



South Branch of the River Raisin Environmental Interaction Study



River Raisin Watershed Council City of Adrian, Lenawee County, Michigan

> Project No. 15063 March 2016



4063 Grand Oak Drive, Suite A109 Lansing, Michigan 48911

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1.0 INTRODUCTION

The purpose of this report is to detail the current conditions of the South Branch of River Raisin (SBRR) in the City of Adrian that affect watercraft recreational opportunities on the river. The report will include means, methods and some potential costs required in order to improve the river for environmental interaction amongst users.

The SBRR is an upstream tributary of the River Raisin, which runs eastward through Lenawee and Monroe counties and empties into Lake Erie. This report focuses on the SBRR that traverses through the City of Adrian from Highway US 223 on the upstream end to Howell Highway on the downstream end. Within this study area, the river around four City parks (Island, Trestle, Comstock and Riverside), along a public walkway, and under several bridges. The total distance of this section of the river is approximately 4.5 miles long.

The basis of the environmental interaction use assessment is to identify the obstacles or issues with the river and the river corridor that limit the ability to kayak the river without requiring portage of the watercraft. This assessment also looks at what issues would affect accessing or using the river (locations to launch a kayak, walk along the river, etc.). Additionally, the study reviews how the river can become an attraction or focal piece to the community and its residents. In many areas the SBRR is "hidden" through the study area. One of the goals of this study is to focus on ways that the river can be a cornerstone feature for the City.

Once the SBRR is assessed based on these factors, the report aims to identify how the river can become an attraction, easier to access, and develop into a sustainable system. In implementing some of the recommendations, the goal is that an improved ecosystem and biodiversity will develop along the river corridor, and long-term water quality improvements to downstream waterways of the Great Lakes will result.

2.0 SUMMARY OF WORK

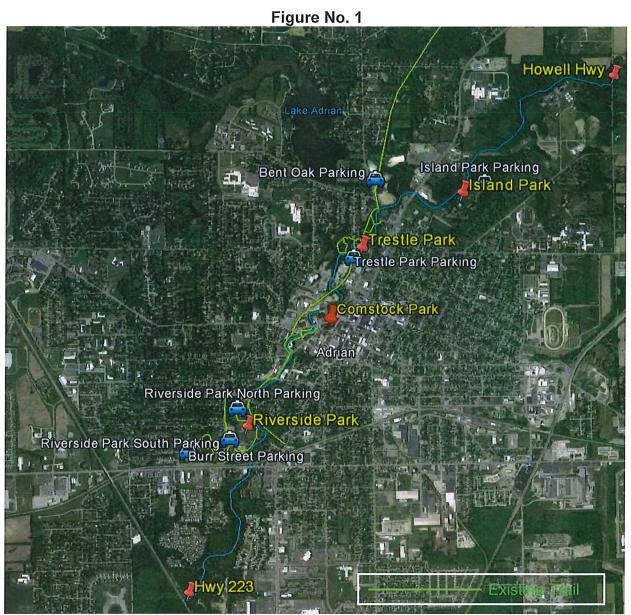
As part of the fieldwork and review of the SBRR, two full-scale site inspections occurred between US 223 and Howell Highway. These inspections were meant to inventory all obstacles or issues that may affect navigation of the river by a kayak. These inspections occurred in late November and early December 2015 and were performed by walking the entire length of the river within the study area. Locations and descriptions of river conditions that adversely affect the environmental interaction use of the river were recorded and documented. In addition, three additional site visits were performed to meet with members of the River Raisin Watershed Council (RRWC), review potential areas for accessibility / access, and review areas for potential connectivity to trail systems.

The work performed as part of the study included the following:

- Identify key access points on the river for kayaking and canoeing.
- Identify and inventory obstructions and depth issues that may hinder for easy passage by kayaking and canoeing.
- Identify potential beautification or enhancement possibilities along the river.
- Identify areas to improve water connectivity from incoming areas, streams or waterways.
- Identify walking path potential along the river and connectivity possibilities to existing trail systems.
- Identify passive environmental interaction opportunities and interaction or educational opportunities along the river system.
- Identify potential fishing opportunities along the river system.
- Identify launch sites for kayaking and canoeing and areas of easy river access
- Prepare a report that summarizes the assessment work performed on the SBRR.
 Outline what issues exist that limit use of the river and what steps can be taken to address them.
- Prepare a list of recommendations and cost estimates to guide future decisions regarding environmental interaction use of the SBRR.
- Prepare a list of possible funding sources or grants to perform the work outlined in the recommendations.

