses are taking advantage of the Great Miami River's assets and its location. Recreation shops and outfitters in the corridor provide supplies, gear, and apparel to outdoor enthusiasts. Liveries and river guides provide river recreation opportunities. Restaurants, coffee shops, bars, breweries, and bed and breakfasts offer amenities for river and trail users.





## 3. SEGMENT TWO

SEGMENT MILE (87.5 - 74.5)

### 3.1 OVERVIEW

Segment Two is the most developed and urban centric of the three segments. There is a higher concentration of parks, connecting bikeways, and development within this segment. Segment Two begins north of Dayton at RM 87.5 (Rip Rap Road Bridge) and extends through the city of Dayton to RM 74.5 (East River Road Boat Ramp). Dayton supports the fourth-largest metropolitan population in Ohio after Cleveland, Cincinnati, and Columbus. This large population center is a leader in many areas, including defense, aerospace, and health care, with a wide variety of businesses, respected universities, and cultural institutions.

The segment was evaluated for recreation resources, activity hubs, historic and cultural resources, flood risk reduction, and new projects. During August 2014, observations were made of existing conditions at select sites along the Great Miami River corridor (sites visited shown in blue):

- **Needmore Conservation Area (RM 85.8)**
- Kitty Hawk Golf Center (RM 85.5)
- **Eintracht Park (RM 84.3)**
- Triangle Park (RM 82)
- **Island MetroPark (RM 81.7)**
- Kettering Fields (RM 81.5)
- Korean War Memorial (RM 80.8)
- **Deeds Point MetroPark (RM 80.7)**
- **RiverScape MetroPark (RM 80.4)**
- Rivers Edge (RM 79.7)
- **Sunrise MetroPark (RM 79.6)**



Needmore Conservation Area (RM 85.8)

The Great Miami River Corridor Study

- **McIntosh Park (RM 79.5)**
- Freedom Park (RM 78.8)
- Miami Valley Vietnam Veterans Memorial (RM 77.8)
- **Carillon Historical Park (RM 77.2)**
- **Tait Station Low-Head Dam (RM 76.6)**
- SunWatch Indian Village/Archaeological Park (RM 75.5)
- **East River Road Boat Ramp (RM 74.5)**

### 3.2 RECREATION RESOURCES

#### 3.2.1 Trails

##### Recreation Trails

Many of the parks listed in this segment connect to the Great Miami River Recreation Trail and to each other via the trail. Users can easily access the trail, since much of it runs along or near paved streets. Way-finding signage along the trail is frequent; however, signage to the trail from roadways is lacking. Public transit operated by the Greater Dayton Regional Transit Authority is available to most trail access points.

The Great Miami River Recreation Trail connects to the Stillwater River Trail, Mad River Trail, and Wolf Creek Trail in this segment. The Great Miami River Recreation Trail, Buckeye Trail, and North Country National Scenic Trail merge and share some of the same trail alignment in Segment One. At Deeds Point, the Buckeye Trail and North Country National Scenic Trail branch off to follow the Mad River Trail.

The surface of the Great Miami River Recreation Trail is paved in asphalt or concrete. There are no gaps



Eintracht Park (RM 85.5)





Island MetroPark (RM 81.7)



Deeds Point MetroPark (RM 80.7)



RiverScape MetroPark (RM 80.4)



Sunrise MetroPark (RM 79.6)



McIntosh Park (RM 79.5)



Carillon Historical Park (RM 77.2)



Tait Station Low-Head Dam (RM 76.6)



East River Road Boat Ramp (RM 74.5)



in the trail in this segment. The Great Miami River Recreation Trail splits and parallels both sides of the Great Miami River for about 5 miles. This allows improved access and a greater volume of foot and bike traffic along the trail, which sets the system up for future high-volume events and activities.

In several areas, there are also local walking trails, including the North River Walk and South River Walk, located on both banks in downtown Dayton. Some sections of the river walk are gravel and some sections are brick. Swings overlooking the Great Miami River and Dayton skyline offer respite along the lighted North River Walk.

The Great Miami River Recreation Trail helped the city of Dayton earn a *Bicycle Friendly Community* designation from the League of American Bicyclists and a *Trail Town* designation from the Buckeye Trail and North Country Trail associations.

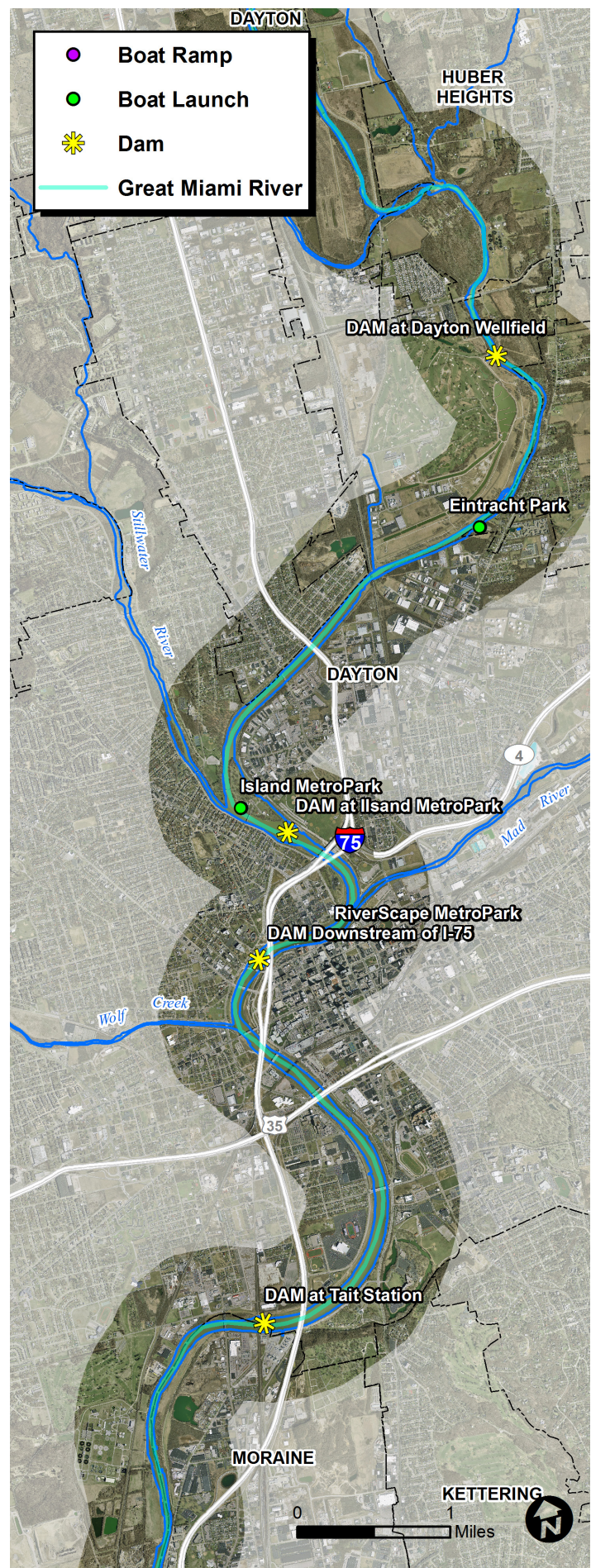
Overall, the trail network within this segment has multiple access points and connections to many parks, trails, and attractions. Downtown attractions are an easy walk from the Great Miami River Recreation Trail, and a large number of bus stops and bus routes are nearby.

### Water Trail

Throughout this segment, the Great Miami River is a state-designated water trail. Kayak rentals are available seasonally at Riverscape MetroPark. Although there are only three public boat ramps in this segment, there are many locations along the river that have wide, flat beach areas where hand-carried boats can launch. The following sites contain public boat ramps along Segment Two:

- Triangle Park
- Island MetroPark
- East River Road Boat Ramp

Navigability along this segment of the Great Miami River Water Trail is restricted by four low-head dams at river miles 85.8, 81.3, 79.9, and 76.6. To get around the low-head dams, portaging is required. Areas were paved to create portage at the dams at river miles 81.3, 79.9, and 76.6; however, improvements to these portages are necessary. Providing safe portage could improve continuity and open more miles of the river to boating. Portages can be simple routes, such as trails, made of soil, gravel, or concrete, or may be built structures, such as staircases with chutes or slides. Safe portage should include adequate signage.



Segment Two Boat Launch and Boat Ramp Locations



Removing or modifying the low-head dams could allow for greater flow of traffic and improve safety along the water trail.

Creating additional boat ramps in this segment could increase recreation on the river.

### 3.2.2 Facilities

#### Family/Event Facilities

There are several pavilions, band shells, and amphitheaters within Segment Two, most notably at Island MetroPark and RiverScape MetroPark. The band shell at Island MetroPark is suitable for small music events and concerts, with a deep lawn in front to accommodate larger crowds. The pavilion at RiverScape MetroPark is a multi-use facility that is used year-round. Events and programming include multiple festivals, a free summer concert series, fitness classes, an ice rink in the winter, and many more special events throughout the year.

#### Lodging and Other Accommodations

In Segment Two, there are many hotels in the river corridor and two on the Great Miami River. There are no campgrounds along Segment Two of the corridor, and there is little suitable land remaining in the surrounding dense, urban environment. However, Five Rivers MetroParks has allowed camping in its facilities in this segment by special permission.

#### Sports Facilities

Parks along this segment of the Great Miami River corridor provide a few locations for sports activities, including softball, baseball, soccer, basketball, and tennis. These parks include Triangle Park, Kettering Field, and McIntosh Park. This segment of the corridor also includes the Kitty Hawk Golf Center, a public facility.

#### Playgrounds and Picnic Grounds

There are multiple facilities with playgrounds and picnic grounds. Island MetroPark, RiverScape MetroPark, and McIntosh Park offer water-play features. Eintracht Park, Triangle Park, Island MetroPark, and McIntosh Park have shelters; RiverScape is a popular place for picnicking and offers music at lunch seasonally. Island MetroPark and McIntosh offer play structures.



RiverScape MetroPark Pavilion



Kitty Hawk Golf Center



McIntosh Park Spray Pad

### 3.2.3 Parks

#### Regional Destination Parks

Segment Two attracts visitors to several regional destination parks with multiple amenities.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Island MetroPark	x	x	x	x
Kettering Fields	x	x		
Korean War Memorial	x			
RiverScape MetroPark		x	x	x
Miami Valley Vietnam Veterans Memorial	x			
Carillon Historical Park	x	x		
SunWatch Indian Village/ Archaeological Park	x	x		

- Island MetroPark is a large regional park situated on its own island in the middle of the Great Miami River. It is a family-oriented park with walking paths, restrooms, band shell, small boat dock, and playground.
- Kettering Fields is a large baseball/softball complex, providing playing fields of various sizes.
- The Korean War Memorial and the Vietnam Veteran's Memorial are small parks that attract visitors because of their historical significance.
- RiverScape MetroPark is Dayton's most iconic park and draws tens of thousands of people a year. RiverScape provides direct access to the Great Miami River Water Trail and Recreation Trail, bicycle and kayak rentals, seating and picnic areas, and a large tensile pavilion that has multiple uses (concerts/special events/ice rink).

- Carillon Historical Park is home to 25 historical buildings and hundreds of artifacts, including the 1905 Wright Flyer.
- SunWatch Indian Village/Archaeological Park features programming and exhibits on early culture.
- All seven parks are easily accessible by major roads and are within a short walking distance of several Greater Dayton Regional Transit Authority bus routes.
- All of the parks in this group, minus SunWatch Indian Village, provide access to the Great Miami River Recreation Trail.
- Island MetroPark and RiverScape MetroPark provide direct access to the Great Miami River.
- All of the parks, except RiverScape MetroPark, provide a parking lot. Parking for RiverScape is limited to on-street parking, although there are public surface parking lots and parking garages within walking distance.
- Three of the seven parks were visited as part of this study.

#### Community Parks

A variety of community parks serve the area along the river corridor in Segment Two.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Triangle Park	x	x		x
Deeds Point MetroPark				
Rivers Edge				
McIntosh Park		x	x	x
Sunrise MetroPark				

- All five parks are accessible by major roads and are within a short walking distance of several Greater Dayton Regional Transit Authority bus routes.
- Deeds Point MetroPark, River's Edge, Triangle Park, and Sunrise MetroPark are directly on the Great Miami River.



- All of the parks in this group provide access to the Great Miami River Recreation Trail.
- Triangle Park is the only one that has off-street parking; all other parks rely on on-street parking.
- Three of the six parks were visited as part of this study.

### Neighborhood Parks

There are just two neighborhood parks in Segment Two.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Eintracht Park	x			x
Freedom Park				

- Both parks provide access to the Great Miami River Recreation Trail and are directly on the Great Miami River.
- Both parks are accessible by major roads and are within a short walking distance of several Greater Dayton Regional Transit Authority bus routes.
- Eintracht Park has off-street parking, while Freedom Park is limited to on-street parking.
- Eintracht Park was visited as part of this study.

### Roadside Parks

Segment Two has two roadside parks.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Tait Station Low-Head Dam	x			
East River Road Boat Ramp	x			

- Both parks provide access to the Great Miami River Recreation Trail and are directly located on the Great Miami River.
- Both parks are accessible by major roads and are within a short walking distance of several Greater Dayton Regional Transit Authority bus routes.
- Both parks have off-street parking, but Tait Station's parking lot is in poor condition.
- Both parks were visited as part of this study.

### 3.2.4 Conservation Areas/Nature Centers

There are currently no nature centers along this stretch of the Great Miami River. The Needmore Conservation Area is land along the river set aside for conservation, but is currently not open to the public. At Sunrise MetroPark, there are native plantings and a wildlife viewing area. SunWatch Indian Village/Archaeological Park also includes educational programs and conservation areas.

### 3.2.5 Recreation Resources Synopsis

In this segment, the Great Miami River Recreation Trail has no gaps, is on both sides of the river, and is well connected to the broader trail network.

All recreation activities and resources assessed for this segment are either on or in close proximity to the Great Miami River. Continuity of the Great Miami River Water Trail is challenged by four low-head dams.

Of significance are RiverScape MetroPark, Carillon Historical Park, and SunWatch Indian Village/Archaeological Park, which annually draw thousands of visitors to the region.

Public transportation and connectivity to the corridor is abundant, with many bus routes crossing or running alongside the Great Miami River corridor. All buses are equipped with bike racks, which make it even easier for users to enjoy the area's recreation resources without having to spend the time and money to drive themselves to the area's Great Miami River Recreation Trail access points.

This segment does not have many parks with athletic fields; however, sports activities are supported at Triangle Park, Kettering Fields, and McIntosh Park.

## 3.3 ACTIVITY HUBS

### 3.3.1 Parks

The activity hubs in Segment Two consist of community focal points and gathering areas.

**RiverScape MetroPark.** The park is centered along the Great Miami River corridor and has become the focus of activity along the river for both the city and the greater region. For example, visitors can rent a bike, listen to live music, exercise, dine, relax in the gardens, splash in the interactive water-play fountain, and enjoy the sights and sounds of downtown and the river. RiverScape links downtown Dayton to the river and is a popular community gathering place. Some of the activities and events offered through this central location include:

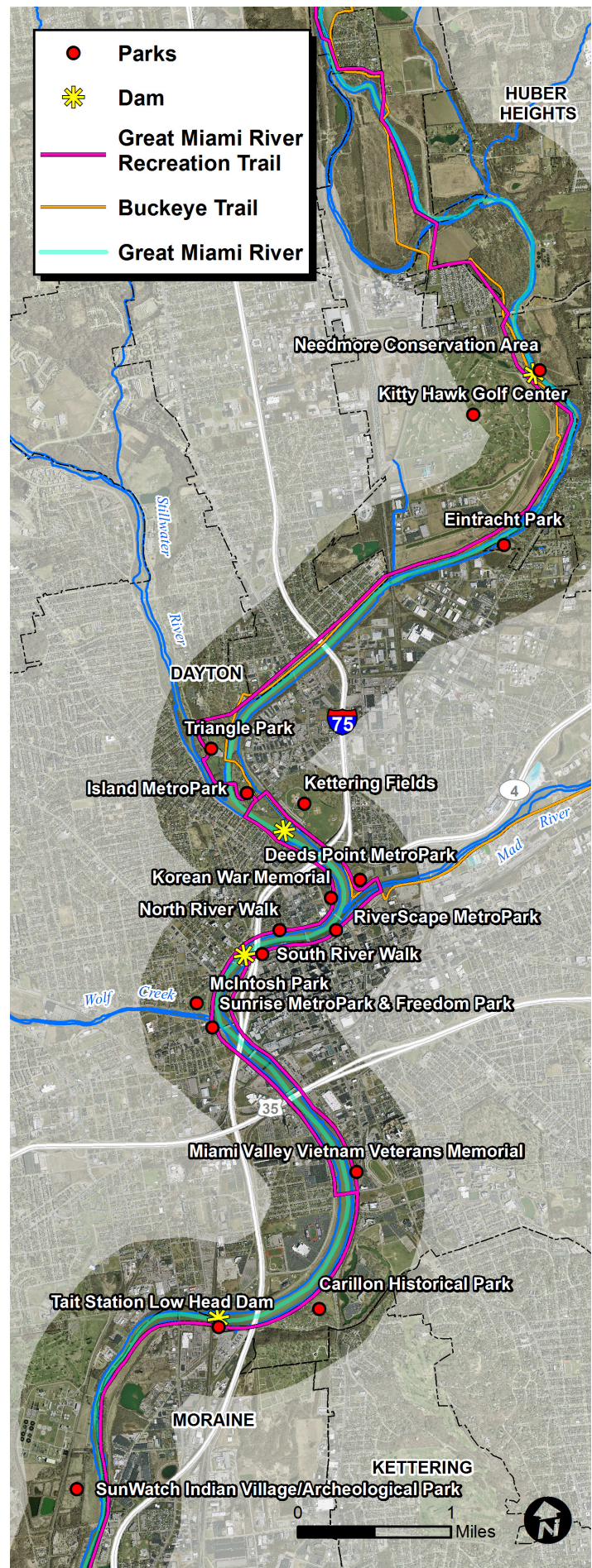
- Bike, kayak, and pedal boat rentals
- Bike hub secure bike storage, showers, and restrooms
- Four-season pavilion
- Food concessions
- Fountain of Lights, a large fountain that sprays over the river
- Interactive water features
- Inventor's River Walk
- Events/programming:
  - Free summer weekend concerts
  - Fitness
  - Ice rink
  - Music
  - Many festivals

**Island MetroPark.** This 33-acre park provides a variety of areas for the community to interact, including shelters, a band shell, and an interactive water-play area. The Greater Dayton Rowing Association also uses the island for its activities, carrying on a 100-year-old tradition of regattas on the river.

**McIntosh Park.** Consisting of 7.3 acres, the park provides sports facilities, shelters, a spray park, playground, and recreational areas.

### 3.3.2 Attractions

**Boonshoft Museum of Discovery.** Boonshoft is an interactive children's museum that focuses on science. Exhibits feature natural history, local water resources, and animals native to Ohio.



Segment Two Park and Trail Locations





Boonshoft Museum of Discovery



Dayton Art Institute



University of Dayton



SunWatch Indian Village

**Dayton Art Institute.** Founded in 1919, the Dayton Art Institute contains a global collection spanning 5,000 years of art history. More than 1,000 items from this collection are permanently exhibited. The distinctive Romanesque building sits atop a hill on the edge of the Great Miami River, overlooking downtown Dayton.

#### **Dayton Aviation Heritage National Historical Park.**

This park consists of sites that tell the stories of Wilbur Wright, Orville Wright, and Paul Laurence Dunbar. Sites near the Great Miami River corridor offer the opportunity to experience the historically refurbished Wright brothers' printing office, walk through an original Wright brothers' bicycle shop, and experience Paul Laurence Dunbar's home.

**Sinclair Community College.** Located on the Great Miami River in downtown Dayton, Sinclair Community College has 24,000 students and hosts community and special events.

**University of Dayton.** Located on the Great Miami River, the University of Dayton is a top-tier Catholic research university founded in 1850 with offerings from undergraduate to doctoral levels. It has a total undergraduate enrollment of 7,975 on a 373-acre campus. The Rivers Institute at the University of Dayton brings key partners in the Dayton community together to promote, preserve, and protect the Great Miami River. Students, faculty, and staff work with community members, stakeholders, and local organizations to build community around the rivers. The University of Dayton Arena and Welcome Stadium host large sporting events.

**Carillon Historical Park.** Carillon is a 65-acre park, home to 25 historical buildings, and many exhibits. The park is split into different sections, including settlement, transportation, invention, and industry. The name of the park originates from the placement of the Deeds Carillon, a 151foot-tall carillon tower built in 1942, which is on the National Register of Historic Places. Among Carillon's exhibits is the original 1905 Wright Flyer III, the world's first practical airplane.

