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**Clean Rivers, Clean Lake
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Leveraging Experience for Future Success

NOVEMBER 14, 2019 | 8 AM - 6 PM

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Forging Partnerships for Healthy Waters in Southeastern Wisconsin

OUR MISSION

Sweet Water is committed to restoring the Greater Milwaukee watersheds to conditions that are healthy for swimming and fishing. We bring diverse partners together and provide the leadership and innovation necessary to protect and restore our shared water resources.

OUR VISION

Dramatic and visible improvements in the Greater Milwaukee watersheds inspire widespread protection and celebration, connecting the region's prosperity to the health of our shared water resources.



MORNING SESSION

8:00 AM - 9:00 AM

WELCOME

Dr. Angela Frey, Professor and STEM Chair, Alverno College; Alverno College

INTRODUCTORY REMARKS

Wisconsin Lieutenant Governor Mandela Barnes

SWEET WATER UPDATE

Jacob Fincher, Acting Director; Sweet Water

'SHED TALK

Be a Coach

Rusty Schroedel, AECOM

9:15 AM - 10:30 AM

Milwaukee's Proud History of Watershed Health Innovation

PRESENTERS:

Karen Sands, MMSD

Nancy Schultz, Jacobs (retired)

Update on the Greater Milwaukee Watersheds Water Quality Improvement Plan

PRESENTERS:

Susan Coyle, MMSD

Pete Hill, Great Lakes Opportunities

Kristin Schoenecker, Sweet Water

10:30 AM - 11:00 AM

Plant Selection for Green Infrastructure

Jason Cooper, Environmental Consulting & Technology

Andy Kaminski, MMSD

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Community: Village of Bayside

Organization: UWM School of Freshwater
Sciences

Lifetime Achievement: Dan Stoffel

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LUNCHEON PROGRAM

11:15 AM – 12:15 PM

WISCONSIN SPEAKER'S TASK FORCE ON WATER QUALITY UPDATE

SWEET WATER 2019 MINI-GRANT AWARDS

Brent Brown, Jacobs

Cassie Goodwin, Smith Group

Kristin Schoenecker, Sweet Water

'SHED TALK

Balancing Arrogance and Humility:

Lessons from Schlitz Audubon's Stormwater Wetland and Ravine Restoration Project

Marc White, Schlitz Audubon Center

12:15 PM – 12:45 PM

INTERCESSION

ROTUNDA: EXHIBITORS & MINI-GRANT POSTERS

2ND FLOOR GALLERIA: ART EXHIBIT & MINI-GRANT POSTERS

CORVIAS NETWORKING ROOM: REFRESHMENTS & MINI-GRANT POSTERS

12:45 PM – 2:15 PM

BREAKOUT SESSION I: QUADRANTS A, B, C & D

2:30 PM – 4:00 PM

BREAKOUT SESSION II: QUADRANTS A, B, C & D

4:15 PM – 5:15 PM

BREAKOUT SESSION III: QUADRANTS A, B, C & D

5:30 PM - 6:00 PM

WATERSHED CHAMPION AWARDS RECEPTION: 2ND FLOOR GALLERIA



We are proud to sponsor Sweet Water at the 2019 Clean Rivers Clean Lake Conference as part of our efforts to develop community-based **Solutions Through PartnershipsSM** for the betterment of Milwaukee watersheds.



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Stakeholder Engagement

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Our Role

Sweet Water's role as a convener and connector of water-focused organizations (public, private, nonprofit, and academic) is a key part of Sweet Water's identity and ongoing work, and was a primary reason for our founding. Our focus is on supporting and more effectively connecting the watershed protection and restoration work already being done (or in need of being done) by others. We add value by buoying and linking the work of our stakeholder partners.

Building on the shared insights and collective commitments of our stakeholder partners, we aspire to provide a "big picture" perspective to frame the evolving landscape of watershed issues and hone strategies for joint success. We add value by synthesizing and sharing information.