3.0 INSPECTION SUMMARY

The overall study area is shown as Exhibit No. 1 in Appendix A of this report. The map below shows several parking areas and trails that exist within the study limits. Photographs of the obstructions that were encountered in the river can be found in Appendix D, and photographs of different depth issues can be found in Appendix E of this report.



Map of Existing Parks, Trails, and Parking areas for access

4.0 OBSTRUCTION & DEPTH ISSUES – SUMMARY

OBSTRUCTIONS

In total 92 documented obstructions were documented within the corridor of the river that could hinder navigation by kayak to various degrees along the SBRR. These obstructions vary from overhanging branches that simply need to be clipped to large-scale fallen trees that are embedded into the riverbed and completely blocking passage that may need to be excavated. The table in Appendix B breaks down each documented obstruction and assigns a level of 1, 2 or 3 based on the difficulty in removing the obstruction from the river. The following table shows how the categories were applied to each obstruction that was noted:

Obstacle Removal Categorization Table				
<u>Number</u>	Interpretation of Number			
1	Manually easy to remove with use of clippers or chainsaw			
2	Removable with chainsaw and rope			
3	Excavator recommended			

Category number 1 obstructions would likely not require a DEQ permit under Part 301 (Inland Lakes and Streams) or Part 303 (Wetlands). Category number 2 obstructions would likely not require a permit if done by hand under Part 301 and depending on location (in the river vs. adjacent to the river) would likely not require a Part 303 permit if done by hand. Category number 3 obstructions would require the use of an excavator and the bank or bed of the river would be disturbed and a dual permit would be required to perform the work.

DEPTH ISSUES

In Appendix C, 42 documented depth issues are identified and categorized on a scale from 1 to 3, depending on the severity. The following table explains the scale ratings assigned to each:

Depth Issue Categorization Table			
<u>Number</u>	Interpretation of Number		
1	There might be sufficient depth for passage but shallow flanks need to be rounded		
2	Soft loose surface excavation		
3	Hard surface excavation		

For all depth issues documented, there are no exemptions that exist to perform the work without obtaining a permit through the DEQ under Part 301, since the SBRR is not a designated County Drain within the study area.

Both Appendix B and C show in detail the recommended corrective measures and the associated costs for each documented obstruction or depth issue.

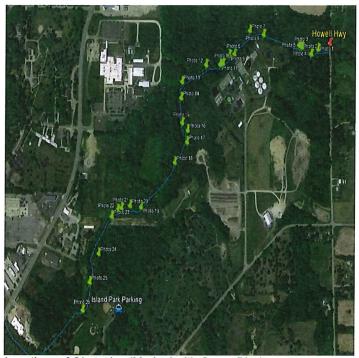
5.0 INSPECTION SUMMARY

The study area for the SBRR is divided into five sections. Each section describes obstacles to be removed, depth issues to be fixed and connectivity or accessibility opportunities.

Section 1 – Howell Highway to Island Park

Obstructions

This part of the river has 29 documented river obstructions that are blocking navigation to some degree. Some of the obstructions are easily removed, but others are implanted into the river bed and have created a dam-like structure that the river has to flow over. Such blockages must be removed in order for kayaking to be possible.



Locations of Obstacles (Marked with Green Pins)

Depth Issues

For the most part, this section of river is deep enough for kayaking. However, several areas have rocks that shallow enough are potentially hit a kayak. Those rocks need to be excavated in order to assure watercraft safety. Also, some areas in the river narrow with deep fast-flowing current flanked shallow rocky areas. In order to ensure that kayakers don't run into the rocky flanks, the corners around the deep narrow areas is advised.

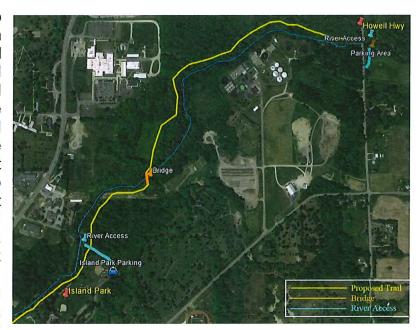


Locations of Depth Issues (Marked with Blue Pins)

Connectivity & Access

Near Howell Highway, the City's wastewater treatment plant occupies space just off the south side of SBRR. The treatment plant has several outlets allowing treated water to enter the river. As a result of the proximity of the treatment plant to the river and the various outfall structures built right up to the shoreline of the river, any trail that would be constructed through the area must be located on the north side of the river. A review of odor issues that may exist must be considered as well. However, in order to connect the pathway to Island Park, this trail would have to cross to the south side of the river. Therefore, a bridge or crossing would be necessary at some point along the trail in order to connect Howell Highway to Island Park.

