

# **Lower Grand River Water Trail Assessment and Improvement Plan**

## **Grand River Heritage Water Trail – Ottawa County**

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### INTRODUCTION

West Michigan Environmental Action Council (WMEAC) and Grand Valley State University (GVSU) undertook a collaborative project with Ottawa County Parks and Recreation Commission, Grand Haven Area Convention and Visitors Bureau, Lower Grand River Organization of Watersheds (LGROW), and the U.S. National Park Service (NPS) to do an assessment of the Grand River Heritage Trail to identify and analyze possible gaps in access, marketing and signage, user amenities, safety considerations, and connectivity with potential water trail development upstream. This assessment includes input from user groups, the business community, local units of government, and the general public. The improvement plan includes recommendations for potential improvements to eliminate identified gaps, to enhance the trail resource, and to bring new users to the Grand River Heritage Water Trail.

This project builds on a number of local, regional, and statewide efforts to establish water trails and paddling amenities along Michigan's rivers and coastal areas. Ottawa County Parks launched the Grand River Heritage Trail in 2012. This water trail traverses nearly 44 miles of the Lower Grand River, through its length in Ottawa County, to the river mouth at Lake Michigan. The water trail has 18 access points, three of which include universally accessible launches, and it highlights 60 cultural and historical features along the trail. However, since the implementation of this water trail, little is known about its usage.

In 2014, WMEAC, GVSU, and Williams and Works released a water trail report that provided data and community input for the planning of a Lake Michigan Water Trail from Benton Harbor to Ludington. At a series of three public meetings held in Grand Haven, the Grand River Heritage Water Trail was identified as a key asset to water trail development and planning. However, participants also identified certain obstacles to water trail use and access which can be attributed to Lake Michigan and the Grand River: no access points after Harbor Island; the need for lodging for overnight trips; the lack of kayak shuttle services; and potential conflicts between anglers, motorized boaters, and paddlers (West Michigan Water Trails, Final Report, Page 34).

The Michigan Department of Natural Resources is leading efforts to encourage the development and management of water trails along the length of the entire Grand River, from Jackson to Lake Michigan. The Grand River is a Lake Michigan connecting waterway; it is the blue thread that ties together our natural resources, opportunities for recreation and economic development, and a sense of place. The Grand River is the natural resource that West Michigan has rallied behind and has worked to protect over generations. Now, with the City of Grand Rapids poised to restore its namesake rapids to the river, a unique opportunity exists to support the development of a Grand River water trails system. Additionally, the Land Information Access Association (LIAA) is leading efforts to develop a Statewide Water Trails Manual. It is anticipated that the information and recommendations found in this report will be used to

inform the development of a Trail Town Master Plan for the entire Lower Grand River, as well as the Water Trails Manual.

Financial assistance for this project was provided, in part, by the Michigan Coastal Zone Management Program, Office of the Great Lakes, Department of Environmental Quality, and is supported through a grant under the National Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration. Additional funding was provided by the Meijer Foundation and the Frey Foundation, and consultation and advice was provided by the NPS's Rivers, Trails, and Conservation Assistance program. The statements, findings, conclusions, and recommendations in this report are those of the authors and do not necessarily reflect the view of the funding entities.

## WHAT IS A WATER TRAIL?

A water trail is a designated route on a navigable waterway such as a river, lake, or canal that is designed, implemented, and managed to foster educational and recreational experiences for the user. Water trails provide safe access to, and information about these waterways, while also providing connections to cultural, natural, and other attractions. Water trails are intended for non-motorized uses such as kayaks, canoes, and other human/muscle powered craft, along with wind-powered activities depending on the character and conditions of the water trail. (West Michigan Water Trails, Final Report, Page 4). They can be classified by cultural experience – historic, urban, culinary, or wilderness trails; or by skill-level – beginner, intermediate, advanced, family-friendly, or challenge trails. For some water trails, skill-level classifications can vary depending upon weather and waterway conditions or intended float/paddle time. The quality of trail assets such as access points, maps, signage, facilities, outfitters, and information about conditions and skill level requirements, can affect the success of a designated water trail. Without proper amenities, emergency services, maintained access sites, or facilities, the water trail will likely go underutilized or impacted by a lack of general understanding of the best management practices for a navigable waterway.

## RESEARCH AND DATA COLLECTION

A mixed methods approach was used in this project to obtain information about a number of factors that could affect the Grand River Heritage Water Trail in Ottawa County: the existing infrastructure and conditions of the water trail in Ottawa County; best practices in water trail management and marketing; local and regional interest in and concerns about the water trail; county and local resources available to support the water trail; and user expectations and experiences. Both quantitative and qualitative data were collected; and there was the assessment of primary and secondary data from previous related research project reports, websites, books, and other publicly available sources. Both formal interviews and informal discussions were conducted, one-on-one telephone and in-person data collection as well as public consultation were conducted. Figure 1 indicates the timeline and project activity components used in the execution of this project.

Figure 1. Timeline and Project Approach



Key elements of this project included a core project team working in collaboration with an advisory committee, on-going interaction and communication with public and private sector interest groups, and paddling experiences of the Lower Grand River Heritage Water Trail in Ottawa County.

#### Research

To learn more about this water trail, the project team reviewed Ottawa County Park's water trail webpage and print materials; completed on-site assessments (see, Appendix A, 1) of all 18 of the county-owned launch sites; reviewed the master plans, zoning ordinances, and recreation plans for the communities along the Grand River in Ottawa County (Appendix A, 2); and paddled the different reaches of the water trail. The 2014 water trails report provided base data showing resident water trail user profiles and the tourism resources for the county (West Michigan Water Trails, Final Report, Pages 21, 40). GVSU conducted extensive research to update the information documenting Ottawa County's historical, natural, and cultural resources.

NPS provided the research team with a number of resources regarding water trail development, marketing, and management from its National Water Trails System and the 18 (now 21) designated National Water Trails. WMEAC reviewed additional water trails and trail marketing information in general from a number of state and regional water trails.

#### Public Input

WMEAC developed, updated, and maintained an email distribution list of potential stakeholders – or interested parties – in water trail management and development along the Lower Grand River. Although the focus of this project was assessment of the current Grand River Heritage Water Trail in Ottawa County, there is interest at the state, regional, and local levels for development and maintenance of a water trail along the length of the Grand River from Jackson to Grand Haven. As a result, this stakeholder list includes a broader list of individuals and potentially-interested organizations and businesses than those just located in Ottawa County. This list includes individuals who attended the public meetings in

Grand Haven about Lake Michigan water trail development during the preparation of the 2014 water trail report; local and regional canoe, kayak, and paddleboard outfitters; recreation, trail, and transit businesses and organizations; emergency services, local government leadership, and county officials; and other interested individuals (see, Appendix B).

These stakeholders were invited to participate in a series of public and private meetings with the project team. Public meetings were held at Ottawa County Parks’ Grand Ravines North facility on December 7, 2015; May 9, 2016; and September 13, 2016. The first meeting introduced the project and solicited information about current usage of the water trail and suggestions for improvements to water the trail; there were 16 participants. The second meeting provided an overview of the project teams’ research and findings to date, provided an update on the state and regional efforts to designate a water trail throughout the length of the Grand River, and requested feedback on additional information at the stakeholders would like to see about water trail; there were 14 participants. Participants included outfitters, township officials, county officials, state representatives, and team members, and self-identified interested individuals or riparian landowners (see, Figures 2, 3). The third, and final, public meeting will review the project process, results, and recommendations for the water trail; public comment will be requested on the final report.

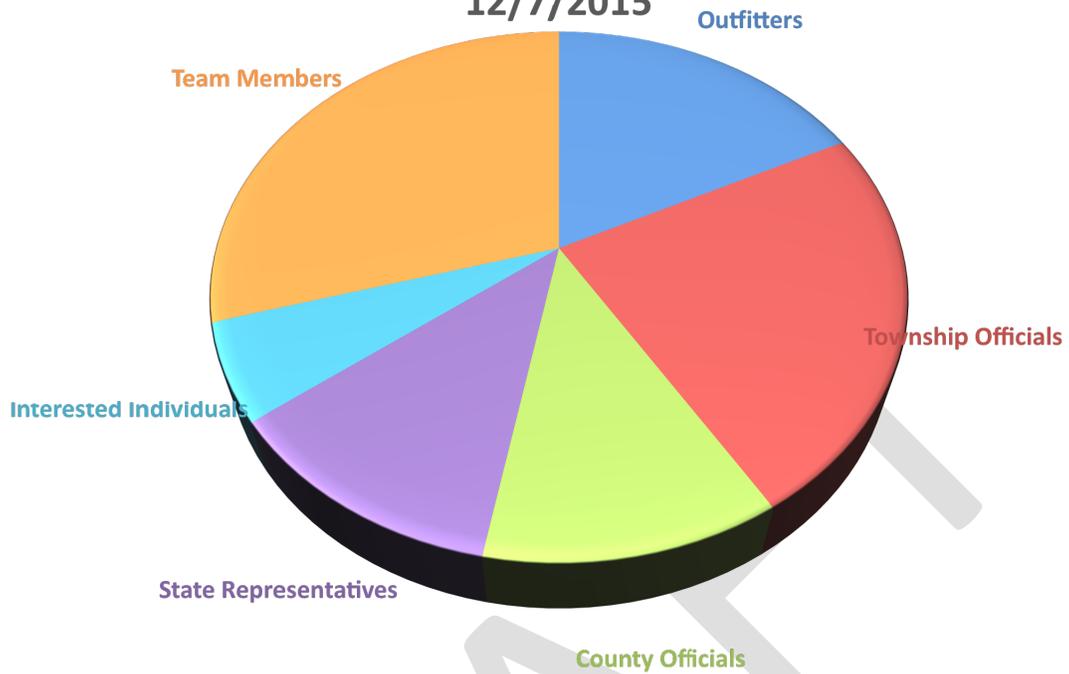
Additional meetings were held with public safety officers to discuss emergency response, preparedness, and other concerns related to water rescue resources, access, and funding (Table 1).

