# COMMUNITY RIVERS PROJECT: CATALYZING HEALTHY COMMUNITIES IN THE MILWAUKEE RIVER BASIN NARRATIVE SUBMITTED BY RIVEREDGE NATURE CENTER

#### 1. Statement of Need

### What do you propose to do

Riveredge Nature Center seeks support from the Institute for Museum and Library Services (IMLS) to increase its capacity to serve as a local resource for water education through a newly launched Community Rivers Project (CRP). Located in the geographic center of the Milwaukee River Watershed and recognized as a leader in community partnerships and education, Riveredge is an ideal candidate to engage local communities in an effort to increase environmental, physical and emotional health supported by improved water quality in rural communities within the basin. The ultimate goal of the CRP is to connect rural communities with their water resources by providing opportunities to inspire, engage, and steward their river basin both in their communities as well as at Riveredge. The project involves partnerships with multiple community leaders that include education providers in urban Milwaukee as well as municipalities in surrounding communities within the Upper Milwaukee River Basin, specifically the "East and West Branches Milwaukee River Watershed" and the "Cedar Creek Watershed" per Hydrologic Unit Code (HUC) 10.

The pilot year of the CRP is currently being launched in the village of Newburg, WI, a neighboring town to the nature center, with aspirations to expand to two nearby larger suburban cities during 2018 and 2019. To increase the CRP's capacity to better serve as a community catalyst in the Upper Milwaukee River Basin, Riveredge Nature Center has identified a critical need to build and strengthen its water-based interpretive exhibits. These exhibits would enhance our role as a hub for watershed education while also providing emphasis on creating an interactive digital experience that would allow educators, families, and community members to utilize the tools in their daily lives. The interpretive design plan will allow Riveredge Nature Center to utilize a learner-centered, inquiry-based approach that aligns with the organization's educational mission and dramatically strengthen its ability to serve its nearly 53,000 annual visitors and 42,700 surrounding community members as a local resource for water resource education.

The design plan fills a need for greater emphasis on engaging rural and suburban citizens in environmental activities to boost awareness in issues related to watershed health. This aligns with Riveredge's strategic goal to inspire a sense of interconnection between nature and society. Throughout this initiative, proven methods of watershed education developed by key water education organizations in urban Milwaukee will be replicated, existing partnerships with local communities will be strengthened, in-depth evaluation will be conducted to measure success, and ongoing documentation will take place in order to assist IMLS in capturing best practices for building partnerships with communities and library, archives, and museums (LAM's).

## Explain how your project will address the challenge identified in this funding initiative

The CRP has been launched at a critical time considering current water challenges locally, nationally, and internationally. In 2016, the Milwaukee River Watershed was determined as a high priority need to meet water quality standards by both Federal and State law and is documented in the Impaired Waters List prepared by the Wisconsin Department of Natural Resources (WDNR). The WDNR released a draft of the Total Maximum Daily Load (TMDL), which is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. These guidelines for the Milwaukee River emphasize that time is of the essence, and that it is imperative that communities within the watershed start planning for how they will meet the new specifications.

Establishment of TMDLs set in motion a series of planning and implementation actions that have a direct impact on all sources of point and nonpoint pollution. The establishment of TMDLs will require municipalities

to implement adaptive plans to overcome pollution and increase overall water quality. The initiatives of the CRP closely align with Watershed Restoration Planning Key Element #5 which requires the "preparation of an information and education plan to enhance public understand and encourage their early and continued participation in selecting, designing and implementing projects planned to meet the pollution reduction necessary to restore water quality." In this way, the CRP initiative serves as a catalyst for large-scale, watershed-wide, improvements in water quality and will unite local municipalities and community members around a shared problem that would otherwise be difficult to address by any one organization or entity.