In addition to the trail, two access points in this section seem ideal for recreational use. One access point would utilize the parking lots in Island Park near the river where wood launch near the Broad St. crossing seems ideal. The other access point would be at Howell Highway. In order to use the river as a watercraft route, this access point would need to have a parking area constructed and а dock extending out into the river. The purpose of this parking area would be to provide a means for taking out a kayak and easily loading it into a vehicle.



Map of Proposed Trail from Howell Highway to Island Park

The road crossing at Howell Highway is not ideal for installing an access point or parking area, even through the west side of the road is owned by the City of Adrian. The areas surrounding the SBRR in this location appear to be regulated wetlands and any work would require a permit within the floodplain. The existing parking facilities and relatively easy access to the SBRR at Island Park is more ideal for access; however, approximately 0.8 mile of river would be unutilized.

Section 2 - Island Park to Trestle Park

Obstructions

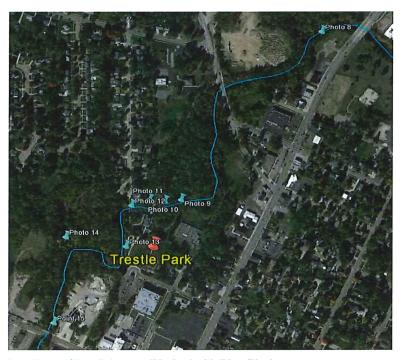
The first part of this section (northerly portion) of the river is mostly clear of obstructions. A few boulders are found by the bridge of North Main Street but these do not block passage. The second part of this section, however, has more tree obstructions that would require removal.



Locations of obstacles (marked with green pins)

Depth Issues

After reaching the corner of Island Park, the river depth decreases in several places, rendering it impassible by kayak or canoe. At those locations, the river will need to be dredged to become passable. The attached figure shows the locations with depth issues along this stretch of river.



Locations of Depth Issues (Marked with Blue Pins)

Connectivity & Access

The existing Kiwanis Trail meets closely with the river from the north near Bent Oak Avenue. A trail would need to be added east of Bent Oak Avenue for trail access along the river. One major obstacle for this new trail would be the North Main Street bridge. The road conditions here are not suitable for pedestrian crossing. The clearance under the bridge, however, is low and might require dredging into the soil near the bridge in order to have an acceptable clearance between the trail and oncoming traffic.



Map of existing and proposed trail from Island Park to Trestle Park

Section 3: Trestle Park to College Avenue

Obstructions

A total of eight obstructions block flow in this short stretch of the river. Most of these obstructions are minimal and are not completely blocking the river.



Locations of obstacles (marked with green pins)

Depth Issues

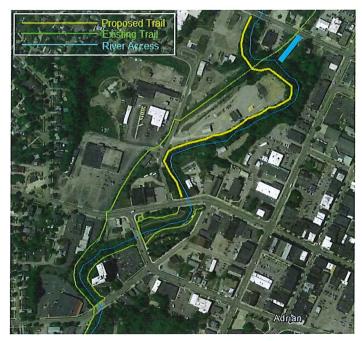
Two concrete dams and a cast iron pipe crossing the river impede through navigation this segment. downstream Removing the obstruction will cause the water level immediately before the dam to lower. The upstream dam does not seem to be serving a purpose and would not greatly affect river conditions removed. Consequently, both of these items are prime examples of funding opportunities several Grant on programs as well (listed in Section 5.0 of this Report).



Locations of depth issues (marked with blue pins)

Connectivity & Access

The existing Kiwanis Trail diverges from the shoreline of the SBRR between West Maple and West Maumee Street. Since the banks in this area are very steep and some property fences are close by, a trail on the east side would need to be a raised wood deck. The proposed trail location for this section is shown on the west side because it would be the most cost effective location and most likely to be permitted. The areas on the west side adjacent to the river are several undeveloped or utility owned properties that are not occupying any space adjacent to the river. Since the road conditions on West Maple and West Maumee streets allow for pedestrian crossing, a crosswalk could easily be created in those two streets.



