REIMAGINING WATER:
Linking Sustainable Urban Water Systems in the Great Lakes Basin

July 25-27, 2019

WORKSHOP GOALS

(1) To present needs and opportunities for research and development to improve Great Lakes Basin urban waterfront environments though the integration of green infrastructure, living shoreline, and aquatic habitat restoration best practices.
(2) To create research and practice networks around the goal of integrating the emerging sustainable urban systems of the Energy/ Water/ Food nexus, to address barriers to innovation and extend best practices and multidisciplinary initiatives for Great Lakes Basin shoreline communities.

Conference Coordinators

James Wasley, Professor, School of Architecture and Urban Planning, Co-Director, Institute for Ecological Design, University of Wisconsin- Milwaukee.

Carol Miller, Professor, Civil and Environmental Engineering, Director, Healthy Urban Waters, Wayne State University

Conference Sponsors

National Science Foundation, Milwaukee Metropolitan Sewerage District, City of Milwaukee Environmental Collaboration Office, Fund for Lake Michigan, Wisconsin Coastal Management Program, SmithGroup

Location

All meetings will be held at the UWM School of Freshwater Sciences, 600 E Greenfield Avenue, Milwaukee, WI 53204.

About workshop process

All attending are participants in the workshop.
CASE STUDIES: All participants are invited to submit short case studies to describe actual projects, challenges and barriers in applying green infrastructure projects to urban coast environments, and how the challenges were met.
ANNOTATED BIBLIOGRAPHY: An annotated bibliography of selected references related to Great Lakes research, sustainability, climate action agendas, and green infrastructure references will be distributed to workshop attendees before the workshop. The bibliography will be expanded following the workshop to include references recommended by speakers and workshop participants.
PRESENTATIONS: will provide examples that address the workshop goals and, in turn, suggest avenues for further research, development, and innovation.
BREAKOUT GROUPS: Two rounds of breakout group discussions, each with a facilitator and recorder, give all participants opportunities to contribute to the discussions, to be summarized and recorded as part of the Workshop Proceedings.
NETWORKING: All participants will be listed in a printed "attendee" list with e-mails, for contacts and referrals. On Friday evening, a joint dinner will be scheduled (optional) for those who want to continue in one of Milwaukee's famous restaurants (and beer halls).
WORKSHOP PROCEEDINGS: Workshop presentations, break-out group notes, key findings and recommendations will be completed after the workshop, as a record of proceedings and shared resource for next steps.

WORKSHOP SCHEDULE (preliminary)

Thursday, July 25 1:00pm-5:00pm *Pre-workshop Activities*

Arrivals	Vans from MKE International Airport to either the Saint Kate Arts Hotel or the School of Freshwater Sciences (SFS) will be available. For people driving and staying at the hotel, hotel parking is $28/night. Alternately, you can park at the SFS and take a van to the hotel.
1:00pm	Optional tour of Milwaukee as a Water-Centric City (Van will leave from the SFS and stop at the Saint Kate at 1:05pm)
4:00pm	Optional harbor tour on the UWM research vessel *Neeskay* (The boat will depart from the SFS. A van will leave from the hotel at 3:45pm to SFS.)

Thursday, July 25 5:00pm-8:00pm *Defining the Context: Challenges and opportunities*

5:00	Reception/ salmon boil at UWM School of Freshwater Sciences (A van will leave from the hotel at 4:45pm to SFS)
6:15	**Jim Wasley**, School of Architecture and Urban Planning, UWM **Carol Miller**, Dept. of Civil and Env. Engineering, Wayne State U. *Welcome, introductions, and a provisional workshop challenge*
6:30	**Val Klump**, Dean, School of Freshwater Sciences, UWM *Near shore water overview*
6:45	**Drew Gronewold**, School for Environment and Sustainability, U. Michigan *Lake level dynamics, climate change, and the challenges of waterfront design in Great Lakes cities.*
7:00	**Don Watson,** FAIA and **Michele Adams,** P.E. *Models of innovation to advance the state-of-art of sustainable urban systems*
7:30	Panel and audience *Defining the context for innovation: What are the distinctive commonalities of the Great Lakes context/ What are the contextual differences between Great Lakes waterfront cities?*
8:00	ADJOURN and vans to hotel