Table 1. Safety Officer Meetings and Outreach

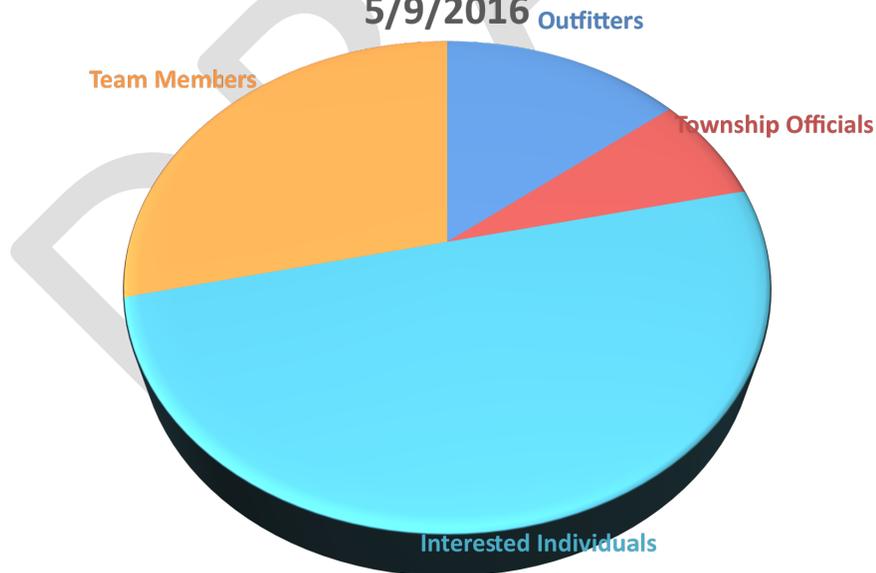
Description	Date	Participants	
Wright-Tallmadge Fire Board Meeting	6/7/2016	Fire Board Members Members of the Public Team Members: WMEAC	4 6 1
Ottawa County Sheriff’s Office Marine Unit Conference Call	7/7/2016	Sgt. Cal Keuning Team Members: WMEAC, Ottawa County Parks, GVSU	1 5
Safety Officers Meeting	8/21/2016	Safety Officers: Spring Lake, Crockery Township, Ottawa County Central Dispatch Team Members: WMEAC, Ottawa County Parks, GVSU	3 5
<i>Total Participants</i>			25

Figures 2, 3. Grand River Heritage Water Trail Meetings

**Public Meeting 1  
12/7/2015**



**Public Meeting 2  
5/9/2016**



Water Trail User Survey

As part of the assessment of the Grand River Heritage Water Trail, a survey was conducted to assess the current needs of paddlers using the water trail, to obtain insight into why paddlers might not be using the water trail, and to determine what might be needed to facilitate a positive water trail experience. The survey is divided into 4 sections:

1. Introductory questions to establish paddling experience and skill level,
2. Paddling venues and level of interest in paddling the Lower Grand River,
3. Quality considerations of existing facilities, and
4. Planning of future paddling excursions.

The survey was prepared and reviewed by students in three sections of GVSU's Hospitality and Tourism Management, Hospitality and Tourism Research classes (HTM 375) in the Winter 2016 semester. The revised survey was submitted to the GVSU Office of Research Compliance and Integrity (RCI), for determination and approval (Appendix A, 3). The RCI determined that this survey did not meet the definition of covered research on Human Subjects and approved its distribution for this project (Appendix A, 4).

The project team took the opportunity to seek input from persons attending the 21<sup>st</sup> Annual Quiet Water Symposium at Michigan State University Pavilion March 5, 2016. These persons were deemed to have an interest in paddling, to be likely candidates for interview, and to be able to provide input based on their paddling experience. The survey was also offered to the paddling public via WMEAC's website. WMEAC did a general call to paddlers to participate in the online survey via social media and during attendance at any WMEAC Water Program event from March – June 2016.

At the Quiet Water Symposium, survey distribution was facilitated out of the WMEAC booth where three team members invited symposium attendees to participate; all persons passing the booth were invited. A total of 56 completed surveys were collected at the Quiet Water Symposium. The online survey was opened immediately after the Quiet Water Symposium and remained available until July 1, 2016; a total of 19 surveys were completed online. The 75 surveys were completed and analyzed; the estimated response rate was 2.7%.

#### EXISTING WATER TRAIL INFRASTRUCTURE

From Jenison, all the way to the Grand River's mouth at Grand Haven, Ottawa County holds nearly 35 miles of the winding Grand River. Using 2008 aerial photography, Ottawa County Parks developed a semi-comprehensive map system that divides the river into six segments called reaches. Each reach is labeled with a variety of historical, natural, and basic infrastructural points of interest along the Grand River. The Ottawa County Parks "Water Trail Maps" are available online for download and in print. While these maps do not detail the safety, infrastructure, or accessibility of kayak/canoe entry points, they present a good account of river, stream, and bayou conditions; waterfowl and fish habitats; and historic human interventions along the river.

Located along both sides of the Grand River are fourteen paved and six carry-down launch points. These access points create conditions conducive to a diversity of non-motorized recreation in and around the river. Most access points are a simple concrete ramp extending into the river, or even more basically, a clearing for carrying down water vessels. Many higher traffic locations have a picnic shelter area, bathrooms, signage, a playground, and/or a green space for recreation. While some launch locations are managed by local townships, most are under the jurisdiction of Ottawa County Parks.

Utilizing a number of different launch site assessment tools, including one developed by the Land Information Access Association (LIAA) for Michigan's Great Lakes water trails, the project team developed a comprehensive launch site and amenity form (Appendix A, 1). The WMEAC Water Trails Asset Record Form records site location information, a detailed inventory of amenities, site description,

environmental and conservation concerns, and potential site improvements. The project team visited 17 launch sites along the Grand River in Ottawa County and western Kent County. The launches were managed by the state (1), Ottawa County (8), Kent County (1), or local municipalities (7). The average distance between launches was 2.5 miles; with 10 of them being 2 miles or less from the last access point, four being 3-4 miles from the last access point, and two being more than 5 miles from the last access point. A detailed summary of the amenities found at each of these sites was created (Appendix C, 1), and an accounting of those amenities appears in Table 2.

Table 2. Summary of Amenities at Launch Sites along the Grand River Heritage Water Trail

Number of Sites with Amenities Present			
Universally Accessible	4	Running Water	4
Boat Storage	0	Waste Disposal	11
Launch Fees	4	Potable Water	1
Camping Facilities	0	WiFi	1
Parking Lot	15	Signage	14
Trailer Parking	13	Emergency Phone	0
Handicap Parking	12	Nearby Rentals	3
Lighting	6	Nearby Indoor Lodging	1
Picnic Area	10	Nearby Restaurant or Food Options	5
Power	7	Nearby Event Venues	2
Restrooms	11	Transportation	3

Of the sites that have signage, only two include information about the water trail and upcoming access points, only four provide information regarding boating rules and river etiquette, and none had signage visible from the water. Launch types vary between developed (14), carry-in (16) and universally accessible (2); and they ranged in distance from the parking lot 30 – 500 feet, with most (11) being 50 feet or less from the parking lot. Transportation options were very limited; only three sites had access to a bus, but that access was at least ½-mile away.

#### CULTURAL, HISTORIC, AND NATURAL AMENITIES

##### Hospitality and Tourism

The project team completed an inventory of hospitality and tourism amenities in each of the communities in Ottawa County along the Grand River Heritage Water Trail. These amenities include accommodations, site attractions, food and beverage establishments, and kayak rentals and other services (Figure 4). A list of those amenities in each community follows.

Figure 4. Hospitality and Tourism Amenities in Communities along the Grand River Heritage Water Trail

## Presence & “Paddler-ready” Tourism Elements

	Accommodation	Site Attractions	Food & Beverage	Rentals & other services
1. Allendale Twp	1	2	11	0
2. Crockery Twp	0	2	2	0
3. Ferrysburg	0	2	1	0
4. Georgetown Twp	1	0	10	0
5. Grand Haven	7	3	13+	1
6. Grand Haven Twp	1	1	2	1
7. Polkton Twp	0	0	2	0
8. Robinson Twp	0	0	1	0
9. Spring Lake Twp	1	1	1	0
10. Spring Lake Village	1	1	7	0
11. Tallmadge Twp	0	0	9	0

**Allendale Township:** Aroy Thai, Bamboo Express, Bass River Recreation Area, Baymont Inn & Suites, Burger King, Cottage Inn Pizza, Manicino’s Pizz, Main St. Pub, McDonalds, Meadows Golf Course, Mug Shots Burgers & Brews, Murphys Family Restaurant, Subway

**Crockery Township:** Terra Verde Golf Course and Restaurant, Turks Tavern

**City of Ferrysburg:** Coast Guard Park, North Beach Park, Pine St. Café

**Georgetown Township:** Bangkok Taste, Comfort Suites Grandville, Cracker Barrel, Culvers, Fazoli’s, Great Lakes Chinese Restaurant, Jimmy Johns, KFC, Marco’s Pizza, New Beginnings Restaurant, Peppinos Pizza, Pizza Hut, Rush Creek Bistro, Stir Fry Express, Wendy’s

**City of Grand Haven:** Arturos Tacos, Best Western Beacon Inn, Blue Water Inn and Suite, Days Inn Grand Haven, Dee-Lite Bar and Grill, Fricanos Pizza, Grand Haven Musical Fountain, Grand Haven State Park, The Grand Seafood, The Grill Room, JW’s Food & Spirits, Kirby House, Morning Star Café, Portobello, Rays Drive In, Rodeway Inn, Russ Restaurant, Serendipity Resorts and Suites, Snug Harbor, Stanz Grill, Suns Sport Rentals, Tri-Cities Historical Museum, various beach house rentals, various bed and breakfasts

**Grand Haven Township:** A and L Restaurant, Kirk Park, Lakeshore Kayak Rental LLC, Stable Inn, Sunset Beach Cottages

**Polkton Township:** None

**Robinson Township:** A&L Restaurant

**Spring Lake Township:** Arboreal Inn, North Ottawa Dunes

**Village of Spring Lake:** 2 Tonys, Arboreal Inn, Chans, Jack's Water Front Grill, Holiday Inn, Pruebelo Mexican Grill, Old Boys Brew House, Subway, Tavern Grille

**Tallmadge Township:** Applebees, Beer Thirty Bar and Grill, Crooked Goose, Interurban Depot Café, Las Cazuelas, McDonalds, Peppermill Grill, Taco Bell, Uccellos

#### West Michigan Flora and Fauna

There is a large variety of plants and animals that a paddler is likely to experience throughout the six reaches of the Grand River Heritage Water Trail. Plants include common species such as Blue Violet, Early Buttercup, False Rue-Anemone, May Apple, Spring Beauty, and Wild Leek; less common species such as Marsh Marigold, Pennsylvania Bittercress, Persian Speedwell, Purple Deadnettle, Toothwort, Trillium, and Yellow and White Violet; and more rare species such as Trout Lily.