**SunWatch Indian Village/Archaeological Park.** This park features a reconstructed Fort Ancient Native American village typical of what would have been in this region from 1000 to 1750 AD. This National Historic Landmark is open to the public. SunWatch Indian Village is a sister site to the Boonshoft Museum of Discovery.

### **3.3.3 Entertainment/Special Events**

In addition to entertainment and special events at the parks in Segment Two, the city of Dayton offers a variety of cultural, art, entertainment, sporting, and special events just blocks away from the Great Miami River.



**Urban Nights.** This free event showcases downtown's dining, nightlife, art, music, retail, urban living options, and more twice a year—once in the spring and once in the fall. The event has been described as a huge, all-inclusive street party and open house for downtown, with something for everyone to enjoy. The event location changes but has included events on and along the river.

**First Friday.** This art hop features exhibit openings at the galleries, along with a variety of entertainment options, including street performances and roaming entertainers, outdoor concerts, an urban street-cycling ride, arts demonstrations, live music, and more. More than a dozen locations are involved, including RiverScape, art galleries, retail shops, restaurants and bars, and coffee shops.

**Dayton Dragons.** The Dayton Dragons, a Class A minor league baseball team that plays in the Midwest League came to Dayton in 2000 after residing in Rockford, Illinois. Attendance at Dragons games at the ballpark holds the record for most consecutive sellouts by any professional U.S. sports team, with more than 815 sold-out games.

**Dayton Greek Festival.** A Greek tradition for the young and old, the festival brings together people of all backgrounds to celebrate all things Greek—food and pastries, unique boutique items, cooking demonstrations, imported beer and wine, craft beer, live music, dance performances, and tours of the beautiful church.

**Dayton Art Institute Oktoberfest.** This community event boasts a diverse array of artisans; unique foods; ample domestic, international, and craft beers; kid-friendly art activities; live music on two stages; international wines; and more.

**Greater Dayton Rowing Association Regatta.** The regatta is a 2,000-meter head race on the Great Miami River that attracts 1,000 rowers and spectators.

**Eintracht Singing Society.** The Society promotes German culture and traditions with their annual German Day Festival, biergartens featuring live music, German and American home-cooked food, special dinners, fish fry events, dances, and concerts by the Eintracht Chorus.

**Runs, Walks, and Cycling Events.** The Great Miami River Recreation Trail hosts dozens of special events each year.



Urban Nights Performer



Dayton Dragons Stadium (Fifth Third Field)



Dayton Art Institute Oktoberfest



Greater Dayton Rowing Association Regatta



### 3.3.4 Activity Hubs Synopsis

Segment Two is rich in activity hubs. There are many large events, activity and community spaces, arts and cultural attractions, and entertainment venues in the Great Miami River corridor. RiverScape MetroPark is the main activity hub on the Great Miami River and heavily incorporates the river into programs and events.

Some parks in the corridor are located on or near the Great Miami River but do not necessarily use the river. Some of the parks in Segment Two are not activity hubs because they are in poor condition and/or have few amenities.

## 3.4 HISTORIC AND CULTURAL RESOURCES

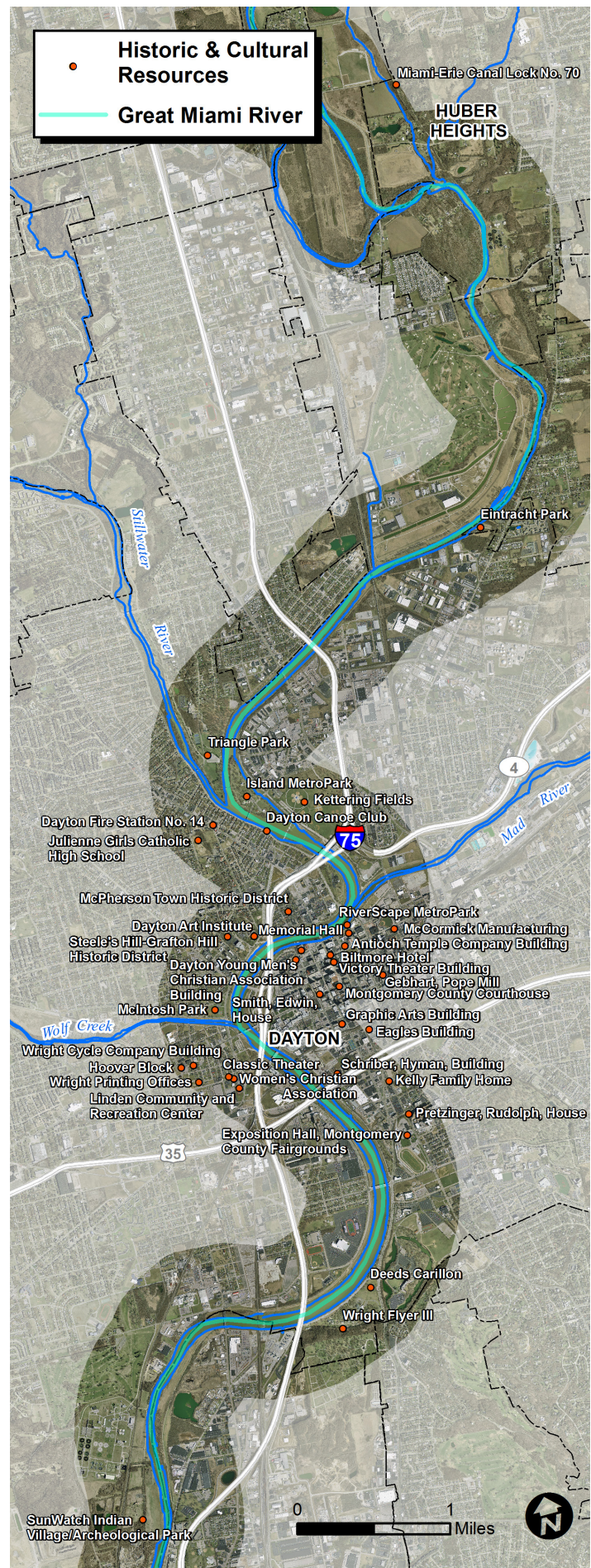
### 3.4.1 Historic Districts

Historic districts in the area include McPherson Town, Steele's Hill-Grafton Hill, and Wright-Dunbar. McPherson Town is an area of Victorian houses along the river across from downtown Dayton. Steele's Hill-Grafton Hill perches high above the river (across from downtown Dayton) and is occupied by several majestic historic structures, such as the Dayton Art Institute, the Dayton Masonic Temple, and Annunciation Church. The Dayton Art Institute hosts Oktoberfest and Annunciation Church hosts the Dayton Greek Festival annually. McPherson Town residents enjoy easy walking distance to riverfront activities such as biking, kayaking, and viewing fireworks. Wright-Dunbar is a historically significant business district west of downtown Dayton. Wright-Dunbar is the center of the neighborhood where Wilbur and Orville Wright invented the airplane. African American poet Paul Laurence Dunbar began his career here.

### 3.4.2 Historic Buildings and Structures

There are countless historical sites and buildings in Dayton, including many notable facilities close to the Great Miami River.

**Eintracht Park.** Eintracht Park, at 2707 Old Troy Pike, was constructed in 1932 for picnics and festivals held by the Arbeiter Gesangverein Eintracht (Workers Singing Society). Started by Jacob Kohl in 1904, the original membership was 21 singers. By 1917, there were 50 singers and 350 members. The grounds of the Eintracht Park provided a place where immigrant workers could meet to discuss work and social issues and to sing. Today, the site is proposed to be acquired by local organizations as a new river access park. ([www.eintrachtsingingsociety.org](http://www.eintrachtsingingsociety.org))



Segment Two Historic and Cultural Resources (Visit [www.nps.gov/nr](http://www.nps.gov/nr) for a Full List of this Area's National Register of Historic Places Sites)



**Triangle Park.** The first National Football League game was played at this park in 1920. Edward Deeds and Charles Kettering purchased the property in 1917 to serve as a recreation facility for workers of Dayton Engineering Laboratories Company, later known as Delco. Howell Field on Ridge Avenue was the home of the company's football team, the Dayton Triangles. The Triangles were a charter member of the American Professional Football Association, which later became the National Football League. Triangle Park, named for its shape at the confluence of the Great Miami and Stillwater rivers, originally was a Methodist camp in the 1800s and offered vacation cottages in the early 1900s. A marker sign exists at this city of Dayton park interpreting its history. ([www.cityofdayton.org](http://www.cityofdayton.org))

**Island MetroPark.** Island MetroPark was the White City Amusement Park in the 19th century with a dance pavilion, amusement rides, canoe lockers, and refreshment stands. The city of Dayton acquired the property and opened the park in 1914. The Leslie L. Diehl Bandshell was erected and opened in 1940. The park is now part of the Five Rivers MetroParks system and features picnic shelters, an interactive water-play fountain, walking paths, canoe/rowing docks, and playgrounds. ([www.metroparks.org](http://www.metroparks.org))

**Kettering Fields.** Kettering Fields is a recreation site located on North Bend Boulevard and includes 30 ball diamonds. Prior to its current use, the park was part of McCook Army Air Field. The U.S. Army Air Corps operated the air field from 1917 to 1927 as an experimental aviation base. Following the closure of the field, the experimental functions moved to Wright Field and later became the Air Force Research Laboratory at Wright-Patterson Air Force Base. Interpretive signage at Deeds Point MetroPark provides information about the airfield. ([www.daytonrecreationandyou.com](http://www.daytonrecreationandyou.com))

**Dayton Canoe Club.** The Dayton Canoe Club is a private membership club. During the late 1800s to the 1930s, canoeing was an especially popular pastime, and canoe clubs were a common form of recreation in riverfront cities like Dayton. In the early days, pillow-lined and Victrola-laden canoes offered romantic interludes before the day of the automobile, and canoe competitions attracted large and enthusiastic crowds. At one time, five canoe clubs dotted the banks of the Great Miami and Stillwater rivers. The last of these was the Dayton Canoe Club, which remains much as it was in 1913. Dayton Canoe Club members still use their riverfront location for canoeing. ([www.daytoncanoeclub.org](http://www.daytoncanoeclub.org))

**Memorial Hall.** Dedicated in January 1910, Memorial Hall was conceived as a memorial for local soldiers who served in the Civil War and the Spanish-American War. Two Dayton architects, William Earl Russ and Albert Pretzinger, were chosen through a competitive search to



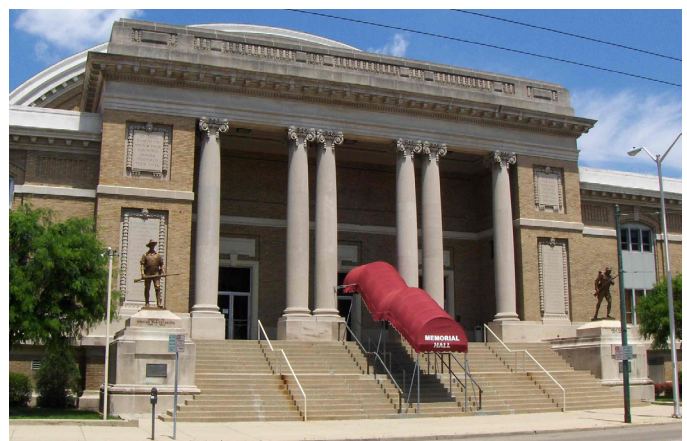
Triangle Park



Band Shell at Island MetroPark



Dayton Canoe Club



Memorial Hall



design the French Renaissance building. The memorial portion of the building consists of the soaring front entrance atrium, which is filled with bronze plaques, relief sculptures, and paintings that depict the region's military history. On the façade of Memorial Hall, the names of Civil War battles in which Montgomery County's soldiers saw action are inscribed, and two statues depict soldiers from the Spanish-American War and World War I. ([www.daytonhistory.org](http://www.daytonhistory.org))

**Antioch Shrine Temple.** On June 14, 1898, a charter was granted establishing Antioch Shrine Temple. Antioch met at several Dayton sites over the years, including the Hotel Atlas, Hotel Beckel, Phillips House, and the Masonic Temple on North Main Street in 1907. The current site of Antioch was purchased in 1919. The buildings on the property were used until 1954, when plans were finalized to build the current Art Deco/Art Modern structure used today. ([www.antiochshrinefoundation.org](http://www.antiochshrinefoundation.org))

**Engineers Club of Dayton.** Charles F. Kettering and Edward A. Deeds (cofounders of Delco) established the Engineers Club in 1913 as an organization to facilitate idea exchanges between Dayton-area engineering and technical leaders. The firm of Schenk and Williams (Engineers Club members) designed and built the current building in 1918. The building was an unofficial officers club for Army Air Corps officers from nearby McCook Field. The building was restored in 1996 and listed on the National Register of Historic Places in 2007. Engineers Club members and visitors enjoy views of the river from the second floor and access to RiverScape across Monument Avenue. ([www.engineersclubofdaytonfoundation.org](http://www.engineersclubofdaytonfoundation.org))

**RiverScape MetroPark.** RiverScape is located at the location of the former Van Cleve Park. In the late 1800s, city council member James Campbell lived across the street from the site and observed the site being used as a dumping ground. He envisioned a picturesque park along the river bank for Dayton residents to enjoy. He bought the property and placed deed restrictions on it allowing the property to become a park in 1892. Early pictures of Van Cleve Park show beautiful, carefully planted gardens and walking paths. ([www.metroparks.org](http://www.metroparks.org))

**Dayton YMCA.** A small group of gentlemen at the Wesley Chapel on Third Street in downtown Dayton established the Dayton YMCA in 1858. The YMCA grew rapidly in the late 19th century and moved multiple times. The riverfront building, which now houses the downtown branch, was dedicated in September 1929. ([www.ymcaonline.org/about-us/dayton-ymca-history](http://www.ymcaonline.org/about-us/dayton-ymca-history))

**Dayton Art Institute.** The Dayton Art Institute was founded in 1919 as the Dayton Museum of Arts. Completed in 1930, the current structure was modeled

after the Villa d'Este near Rome and the Villa Farnese at Caprarola in Italy, both examples of 16th century Italian Renaissance architecture. Sitting atop a hill on the edge of the Great Miami River, the museum was renamed The Dayton Art Institute to reflect the growing importance of its school as well as its museum. (<http://daytonartinstitute.org/about-dai/history>)

**McIntosh Park.** McIntosh Park is located along Edwin C. Moses Boulevard and includes a playground, a water-play area, basketball court, softball field, and tennis court. The park has its origins from a donation by Adam Schantz II after the Great Flood of 1913. In 1996, the park was renamed McIntosh Park to honor William Sumpter McIntosh, a local civil rights leader. McIntosh was killed by gunfire in 1974 as he tried to stop a robbery.

**Paul Laurence Dunbar House Historic Site.** The Paul Laurence Dunbar House was the 1904–1906 home of poet Paul Laurence Dunbar. Born to former slaves in 1872, Dunbar was the first African American poet to earn international acclaim. In his short life of 33 years, he published more than 400 poems, six full-length novels, plays, short stories, and lyrics for musical productions. His body of published work reveals the daunting challenges facing African Americans in the post-Civil War era and protests the widespread atrocities committed against them.

**Wright Cycle Company Building.** The fourth location of the bicycle shop opened by the Wright brothers remains in its original location and serves as a testament to their bicycle business. The location was designated a National Historic Landmark in 1990 and is part of the Dayton Aviation Heritage National Historical Park.

**Hoover Block.** Wilbur and Orville operated Wright & Wright, Job Printers, on the second floor of the Hoover Block from 1890 to 1895. The Wright-Dunbar Interpretive Center for the Dayton Aviation Heritage National Historical Park is located in the building. Hoover Block was added to the National Register of Historic Places as part of the West Third Street Historic District in 1988.

**Deeds Carillon and Carillon Historical Park.** The Deeds Carillon is the largest carillon in Ohio, and was built at the request of Colonel and Mrs. Edward Deeds. Completed in 1942, the 151-foot tower houses 57 bells. Upon its completion, the first concert was played by Mrs. Deeds herself on Easter Sunday of that same year. The carillon was refurbished in 1988, converting it from an electrically controlled carillon to a traditional, mechanical one. Carillon Historical Park is a collection of 25 buildings and exhibits highlighting Dayton's



Antioch Shrine Temple



Engineers Club of Dayton



Paul Lawrence Dunbar House Historic Site



Wright Cycle Company Building

founding in 1796 and its two centuries of expansion, industrialism, and innovation. The park includes the original 1905 Wright Flyer III (the world's first practical airplane and a National Historic Landmark), the 1835 B&O Grasshopper steam locomotive, and the first automobile self-starter. The site also interprets pioneer history and houses Dayton's oldest building, Newcom's Tavern. ([www.daytonhistory.org](http://www.daytonhistory.org))

### 3.4.3 Historic Bridges, Canals, and Transportation Corridors

In Segment Two, the Miami and Erie Canal remnants are not visible today, but the canal in Dayton followed the current Patterson Boulevard. Interpretive signage along Patterson Boulevard from the river to Fifth Street tells the story of the canal in the area. Part of the canal and one of the original locks is located at Carillon Park. Carillon Park also has a transportation barn displaying multiple railroad cars and buses that served the transportation needs of the area in the 19th and 20th centuries.

### 3.4.4 Archaeological Sites

Sites include Island Park Site/Stillwater Cemetery, Triangle Park Mound, and SunWatch Indian Village/Archaeological Park. SunWatch Indian Village/Archaeological Park is a reconstructed, Fort Ancient Native American settlement discovered in the early 1970s, when the City of Dayton wanted to expand its sewage treatment plant. Operated by the Dayton Society of Natural History, the site is adjacent to the river between Dayton and Moraine and receives numerous visitors and school groups annually to its museum and grounds. However, visitors do not have direct access to the river and barely know that the site is in the river's floodplain.

### 3.4.5 Historic and Cultural Resources Synopsis

The region's heritage is especially significant in this segment. There are multiple locations, attractions, and parks that feature many aspects of history. By focusing on the river corridor as a whole, there is an opportunity to market these sites regionally to attract more visitors.

## 3.5 FLOOD RISK REDUCTION

### 3.5.1 Overview

The Miami Conservancy District owns and maintains the flood protection system that reduces the risk of flooding to areas of Huber Heights and Dayton within Segment Two. The dams and levees play a key role in the development of recreation along the Great Miami River corridor.



### 3.5.2 Dams

All of the five Miami Conservancy District dams are located outside of Segment Two. Four low-head dams in Segment Two do not contribute to flood risk reduction. These dams are maintained for water supply and/or recreation purposes.

### 3.5.3 Levees

#### Huber Heights

The Great Flood of 1913 caused minimal property damage and no deaths in what is now Huber Heights. The flood protection system at Huber Heights today provides risk reduction to approximately 55 acres containing 340 properties valued at nearly \$8 million and a population of nearly 300.

The flood protection system at Huber Heights includes one levee totaling 0.8 miles. The levee is grass covered and provides no stairways or ramps from the neighborhood to the Great Miami River. The Great Miami River Recreation Trail runs along the river side of the levee.

#### Dayton

The Great Flood of 1913 caused 123 deaths and an estimated \$46.5 million in property damage (1913 dollar value) in Dayton. The flood protection system at Dayton today provides risk reduction to more than 4,900 acres containing 11,500 properties valued at more than \$1.7 billion and a population of approximately 20,300.

The Miami Conservancy District flood protection system at Dayton includes six levees totaling 19 miles. The levees are typically grass covered, but in some areas, concrete revetment lines the river side slope. Many of the levees are high and steep, and difficult for pedestrians to cross. Concrete floodwalls supplement the earthen levees in several areas. Stairways and bikeway ramps at several locations provide pedestrian and cycling access to the levee tops and river channel. An example is the levee at the McPherson Town neighborhood, which features three stairways on the land side and two stairways on the river side of the levee. The levee at the Kitty Hawk Golf Center is owned and maintained by the city of Dayton.

Several of the parks in Segment Two are situated at the levee top, providing scenic overviews of the river and, in some areas, direct access to the river channel. These levee-top amenities include three regional destination parks (RiverScape MetroPark, the Korean War Memorial, and the Miami Valley Vietnam Veterans Memorial) and two community parks (Deeds Point MetroPark and Sunrise MetroPark). The first section

of Great Miami River Recreation Trail to use both the levee tops and provide multiple paved ramps to the river corridor is in Dayton.

#### Preserved Floodplains

Island MetroPark, located on an island in the Great Miami River, provides a unique setting nestled between the levees within the floodplain. Other parks within Segment Two that are in the floodplain include Triangle Park and East River Road Boat Ramp. Carillon Historical Park, built by the Miami Conservancy District in the 1940s and operated by Dayton History today, is an example of reusing a former floodplain that once had no development potential and now, because of the levee, is a vibrant regional destination.

### 3.5.5 Flood Risk Reduction Synopsis

Dams, levees, and preserved floodplains help reduce flood risk. Levees protect property throughout Dayton. Flooding occasionally occurs at parks and facilities built in the floodplain.