## How does this project differ from, complement, or build upon previous work

Development of interpretive exhibits focused on the health of the Milwaukee River basin is unique and differs from other LAM's in greater southeastern Wisconsin region. By enabling Riveredge Nature Center to serve as a hub for watershed education where no other resources exist, will transform how communities in the upper river basin, as well as broadly throughout the greater Milwaukee area, engage and learn about these issues.

The project aligns with the need for municipalities to meet new requirements for the Total Maximum Daily Load (TMDL). Municipalities that engage as CRP partners will be committed to improved water quality while being supported through sustainable community education and land management practices, both of which will complement their efforts to meet TMDL requirements.

The CRP project will leverage the technical information developed under the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Water Quality Management Plan, the Ozaukee and Washington County Comprehensive Plans, the Milwaukee River TMDL plan, and the Ozaukee and Washington County Land and Water Management Plans. Upon release of the new TMDL requirements, the CRP will also be able to connect to the Ozaukee County led Mid Moraine Water Quality Collective which is working to identify opportunities that define projects which meet TMDL requirements.

In addition to new municipal requirements, the revised Total Maximum Daily Load (TMDL) report published in 2016 indicated that all municipalities that contain discharge permits must contain educational programming that is specific to water quality. Partnering municipalities have indicated that they do not have the capacity to implement educational programming to address the new TMDL requirements. Therefore, the CRP will fill this need by building on existing educational efforts taking place in the lower Milwaukee River Basin.

Current efforts in urban Milwaukee include a wide variety of community engagement activities that the CRP will draw upon. Hosting organizations include, but are not limited to, Milwaukee Riverkeepers, Sweet Water, and Milwaukee Metropolitan Sewerage District (MMSD). In early 2016, these organizations indicated commitment as CRP partners to work with and/or replicate efforts in the upper rural/suburban stretches. Partnering organizations have shared similarities between the CRP and their existing work.

"This project aligns well with our organizational mission to protect water quality and wildlife habitat and advocate for sound land management in the Milwaukee River Basin" -- Cheryl Nenn, Milwaukee Riverkeeper.

Additionally, existing Riveredge initiatives (see pg. 9, "institution's assets") have successfully built partnerships with school districts, municipalities, researchers, and families.

What is the community improvement opportunity you will be addressing and how was it identified Despite a great deal of both government and grassroots efforts to clean the Milwaukee River in recent decades, its environmental health continues to fall below national averages proving to be a wicked challenge for municipalities, sewerage districts, business owners, and community members alike. During 2015, the Milwaukee River Keepers, a nonprofit water resource advocacy and education group, assigned a C- grade to the

entire watershed<sup>1</sup>. Additionally, the report card indicated that "the watershed overall continues to get failing grades for phosphorus, receiving an F grade in 2014, as was the case in the last several years." The Milwaukee River South, Milwaukee River East & West Branch, and the Milwaukee River North Branch subwatersheds all received F grades this year, with Cedar Creek receiving a D+. This shows there is a widespread problem with phosphorus or nutrients in our largest watershed, regardless of land use (e.g., urban or rural). Phosphorus is the limiting nutrient in most freshwater ecosystems, and excess phosphorus causes growth of nuisance algae as well as other water quality problems as it is broken down biologically in a stream.

While momentum is taking shape in places like the nearby Rock River Watershed and the Lower Fox River, where adaptive management and water quality trading are being practiced as potential solutions to water issues, it is essential that numerous and diverse community partners work together to identify and implement creative nonpoint pollution projects. We need well informed and educated citizens that understand the watershed, the river, the connection between landscape and the importance of water quality on both human and environmental health. This project will lay the groundwork to develop knowledgeable and empowered citizens that are inspired to work together for the improvement of the water in the Milwaukee River and restore its watershed.

