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***We extend a special thank-you to all of our conference
sponsors, contributors, and exhibitors!***

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Wisconsin Department of Natural Resources, Office of the Great Lakes
The Great Lakes Beach Association

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Conference Planning Committee

Victoria Harris, Conference Co-Chair – UW Sea Grant Institute (Retired), Green Bay, WI
John Masterson, Conference Co-Chair – Wisconsin Dept. of Natural Resources, Sheboygan, WI
Judy Beck – U.S. Environmental Protection Agency, Great Lakes National Program Office, Chicago, IL
Cheryl Bougie – Wisconsin Dept. of Natural Resources, Green Bay, WI
Todd Breiby – Wisconsin Coastal Management Program, Madison, WI
Mark Breederland – Michigan Sea Grant Program, Michigan State University, Traverse City, MI
Shannon Briggs – Michigan Dept. of Environmental Quality, Surface Water Quality Division, Lansing, MI
Tom Edge, Environment Canada, National Water Research Institute, Burlington, Ontario
Jim Kettler – The Lakeshore Natural Resources Partnership, Sturgeon Bay, WI
Greg Kleinheinz – UW-Oshkosh, Oshkosh, WI
Mike Molnar – Indiana Dept. of Natural Resources, Lake Michigan Coastal Program, Indianapolis, IN
Matt Preisser – Michigan Dept. of Environmental Quality, Office of the Great Lakes, Lansing, MI
Theresa Qualls – UW Sea Grant Institute, UW-Green Bay, Green Bay, WI
David Rockwell – Cooperative Institute for Limnology and Ecosystems Research, University of Michigan, Ann Arbor, MI
Diane Tecic – Illinois Dept. of Natural Resources, Coastal Management Program, Chicago, IL
Holly Wirick – U.S. Environmental Protection Agency V, Chicago, IL

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Mona Christensen, Registration Services – UW-Green Bay Outreach and Extension, Green Bay, WI
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Julia Noordyk, Outreach Specialist – UW Sea Grant Institute, Green Bay, WI
Kim Walz, Project Manager – Wisconsin Dept. of Natural Resources, Madison, WI

Conference Session Chairs

Developing, Implementing, and Communicating the Use of Predictive and Rapid Tools at Beaches

Meredith Nevers, Research Ecologist, U.S. Geological Survey, Great Lakes Science Center

David Rockwell, MS, MBA, Beach Water Quality Forecasting Coordinator, Center of Excellence for Great Lakes and Human Health, Cooperative Institute for Limnology and Ecosystems Research, University of Michigan

Beach Remediation and Monitoring Success Stories

Greg Kleinheinz, Ph.D., University of Wisconsin-Oshkosh

Julie Kinzelman, Ph.D., MT (ASCP), Research Scientist/Lab Director, City of Racine Health Department

Challenges for Beach Managers in 2013 and Beyond

Shannon Briggs, Ph.D., Surface Water Quality Division, Water Bureau, Michigan Depart. of Environmental Quality

Investigating and Managing the Physical and Hydrological Aspects of Beaches

Clare Robinson, Ph.D., Assistant Professor, Civil and Environmental Engineering, Western University

Identifying Sources and Managing Fecal Contamination

Michael Sadowsky, Ph.D., Distinguished McKnight Professor, Dept. of Soil, Water, and Climate; and BioTechnology Institute, University of Minnesota

Julie Kinzelman, Ph.D., MT (ASCP), Research Scientist/Lab Director, City of Racine Health Department

Progress on Lake Michigan Areas of Concern

John Perrecone, Area Of Concern Program, U.S. EPA, Great Lakes National Program Office

Contaminant Trends and Health Advice in Lake Michigan fish

Jacqueline Fisher, U.S. EPA, Great Lakes National Program Office

Elizabeth Murphy, U.S. EPA, Great Lakes National Program Office

Lake Michigan Monitoring and Coastal Assessment Programs

Lisa Fogarty, Supervisory Hydrologist, MI Water Science Center, U.S. Geological Survey

Charlie Peters, WI Water Science Center, U.S. Geological Survey (Retired)

It's Not Just a Document Anymore: Online Resources for Lakewide Action Management Planning

Jeff Edstrom, Environmental Consulting and Technology, Inc.

David Hart, Ph.D., University of Wisconsin Sea Grant Institute

Coastal Habitats and Lake Michigan Biodiversity

Matt Preisser, Lake Coordinator, Michigan Dept. of Environmental Quality, Office of the Great Lakes

Lake Michigan Fisheries

Dave Caroffino, Ph.D., Fisheries Biologist, Michigan Dept. of Natural Resources

Aquatic Invasive Species and the Lake Michigan Food Web

David "Bo" Bunnell, Ph.D., Research Fishery Biologist, U.S. Geological Survey, Western Basin Ecosystems Branch, Lake Michigan Section

Nuisance Algae and Nutrient Dynamics in the Nearshore Zone

Harvey Bootsma, Ph.D., School of Freshwater Sciences, University of Wisconsin-Milwaukee

Green Bay Hypoxia

Val Klump, Ph.D., Assoc. Dean of Research, School of Freshwater Sciences, University of Wisconsin-Milwaukee

Kevin Fermanich, Ph.D., Natural and Applied Sciences, University of Wisconsin-Green Bay

Lake Michigan Basin TMDLs and Phosphorus Management

John Masterson, Lake Michigan Program Coordinator, Wisconsin Dept. of Natural Resources

Learning to Live with Coastal Hazards

Kate Barrett, GIS Specialist, Wisconsin Dept. of Natural Resources, Office of Great Lakes