Friday, July 26 9:00am-4:00pm *Best practices*

	Breakfast not provided. There will be coffee and pastry at SFS
8:00-8:20am	Shuttles from hotel to School of Freshwater Sciences
	PART 1: *Focus Topic: Linking G.I. and Aquatic Habitat*
8:30	**Carol Miller**, Workshop co-chair *Reprise and speaker introductions*
8:40	**Patrick Lucey**, Senior Aquatic Ecologist, Aqua-Tex Scientific Consulting Ltd., Victoria B.C. *Proper ecological functioning conditions in five cases*
8:55	**Jason Strangland**, PLA, National Waterfront Practice Director, **Emily McKinnon**, PE, Principal and Ann Arbor Director of Operations, **Cassie Goodwin**, Principal, Civil Engineer, Smith Group *Ecology of urban waterfronts- case studies and emergent trends*

9:10	**Chris Glaisek**, Chief Planning and Design Officer, Waterfront Toronto *Waterfront Toronto's Port Lands Flood Protection project*
9:25	**Jim Wasley** *Compilation of Case Studies and a Problem Statement: Solving the problem of linking stormwater and aquatic habitat work.*
9:45	15 min. BREAK
10:00	Breakout groups - Round One (fluid topic tables by Case Study issues)
11:00	Breakout group reports [8 reports @ 5 min. each)
11:50	Session summary
12:00pm	LUNCH BREAK (box lunch provided)
12:50	**Guest speaker- David Rankin**, Great Lakes Protection Fund [10 min.]
	PART 2: *The Expanded Field: Sustainable Urban Systems Integration Through the Medium of Water*
1:15	**Charles Waldheim**, John E. Irving Professor of Landscape Architecture, Harvard Graduate School of Design *Urban design responses to water in four Great Lakes cities*
1:30	**Steve Apfelbaum**, Applied Ecological Services *Points of Friction: Examples of misalignment between regulation and reality*
1:45	**Sean Burkholder,** Assist. Professor. Landscape Architecture, School of Design, U. Penn. *Linking dredging and habitat creation in the Great Lakes Basin*
2:00	**Robert Zimmerman**, Zimmerman Environmental, Littleton, MA. *The Detroit Community Water and Energy Resource Center*
2:15	15 min. BREAK
2:30	Panel and audience *Focusing the workshop challenge: The leading questions to pursue*
2:45	Breakout groups Round Two (defined by leading questions)
3:45	Breakout group reports [4 reports @ 7 min. min. each)
4:15	Session summary: *What do you recommend as the most promising research and development initiatives to protect and sustain Lake Michigan waters and urban communities around this goal of Sustainable Urban Systems Integration?*
4:30	ADJOURN. Vans to Saint Kate available.
5:00	COCTAILS at the Rockwell Clocktower (verify). (Van or walk from SFS at 5:00pm
6:30	GROUP DINNER at Braise Restaurant, 1101 South 2nd street, next door to the Rockwell Clocktower. A Van will depart the hotel at 6:15pm if needed.

Saturday July 27 ***Building a Sustainable Urban Water Systems Research Network***

	Breakfast on your own. There will be coffee and pastry at SFS
8:00-8:30am	Shuttles from hotel to School of Freshwater Sciences
9:00	**Jim Wasley**, School of Architecture and Urban Planning, UWM *Reprise and speaker introductions*
9:05	**Margaret Noodin**, Electa Quinney Institute for American Indian Education, University of Wisconsin-Milwaukee *Resilience and Inclusion of Indigenous Coastal Great Lakes Communities*
9:20	**Carol Miller**, Director, Healthy Urban Waters, Wayne State U. *Building a Sustainable Urban Water Systems Research Network*
9:35	10 min. BREAK
9:45	Facilitated discussions, plenary and breakout *Next Steps to creating a Sustainable Urban Water Systems Research Network for the Great Lakes Basin.*
11:15am	Conference summary and awards
11:45am	ADJOURN
12:00pm	Informal lunch or vans to the airport