

COUNTY OF KENOSHA

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Petrifying Springs Park Pike River Restoration (Phase II)

Surface Water Grant Project Number: RM08120

Summary:

The Pike River reach within Petrifying Springs Park is an impaired body of water under section 303(d) of the Clean Water Act due to excessive amounts of sediment from eroding banks and phosphorus release resulting in a degraded biological community. Kenosha County will improve reduce nonpoint source pollution impacts, improve water quality, and restore habitat and ecological functioning within a 3,067 linear foot reach of Pike River within Petrifying Springs Park, an urban green infrastructure hub designated in the EPA-approved Pike River Watershedbased Plan. This will reduce total suspended solids (TSS) and sediment-bound nutrients that are transported to the river mouth and nearshore area of Lake Michigan. Implementation of green infrastructure and streamflow dynamics, and use native vegetation to stabilize and improve filtration and infiltration of the riparian area.

Project Activities:

The project was completed in Fall 2021 on schedule. Kenosha County hired Cardno Inc. as the construction management consultants for the project. Cardno, Inc. was responsible for constructability review of the project, preparing, reviewing and evaluating bidding and contract awards, providing on-site administration of all related services during the construction phase of the project, and ensuring post-construction phase inspections. C.W. Purpero Inc. was the contractor for this project. All mobilization, clearing and brushing on project site, earthwork, temporary erosion and sediment control, strategic bank stabilization, trail renovation, and all the native vegetation planting within the 4.8-acre riparian habitat was completed by September 2021. No significant project delays were experienced during the project period. Students from UW-Parkside conducted water sampling in during the academic semesters of Spring 2021 and Fall 2021.

Water sampling by UW-Parkside students will continue in the Spring and Fall academic semesters of 2022. Data analysis for the 2021 project period is currently underway. Kenosha County will follow ongoing maintenance of the project site to ensure successful establishment of bank stabilization and native vegetation. Additionally, Kenosha County Parks has begun planning efforts for the Pike River Phase III project within Petrifying Springs Park. A request for proposals (RFP) was released in December 2021 for construction management and design services of Phase III. Phase III implementation of the Pike River Restoration Project is anticipated to commence in Spring/Summer 2023.

Recreational features have been expanded within the Phase I and Phase II reach of the river. Future phases will incorporate these, in addition to vista clearances for park visitors to connect to the river and utilize these areas to fish. The land-use agreement drafted between Kenosha County and the University of Wisconsin-Parkside has allowed Kenosha County Parks to expand restoration efforts on land within the campus. A natural resource inventory of this site will be undertaken soon to develop a comprehensive restoration plan for the Pike River segment on site. Kenosha County is grateful for the collaborative partnership with the Wisconsin Department of Natural Resources in making a positive impact on the health of Lake Michigan and on the communities of Wisconsin for years to come.

Summary of Public Outreach:

Restoration of the Pike River within Petrifying Springs Park has attracted positive publicity throughout the years. Kenosha County Parks incorporates grant funder logos and acknowledges their support in all grant publicity. Educational banners were displayed on-site to provide information on the project during implementation (https://bit.ly/34QiJct). Kenosha County shared a press release before project implementation via local news channels and social media (https://bit.ly/3uTGTOb). Lastly, a ribbon-cutting ceremony event took place on Friday, October 15th to celebrate the completion of the Pike River Phase II Restoration Project. The event was open to the public and held on-site at Petrifying Springs Park. Representatives from grant funders, including Vicki Elkin (Fund for Lake Michigan), Secretary Preston Cole (Wisconsin Department of Natural Resources), Kenosha County Executive Jim Kreuser, and the Kenosha County Board of Supervisors were in attendance. Notice of this event was shared on social media and news channels (https://bit.ly/3rNX6T5). Kenosha County Parks staff submitted a blog post to the site, "*A Wealth of Nature*," highlighting the impact of the Pike River Restoration work on the watershed and Lake Michigan (https://bit.ly/3DTISV4).

Outreach and Educational Activities:

On August 18, 2021, Matthew Collins (Kenosha County Parks Director) met with Donalea Dinsmore and Stacy Hron (Wisconsin Department of Natural Resources) at the Phase II project site to provide a comprehensive overview of construction and progress made. This provided an opportunity to demonstrate the impact of stakeholder involvement with the project.

On September 10, 2021, Nancy Retana (Kenosha County Grant Specialist) provided a tour of the Phase I and Phase II for 15 students from the University of Wisconsin-Parkside Geosciences 301 class. Dr. Rachel Headley, head of water sampling activities within the Pike River Restoration site, organized the site visit with the intent of providing a live learning opportunity for students. The students learned about the history of Kenosha County's restoration efforts and saw firsthand the progress of Phase II.

Matthew Collins led a tour from the Wisconsin Land and Water Conservation Association on October 7th to showcase Kenosha County's efforts of the river restoration project. Attendees were impressed with the success of Phase I streambank restoration efforts, the Phase II completion, and learned about plans for future phases within Petrifying Springs Park.

As mentioned previously, a ribbon-cutting ceremony to commemorate the completion of Phase II was held on October 15, 2021. Stakeholders from the Wisconsin Department of Natural Resources, the Fund for Lake Michigan, Kenosha County Executive, and Kenosha County Board Supervisors, attended the event and gave a few remarks. Over 50 community members attended the event. Upon completion of the speeches, guests were invited to tour the Phase II site.

Season	Phosphorous	Nitrates	Turbidity	Dissolved Oxygen	Conductance	pН	TSS
Fall 2019	1.087	1.294375	13.05	11.76625	0.3896875	7.47	-
Spring 2020	-	-	-	-	-	-	-
Fall 2020	-	-	-	-	-	-	
Spring 2021	0.07131	1.4207	4.4622	14.12	0.80296	8.2232	9.25
Fall 2021	0.14162	0.18741	not available	10.693	0.7656	7.243*	24.5

Water Data Collected to Date:

*pH sensor malfunction skewed results Fall 2021