Gene R. Clark, PE, Coastal Engineering Specialist, UW Sea Grant Institute, Lake Superior NERR Building

Sustainable Coastal Communities

Nancy Williamson, Regional Watershed Coordinator, Illinois Dept. of Natural Resources

Julia Noordyk, University of Wisconsin Sea Grant Institute, UW-Green Bay

Harbors, Working Waterfronts and Recreation

Mark Breederland, Extension Educator, Michigan Sea Grant

Todd Parker, Lake Michigan LaMP Forum Facilitator, Delta Institute

Poster Session

Theresa Qualls, University of Wisconsin Sea Grant Institute, UW-Green Bay

Plenary Speakers

Steve Galarneau

Wisconsin Department of Natural Resources, Director of the Office of the Great Lakes

Steve is the Director of the Office of the Great Lakes for the Wisconsin Department of Natural Resources (WDNR). His responsibilities include implementing the Great Lakes Restoration Initiative and Great Lakes policy in Wisconsin. Steve has been appointed one of the commissioners for the Great Lakes Commission, serves as a Council Member for the Wisconsin Coastal Management Program and represents WDNR

as a board member for the Fund for Lake Michigan. Steve is co-chair of the Great Lakes Dredging Team and is responsible for sediment management in Wisconsin. He has also been appointed one of Wisconsin's representatives for the National Ocean Council Regional Planning Body, and is a member of the Great Lakes Advisory Board. Steve graduated from the University of Wisconsin - Milwaukee in 1985 with a bachelor's degree in biological sciences. In 1989, he earned a master's degree from the UW-Milwaukee Water Institute in biological sciences. His master's thesis focused on primary production in Lake Michigan. Steve has worked with WDNR for 19 years and has spent over 26 years working on water quality, sediment quality and Great Lakes issues.



Adam Payne

Sheboygan County Administrator

Adam Payne is the Sheboygan County Administrator, and began his duties in January 1999. As the Chief Administrative Officer of Sheboygan County, Adam coordinates and directs the administrative and management functions of the County's 19 Departments, comprised of nearly 850 employees, 206 programs and an annual budget of \$127 million. Adam has a Bachelor of Arts and a Master's Degree from UW-Madison. Prior to accepting his present position, Adam worked for the State Department of Agriculture, Trade and Consumer Protection, and was the Executive Director of the Wisconsin Land and Water Conservation Association. Adam is an active member of a number of conservation, sportsman and civic organizations.



Thomas Edge
President, Great Lake Beach Association

Tom Edge serves as the President of the Great Lakes Beach Association. This Association provides an information sharing forum for over 1000 individuals working together to improve recreational water quality and beaches around the Great Lakes. Tom also works as a Study Leader at Environment Canada's National Water Research Institute in Burlington, Ontario, and he has an appointment in the Biology Department at McMaster University in Hamilton, Ontario. Tom has a Ph.D. in environmental microbiology and conducts waterborne pathogen and microbial source tracking research around the Great Lakes. He has been conducting water quality research at Lake Ontario beaches for over ten years. Tom has served as a scientific advisor for diverse groups including International Joint Commission Working Groups, and the Health Canada Committee that recently revised Canada's Recreational Water Quality Guidelines.



Cathy Stepp
Secretary, Wisconsin Department of Natural Resources

Secretary Cathy Stepp served as Racine's State Senator from 2002 to 2006, but most of her professional experience has been in the private sector. As a former homebuilder, she became aware of Wisconsin's regulatory climate and how it affected small business owners. In 1998, Governor-Tommy Thompson asked her to bring this perspective to the Natural Resources Board, and she served on the Board for three years. That experience led her to run for the Wisconsin State Legislature where she was chairman of the Senate Job Creation Committee and co-chair of the Environment and Natural Resources Committee. Stepp notes her administration is concentrating on improving DNR's customer relations and streamlining and simplifying permitting to accomplish Gov. Scott Walker's goals to create jobs in Wisconsin. She believes job creation and environmental protection are mutually supportive.



Chris Korleski

**Director, U.S. EPA Great Lakes National Program
Office (GLNPO)**



Chris Korleski is director of the U.S. EPA Great Lakes National Program Office (GLNPO). GLNPO coordinates U.S. efforts in implementing the goals and objectives of the Canadian-U.S. Great Lakes Water Quality Agreement, working under the strategic framework of the Great Lakes Restoration Initiative. Under his direction, GLNPO monitors lake ecosystem indicators, manages and provides public access to Great Lakes data, helps communities address contaminated sediment in their harbors, supports local protection and restoration of important habitats, and promotes pollution prevention. Before coming to GLNPO, Chris was Director of the Ohio Environmental Protection Agency. He also served as counsel to Honda of America Mfg. Inc. and was an assistant attorney general in the Ohio Attorney General's Environmental Enforcement Section. Korleski earned a bachelor's degree in agronomy from The Ohio State University College of Agriculture, a master's degree in agronomy from the University of Nebraska, and a law degree from The Ohio State University.

Judy Beck

Lake Michigan Coordinator, U.S. EPA, GLNPO



Judy Beck has managed the United States Environmental Protection Agency Lake Michigan collaborative efforts since October 1995. In this capacity she chairs the multi-agency lakewide action and management process called for in the Great Lakes Water Quality Agreement signed by the United States and Canada. Previous to this position she was the State Relations Manager for the U.S. EPA Regional Administrator and worked in the Superfund Program. Judy also served as an elected Commissioner of the Glenview Park District for 32 years and as a president of the Illinois Association of Park Districts. She now has a park named in her honor.