Possible wildlife stings could include bald eagles, blue jays, white cabbage moths, common grackles, downy woodpeckers, crayfish, fox squirrels, many species of frogs, great blue herons, muskrats, red admiral butterflies, red-winged blackbirds, robins, white-throated sparrows, tufted titmouses, water striders, and wild turkeys.

#### RIPARIAN COMMUNITY MASTER PLAN AND ORDINANCE REVIEWS

Utilizing the Planning, Zoning and Land Use Considerations section of the 2014 report (West Michigan Water Trails, Final Report, Pages 50-55), the project team developed a local unit of government assessment tool (see, Appendix A, 2). This form records land use planning information, critical/high risk erosion planning ordinances, low impact development (LID) provisions, open space and view protections, future public access, parks and recreation planning, and site design considerations. The team used this information to evaluate whether there were any obstacles or incentives for new or expanded water trails infrastructure, access, wayfinding, or maintenance within the local municipalities adjacent to the Grand River, other than the County.

The project team reviewed master plans, recreation plans – where available, and zoning ordinances for 12 communities, including Ottawa County, which have Grand River waterfronts or riparian access. All of these municipalities have Planned Urban Development (PUD) or Cluster Growth to limit sprawl, although the highest population densities and developed areas are on either end of the county along the Grand River: near the Lake Michigan shoreline or the outskirts of the City of Grand Rapids. The remaining communities are less populated, and farmland and open space preservation ordinances are in place to preserve their rural/small town character.

All of the riparian municipalities have some type of limitation on development for the protection of wetlands, natural features, tree canopy, or waterways. In addition, 58% have green space preservation provisions; 83% have public park improvement plans; 42% have adopted or plan to adopt stormwater

and LID ordinances; and 33% promote community and youth education and participation in natural landscapes and water preservation.

Trail development is included in the planning and development for the majority of these communities, including planning for a “Blue Water Trail” on the Grand River (4); implementing, improving, or managing canoe and kayak access points on the Grand River (6); and improving other non-motorized trail, pathway, or greenway corridor connectivity (8).

It should be noted that the three communities with the largest amount of Grand River floodplain area (Crockery, Polkton, and Tallmadge Townships) have the least access; fewer protections; and less of a focus on creating or preserving trails, parks, or green space (Figure 5).

Figure 5. Summary of Key Planning and Ordinance Provisions for Grand River Riparian Communities in Ottawa County

Allendale Township

	Protection/ zoning natural features	Improve and/or expand public parks	Improve non- motorized recreational corridor connectivity	Improve, preserve, and/or create green spaces	Improve, create, and/or manage kayak/canoe access points	Promote stakeholder participation in natural preservation	Promote “Blue Water Trail” development
Grand Haven (city)	X	X	X	X	X	X	X
Spring Lake (village)	X	X	X	X	X	X	X
Spring Lake (twp)	X	X	X	X	X	X	X
Ferrysburg	X	X	X	X	X		X
Allendale	X	X	X	X		X	
Georgetown	X	X	X	X	X		
Grand Haven (twp)	X	X	X	X	X		
Robinson	X	X	X	X			
Crockery	X	X					
Polkton	X						
Tallmadge	X						

As a growing and diverse community, Allendale strives to provide a small town atmosphere with the Grand River and its bordering wetlands as recreational focal points. Allendale is working to improve GVSU student-community discussions to best meet the needs of residents and visitors alike. Improving and connecting pedestrian pathways between handicap and senior accessible parks and recreation areas will help bridge township parks and blend green spaces with the built landscape. The adoption of LID ordinances will limit further sprawl and maintain the township’s unique semi-rural feel as well as protect sensitive natural habitats. Allendale hopes to work closely with Ottawa County on a pathway system linking recreation areas and scenic pathways along the Grand River.

Crockery Township

Wide open fields and agrarian values mark Crockery Township as an idyllic, countryside community along the Grand River. Crockery is working to keep the rural spirit and watershed alive through limiting development in wetland areas and investing in the protection of open agricultural land. With about 20% of the township within the U.S. Army Corps of Engineers 100 year floodplain, the use of both a “Natural Features” and floodplain overlay for future zoning have the dual benefits of preventing ecological damage as well as limiting economic costs related to flooding. To ensure efficient use of resources and heightened park walkability and access, the Crockery master plan encourages cluster growth near existing public utilities, reduction of cul-de-sac development, and fostering a comprehensive park plan.

Crockery has zoned lands adjacent to the Grand River as the “Grand River Marina District” to curb development and prevent excessive environmental fragmentation along the river.

#### City of Ferrysburg

Bordered by the iconic North Shore Dunes, Lake Michigan, and the mighty Grand River, the coastal town of Ferrysburg seeks to maintain its “small town character” while providing ample public recreation opportunities. Further development of non-motorized pathways and communal green spaces within the townscape is already underway along the Grand River and Lake Michigan. Expanding waterway accessibility and improving “neighborhood aesthetics” (namely on Pine Street, the sand mine, and yacht club) through beautification projects are vital residential life improvements. The primary technique used to minimize ecological damage in Ferrysburg is clustered PUD which discourages wetland development, preserves dune root systems, and limits industrial growth. Ferrysburg also plans to introduce “Blue Water Trail” kayak/canoe access points along the Grand River to help stimulate ecotourism and residential park use.

#### Georgetown Township

As a highly developed and densely populated township, Georgetown values improving existing non-motorized green corridors, pathways, trails, parks, and open spaces; in addition to acquiring more land for recreation areas. Georgetown’s master plan indicates a call for increased community park access through more signage, athletic fields, year round facilities, and geographically balanced parks that serve all residents. Centralizing maintenance, PUD, and a floodplain zoning overlay will assist city park management and residential development as well as reducing wetland destruction. While there are no current parks on the Grand River, Georgetown has proposed developing kayak/canoe access points and a “watercourse corridor” (greenway) along the river through reclamation of old mining land.

#### City of Grand Haven

While the virtually “land-locked” city of Grand Haven holds few opportunities for *spatial* growth, city planners are working to improve resident and tourist satisfaction with established, communal green spaces. Due to the simple fact that more city area is zoned for industry than public parks, cityscape managers have put forth many express objectives to more effectively govern limited public land and protect the city’s unique local ecology. Preventing development on fragile dune slopes and bayous as well as establishing low impact hiking trails, will protect threatened native species, stabilize soil, and encourage greater biodiversity. The city’s “sensitive area” zoning overlay improves public awareness of natural and open spaces, which in turn provides both recreation areas and natural habitats.

A broad theme for Grand Haven city officials is to encourage “smart growth” entailing many ecological modernization techniques to improve public park access, usability, and mitigation of the detriments of commercial and residential development. The city has adopted a slew of “green infrastructure” methods such as the redevelopment of brownfield sites, residential LID and PUD ordinances, and the goal of Leadership in Energy and Environmental Design (LEED) certification for new developments. In regard to city life, Grand Haven has pushed for greater investment in cityscape beautification through the implementation of a “careful removal” ordinance for the domesticated tree canopy.

The landscape adjacent to the Grand River is currently made up of a dense, highly varied matrix of human developments. Improvements to non-motorized pathway connections, signage, public access points, and LID impact maps along the Grand River will greatly improve public waterway accessibility and knowledge of watershed issues and remedies. With a relatively low median household income and a high youth population, Grand Haven has empirically poor community/stakeholder involvement. Proposed community stormwater education campaigns will increase residential awareness and

investment in local water issues. Through increased youth involvement in water and green space protection, Grand Haven can empower community connections to the Grand River Watershed.

#### Grand Haven Township

Though the Township of Grand Haven is roughly 1/4 agricultural land, it remarkably holds the highest population, income, and housing market growth in all of Ottawa County. The township's current master plan outlines several key environmental planning goals: ecological conservation, public park access, and investment in sustainable 'green' infrastructure.

The largely residential township deeply values its wooded, rural character and strives to promote the conservation of forests, wetlands, bayous, and the Grand River. The township's master plan advocates for amendments to open space zoning and mapping sensitive natural areas, though few changes are explicitly noted regarding residential construction patterns along the Grand River. The most potent proposal in the master plan is the exclusion of stormwater retention areas, wetlands, and non-developable sites from the "open space" title within current PUD ordinances.

While there are many established boat launches, access points, and bayou parks, Grand Haven Township seeks to enhance public accessibility to the waterfront in addition to further promotion of water trail tourism. Through continued support of the Northwest Ottawa Recreation Authority, the township hopes to expand the park system by creating and linking non-motorized trails and pathways. Grand Haven Township is currently exploring green infrastructure techniques such as rain gardens and permeable pavement for a reduced development footprint. Sustainable growth is explicitly promoted through investment in wind turbines and ongoing participation in the Northwest Ottawa Sustainability Coalition.

#### Northwest Ottawa County

Township board and city council members from Ferrysburg, the City and Township of Grand Haven, and the Village and Township of Spring Lake have devised a community parks and recreation plan which expires in 2019. The plan includes an inventory of all current parks within the jurisdiction of the partner municipalities. The plan then outlines each communities' goals and action plan regarding future park and recreation area development. This joint planning effort communicates a high degree of support for the development of more accessible parks and trails as well as water trail kayak/canoe access points along the Grand River.