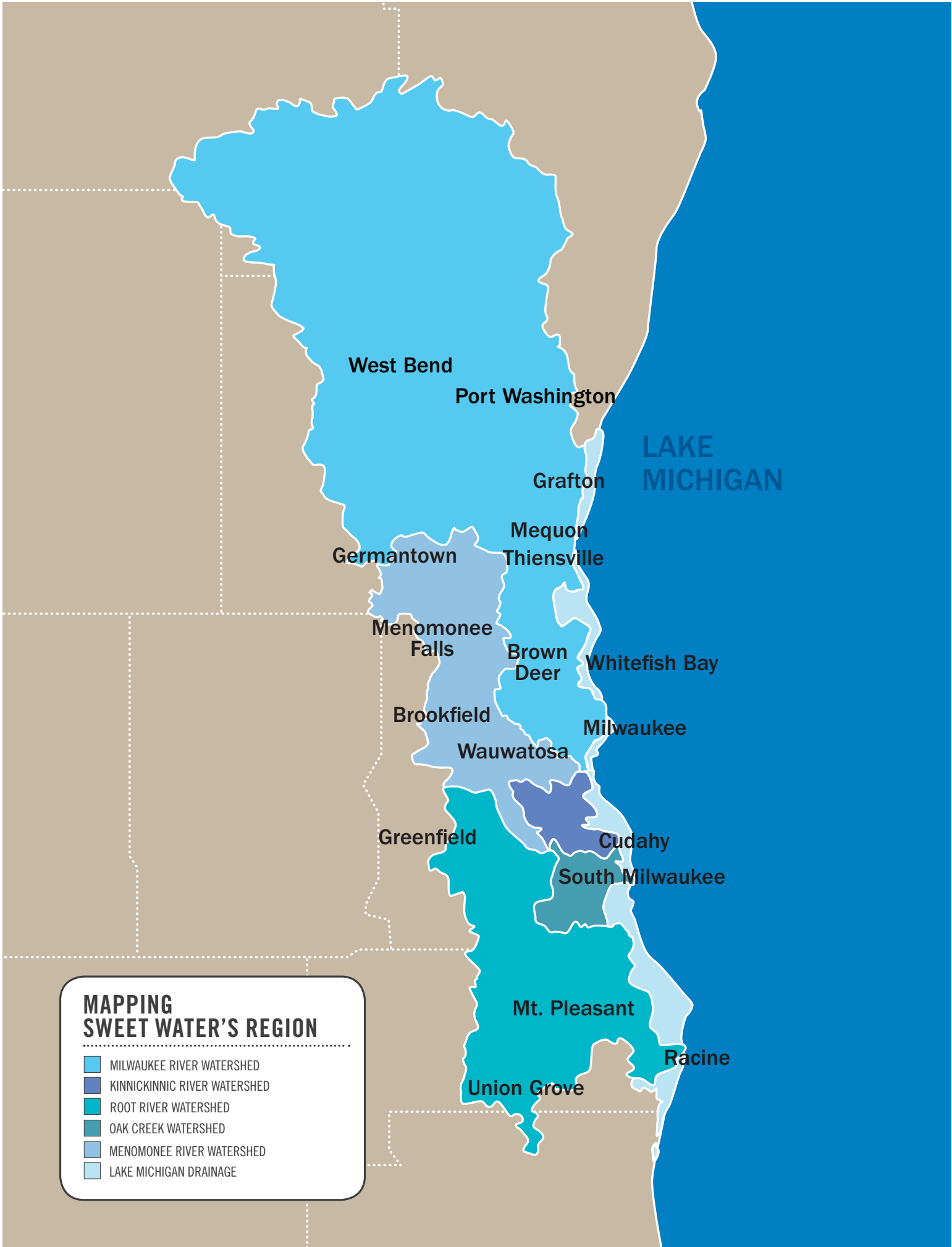
Using our "big picture" lens, Sweet Water identifies where additional efforts and resources are needed. We work to address these needs by drawing on the respective capacities of our partners and, where necessary, filling capacity gaps. We also facilitate collective fundraising to address resource challenges. Recognizing that Sweet Water's mission overlaps with those of many of our partners, we take care to ensure that we do not act, inadvertently or otherwise, to replicate or our partners' expertise or usurp their roles. We add value by identifying and securing needed capital and professional capacity to drive progress to meet our shared watershed goals.

Transparency, accountability, two-way communication, and information exchange are essential to our collective effectiveness. This work and requires considerable time and effort. Our commitment to this work is demonstrated by our investment in staff capacity to understand the needs and goals of our stakeholder partners. We add value by investing in building relationships of trust across the watershed community.

Our Watersheds

A WEALTH OF FRESH WATER

The Milwaukee River Basin is located in portions of seven counties, contains 13 cities, 32 towns, 24 villages and is home to about 1.3 million people. The basin is divided into six watersheds. Collectively the six watersheds contain about 500 miles of perennial streams, over 400 miles of intermittent streams, 35 miles of Lake Michigan shoreline, 57 named lakes and many small lakes and ponds. Wetlands encompass over 68,000 acres, or 12 percent of the basin land area.





Our Approach

Since 2008, Sweet Water has collaborated with diverse stakeholders in efforts to secure healthy and sustainable water resources in the Greater Milwaukee watersheds.

We base decisions on sound science, taking a watershed approach that bridges jurisdictional and social boundaries and recognizes that how we manage the land affects our water resources.



Develop and implement plans for watershed restoration



Forge partnerships that build support for water quality projects and improvements



Promote the use of green infrastructure to improve water quality



Support innovations to advance water quality in a cost-effective manner



Provide mini-grants to fund small-scale water quality improvement projects



Raise public awareness about reducing stormwater pollution



Develop and implement policy and regulatory tools

OUR TEAM

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Laura Herrick, Southeastern Wisconsin Regional Planning Commission

STAFF AND PROGRAM ASSOCIATES

Jacob Fincher, Acting Director
Kristin Schoenecker, Watershed Coordination Manager
Ali Woodruff, Adopt-A-Storm Drain Volunteer Coordinator
Chris Magruder, Science & Policy Committee Coordinator
Pete Hill, Project Consultant



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CONGRATULATIONS TO OUR 2019 MINI-GRANT AWARDEES!