Keynote Speakers

Thomas Pleger
Dean and Campus Executive Officer, UW
Baraboo/Sauk County

Dr. Thomas Pleger has served as Campus Executive Officer and Dean at the University of Wisconsin-Baraboo/Sauk County since 2006. In that role, he oversees all operations of the campus. Dr. Pleger has previously held positions at UW-Madison, UW-La Crosse, UW-Marquette, UW-Fox Valley, and Lawrence University. He received a Bachelor's degree in Political Science, with honors, from UW-La Crosse and is an alumnus of the Wisconsin in Scotland program. He earned his M.A. in Anthropology and his Ph.D. in Anthropology/Archaeology, both from the UW-Madison. His Ph.D. and subsequent research has focused on the archaeology of the Western Great Lakes and has resulted in publications in regional and local archaeological journals. Pleger is a recipient of the Wisconsin Archaeological Society's Lapham Research Medal, and is a speaker for the Wisconsin Humanities Council Speakers Bureau. He is currently a council member of the Wisconsin Academy of Sciences, Arts, and Letters. He has been a regular guest on Wisconsin Public Radio concerning topics on archaeology and on topics concerning public higher education in Wisconsin.



John Rogner
Coordinator, Upper Midwest and Great Lakes
Landscape Conservation Cooperative (LCC)

John Rogner leads the Upper Midwest and Great Lakes LCC as Coordinator. Established in 2010, the LCC is focused on a diverse range of fish, wildlife and other natural resources that transcend state and international borders, including the Great Lakes. Rogner works with LCC and science coordinators from across the country to grow conservation partnerships established by the LCC network, and connect cutting-edge scientific research with on-the-ground natural resources management. Rogner was appointed in July 2009 as assistant director of the Illinois Department of Natural Resources. Prior to this, he led the U.S. Fish and Wildlife Service's (USFWS) Chicago Ecological Services Field Office as field supervisor. During this time he also served as chair of Chicago Wilderness, a coalition of over 240 organizations dedicated to conserving the biodiversity of the Chicago region. Rogner has undergraduate and graduate degrees in biological sciences from Northern Illinois University. He received the distinction of professional wetland scientist through the Society of Wetland Scientists in 1995, in addition to multiple performance awards from both the U.S. Army Corps of Engineers and USFWS.



Presenter Guidelines

Guidelines for Oral Presentations

All presentations will be limited to 20 minutes. Your presentation should last no longer than 15 minutes, leaving the remaining 5 minutes for questions. You will not be able to extend your time if you have technical problems during your talk. A technical assistant will be on hand for equipment operation.

All presentations must be in PowerPoint format. Name your PowerPoint file with the last name of the first author and the day and time of the presentation (e.g., Smith_Thurs_1:20). You must load your PowerPoint file into your session's file folder on the desktop of the computer in your session room **PRIOR TO** the start of your session. There will be technical assistance available if you need help. Presenters may not use their own computers or run their presentations from a flash drive.

Session rooms will be open for uploading talks from:

- 12:30 - 2:30 PM and 5:00 - 6:30 PM on Tuesday, October 15th
- 7:30 - 9:00 AM Wednesday, October 16th
- 5:00 - 8:00 PM on Wednesday, October 16th
- 7:30 - 8:00 AM on Thursday, October 17th
- In addition, talks may be uploaded during lunch (only in Salons E/F or G) or scheduled breaks (all Salons).

You may preview your presentation in the Banquet Office near the registration desk or in your session room during breaks.

Guidelines for Poster Presentations

Presenters need to provide their own easels and poster board. A limited number of easels are available from the registration desk. There is a charge of \$10 for their use. Posters may be displayed all day Wednesday, October 16th and Thursday, October 17th in the Lakeside Terrace (Lake Michigan posters) and conference center entrance foyer (beach posters). Both areas will be used for coffee breaks and breakfasts.