## 3.6 NEW PROJECTS

### 3.6.1 Public Projects

Several new riverfront parks or recreation amenities are in various stages of visioning, planning, design, and implementation throughout Segment Two of the corridor. Planned amenities within this segment of the corridor include boat ramps, dam removal and modifications, and trail extension. The following is a description of new projects and their stage of development as of October 2014.

**City of Dayton Wellfield Low-Head Dam Portage (RM 85.8).** This project is located adjacent to the Needmore Conservation Area and the Kitty Hawk Golf Center. A portage will be constructed around the existing low-head dam. The portage will improve the navigability of the Great Miami River.

**Eintracht Riverfront Park (RM 94.3).** The city of Riverside purchased the Eintracht Singing Society property on the bank of the Great Miami River and plans to transform it into a public park with a ramp for hand-carried boats to access the river. The property includes a large parking lot and large clubhouse with a ballroom. The city has applied for boat ramp funding. This project will be Riverside's only public access to the Great Miami River along a stretch that has limited access.

**RiverScape River Run (RM 80.4 to RM 79.9).** Five Rivers MetroParks is planning to partially remove a low-head dam in downtown Dayton and construct two rock features to create a recreational stretch



of whitewater on the river. In addition to the in-river features, bank and access improvements are planned. Preliminary engineering is complete and funding is secured. Riverbank access locations are also being finalized. Construction is expected to begin in 2015. The modification of the low-head dam is intended to remove the existing safety hazards, improve water quality, and enhance recreation. The recreational whitewater would be the only whitewater feature on the Great Miami River.

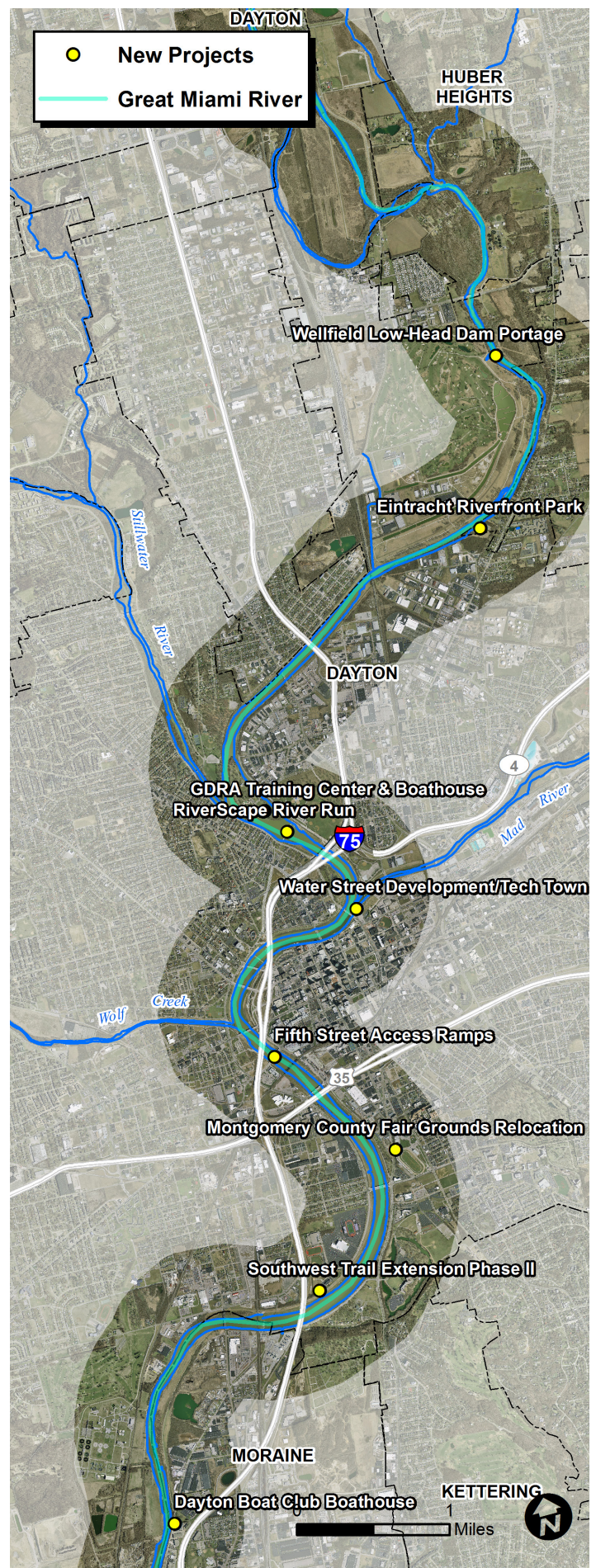
**Great Miami River Fifth Street Access Ramps (RM 79).** The city of Dayton recently completed construction of bikeway ramps on both sides of the river at Fifth Street, providing street-level access to the river and Great Miami River Recreation Trail. This project improves connectivity between Sinclair Community College and the river.

**Great Miami River Recreation Trail Southwest Extension Phase II (RM 77 to RM 76.1).** The city of Dayton plans to extend the Great Miami River Recreation Trail approximately 1 mile on the right bank from its current terminus near the Marriott Courtyard Hotel. Funding is secured and the project is in design. Future phases are envisioned to extend the trail to Sunwatch Indian Village.

### 3.6.2 Private Investment

The synergy of the corridor continues to build with the development of RiverScape, enhancement of parks, and integration of trails into the surrounding communities. These efforts are spurring further private and public investment in the corridor, which is, in turn, providing further opportunities on and along the river. As the trails, parks, and other riverfront amenities grow, private investors are building housing, office buildings, and retail and entertainment venues adjacent to the riverfront.

**Greater Dayton Rowing Association Training Center and Boathouse.** The Greater Dayton Rowing Association was formed to further the sport of rowing as an athletic and recreational activity to all interested persons in the Dayton community. It currently has 130 feet of rowing docks and uses the boathouse on Island MetroPark as boat storage for the adult and junior programs. The association is engaged in a master planning process to improve the docks, construct a new training facility, and enhance the rowing course. For more information, see <http://www.daytonrowing.org/power10.html>. This project is a concept and not funded. Feasibility has not been thoroughly researched.



Segment Two New Project Locations





Greater Dayton Rowing Association Training Center and Boathouse (Conceptual)



Water Street Development (Conceptual)



Tech Town



Montgomery County Fair Grounds

**Water Street Development.** This mixed-use project broke ground in early 2014 on the downtown Dayton riverfront. In addition to a 50,000square-foot commercial building and a new three-level parking structure, Phase One is slated to include at least 150 luxury residential apartment units. A possible second and third phase of the development would extend the project east along the river toward Tech Town, redeveloping the Mendelson Building at 329 East First Street, and eventually adding more development across the river at Deeds Point.

**Tech Town.** Dayton's premier technology-oriented campus is located at the confluence of the Mad River and Great Miami River and near the Water Street Development. It is designed to support the application, commercialization, and convergence of cutting-edge technologies. Tech Town is a 40-acre redevelopment site and the expected build out may reach 400,000 square feet.

**Montgomery County Fair Grounds.** The Montgomery County Agriculture Society is in the process of relocating the fairgrounds from its current site within the Dayton city limits to property in the northwestern section of Montgomery County. The existing site, which consists of 37 acres adjacent to the Great Miami River, offers the opportunity to create a southern gateway into downtown Dayton's central business district, leveraging two strong community anchors: Miami Valley Hospital and the University of Dayton.

**Dayton Boat Club Boathouse.** The Dayton Boat Club, home to competitive junior and master rowing programs, proposes building a new boat house on the left bank of the Great Miami River. The organization is currently located in Moraine off of East River Road. This building would provide a permanent home for the club.



## 4. SEGMENT THREE

SEGMENT MILE (74.5 - 31)

### 4.1 OVERVIEW

Segment Three encompasses the southernmost 34 miles of the 99-mile corridor. It begins at East River Road Boat Ramp (RM 74.5) and ends downstream of Joyce Park (RM 31). Segment Three encompasses parts of three counties: Montgomery County (cities of Moraine, West Carrollton, and Miamisburg); Warren County (city of Franklin); and Butler County (cities of Middletown and Hamilton). Historically, many areas in these cities were dominated by manufacturing and industry. Native American culture is evident along the river corridor. What attracted the Native American tribes to the area were the fertile lands, which are fed by the Great Miami River and a rich aquifer of glacial deposits. Native American mounds and archaeological sites can be found along the Great Miami River. Large building murals, monumental sculptures, and festivals are common in the river corridor along this segment.

The segment was evaluated for recreation resources, activity hubs, historic and cultural resources, flood risk reduction, and new projects. During August 2014, observations were made of existing conditions at select sites along the Great Miami River corridor (sites visited shown in blue):

- **Miami and Erie Canal Park (RM 72.4)**
- **Miami Bend–South Montgomery County Low-Head Dam Park (RM 72.0)**
- Wax Park (RM 71.8)
- West Carrollton Soccer Complex (RM 69.8)
- Harmon Park (RM 69.3)
- Friend Park (RM 68.9)
- Linden Avenue Bridge River Access (66.3)
- **Riverfront Park (RM 66.3)**
- **Bell Civic Park (RM 65.5)**
- Rice Field (RM 64.0)
- **Crains Run (RM 62.0)**
- **Second Street at River Street (RM 59.7)**
- **Boat Ramp, Dayton-Oxford Road (RM 59.2)**
- **River Trail Access (RM 56.6)**
- SR 4 at Carmody Boulevard (RM 54.2)
- Smith Park (RM 52.5)
- **AK Pavilion/Bicentennial Commons (RM 52.0)**
- Middletown/Lemon Township Boat Ramp (RM 48.4)

- Chisholm Historic Farmstead/Woodsdale Regional Park (RM 44.2)
- **Rentschler Forest MetroPark (RM 41.3)**
- Combs Park (RM 36.6)
- **RiversEdge Amphitheater (RM 35.6)**
- High/Main Bridge Park (RM 35.4)
- Monument Park (RM 35.4)
- Fitton Center for Creative Arts (RM 35.3)
- Veterans Park (RM 35.2)
- Booker T. Washington Community Park (RM 34.7)
- **City of Hamilton's Boat Ramp (RM 34.4)**
- Dam Overlook Park (RM 33.8)
- **Joyce Park (RM 32.0)**



Miami and Erie Canal Park (RM 72.4))



Miami Bend - South Montgomery County Low-Head Dam Park (RM 70.0)



Riverfront Park (RM 66.3)





Bell Civic Park (RM 65.5)



Crains Run (RM 62.0)



Second Street at River Street (RM 59.7)



Boat Ramp, Dayton-Oxford Road (RM 59.2)



River Trail Access (RM 56.6)



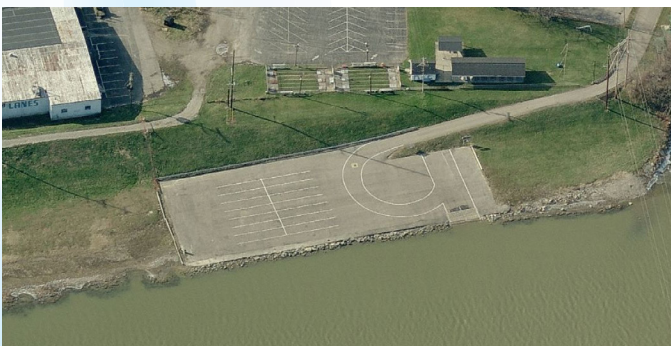
AK Pavilion/Bicentennial Commons (RM 52.0)



Rentschler Forest MetroPark (RM 41.3)



RiversEdge Amphitheater (RM 35.6)



City of Hamilton's Boat Ramp (RM 34.4)



Joyce Park (RM 32.0)



## 4.2 RECREATION RESOURCES

### 4.2.1 Trails

#### Recreation Trails

Many of the parks in this segment connect to the Great Miami River Recreation Trail and to each other via the trail. The Great Miami River Recreation Trail is accessible by local roadways. Way-finding signage along the trail is frequent; however, signage from roadways to trail access points is lacking. There are multiple parking areas along this section of the Great Miami River Recreation Trail. In the Montgomery County communities, public transit is available to most trail access points via the Greater Dayton Regional Transit Authority. In Butler County, the Butler County Transit Authority offers service to areas along the Great Miami River Recreation Trail.

The surface of the Great Miami River Recreation Trail is paved asphalt or concrete. In Segment Three, there are multiple gaps in the Great Miami River Recreation Trail. The first gap is approximately 1.5 miles long and is located between Baxter Drive in Franklin and River Trail Access (RM 56.6). The second gap is 7 miles in length and is located between State Route 73 at the Middletown/Lemon Township Boat Ramp (RM 48.4) and the Rentschler Forest MetroPark in Hamilton. The third gap is 1.6 miles long and is located at the northern end of Hamilton.

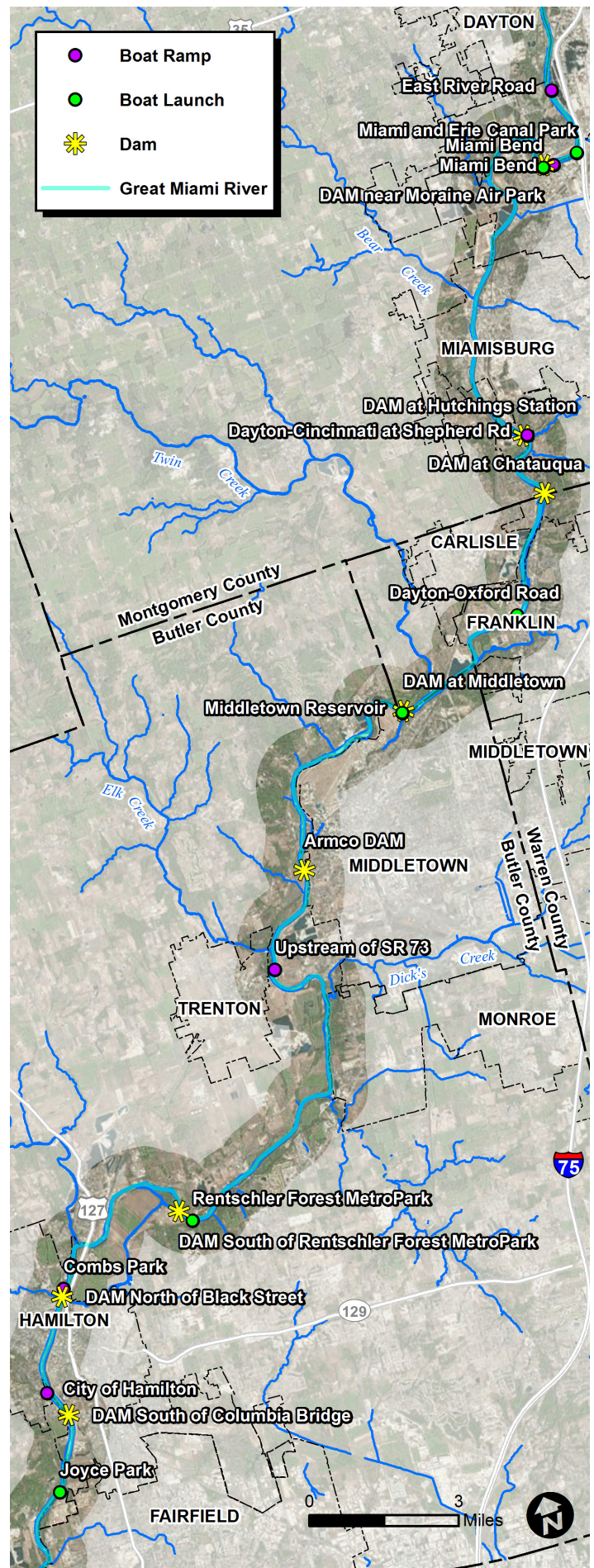
The Great Miami River Recreation Trail connects to the Medlar Trail near Crains Run Park. Local trails also connect parks, including Smith Park and Joyce Park, to the Great Miami River Recreation Trail. Walking trails are available within some of the parks, such as Rentschler Forest MetroPark.

The six communities and their downtown attractions are an easy walk from the Great Miami River Recreation Trail.

#### Water Trail

Throughout this segment, the Great Miami River is a state-designated water trail. There is one kayak livery in Hamilton, and rentals are available during special events in other locations. There are multiple public boat ramps in this segment, and many locations along the river that have wide, flat beach areas where hand-carried boats can launch. The following sites contain public boat ramps along Segment Three:

- Miami and Erie Canal Park
- Miami Bend–South Montgomery County Low-Head Dam Park



Segment Three Boat Launch and Boat Ramp Locations



- Boat ramp downstream of South Montgomery County Low-Head Dam
- Linden Avenue Bridge River Access
- Boat ramp at Dayton-Cincinnati at Shepherd Road
- Boat ramp, Dayton-Oxford Road
- Middletown/Lemon Township boat ramp
- Rentschler Forest MetroPark
- Combs Park
- City of Hamilton's boat ramp
- Joyce Park

Navigability along this segment is restricted by six low-head dams at river miles 72, 63.5, 50.8, 40.2, 36.5, and 33.8. To get around the low-head dams, portage is required. Providing safe portage could improve continuity and open more miles of the river to boating. Portages can be simple routes, such as trails made of soil, gravel, or concrete, or may be built structures, such as staircases with chutes or slides. Safe portage should include adequate signage.

With 11 boat ramps along this segment, options to exit and re-enter the Great Miami River are frequent. Removing or modifying a dam could allow for greater flow of traffic and improve safety along the water trail.

Power boating, waterskiing, and rowing are popular upstream of low-head dams in West Carrollton and Hamilton.

#### 4.2.2 Facilities

##### Family/Event Facilities

There are multiple large pavilions/band shells within Segment Three, most notably at Riverfront Park, Bicentennial Commons, and RiversEdge. The band shell at Riverfront Park is suitable for small music events and concerts, with a deep, shaded lawn in front to accommodate larger crowds. Roads bordering the site can be closed for pedestrian use only to accommodate crowds during events. The pavilion at Bicentennial Commons can also hold small concerts, but has limited covered seating space. RiversEdge Amphitheater is part of a new 7.3-acre park in downtown Hamilton, which is heavily used for festivals and concerts, such as the Summer Concert Series.

##### Lodging and Other Accommodations

The only location to camp in Segment Three is Rentschler Forest MetroPark. A lot fee is required to camp. Otherwise, there are no camping locations along this segment of the corridor, but land is available if future plans include more campgrounds.

There is a hotel on the Great Miami River in Hamilton. Other overnight accommodations can be found a short distance away.

##### Sports Facilities

Parks along this segment of the Great Miami River offer baseball, softball, football, soccer, tennis, and basketball. These parks include Wax Park, West Carrollton Soccer Complex, Harmon Park, Bell Civic Park, Rice Field, Smith Park, Rentschler Forest MetroPark, Booker T. Washington Community Park, Veteran's Park, and Joyce Park.

##### Playgrounds and Picnic Grounds

Playground structures are available at Wax Park, West Carrollton Soccer Complex, Friend Park, Crains Run, Smith Park, Rentschler Forest MetroPark, Booker T. Washington Community Park, Veteran's Park, and



AK Pavilion at Bicentennial Commons



Playground at Rentschler Forest MetroPark

Joyce Park. Shelters are available for picnicking at each of these parks except Friend Park. Shelters are also available at Chrisholm Historic Farmstead/Woodsdale Regional Park. Smith Park also has a skatepark and water-play features. Joyce Park offers a BMX course.

#### 4.2.3 Parks

##### Regional Destination Parks

Segment Three attracts visitors to several regional destination parks with multiple amenities.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Miami Bend Park	x			
West Carrollton Soccer Complex	x	x	x	x
Riverfront Park				
Rice Field	x	x		
Crains Run	x	x	x	x
Smith Park	x	x	x	x
Rentschler Forest MetroPark	x	x	x	x
Riversedge Amphitheater				
Chrisholm Historic Farmstead/Woodsdale Regional Park	x	x		x
Joyce Park	x	x	x	x

- All 10 parks are easily accessible by major roads and most are within a short walking distance of several bus routes.
- Nine of the parks in this group provide access to the Great Miami River Recreation Trail. Chrisholm Historic Farmstead/Woodsdale Regional Park is on the opposite side of the river from the Great Miami River Recreation Trail.
- Smith Park is connected to the Great Miami River Recreation Trail by a trail spur, but the park itself does not have direct river access.

- All of the parks except Riverfront Park and RiversEdge Amphitheater provide off-street parking. Parking for these parks is found on nearby streets or at public surface-parking lots and parking garages within walking distance.
- Six of the 10 parks from this group were visited as part of this study.

##### Community Parks

A variety of community parks serve the area along the river corridor in Segment Three.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Miami and Erie Canal Park	x			
Wax Park	x		x	x
Harmon Park	x	x		
SR 4 at Carmody Boulevard	x			
AK Pavilion/Bicentennial Commons				
Combs Park	x			
Veterans Park	x	x	x	x
Booker T. Washington Community Park	x	x	x	x

- All eight parks are easily accessible by major roads and are within a short walking distance of several bus routes.
- Five of the eight parks in this group provide access to the Great Miami River Recreation Trail (Miami and Erie Canal Park, Wax Park, Harmon Park, SR 4 at Carmody Boulevard, and AK Pavilion/Bicentennial Commons).
- Four parks in this group—Miami and Erie Canal Park, SR 4 at Carmody Boulevard, AK Pavilion/Bicentennial Commons, and Combs Park—provide access to the Great Miami River.