Map of existing and proposed trail from Trestle Park to College Avenue

The proposed trail could also begin on the south side of the Kiwanis Trail bridge crossing, just south of Maple Street, if the proposed access location is not pursued.

A new proposed access location is shown off Maple Street on an existing property adjacent to the Kiwanis Trail. This area could accommodate approximately 12 to 14 parking spaces. Excavation on the easterly side of the bridge is necessary for a kayak launch on the river. The grade drops approximately 10 feet from the existing ground to the elevation of the river. Installation of a stepped kayak launch requires between 30 to 35 feet of horizontal space away from the top of the bank of the SBRR. Making this access launch area ADA compliant would be very difficult, potentially limiting some grant funding options.

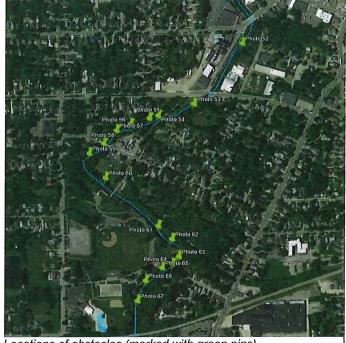
A main focal point in this section is to open the river corridor from the Kiwanis Trail bridge to the river crossing under the Maumee Street bridge and along Comstock Park. Significant underbrush and woody vegetation growth is apparent on both sides of the river in this location. Selective tree removal and brush clearing in this area would greatly increase the visibility of the river for the downtown businesses and residences that overlook the high bluff on the east side.

Comstock Park, located between Maumee and Church streets, is a very appropriate location for access to the South Branch of the River Raisin. However, parking options to accommodate kayakers trying to install their watercraft is not ideal. A wood kayak launch would be relatively easy to construct and install within this park; however, without a nearby parking lot, hauling a kayak to the river would be cumbersome.

Section 4: College Avenue to Riverside Park

Obstructions

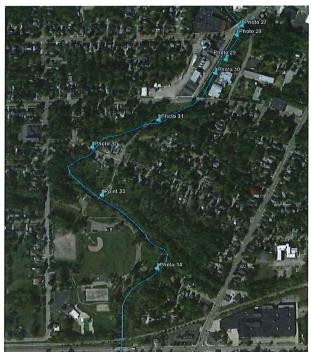
A total of sixteen river obstructions are found in this section. Many of the obstructions are trees that are floating on the river or are low hanging over the river. Other critical obstructions in this section include a large clump of tree branches blocking passage and a downed tree that is blocking passageway across the entire river.



Locations of obstacles (marked with green pins)

Depth Issues

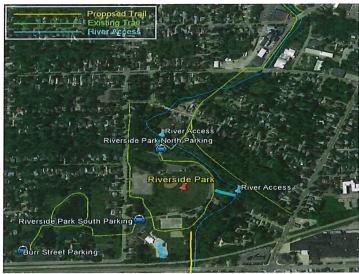
This segment from College Avenue to Michigan Avenue contains several shallow areas, some with metallic debris. In one area, a metal pipe crosses the entire width of the river. South of Michigan Avenue, the depth issues are located under bridges and storm drain outlets but not in the long stretches between. In the areas under bridges or near some storm drain outlets the river is very shallow and passage with a kayak would be difficult.



Locations of depth issues (marked with blue pins)

Connectivity & Access

The Kiwanis Trail follows closely with the alignment of the river between College Avenue and Riverside Park. Upstream, a trail at the southern end of Riverside Park should be added in order to provide connectivity to a potential roadway or access location. In using Riverside Park, two access points can be added to the river system. The first access point can be placed near the existing parking area and Kiwanis Trail bridge crossing on the northern side of Riverside Park. A kayak launch could be installed with minimal excavation and grading in



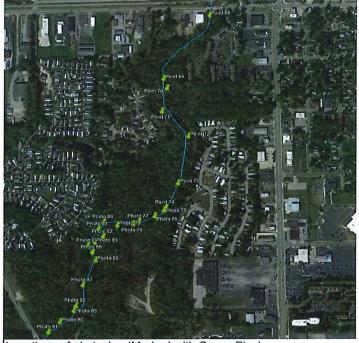
Map of existing and proposed trail from College Avenue to Riverside Park

this location. The second access point can be located on the open area on the eastern side of Riverside Park. Driveway access through the park exists; however, a small parking area would be needed if installing a launch area for watercraft.