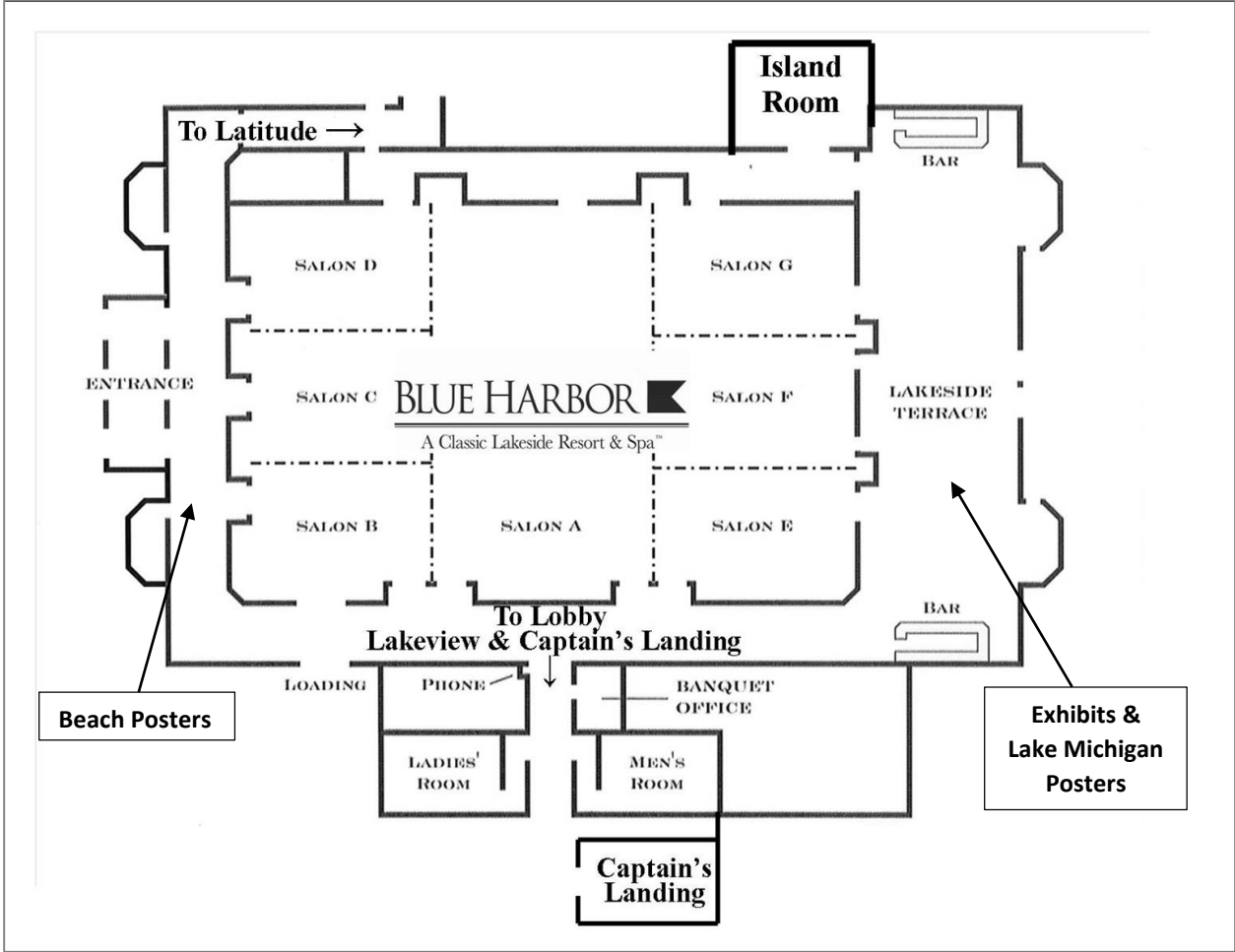
The poster reception and buffet will be held on Wednesday, October 16th, from 6:00 - 8:00 PM in the Lakeside Terrace and Salon G. Posters set up in the entrance foyer or hallways during the day should be moved into Salon G prior to the poster reception and then moved back after the reception ends. Salon G must be cleared Wednesday evening so it can be reset for sessions on Thursday. At least one of the authors should remain with their poster during the evening poster reception to answer questions.

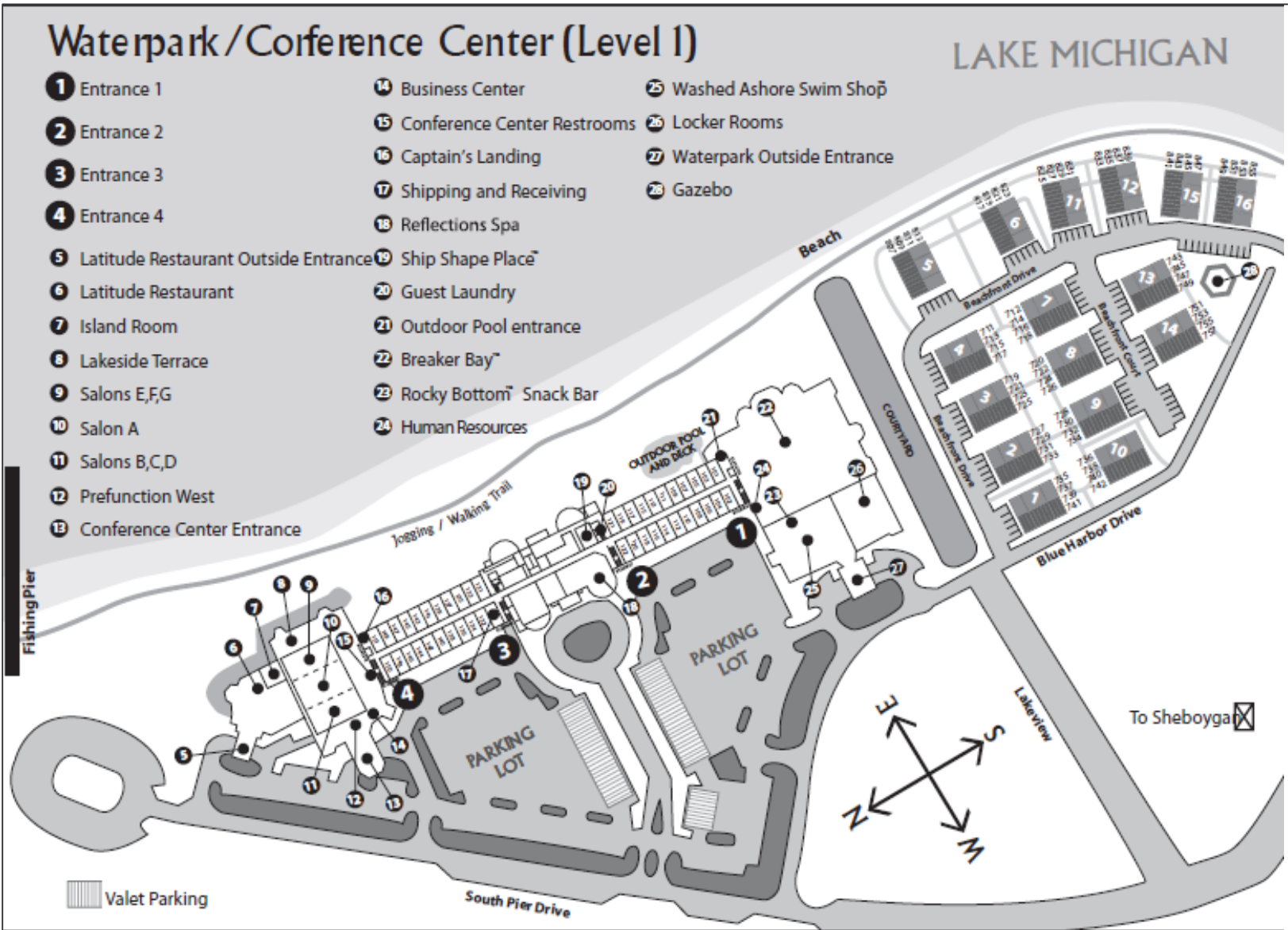
Presenters can set up their posters after 7:30 PM on Tuesday evening or any time after 7:30 AM on Wednesday. Posters may be displayed for the duration of the conference, but should be removed by 3:30 PM on Thursday. The Lakeside Terrace will also be used by exhibitors, who have preference, so please do not crowd them.