- Bicentennial Commons is the only park in this group that does not provide off-street parking.
- Combs Park is in poor condition. A restroom facility is closed. The park experiences vandalism and illegal dumping. The boat ramp is in disrepair.
- Two of the eight parks were visited as part of this study.

### Neighborhood Parks

There are five neighborhood parks in Segment Three.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Friend Park			x	
Bell Civic Park				
Second Street at River Street				
Monument Park				
High/Main Bridge Park				

- Four parks provide access to the Great Miami River Recreation Trail, but Second Street at River Street does not.
- All five parks are along the Great Miami River.
- Bell Civic Park's condition is poor. The park is a grassed lot with a rusted baseball backstop.
- Monument Park and High/Main Bridge Park are small parks focused on historical markers/monuments.
- Friend Park and Bell Civic Park were visited as part of this study.

### Roadside Parks

Segment Three has five roadside parks.

Facility Name	Parking	Restrooms	Playgrounds	Picnic and/or Shelter
Boat Ramp, Dayton-Oxford Road	x			
River Trail Access	x			
Middletown/Lemon Township Boat Ramp	x			
City of Hamilton's Boat Ramp	x			
Dam Overlook Park	x			

- Three parks provide access to the Great Miami River Recreation Trail.
- All parks have access to the Great Miami River.
- All parks are accessible by major roads and have off-street parking.
- Three parks in this group were visited as part of this study.

### 4.2.4 Conservation Areas/Nature Centers

There are several conservation areas within parks in this segment, including Crains Run, Rentschler Forest MetroPark, and Chrisholm Historic Farmstead/Woodsdale Regional Park. There are no nature centers.

### 4.2.5 Recreation Resources Synopsis

The Great Miami River Recreation Trail has sections in each city, but has three gaps.

There are a few parks with natural areas; most of the parks in this segment consist of mowed areas.

Navigability on the Great Miami River Water Trail is challenged by six low-head dams, which limit boaters to only a few miles before having to portage. There are many boat ramps in this segment.

Sports facilities are plentiful in this segment, including West Carrollton Soccer Complex, Harmon Park, Rice Field, Smith Park, Veteran's Park, Booker T. Washington Community Park, and Joyce Park, which have an assortment of soccer, football, baseball and softball fields, and basketball and tennis courts.

## 4.3 ACTIVITY HUBS

### 4.3.1 Parks

The activity hubs in Segment Three include sports complexes, event venues, and large parks that offer programs. For example, Riverfront Park in Miamisburg hosts more than 70 events a year including concerts, festivals, and runs. Their annual Turkey Trot, which starts at the park, draws more than 10,000 people. RiversEdge Amphitheater is located along Hamilton's riverfront and near the German Village Historic District. The location hosts free concerts throughout the summer. Several parks are activity hubs for athletic leagues and competitions.

- Harmon Park
- West Carrollton Soccer Complex
- Riverfront Park Smith Park
- Bicentennial Commons and Pavilion
- RiversEdge Amphitheater
- Booker T. Washington Community Center
- Joyce Park

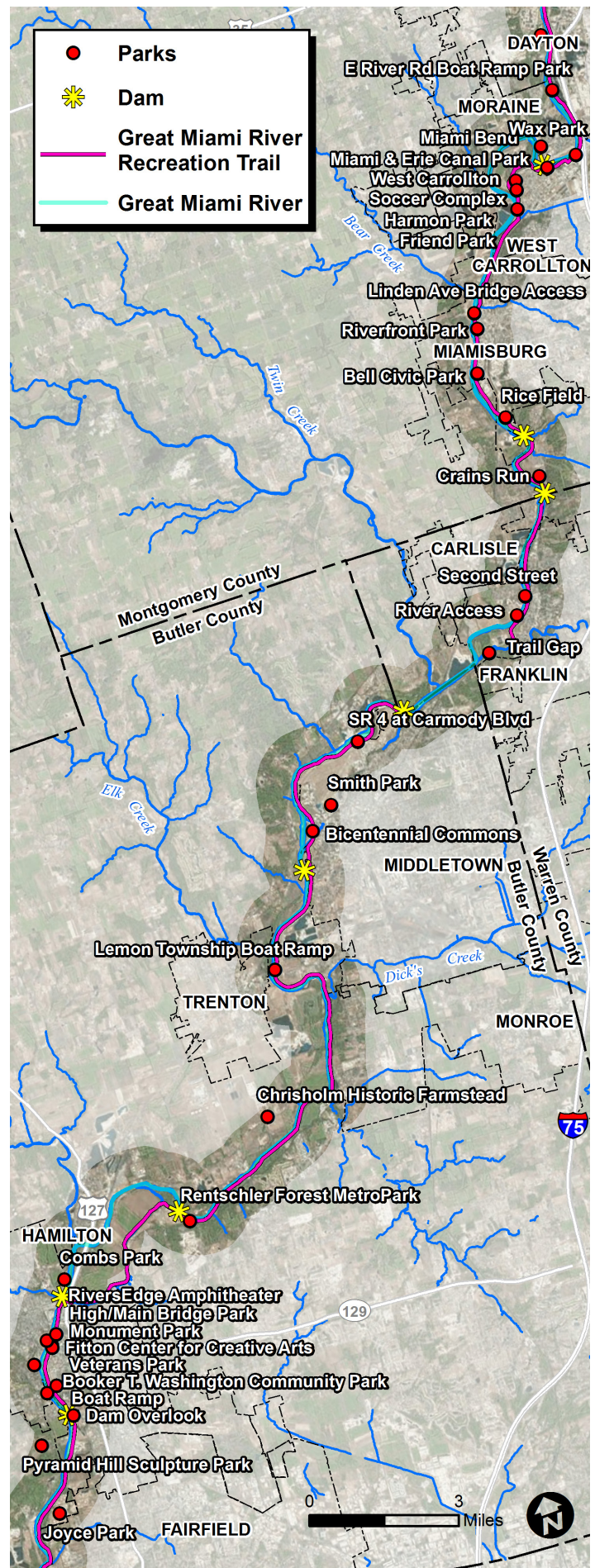
### 4.3.2 Attractions

**Market Square Building.** This building houses the Miamisburg Historical Society, founded in 1967. The building is open for tours and contains a gift shop. The society is responsible for preserving the history of Miamisburg and the surrounding areas through exhibits and various events.

**Butler County Museum.** The Butler County Historical Society resides in the Victorian-era Benninghofen House in the city of Hamilton. Historical records are stored, preserved, and exhibited throughout the building.

**Fitton Center for Creative Arts.** The Fitton Center is a not-for-profit community arts center featuring a variety of unique programs, including visual and performing arts classes, exhibitions, entertainment, and theater productions for all ages.

**Pyramid Hill Sculpture Park.** This outdoor museum focuses on monumental pieces of sculpture in an environment of meadows, forests, and various gardens. The park



Segment Three Park and Trail Locations



includes a 10,000–square-foot Ancient Sculpture Museum displaying Egyptian, Greek, Roman, and Etruscan sculpture thousands of years old. Educational programs are provided in art, horticulture, geology, and the environment.

**Great Miami River Rowing Center.** The Great Miami Rowing Center is a sports facility that offers rowing lessons, kayak rental, and training for competitive rowing teams. The center hosts regattas, learn-to-row days, and other special events.

**Miami University.** Miami University Hamilton is a regional, commuter campus of Miami University, a public university with a national reputation. Miami Hamilton offers bachelor's degrees, associate degrees, and beginning course work for most 4-year degrees.

#### 4.3.3 Entertainment/Special Events

The communities in this segment are home to special events such as parades, fireworks, concerts, and festivals within walking distance of the Great Miami River, including:

- Easter Egg Hunt, Community Pride Day, Holiday Festival, Doggy Day Splash Fest (West Carrollton)
- FM Bank River Blast, A Taste of Wine (Live Music), Canine Carnival, Fall Fest (Miamisburg)
- 4th of July Parade, Downtown Saturday Night, Thunder on the River (Franklin)
- RiversEdge, First Fridays, Middletown Arts Festival (Middletown)
- Summer Concert Series, Great Miami River Days, IceFest, Operation Pumpkin (Hamilton)
- Groovin' on the Green, Memorial Day Parade (Fairfield)

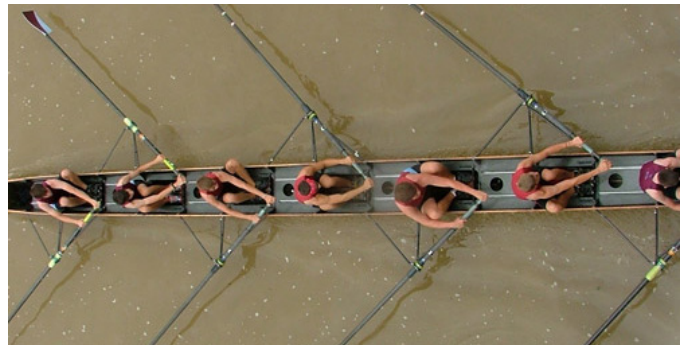
#### 4.3.4 Activity Hubs Synopsis

The proximity of individual river communities to each other offers an opportunity to build upon each other's efforts and not duplicate resources.

This segment could be one large activity hub that not only supports the local residents but also attracts regional tourism.

This regional activity hub could be strengthened by better linking the individual communities and their assets, collaborating on future planning efforts in the corridor, coordinating events, and creating a coordinated master plan with a cohesive marketing and promotional plan.

Not every community in this segment has a central activity hub. More community focal points would improve connectivity to the river and provide locations that would help the cities identify with the Great Miami River.



Great Miami River Rowing Center Rowing Training



Miami University - Hamilton



Canine Carnival



Summer Concert Series



Groovin' on the Green



## 4.4 HISTORIC AND CULTURAL RESOURCES

### 4.4.1 Historic Districts

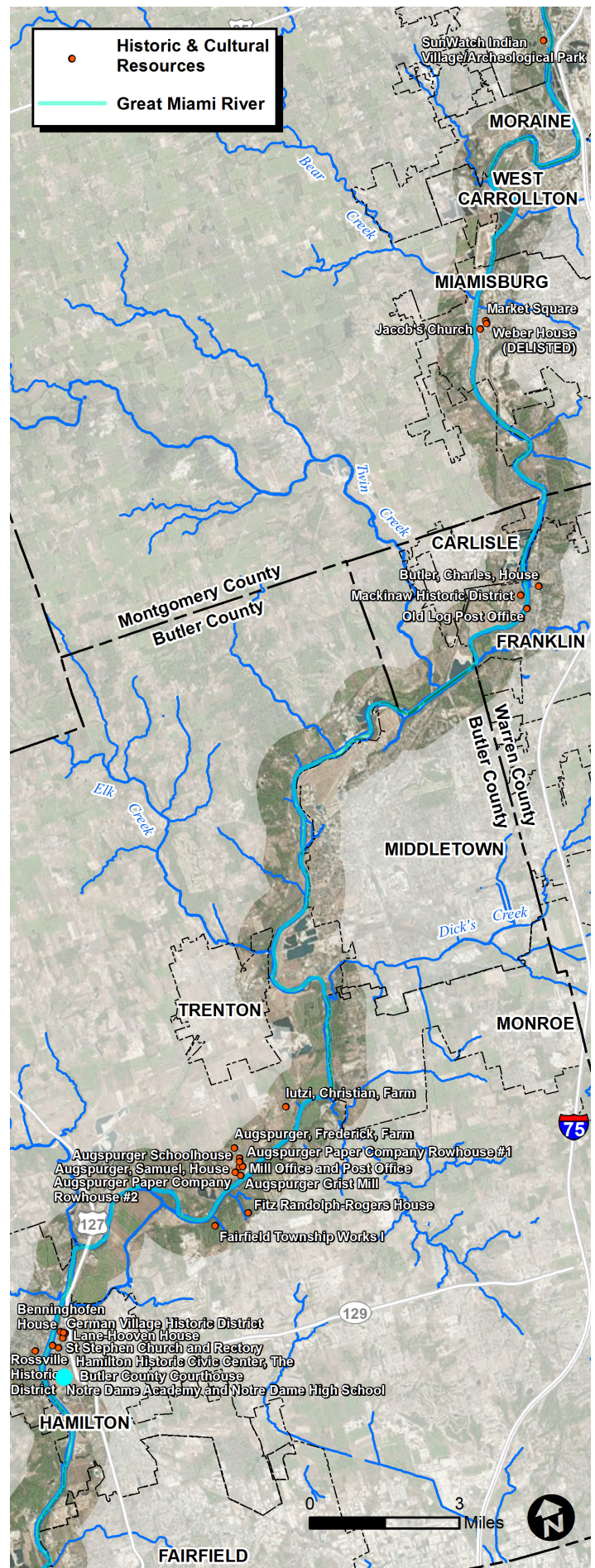
Historic districts in the area include Mackinaw Historic District (Franklin), German Village Historic District (Hamilton), and Rossville Historic District (Hamilton). Mackinaw Historic District is a collection of 30 Queen Anne houses on the right side of the river built by Franklin's early mercantile and industrial leaders. German Village Historic District encompasses nine blocks of 1800s homes in a variety of styles. It has easy access to the RiversEdge Park and walkways along the river. Rossville Historic District is on the right side of the river and contains 123 buildings, mainly large and stately homes within a short walk of the river.

### 4.4.1 Historic Buildings and Structures

**Market Square (Miamisburg).** Built in 1851 on the public square set aside by the founding fathers, the Market Square building's closed arches were once open to provide a market for local farmers. In 1873, council established two rooms facing Main Street, reserving the rest of the building for council rooms, and the jail. Town Hall meetings were held on the second floor. The Market Square Building has functioned as an open-air market and town gathering and social center. (miamisburg.org)

**Old Franklin Log Post Office.** The post office is the oldest known structure standing in Franklin and is located along the left bank of the river. It was built in 1802 by John Noble Cumming Schenck, brother of one of Franklin's founders. The building originally stood at 310 South River Street and was covered in clapboard. The log appearance was restored, and the building was moved to its current location in 1976. It is listed on the National Register of Historic Places and an Ohio Historical Marker describes the site. (<http://www.remarkableohio.org/HistoricalMarker.aspx?historicalMarkerId=764&fileId=108160>)

**Benninghofen House.** The Benninghofen House exhibits the lifestyle of a prominent businessman and his family during the latter 19th century, as Hamilton developed into an industrial center. Original architectural details remain throughout the interior of this National Register of Historic Places building and offer a picture of the best of the past. The Italianate home was built in 1861 and was home to the Benninghofen family for nearly 75 years. The home is furnished with period furnishings, antique toys, industrial artifacts, and more. The Benninghofen House is the current home of the Butler County Historical Society. (<http://www.gettothebc.com/listings/Benninghofen-House/1118>)



Segment Three Historic and Cultural Resources (Visit [www.nps.gov/nr](http://www.nps.gov/nr) for a Full List of this Area's National Register of Historic Places Sites)





Old Franklin Log Post Office



Benninghofen House



Lane-Hooven House



Butler County Courthouse

**Lane-Hooven House.** This rare, restored, octagonal home was once the home of prominent Hamilton industrialist Clark Lane and is one of only 400 octagonal structures in the United States. Built in 1863, the elegant Victorian Gothic home features ornate details and a unique spiral staircase. The house, in Hamilton's German Village District, is listed on the National Register of Historic Places, and houses the Hamilton Community Foundation. (<http://www.gettothebc.com/listings/lane-hooven-house/711>)

**Butler County Courthouse.** One of Butler County's foremost landmarks, this grand four-story structure was built between 1885 and 1889 with Corinthian columns and a mansard roof. The Courthouse is an outstanding example of Second Empire architecture and is listed on the National Register of Historic Places. The symmetrical massing features, which vary from one level to the next, contribute to the building's imposing stature. (<http://www.gettothebc.com/listings/Butler-County-Courthouse/1124>)

**The Butler County Soldiers, Sailors, and Pioneers Monument.** Erected in 1902, the monument is an iconic structure at the east end of High Street Bridge over the river. It stands on the site of Fort Hamilton, built in 1791. The monument was built by the people of Butler County to honor those who served and who sacrificed their lives in the service of our country. The monument also celebrates the men and women who first settled Butler County. The monument houses an impressive collection of Civil War weapons and swords. It also has exhibits on 20th century American wars, including military uniforms, military medals, and photographs. The monument maintains records of Butler County residents who served in World War I, World War II, and the Korean, Vietnam, and Gulf Wars. (<http://www.butlercountyohio.org/monument>)

#### 4.4.3 Historic Bridges, Canals, and Transportation Corridors

Remnants of the Miami and Erie Canal are found in various locations of this segment, including a dry canal and a canal worker's stone house in Rentschler Forest MetroPark. The High Street Bridge at Hamilton was reconstructed in 2007 to replace an arched bridge built after the Great Flood of 1913. The new bridge is also of an arched design (reminiscent of the former bridge) and features multiple, interpretive bronze medallions depicting events in Hamilton's history. The Dixie Highway was constructed along the river in the early 1900s as part of a highway system intended to connect the midwestern and southern states. A monument erected as a way-finding point for the Dixie Highway can be found in Franklin at the intersection



of Old Dixie Highway and Hamilton–Middletown Road. The importance of the Dixie Highway for interstate transportation greatly diminished with the completion of Interstate 75.

Moraine Airpark is adjacent to the Great Miami River and is the location of the Wright Seaplane Base, where the Wright brothers developed and conducted test flights of seaplanes, landing and taking off from the river.

#### 4.4.4 Archaeological Sites

Numerous Native American mounds are located along this segment, including the Fairfield Township Works and other mounds in Rentschler Forest MetroPark. The Line Hill Mound earthworks at Rentschler Forest MetroPark is an earthen ring framed by two arcs forming what has been interpreted to be an elaborate gateway.

#### 4.4.5 Historic and Cultural Resources Synopsis

Historic districts and events at historic structures in the area enhance the livability of the riverfront and overall urban-life connection to the river. Interpretation of historic transportation routes in the area (particularly the Miami and Erie Canal) describe past land uses and help attract tourists to the area. Mounds in Rentschler Forest MetroPark provide a glimpse of prehistoric cultures that inhabited the river valley. The Market Square in Miamisburg continues to be a center of community activity. Towns in the area have located structures with historic significance adjacent to the river even though the sites may not directly relate to the river, such as the relocation of the Franklin Log Post Office to the edge of the river and The Butler County Soldiers, Sailors, and Pioneers Monument on the river bank at High Street in Hamilton.



The Butler County Soldiers, Sailors, and Pioneers Monument

## 4.5 FLOOD RISK REDUCTION

### 4.5.1 Overview

The Miami Conservancy District owns and maintains a flood protection system that reduces the risk of flooding to areas of West Carrollton, Moraine, Miamisburg, Franklin, Middletown, and Hamilton within Segment Three. The dams and levees play a key role in the development of recreation along the Great Miami River Corridor.

### 4.5.2 Dams

There are six low-head dams in Segment Three and only one contributes to flood risk reduction. The Two Mile Dam, located upstream of downtown Hamilton (RM 36.5), serves as a grade-control structure and prevents gravel from accumulating in the river channel in downtown Hamilton.

### 4.5.3 Levees

#### West Carrollton and Moraine

The Great Flood of 1913 caused no deaths but an estimated \$700,000 in property damages (1913 dollar value) in areas of Montgomery County outside Dayton and Miamisburg, including West Carrollton and Moraine. The flood protection system at West Carrollton today provides risk reduction to more than 400 acres containing approximately 950 properties valued at more than \$106 million and a population of approximately 2,500. In Moraine, the flood protection system today provides risk reduction to more than 400 acres containing approximately 900 properties valued at nearly \$40 million and a population of approximately 1,500.



RiversEdge Levee



The flood protection system at West Carrollton includes one levee totaling 2.1 miles. The flood protection system at Moraine includes one levee totaling 2.5 miles. The levees are typically grass covered. Many of the levees are high and steep, and difficult for pedestrians to cross. The Great Miami River Recreation Trail uses the levee tops and channel areas in West Carrollton. Multiple paved ramps provide access from the top of the levee to the channel.

### **Miamisburg**

The Great Flood of 1913 caused no deaths but an estimated \$1,225,000 in property damages (1913 dollar value) in Miamisburg. The flood protection system at Miamisburg today provides risk reduction to more than 460 acres containing nearly 1,500 properties valued at more than \$127 million and a population of approximately 4,000.

The flood protection system at Miamisburg includes three levees totaling 4.1 miles, and modification along 3 miles of the river channel. Concrete floodwalls supplement the earthen levees in several areas. The Great Miami River Recreation Trail uses the levee tops and channel areas in Miamisburg. Multiple paved ramps provide access from the top of the levee to the channel.