It is our intent that the CRP will bring attention to all water quality parameters and how human behaviors, including individual use/consumption and green infrastructure/land management practices, impact these parameters. In particular, the phosphorus content of the Milwaukee River is a prime "teachable moment" for the residents of the rural towns. By inspiring action, we believe that our efforts, along with those already occurring in the watershed, will play a role in improving the phosphorus levels in the water and tributary streams in the Upper Milwaukee River Watershed. Runoff and erosion mitigation will be addressed with both municipalities, businesses and individual landowners.

In addition to improved ecosystem health in partnering communities, the CRP will enable improved social well-being by strengthening the recreational and educational offerings in a rural/suburban geographical location where community education providers have witnessed little engagement with communities. Although many organizations have successfully reached out to the metropolitan areas of the watershed, and others are actively working on agriculture's effect on the watershed, there is currently little to no engagement with rural and suburban communities north of Milwaukee. Riveredge has recognized this gap and aims to create healthier and happier ecosystems and communities by providing water resource education and recreational offerings in the communities that fall within the Upper Milwaukee River Watershed through the CRP.

Lastly, while research and community initiatives are in place on site at Riveredge, programming is not well known by the greater community. There are immense opportunities to enhance our existing exhibit infrastructure and provide visitors information on our current initiatives. Educational displays in the visitor center and river access areas would enhance and celebrate the importance of the Milwaukee River and allow for visitors to make connections through personal engagement with the resource. Enhanced learning on site will be complemented by technology resources that will propel learning while accessed at home or in schools for further extension<sup>2</sup>.

#### What key facts or key events are the basis or impetus for your project

Identification of the obvious gap in engaging local rural and suburban audiences with their watershed was the initial impetus for the creation of the CRP. Additionally, as stated above, with the Wisconsin Department of Natural Resources' 2016 release of the draft TMDL guidelines for the Milwaukee River, identify the timely and

<sup>&</sup>lt;sup>1</sup> "2015 Milwaukee River Basin Report Card - Milwaukee Riverkeeper." http://milwaukeeriverkeeper.org/2015-milwaukee-river-basin-report-card/. Accessed 30 Mar. 2017.

<sup>&</sup>lt;sup>2</sup> "Meaning Making: A New Paradigm for Museum Exhibits? - National ...." <a href="http://name-aam.org/uploads/downloadables/EXH.fall\_99/EXH\_fall\_99\_Meaning%20Making%20A%20New%20Paradigm%20for%20Museum%20Exhibits\_Rounds.pdf">http://name-aam.org/uploads/downloadables/EXH.fall\_99/EXH\_fall\_99\_Meaning%20Making%20A%20New%20Paradigm%20for%20Museum%20Exhibits\_Rounds.pdf</a>. Accessed 29 Mar. 2017.

imperative need that communities within the basin start planning for how they will meet the new specifications. The CRP initiative is a catalyst for large-scale, basin-wide, improvements in water quality.

Convening around this environmental issue has sparked continuous momentum since early 2016 by community municipalities with the village of Newburg (~1,200 people), enthusiastically agreeing to spearhead the CRP initiative as pilot year partners. Soon thereafter, the city of Cedarburg (~11,000 people) expressed interest in broadening, what was at the time, a plan to engage smaller rural communities, as a community partner.

Planned activities launched this year (2017) in Newburg will be replicated and expanded upon in all CRP communities in the coming years. Some of the activities include: Environmental Stewards Tour of Homes, community-wide festival, one-on-one environmental education, rain barrel workshops, watershed bus tour, citizen science water quality monitoring, and land management workshops for landowners.

## Who are the non-traditional audiences or constituencies you seek to involve

At Riveredge Nature Center, we have identified a gap of engagement with our rural communities. Although many organizations have successfully reached out to the metropolitan areas of the Milwaukee basin, and others are actively working with farmers on agriculture's effect on the basin, we have seen little engagement with the rural communities.