There will be a Lake Michigan Stakeholders meeting and separate poster session in the Lakeside Terrace from 6:00 - 7:30 PM on Tuesday evening. This is a separate event with a different set of posters so please do not set up your poster until after 7:30 PM.

Presentations and posters are the property of the presenters. Audio recordings, copying, videotaping, or photographing of a presentation or poster without the permission of the presenter is prohibited.

Blue Harbor Conference Center Map





Conference and Events Agenda, 2013

TUESDAY, OCTOBER 15TH

8:00 – 9:45 AM	Using Free Decision-Support Tools to Inform Beach Advisories and Mitigation – Adam Mednick NOTE: Workshop Cancelled Due to Shutdown of Government Websites	Salon E/F
10:00 AM – 1:00 PM	Utilizing Sanitary Survey Data to Inform Mitigation – Dr. Julie Kinzelman and Dr. Greg Kleinheinz	Salon E/F
	Lunch on Own	
12:00 – 6:00 PM	Lake Michigan Monitoring Coordination Council NEMO Workshop #2 – John Hummer	Salon B,C,D
12:30 – 2:00 PM	Registration, Blue Harbor Conference Center	Foyer near Salon A
4:30 – 8:30 PM		
2:00 – 5:00 PM	Field Tours <ul style="list-style-type: none"> • Sheboygan River Area of Concern (AOC) Restoration Project <i>Trip Leaders: Stacy Hron, Sheboygan River AOC Coordinator, WDNR and Deb Beyer, Natural Resources Educator, University of Wisconsin-Extension</i> • Kohler-Andrae State Park <i>Trip Leaders: Ed Muzik, Park Manager, Kohler-Andrae State Park, WDNR and Tina Wolbers, Aquatic Invasive Species Specialist, WDNR</i> • Centerville Creek Restoration Project <i>Trip Leaders: Jim Kettler, Executive Director, Lakeshore Natural Resource Partnership, and Russ Tooley, Water Quality Chair, Friends of Hika Bay</i> 	<i>Buses depart promptly from the Conference Center Entrance (Please pick up your registration packet with tour ticket before boarding the bus)</i>
4:00 – 6:00 PM	Exhibit Set-Up	Lakeside Terrace
	Dinner on Own	
5:00 – 7:00 PM	Lake Michigan League of Women Voters Meeting	Salon A
6:00 – 7:30 PM	Lake Michigan Stakeholders Poster Reception and Networking	Lakeside Terrace
6:00 – 7:00 PM	GLBA Board of Directors Dinner Meeting	Captain's Landing
6:30 – 9:00 PM	Lake Michigan LaMP Forum and Watershed Academy Dinner Meeting	Local Restaurant TBD
7:30 – 9:30 PM	Great Lakes Beach Association Meet and Greet (Cash Bar only)	Lakeside Terrace

WEDNESDAY, OCTOBER 16TH

7:30 AM	Poster and Exhibit Set-Up Begins – <i>Lakeside Terrace (Exhibits and Lake Michigan Posters), Entrance Foyer (Beach Related Posters)</i>
8:00 AM – 7:00 PM	Registration, Blue Harbor Conference Center, <i>Foyer near Salon A</i>
7:30 – 9:30 AM	Breakfast, <i>Lakeside Terrace</i>
7:30 – 8:30 AM	BHICT Breakfast Meeting, <i>Captain’s Landing</i>
9:00 – 11:10	Plenary Session in Grand Ballroom (Salons A, B, C, D)
9:00 – 9:05	Welcome and Acknowledgements – Steve Galarneau Director, Office of the Great Lakes, Wisconsin Dept. Natural Resources
9:05 – 9:20	Adam Payne, Sheboygan County Administrator
9:20 – 9:40	Thomas Edge, President, Great Lakes Beach Association (GLBA)
9:40 – 10:00	Cathy Stepp, Secretary, Wisconsin Dept. Natural Resources
10:00 – 10:30	Chris Korleski, Director, U.S. EPA Great Lakes National Program Office (GLNPO)
10:30 – 11:05	State of Lake Michigan Report – Judy Beck, Lake Michigan Coordinator, U.S. EPA, Great Lakes National Program Office
11:05 – 11:10	Announcements
11:10 – 11:30	Break for Lunch Set-Up
11:30 AM – 12:30 PM	Lunch in Grand Ballroom (Salons A, B, C, D) and Keynote: <i>Pre-European Culture and Archeology of the Western Great Lakes</i> , Thomas Pleger, Dean and Campus Executive Officer, UW Baraboo/Sauk County