#### Polkton Township

The sparsely populated township of Polkton defines three objectives regarding natural spaces and the bordering Grand River: mitigation of flooding, safeguarding the vast agricultural landscape, and improving the current park network. With much of the lowland township located within the 100 year floodplain, Polkton has undertaken several regulatory measures to prevent damage to housing and crops. The Flood Overlay District ordinance has zoned land adjacent to the Grand River as "residential sensitive" to prevent development on extremely fragile slopes and ravines. In order to preserve the local rural spirit, Polkton classified some farmland under the Open Space Preservation Act, as well as economic incentives for residential PUD. To foster a more inclusive and accessible recreational park system, Polkton's master plan urges for greater investment in regional cooperative planning and management initiatives. These efforts would promote year-round park access for all ages, non-motorized trail and pathway improvements, and preservation of sensitive natural areas along the Grand River.

#### Robinson Township

As a more environmentally progressive rural township, Robinson focuses on three intertwined socioecological goals: open space preservation, flood risk mitigation, and public parkland reclamation.

With currently only one township park and 90% of the area zoned as agricultural or residential, Robinson seeks the increase of uninterrupted open space along the Grand River floodplain. The most ambitious and comprehensive aspect of the township master plan is to identify all area (mostly maintained farming ditches and bayous) within the 100 year floodplain and reclaim it as a recreational greenway corridor. Creating accessible green spaces requires non-motorized pathway construction to “showcase the natural wetlands and woodlands along the Grand River.” Promoting PUD and clustering businesses and housing rather than “strip” development will assist in preserving wetland ecosystems for sustained recreational use.

### Spring Lake Township

Rich in natural water resources, Spring Lake Township has created a master plan which identifies three environmental points of interest for future development and planned use: public engagement, natural landscape preservation, and “smart growth.” The master plan notes that meaningful legislation regarding the Grand River watershed corridor and Spring Lake and begins with encouraging stakeholder education, collaboration, and deliberation. The master plan also acknowledges that improving waterfront connections, accessibility, and beauty calls for updates to the Spring Lake recreation plan, which entails coordination between township officials, Ottawa County Parks, and citizens.

Spring Lake officials have made a concerted effort to improve the health of Spring Lake and the Grand River. Best management practices regarding riparian “viewsheds” and wetland drainage will help preserve and strengthen local ecology. Due to high residential growth, Spring Lake officials have devised a “natural features” zoning overlay to mitigate forest canopy and “critical” dune losses in residential areas. Spring Lake is working to create “active living environments” using an array of ‘smart growth’ techniques guided by the U.S. Environmental Protection Agency and Sustainable Community Network Assessment.

Spring Lake has recommended the implementation of LID ordinances, encouraging mixed land use, and reducing sprawling riverside development through PUD ordinances. Developing pocket – or micro – parks, connecting trail and pathways, and reducing suburban cul-de-sacs will increase walkability and accessibility of public township parks. Perhaps most importantly, the Spring Lake master plan advocates for the creation of Grand River and bayou kayak/canoe access points on the water trail.

### Village of Spring Lake

With approximately 80% shoreline, the Village of Spring Lake is a dense, “mature community” looking to improve the physical and cultural connection to their extensive waterfront. Spring Lake officials have noted one key area in need of intervention: public water education. Improvements to signage, kayak/canoe access points, and route maps will expand residential and ecotourist knowledge of existing waterfront access points. The Village is working to support the Ottawa County Road Commission with end-of-road access points to the Grand River and bayous, as well as increasing non-motorized trails and facilities.

Spring Lake has shouldered several wetland, “landscape regulation,” pavement, fertilizer, and waterfront zoning ordinances to preserve the watershed and tree canopy for sustained future use. While most of Spring Lake’s waterfront is zoned as low density residential, a “planned development” approach will provide enhanced waterfront access. Best management practices regarding stormwater pollution prevention need to be addressed in the form of new and renovated ordinances.

A residential survey identified swimming and boating as two of the most important public recreation activities. The U.S. Army Corps of Engineers maintains a deep draft boat channel, connecting Spring Lake

to the Grand River. This managed waterway encourages the further development of the water trail by opening up the inland lake as a river recreation access point. The most costly (and perhaps most beneficial) future city developments will be the completion of the Grand River Greenway boardwalk and North Coastal Greenway along Lake Michigan.

#### Tallmadge Township

The rural township of Tallmadge clearly identifies three meshed environmental goals: prevention of flood damages, preservation of the rural character, and more efficient zoning. Changes to the existing floodplain district zoning ordinances will limit further erosion, flood hazards, and improve natural soil saturation and drainage. The continued support of the Open Space Preservation Act maintains the township's nearly two thirds vacant or agricultural land. Tallmadge has taken initiative to encourage high density PUD as well as low density residential development. The master plan does not go into great deal regarding green spaces, active wetland improvements, or recreational opportunities in or around the Grand River.

#### WATER TRAIL COMMUNITY FEEDBACK

Interest in water trail development is varied, and more than 100 individuals provided feedback on a number of issues related to the Grand River Heritage Water Trail. Long-time paddlers are interested in improved infrastructure, signage, or experiences. Community leaders are concerned about expenses and economic impacts. Outfitters see expanded business opportunities. Many people expressed safety issues from a number of different perspectives. Some just wanted to know learn more, see what was going on, or find out how they could get involved. This project offered different opportunities for community engagement and input.

#### Public Meetings

Topics covered during the public meetings included outfitter services and information, paddle trip planning, water trail and Grand River marketing, water trail experiences and events, signage and information accessibility, safety and emergency services, and private property issues.

Outfitters in attendance offer a variety of services for paddlers. They currently provide safety instruction, paddling techniques, personal floatation devices (PFDs), maps and landmark information, and put in and take out transportation services. Additional services offered by some outfitters included online booking and river guides. Some outfitters have age restrictions for their services, and prohibit the use of alcohol in their boats. One outfitter offers a series of "biology tours" along the river, which have been popular and have generated a lot of interest in Grand River water trail usage.

Currently, the Grand River Heritage Water Trail webpage includes a list of outfitters available to accommodate user trips. However, paddlers are also looking for more information to plan and conduct their own trips. Meeting attendees did not feel that the Ottawa County Parks website was easy to access, and they wanted to be able to find the water trail information in multiple locations (e.g., local Chambers of Commerce, West Michigan Tourist Association, Department of Natural Resources water trails, and MichiganWaterTrails.org). Overall feedback was that additional information needs to be more broadly available and easily accessible.

Meeting participants wanted more marketing about the water trail and about the experiences on the Grand River, in particular. Information and marketing should be targeted toward new paddlers or tourists making plans at the last minute. Most paddle trips on the Grand are shorter, putting in and taking out

within the same day; many trips go off of the Grand, into the bayous and tributary creeks. Downriver was suggested as “more fun” than upriver, although head winds and large boat traffic increase in that part of the water trail. These types of opportunities should be highlighted, including with personal anecdotes; basic information about access points, skill level, suggested float/paddle times, age limits, options for transportation between launch sites (for people and for boats), and big boat traffic need to be made more available.

Attendees also recommended re-creating the image surrounding the Grand River, particularly as it relates to water quality. There is still a perception that the Grand River is “dirty” – particularly downstream of Grand Rapids in Ottawa County. Participants suggested a promotion campaign that highlights the improvements to water quality. They also suggested hosting community events to entice more people to come to the river, such as boat races, sunken riverboat tours, education initiatives, and historical tours. Participants recommended facilitated and open conversations with local businesses, campgrounds, facility providers, and outfitters about how the water trail benefits their community and business interests. They also suggested more communication with communities and business upstream.

Once paddlers are in their boats, they have additional informational needs which are not being provided. There needs to be more signage that can be viewed from the water to assist with wayfinding. Paddlers need better signage at launch sites and interval stopping points with access to bathroom facilities, food, and water. Not all launch sites visible from the water are publicly available, such as those at privately owned campgrounds who reserve their facilities only for current campers. Paddlers also need signage at trail crossing points so that tributaries, roads and bridges, and other mile markers can be identified. This increases access to emergency services when needed, and it would help ease anxiety and help establish a sense of place along the water trail. There was concern about who would maintain such signage, particularly through periods of high water and ice floes; temporary buoys were discarded as an option over concerns that they would be stolen or tampered with.

During the discussions, meeting participants also raised potential conflicts between water trail users and private property owners. There was concern that more water trail traffic and increased tourism would increase noise and debris from boaters and tubers, alcohol consumption on the river, and boaters infringing on private property rights.

### Survey Results

During the first public meeting in December 2015, participants suggested that reaching out to a broader audience about their paddling experiences, and paddling on the Grand River Heritage Water Trail specifically, would be instructive. As a result of this feedback, the project team created and distributed a user survey. Survey responses are summarized in Tables 3, 4.

Table 3. Survey Responses Regarding Experience and Interest Level on the Grand River Water Trail

Survey Question	Response Option	Response Rate	
		#	%
What kind of paddler are you?	Kayaker	53	71.5
	Canoer	10	13.5
	Kayak and Canoe	5	6.8
	Kayak and Inner Tube	3	4.1

	Kayak, Canoe, and Stand-Up Paddler	1	1.4
	Kayak, Inner Tube, and Stand-Up Paddler	2	2.7
	<b>Total Stated</b>	<b>74</b>	<b>100.0</b>
Paddling Experience Rating	Beginner	7	9.6
	Intermediate	51	70.0
	Expert	15	20.4
	<b>Total Stated</b>	<b>73</b>	<b>100.0</b>
Preferred Paddling Location	Rivers	58	49.9
	Inland Lakes	36	30.5
	Great Lakes and Connecting Channels	17	14.5
	White Water Rivers	6	5.1
	<b>Total Stated</b>	<b>117</b>	<b>100.0</b>
Do you paddle most often with....	Yourself	23	31.5
	Friends and Family	48	65.8
	Organized Tours and Groups	2	2.7
	<b>Total Stated</b>	<b>73</b>	<b>100.0</b>

Table 3 indicates that 72% of the survey respondents were exclusively kayakers, compared with 14% who were exclusively canoers. Overwhelmingly, these paddlers rated themselves as intermediate in skill. Rivers and inland lakes are the preferred padding location for 80% of the respondents, with river being the dominant location. As was expected, most of the respondents paddled with friends and family (66%), and very few paddled in organized groups (3%). The majority of respondents (93%) indicated a definite interest in paddling the Lower Grand River; a mere 7% of the respondents indicate no interest. Table 4 provides a summary ranking of facilities for a variety of locations and paddling venues.