Several opportunities for input among community partners are planned in order to drive intervention of healthier communities and ecosystems within the Upper Milwaukee River Basin. Activities during year one include a visioning session(s) with key community partners representative of the non-traditional audiences or constituencies directly impacted by the initiative. This includes local municipalities (village/town officials) as well as school district leadership (public / private), and property owners. In addition, planning and needs assessment during this time, related to interpretive design, will inform implementation during year two. Involvement for the second phase will require input from water-based education partners in the Milwaukee area as well as the two contracted leaders in interpretive design, Split Rock and Balance Studios.

## 2. Impact

Describe how your project will have impact in your community to address the opportunities and needs

The CRP aims to improve health and quality within the Upper Milwaukee River Basin by working in conjunction with citizens of all ages, elected municipal officials and stakeholder groups to develop the necessary knowledge and understanding to effectively plan, design, and build projects that will reduce nonpoint source pollution to the Milwaukee River. Examples of these changes would include installation of rain gardens or prairie gardens as buffering systems for overland flow runoff, installation of rain barrels to reduce the amount of runoff that is going into the river, and increasing natural vegetation buffers along the riverbank in addition to educating visitors on site with our interactive exhibits. The pilot (2017) CRP program is intended to lay the foundation as a model that is replicable in additional communities (2018/19) throughout the Upper Milwaukee River and will further improve the health of the river in future years.

## How will the community be involved in defining the opportunities and associated needs

The CRP conceptual framework borrows from a committed mindset theory which asserts that "when just 10 percent of the population holds an unshakable belief, their belief will always be adopted by the majority of the society<sup>3</sup>." This theory, developed by scientists who used computational and analytical methods to discover the tipping point where a minority belief becomes the majority opinion, provides the basis for building an adaptive program, project, or organization. This underlying assumption, that a small group of committed citizens can

<sup>&</sup>lt;sup>3</sup> Rensselaer Polytechnic Institute. (2011). "Minority rules: Scientists discover tipping point for the spread of ideas." <a href="http://www.sciencedaily.com/releases/2011/07/110725190044.htm">http://www.sciencedaily.com/releases/2011/07/110725190044.htm</a>

build a culture of community water stewards, is what will help shape the conceptual framework for change. It is also a model being utilized by a national group, with a Wisconsin affiliate, called ThinkWater, who helped advise early planning of the CRP systems model.

To identify early adopters that make up the "committed minority," the CRP will rely on capturing feedback through a variety of mixed methods that include accessing shared water resource data, administering a survey of community member and facilitating discussion at community events and programs. Specifically, during early summer and fall of each project year, seasonal staff and interns will work on one with land/homeowners and government officials to advise and assist with positive land management changes to shoreline parcels. At community events and programs, discussion will be facilitated by the designated educator that examines personal connection and water resource action.

## Explain how your proposed processes will create or support community dialog and narrative

By providing opportunities to hear from community members through both one-on-one engagement as well as shared experiences (i.e. educational programs and community events) led by leaders in the municipality, the CRP initiative allows individuals to take ownership of their resource in their communities. Through recognition of the community as a "Healthy River Community" (see below "key metrics") as well as spotlighting success stories of individuals, businesses, or government who are implementing infrastructure or land management changes, the project supports positive changes among friends and neighbors. In addition, stories from partnering community members may be included in water-based interpretive exhibit(s) developed as part of the interpretive design plan allowing for community members to feel a sense of ownership as contributors to the regional water conservation.

## Describe your performance goals for the project that will ensure impact.

There are three major areas for measurement of performance goals that will be evaluated within the scope of this application related to the CRP. The first focuses on the process and examines the role of Riveredge as a project partner with a diverse set of community partners. The following goals relate to impacts of the program taking place both in the communities as well as onsite at Riveredge Nature Center via the interpretive exhibits and digital interactive experiences. Therefore, the project will explore the following performance goals that build upon IMLS community goals:

In order to ensure that Riveredge Nature Center is a *successful partner* in building a network of water stewards in the Upper Milwaukee River Basin, the following performance goals will be assessed:

- Strengthen relationships between Riveredge and essential water-based education partners in addressing the needs of their communities.
- Develop reputation with neighboring communities as a resource for river basin education and practice.