ALL PEOPLES GATHERING LUTHERAN CHURCH

BURDICK SCHOOL

GOLDA MEIR SCHOOL

GROUNDWORK MILWAUKEE

HARBOR DISTRICT, INC.

MARCUS PERFORMING ARTS CENTER

MEQUON NATURE PRESERVE INC.

OZAUKEE WASHINGTON LAND TRUST

TREASURES OF OZ

SCHLITZ AUDUBON NATURE CENTER

SOUTH SHORE YACHT CLUB

ST. MICHAEL CATHOLIC CHURCH

STARMS EARLY CHILDHOOD CENTER

ULAO CREEK PARTNERSHIP

We are grateful for our 2019 Mini-Grant Partners:



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2019 SWEET WATER MINI-GRANT PROGRAM AWARDEES

ALL PEOPLES GATHERING LUTHERAN CHURCH

WEBSITE: allpeoplesgathering.org

PROJECT: **Greenhouse Roof and Rainwater Harvesting**

All Peoples Church is in a highly urbanized area in the Milwaukee River watershed. In 2012, the church built a greenhouse with a rainwater harvesting system, however, the roof was designed incorrectly and a significant amount of runoff water was not captured. Funding was sought to address the design issues by replacing the roof with new overlapping panels and increasing the pitch of the roof to better drain water into the rainwater harvesting system. The project will enable the rainwater harvesting system to work as originally designed and intended, improving the system's efficiency and reducing stormwater runoff.

BURDICK SCHOOL

WEBSITE: www5.milwaukee.k12.wi.us/school/burdick

PROJECT: **Outdoor Learning**

Burdick is redeveloping the school playground that is currently comparable to an asphalt island. As a part of these updates, the school sought a Mini-Grant to repair the current hoop house, add a natural water collection system to the greenhouse, and install wood chips to both the adjacent lot and around the greenhouse. The water collection system will allow students to learn about the water cycle in a hands-on learning experience and will provide a reliable source for collecting and using water for the greenhouse plants. The wood chips will improve the water retention potential due to asphalt removal and allow the water to be channeled towards the greenhouse. Excess water that is not used by the greenhouse will be filtered and directed towards the new trees in our outdoor classroom.

GOLDA MEIR SCHOOL

WEBSITE: www5.milwaukee.k12.wi.us/school/goldameir

PROJECT: **Golda Meir Sustainable Front Walk**

Golda Meir School's Sustainable Front Walk will create an educational area that displays information and examples of ways to be sustainable and reduce stormwater runoff. Each display will consist of student planted/maintained garden beds with native plants and specific educational signs about the plants and sustainable actions. A rainwater harvesting system will be installed and used as an active educational tool. Benches will be designed and built by students and placed in front of the area. Larger signs will be placed at the entrances of the school to invite visitors to take a walk and learn more about sustainability.

GROUNDWORK MILWAUKEE

WEBSITE: groundworkmke.org

PROJECT: **Maglio Green Infrastructure and Irrigation Project**

Groundwork Milwaukee (GWM) embarked on an exciting exploration of sustainable extended season vegetable production in 11 existing hoop houses. Hand watering of plants done in the past in the hoop houses had been incredibly wasteful with no green infrastructure installed. With this grant, GWM installed green infrastructure in the form of gutters on the hoop houses feeding 275 gallon totes for watering and water conserving drip irrigation. This project will prevent thousands of gallons of stormwater runoff, supply fresh produce to a local food pantry, contribute to a community supported agriculture (CSA) group of at least 50 members, and provide innumerable educational opportunities for the community and local youth.

HARBOR DISTRICT, INC.

WEBSITE: harbordistrict.org

PROJECT: **Kinnickinnic River Trail Riparian Habitat Restoration**

The Kinnickinnic River Trail between Chase Avenue and Lincoln Avenue is an important green corridor on Milwaukee's south side, but is in need of community attention and habitat restoration. Harbor District, Inc. worked with Sixteenth Street Community Health Centers and the River Revitalization Foundation to remove invasive species and establish new trees and native shrubs along this seven-acre section of riparian land. New native plants and trees capture and clean stormwater runoff before it reaches the Kinnickinnic River, while also improving habitat and the urban tree canopy. Further, community events have connected area residents with their River.

MARCUS PERFORMING ARTS CENTER

WEBSITE: marcuscenter.org

PROJECT: **Bringing the Community Together: Building the Future with Water**

This project focused on integrating educational opportunities into the renovation of the Marcus Center grounds which included planting storm water trees, installing rain gardens, and utilizing green infrastructure. Sweet Water supported the design and implementation of interactive technology used as an environmental educational tool for the community, including the 100,000 youth who visit the Marcus Center annually. Design concepts were created by students at

2019 SWEET WATER MINI-GRANT PROGRAM AWARDEES, CONTINUED

Milwaukee Institute of Art & Design (MIAD) who leveraged the importance of sustainable practices and used technology as an avenue for creativity and innovation.

MEQUON NATURE PRESERVE INC.