Section 5: Riverside Park to Highway 223

Obstructions

A total of 35 obstructions are encountered in this area. Many of the obstructions completely block passageway and need to be removed in order to make this segment of the river navigable. This section of river requires the most amount of work and cost to make the section navigable by a kayak,



Locations of obstacles (Marked with Green Pins)

Depth Issues

Several shallow areas are encountered throughout this stretch of river since the flow is much slower in this section due to the number of obstructions present. Removing collected debris from fallen trees will help decrease the amount of sediment buildup in the riverbed.



Locations of depth issues (marked with blue pins)

Connectivity & Access

This segment of river has no current trails and heavily vegetated, making construction of a new trail or access area more costly. A new trail would have to be built from Riverside Park to a service drive off of Highway 223, or to an adjacent road right of way, from one of the neighboring subdivisions.

South of Riverside Park at the Beecher Street Bridge, the river spans the entire width of the ground leaving no existing land available for a walking path. In order to connect the trail, fill must be added under the bridge, or an elevated walkway would need be constructed through this area. Pedestrian crossing at the bridge is currently not possible due to traffic and the railroad Map of proposed trail from Riverside Park to US 223 location parallel to the road.



A possible alternative to building under the bridge or an elevated walkway would be to connect a trail from Riverside Park westward to Burr Ponds Park. From Burr Ponds Park, the trail can more safely cross Beecher Street.



Once the proposed trail is south of the Beecher Street Bridge, the trail would cross a large wetland perpendicular to the River Raisin on the west side of the river. In order to avoid this regulated area and to provide access to residents located on the east side of the river. a walking bridge crossing over River Raisin could be constructed. The trail would then align south on the east side of the river and avoid the private docks on the west side of the Several small-scale bridge structures would be needed over open-channel inlets that enter the SBRR on the east side of the river.

In this section, three access zones have been identified that could provide trail access or a

parking lot and a kayak launch location. One access zone in the southwest corner of this section will require building a bridge to connect to the main trail on the other side of the river.

In addition to a trail, a parking area could be constructed adjacent to Highway 223 to allow users to park cars before heading to the river. This access may attach to the service drive approximately 1,000 feet to the east. Further exploration with the Michigan Department of Transportation (MDOT) would be required.

Even obstruction removal and depth issues for this section of river require the greatest construction, permitting and administrative costs. It is the most secluded portion of river within the study area. Installing an access and launch location on the upper end of the river system through the City would allow residents to use the most attractive portion of the river, which appears to have the most biodiversity of plant and animal species.

5.0 GRANT OPPORTUNITIES & FUNDING SOURCES

As part of the work for this study, various funding sources or grant opportunites were assembled to guide some of the recommendations or items of work undertaken by the RRWC. While this is not an exhaustive list, these items are the most practical and/or probable for funding.

GRANTS

Michigan Natural Resources Trust Fund – Recreation Grant

Overview:

- \$15,000 (minumum) to \$300,000 (maximum)
- 25% match required (higher scoring for larger percentage of match received)
- MNRTF Board will emphasize the following three areas for funding in 2016:
 - Trails (including water trails)
 - Water trails were added to the Board's Trail Priority in 2014. They are documented routes for use by people in small non-motorized boats, including launch locations, trailheads, signage and methods for programming and marketing.
 - Wildlife/Ecological Corridors and Winter Deeryard (acquisition only)
 - Projects Within an Urban Area

Requirements:

- State and local governments, school districts, and regional recreation authorities are eligible
- Must have a 5-year recreation plan that is locally adopted and submitted in MiRecGrants by March 1st. The following sections of the plan are required:
 - o Community Description
 - Administrative Structure
 - Recreation Inventory
 - Resource Inventory (optional)
 - Description of the Planning and Public Input Process
 - Goals and Objectives
 - Action Program
- Public Input: At least one public meeting six months before application deadline and before resolution committing to the application is passed by highest local governing body.
- Long-term obligations:
 - o Land must remain open to public use
 - Grantee must maintain the site and facilities necessary for access and compliant with ADA standards
- Eligible projects include: fishing, beaches, boating access, trails, buildings that are needed to support the previously mentioned items
- Applicant representative must be elected official or paid staff of the local unit of government

Required Content (All Applications):

- Application narrative
- Site development plan
- Project location map
- Documentation of local match sources
- Advance notice of a public meeting to receive public comment on the application
- Certified minutes of the public meeting where the public hearing was held and certified meeting minutes where the resolution was passed by the governing body authorized to allocate funds for the application
- Certified Resolution from the governing body
- Environmental Report if applicable based on Property Checklist in Section F of the Application
- Notice of Intent Form (PR5750-2)
- Transmittal of the Notice of Intent Form to the regional clearinghouse
- Photographs of the site
- Copy of most recent deed(s) for the parcels
- Maintenance Plan
- Boundary map delineating the legal boundaries of the site