The following demonstrate key performance goals that will *guide activities* determined for CRP program participants both onsite and offsite:

- Individuals and communities will better understand their relationship to their river basin and the many variables that contribute to a basin (i.e. topography, biodiversity, water cycle, scale)
- Individuals and communities will know what resources basins provide for them in ecosystem services (i.e. clean water, recreation, land value)
- Individuals and communities will take action to improve the health of the basin (i.e. property use, consumption, recreational choices)

## Elaborate upon how you will be monitoring, tracking, and assessing your progress and how this will be shared with the community.

Riveredge Nature Center will utilize the contractual services of an external evaluator to design and implement a plan to evaluate the performance goals mentioned above. Riveredge has recent experience in working with an

outside evaluator to design comprehensive evaluation plans and tools to determine and document outcomes of both its "Scientist in Residence" partnership with local school districts as well as on-site student educational programs at the Center.

Throughout first year activities, part of the evaluation planning process will be to determine systems needed to track participation, conversations, key events, and other artifacts related to the partnership building process. Whenever possible, it can be anticipated that many of these systems can integrate with tools Riveredge and community partners already use, such as school district attendance records, municipality parcel data, etc. Similarly, assessing progress related to learning goals will be determined during year one evaluation planning and implemented in year two.

As with the partnerships mentioned, systems to share information will be included in the planning process. For example, the CRP planning team will have frequent face-to-face (bi-monthly) contact in addition to meetings with key personnel from community partners. At those meetings, Riveredge staff will share updates on project and evaluation activities, brainstorm upcoming needs, and seek feedback related to the interpretive design process. The broader community residents will be included in decision making processes determined in the year one planning phase through visioning sessions.

## What key metrics are important for your project?

The following are a set of key metrics addressed by the Community Rivers Project:

- Engage <u>20-60% of residents and businesses</u> within the cities of Cedarburg (est. pop. 11,500) and West Bend (est. pop. 31,676) with inspirational experiences and educational programs through one-on-one contact or community-wide events within two years time.
- Inform <u>all residential housing parcels that border the Milwaukee River</u>, within the City of West Bend, and residents within the City of Cedarburg, along Cedar Creek, on water quality issues and impacts of land management practices on the health of their local river (habitat and water quality).
- Inspire 20% of residents and businesses along the waterways within the City of West Bend and the City of Cedarburg to implement land management changes which will improve the habitat and/or water quality of the Milwaukee River or tributary streams.
- Implement <u>land management changes</u> (e.g. green infrastructure projects, rain barrels, native plantings, etc.) in cooperation with local government officials on City owned property identified in phase one.
- Implement "Healthy River Community" <u>signage throughout partnering cities</u> (Yr. 1, Cedarburg, Yr. 2, West Bend) as recognition for participating in the project. This recognition can be renewed on a regular basis (and, thus, continuing to support and encourage ongoing attention to the effect of land management choices on the health of the river and adjacent habitat).
- Work with interpretive design planners (Balance Studios and Split Rock Studios) to design <u>up to ten</u> <u>interactive digital educational elements</u> as well as <u>exhibits that encompass approximately 3,600 square feet</u> at Riveredge that support greater understanding of watershed health.

## What outcomes and outputs are most important to determine the overall impact of your project?

By engaging communities with their water resources, achievement of the key metrics stated above will enable increased health of both the river basin as well as the partnering communities. The following outcomes and outputs reflect impacts that can be anticipated as a result of participation in the CRP.