Respondents indicated that 44 (60%) of them asked friends about planning future paddling trips, while 15 (21%) used the Internet. Guide books and travel magazines were used by fewer respondents. Of the 69 persons who responded to the question about paddling clubs membership, 49 (71%) indicated that they did NOT belong to a club, while 20 (29%) reported that they were members of a paddling club.

Table 4. Quality Considerations of Existing Facilities Available to Paddlers

	Excellent	Above Average	Average	Below Average	Poor	TOTAL STATED
Bathrooms:						
Availability		7	14	11	4	36
Quality		5	19	7	3	44
Transportation to the launch site/s		6	16	7	3	32
Signage						
Directional	1	2	18	9	2	32
Informational		7	17	6	1	21
Land-based	1	6	14	4	2	27
Accessibility (ADA)	2	6	16	5	2	31
Sense of safety	2	9	14	6	1	32
Landing facilities	1	8	16	7	1	33
Emergency services		3	17	5	3	28

### Paddling Experiences

The project team received additional support for this project from the Meijer and Frey Foundations to experience the Grand River Heritage Water Trail as a user. The intention was to paddle all six reaches of the trail during the Spring and Summer of 2016. Four different trips were scheduled, resulting in four reaches being completed. In addition to the four project team trips, two recent graduates of Calvin College paddled the entire length of the trail. They shared their experiences, which were published on the WMEAC blog on August 17, 2016 (see Appendix D, 1).

**Reach 1:** On the evening of July 9, 2016, team member Ethan Lussky and volunteer Olivia Gilbert paddled from Johnson Park to Grand River Park, which includes Reach 1 of the Grand River Heritage Water Trail. They found it difficult to coordinate transportation due to the lack of public transit, the bulky size and shape of the kayak, and the distance between access points. If there had been a cheap service to move them between launch locations, they would not have required two cars. In addition, there were no enclosed docking or storage spots to simply leave the kayaks while picking up the other vehicle at the starting point after the trip down the river was over. As current college students, they thought they would have frequented the Grand River much more if there were a reliable city-operated or private transportation service.

During the paddle itself, Ethan and Olivia traversed nearly eight miles of the Grand River. It was a safe and easy paddle. In addition to seeing a number of people on and around this stretch, the river was extremely wide, slow, and deep, which made paddling quite enjoyable. They never lost phone or geographical positioning services (GPS); although they wished there would have been more signage or

maps to help track their journey. One of things they enjoyed the most about kayaking on this reach of the Grand was the shallow sloping shoreline which, had it been necessary, would have made for an easy water exit. They saw access points along Reach 1 with shaded benches, tables, and outdoor grilling equipment; bathrooms, food and water, and paved boat launches seemed to be few and far between.

A more detailed account of their trip was published on the WMEAC Blog on August 26, 2016 (Appendix D, 2).

**Reach 2:** On May 23, 2016, team members Elaine Isely, Michael Scantlebury, Mark Gleason, Marci Cisneros, Aaron Bodbyl-Mast, and Nicole Patterson paddled from Grand River Park to Eastmanville Bayou. This was a guided tour, led by two representatives from Board Meetings – a local paddleboard and kayak outfitter that specializes in corporate retreats; the group rate was \$65 per person, which included kayak rentals, PFDs, and bus transportation back to Grand River Park. Team members' skills ranged from beginner to intermediate.

Grand River Park has two parking lots. One lot is at a trailhead, where there is a fishing pond and bathrooms. You have to go further down to the second lot on the river where the launch is. If you were to paddle up to this site, there is nowhere to secure your boat to get to the bathrooms, and no signage noting the location of the bathrooms. The launch itself was a universally accessible launch, which made getting into the river very easy for all of the members of the group.

The Grand River in this reach is very wide and slow moving; it is definitely more of a "paddle" than a "float". A paddler needs to be prepared to work, and a longer trip can get very tiring. This paddle trip was approximately 8.5 miles, and it took us nearly four hours. The afternoon was hot, and the group definitely needed to break up the trip. The paddle guides had scheduled a stop at Deer Creek Park, but that was less than a mile from the planned endpoint.

The water trail was very scenic. The team saw an eagle's eyrie, several blue herons and other birds, and several snakes sunning themselves on docks they passed. However, the distance seemed much longer because the river was so slow-moving. Nicole noted that the trip seemed longer than it actually was because for most of the trip she had trouble figuring out where she was. Other than GVSU's crew dock and M-45, there weren't many landmarks or other navigational clues to let the team know how far they had gone. There was no signage visible from the river to provide any guidance regarding upcoming launches or access point. Even the Deer Creek launch was particularly hard to find because it wasn't really visible until they had paddled past it. If you didn't know exactly where it was, it would be very easy to miss. The team might have missed it if not for their guides.

When they reached the Eastmanville launch, they had a little trouble getting out of the water. Normally, there would have been a universally accessible launch at this site, but the water levels were low and Ottawa County Parks hadn't yet installed the launch for the season. The low water levels meant that the team had to exit our kayaks in pretty mucky conditions. Even with the help from our guides, Michael ended up waist deep in the river and mud. This was his first paddle, and now he has a good story and pictures to share.

**Reach 3:** Team members Elaine Isely, Marci Cisneros, Aaron Bodbyl-Mast, Nicole Patterson, and Ethan Lussky set out to paddle Reaches 3 and 4 of the Grand River Heritage Water Trail on July 21, 2016. They rented kayaks from GR Paddling for \$35 per person, which included kayak rentals, PFDs, snacks, and transportation back to their vehicles. This was not a guided paddle. GR Paddling welcomed them with a sign with all of their names; this was a nice touch.

The team launched at Eastmanville Bayou from the universally accessible launch. It was a beautiful day, not too sunny or too hot. Reach 3 goes along the Bass River State Recreation Area to the south, with only a little development along the north shore. The banks of the river along this stretch seemed mostly wild; they saw a juvenile eagle, butterflies, and turtles.

During the paddle, the team tracked the afternoon weather forecasts and radar. It looked like a storm was coming across Lake Michigan that would reach them later in the afternoon. They did have to “paddle” against a pretty good headwind; it seemed at times that if they weren’t paddling, they weren’t moving at all. Then, the weather turned, and rather quickly. The sky turned more grey, and they heard thunder in the not-so-far-distance. They checked the radar, and started looking for a place where they could pull out. The banks were lined with trees and thick shrubs, with no real egress. There was a bolt of lightning in the distance, and Elaine argued for pulling off as soon as possible. Aaron’s concern was that anyplace to pull out would still expose the team to open fields beyond the thicket at the water line. They paddled on, hoping to get to Riverside Park, where GR Paddling was waiting. There was more thunder, and then more lightning – this time, much closer. Elaine spied some private homes with boat docks and private water access, and paddled quickly to shore. As the team exited their kayaks, the rain came down in a deluge. Elaine checked a couple of the local houses to see if anyone was home and could offer shelter, but no one answered their doors. The team waited it out on someone’s riverfront deck until GR Paddling could drive over to collect the paddlers and their kayaks.

**Reach 4:** The project team never made it to paddle this reach after they were forced out of the water in Reach 3 at the start of the storm. However, although not particularly spelled out in their account, this was part of the experience of volunteers and recent Calvin College graduates, Gabe LePage and Peter Sunshine Cahill (Appendix D, 1).

**Reach 5:** Team members Elaine Isely, Marci Cisneros, Aaron Bodbyl-Mast, and Nate Slauer paddled Reach 5 of the Grand River Heritage Water Trail on August 9, 2016. They rented kayaks from Lakeshore Kayak Rental, LLC for \$35 per person, which included PFDs, waterproof maps, and transportation from our end point back to Lakeshore Kayak Rental. The team put in to the Grand River at their facility at the mouth of Stearns Bayou, and paddled to Harbor Island. This was approximately at 8.5 mile paddle trip.

They had another gorgeous day for paddling. It was bright out, but not too hot. The team paddled out onto the river, past a number of private homes high up on the south bank of the river. They had long stairs down to docks on the river, and most had good-sized boats moored there. The north bank was less developed. As with the previous trips, it was a paddle; floating down this section of the Grand was really slow-going.

Reach 5 includes the “Lost Channel”, which took the team on a beautiful paddle through a fairly wild-looking section of the Grand. They saw blooms of purple and white, including a field of lotus blossoms. They saw muskrats and heard bullfrogs. The water was calm, and it was easy to get lost in the serenity of this part of the river. For a little while, they imagined being alone in the wilderness.

Once they left the Lost Channel, the team started to see more signs of civilization. There were more houses, and the marina up ahead in Spring Lake. They paddled west, under the M-31, and over to Harbor Island. As they passed GVSU’s D.J. Angus research vessel, which was being painted by Captain Tony Fiore, they waived and stopped for a quick chat, before paddling around the bend to the endpoint.

Nate Slauer authored a blog post about his journey, which was posted in the WMEAC Blog on September 8, 2016 (Appendix D, 3).

**Reach 6:** Reach 6 of the Grand River Heritage Water Trail is less than two miles, from Harbor Island to Kitchell Lindquist Dunes on Lake Michigan. This reach is subject to large swells coming in off of the Big Lake, more and larger boat traffic, and stronger headwinds. Even with guides, the team felt that they were not experienced enough to safely paddle this reach.

## SAFETY CONCERNS

Feedback from several safety officers with jurisdiction on the Grand River in Ottawa County was invaluable. First, it gave the project team the opportunity to introduce the concept of water trails. Second, it provided the team with a better overview of local safety resources, concerns, and opportunities.

Most of the safety officers who participated in the project were unfamiliar with the term “water trail”. From their perspective, designating and marketing a waterbody as such will increase users, thereby increasing the potential of needed rescues or recoveries. Personal watercraft (PWC) users are often unaware of the “rules of the road”, or in this case of the waterway. When PWC users fail to yield right-of-way to larger boats they place themselves in a potentially dangerous situation. PWC users also need to be made aware of the potential dangers on the river, particularly on this river: there are deadheads and floating debris, the winds are often strong and changing due to the proximity to Lake Michigan, underwater currents can be very strong, there is extremely low underwater visibility and the muck on the bottom is very treacherous, and long stretches on the river can lead to dehydration if supplies are short. Paddlers can find themselves in a very dangerous situation very quickly, especially if they do not have or are not wearing, their PFDs or have no floatable seat cushions.