WEDNESDAY, OCTOBER 16TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Beach Remediation and Monitoring Success Stories Moderators: Greg Kleinheinz and Julie Kinzelman	Session: Progress on Lake Michigan Areas of Concern Moderator: John Perrecone	Session: Lake Michigan Basin TMDLs and Phosphorus Management Moderator: John Masterson	Session: Sustainable Coastal Communities Moderators: Nancy Williamson and Julia Noordyk
Time	Presented by / Title	Presented by / Title	Presented by / Title	Presented by / Title
1:20 – 1:40 PM	Annette DeMaria <i>et al.</i> Chrysler Beach Stormwater Improvements: Securing Funding and Developing a Design to Reduce the Number of Beach Closures	John Perrecone Session Introduction CANCELLED	Phillip DePetro <i>et al.</i> One Size Fits All? Nearshore and Offshore Responses to Phosphorus Loadings in a Changing Lake Michigan	Kevin Shafer Greenseams®: A Sustainable Approach to Watershed Management
1:40 – 2:00	Mike Marek Beaches and Bluffs: A New Method for Slope Stabilization and Native Vegetation Restoration at Atwater Park in the Village of Shorewood, Wisconsin	Marc Tuchman The Great Lakes Legacy Program: Cleaning Up Contaminated Sediments in Lake Michigan AOCs	Lyman C. Welch Algae and Nutrient Control in the Great Lakes – The Need for Innovative Regulatory Approaches	Margaret A. Kohring Greenseams: Milwaukee River Flood Reduction Program
2:00 – 2:20	Sarah U’Rren Successful GLRI Beach Restoration Projects on Grand Traverse Bay	Steve Choy <i>et al.</i> Collaborative Efforts to Restore Ecosystems Surrounding Major Tributaries within Wisconsin’s Lake Michigan Basin, Wisconsin, USA	Jim Baumann Phosphorus Water Quality Standards Criteria: Development and Management Implications	Kate Morgan and Kate Sands Beyond the Audit – Tackling Barriers to Green Infrastructure

WEDNESDAY, OCTOBER 16TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
2:20 – 2:40 PM	<u>Adrian J. Koski</u> Unsafe for Swimming by Order of Health Officer: Optimizing Coastal Recreation at an Impaired Location	<u>Stephanie Swart et al.</u> Statewide Assessment of Beneficial Use Impairments in Michigan's Areas of Concern	<u>Dale Robertson and D. A. Saad</u> Recent Progress and Future Plans for SPARROW Watershed Modeling in the Lake Michigan Basin	<u>Jeffrey L. Mengler and N. Williamson</u> Chicago Wilderness Green Infrastructure Vision as a Tool to Protect Lake Michigan
2:40 – 3:00	<u>Frank Lupi et al.</u> Economic Values for Great Lakes Beach Recreation	<u>Heather Williams</u> Sediment Remedial Action: The Great Lakes Legacy Act and Great Lakes Restoration Initiative Dredging Projects at the Sheboygan River Area of Concern	<u>Jeff Martinka</u> Milwaukee's Four New Third Party TMDLs: New Approaches, New Challenges	<u>Corey Zetts</u> Milwaukee's Menomonee Valley: A Sustainable Redevelopment Story
3:00 – 3:20 PM	Break – Lakeside Terrace and Conference Center Entrance Foyer			
	Session: Investigating and Managing the Physical and Hydrological Aspects of Beaches Moderator: Clare Robinson			Session: Harbors, Working Waterfronts and Recreation Moderators: Todd Parker and Mark Breederland
3:20 – 3:40	<u>Peter G. Pittner</u> Methodology for Designing Beach Naturalization	<u>Stacy Hron et al.</u> Progress Towards Delisting the Sheboygan River: Area of Concern to Area in Recovery	<u>William Schleizer et al.</u> Reducing Phosphorus from Agriculture: Creating a Pay-for-Performance Program using Field- Specific Information in the West Branch of the Milwaukee River Watershed	<u>Jane Harrison</u> Economics Benefits of AOC Remediation & Restoration: Improved Recreation & Business Growth in the Great Lakes