### *Improving river health:*

- Decreased nutrient loading, runoff reduction, and erosion mitigation
- Increased species diversity, macroinvertebrates and aquatic plants

*Improving community health (indicators of social well being)*<sup>4</sup>:

- Improved relationships with family and friends: How an individual relates to the people around them, including the relationships they develop, the quality of these relationships, and sense of connectedness
- Improved perceptions of and connectedness to the community: A feeling that an individual is part of a meaningful community or communities, feels connected to the environment around them
- Improved overall life satisfaction: General assessment of satisfaction with life as a whole

## Describe your project's results.

As mentioned above in the performance goals section, project results focus on both the process for building successful partnerships around community watershed health as well as impact outcomes that connect individual citizen actions to support green infrastructure changes that benefit their homes as well as improve water quality. Results for the CRP initiative are highlighted in the key metrics section. Because the CRP initiative will continue beyond the scope of the IMLS two year grant period, all results will be compiled into a report annually that focuses on both process (formative) and impact (summative). By nature of the project, the results have great potential to be replicated in other communities large or small wishing to partner with LAM's (nature centers) around water quality issues, or environmental health broadly. Eventually, it can be anticipated that the compilation of reports over the two year timeline can serve as a sort of toolkit for areas around the country wishing to engage rural and suburban communities using the best practices learned through this process.

## Explain how your project will generate findings that serve as the basis for approaches, processes, tools, and resources that will support ongoing application across LAMs.

The CRP initiative generates findings that support creation of a model for how LAMs can catalyze a community around a shared issue or problem, in this case, water quality. Systems are already in place to document preliminary activities and impacts in the pilot year (2017). As the CRP moves into the pilot year, additional needs will be identified through conversations and facilitated discussions with community partners which require additional processes, tools, and resources that will lay the foundation for building a model in future communities. Currently, systems to document the process include an activity tracking tool, reflection log, and shared resources that define the project approach and create common language among project partners (included in supporting documents). Support from an external evaluator will enhance the capacity to document the process additionally, in the hopes that the CRP will contribute to the IMLS learning community in creating a model for other organizations or community wishing to address a similar problem.

#### 3. Project Design

## Provide a description of the proposed project's work plan.

Riveredge Nature Center's work towards serving as the basin education hub for the Upper Milwaukee River Watershed revolves around two connected efforts:

- 1. Launching the newly formed "Community Rivers Project" within rural and suburban communities in the Upper Milwaukee River Basin, and,
- 2. Developing locations at the nature center as "hubs" of education both through interpretive design, hands-on experiences, and technology tools that can be used not only at the nature center, but throughout our local communities.

The Community Rivers Project (CRP) is an approach to transforming the Upper Milwaukee River Watershed through the engagement of the rural villages and townships in its region. The pilot year will be launched in April 2017 with a local rural community, the village of Newburg. In subsequent years, the project will work with additional communities to inspire, inform, and engage its citizens within the Upper Milwaukee River. The

<sup>&</sup>lt;sup>4</sup> "Well-being Indicators: Applicability to Community Based ... - OECD." <a href="https://www.oecd.org/site/progresskorea/44254331.pdf">https://www.oecd.org/site/progresskorea/44254331.pdf</a>. Accessed 31 Mar. 2017.

CRP leverages best practices by replicating existing engagement programs which occur in urban areas in the lower Milwaukee River Basin to be implemented in rural and suburban communities in the Upper Milwaukee River Watershed

## What are the goals, outcomes, and assumptions of your project, as framed within a social well-being framework

The premise of the project is to first inspire the residents to care about their basin through a variety of initiatives, inform them about the challenges faced by the basin, and finally engage them in changing land management practices on their own properties to help do their part to improve the habitat and quality of water in the Upper Milwaukee River Watershed. The project achieves this through a series of personal engagement, adventure activities, and community-wide efforts.

To achieve the intended goals and outcomes of the project, the CRP operates using the following assumptions understood within a social wellbeing framework modified from the United Kingdom's Faculty of Public Health 2001 report<sup>5</sup>. Thereby, we assume that participating individuals in the committed minority will be willing to:

- make a positive contribution to our communities,
- form positive relationships with others, and feel connected and supported,
- experience peace of mind, contentment, happiness and joy,
- cope with life's ups and downs and be confident and resilient,
- take responsibility for oneself and for others as appropriate.