### **Franklin**

The Great Flood of 1913 caused seven deaths and an estimated \$380,000 in property damages (1913 dollar value) in Franklin. The flood protection system at Franklin today provides risk reduction to nearly 250 acres containing more than 850 properties valued at nearly \$57 million and a population of approximately 3,100.

The flood protection system at Franklin includes three levees totaling 3.7 miles, and modification along 1.7 miles of the river channel. The levees are typically grass covered. Some of the levees are high and steep, and difficult for pedestrians to cross. Concrete floodwalls supplement the earthen levees in several areas. The Great Miami River Recreation Trail uses the levee tops and channel areas in Franklin.

### **Middletown**

The Great Flood of 1913 caused three deaths and an estimated \$1.1 million in property damages (1913 dollar value) in Middletown. The flood protection system at Middletown today provides risk reduction to nearly 2,600 acres containing more than 5,600 properties valued at approximately \$430 million and a population of approximately 7,800.

The flood protection system at Middletown includes two levees totaling 9.6 miles, and modification along 8.4 miles of the river channel. The levees are typically grass covered. Some of the levees are high and steep, and difficult for pedestrians to cross. The Great Miami River Recreation Trail primarily uses the channel areas in Middletown, but follows the levee tops in several areas. AK Pavilion/Bicentennial Commons is situated on the levee top, providing a wide view of the river.

### **Hamilton**

The Great Flood of 1913 caused 159 deaths and nearly \$13 million in property damages (1913 dollar value) in Hamilton. The flood protection system at Hamilton today provides risk reduction to more than 1,500 acres containing more than 7,800 properties valued at approximately \$548 million and a population of approximately 14,000.

The flood protection system at Hamilton includes three levees totaling 5.1 miles, and modification along 3.8 miles of the river channel. The levees are typically grass covered, but in many areas, concrete revetment lines the river side slopes. Many of the levees are high and steep, and difficult for pedestrians to cross. Concrete floodwalls supplement the earthen levees in several areas. The Great Miami River Recreation Trail uses the levee tops and channel areas in Hamilton, and provides several paved ramps to the river channel. Dam Overlook Park is situated on the levee top, providing a wide view of the river and a paved bikeway ramp.

### **4.5.4 Preserved Floodplains**

Use of floodplain land for parks allows public access to natural areas and prevents development in flood prone areas. Miami Bend, Rice Field, Crains Run, River Trail Access, Middletown/Lemon Township boat ramp, Combs Park, and city of Hamilton's boat ramp are examples of parks within Segment Three that are in the floodplain.

### **4.5.5 Flood Risk Reduction Synopsis**

Levees protect property in Moraine, West Carrollton, Miamisburg, Franklin, Middletown, and Hamilton. The levees are sometimes high and steep, creating physical and visual barriers, but the levees also create the route for the Great Miami River Recreation Trail through this segment. Several parks exist on floodplain lands in this segment and can be subject to flooding.

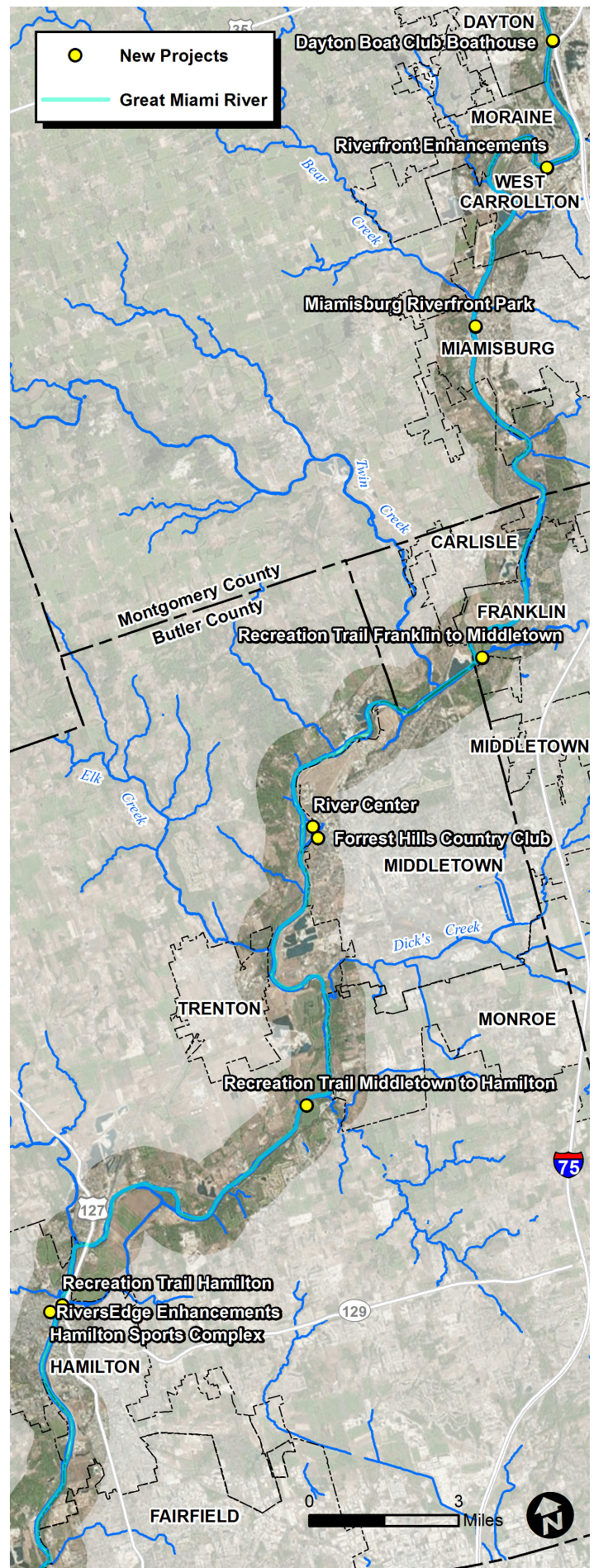
## 4.6 NEW PROJECTS

### 4.6.1 Public Projects

Several new riverfront parks or recreation amenities are in various stages of visioning, planning, design, and implementation throughout Segment Three of the corridor. Planned amenities within this segment of the corridor range from park development and dam modification, to trail linkages. The following is a description of each planned project and its stage of development as of October 2014.

**Riverfront Enhancements, West Carrollton (RM 72).** The city of West Carrollton is planning a project on the left bank of the Great Miami River. The project includes a riverfront park, an Olympic-quality whitewater kayaking course, an area events center, a professional soccer complex, a youth soccer complex, and a hydroelectric generation station. The park would be used during good weather to accommodate riverfront concerts, fireworks shows, boating events, and professional kayaking events. The city would also modify the existing river access points, allowing better boating opportunities as well as better use of the river. The city would encourage the construction of a bike hub, primarily at the riverfront park access point at the bend of Alex Road. In addition, the city would move a portion of the bike path, which currently bends away from the river and merges with auto traffic on River Road, back to the riverfront. This would increase user safety and help alleviate automobile and bike interaction. This project is still in the visioning stage, with some conceptual renderings but no design yet. The project is not funded, but \$250,000 for use toward the project was in the state capital budget bill. Currently, the city is disconnected from the river but the planned linkages and trails will help integrate the river into the city. The city is one of the communities in this segment that doesn't have a central activity hub. The proposed plan will create an activity hub and develop a unique regional attraction.

**Miamisburg Riverfront Park (RM 66.1).** The city of Miamisburg proposes to develop its park along the left bank of the Great Miami River in downtown Miamisburg. The park proposal is detailed in the Miamisburg Riverfront Park Master Plan. The proposal would modify the existing flood protection levee and include a great lawn and festival area, river overlook, central plaza and special event venue, rerouted recreation trail, walking paths, watercraft storage, bike depot, performance stage, parking, and boat drop-off areas. Miamisburg purchased and demolished



Segment Three New Project Locations





Miamisburg Riverfront Park



Miami Bend Entertainment District



Forrest Hills Country Club



RiversEdge Enhancements

houses in the project area several years ago. The area is currently open space used for many festivals and other programmed events. Funding has not been secured for the construction project, although Miamisburg received \$250,000 from the state capital budget bill for use toward the project. This would add a central activity hub for the community, expand upon access to the river, and add many new assets.

**Great Miami River Recreation Trail: Franklin to Middletown.** There is currently a gap in the Great Miami River Recreation Trail between Franklin and Middletown. Filling this gap is envisioned but not yet planned or funded. No lead agency has been identified for this project. In July 2014, a meeting of interested stakeholders was held to discuss closing the trail gap. The construction was estimated at \$1.7 million dollars. The cities are planning to pursue transportation funding to complete the project. This proposed section of trail will fill a current gap in the system and connect Franklin to Middletown and the rest of the Great Miami River Recreation Trail.

**River Center (RM 51.7).** MetroParks of Butler County plans to create a hub in Middletown on the left bank of the Great Miami River. The River Center will serve those in the region who walk, run, and bike along the Great Miami River Recreation Trail, and those who make use of the Great Miami River as a recreational resource. The River Center would house a substation for MetroParks rangers. The construction would also include parking improvements in the area. As part of this project, enhancements would be made to the existing Bicentennial Commons area and the AK Steel Pavilion. MetroParks of Butler County has received \$1 million toward the project from the Ohio capital budget bill. The addition of a ranger station will fill a safety need within the corridor.

**Great Miami River Recreation Trail: Middletown to Hamilton.** There is a gap in the trail from State Route 73 in Lemon Township (Middletown) to Rentschler Forest MetroPark (Hamilton). This proposed 7-mile section of trail will fill a current gap in the system that will connect Middletown to Hamilton and the rest of the Great Miami River Recreation Trail.

**Great Miami River Recreation Trail: Hamilton.** There is a 1.6-mile gap in the trail at the northern end of Hamilton. Plans are complete, funding is in place, and construction is pending. Construction is scheduled to be completed in 2015.

**RiversEdge Enhancements (RM 35.7).** The city of Hamilton is proposing to build a ramp from RiversEdge Park (at the top of the levee) down to the river channel.

An expansion to the park is also proposed along with a pedestrian bridge across the river to the Great Miami Rowing Center Boathouse. A master plan was recently completed. This would help link both sides of the river for pedestrian access, creating one large, regional destination, activity hub area.

#### 4.6.1 Private Investment

The synergy of the corridor continues to build with the development of activity hubs, enhancement of parks, and integration of trails into the surrounding community. The communities in this segment are exploring opportunities to build upon this synergy through private investment and redevelopment or reuse of their riverfronts. This is an opportunity to link the community's art, culture, entertainment, and economy with the river and provide opportunities for the preservation and revitalization of the historic downtown business district.

##### **Miami Bend Entertainment District, West**

**Carrollton.** As part of the broader vision of the West Carrollton Riverfront Enhancements, the city envisions a 600-acre mixed-use development along the Great Miami River corridor and the I-75 corridor to complement the recreational and open space improvements at the riverfront. These uses could potentially include waterfront restaurants, retail, hotels, office buildings, and high-end living spaces. (<http://discoverwestcarrollton.com/entertainment-district>)

**Middletown Forrest Hills Country Club.** The city is envisioning the development of the block of Carmody Boulevard, Second Avenue, Water Street, and Central Avenue with mixed-use residential and economic development projects. The 41-acre Forest Hills Country Club has future plans for redevelopment, including lifestyle living with green space, a bike trail, and an amphitheater. (<http://riversummit.udayton.edu/Riverside%20Riverwalk%20Hamilton.pdf>)

**Hamilton Sports Complex.** A private company purchased the former 500,000-square-foot Champion Paper manufacturing plant and surrounding 42 acres with the intent to transform the property into a \$30 million sports complex. A study to see what would fit on the property showed the conversion of the manufacturing plant into an indoor recreational sports complex and potential to build a 5,000-seat minor league baseball complex to house the local Hamilton Joes. The sports center would partner with affiliates to include water programming through the waterfront recreational facility at the Great Miami Rowing Center directly across the river. (<http://www.bizjournals.com/cincinnati/news/2014/10/09/could-aformer-paper-factory-find-new-life-as-a-30.html?page=2>)

**Great Miami Rowing Center Boathouse.** In June 2013, the Great Miami Rowing Center began leasing a portion of the former SMART Paper campus. Using what was once a power generation station as a template, the center is in the process of converting the space into a multiuse riverfront recreational facility. Future plans include the facility as a trail head for the Great Miami Recreation Trail and for the existing bike path that will soon be connected to miles of pathway directly to the north. The facility would then be a destination along the path down the Great Miami River, with the potential for concessions, bike rental, fishing weirs, kayak rentals, inline skate rentals, and so forth. The Great Miami Rowing Center is in the process of raising funds to implement the first phase of their plan.

**Small Businesses.** The Great Miami River is proving to be an attractive place to do business. Visitors support local shops and outfitters that provide supplies, outdoor gear, apparel and programs to outdoor enthusiasts. Boutique shops, restaurants, coffee shops, bars, and breweries are frequented by river and trail users.





## 5. CASE STUDIES

### 5.1 Mascoma River Corridor, New Hampshire

**Length:** 25.27 miles

#### **Initial Organization**

- Organizing action: March 2008
- Public information meetings: March 2000–May 2010
- Mascoma River Corridor Management Plan, December 2012

#### **Sponsoring Organizations or Individuals:**

- Upper Valley Lake Sunapee Regional Planning Commission  
30 Bank St., Lebanon, NH 03766  
(603) 448-1680  
Contact person: Rachel Ruppel
- Mascoma River Local Advisory Committee  
C/o UVLSRPC  
10 Water Street, Suite 225  
Lebanon, NH 03766  
Contact person: Bill Chabot, Chairperson

#### **Partners**

- New Hampshire Department of Environmental Services
- City of Lebanon City Council, Planning Board, and Conservation Commission
- Town of Enfield Board of Selectmen, Planning Board, and Conservation Commission
- Town of Canaan Planning Board and Conservation Commission
- Greater Upper Valley Chapter of Trout Unlimited
- Mascoma Lake Association
- Goose Pond Lake Association
- Upper Valley Land Trust
- Mascoma Watershed Conservation Council
- Hanover Conservation Commission

#### 5.1.1 Overview

The Mascoma River corridor was selected as a case study after preliminary research into eight corridors that appeared to have conditions and organization similar to the Great Miami River. The research on the Mascoma River was built on information provided on the Mascoma River Local Advisory Committee website, supplemented by the Mascoma River Corridor Management Plan: Phase I with its appendices, which include the nomination of the Mascoma River for designation to the Rivers Management and Protection Program. Additional background also came from the Upper Valley Lake Sunapee Regional Planning Commission website. The published information was discussed and updated by Bill Chabot, chairperson of the Mascoma River Local Advisory Committee. The committee, and thus the program to protect the resources of the river, is still in its beginning stage, and much of the planned work has not yet been completed. However, the lessons learned in forming the Mascoma River Local Advisory Committee, the plan that was developed, and the outline of action items to guide protection of the river provide useful insights for the Great Miami River.

The Mascoma River is similar to the Great Miami River in several ways. Like the Great Miami River, the Mascoma River is a major recreation resource for its region and valuable to the regional economy. Reaches of the Mascoma River are quite rural, while others are urban, and the river is interrupted by several dams constructed for both flood management and industrial purposes. The upper reaches of the Mascoma River pass through rural lands and several small communities, similar to Segment One of the Great Miami River. The one larger city in the corridor, Lebanon, is the center of economic, cultural, and recreational activity for the Mascoma River corridor, much as Dayton is for the Great Miami River, although Dayton is much larger, with more cultural and recreational assets. Trails, conservation areas, and parks are major recreation assets along the Mascoma River corridor and for the region, as the Great Miami Recreation Trail and the parks it links are important to the Great Miami River. The trail system is linked to the Northern Rail Trail, a larger regional system, not unlike the Buckeye Trail or the North Country National Scenic Trail, which intersect the Great Miami Recreation Trail.



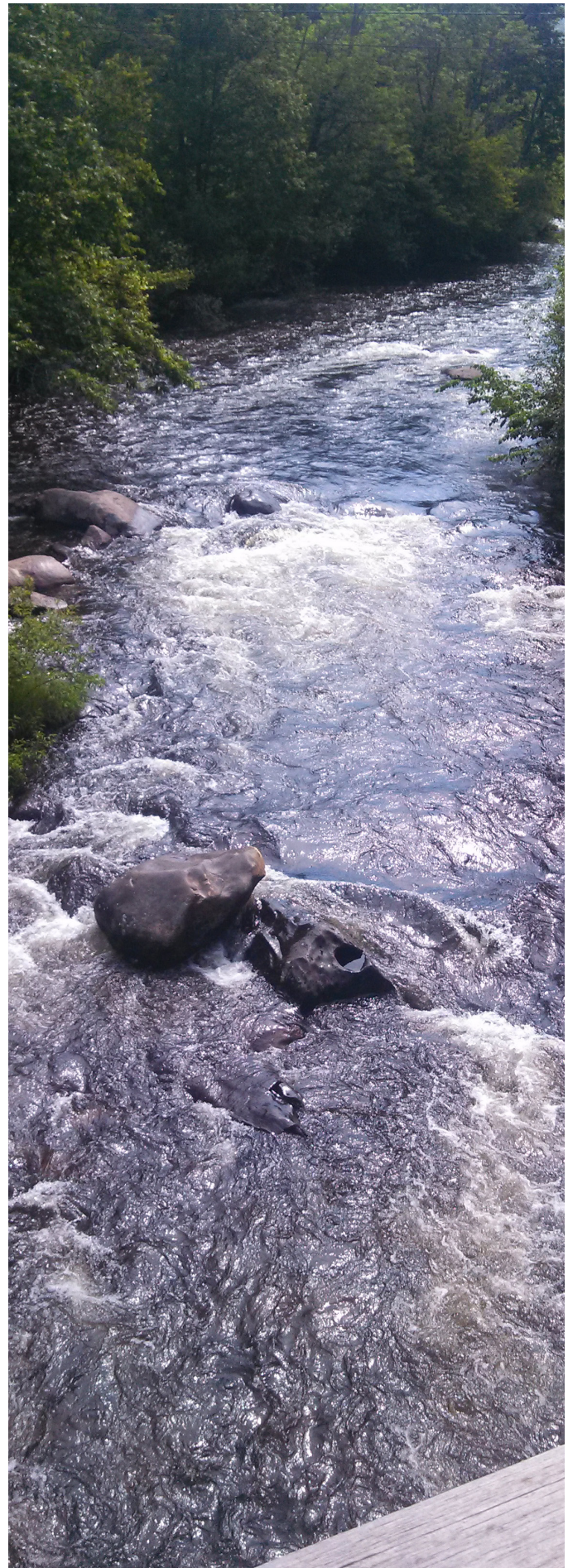
The Mascoma River also has a history of industrial uses that were dependent on the river for power and, to an extent, transportation. The Mascoma River also provides sufficient water to power hydroelectric stations and support industrial uses. This is also similar to the Great Miami River, and like some dams on the Great Miami River, some of the dams along the Mascoma River were built for early industrial purposes. The remnants of the industries remain, presenting both assets and challenges to growing recreational use. Unlike the Great Miami River, the Mascoma River has a number of naturally occurring rapids that also interrupt navigation.

The Mascoma River was designated a Protected River under the State Rivers Management and Protection Program in 2010. It is managed in three classifications: Rural River, 11 miles; Rural and Rural-Community River, 6 miles; and Community River (two segments), 8 miles. The Mascoma River Local Advisory Committee meets monthly. In discussing accomplishments to date, the chairperson of the Mascoma River Local Advisory Committee said the committee does not see that the river's status as a protected river has had any significant positive or negative effect on recreation so far.

The State Wildlife Action Plan identifies four areas of wildlife habitat that rank as top tier on a statewide level and about a dozen other areas of regionally important wildlife habitat. The Enfield Natural Resources Inventory shows three large, potential wildlife-travel corridors on or near the Mascoma River. Riparian buffers cover more than 1,800 acres along the river in Enfield and connect to two large wetland complexes and adjoining upland habitat. In addition, a very large, potential corridor has been identified just west of Mascoma Lake. Multiple Wildlife Management Areas cover several large parts of the watershed and serve as wildlife refuges.

The flow of the Mascoma River is regulated by seven impoundments on the main stem in Enfield and Lebanon between Canaan Center and the Connecticut River in West Lebanon, but the river is primarily free flowing. Of particular significance is the free-flowing section below Mascoma Lake Dam in Lebanon, where the annual whitewater kayaking race is held every spring. Mascoma Lake is a natural lake raised by damming. Particularly in Lebanon, the river has steep banks prone to erosion and landslides; the 2007 Route 4 Corridor Study identified erosion near Mill Road and Route 4 in East Lebanon as an area of concern.