Access is an important component to river safety. Not all townships have boats or public launch sites. The Ottawa County Marine Division patrols the entire Grand River from Grand Haven to the county line; it has a 25-foot pursuit boat moored in the water and an 18-foot Zodiac boat that is kept on a trailer at headquarters in Grand Haven. Most of the townships have smaller boats they can use for emergencies and rescue purposes, and “mutual aid” is afforded from other, better-equipped communities. Spring Lake Village/Township, Crockery Township, and Georgetown Township are the only communities with dive teams. Tallmadge Township has no boats, trained marine staff, or a boat launch; they rely on rescue services from Georgetown Township or the City of Grand Rapids. Emergency responders are not limited to use of public launches; they may access the river using private access points, and have on occasion utilized the GVSU dock and boat.

Paved small boat entry points on the Grand River are essential to executing a timely victim response. Although twenty launch points in the county may seem sufficient, half of these are located within the last 11 miles of the river before reaching Lake Michigan, leaving several stretches between access points as long as six miles. In the face of ever-changing river conditions, combined with an expected rise in river tourism, providing adequate mapping and entry point accessibility requires renovations to water trail maps and paved ramp locations. Mile markers do not exist upstream of the gravel pits. In the event of an emergency on the water, a PWC user needs to know where they are, and if they can stop in place; and emergency responders need to know where to find them. Responders can triangulate cell phones using GPS, and can launch from private sites. However, ultimately, emergency responders rely on Ottawa County to know the river and to get them to the location as quickly as possible: what is the most

appropriate boat to access the site, what is the river depth, where is the closest break in the tree-line, what are the usual water flows, and is there any known debris in the river.

As part of a recent parks millage, Ottawa County Central Dispatch has invested in Smart 911 technology, which is a service that provides emergency responders with more information about callers registered in the system. Most emergency calls are made from cell phones; Smart 911 shows all of the active emergency calls throughout the county, and it includes an outgoing chat feature which can actively request additional information from the caller, even on missed or hang-up calls. The information on the site is secure; personal information is only available to county employees and emergency responders. This service has significant potential implications for water trail-related emergencies. Smart 911 is tied into the county's GIS. Ottawa County Parks, including points along the water trail can be mapped into segments and add landmarks; river markers could also be put into place. An emergency call would then first hit a cellular tower, then Smart 911 would re-vid the area to hone in on the caller's location; this information would be sent from dispatch to the first responders screen. As of August 2016, Ottawa County is the only municipality in the country to have the service live; regionally, Muskegon, Barry, and counties to the east have invested in the service, and Kent and Allegan are moving toward its adoption.

Additional concerns were raised about the costs associated with having a river rescue operation within each municipality along the water trail. Most townships do not invest in a rescue program because the costs are not justified by the limited need; for the most part, they partner well with the sheriff's department. Most safety/rescue grant programs available to the municipalities exclude dive resources. With diver and rescue resources located primarily at the extreme ends of the Grand River in Ottawa County, this makes many life-threatening river emergencies in the middle of the water trail a recovery (as opposed to a rescue) operation. If the state and the county are going to promote water trails, there needs to be more resources available for rescue operations: more boats and more man-power; boat storage and maintenance; training, certifications, and licensure; clothing, gear, and equipment.

## BEST PRACTICES

The project team reviewed a number of resources to develop information about best practices related to water trails management. The National Park Service's Recreation, Trails, and Conservation Assistance program offered a great deal of information. This was supplemented by additional research and resources from regional and local water and recreation trails around the country.

### National Water Trails

There are currently 21 designated National Water Trails. To qualify for this designation, a water trail must be open to the public use for at least 10 years after designation and be designed, constructed, and maintained according to best management practices identified by the National Park Service; it must be in compliance with applicable land use and environmental laws; and national designation must be supported by the landowners on which access points exist. The project team selected 10 of these nationally designated water trails and reviewed their best management practices (Appendix E, 1-10).

**Recreation Opportunities:** A National Water Trail must have established public access points that accommodate a diversity of trip lengths and provide access to a variety of opportunities for recreation and education. The water trails reviewed by the project team vary in length from 8 – 170 miles, with minimum distances between access sites being 1 – 12 miles. Trail experiences range from flatwater novice trails and family-friendly paddling to whitewater rapids or lengthy, overnight trips. Amenities

include picnic sites and bathrooms; playgrounds and fishing access; campgrounds; access to land trails; visitor centers or information kiosks; or some combination of the above. One water trail has securable kayak and gear storage and universally accessible boat ramps; another offers guided trips, rentals and shuttle services. A number of natural or cultural opportunities are listed for the different water trails, and these include: saltwater, bayous, islands, and marshes; birdwatching; urban paddling and commercial access; historic sites; and events, festivals, and attractions. Most of these water trails are managed through partnerships between local, state, or federal agencies and nonprofit organizations or local businesses.

**Education:** National Water Trails must provide users with opportunities to learn about the value of the water resources, cultural heritage, boating skills, and outdoor ethics. Educational opportunities can range from school programs on water safety, paddling skills, and river restoration and stewardship; historical information and guided tours; paddling classes for novices and newcomers; water trail websites; printed or downloadable trail guides with site-based information on amenities, attractions, natural resources, and history; events and festivals; Leave No Trace training and advocacy; and organized educational paddle trips or events. Two of the water trails reviewed included volunteer water quality monitoring programs. Community partnerships with nonprofit organizations; local museums and other educational attractions; outfitters and local commercial partners; and local, state, or federal agencies were identified as important.

**Conservation:** A National Water Trail provides opportunities for communities to develop and implement strategies that enhance and restore the health of local waterways and surrounding lands. Partnerships are again important to accomplishing conservation goals including, but not limited to: long term watershed planning that includes encouraging waterfront access, outdoor ethics, and respect for private property; establishing water quality and minimum flow standards; improving land development practices and stormwater management guidelines; implementing stormwater management projects; creating and preserving wildlife habitat and greenbelt protection; and identifying dams for potential removal projects. Some national water trails have implemented volunteer programs such as river cleanups and volunteer water trail maintenance, or helped establish a “Friends of the water trail” group; and some have even bought up land or conservation easements on lands along the water trail. Community education is also important, including “leave no trace” and “tread lightly” principles, maintenance of septic tanks, native plant restoration, prevention of nonpoint source pollution, and agricultural best practices.

**Community Support:** Best practices for National Water Trails include local community support and advocacy for maintenance and stewardship of the water trail. This can include education efforts around launch development, maintenance, and access; paddling safety; and environmental stewardship. Cooperative water trail management includes identification of the level of local community interest and support and the development of voluntary participation programs. Programs components can vary from contracted concessions for watercraft rentals, fishing services, or education programming; inclusion of water trails in Master Planning and Master Recreational Planning; development of a water trails board or advisory committee – with membership that includes dues-paying watershed council representatives – that meets regularly to identify water trail needs, seek funding for projects, and track status of water trail building; and management of an application process for potential access site owners than requires a launch site management and maintenance plan.

**Public Information:** National Water Trail managers must provide the local, regional, state, and national public audiences with accessible and understandable water trail information, including details for identifying access and trail routes; cultural, historic, and natural features; hazards; and water quality. This information can be provided online via a website, links to partner websites, and mobile applications;

waterproof water trail guides, brochures, and newsletters left with partners, outfitters, and local businesses; launch site and trail signage and kiosks; and informational media/social media campaigns. Types of information should include trip planning, directions, and access; fees and logistics; site descriptions, concessions, rentals, and paddler facilities; weather, safety, and hazard information; recreational opportunities; cultural, historic, and natural resource information; information about nonpoint source pollution and restoration of native habitats along the water trail; and a listing of other nearby access points and points of interest. All information should be made available in other languages, depending on the community demographics and targeted audiences.

**Trail Maintenance:** A National Water Trail must be designed, constructed, and maintained utilizing sustainability principles; the manager of the trail will have a demonstrated ability to support routine and long-term maintenance investments on the water trail. Water trail maintenance can be shared through formal or informal agreements with partners or volunteer groups; funding can often be a problem, and cooperative funding can minimize the burden on the management agency. Strategies employed for ongoing trail maintenance include clean up events, Adopt-A-Section programming, and “Leave No Trace” education; implementing pervious surface parking areas and utilizing abandoned lands for new access sites; ecological restoration and management, watershed management, and woody debris management plans; and GIS mapping, photo inventories, and gap inventories for planned and completed water trail projects.

**Planning:** Best practices for National Water Trails include maintaining a water trail plan that describes a vision, desired future conditions, and strategies to strengthen best management practices. Water trail planning can be included in its own plan or within a larger planning or regional effort. Workshops, public meetings, and regular planning meetings are beneficial for continued dialogue among partners and stakeholders. Planning components should include water trail marketing and promotion; signage for locational, directional, and time/distance information, warning and skill level requirements, parking and shuttle facilities, and attractions and amenities; and facilities that include overnight arrangements every 10-15 miles; and voluntary, bottom-up engagement from local communities and water trail volunteers.

### Safety

When weighing the social and economic opportunities associated with promoting a water trail project, community leaders also need to be aware of the responsibilities and costs correlated with heightened ecotourism. It is expected that yearly increases in use of the Grand River will raise the potential for resulting injuries, drownings, and rescues. Local municipalities adjacent to the water trail will need to shoulder the tasks of river hazard mitigation and adequate rescue preparedness.

River hazards can be broken into two categories: personal and environmental. Personal hazards such as alcohol consumption, diving into unknown water depths, and boating alone or without a PFD are highly avoidable through basic water safety education, though accidents and injuries may still occur on the water. While environmental hazards like steep grades and obstructions (tree falls, subsurface rocks, dams/bridges, etc.) can be sufficiently mapped or managed by township and county park commissions, rivers constantly alter their floodplain. In addition to somewhat unpredictable river terrain, severe hail and thunderstorms, flash floods, high winds, and lightning can leave a kayaker in a position of extreme vulnerability. Due to the rapid onset of hypothermia and drowning, it is vital that rescue crews are well prepared for an expedient river entry and location of victims.