WEBSITE: mequonnaturepreserve.org

PROJECT: **Raised Rain Gardens at MNP's Education Center**

Mequon Nature Preserve, Inc. requested funds to purchase and install two raised rain gardens (manufactured by StormGUARDen™) and educational signage to be placed at two entrances to MNP's PieperPower Education Center (PPEC). The raised rain gardens will capture and filter rainwater from the PPEC, reduce stormwater discharge into the Milwaukee River watershed, and expose thousands of annual visitors to a replicable model of green infrastructure that positively affects Lake Michigan.

OZAUKEE WASHINGTON LAND TRUST

WEBSITE: owlt.org

PROJECT: **Mixed Hardwood Forest Tree Planting**

Through this project, Ozaukee Washington Land Trust (OWLT) increased tree species diversity and critical mass in the mixed hardwood forest area of Forest Beach Migratory Preserve (FBMP), located just north of Port Washington. Over the past 10 years, OWLT has advanced the conservation of this unique open space along Lake Michigan, converting a golf course into a 120 acre publicly accessible nature preserve that hosts a "patchwork quilt" of wildlife-supporting habitats. Planting of new trees will enhance water quality, improve tree species diversity, create essential bird and pollinator habitat along the Lake Michigan flyway, and help mitigate spread of invasive plant species.

OZAUKEE WASHINGTON LAND TRUST

WEBSITE: treasuresofoz.org

PROJECT: **Treasures of Oz 2019 Eco-Tour**

The Treasures of Oz Eco-Tour is an annual, one-day, free and open to the public education event to learn about OWLT's parks and preserves. Six preserves and park sites were featured in 2019. Each site offered an opportunity to learn about water and habitat resources, where funding for these areas comes from, and much more. This year, an artist-in-residence program and art installation(s) were featured, which was planned to attract more people.

The Trust hopes that participating in the Eco-Tour increases people's involvement in protecting Ozaukee and Washington Counties' land and water resources and helps them understand the importance of supporting public funding for the environment.

SCHLITZ AUDUBON NATURE CENTER

WEBSITE: schlitzaudubon.org

PROJECT: **Rain Garden Improvement Project**

The Rain Garden Improvement Project will improve approximately 11,200 sq. ft. of rain garden and associated habitats on the highly visible southeast corner of Schlitz Audubon's Education Center, where rainwater runoff is captured from 4,100 sq. ft. of the Center's roof. We will increase the 5,696 sq. ft. rain garden's capacity by excavating and regrading a core area of 2,500 sq. ft., removing invasive cattails, buckthorn, and other undesirable species, and by reducing bare ground in the entire rain garden by planting native plants. Invasive species removal and native planting will also occur within the 5,485 sq. ft. of various habitats that surround the rain garden.

SOUTH SHORE YACHT CLUB

WEBSITE: ssyc.org

PROJECT: **Capture of Vessel Wash Wastewater, Oil & Sediment**

South Shore Yacht Club (SSYC) is located on Lake Michigan in Milwaukee and stores member boats each winter. When each boat is removed from the water, the underside of the boat is power-washed to remove algae, weeds, mussels, heavy metals, oil and grease. SSYC devised a solution to capture and filter the wash water before returning it to the lake by installing a 30-gallon sewage sump near the seawall. A macerator-type sewage pump was placed into the sump and pumps contaminated wash water into a dewatering (filter) bag. The dewatering bag is used as the filter to remove all contaminants. Approximately 4,000 gallons of heavily polluted water will be processed through this system annually and sent to a landfill instead of being directly washed back into Lake Michigan.

ST. MICHAEL CATHOLIC CHURCH

WEBSITE: stmichaelsmke.com

PROJECT: **StormGUARDen™ Installations**

With funding from Sweet Water, St Michael's purchased two StormGUARDen™ systems, created two in-ground rain gardens, and disconnected two downspouts from the Milwaukee



combined sewer system. The in-ground rain gardens capture water from the overflow drains of the StormGUARDen™ boxes. The parish project models good stewardship of water resources, and also alleviates water leakage problems in the lower levels of the church's buildings. One StormGUARDen box will be planted by a few of the elderly Southeast Asian parishioners who live in the parish house to do stand-up gardening of herbs and vegetables used in their cultural cuisine. The other box is used for more decorative plantings.

STARMS EARLY CHILDHOOD CENTER

PROJECT: **Outdoor Classroom Cistern**

Starms Early Childhood Center Schoolyard Redevelopment Plan focused on providing the students, school, and community a space to replace imperviousness with beautiful, nature-inspired landscapes that increase urban biodiversity, educate, and inspire. Redeveloping the existing outdated schoolyard also provides a multitude of potential Science, Technology, Engineering, Arts, and Mathematics (STEAM) curriculum connections. A new shelter was built as the outdoor classroom and a 1,000-gallon cistern installed that captures rainwater from the shelter roof. The stored rainwater is used for watering the nearby raised-bed gardens.