Similarly, Riveredge Nature Center is making an assumption that there is a need for serving as a watershed hub for teaching and learning that can be filled through creation of water resource education exhibits and digital tools that connect communities in the Upper Milwaukee River Basin.

## How does your institution's assets map back to the identified community opportunity

Riveredge Nature Center's organizational assets strategically align with this initiative and poise it for success. At Riveredge, we have proven experience partnering with other organizations to partner for positive community change. From our recently launched "Scientist in Residence<sup>6</sup>" partnership with local schools to other work which has brought Family Nature Clubs<sup>7</sup> to the surrounding counties, our education and research staff's theory of change includes significant work and experience in promoting positive inspiration within the communities. In the area of water quality monitoring and water education, the Riveredge team continues to engage area schools, over the past 15 years, throughout the river basin in water monitoring projects as part of the collaborative "Testing the Waters<sup>8</sup>" program. Our organization's educational philosophy is that of inquiry-based education which assists participants in exploring the environment and bringing meaning to their unique role in bringing positive change to natural and human communities.

#### What will be the roles of community members and key stakeholders in implementation

The CRP planning team involves a variety of key stakeholders who play important roles in the implementation of the project outcomes. Their roles and commitments are included in the chart below:

http://www.riveredgenaturecenter.org/education/school-youth-groups/naturalist-in-residence/. Accessed 31 Mar. 2017.

http://www.riveredgenaturecenter.org/education/school-youth-groups/testing-the-waters/. Accessed 31 Mar. 2017.

<sup>&</sup>lt;sup>5</sup> "FPH :: Concepts of Mental and Social Wellbeing." <a href="http://www.fph.org.uk/concepts\_of\_mental\_and\_social\_wellbeing">http://www.fph.org.uk/concepts\_of\_mental\_and\_social\_wellbeing</a>. Accessed 30 Mar. 2017.

<sup>&</sup>lt;sup>6</sup> "Scientist in Residence - Riveredge Nature Center."

<sup>&</sup>lt;sup>7</sup> "Family Nature Clubs - Riveredge Nature Center." <a href="http://www.riveredgenaturecenter.org/family-nature-clubs/">http://www.riveredgenaturecenter.org/family-nature-clubs/</a>. Accessed 31 Mar. 2017.

<sup>&</sup>lt;sup>8</sup> "Testing the Waters - Riveredge Nature Center."

Partner	Role in Project	Resources Brought to Project
Milwaukee Riverkeeper	Coordination and training for water quality monitoring in the Upper Milwaukee River Basin, leading kayaking programs on the Milwaukee River, marketing the project, and providing educational support for programs focused on the water quality of the Milwaukee River Basin.	\$5,000 (In-kind) - Project visibility and community engagement in citizen science and other engagement programming.
Southeastern Wisconsin Watershed Trust (Sweet Water)	Educational support and marketing specific to programs pertaining to this project.	\$2,000 (In-kind) - Allow high visibility of this project throughout southeastern Wisconsin, and help to bring other organizations into a partnership with this project.
Ozaukee County	Educational support and programming for farmers in the Upper Milwaukee River Watershed, within Ozaukee County.	\$1,000 (In-kind) - Communication with farmers within county to increase water quality awareness and environmental stewardship.
Washington County	Educational support and programming for farmers in the Upper Milwaukee River Watershed, within Washington County.	\$1,000 (In-kind) - Communication with farmers within county to increase water quality awareness and environmental stewardship.
Cedarburg School District	Through the work of Riveredge's "Scientist in Residence" at the Cedarburg School District, the students will be engaged in water education, water quality monitoring, and recreation in the Cedar Creek, a tributary within the Upper Milwaukee River Watershed.	Project visibility and encouragement of community engagement with the district's students, families, teachers, and administrators.
Wisconsin Water Thinkers (ThinkWater)	Advise CRP planning team on development of systems-thinking framework for considering mental model of community members we wish to change. Provide input on activities that address those learning objectives and connect planning team with industry professionals throughout the region participating in similar initiatives that the CRP can learn from or contribute to.	\$1,000 (In-kind) - Refinement of shared vision via systems-thinking metamap,
Partner Communities Cedarburg - Yr.1 West Bend - Yr. 2	Participate in water based education and recreation programming both onsite at Riveredge as well as in their communities. Consider and implement green infrastructure choices with support from municipality at homes.	Project visibility and encouragement of community engagement. Build relationships with Riveredge and community partners focused on water quality.