In 2013, the Muskegon Township Fire Department invested in a flat bottom, jet propelled river boat for rescues on the Muskegon River. Within just a few months, two kayakers fell into the freezing Muskegon River. Just 21 minutes after a phone call to the fire department, a small crew was deployed and saved the

kayakers from imminent death. Muskegon Township Fire Chief Dave Glotzbach noted that if there were not trained professionals, an adequate rescue boat, or nearby launch point, saving the kayakers would have been “incredibly challenging—if not impossible.” “Last year when we had two incidents on that river, we had no good way to do anything about it. We were standing on the shore with very limited options. It was a pretty helpless feeling”. River-adjacent townships making the investment in standard rescue equipment and trainings can literally make the difference between life and death. (Muskegon River Rescue: Holton Woman Flips Kayak in Frigid Water, Rescued by Firefighters; by Heather Lynn Peters, April 1, 2014. MLive).

Properly training, certifying, and equipping small teams of local river responders to facilitate rescues calls for the allocation of township fire department funds. While water rescues are often the combined efforts between two or more municipalities, communities along the water trail should have a protocol for managing river safety within their jurisdiction. In order to efficiently locate and reach victims on the water, it is crucial that fire department rescue teams not only have a neighboring point of river entry, but also a sufficiently powerful boat. A 16 foot, aluminum utility boat, or Jon boat, is commonly used for non-whitewater rescues. A 40-60 (30 minimum) horsepower outboard jet motor is recommended to drive the boat up and downstream during possible swift or flood conditions. Year-round storage, fuel, spare parts, and general upkeep should be expected annual costs.

Maneuvering a watercraft and tending to victims under stressful conditions requires expert responsiveness, knowledge of equipment, and emergency medical treatment skills. The National Fire Protection Association’s (NFPA) Standard Technical Search and Professional Rescue (1670 & 1006) manuals establish fundamental “levels of functional capability for efficiently and effectively conducting operations at technical search and rescue incidents while minimizing threats to rescuers.” The NFPA requires fire department personnel be certified with a minimum of “awareness” level for surface and swift water rescues (chapters 11 & 12). While the NFPA does not offer these specific training courses, the privately operated Michigan Rescue Concepts offers a three day (30 hour), “Advanced River, Swiftwater, and Flood Rescue” course that is NFPA 1670 & 1006 compliant. In addition to the rescue boat, trainings, and certifications, a supply of river-specific technical rescue clothing and equipment must be readily available for rescue crews. In total, initial costs for these all of these items and trainings will range from \$8,000 to \$13,000 (with roughly \$1000 annual costs expected) (Table 6).

Table 6. Sample Budget Items for a Trained and Equipped Rescue Team

Item	Estimated Expense	Frequency
Aluminum Flat-Bottom River Boat (16 foot Jon Boat)	\$1,800 - \$2,200	Single Purchase
40-60 HP Outboard Motor (2016 new)	\$4,000 - \$8,200	Single Purchase
Boat Storage and Maintenance	\$1,000	Annually
Michigan Boating Safety License	\$30 per person	Single Purchase
National Fire Protection Association Reference Book	\$60	Single Purchase
National Fire Protection Association Certification Course	\$200 - \$600 per person	Single Purchase
Surface and Swiftwater Rescue Clothing and Equipment	\$1,000 - \$2,000	Periodic Replacement
<b>Total Start-Up Costs: \$8,000 - \$13,000</b>		

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## Marketing

Marketing tools for water trails are not well developed at the national level. The project team looked at best practices for three established water trail networks with good marketing and implementation plans – Georgia River Network Water Trails, Ohio Water Trails, and the Pend Oreille River Water Trail Concept Plan – as well as other marketing best practices, generally. The core of the marketing for a water trail is one of accessibility and market saturation. Efforts should make water trails seem accessible to all users, not only those who are paddling enthusiasts. Basic marketing principles include creating a brand and messaging strategy for your water trail; inventorying assets and areas of interest; developing signage and information about the water trail; developing and maintaining relationships with local partners; and keeping the community involved through events, festivals, and educational programming.

**Market Saturation:** Market saturation will come from having many varying channels promoting a water trail. A water trail should create a feeling of accessibility for users of all experience levels, and ensure that those looking for outdoor activities on the water consider water trails first – as the foremost way to enjoy Michigan via water.

Through multi-channel marketing efforts, the water trail comes alive for users, both in person and in a collateral, and sway top-of-mind presence with strategic use of social influencers, media saturation, point-of-contact collateral and web presence. Continual marketing efforts should include collateral, web and social assets, and a significant Brand Champions program that turns users and vendors into primary channels for word of mouth spread of the water trail itself and of the water trails concept.

To achieve market saturation, there are a number of marketing strategies that a water trail manager should consider:

- **Collaborative Promotion:** Collaborate with organizations and paddle clubs at local, regional, state, and nation levels to disseminate information, and to attract paddlers to the region. In addition, market the water trail through the media and feature articles in recreational and tourism publications.
- **Earned Media:** Make sure the water trail is being promoted or any expansions are being covered by local media. All expansions or changes should be met with not only a press release, but also a media event or ribbon cutting. The more this water trail is seen as an asset of the community, the more the community will rally behind it.
- **Event Media:** Ensure all events, even if they are run privately, are promoted to news media. Show off the water trail as an asset to the community to be used for their large event by outfitters and other groups.
- **Convention and Visitor Bureaus:** Leverage other West Michigan marketing blogs like those of the visitors bureaus to get weekend visitors to the trail. The marketing from these groups should focus on the ease of the water trail and the attractions nearby.
- **Social Media:** Social media should focus on the communal nature of the water trail by showing families, paddling groups, and outfitters hosting events. The photography should focus on highlighting the beauty of the water trail and the various points along the water trail. Make sure the access points have names, and if they are currently unnamed utilize your community to name them.

**Branding:** Develop a recognizable brand for your water trail. It can include, at a minimum, a logo and an interactive, user-friendly website. Some water trails have also utilized a mascot and virtual water trail tour. To achieve market saturation of your brand, a water trail should have a Brand Champions Program. Brand champions are organizations, individuals, and companies that are invested in the success of the water trail and want to promote it. These individuals could be outfitters or other influencers within the

community. They might want to promote it because they believe in conservation or are avid paddlers, or because they want to attract more people to their shop; any reason is a good reason. The water trail can support these champions by giving them materials to promote the water trail with like social media content, content they can use at their stores/businesses (maps, website content, etc.), or physical goods (t-shirts, beer koozies, bandanas, etc.). The champions will support your market saturation efforts.

**Assets and Areas of Interest:** It will be necessary to survey and document the entire length of the proposed water trail. The inventory should include items such as existing access points, safety hazards, available amenities, and local points of interest. A key issue with the assets available for trail users is the lack of reassuring and smart guidance for new users on the water trail. An accurate survey is important to the development of a good trail map and guide.

One of the most important jobs of a successful water trail is to provide information about the waterway. The most useful form of information is a trail map and guide. There are many examples of successful trail maps and guides. Generally, a map and guide should include a short description of the water trail; an inset of the state map with the location of the water trail watershed; all public access points, distance between access points, and existing facilities at each access point; hazards and obstacles; water trail segment challenge and experience levels; safety information and boating regulations; information on natural, cultural, and historic points of interest that water trail users will see along the way; a map legend that includes the watershed, tributaries, existing and future water trails, communities, and major roads; the water trail logo and website; and any sponsors and supporters.

A printed water trail guide on waterproof paper can be made available at launch kiosks and partner organizations, or it can be sold for a small fee to create ongoing revenue. In addition, an online interactive map will reach more potential water trail users. This map will be useful for those who are new to the water trail, particularly those with less experience overall using traditional trail maps and park resources. By creating an interactive experience, the water trail becomes a part of other park resources.

**Signage:** Signs are an integral component in conveying information and transforming the paddling route into a seamless water trail. Road-based signs that identify access sites for vehicles, and river-based signs that identify access sites for those on the river are needed. Mile markers are helpful not only for navigation and wayfinding, but also for safety responders during an emergency. Dam and portage signs should be placed upstream to warn paddlers of upcoming hazards or challenges, and marking where camping is and is not allowed along the water trail for those trails that have the potential for an overnight experience is also important. Interpretive signs regarding flora and fauna, as well as historical, cultural, and natural history can also enhance the water trail experience.

Access site signage or launch kiosks should also include paddling safety information and river etiquette; local emergency numbers; maps of the water trail, including "You Are Here" locational finders; a description of the water trail segment to the next downstream access point, including distance, obstacles, experience or challenge level, and alternate routes that might be available; and driving directions to and existing amenities at closest upstream and downstream access points.

Including the water trail logo on all the signs and kiosks will help identify and link the sites along the river. For river-based sites, Carsonite posts will be placed with the water trail logo on it, type of site, river mile, and land manager names.

**Partnerships:** Due to the various entities that may own the existing access sites, and others who share your interest in developing a water trail, it will be advantageous to form partnerships. The degree of

formality for the partnership is up to the members and the specifics of the proposal. However, the establishment of the water trail coordinator is essential to the success of the water trail. A coordinator could be under the umbrella of the local water trail manager, another key partner along the trail, or potentially a shared partnership position. An individual coordinator needs to be selected who will serve as the point of contact for the community and water trails partners, engage the water trail committee and private businesses along the water trail, and seek funds and in-kind support for recommendations outlined in water trails planning documents.

**Community Involvement and Engagement:** It is important to talk to the people in the communities along the water trail to determine if there is interest and support in developing a water trail. Once you have some interest from local stakeholders, it is time to bring everyone together to talk more specifically about developing a water trail. Begin with a few meetings with key stakeholders to build some initial support; and then host public meetings to gather additional input directly from the community, potential trail users, and local and regional entities that manage public access.