ULAO CREEK PARTNERSHIP

WEBSITE: ulaocreek.org

PROJECT: **Stormwater Trees for Ulaocreek Habitat Restoration Site**

The Ulaocreek Partnership, in partnership with the Ozaukee County Planning and Parks Department, purchased and planted native "stormwater" trees with the assistance of volunteers and conservation corps teams at the Ulaocreek Habitat Restoration Site. Adding a diverse assortment of native trees will preserve and restore the local ecology and protect significant restoration investments made recently on Ulaocreek. Tree planting efforts will support ongoing restoration projects to replace invasive vegetation, filter and sequester stormwater, provide shading along waterways/wetlands for fish and aquatic life habitat, mitigate impacts of Emerald Ash Borer, encourage organizational partnerships, and support volunteer activities.





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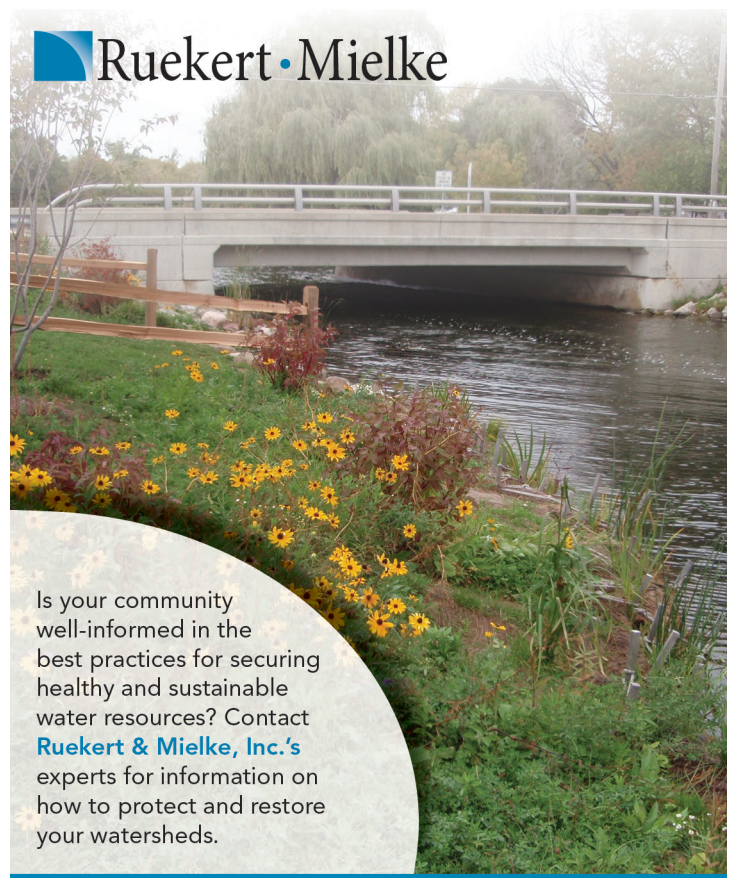
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A Healthy Soils and Clean Farms

QUADRANT A

MODERATOR: **Andrew Holschbach**, Ozaukee County

Rainfall Simulator Demonstration/Healthy Soils Discussion

PRESENTERS: **Justin Morris** and **Katie Ziemer**, USDA-NRCS

Take a step outside for a detailed demonstration of soil health concepts.

Milwaukee River Watershed Clean Farm Families

PRESENTER: **Jim Melichar**, President

The Milwaukee River Watershed Clean Farm Families, working as part of the Milwaukee River Watershed Conservation Partnership, is providing a platform for producers and landowners to share ideas, concerns, priorities, and lessons learned about agricultural conservation efforts within the Milwaukee River Watershed.

Ozaukee County Demonstration Farm Network

PRESENTER: **Matt Winker**, Demo Farmer

The Ozaukee County Demonstration Farm Network (“Ozaukee Demo Farms”) is a Great Lakes Restoration Initiative project designed to showcase and demonstrate leading-edge conservation practices that improve Great Lakes water quality by reducing phosphorus from entering Lake Michigan through Sauk Creek, Sucker Creek & the Milwaukee River.

NOTES

B Inspiring Communities with Public Space Initiatives

QUADRANT B

MODERATOR: **Nancy Frank**, UWM School of Architecture and Urban Planning

Serve the Community, Inspire the World: Chicago's South Lakefront Framework Plan

PRESENTERS: **Gregg Calpino and Valerie Berstene, Smith Group**
Heather Gleason, Chicago Park District

The South Lakefront Framework Plan sets a community-based course for the evolution of Chicago's historic Jackson Park and South Shore Cultural Center. Community concerns of gentrification and displacement charged this plan to deliver a vision and tools for a larger, more connected park. Centered around a water-forward strategy, the plan repositions the park's lagoons and lakes as central, usable and unifying elements while bolstering their role as a sustainable, performance landscape.

Port Milwaukee Green Visioning

PRESENTER: **Amy Post**, Symbiont

Our region's aqueous gateway, Port Milwaukee's Jones Island operations include massive docks, cranes, railways, salt piles, and the Lake Express ferry. Harbor District Inc. (HDI)'s innovative planning illustrates how, with green infrastructure and other creative storm water solutions, Port Milwaukee can exceed water quality standards and inspire the public. Using Wisconsin Coastal Management Program Grant funding, HDI worked with Symbiont to develop conceptual stormwater designs for three Jones Island sites.