Required Content (For Acquisition Applications Only):

- Plat or parcel map with subject parcel(s) highlighted
- Draft easement or other agreement, if applicable
- Copy of most recent tax bill for the parcel(s)

Required Content (For Development Applications Only):

- Preliminary floor plans and elevation drawings for proposed structures
- Documentation of Site Control Form (PR5750-4)

Supporting Documentation for All Applications:

- Signed minutes of other public meetings to gather public comment and support
- Letters of support for the project
- Correspondence regarding regulatory permitting issues, if applicable
- Expert documentation, to support the project in Sections G-H

Timeline:

- January 2016 Application period starts in MIRecGrants
- March 1, 2016 Recreation plans to be submitted to MiRecGrants
- April 1, 2016 Application Due Date
- April 2016 to July 2016 Grants scored are reviewed
- August 2016 Preliminary scores made available to Grantees and supplemental information is requested
- September 2016 to October 2016 Final score evaluations performed
- December 2016 MNRTF Board makes final recommendations for funding
- January 2017 Bill prepared for Legislature approval to appropriate funds

- February 2017 to June 2017 Project Agreements distributed to Grantees
- June 2017 to September 2017 Project Agreements signed and executed, work may commence once agreements have been signed.

Opportunities for the South Branch of the River Raisin:

Nearly all recommendations listed in this report could be eligible for funding under this Grant. This Grant is viewed as the highest probability for funding many of the potential downtown Adrian improvements for access, pathways and accessability. The Public Input requirement, which requires a public meeting regarding the activities proposed in the Grant application at least six months prior, may prohibit submission in 2016. This was the Grant that was received to do the Mill Creek project in Dexter, MI.

DNR – Aquatic Habitat Grant Program

Overview:

- \$25,000 (minumum) to \$500,000 (maximum). Maximum is dependent on amount available any given year, most ever given out was \$500,000 to one project in a year.
- 10% local match required. Higher scores for greater match or additional funding sources.

Requirements & Desirable Projects:

- Projects that "rehabilitate or protect rivers whose key physical process that control aquatic habitat and fish production are impaired"
- Processes such as hydrology (dam removal), connectivity of water bodies, geomorphology (bottom shape of a water body), material recruitment and movement, and water quality
- Increase desirable fish populations
- Increase direct public involvement in watershed issues
- Increase high quality and self-sustaining aquatic resources
- Public waters with priority given to projects on public waters with legal public access
- Projects that improve degraded watershed processes, priority to urban areas
- Must submit 3-page pre-proposal

Required Content of All Applications:

- Aquatic Habitat Grant Program Application
- Application Narrative
- Project Location Map
- Documentation of local committed fund sources (commitment letters)
- Photographs of the site
- Electronic Version of the Grand Application
- Correspondence regarding regulatory permitting issues

Timeline:

• July 25, 2016 – Request for Pre-Proposals Begins

- August 29, 2016 Pre-Proposals Due
- Sept. 30, 2016 Invitation to Submit Grant Appliation Packet Begins
- Nov. 14, 2016 Grant Application Packet Due
- April 14, 2017 Review & Selection Process Completed, Awards Announced
- May 2017 Project Period Begins
- Oct. 10, 2017 Project Period Ends
- Dec. 10, 2017 Final Project Report Due

Opportunities for the South Branch of the River Raisin:

This Grant has an emphasis on fisheries habitat restoration but it also scores well for applications submitted for improved fisheries connectivity. Many of the issues associated with large-scale obstruction removal (or possible replacement of woody debris along the banks) or depth may be eligible. Eng., Inc. has a good working relationship with the DNR Fisheries Division who administers this Grant and reviews the projects that receive funding. Eng., Inc. is currently working on two projects that are seeking funding from this Grant.