However, even after a water trail has been established, the community will still need to be encouraged to engage. Events should be a major focus of any water trail. They are an opportunity to involve new and experienced water trail users, but also a great opportunity to convert non-users into water trail users. There are various aspects to event planning which should be considered by the water trail manager:

- **Hosting Events:** Hosting an event can provide a potential funding stream for a water trail, or a means of setting up the water trail up as an event venue. Although events can be very staff or volunteer time-intensive, they can be a real boon to the identity of a water trail and help show the vibrancy of the paddling community. A large scale event offers some level of assurance that the event will be well attended and will have adequate sponsorship to help fund the event. Ticket sales to these events can generate funds for trail improvements.
- **Private Events:** Smaller, private events can draw new users and showcase the trail as a community good. By recruiting new events to the water trail, there is both an opportunity to create partnerships for future improvements, as well as possible revenue stream by offering paid amenities (like long term parking, shelter rental, etc) that can help with the sustainability of the water trail. These events should require little to no planning on behalf of the water trail manager, other than general maintenance and booking of paid amenities and event marketing.
- **Event Funding:** Public events, like those hosted by the water trail, are often free of charge for those attending the event. However, there are opportunities to make these events benefit the bottom line of the water trail through sign-up fees, sponsorships, and games or raffles.
- **Event Marketing:** Public events like these often have a host committee or association of organizations that put the event on and help in planning. The host committee or association should focus on ensuring that each member is able to turn out their respective audience. By shrinking the effort to individual organizations like this, there is a more targeted approach to the marketing efforts. However, beyond the host committee audience there needs to also include broad based outreach which includes public relations, advertising on billboards and newspapers and online marketing. For events that are hosted by private organizations, marketing should focus on helping that private organization not only increase attendance, but highlight the fact that the organization chose to host their event at this water trail. This will help ensure others see the water trail as an event destination.

## RECOMMENDATIONS

The goals of this project were to do a comprehensive assessment of the existing assets, experiences, and existing and potential partnerships for the Grand River Heritage Water Trail in Ottawa County; to identify

best practices in water trail management from within Michigan and around the country; and to make recommendations for potential improvements. Although the primary audience for this work were the water trail manager, Ottawa County Parks and Recreation Commission; the project process, results, and recommendations will be helpful to anyone involved in the planning or management of a water trail.

#### Recommendation 1: Improve Water Trail Facilities

Water trail users generally own their own paddle crafts, and prefer to paddle alone or in small groups of family and friends. Because of these preferences, they have identified boat storage or another way to secure their boat at different launch site locations as a need. This would allow them to leave their craft for a short period of time to secure transportation back to their vehicle, search for food and beverages, or otherwise take a break from their paddle journey. Paddlers also identified the need for more transportation options between launch sites that can accommodate a paddle craft. This could simply be access to existing transportation services or the establishment of new transportation options, such as Uber drivers that can accommodate a paddle craft.

Many of the launch sites along the Grand River Heritage Trail do not have easy access to eateries or other food options. Considering opportunities that allow what is currently a small number of paddlers to have access to vending machines, food delivery services, or possibly periodic visits from food trucks would make for a more enriching experience.

Although there are three campsites along this stretch of the Grand River, they are privately owned and available only to registered campers. Ottawa County Parks should include information about these campsites on their website and marketing materials for potential overnight paddlers.

#### Recommendation 2: Encourage Regional Water Trails Planning

Intergovernmental planning and management will provide local policymakers and users of the water trail with the tools necessary to coordinate and implement natural resource conservation policy goals for the Grand River. While all townships adjacent to the Grand River in Ottawa County currently use some form of natural features mapping, it is imperative that advanced zoning of river “buffer” wetlands is incorporated to minimize the impact of new developments, especially in growing rural townships such as Polkton, Tallmadge, Robinson, and Grand Haven. More stringent LID plans and PUD ordinance implementation will act to limit erosion, sedimentation, and habitat loss, in addition to boosting the local ecotourism revenue stream. Ottawa County Parks should work with other communities located along the water trail to include water trails planning and development within their local master planning, parks and recreation planning, and ordinance updates. This will enhance partnerships and help coordinate regional goals and objectives for the water trail.

#### Recommendation 3: Improve Signage

Most of the launch sites along the water trail include some type of signage. However, at all sites, the signs are only visible from the landward side. Signage needs to be installed that is visible from the waterway so that paddlers can identify the launch site and their location along the water trail. In addition, mile markers would be helpful for wayfinding along the trail. It will provide paddlers with periodic location confirmations, and provide first responders with more details about a disabled paddler’s location in the event of an emergency. However, in order to be most useful to first responders, any new water trail marking/location information should be provided to the Ottawa County Marine Patrol and Central Dispatch; if mile markers are in place, first responders should be educated as to where they are.

Landward facing water trail signage needs to provide complete information about the water trail, including “You are here” locational finders; description of the water trail segment to the next downstream access point, including distance, obstacles, experience or challenge level information, and alternate routes that might be available; driving directions to and existing amenities at the closest upstream and downstream access points; and water trail logo and sponsorship information.

#### Recommendation 4: Coordinate Safety Resources

Based on feedback from local and regional first responders, the Ottawa County Marine Patrol, and the County’s Central Dispatch there were concerns about efforts to bring more users to the Grand River (i.e. the water trail) without the additional investments necessary for the increased need for dive, rescue, and recovery resources.

During the establishment and maintenance of a water trail, it is essential that the water trail manager communicate with first responders with jurisdiction along the trail. First responders need to be made aware of any water trails markings, routings, or infrastructure conditions and updates that might affect their access and wayfinding along the water trail. This includes updating mapping to reflect such changes or additions, and then communicating those changes to, at a minimum, the Ottawa County Marine Patrol and Central Dispatch. The responders from local communities rely on the County to know the most up-to-date information.

Additionally, Ottawa County Parks should work with the County Marine Patrol, Central Dispatch, and the local first responders from the townships, villages, and cities along the Grand River to develop a water trails safety protocol for a response plan that provides the swiftest possible response during a water-based emergency. This proactive measure will help limit the number of water recoveries and increase the number of water rescues. There is already a level of cooperation between the County and the local communities, but clarifying the most proximate rescue partners for the different reaches of the water trail will aid in these efforts.

#### Recommendation 5: Improve Webpage

Many of the participants in the project felt that the Ottawa County Parks Water Trails website needed additional information and broader accessibility. User suggestions included more information about the experience and skill level needed to paddle the different reaches of the water trail; paddle times and distances between launch sites; and more information about amenities and services available at launch sites, including outfitters, transportation, food and beverage establishments, and overnight opportunities.

The water trails website is the best way to reach recreationalists and visitors. Enhancing the website would improve the visitor experience. To reinvigorate the water trail website with a custom mini-site using the messaging and style of the marketing writ large, or ramp up the current Ottawa Parks-based site. The goal of this landing page should focus on attracting new users; keep these low experience users at the forefront. The site must feature more original content specific to the water trail, in order to make users feel confident enough to use the trail if they have lower experience levels. This content may consist of user guides/getting started guides; guides tailored for specific users (fishers, paddle-boarders, kayakers, etc.), or blog writing (primarily for SEO/news purposes).

The website should also be more interactive. A primary component for the website should be that the map can show and expand on points of interest and visually identify them; show the entire water trail as a single unit, and not just the individual reaches; zoom in on individual reaches and sections; utilize Google maps/Earth API integration; and show as part of the larger Grand River Water Trail for context.

#### Recommendation 6: Increase Community Education

There are a number of partners already doing environmental education along the river corridor and throughout the Lower Grand River Watershed, including the West Michigan Environmental Action Council, Grand Valley State University, and the Lower Grand River Organization of Watersheds. A lot of these efforts are focused on water quality, stormwater runoff, and other nonpoint source pollution. Consistent water quality monitoring of point source and non-point source pollution will inform policymakers and citizens on how, why, and where the Grand River is being polluted. With this knowledge of the causes and effects of river pollution, citizens will be better equipped to make rational environmental policy decisions to provide lasting river ecosystem stability.

Water trail education efforts can complement environmental education, by including “Leave No Trace” principles, river restoration and stewardship, and the value of water resources and the water trail. Additional educational programming should include water safety and paddling skills; river etiquette and how to respect bordering landowner property rights; experience and skill level information; cultural and historical resources; and natural resources along the routes. These efforts can target novices and newcomers to paddle sports, as well as to the broader community audience as well.

Preservation of water quality and land bordering a water trail through management, mapping, monitoring, and mitigation will prevent the destruction of surrounding habitats, provide intergenerational native speciation, and improve the quantity of charismatic wildlife (large mammals, birds, reptiles, amphibians, and fish), thus improving recreational user experiences. By using the most recent aerial/satellite imaging, remapping the current Grand River Heritage Water Trail will better provide visitors with an accurate evaluation of hazards, new developments, and points of interest.

#### Recommendation 7: Improve Branding and Messaging

Current water trails messaging lacks impetus to get people out on the trail. With improved messaging, it will make clear that the water trail is for everyone, of any experience level, and that this unique asset is very user-friendly. There are four key messaging focuses for the Grand River Heritage Water Trail in Ottawa County:

- Focus 1: Water trails are the best way to explore Michigan’s natural beauty by boat or board – try Michigan’s newest water trail now.
- Focus 2: A water trail is just that – a trail comprised of one or more waterways.
- Focus 3: Water trails are for everyone – if you can hike, you can Hike the Water.
- Focus 4: The water trail starts in Grandville and goes all the way to Lake Michigan – “hike” all or part of it.

All of the facilities, experience and skill levels, safety, educational, and branding information should be captured in a waterproof guide book that can be distributed or sold to paddlers utilizing the Grand River Heritage Water Trail. This enhances the messaging, strengthens the branding, and provides a potential revenue source for the water trail.

#### Recommendation 8: Develop and Maintain Partnerships

Partnerships are so important in the development, maintenance, and marketing of a water trail. Ottawa County Parks was able to lead the implementation of its access sites with minimal assistance from partners. However, going forward, their management of the water trail would benefit from strengthened partnerships with local municipalities and homeowners along the river corridor; local outfitters; and state, local, and regional partners. Partners can assist with many of trail and launch site maintenance,

education, news and events, safety responses, future planning, and marketing. The importance of partners in water trail planning, development, management cannot be over-stated.

Recommendation 9: Establish a Water Trail Coordinator

The Grand River Heritage Water Trail is a valuable asset for Ottawa County and the West Michigan region. To most effectively accomplish the best practices identified in this report – launch site and trail maintenance, regional water trail planning, communications and cooperation with emergency responders, website maintenance, community education, event planning and coordination, and the development and maintenance of water trail partnerships – a water trail coordinator is needed. This person can be part of the current staff, hired as new staff, or even hired as a joint staff person between Ottawa County Parks and another partner organization.

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