NOTES

C Mapping as a Tool for Folks and Fish

QUADRANT C

MODERATOR: **Mandie Zopp**, Riveredge Nature Center

Using Surface Water Flow Path Modeling for Community Engagement & Innovative GI Design

PRESENTERS: **Juli Beth Hinds**, Birchline Planning
Andy Pederson, Village of Bayside
Patrick Lach, Hey & Associates
Jake Fincher, Sweet Water

In partnership with Sweet Water and its consultants, the Village of Bayside has used surface water flow path mapping—derived from ArcHydro(R) and LiDAR—as a critical tool in public communication, neighborhood engagement, and green infrastructure planning. Bayside has now used the flow path map to support design and siting of lower-cost green infrastructure solutions on public and private property, and to support outreach and assistance to property owners with backyard and ditch flooding.

Mapping Lake Sturgeon Habitat in the Milwaukee River Using Side-Scan Sonar

PRESENTER: **Ryan Miller**, Ozaukee County

Since 2006, approximately 11,000 Lake Sturgeon have been released into the Milwaukee River and are expected to begin returning within the next few years to spawn. However, it is unknown if there is sufficient accessible spawning habitat. Ozaukee County is currently using side-scan sonar as a low-cost method to evaluate over 14 miles of the Milwaukee River. The generated habitat maps will provide the information needed to consider potential Lake Sturgeon habitat restoration projects.

NOTES

D WDNR Updates

QUADRANT D

MODERATOR: **Linda Reid**, Water365, LLC

Annual Report Summary of Southeast Region MS4s

PRESENTER: **Suzy Limberg**, WDNR

This presentation will provide an analysis of southeast region's MS4's 2018 annual report data, discussing common themes, and what it means for permittees moving forward in annual reporting and the MS4 program as a whole. A brief overview of the reissued MS4 general permit and upcoming compliance dates will also be presented.

Q&As for the Milwaukee River Basin TMDL

PRESENTERS: **Samantha Katt**, **Mark Riedel**, and **Jake Zimmerman**, WDNR

Interested in an update on what's happening related to the Milwaukee River Basin TMDL? Staff from the Wisconsin Department of Natural Resources will give brief presentations/overviews on regulation and water quality in southeastern Wisconsin, the Milwaukee River Basin bacteria TMDL, and TMDL implementation experiences from the Rock River.

NOTES

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A

Innovative Agricultural Approaches

QUADRANT A

MODERATOR: **Dennis M Grzezinski**, Law Office of Dennis M Grzezinski

Utilizing GIS-based mobile tools to support conservation planning and implementation for Adaptive Management

PRESENTER: **Megan Bender**, Jacobs

Mobile tools assist with organizing and deploying field teams to collect information and facilitate communication between program team members. NEW Water's Adaptive Management Plan in the Ashwaubenon and Dutchman Creeks watersheds will utilize ArcGIS Collector, automated email reports, and web-based dashboards to identify, plan, implement, and maintain agricultural best management practices to reduce phosphorus and suspended solids delivery to waterways.

Water Stewardship at Clear Water Farms

PRESENTER: **Bill Davis**, River Alliance of Wisconsin

The Clear Water Farms program guides farms and processing facilities through a rigorous certification of their on-site and supply chain water management using the Alliance for Water Stewardship International Water Stewardship Standard—the world's only comprehensive industry water use standard. Meeting the standard can reduce a farm's costs, resource and regulatory risks, and demonstrates commitment to consumers who value sustainable food production.

Clear Water Farms produced the first certification of a farm in North America in the fall of 2019, and is currently scaling the project with the aim of including more than 10 farms within a watershed. Learn more about the Miltrim Farms success story and other program details in this session.

NOTES

B Multi-Stakeholder Habitat Restoration Projects

QUADRANT B

MODERATOR: **Beth Wentzel**, Ozaukee County

Streambank Stabilization and Restoration in an Urban Watershed

PRESENTER: **Terrence Tavera**, Ruekert & Mielke

Decades worth of urbanized runoff had turned a once wild natural creek to a system that experienced severe flooding, erosion and habitat degradation. The City of Greenfield recently completed their latest phase of a multi-year plan to restore Wildcat Creek. Public/private partnerships needed to overcome project hurdles will be described along with funding sources utilized. A restored concrete lined channel on Beaver Creek in the Village of Brown Deer will also be highlighted.

Little Menomonee River Corridor Ecosystem Restoration

PRESENTER: **Andrew Struck**, Ozaukee County

The Ozaukee County Planning and Parks Department is implementing a large scale habitat restoration project on the Little Menomonee River (LMR) in the City of Mequon, Ozaukee County. Project goals for the LMR include: (1) improve water quality and document water quality impacts; (2) improve geomorphic function; (3) provide high quality, diverse habitat; and (4) demonstrate successful use of a GIS Tool.