The Mascoma River is overseen by a public agency, the Upper Valley Lake Sunapee Regional Planning Commission. The Mascoma River has an advisory commit-



Mascoma River



tee, the Mascoma River Local Advisory Committee, established under state legislation that is charged with developing and implementing a River Corridor Management Plan. The plan's intent is to guide the Mascoma River Local Advisory Committee and its community partners as they take action to protect the water- and land-based natural resources of the Mascoma River, both of which are considered valuable recreation resources. Committee members also serve on partner organizations; to date, that appears to be the primary means of maintaining communication and coordination.

The Mascoma River Local Advisory Committee reviews and reports on state environmental permit applications within the watershed, and reports to the New Hampshire Department of Environmental Services any violations of permits or state environmental law that occur within the watershed. This is a volunteer committee whose members are appointed by the member communities. It has no dedicated funding from the state, but rather relies on funding from grants and local sources such as Mascoma River Watershed Council, Rotary clubs, Lions Club, and other local philanthropic organizations. So far in its initial years, funding has been a big challenge, according to the chairperson of the committee.

Two initial steps that the Mascoma River Local Advisory Committee has taken could benefit the Great Miami River corridor. The committee convened a Mascoma River Summit, which brought in more than 20 regional groups with an interest in the watershed for discussions on how to improve communications and common efforts. This summit is similar to the Great Miami River Summit, reinforcing the value of the concept; however, the committee has just started the practice and so has not seen a lot of benefit yet, according to the chairperson.

Of particular interest is that the Mascoma River Local Advisory Committee started by preparing a plan for the entire corridor. The idea of starting with a plan and some lessons learned can be of value to the Great Miami River, even if the plan itself is not directly relevant. The Mascoma River Corridor Management Plan, considered a Phase 1 plan, identifies priority issues in the Mascoma River watershed. It is important to note that this is a watershed plan that reaches beyond just the main stem corridor. Using this plan, the committee reviews its goals and action items annually. A key lesson was the importance of engaging and achieving buy-in from all corridor communities; one community did not sign on, and the chairperson believes that that lack of buy-in is detrimental to the committee's mission.

The committee surveyed municipal officials, waterfront landowners, and watershed residents about the most important resources and most pressing threats to the river and its watershed. The plan brought together work already underway by the committee's partners. It used the survey responses to develop management and resource protection goals, based on work already underway in the three partner communities.

While recreation and economic benefits are important to the committee, the plan goals are weighted toward environmental and water-quality issues:

- Goal 1: Protect the quality and adequate supply of drinking water for the city of Lebanon.
- Goal 2: Identify causes of water quality problems in Mascoma Lake and take action to improve water quality.
- Goal 3: Ensure adequate water flow and water levels for the Mascoma River's many users.
- Goal 4: Improve public access to the Mascoma River and Mascoma Lake for recreation.
- Goal 5: Prevent the spread of aquatic, wetland, and terrestrial invasive species.
- Goal 6: Protect the scenic quality of the Mascoma River watershed.
- Goal 7: Ensure that septic systems are properly maintained.
- Goal 8: Prevent stormwater runoff from carrying pollutants into the river system.
- Goal 9: Reduce road salt runoff into the river system.
- Goal 10: Avoid overdevelopment and protect open space.

The basic plan laid out in the Mascoma River Corridor Management Plan: Phase 1, was adopted in December 2012; however, the committee has yet to inventory resources and assess problems and opportunities, beyond assessing what efforts were already under way. Also, the committee has yet to assess how the plan and committee actions are benefitting development of an integrated recreation corridor. While there is a lot of history in the area, the plan and Mascoma River Local Advisory Committee have focused on natural resources. The chairperson said that the committee does not believe that historical and cultural resources are significant attractions, nor does the committee recognize any activity nodes along the corridor. In their emphasis on water quality and recreation, the committee's goals parallel those of the Miami Conservancy



District. However, in the areas of community economic benefit and recreation, the chairperson said that the committee has not yet gotten to those aspects of the corridor. The several dams on the Mascoma River are for hydroelectric power or for impoundments that serve recreation purposes; some were built initially for water and power for industries. It is interesting that flood risk reduction is not mentioned. The chairperson simply considers flood risk a non-issue. Also, while half of the committee's goals deal with water quality, the committee has not yet identified any water quality impacts on recreation.

It is too early to see any benefits of the Mascoma River Corridor Management Plan, so there are limited lessons that may apply to the Great Miami River. The process did identify the importance of trails and recreation facilities, and protection of the natural resources that are the basis of what attracts people and investment to the river corridor. The chairperson stated that one important lesson learned is that the process probably would have benefitted from a large number of grassroots meetings to gain as much local citizen support as possible before going to the respective town officials.

The committee does not list any proposed projects, yet the plan incorporates work already under way by partners. This gap may derive, in part, from the early stage of the program, but also seems to be related to the lack of assessments yet completed. In this regard, the Great Miami River corridor initiative is positioned to cover areas that are currently lacking in the Mascoma River program.

### 5.1.2 Recreation Resources

The Mascoma River corridor includes large areas of open space along the upper sections of the river and in the upper sections of the watershed, from Canaan Center through East Lebanon. Cummins Pond and then Reservoir Pond feed the uppermost reaches of the Mascoma, which is almost entirely undeveloped timberland. Below East Lebanon, the corridor becomes more developed as it travels through downtown Lebanon, but there are a number of public parks, natural areas, and smaller open spaces even in the most developed sections.

The Northern Rail Trail (also on the New Hampshire Department of Transportation bike route map) is a resource of statewide significance, connecting town and village centers via a multi-use trail. The Mascoma River Greenway connects to this trail in Lebanon. More than 30 state, school, municipal, and private recreation areas front on the Mascoma River. Other resources include the Enfield community development projects,

parks in the Lebanon Rotary Club String of Pearls project, and fountains in Lebanon's public spaces. The river and lakes are very popular for fishing. They are stocked with salmon and three species of trout, in addition to the naturally breeding bass and pan fish, such as black crappie and bluegills.

### 5.1.3 Activity Hubs

The Mascoma River flows through villages and the downtown areas of the towns of Canaan, Enfield, and the city of Lebanon before entering the Connecticut River in West Lebanon. One component of the individual master plans for Canaan, Enfield, and Lebanon is the value of the river to the communities. The New Hampshire Department of Transportation has designated all but two major roads along the Mascoma River and Mascoma Lake as bicycle routes.

### 5.1.4 Historic and Cultural Resources

Native Americans used the Mascoma River corridor as a trail to the interior of the state and camped and fished on Mascoma Lake. The Mascoma River translates to "Clap Place River", or a man's name in Abenaki. Chief Mascoma was a "talking sachem" for the Squakheag tribe, which ranged from central Massachusetts to New Hampshire along the Connecticut River. Euro-American settlers began establishing villages and water-powered industries in the 1760s. The industries expanded and the Northern Railroad followed the river, connecting local industries to the region, and brought travelers to Mascoma Lake. The corridor now contains four historic districts listed in the National Register of Historic Places. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*)

The Enfield Shaker Historic District is of national significance. It is part of the Shaker Historic Trail, which connects the 15 Shaker communities on the National Register of Historic Places on the east coast of the United States. There are no sites on the New Hampshire Register of Historic Places within the river corridor. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*)

The State of New Hampshire and local municipalities have invested in public lands, boat launches, and recreation areas along the full length of the river. Areas of particular significance are the fly-fishing-only section of the Mascoma River in East Lebanon, the Northern Rail Trail's riverside section along the river between downtown Lebanon and Route 4/LaFortune Road in Canaan, the annual whitewater kayak race below Mascoma Lake Dam, and the three Water Management

Areas with frontage on the river or lake. The city of Lebanon and its local partners, notably the Lebanon Rotary Club, have developed a series of parks and open spaces along the Mascoma River, even in the urbanized parts of the city. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*)

### 5.1.5 Flood Risk Reduction

The Mascoma River has experienced some large flooding events. Significant floods occurred in 1936 and 1953. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*) However, as noted, the Mascoma River Local Advisory Committee currently is not concerned with flood risk reduction, nor is it a component of the Mascoma River Corridor Management Plan.

### 5.1.6 Water Quality

Water quality has improved significantly since the closure of the mills in the 1960s and early 1970s, and the passage of the Clean Water Act in 1972. Since 2001, the city of Lebanon has been separating its sanitary sewer and stormwater sewer system, improving water quality in the Mascoma River and the Connecticut River. All four lakes in the watershed—Mascoma, Canaan Street, Crystal, and Goose Pond—have active water-testing programs to help identify water quality problems. In addition, programs are in place to manage and decrease invasive weeds in the corridor. All four lakes have programs to prevent further spread of invasive plants. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*)

All segments of the Mascoma River meet state Class B (rural, rural-community, and community rivers) water quality standards for drinking water after treatment and for safe boating. However, all segments are impaired for safe fish consumption, because of mercury contamination, a condition common to all New Hampshire water bodies. Nine segments of the river in Lebanon are impaired for safe swimming, because of *Escherichia coli* bacteria.

The river has not been identified to serve as a public water supply for either Canaan or Enfield, although Enfield does draw part of its drinking water supply from three groundwater wells within the Mascoma River corridor and Canaan has identified the stratified-drift aquifer near the Mascoma River as an important resource in its master plan.

### 5.1.7 Quality of Life

The Upper Valley region has seen significant economic growth over the last 25 years, with correlated growth in development and population. Route 4 parallels the Mascoma River for about 20 miles between Lebanon and Canaan; this is a primary travel route for commuters between easterly outlying communities and the Lebanon/Hanover/Hartford (Vermont) employment center. Without thoughtful planning and management, further residential and commercial development in outlying areas could undermine the natural, scenic, and recreation values of the Mascoma River. (*Nomination of the Mascoma River from Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program. 2010*)



## 5.2 Carolina Thread Trail, North Carolina

**Length:** 217 miles of completed trail (1,500 total miles planned) in 14 corridors through a variety of landscapes, both upland and along rivers, in 15 counties of two states

### Initial Organization

- Organizing action: Regional meeting convened by Foundation for the Carolinas: 2005
- Trail launched 2007

### Sponsoring Organizations or Individuals:

- Catawba Lands Conservancy  
105 W. Morehead Street, Suite B  
Charlotte, NC 28202  
carolinathreadtrail.org  
(704) 342-3330  
Contact person: Karl J. Froelich, Carolina Thread Trail Director  
(704) 342-3330, ext. 213  
heike@catawbalands.org
- Carolina Thread Trail Advisory Council

#### 5.2.1 Overview

The Carolina Thread Trail (The Thread) was selected as a case study because of its extensive organization, with 15 partner counties and variety of trail types connecting a wide range of nodes, communities, and cultural, historical and natural resources. The research on The Thread was built on information provided on the Catawba Lands Conservancy and Carolina Thread Trail websites, supplemented by the 2013 Report to Communities articles on The Thread. Additional background also came from the Carolina Thread Trail Master Plan for Cabarrus County Communities (an example of the 15 coordinated county plans). The published information was discussed and updated by Karl Froelich, director of the Carolina Thread Trail. The lead agency for The Thread is the Catawba Lands Conservancy, with a mission similar to that of the Miami Conservancy District.

The Thread is a network of trails, greenways, and conserved corridors that links 15 counties in North Carolina and South Carolina. Components of The Thread are varied, from community bike and multi-use trails, to corridors through both upland and river corridor preserves. The Thread connects the region and places of interest, in addition to conserving the region's most significant natural areas.

The Thread is quite different from the Great Miami River corridor in several ways. However, there are parallel conditions, opportunities, and challenges that can inform planning and development of the Great Miami River corridor. The Catawba Lands Conservancy is a conservation organization dedicated to preserving habitat and natural systems, with one of its main goals to protect and enhance water quality. A productive approach has been explored and developed to leverage the relationship between floodplain and other natural land preservation and trail routing along The Thread into a synergetic strategy that benefits both trails and land preservation programs. The Thread connects more than 70 communities, and by developing strong leadership through planning, The Catawba Lands Conservancy, through its Carolina Thread Trail nonprofit organization, has built an effective program that assists and enables local communities to make the key decisions on priority destinations and routing, within the unifying oversight of one body that keeps the whole system connected, and consistently branded. The Thread is a 501 c(3) nonprofit organization under the Catawba Lands Conservancy. It has four full-time staff, relying on conservancy staff for much of its operational support. The Thread was launched with a private capital campaign that continues to leverage local, state, and federal funds.

Not all trails in The Thread system follow water courses, but waterways are a major component. The Thread works within the Catawba Lands Conservancy to marry trail routing with land conservation wherever land can serve both conservation and trail objectives. The methods of coupling land conservation, both within floodplains and uplands with trail development, linking parks, community nodes, and historic and cultural resources, offer guidance to the Great Miami River corridor.

The Thread organization and trail system was conceived in 2005, and by 2007 had \$17 million in funding in place to support its initial master planning efforts (see funding, below). The initial process involved more than 40 community and business leaders, starting with countywide master planning. Initially, The Thread Trail Advisory Council hired two planners from regional municipalities to work with each county to create county master plans. The planners coordinated all of the plans so that each county's plan connects with adjacent counties. The process included public workshops in each county as well as secondary workshops to define goals and build agreements that led to signed letters of agreement among all of the cities in each county.







The benefits that The Thread offers its member communities parallel those expressed for the Great Miami River corridor. The Thread is intended to:

- Support economic prosperity by attracting and retaining new employers to the area
- Promote tourism
- Foster the joining of diverse communities
- Serve as an alternative means of transportation
- Encourage healthy lifestyles
- Aid in clean air and water preservation
- Promote permanent conservation of nature and wildlife habitats
- Increase awareness and visitation of cultural and historical venues
- Create a sustainable Carolinas legacy for generations to come
- Educate our children and connect them to nature

The Thread Trail Advisory Council offers coordination and significant professional and funding assistance to member communities. The way in which the council provides assistance with planning and implementation of trails, especially routing through riparian and flood prone areas, offers insights that can strengthen efforts by the Miami Conservancy District in the Great Miami River corridor.

Accomplishments to date include:

- Assembled \$1.4 billion in program funding
- Awarded \$3 million in private grants to communities
- In 3 years, 14 counties have adopted master plans with The Thread routes, with the 15th in process
- 76 local governments are collaborating
- 220 miles of The Thread are currently open

**Partners.** The Thread team engages its communities in the planning and implementation of trail plans. Each county hired its own consultants to prepare its master plan, and retains its own designers to implement the plans. Once plans are adopted, The Thread Trail Advisory Council actively partners with communities on priority corridors to help them realize their vision. The council, working with the Foundation for the Carolinas, also raises private capital and assists communities with funding.

The Thread Trail Advisory Council enhances trail-building capacity across the region through its annual trail forum, a day of learning from experts and sharing best practices. The Thread Trail Advisory Council also

provides mapping expertise to support the design and implementation of trails. By training volunteer leaders, "Trail Masters," in sustainable trail building, The Thread Trail Advisory Council coordinates a core of volunteers in building and maintaining natural surface trails.

The target was to build a minimum of 5 miles of continuous trail in each county. Half of the counties already have five or more continuous miles in place; the rest will be in place over the next 3 to 5 years.

**Funding.** Private funding has been fundamental to the rapid growth of The Thread. Catawba Lands Conservancy serves as the lead agency and Foundation for the Carolinas, which manages the funds, is The Thread's philanthropic partner.

Initial funding was provided by:

- Duke Energy
- Bank of America
- Foundation for the Carolinas
- Knight Foundation
- Piedmont Natural Gas
- Turner Family Foundation
- Wachovia Foundation Women's Impact Fund

Through its private fundraising efforts, The Foundation for the Carolinas has provided The Thread with grant funds for communities for planning, design, land acquisition, and construction of trail segments. Initially, each county received \$300,000 to start the process. The Thread Trail Advisory Council also assists communities in attracting public funding and other private grants. The foundation receives some money from the counties and, generally, each county donation is earmarked for that county. Funding secured to date includes:

- \$17 million in private capital
- \$7.3 million in land donations
- \$27 million in public funding committed through federal, state, and local sources

Communities apply to the Carolina Thread Trail Grant Committee for implementation funding. From this funding, \$300,000 implementation grants have been awarded and momentum is being created in communities across their footprint. The Thread Trail Advisory Council helps with design and permitting to help each community put its trails in place. Currently, there are 76 communities with connected, adopted master plans averaging 95 to 110 miles per county.

Half of the implementation funds remain in the bank to be distributed as grants. When grant money is distributed, there will still be money for growth. Currently, \$2 million is reserved for endowment, anticipated to produce income at about 3% per year for funding to keep the brand alive, for marketing and communications, and some technology.

### 5.2.2 Recreation Resources

The Thread Trail Advisory Council is dedicated to protecting and connecting open space, resulting in preservation of large linear areas of natural resources. The Thread trail itself is considered a primary recreation resource in the region and one of the most important recreation resources in each of the counties and individual communities. (*Karl J. Froelich, Carolina Thread Trail director*) The Thread connects the primary destination or signature parks in each county as well as local points of interest, historic sites, arenas, universities, gardens, museums, natural features, and wildlife preserves. While not every local trail will be part of the Carolina Thread Trail system, The Thread links regionally significant trails and many regional attractions. It is promoted as a “green interstate system” of major trails and conservation lands created through local efforts across the region.

### 5.2.3 Activity Hubs

Activity centers are found in the towns and cities through which the trails pass, as well as at state and local parks, and at universities. The Thread Trail Advisory Council is a resource to help communities route trails. It uses workshops as a public forum and surveys to pick destinations and use them to route trails. Each community identifies and prioritizes the nodes and activity centers it wants the trails to connect. The individual master plans route the trails and highlight the hub destinations. Through this process, each community passes local resolutions. This draws on local knowledge to pick and prioritize destinations. The local communities also choose the top priority local trail segments to be included in The Thread.

### 5.2.4 Historic and Cultural Resources

More than a hiking trail and more than a bike path, The Thread preserves the region’s natural areas and is a place for exploration of nature, culture, science, and history. Historic and cultural resources are often destinations on the trail system, designated and prioritized by local communities, giving The Thread a distinctly local character along each of its links.

### 5.2.5 Flood Risk Reduction

The Thread is broad reaching, covering multiple watersheds and resources. Many of the trails follow river corridors. The Thread Trail Advisory Council is now buying flood plain land along river corridors for public access, drawing on \$27,000,000 in funding from the public North

Carolina Clean Water Management Trust Fund. Those funds are designated for habitat and resource protection, and with increased competition for funds, river corridors that offer good trail opportunities are higher priorities for acquisition. The river corridors tend to be the most attractive routes for trails, because of the water and continuity of natural habitat. Land in the floodplain generally costs less because it cannot be developed. While floodplains have challenges, they are desirable. The Thread’s Regional Advisory Council has learned how far above a river it wants trails to be located. Planners now try to get trails on a shelf 20’ to 30’ above the bottom land along the river. That allows designers to slope the trail surface, allowing it to drain better and dry more quickly so the trails last longer. Developers can sell or give an easement over floodplain land and still get desired density.

### 5.2.6 Water Quality

The Thread is broad reaching, covering multiple watersheds and resources. Clean water is one of the primary missions of the Carolina Lands Conservancy, and a primary means to achieve clean water is to protect land around and near waterways, improving the natural filtration of pollutants and sediments, helping to prevent flooding. With help from funding sources like the North Carolina Clean Water Management Trust Fund, the Catawba Lands Conservancy is purchasing riparian and floodplain lands. The conservancy has used good trail potential, to improve the potential to fund purchase of targeted riparian lands. Adding recreation and the economic value of trails to the water-quality benefits of conserving lands around key waterways helps to acquire funds to keep natural buffers intact. The Catawba Lands Conservancy has received \$12.5 million in grant awards from the Clean Water Management Trust Fund since 1998. It has preserved more than 48 miles of river or stream frontage in the last 5 years, of which 1,300 acres also contain trails.

### 5.2.7 Quality of Life

The Thread Trail Advisory Council has focused on preserving natural corridors and connecting people to nature through a network of trails. The Thread strengthens the region and promotes economic development, education, better health, and land conservation by connecting people, businesses, and communities of diverse backgrounds and interests. The Thread will develop over time as communities work together to plan and build trails reflecting community character, aspirations, and priorities. The Thread Trail Advisory Council and the Catawba Lands Conservancy cite economic benefits (including 7-year payback on trail construction costs), documented in the report by Dennison and derived from improved quality of life, as important successes of the combined land conservation and The Thread trail programs.