DNR - Recreational Passport Grant:

Overview:

- \$7,500 (minimum) to \$45,000 (maximum)
- 25% local match required

Requirements & Desirable Projects:

- Focus on recreation-based development projects
- Similar to Michigan Natural Resources Trust Fund Grant and scoring criteria, except this is for development projects only and projects for recreational use for the life of the project, rather than perpetuity
- Limited to Applicants being Local Units of Government, Recreational Authorities or Trailway Commissions
- Site control required
- Focus on ADA compliance
- No funding of projects for routine maintenance or operational expenses
- Application Submission Requirements:
 - Project narrative
 - Site development plan
 - Project location map
 - Site control documentation
 - Certified resolution of support from governing body
 - Documentation of the local match
 - Expected project budget
 - Either current approved annual capital improvement plan or a 5-year recreation plan that includes the listed project

Timeline:

- April 1, 2016 Application Deadline
- October 2016 Recommended projects to the DNR Director for approval
- November 2016 Grant Awards announced
- Three years allowed for project completion

Opportunities for the South Branch of the River Raisin:

Although a rather small Grant amount, the application process requires fewer materials for submittal. The projects receiving funding in the past are very broad, with an emphasis on recreational activities (hockey, basketball, baseball, canoeing, etc.) A kayak or canoe launch project would be ideal for this Grant.

<u>USFWS – Fisheries Passage Grant:</u>

Overview:

- \$5,000 (minimum) to \$100,000 (maximum)
- No match required, although it is strongly encouraged

Requirements & Desirable Projects:

- Restore native fish and other aquatic species to self-sustaining levels by reconnecting habitat that has been fragmented by man-made barriers.
- Projects are voluntary and done in cooperation with willing partners; multiple stakeholders are preferred
- Application requirements are typically very easy and many times can be construction plans with some administrative documents included

Timeline:

*** Projects are awarded on an ongoing basis as applications are received ***

• One contact in Michigan administers this program and reviews applications.

Opportunities for the South Branch of the River Raisin:

Rather simple program that focuses on perched culverts or manmade obstructions or diversions in drains, streams and rivers that limit fish passage and aquatic connectivity. Only one person in the State administers and reviews these projects for grant approval. Because it is a federal program, the disbursement of funds can be somewhat difficult if going to a local entity of government. Typically the DNR or the local Conservation District is involved and project funding is highly dependent on their involvement. Eng., Inc. is currently working on a small dam removal project that is using funding from this Grant program and we are familiar with the process.

<u>Great Lakes Fishery Trust (GLFT) – Habitat Protection & Restoration (including barrier removel) or Special Projects:</u>

Overview:

- \$10,000 (minimum) to \$500,000 (maximum)
- No Match required, although it is encouraged

Requirements:

- Projects must have measurable outcomes
- Projects must have benefits primarily directed to the Great Lakes
- Project applicants must be a public entity, nonprofit organization, or private educational institution
- Projects must not duplicate ongoing activities in the region or activities funded by alternative sources
- Project applicants must have demonstrated an ability to undertake such projects
- Projects should demonstrate all or most of the following:
 - Highly visible results
 - Plans for making the public and other appropriate forums or groups aware of results should be incorporated into the project proposal
 - Projects should have a broad range of support from organizations interested in Great Lakes fisheries, the general public, and/or the scientific community.
 - Projects should provide information or results that will help guide future grant activities of the Great Lakes Fishery Trust

Timeline:

*** Projects are awarded on an ongoing basis as applications are received ***

- March 8, 2016 Habitat Restoration Grant Applications Due
- August 23, 2016 Access to Great Lakes Fisheries Proposals Due
- October 7, 2016 Special Project Proposals Due

Opportunities for the South Branch of the River Raisin:

In general, projects located closer to the Great Lakes, with an emphasis on Lake Michigan shoreline and river tributaries of the Great Lakes are scored higher. However, there has been a recent emphasis with grant funding has emerged for barrier removal and large-scale manmade obstruction removal that will facilitate fish passage. Opportunity exists for funding for some of the access or launch areas through their Access to Great Lakes Fisheries portion of the Grant. This selection looks at efforts to increase use and interaction to fishing opportunities for systems connected to the Great Lakes. Although the focus is on fisheries and fisheries habitat, there are some secondary opportunities at some of the proposed access locations or existing community parks. Eng., Inc. also has a long-standing professional relationship with the Grant Administrator for the GLFT.

OTHER FUNDING SOURCES & POTENTIAL GRANTS

Harriett Kimball Fee Estate

The Fee Estate was established to assist in the beautification of Adrian's city parks and public properties. The funds are to be used for beautification only and cannot be used for things such as athletic fields, recreation facilities, playground equipment or land acquisition. Many of the items covered by this Fee Estate would be needed to allow environmental interaction, kayak passage and connectivity, and increased interaction with the SBRR could be covered under this Trust, which is administered by the City of Adrian.