WEDNESDAY, OCTOBER 16TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Investigating and Managing the Physical and Hydrological Aspects of Beaches (continued) Moderator: Clare Robinson	Session: Contaminant Trends and Health Advice in Lake Michigan Fish Moderators: Jacqueline Fisher and Elizabeth Murphy	Session: Lake Michigan Basin TMDLs and Phosphorus Management (continued) Moderator: John Masterson	Session: Harbors, Working Waterfronts and Recreation (continued) Moderators: Todd Parker and Mark Breederland
3:40 – 4:00 PM	<u>Eva Kramer et al.</u> Comparing Output from a Linked Hydrologic-Hydrodynamic-Particle Model with Real World Bacterial Concentrations	<u>John Wathen et al.</u> EPA’s Great Lakes Human Health Fish Tissue Study	<u>Titus Seilheimer et al.</u> Prioritizing Lake Michigan Watersheds for Protection and Restoration using Landscape Indicators and Forest Disturbance Metrics	<u>Jeff Prey, Angie Tornes, and Dave Lemberg</u> The Lake Michigan Water Trail Partnership
4:00 – 4:20	<u>Clare Robinson et al.</u> Characterization of the Groundwater, Nutrient and Microbial Conditions at Four Great Lakes Beaches	<u>Elizabeth Murphy et al.</u> Status and Trends of Legacy and Emerging Contaminants Identified through the Great Lakes Fish Monitoring and Surveillance Program	<u>Kevin Fermanich et al.</u> Event Driven Loads in the Fox River Basin: Science, Awareness, and Management	<u>Josh Gunn et al.</u> Great Lakes Clean Marina Network: Collaborative Efforts to Protect the Triple Bottom Line
	Session: Challenges for Beach Managers in 2013 and Beyond Moderator: Shannon Briggs			
4:20 – 4:40	<u>Bill Kramer</u> Data Mining to Identify Beaches with Advisories and Closures using the Modernized BEACON Webpage	<u>Russell Kreis et al.</u> Lake Michigan Lake Trout PCB Model Forecast Post Audit CANCELLED	<u>Jim Baumann</u> Wisconsin’s Nutrient Reduction Strategy and Lake Michigan	<u>Cathy McGlynn</u> Clean Boats Crew: Aquatic Invasive Species Education and Outreach in Illinois and Indiana

WEDNESDAY, OCTOBER 16TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
4:40 – 5:00 PM	<u>John Wathen</u> Implementing EPA’s 2012 Recreational Water Quality Criteria at Great Lakes Beaches	<u>Mike Ripley</u> Contaminants Declining in Tribal Commercial Fish Harvest	<u>Jim Baumann</u> Innovative Permit Compliance Options for Wisconsin Wastewater Treatment Facilities with Stringent Phosphorus Effluent Limits	<u>Paul J. Roebber</u> Why Lake Michigan Water Levels Have Dropped and What It Means for the Future
5:00 – 5:20	<u>Jamie Cross</u> Taking Action to Improve Beach Health through Education			<u>Domenico D'Alessandro</u> Creation of Fish Refugia in Existing Marinas
6:00 – 8:00 PM	Poster Paper Reception and Buffet – Lakeside Terrace and Salon G			
8:00 – 10:00 PM	Beach Bonfire – Lakeside Terrace Patio			

THURSDAY, OCTOBER 17TH

7:30 AM – 12:30 PM	Registration, Blue Harbor Conference Center, <i>Foyer near Salon A</i>			
7:30 – 9:20 AM	Breakfast, <i>Lakeside Terrace</i>			
	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Identifying Sources and Managing Fecal Contamination Moderators: Michael Sadowsky and Julie Kinzelman	Session: Lake Michigan Monitoring and Coastal Assessment Programs Moderator: Lisa Fogarty and Charlie Peters	Session: Nuisance Algae and Nutrient Dynamics in the Nearshore Zone Moderator: Harvey Bootsma	Session: Lake Michigan Fisheries Moderator: Dave Caroffino
Time	Presented by / Title	Presented by / Title	Presented by / Title	Presented by / Title
8:00 – 8:20 AM	<u>Phillip Jones and Michele C. Eddy</u> Using a Probabilistic TMDL Framework to Characterize <i>E. coli</i> Source and Transport Mechanisms for IL Lake Michigan Beaches	<u>John Hummer</u> Evaluating and Enhancing Lake Michigan Nearshore Monitoring	<u>James Waples and J. Val Klump</u> Horizontal Particle Transport in Nearshore Lake Michigan	<u>Mike Mushinski</u> Northern Pike Restoration in the Bay of Green Bay
8:20 – 8:40	<u>Amber M. Koskey et al.</u> Community Analysis of Gull Fecal Microbiome Reveals Dominance of <i>Catelliboccus marimammalium</i> in Relation to Culturable Enterococci	<u>Glenn Warren and Jeffrey C. May</u> Synoptic Nearshore Monitoring of Lake Michigan Using Towed Sensors	<u>Julie Peller et al.</u> In Vitro Aqueous Chemistry of Great Lakes Decaying/Decomposing <i>Cladophora</i>	<u>Dale Hanson et al.</u> Natural Reproduction of Lake Trout in Lake Michigan ...Finally Some Good News!

THURSDAY, OCTOBER 17TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
8:40 – 9:00 AM	<u>Ryan Oster et al.</u> Quantitative Assessment of Bacterial Pathogens at Great Lakes Beaches	<u>Steven Corsi et al.</u> Hydrologic and Seasonal Patterns in Waterborne Pathogens, Source-specific Bacteria, and Trace Organic Compounds and Indications of Contaminant Sources in Eight Urban and Rural Tributaries of the Great Lakes	<u>Chan Lan Chun et al.</u> Association of <i>Clostridium botulinum</i> with the Macroalga <i>Cladophora</i> in the Great Lakes	<u>Robert F. Elliott et al.</u> Population Status and Efforts Towards Rehabilitation and Restoration of Lake Sturgeon, <i>Acipenser fulvescens</i> , in Lake Michigan and its Tributaries
9:00 – 9:20	<u>Thomas Edge and Stephen Hill</u> Gradients of <i>Escherichia coli</i> Numbers and Antimicrobial Resistance at Urban Beaches in Southern Ontario	<u>Jenny Chipault et al.</u> Monitoring Avian Botulism Related Mortality Along Northern Lake Michigan Beaches, 2010-2012	<u>Brenda Moraska Lafrancois et al.</u> Lake Michigan Botulism Drivers: Historical and Modern Insight	<u>Bradley T. Eggold</u> Using a Streamside Rearing Facility on the Milwaukee River for Lake Sturgeon Rehabilitation
9:20 – 9:40	<u>Todd Brennan</u> Helping Beach Managers Using Citizen Monitoring to Identify Potential Pollution Sources at SE Wisconsin Beaches	<u>Colin Brooks et al.</u> Remote Sensing Time Series Observations of Lake Michigan Water Quality Parameters	<u>Steven Greb</u> Spatial and Temporal Variability of Water Quality in Nearshore Areas of Western Lake Michigan	<u>Randall Claramunt et al.</u> Are Management Plans for Pacific Salmonines in the Great Lakes Consistent with Recent Ecological Constraints?
9:40 – 10:00 AM	Break – Lakeside Terrace and Conference Center Entrance Foyer			