## 5.3 Susquehanna Greenway, Pennsylvania

**Length:** 500 miles

**Initial Organization:** Initiated in 2001 as a result of an initiative by the Pennsylvania Greenways Partnership Commission to identify a statewide system of greenways: "Pennsylvania Greenways: An Action Plan for Creating Connections." (June 2001)

### **Sponsoring Organizations or Individuals:**

- Susquehanna Greenway Partnership  
201 Furnace Road  
Lewisburg PA 17837  
(570) 522-7211  
info@susquehannagreenway.org  
Contact person: Trish Carothers, Executive Director  
(570) 522-7259  
tcarothers@susquehannagreenway.org
- Pennsylvania Department of Conservation and Natural Resources

### 5.3.1 Overview

The Susquehanna Greenway was selected as a case study because the organization oversees a range of interests in the river corridor similar to that of the Great Miami River. The research on the Susquehanna Greenway was built on information provided on the Susquehanna Greenway web site, supplemented by the eConnections newsletter, published by the partnership on a monthly basis. The newsletter provides the most current information on projects, workshops and seminars and the Annual Susquehanna River Symposium, which appears to be similar to the one hosted by MCD, but is attended by researchers, managers and consultants, as well as the public.

The symposium focuses on scientific research and innovative projects to increase awareness of watershed health, management and sustainability issues. The greenway includes in its mission not only protecting the natural and cultural resources of the river corridor but also revitalizing river communities and building trails, parks, and river access. The greenway's role in funding offers a model that may serve the Great Miami River corridor. This corridor, while significantly larger than the Great Miami River, nevertheless has many similar components, including rural agricultural areas with small towns, large industrial cities, and major

transportation routes both paralleling and crossing the river. This corridor offers a slightly different perspective in that the Susquehanna Greenway is not an arm of a lands conservancy or other organization with broader interests.

The Susquehanna Greenway Partnership is a nonprofit watershed-wide organization for resource management and community conservation for a river corridor-based system that will link natural, cultural, historic, and recreational resources along the 500-mile corridor of the Susquehanna River in Pennsylvania. Water-based recreation is a major component of the plan. The Susquehanna Greenway Partnership is an independent agency governed by its own board, with a principal staff of six people, with expertise in parks, trails, stormwater/green infrastructure, walkable/bikeable communities, river town redevelopment, and conserving land. Member communities can draw on this expertise for their projects.

The Susquehanna Greenway corridor will be the state's longest greenway, and this landscape-scale vision is composed of many smaller, local greenway projects. The Susquehanna River Watershed is Pennsylvania's most important natural asset and the largest tributary to the Chesapeake Bay. The Susquehanna River connects wild and remote canyons to pastoral agricultural landscapes, and passes through a variety of river towns along its length. While much larger in scope than the Great Miami River corridor, the Susquehanna Greenway offers examples of how such a diverse landscape can be unified as a trail system and under a coordinating oversight program.

An Interpretive Master Plan for the Susquehanna River Water Trail and Susquehanna Greenway was prepared in 2008. The plan was based on site visits and analysis of existing, or potential, interpretive services and media within the corridor of the Susquehanna Greenway and the Susquehanna River Water Trail. The plan identified great heritage tourism and interpretation potential that could bring millions of tourism dollars into the local economy through the draw of resources such as scenic byways and heritage areas. The plan recommended the formation of the Susquehanna Greenway Partnership to work with stakeholders throughout the greenway to look at the Susquehanna River Water Trail and Susquehanna Greenway Corridor in an overarching view to help all the stakeholders, organizations, and agencies within the greenway to maximize their potential and accomplish their missions. In addition to the interpretive program, the plan included an interpretive/marketing strategy, branding and themed signage, recommendations for partnering, and a recommended staffing structure.

The Susquehanna Greenway Partnership operates as a leading champion for the Susquehanna River watershed. It advocates for public and private efforts to connect people with the region's natural and cultural resources, and promotes a sustainable and healthy environment. The partnership is focused on six strategic program initiatives:

- Conserving and enhancing natural resources
- Revitalizing river towns
- Improving connectivity
- Improving river access
- Signage, branding, and promotion
- Interpreting natural and cultural assets

The Susquehanna Greenway Partnership provides technical assistance, through its staff of six people, while working collaboratively with municipalities, state, and federal agencies and local partners to help them advance each of the partnership's strategic initiatives, which are:

- Determine the status of regional greenway efforts
- Build upon public participation activities previously conducted in the corridor
- Promote the importance of strong community involvement in present and future greenway development
- Provide a diverse and inclusive program to maximize input from all segments of the population
- Promote local ownership of the greenway plan and its implementation

**Partners.** Partners are regional and local nonprofits focused on cultural and historic heritage and conservation. The partner organizations include:

- Endless Mountains Heritage Region
- Delaware and Lehigh National Heritage Corridor
- Headwaters Charitable Trust

**Funding.** Funding for the interpretive master plan came from the National Park Service Gateways Program as well as a grant from the Community Conservation Partnership Program, and the Keystone Recreation, Park and Conservation Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

The partnership has a program of mini grants, and operates as a clearinghouse for communities and others seeking to implement projects in the greenway. It also proposes demonstration projects to help communities develop their own projects.



Lady Liberty Along the Susquehanna River



### 5.3.2 Recreation Resources

Recreation resources like parks, pedestrian, and bike/water trails are central to the work of the Susquehanna Greenway Partnership in all areas of its activities. Much of its activities involve planning and funding creation of safe walking and biking, routes, riverfront parks, and river access points, connecting communities and linking residents and visitors to the resources of the Susquehanna River. The Susquehanna Greenway Partnership fosters a positive association with the river, helping to build a greater sense of community and providing healthy living opportunities. Susquehanna Greenway Partnership helps its partners to:

- Link riverfront parks to downtown businesses and residential areas to provide public access to the river and water trails
- Link to other regional trail systems
- Link wildlife habitat corridors, especially along riparian corridors

### 5.3.3 Activity Hubs

The towns and cities along the Susquehanna Greenway serve as the primary hubs, with the cities connecting the corridor with the population and resources of the larger region. River access sites are the transition points to and from land- and water-based assets. Susquehanna Greenway Partnership considers these connections key to unlocking the greenway's potential and helps its partners to:

- Add and improve river access to enhance enjoyment and increase recreation opportunities, including fishing, boating, canoeing, and kayaking
- Provide public access to the river from river towns
- Develop signage and other interpretive systems for water and land assets that recognize the Susquehanna Greenway as a special place—a distinctive destination of diverse, interconnected landscapes and communities, all of which tie to the Susquehanna River and Chesapeake Bay

The Susquehanna Greenway is composed of many smaller existing and planned greenways, parks, trails, and conservation areas. Susquehanna Greenway Partnership works with its partners to bring these greenway elements into a cohesive and identifiable whole that can be promoted on a regional scale for maximum economic impact. The goals of this effort are to:

- Develop Susquehanna Greenway branding and identity standards

- Create a comprehensive signage system to help residents and visitors identify, enjoy, and navigate through the greenway's assets
- Preserve, enhance, and interpret scenic, historic, geologic, natural, and cultural heritage assets and connect users to their enduring stories through targeted promotion
- Promote the Susquehanna Greenway as a tourism destination

In addition to land-based connections, the Susquehanna Greenway also includes the Susquehanna River Water Trails, a significant recreational resource. These boat routes are suitable for canoes, kayaks, and small motorized craft. Along these trails are access points, boat launches, day-use areas, and overnight campsites. Sojourns, sponsored by the Pennsylvania Organization for Watersheds and Rivers, are guided, educational river trips, which also include bike tours, and are held on the Susquehanna River water trails during the summer. Water trails total 444 miles, and there is a 444 Club for those who have paddled the entire length.

The four major trails are:

- North Branch Water Trail, 181 miles (in Pennsylvania)
- Middle Branch Water Trail, 228 miles
- Middle Section, 54 miles
- Lower Section, 53 miles

### 5.3.4 Historic and Cultural Resources

The Susquehanna Greenway corridor passes through 70 river towns over its length. These towns exist because, at some point in history, the river was necessary for survival or economic advantage and often because of their strategic location with respect to transportation. Today, as in the past, river towns are the most visible means of connection to the river that shapes the region's common heritage. The corridor offers access to past and present cultures and heritage in its diverse and authentic communities.

The Susquehanna River guided travel and settlement throughout the region. The towns served as the connection points and industrial hubs between local resources and distant markets. The greenway is organized into four segments:

- The Upper North Branch of the river flows through rolling meadows, forests, and crop land, set within the Endless Mountains Heritage Region, which offers abundant outdoor recreation. Classic Americana still flourishes in the small river towns of this region.

- The Middle Susquehanna is the area where the North Branch and West Branch of the Susquehanna River meet before flowing south toward the Chesapeake Bay. This is a predominantly rural area, notable for its river towns surrounded and separated by forested ridges and broad agricultural valleys.
- The Capital Region joins historic towns like Duncannon and Millersburg; the state capital, Harrisburg; and suburban communities like Camp Hill, New Cumberland, and Swatara Township that have easy access to major highways and metropolitan worlds, with woodland, well-tended farmland, and steep gorge-like ridges with winding river trails.
- The Lower Susquehanna is a fertile landscape of wineries and farms, where the heritages of both the Revolutionary War and the Civil War are an important part of the region.

Susquehanna Greenway Partnership fosters stewardship and resource conservation among river town residents, boaters, and area visitors by creating new opportunities for “place-based” interpretation along the Susquehanna River Water Trail and creating quality visitor experiences.

It promotes the connection between the Susquehanna River Corridor and the Chesapeake Bay through interpretation of natural and cultural assets along the river. The interpretation emphasizes the preservation and conservation of the Susquehanna’s many diverse natural and cultural resources, and historic communities.

### 5.3.5 Flood Risk Reduction

The Susquehanna Greenway Partnership serves the region as a source of information on a wide range of river-related topics, including flooding. It coordinates and sponsors workshops, coordinated with partner state, federal, and other agencies, to provide information on flooding events, stormwater management, conditions leading to flooding, and remedial actions for the watershed as well as individual stream segments and properties.

### 5.3.6 Water Quality

While water quality is much improved, pollution remains an ongoing challenge. The after effects of historic mining practices continue. While much has been done to mitigate the impact of modern farming practices on the river and the Chesapeake Bay, sedimentation, and chemical and nutrient pollution are continuing concerns. The Susquehanna River provides drinking water for 750,000 people in Pennsylvania and supplies nearly half of the fresh water entering the Chesapeake Bay. The Susquehanna Greenway Partner-

ship provides stewardship to conserve critical wetlands, forestlands, farmlands, and riparian areas along the river to enhance water resources and the quality of life for all living things. Susquehanna Greenway Partnership works with its partners to:

- Increase awareness of conservation and water quality issues
- Preserve and enhance riparian corridors
- Advocate for priority conservation projects including wetlands, forestlands, and farmlands

### 5.3.7 Quality of Life

Many of the river towns, built during the industrial era, are now suffering from the loss of industry and jobs, urban abandonment, suburban sprawl, and a shrinking tax base. The Susquehanna Greenway Partnership helps improve quality of life by stimulating investment in river town parks, trails, and open spaces to create healthier, greener communities, attract business investment, encourage urban living, and improve the economic potential for tourism. Susquehanna Greenway Partnership works with its partners to:

- Create trails and walkways from downtowns to the river
- Provide opportunities for safe walking and biking
- Create and enhance riverfront parks, trails, and access points
- Promote river towns
- Reclaim and find new uses for abandoned buildings and brownfields





## 6. RIVER CORRIDOR SYNTHESIS

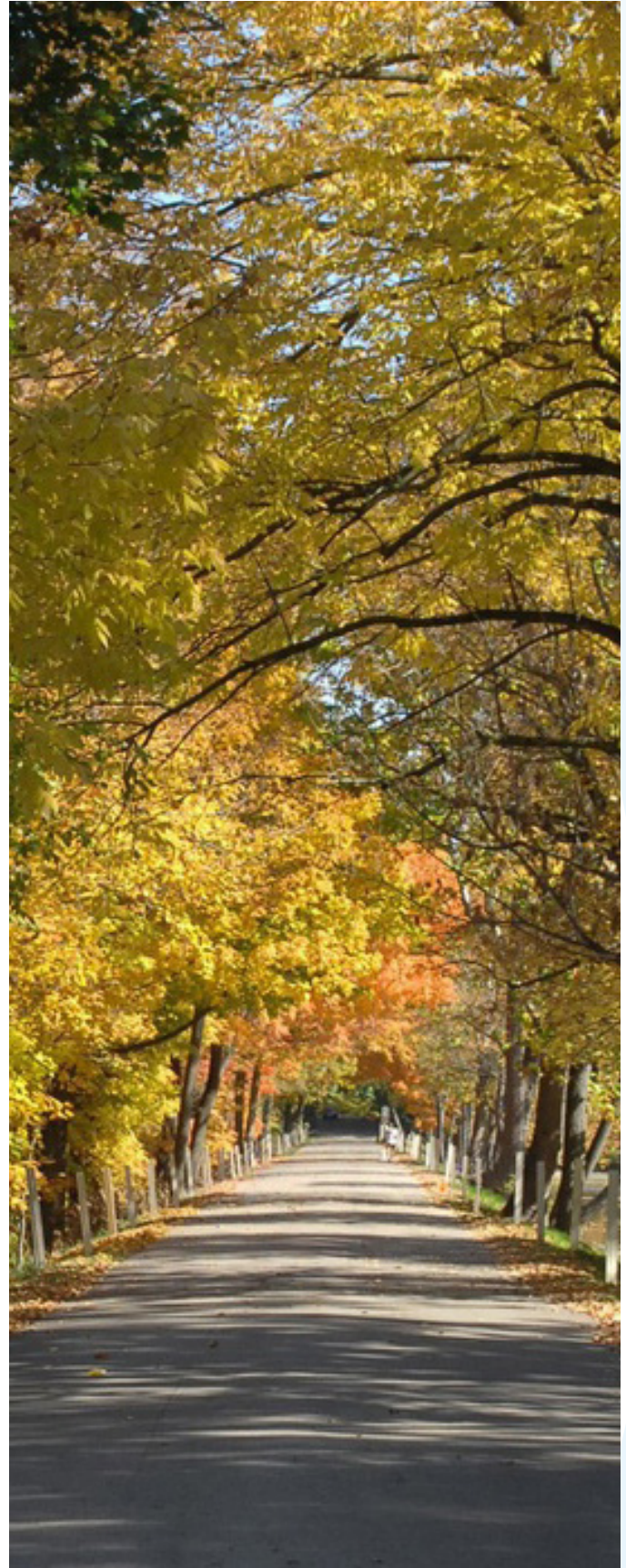
### 6.1 RIVER CORRIDOR GAP ANALYSIS

The Great Miami River corridor has many of the physical characteristics and management systems found in noteworthy recreational corridors elsewhere in the country. Organizational and planning efforts to strengthen the Great Miami River as a regional recreational asset are well underway, using some of the approaches and techniques that have succeeded elsewhere.

The case studies selected ranges from much smaller than the Great Miami River corridor (one-fourth the length) to much larger (five times the length with twice the number of counties). Each case study traverses different geographic and cultural environments, yet there are examples in each of the approaches and concepts that can inform and guide decisions made for the Great Miami River. Regardless of size, each of the case study corridors is branded and coordinated, if not actively managed by one overall agency charged with both initiating actions and policy, and with guiding and supporting the actions of the several communities that populate the corridor. In each case, the corridor is envisioned in its regional context and identified as a whole, even when managed or promoted in segments.

The Great Miami River corridor is part of the largest water trail in Ohio, the 265-mile Great Miami River Watershed Water Trail. The corridor also benefits from the Ohio's Great Corridor Association, a partnership of cities, counties, businesses, park districts, and other organizations, including the Miami Conservancy District. The Ohio's Great Corridor Association helped to create a regional vision. Each of the three corridors evaluated in the case studies has some form of such an organization, which in each case appears to contribute to the success of the corridor.

Each of the sponsoring organizations in the case-study corridors recognizes the value of historical and cultural resources to river corridor attraction, and each promotes the economic value of the river- or trail-based recreational, cultural, and historic resources to economic growth and vitality. Each, to a greater or lesser degree, promotes economic benefits as fundamental to supporting investment in its system of trails and recreation. In the case studies, funding of the corridor programs seems to be directly related to the strength of the economic arguments used to promote the trail and recreation program.



Tawawa Park



Each of the case-study corridors has breaks in connections and facilities, not unlike the Great Miami River corridor, but each has some form of an overall vision and plan for the whole corridor and a mechanism to assist each community to carry out its portion of the overall vision, with its own resources and reflecting the unique, authentic quality and character of that community as a part of the larger whole.

The Miami Conservancy District's primary mission is focused on flood control, but its River Corridor Improvement Subdistrict focuses on recreation in the Great Miami River corridor. Ohio's Great Corridor Association could help to build an identity and brand for the Great Miami River corridor. Ohio's Great Corridor Association could fill the role that the case studies show has great value. Each case-study corridor has an organization dedicated to the broader recreational, environmental, and cultural continuity of the corridor or system, as well as economic vitality. Such organizations contribute significantly to branding the system and play a vital role in coordinating planning, funding, marketing, and even design and development guidance.

Trail development through the 99-mile study reach of the Great Miami River corridor is extensive, comparing well with the case-study corridors. While the Ohio's Great Corridor Association and the Miami Conservancy District and partners recognize and promote this strength, overall master planning and implementation coordination is not as well developed as in two of the case studies. Recent planning by the Green Umbrella Regional Trails Alliance could provide a model to strengthen trail planning for the Great Miami River corridor. While water and land trails offer good tripping opportunities, the lack of camp sites limits the desirability of the system for extended tripping, and the potential economic benefits of that activity. The prevalence of dams, many without portages, limits to some degree the potential of the Great Miami River Water Trail as a tripping resource.

While large sections of the Great Miami River retain significant natural cover, the corridor does not yet have a defined greenway encompassing the broader spectrum of the riparian environment. Sections of heavily urbanized corridor in the central and southern sections create gaps in any potential greenway links, but significant opportunities persist to develop a fuller spectrum greenway in many areas.

The primary gaps in the Great Miami River corridor appear to be on two levels, physical and programmatic. Gaps remain in physical improvements that are not yet in place and the programs they can support. Most of

those are incomplete sections of trail, current limited visibility and connectivity to sections of the river, and spotty development of facilities and resources that integrate life along the river with the river itself. The majority of planned projects in the corridor will add significantly to river access, visibility, and orientation.

Programmatically, there does not seem to be a strong, unified—or branded—message of the economic benefits of a cohesive trail and recreation corridor. Likewise, there does not yet appear to be a coordinated message of the cultural and historical resources of the Great Miami River corridor as a whole, as a part of its brand, although some individual communities place more emphasis on historical resources than others.

The fact that a large number of river access and trail projects are currently in planning, funding, or design stages testifies to the recognition by the river corridor communities of the economic and quality-of-life value of trails and recreation, and strengthening their connection with the river and to the trail system.

## 6.2 RIVER CORRIDOR PROBLEMS AND OPPORTUNITIES

### Recreation

The Great Miami River corridor offers ample athletic fields, golf courses, and other recreation facilities. At a few key hubs, most notably Dayton's Riverscape Metropark, water and riverside access are combined with regional destination events facilities. Most communities have one or more parks on the river. Several offer a wide range of activities. The few established conservation areas protect the natural systems while also providing recreation through hiking and interpretive trails. Carolina Thread Trail offers the Great Miami River corridor a good example of how to increase funding potential for both land conservation and trail development through the synergy between conserved land and trail routing, increasing the return on the investment in both land and trail construction.

Camping serves in varying degrees to fill out the recreational opportunities in each of the case-study corridors, supporting tripping as well as stationary camping, and is recognized as an economic benefit. Camping is one form of river-related recreation that is very limited along the Great Miami River. Other accommodations are available and could offer services and amenities such bike and boat storage to corridor users.



Bicyclist Riding Along the Great Miami River Recreation Trail



Segment Three Trail Segment



Robert J. Shook Recreation Trail Bridge

There are many boat launches along the corridor, some in the larger parks, others free standing, all of which reinforce the water trail. There is potential to tie the several kayak, canoe, and boat access points together into a true tripping trail system, removing or building passages around low-head dams, and using the connecting roadway system for connections to starting places.

## Connections

Connectivity within the various amenities and communities in the corridor is fragmented. Good physical connections exist, but all are not yet integrated into or presented as an overall system. The greatest lack of connectivity in the corridor may not be so much physical as in the connectivity of the ideas, character, and culture of the different parts of the corridor. The Miami Conservancy District, Ohio's Great Corridor Association, and Regional Trails Committee are all building a regional identity for the Great Miami River as a place or progression of related places with common overriding bonds highlighted by the unique assets of the individual communities in the chain. The Great Miami River corridor needs to grow its brand recognition as a region and destination. Each of the three case-study corridors has defined itself as an identifiable region with a few overriding characteristics that give it an attractive and compelling identity around which to build both a marketing message and cooperative management direction, with common goals and standards adopted by member communities and partners that guide programmatic, planning, and design decisions. Each of the several communities in the Miami Valley has begun to develop a vision of its own identity and future; most are building, to a greater or lesser degree, on their place along the Great Miami River. These multiple initiatives should be blended into a strong corridor identity finding the common threads and vision, and those commonalities that are the basis for an overall theme and brand.