Lenawee County Drain Commissioner - Michigan Drain Code

A new amendment adopted in 2013 to the Michigan Drain Code allows Drain Commissioners to perform work on non-designated County Drains, rivers or streams if there are obstructions (log jams, fallen trees, etc.) that may cause a backup to an upstream County drain. In this case, the Savage Drain outlets to the SBRR just south of US 223 and the study area. Many of the obstructions immediately downstream of this area could be removed, and the costs for such assessed to the Drainage District for the Savage Drain and any tributaries of the Savage Drain. Further upstream is the L.A. Porter Drain, which may also meet the requirement for obstruction removal on the SBRR. A DEQ Permit is required to do this work and a Professional Engineer must certify that the obstructions may cause a backup or flood on upstream County Drains.

Freshwater Future/Healing Our Waters Planning Grants

- Award Up to \$15,000 to help organizations develop proposals to federal sources
- Grants have an emphasis on the Lake Michigan basin
- Contact: Cheryl Kallio, <u>cheryl@freshwaterfuture.org</u>

Sustain Our Great Lakes

- Up to \$5 million available
- Individual projects range from \$50,000 to \$1.5 million
- Grants awarded in two categories: Stream and Riparian Habitat, and Coastal Wetlands
- Nonprofits, educational institutions, and units of government eligible to apply
- Contact: Todd Hogrefe (612-564-7286; todd.hogrefe@nfwf.org)

Land and Water Conservation Fund

- Requires a recreation plan
- Administered by MDNR

Outdoor Recreation Legacy Partnership Program (Joint NPS - DNR Program)

- Not currently accepting applications but anticipate an RFP being released later this year.
- Program targets land acquisition and development for outdoor recreation
- Focused on jurisdictions of 50,000 or more people.
- Requires a 50 percent match

Other DNR Grants

DNR has other funding opportunities available – summarized: https://www.michigan.gov/dnr/0,4570,7-153-58225---,00.html

Miscellaneous

- Michigan Association of Counties has staff that will track down grant opportunities for various purposes. Contact Gabe Zawadzki <u>zawadzki@micounties.org</u>
- The MDEQ Lake Erie Coordinator is Michelle Selzer, <u>selzerm@michigan.gov</u>. Michelle is a wealth of information and a good partner in developing projects
- USDA Regional Conservation Partnership Program recently launched its more focused on farm conservation but there may be some funding available for river restoration.
- Significant resources are going into phosphorus reduction in the Western Lake Erie basin. If there is a nexus to Phosphorus reduction there may be additional funding sources available.

7.0 RECOMMENDATIONS & PRIORITIES

The following is a list of recommendations and priorities based upon doing some initial work to achieve the goal of becoming a navigable river system through the City of Adrian. They have been listed in order of immediate priority based upon the goals of committee that helped guide the preparation of this report. The basis for the priorities have been listed below.

Priority 1 – complete in 2016, lowest amount of time, materials and workforce.

Priority 2 – complete in 2017 and subsequent years based upon available resources. Requires lowest amount of time, materials and workforce.

Priority 3 – complete in 2017 and subsequent years based upon available resources and some smaller grant opportunities or funding sources.

Priority 4 – long term goal that will require significant some source of funding.

RECOMMENDATIONS – PRIORITY 1

- Remove by hand through volunteer work or service groups Category 1 and some Category 2 Obstructions in Section 2 and Section 3. Place large-woody debris along banks where erosion is taking place.
- Seek out grant opportunities through consultation with Engineer and company specializing in grant funding.

RECOMMENDATIONS - PRIORITY 2

- Remove by hand through volunteer work or service groups Category 1 and some Category 2 Obstructions in Section 1 and Section 4. Place large-woody debris along banks where erosion is taking place.
- Seek out grant opportunities through consultation with Engineer and company specializing in grant funding.

RECOMMENDATIONS – PRIORITY 3

- Remove by hand through Lenawee County Drain Commissioner's office because
 of upstream flooding conditions Category 1 & 2 Obstructions in Section 5. Place
 large-woody debris along banks where erosion is taking place.
- Identify one area for access in Section 2, 3 or 4 and seek grant to install kayak and river access point.

RECOMMENDATIONS – PRIORITY 4

- Install new paths identified in various sections of the report to improve connectivity.
- Purchase land for access and connectivity identified in the report in Section 1 and Section 5.