NOTES

C Environmental Change and Engaged Communities

QUADRANT C

MODERATOR: **Mandie Zopp**, Riveredge Nature Center

Engaging Challenged Communities

PRESENTERS: **Delores Green**, Renew Environmental Public Health Advocates
Dr. Jeanne Hewitt, UW-Milwaukee Children's Environmental Health Science Center

Engaging socio-economically challenged communities is vital to real environmental and social change. Why is it that so many communities of color are not engaged? This is a question we must all address.

Greenspace as a Community Asset: The Kinnickinnic River Plaza

PRESENTERS: **Kelly Moore Brands** and **Stephanie Mercado**, Sixteenth Street Community Health Centers

The revitalization of the Kinnickinnic River directly affects residents in Milwaukee's Kinnickinnic River Corridor Neighborhood. The removal of houses to make way for the river's new widened floodplain left grassy lots and dead-end alleys and streets that brought suspicious activity. Sixteenth Street Community Health Centers and its many partners used this as an opportunity to engage with neighbors to create a useful, educational, fun, and unique greenspace adjacent to a popular county park.

NOTES

D Creating Community-Based Stormwater Projects

QUADRANT D

MODERATOR: **Patricia Gerber**, UWM Student and Sweet Water Volunteer

Environmental Justice In Action: Connecting Neighbors and Managing Stormwater Where It Falls

PRESENTERS: **Pamela Ritger** and **Ethan Taxman**, Clean Wisconsin
Yvonne McCaskill, Century City Triangle Neighborhood Association

The Milwaukee Metropolitan Sewerage District (MMSD) partners with Clean Wisconsin and various neighborhood organizations to educate and encourage residents to manage stormwater where it falls using green infrastructure (GI). Results include a reduced risk of flooding, basement back-ups and combined sewer overflows, while providing environmental, social and economic benefits to underserved communities.

Growing Small Green (Infrastructure) Dreams into a Big Reality at Alice's Garden

PRESENTER: **Jane Pederson**, GZA
Margaret Swedish, Alice's Garden

Alice's Garden sought to create a sustainable irrigation system for their community garden. Working for and with local non-profits, GZA designed a solar-powered, rainwater harvesting system and helped construct it alongside volunteers to meet this need. The system uses stormwater runoff, diverted from the adjacent schoolyard, to irrigate edible crops. A graduate student conducted a water quality risk assessment to affirm the treatment system would sufficiently mitigate human contact with pollutants common in urban stormwater runoff.

NOTES

A Moving Forward to Prioritize Restoration of the Milwaukee Estuary Area of Concern

QUADRANT A

MODERATOR: **Cheryl Nenn**, Milwaukee Riverkeeper

Cheryl Nenn, of Milwaukee Riverkeeper and also the Chair of the Milwaukee Blue Crew, will moderate the panel as well as discuss a brief history of the Milwaukee River Estuary Area of Concern and efforts to clean up legacy contamination from our waterways that are impacting the ability of our community to use them for swimming, fishing, and other uses such as commercial navigation.

Addressing fish and wildlife habitat and population impairments

PRESENTER: **Brennan Dow**, WDNR

Brennan Dow from WDNR will discuss projects that are underway and planned to address the lack of fish and wildlife habitat in the Milwaukee River Estuary due to historic modifications of our waterways. Brennan will also discuss proposed projects to enhance populations of fish and other wildlife in the Milwaukee Estuary Area of Concern, as well as other efforts to ensure that all work in the Area of Concern meets scientifically derived and community supported targets. The panel will also discuss other ongoing and proposed work to address beach safety issues, and to ensure cleaner water and a healthier community.

Progress and future plans for addressing contaminated sediments in Milwaukee's waterways

PRESENTER: **Dave Misky**, City of Milwaukee

Dave Misky from the City of Milwaukee will talk about planned efforts to dredge contaminated sediments from several sections of Milwaukee's Rivers in the next 5 years, including the lower Milwaukee River, lower Menomonee River, and Kinnickinnic River turning basin, and why these projects are important to the City of Milwaukee. Dave will also discuss the preferred option for dealing with disposal of dredged sediments to maximize water quality and community benefits.

NOTES

B Institutions, the Impact of Water, and Their Visions for the Future

QUADRANT B

MODERATOR: **Anuja Patil**, GRAEF

STEAM - Art Bringing Life to Water Across the Curriculum

PRESENTERS: **Christine Fleming**, The Haggerty Museum of Art
Dr. Jeanne Hewitt, UW-Milwaukee Children's Environmental Health Science Center

Where are the arts in our Milwaukee water science community? Learn how an art museum brought life to a water curriculum by allowing art to act as a catalyst for ecoliteracy and inspiration.

MMSD 2050 Facilities Plan Update

PRESENTER: **Karen Sands**, MMSD

Attend this session to learn how MMSD is planning for the future of our region. The 2050 Facilities Plan addresses future visions and timelines:

- How the region will reach the MMSD 2035 Vision
- What is necessary for MMSD to accomplish regulatory outcomes for 2040
- How MMSD will achieve its mission and more when the region is fully built out

NOTES

C Improving the Performance of Stormwater Green Infrastructure

QUADRANT C

MODERATOR: **Eric Bunke**, Badger Meter

Going Green Saves Green - Reducing Operating Costs and Increasing Profits With Sustainable Designs

PRESENTER: **John Ferris**, GZA

Too often the decision for installing green infrastructure emphasizes holistic social and environmental benefits of the Triple Bottom Line. However, an even stronger case may be made for the economic business case for going green. Several examples and case studies will be presented to illustrate how green decisions can improve the financial longevity of the business.