Greenways are a common component of recent planning and development for most of the communities along the Great Miami River. Greenways are more than just trails; they are multidimensional linear parks with preserved open space in a functionally connected form, sustaining native habitat and wildlife in addition to human activity. The development and maintenance of a greenway is a primary goal of many regional corridors, and the major purpose of some, such as the Susquehanna Greenway and the Carolina Thread Trail. Several communities along, and linked to, the Great Miami River have begun greenway corridors that can form the basis of a significant greenway along the Great Miami River linked to some of the major greenways and trails in the region.

Trails are a major feature of each of the corridors in the case studies and many other branded corridors; they tie



the corridors together. The Great Miami River corridor is crossed by several major trails that connect it to other regions, such as the Mad River Trail, Stillwater River Trail, and Wolf Creek Trail. The Great Miami River Recreation Trail also benefits from alliances with:

- Buckeye Trail
- North Country National Scenic Trail
- Ohio to Indiana Trail
- U.S. Bicycle Route 50

While the Carolina Thread Trail is an even more extensive trail network, the Great Miami River may be better connected to significant regional trail systems than the Mascoma River or Susquehanna River systems. The Great Miami River Water Trail introduces the concept of a connected, multiuse water and land trail system along the entire length of the river. While not currently emphasized as a greenway, the Great Miami River Water Trail has much of the foundation to become an identified regional greenway on a smaller scale than, but similar to, the Susquehanna Greenway. This trail holds the promise of becoming a potentially distinguishing feature of the Great Miami River corridor. The concept of a greenway implies a hierarchy of trails, from scenic roadways to multiuse bike and hiking trails to hard surface and natural

surfaced walking trails and water trails. Connections back into the surrounding communities are also important and a prominent part of the case-study corridors.

The Great Miami River is an identified water trail, the longest in the state, but it is hampered by 18 low-head dams, which require portages. The Great Miami has 18 dams in 99 miles, an average of one every 5.5 miles. By comparison, the Mascoma River has seven dams in less than 30 miles, which is an average of one every 4 miles. The Mascoma River is further interrupted by rapids and falls; however, those natural features also enrich its recreational value.

Many regional roadways cross the Great Miami River corridor, providing good connections to the river. There are also roadways running parallel to the river, generally following the edges of the corridor, and often close enough to the river to provide good views. However there is not one continuous roadway or route tracing the length of the corridor, rather a series of various streets, collectors, and arterials that are not always well connected. Interstate 75 generally parallels the general course of the river and provides good regional access and connectivity from north to south, crossing the river several times. An identified nonhighway, river-corridor driving route could enhance the visibility and identity of the Great Miami River corridor.



Buckeye Trail Blue Blaze



Ohio to Indiana Trail Segment (Sidney)



North Country National Scenic Trail Signage



U.S. Bicycle Route 50 Users



## Activity Hubs

Events and activities, while prevalent, do not have a central branded message for the whole or part of the corridor. Each of the case-study corridors benefits from one or more focal points of activity that center the system and contribute key facets of its identity. For the Great Miami River, that focal point is Dayton, at the confluence of the Great Miami and Mad rivers. The fourth-largest metropolitan area in Ohio, Dayton is the epicenter of the region, and developed in large part due to the presence of the rivers. As a result, this section of the river is highly urban, with industrial, commercial, and residential lands lining the river banks, leaving primarily linear open space along the river with Riverscape MetroPark as the primary activity hub for the river corridor. Levees and channelization create a very controlled environment and often block the community from visual and physical access to the river, although trail connections link many areas along the river. Dayton has the highest concentration of activity hubs along the river. More activity hubs are needed throughout the Great Miami River corridor.

Two of the case studies, being considerably larger than the Great Miami River corridor, have more than one major activity hub that contributes to the identity of the overall corridor, or at least one segment. The Great Miami River corridor can benefit from that structure to a degree, building on not only the center at Dayton, but also the aggregated concentration of activity in the Hamilton-to-Miamisburg reach and smaller concentrations in the Sidney-to-Tipp City reach. By viewing and planning the corridor as a whole, through the planning efforts of the member counties and communities, the Great Miami River corridor can capture some of the system-identity benefits that the case-study corridors enjoy. This approach toward unified grassroots planning can help keep all communities engaged, avoiding the problems faced by the Mascoma River corridor, with one of its communities remaining out of participation.

## Historic and Cultural Resources

As is the case with many destinations, historical and cultural authenticity counts heavily in defining and enriching the brand of the area. Each of the corridors assessed in the case studies promotes aspects of its cultural history to define the value and quality of life of the corridor.

Common to all Great Miami River communities is some level of evidence—surviving in mounds and archaeological sites—of the Native American culture that thrived along the river. The Great Miami

River corridor has many historic structures, sites, and communities, dating from Native Americans through the Miami and Erie Canal, through 19th century invention, up into 20th century industrial pioneering, that are listed on the National Register of Historic Places and open to the public. The history of transportation on the river and canal, historic bridges, canals, and transportation corridors in the area give this region a unique story to tell, one that may be best told on a regional basis.

While the corridor's rich heritage is portrayed well by the Dayton Aviation Heritage National History Park, Carrillon Historical Park, Sunwatch Indian Village, and in various communities and local parks, the Great Miami River corridor as a whole does not offer a unified overall presentation of the scope and unique historical and cultural aspects of the region. This cultural history offers an opportunity to brand the entire corridor and promote a message that can expand tourism, and, therefore, economic benefit, to the region. At least two of the case-study corridors have leveraged their history to justify added investment in recreational infrastructure. While rich in history, the Mascoma River corridor, the most recently organized, has not yet promoted its history or the economic value of the recreation corridor in a significant way. It is also the corridor that struggles most with funding.



Riverscape MetroPark



## Flood Control

The largest dam on the river is Miami Conservancy District's Taylorsville dam, one of five dams built to protect the cities along the Great Miami River from flooding, in response to the Great Flood of 1913. The floodwater storage area upstream of Taylorsville dam provides the site for Taylorsville MetroPark, which offers a diversity of recreational opportunities.

Levees that protect some areas of the corridor from flooding are maintained by the Miami Conservancy District and are mostly vegetated with mowed turf. While some are low, a number are high and steep, separating the adjacent communities from the river. In most of the river corridor communities, the levees and flood protection channel provide the linear swath of land for the Great Miami River Recreation Trail.

As the agencies reviewed in the case studies have found, public land, acquired for flood risk management or land conservation, can provide good routes for trails connecting significant lengths of a river and connecting the river to community hubs. Specific projects built along the Great Miami River, such as Riverscape MetroPark, and along the case-study corridors offer specific examples of ways to minimize the access limitations and creatively integrate recreational areas with flood control measures. Several planned projects along the Great Miami River will integrate levee or channelized reaches with recreation features.

## Water Quality

Water quality is not emphasized in the recreation message of any of the case-study corridors, although it is a primary mission of the conservancy organizations that oversee the corridors. Many of the measures used by the lead agencies that oversee the case-study corridors, as well as by the Miami Conservancy District, such as conserving riparian habitat and building green infrastructure, enhance water quality while implementing trail and recreation plans.

## New Projects

Projects proposed for the Great Miami River corridor call for significant investment. The majority of planned projects will add significantly to river access, visibility, and orientation. The plans suggest a growing recognition of the value of the Great Miami River to the quality of life and economic vitality of the river communities, and similar patterns to the types of improvements planned throughout the corridor.

Projects along the Great Miami River include removal of at least one low-head dam, and creating portage around others, improving the river for water trail use. Several trail-connecting sections are in various stages of planning, funding, and design, with construction

pending on a couple. These trail segments are specifically planned to close gaps in the Great Miami River Recreation Trail, two of which connect communities. Several downtown redevelopment projects center on the river, and several include mixed-use housing, commercial, restaurant, and recreational development. At least three boathouses are planned to serve the rowing and water-sports community, as well as the general public, through added access to river activities such as fitness and trail-head facilities. Two projects plan to add structures in the water to create recreational whitewater courses both for boaters and spectators in downtown areas, giving the Great Miami River water features that are unique in the broader Ohio-Indiana region. Access ramps are planned in several communities along the length of the corridor. At least one plan calls for a wide range of sports and recreational facilities in a riverside complex, including soccer complexes.

The predominance of new projects that will directly increase accessibility and interaction with the river reflects a growing appreciation for the role that the river can play in the quality of life of the communities. The revitalization projects are attempting to bring activity to the river. The number of projects now in planning and design indicates a growing appreciation for what the river is doing and can do for quality of life, and increased momentum for adding quality-of-life improvements.

## River Life

The Great Miami River has many of the physical and cultural components that appear to have made the corridors in the case studies successful. The corridor offers a range of environments, features, and lifestyles that reflect the diversity of the region, with appeal to a broad demographic. Agriculture, historically one of the principal growth engines of the Miami Valley region, still dominates large areas of the upper river corridor. The communities along the Great Miami River range from distinct small towns and cities in a largely rural setting in the north, with one of the region's largest metro areas in the center, and a more industrial urban land-use pattern with communities that tend to blend into each other. The case-study corridors, in particular the Carolina Thread Trail, and, to a lesser degree, the Susquehanna Greenway, celebrate this diversity of landscape and community, and have built their brand, in part, on this variety of assets.

Much of the life of the region is centered on the Great Miami River, yet physical development does not consistently take advantage of that resource. Levees and steep banks block both views and direct access, and development patterns often line the river with uses that block access. However, much of the

community gatherings and many events do relate to the river and its corridor. Virtually every community along the river provides several programs, including art, culture, theater, and other entertainment; shopping; and dining; along with community spaces housing seasonal events such as parades, fireworks, concerts, and festivals, on sites near or on the Great Miami River. Considered as a whole, the Great Miami River offers a wide variety of cultural and entertainment events. The Ohio's Great Corridor Association appears to be building the capability to promote those events in a holistic manner.

The Ohio's Great Corridor Association has begun to take the lead in establishing the overall identity for the Great Miami River corridor. Community leaders gather each year for a River Summit. Entrepreneurs are providing opportunities for biking, canoeing, kayaking, rafting, fishing, and special events. Several outfitters operate on the river, also serving as information resources for outdoor activities and facilities in the region.

To varying degrees, many of the communities in the Great Miami River corridor are building upon the attraction of the river by redevelopment of their riverfronts, repurposing and reusing existing buildings, and planning infill projects. Some communities are looking at larger opportunities, which may include residential, retail, restaurant, hotel, and office space, along with trail- and river-related recreation. The Ohio's Great Corridor Association can play an increasing role in supporting and publicizing those efforts as part of a unified message of the value of the river, the trails, and the recreational, cultural, and historic resources to the quality and economic vitality of the communities. The most successful of the case-study organizations, the Carolina Thread Trail, has promoted such a message.

## 6.3 RIVER VISION

Comparisons of the case studies suggest that the more that a corridor is known by a well-articulated and unifying identity—or brand—the more investment of both private and public funds is directed at projects that produce quality-of-life gains as well as economic returns and improved conservancy of important land and water habitats. There are valuable lessons to be learned from all three case-study organizations.

Strong overall planning can help build a strong identity, as well as help to drive effective implementation. By viewing and planning the corridor as a whole, through the planning efforts of the member counties and communities, the Great Miami River corridor can capture some of the system-identity benefits that the case-study corridors enjoy.

While the Great Miami River has a relatively strong start on its trail system, with good local participation, there may be some value to pursuing a more powerful funding model built along the lines of the Carolina Thread Trail. That funding has allowed the Carolina Thread Trail Advisory Council to take an active lead in planning the overall system through grants it has provided to each county to create an integrated set of grassroots-based master plans for a well-developed and connected trail system. That level of funding has also supported a level of administration that serves as a comprehensive clearinghouse for each of the 76 communities in the counties to access a wide range of funding sources.

Comparison of the case studies also suggests that a coordinated promotion of the economic benefits of the trail and recreation system can help generate stronger financial support for planning and improvements. Closely allied with economic benefits is the incorporation of cultural and historical resources into the overall identity and plan of the corridor. Historic and cultural sites add an additional layer of destination to a trail system. The focus in the Great Miami River corridor on building a continuous integrated trail system compares favorably with all three case studies. The challenges to completing the trails involve land acquisition and physical limitations at the trail gap locations. Overcoming those challenges can benefit from some of the tactics used by the case-study systems. Combining land conservancy with trail routing, backed by documented economic benefits, could strengthen funding potential.





# 7. REFERENCES

## Cited Sources

- **Executive Summary**

1. <http://www.lrl.usace.army.mil/Missions.aspx>
2. <https://www.miamiconservancy.org/about/mission.asp>

- **Introduction**

3. <http://parks.ohiodnr.gov/canals/publications>
4. [http://newserver.miamiconservancy.org/recreation/documents/GMR\\_RiverMap\\_09web.pdf](http://newserver.miamiconservancy.org/recreation/documents/GMR_RiverMap_09web.pdf)
5. <http://www.miamivalleytrails.org/great-miami-river-trail>
6. <http://www.bikemiamivalley.org>
7. <http://www.epa.state.oh.us/portals/35/documents/ugmr94.pdf>

- **Segment One**

8. <http://www.buckeyetrail.org/trailtowns.php>
9. [http://parks.ohiodnr.gov/Portals/parks/PDFs/canals/ME\\_canal\\_booklet.pdf](http://parks.ohiodnr.gov/Portals/parks/PDFs/canals/ME_canal_booklet.pdf)
10. <http://www.troycivictheatre.com/>
11. <http://www.hobartarena.com/>
12. <http://www.tipprollermill.com/>
13. [http://www.piquaoh.org/hotel\\_restoration\\_project.htm](http://www.piquaoh.org/hotel_restoration_project.htm)
14. [http://tdn-net.com/news/home\\_top-news/3584435/A-gift-that-keeps-giving](http://tdn-net.com/news/home_top-news/3584435/A-gift-that-keeps-giving)
15. <http://m.visitmiamicounty.org/attractions/troy.php>
16. <http://overfieldtavernmuseum.com>
17. [http://www.piquaoh.org/feature\\_downtown\\_riverfront\\_redevelopment\\_planning.htm](http://www.piquaoh.org/feature_downtown_riverfront_redevelopment_planning.htm)

- **Segment Two**

18. <http://www.eintrachtsingingsociety.org>
19. <http://www.cityofdayton.org>

20. <http://www.metroparks.org>

21. <http://www.daytonrecreationandyou.com>

22. <http://www.daytoncanoecub.org>

23. <http://www.daytonhistory.org>

24. <http://www.antiochshrinefoundation.org>

25. <http://www.engineersclubofdaytonfoundation.org>

26. <http://www.ymcaonline.org/about-us/dayton-ymca-history>

27. <http://daytonartinstitute.org/about-dai/history>

- **Segment Three**

28. <http://www.miamisburg.org>

29. <http://www.remarkableohio.org/HistoricalMarker.spx?historicalMarkerId=764&fileId=108160>

30. <http://www.gettothebc.com/listings/Benninghofen-House/1118>

31. <http://www.gettothebc.com/listings/lane-hooven-house/711>

32. <http://www.gettothebc.com/listings/Butler-County-Courthouse/1124>

33. <http://www.butlercountyohio.org/monument/>

34. <http://discoverwestcarrollton.com/entertainment-district>

35. <http://riversummit.udayton.edu/Riverside%20Riverwalk%20Hamilton.pdf>

36. <http://www.bizjournals.com/cincinnati/news/2014/10/09/could-aformer-paper-factory-find-new-life-as-a-30.html?page=2>

- **Case Studies**

37. Source: Nomination of the Mascoma River From Canaan Center to West Lebanon; New Hampshire Rivers Management and Protection Program

38. Source; Karl J. Froelich - Carolina Thread Trail Director



## Community Links

### • City of Sidney

- Economic Development: ( <http://www.sidneyoh.com/Community-Services/comm-serv-economic-dev.asp> )
- Comprehensive Plan: Imagine Sidney 2025: ( <http://www.sidneyoh.com/Community-Services/sidney-2025-sidney-ohio.asp> )
- Budget (Other Docs): ( <http://www.sidneyoh.com/Finance/budget-sidney-ohio.asp> )

### • City of Troy

- Comprehensive Plan: ( <http://oh-troy.civicplus.com/132/City-of-Troy-Comprehensive-Plan> )
- Economic Development Site: ( <http://www.troyohio.gov/131/Economic-Development> )

### • City of Tipp City

- Economic Development Site: ( <http://www.tippcityohio.gov/ED.cfm> )

### • City of Dayton

- Economic Development Site: ( <http://www.daytonohiobusiness.com/home.aspx> )
- Document Library Link (Plans, Reports, etc.): ( <http://www.cityofdayton.org/departments/pcd/Pages/DocumentLibrary.aspx> )

### • City of West Carrollton

- Vision Report (2007), Comp. Plan (2009), Comp. Plan Maps: ( [http://www.westcarrollton.org/index.php?option=com\\_joomdoc&task=cat\\_view&gid=174&Itemid](http://www.westcarrollton.org/index.php?option=com_joomdoc&task=cat_view&gid=174&Itemid) )
- Economic Development Site: ( [http://www.westcarrollton.org/index.php?option=com\\_content&view=article&id=174&Itemid=86](http://www.westcarrollton.org/index.php?option=com_content&view=article&id=174&Itemid=86) )

### • City of Miamisburg

- Economic Development Site: ( [http://www.ci.miamisburg.oh.us/index.php?option=com\\_content&task=view&id=15&Itemid=31](http://www.ci.miamisburg.oh.us/index.php?option=com_content&task=view&id=15&Itemid=31) )

- Annual Reports Site: ( [http://www.ci.miamisburg.oh.us/index.php?option=com\\_docman&task=cat\\_view&gid=91&Itemid=119](http://www.ci.miamisburg.oh.us/index.php?option=com_docman&task=cat_view&gid=91&Itemid=119) )

### • City of Franklin

- Documents Library: ( <http://www.franklinohio.org/government/download-documents> )

### • City of Middletown

- Economic Development Site: ( <http://www.cityofmiddletown.org/ed/> )
- Master Plan: ( <http://www.cityofmiddletown.org/planning/masterplan.aspx> )

### • City of Hamilton

- Economic Development Site: ( <http://hamiltonohiobusiness.com/index.aspx?page=8> )
- Documents & Forms: ( <http://www.hamilton-city.org/index.aspx?page=324> )
- Planning: ( <http://www.hamilton-city.org/index.aspx?page=94> )

### • Miami County

- Economic Development Site: ( <http://www.co.miami.oh.us/index.aspx?NID=140> )

### • Shelby County

- Planning: ( <http://co.shelby.oh.us/RPC/planning.asp> )

### • Butler County

- Economic Development Site: ( [http://development.butlercountyohio.org/content/txtcontent/ed/ec\\_dev\\_Home.cfm](http://development.butlercountyohio.org/content/txtcontent/ed/ec_dev_Home.cfm) )
- Planning: ( <http://development.butlercountyohio.org/content/txtcontent/plan/planhome.cfm> )
- Land Use Plans: ( <http://development.butlercountyohio.org/content/txtcontent/plan/landusemaps.cfm> )
- Community Development: ( <http://development.butlercountyohio.org/content/txtcontent/cd/cdhome.cfm> )

- **Warren County**
  - Comprehensive Plan: ( <http://www.co.warren.oh.us/planning/CompPlan/default.aspx> )
  - Economic Development Site: ( <http://www.co.warren.oh.us/wcoed/> )
- **Sinclair Community College**
  - Facilities Department Contact: ( <http://www.sinclair.edu/about/offices/fpc/information/> )
- **Wright State University**
  - Facilities Management Site: ( <http://www.wright.edu/business-and-finance/facilities-management-and-services/facilities-planning-and-development/overview> )
  - Budget: ( <http://www.wright.edu/budget/> )
- **University of Dayton**
  - Facilities Management: ( <http://www.udayton.edu/facilities/> )
  - Rivers Institute – supporting the Great Miami River Watershed: ( [http://www.udayton.edu/artssciences/fitzcenter/rivers\\_inst/](http://www.udayton.edu/artssciences/fitzcenter/rivers_inst/) )

<http://www.dot.state.oh.us/Divisions/Planning/Environment/Ecological Resources Permits/MitigationInventory/Documents/MiamiLost%20Creek/Great%20Miami%20River%20-%20Lost%20Creek%20balance%20sheet%20update%2011-21-13.pdf>

#### Other Links:

<http://www.miamivalleytrails.org/great-miami-river-trail>

<http://www.railstotrails.org/news/recurringFeatures/trailMonth/archives/1406.html>

<http://www.wlwt.com/news/local-news/butler-county/study-due-for-99mile-great-miami-river-corridor-development/21840540>

<http://www.miamicountyparks.com/Park.aspx?c=FR>

<http://www.oki.org/departments/landuse/pdf/greenspace/presentations/oh-signifrvrsatrisk-gable.pdf>

<http://www.traillink.com/trail/great-miami-river-trail.aspx>

<http://www.urbanohio.com/forum2/index.php?topic=18979.0>

<http://epa.ohio.gov/dsw/tmdl/GreatMiamiRiver.aspx>