Balance Studios/Split Rock Studios	Work with Riveredge Nature Center staff and CRP planning team to brainstorm, refine, and develop interpretive exhibits and digital interactive applications that support watershed education in the Upper Milwaukee River Basin.	Industry leaders in field of interpretive exhibit interactives that help organizations tell specific stories and create personal connections with the resource.
Jessica Bizub (Third-party Evaluator)	Work closely with Evaluation Specialist and CRP planning team to document process (formative) and impact (summative) evaluation to be shared with project partners and IMLS to support best practices for LAM's.	Outside perspective and professional expertise in field of evaluation and social science. Commitment to provide consultation regarding planning, development, and reporting during grant period.

## When and in what sequence will your activities occur

A thorough timeline of key activities that will take place throughout 2018/19 CRP initiative are included in the Schedule of Completion.

## How does the proposal marshal community resources to build upon existing momentum and stakeholder networks in order to spark discourse and coalesce around a vision for change

Milwaukee, WI has publicly stated its intentions to become the "freshwater capital of the world9." Because of this shared commitment, there has never been more momentum regarding network building, shared datasets, and other initiatives to hold accountable the region's commitment to infrastructure changes than at present. As stated previously, the tightening of TMDLs in 2016 is just one reflection of the commitment that local village officials and community leaders are considering as they plan for future community initiatives, projects, and plans. The CRP is leveraging the gap in water based education and green infrastructure in a geography that is currently underserved when compared to urban Milwaukee. Understanding the scope of needs and enthusiasm among surrounding community municipalities, Riveredge Nature Center has identified and obtained assets that leverage financial, expertise, and resource support from the wide variety of partners that you see in this application. Collectively, these partnerships complement one another in order to build and strengthen not only healthier communities but also healthier ecosystems.

### How and with whom will you share your project's work

Due to the intentional design of the CRP initiative as a largely participant-driven process, it can be anticipated that results and discoveries will be shared in a number of ways in the greater Milwaukee region both sponsored by Riveredge Nature Center as well as the partner communities and water-based education organizations. Similarly, it is likely the organizations hired for contractual services will include the outcomes of this project in their portfolio to be shared with future clients. Internally, Riveredge Nature Center plans to share the CRP initiative in the following ways in an effort to advance theory and practice of the LAM's field. These include, but are not limited to:

- Conferences & Workshops (Wisconsin Association for Environmental Education Conference, National Association for Environmental Education Conference (NAAEE), Clean Rivers Clean Lake Conference)
- Blogs and Media (if desired, IMLS Community Catalyst Blog, Riveredge Nature Center Blog, NAAEE Blog)
- Print Media (Annual report to partnering communities, impact summaries mailed to residents)
- Digital applications (Creation of a watershed education app that can be used off site to serve as community catalyst that extends learning among community members in partnering municipalities).

<sup>&</sup>lt;sup>9</sup> "Why Milwaukee – The Water Council." <a href="https://thewatercouncil.com/why-milwaukee/">https://thewatercouncil.com/why-milwaukee/</a>. Accessed 30 Mar. 2017.