GI Maintenance Analysis and Lessons Learned

PRESENTERS: **Lisa Sasso**, MMSD

Alyssa Schmitt, Stormwater Solutions Engineering

While more and more municipalities seek to scale up green infrastructure (GI) in their communities to address their storm sewer permit requirements as well as their flood protection and water quality improvement goals, they're concerned about the associated long-term operations and maintenance costs and staffing issues that come with GI solutions. The Milwaukee Metropolitan Sewerage District (District) contracted with Stormwater Solutions Engineering, LLC (SSE) to develop GI maintenance standards for bioswales, green roofs, rain gardens, porous pavement, constructed wetlands, stormwater trees, cisterns, native landscaping and soil amendments.

The SSE team was also tasked with interviewing DPW and engineering staff at 21 municipalities in the District's service area to better understand their GI maintenance needs, lessons learned, and synthesizing the information to make recommendations for improving process efficiencies and GI effectiveness in future GI projects.

The project is seen as an opportunity to enhance GI installations and secure better long-term O&M plans. In this session, we'll share a brief overview of the GI maintenance standards that were developed as well as the municipal lessons learned.

NOTES

D Stormwater Runoff Management Design

QUADRANT D

MODERATOR: **Pete Hill**, Great Lakes Opportunities

Regenerative Stormwater Conveyance at CTH KR Roadway Expansion: Economics and Environment Can Both Win

PRESENTERS: **Adrienne Cizek**, Stormwater Solutions Engineering
Dave Giordano, Root Pike WIN

Wisconsin Department of Transportation (WisDOT) is expanding County Highway KR and must manage additional stormwater flows associated with the added pavement, what would conventionally be managed in a stormwater pond adjacent to the Pike River. Stakeholder groups, including Kenosha County, Root-Pike Watershed Initiative Network (RPWIN), Wisconsin Department of Natural Resources (WDNR), and WisDOT agreed that Regenerative Stormwater Conveyance was an alternative innovative solution which improved the ecology of the Pike River, potential recreational and development uses, water quality improvements, and overall economics to manage the additional runoff.

Juneau Park Lagoon: Treating Stormwater Runoff Using Nature

PRESENTER: **Neal O'Reilly**, UW-Milwaukee

Juneau Park Lagoon has been in the news due to the discovery of toxic algae blooms. To reduce the frequency of these blooms Milwaukee County Environmental Services has been exploring options to restore the lagoon. One effort was to partner with the UWM's Conservation and Environmental Science program to explore options. This talk will provide an overview of an effort to explore the use of treatment wetlands to reduce nutrient inputs and improve wildlife habitat.

NOTES



Schedule Of Events

7:30 AM | REGISTRATION

8:00 AM | INTRODUCTORY SESSION

9:00 AM | REFRESHMENTS/NETWORKING

9:15 AM | **GREATER MILWAUKEE WATERSHEDS – LEVERAGING EXPERIENCE FOR FUTURE SUCCESS**

10:30 AM | **GREEN INFRASTRUCTURE SPOTLIGHT**

11:00 AM | REFRESHMENTS/BUFFET LUNCH, *available in East and West Corridors*

11:15 AM | LUNCHEON PROGRAM

12:15 PM | INTERCESSION, *Rotunda, Corvias Networking Room & 2nd Floor Galleria*

12:45 PM | **BREAKOUT SESSION I**

HEALTHY SOILS AND CLEAN FARMS, *Quadrant A*
INSPIRING COMMUNITIES WITH PUBLIC SPACE INITIATIVES, *Quadrant B*
MAPPING AS A TOOL FOR FOLKS AND FISH, *Quadrant C*
WDNR UPDATES, *Quadrant D*

2:30 PM | **BREAKOUT SESSION II**

INNOVATIVE AGRICULTURAL APPROACHES, *Quadrant A*
MULTI-STAKEHOLDER HABITAT RESTORATION PROJECTS, *Quadrant B*
ENVIRONMENTAL CHANGE AND ENGAGED COMMUNITIES, *Quadrant C*
CREATING COMMUNITY-BASED STORMWATER PROJECTS, *Quadrant D*

4:15 PM | **BREAKOUT SESSION III**

MOVING FORWARD TO PRIORITIZE RESTORATION OF THE MILWAUKEE ESTUARY AREA OF CONCERN, *Quadrant A*
INSTITUTIONS, THE IMPACT OF WATER, AND THEIR VISIONS FOR THE FUTURE, *Quadrant B*
IMPROVING THE PERFORMANCE OF STORMWATER GREEN INFRASTRUCTURE, *Quadrant C*
STORMWATER RUNOFF MANAGEMENT DESIGN, *Quadrant D*

5:15 PM | WATERSHED CHAMPION AWARDS RECEPTION, *2nd Floor Galleria*