THURSDAY, OCTOBER 17TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Developing, Implementing, and Communicating the Use of Predictive and Rapid Tools at Beaches Moderators: Meredith Nevers and David Rockwell	Session: Lake Michigan Monitoring and Coastal Assessment Programs (continued) Moderator: Lisa Fogarty and Charlie Peters	Session: Nuisance Algae and Nutrient Dynamics in the Nearshore Zone (continued) Moderator: Harvey Bootsma	Session: Lake Michigan Fisheries (continued) Moderator: Dave Caroffino
10:00 – 10:20 AM	Cathy Breitenbach and Meredith B. Nevers et al. Predictive Modeling for Water Quality in Chicago	George Leshkevich et al. Creating and Distributing Great Lakes Satellite Remote Sensing Products	Robert Shuchman et al. Mapping <i>Cladophora</i> and Other Submerged Aquatic Vegetation in the Great Lakes Using Satellite Imagery	John Janssen The King is Dead, Long Live ?????
10:20 – 10:40	Adam Mednick Wisconsin Beach Nowcast 2013: Results and Lessons Learned	Sarah Endres et al. Mapping Coastal Great Lakes Wetlands and Adjacent Land use Through Hybrid Optical-Infrared and Radar Image Classification Techniques	Harvey Bootsma et al. Factors Regulating Interannual Variability of <i>Cladophora</i> Biomass in Lake Michigan	
			Session: Coastal Habitats and Lake Michigan Biodiversity Moderator: Matt Preisser	Session: AIS and the LM Food Web Moderator: David “Bo” Bunnell
10:40 – 11:00	Richard A. Haugland et al. Estimation of Enterococcus qPCR Target Sequence Recoveries from the EPA NEEAR Study Calibrator Samples	Eric Anderson and David J. Schwab A Forecasting System for Flow Prediction in the Straits of Mackinac and the Implications for Water Quality and Spill Transport	Mary Khoury et al. Biodiversity in and along Lake Michigan – How is it Faring and What can the Biodiversity Conservation Strategy do for You?	David B. Bunnell et al. Overview of Trends in the Lake Michigan Food Web and Exploration of Key Drivers

THURSDAY, OCTOBER 17TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Developing, Implementing, and Communicating the Use of Predictive and Rapid Tools at Beaches (continued) Moderators: Meredith Nevers and David Rockwell	Session: It's Not Just a Document Anymore: Online Resources for Lakewide Action Management Planning Moderators: Jeff Edstrom and David Hart	Session: Coastal Habitats and Lake Michigan Biodiversity (continued) Moderator: Matt Preisser	Session: AIS and the LM Food Web (continued) Moderator: David "Bo" Bunnell
11:00 – 11:20 AM	<u>Alicia Ritzenthaler et al.</u> Spatial, Temporal, and Analytical Variability in Near-shore Water Quality and its Implications on Model Development and Beach Management Decisions	<u>Lisa Cotner et al.</u> Mixing Minds, Monkeys and Wikis: A Technological Approach to Setting Implementation Priorities for Lake Michigan	<u>Randall Claramunt</u> A Case Study of Protecting Critical Coastal Habitat to Protect Biodiversity: Evidence of a Remnant Lake Michigan Cisco Stock	<u>Richard Barbiero et al.</u> Recent Changes in the Lower Food Web of Lake Michigan
11:20 – 11:40	<u>Lauren Fry et al.</u> Representation of Spatial and Temporal Variability in Beach Water Quality Using a Bacteria-Hydrology-Hydrodynamics Modeling Framework	<u>Mary Khoury et al.</u> The Great Lakes Information Management and Delivery System: Fostering Shared Goals and Collaborative Solutions	<u>Faith A. Fitzpatrick et al.</u> Taking into Account Lake Level Changes and Sieche Effects in Designing Habitat Improvements in Lake Michigan Rivermouths -- Sheboygan River Area of Concern	<u>Mark Rowe et al.</u> Estimating the Spatial Distribution and Lakewide Biomass of Quagga Mussels in Lake Michigan from Point Observations
12:00 – 1:00 PM	Lunch in Grand Ballroom and Keynote: <i>New Opportunities for Partnership in Landscape Conservation</i>, John Rogner, Coordinator, Upper Midwest and Great Lakes Landscape Conservation Cooperative (LCC)			

THURSDAY, OCTOBER 17TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
	Session: Green Bay Hypoxia Moderators: Val Klump and Kevin Fermanich	Session: Learning to Live with Coastal Hazards Moderators: Kate Barrett and Gene Clark	Session: Coastal Habitats and Lake Michigan Biodiversity (continued) Moderator: Matt Preisser	Session: AIS and the LM Food Web (continued) Moderator: David "Bo" Bunnell
Time	Presented by / Title	Presented by / Title	Presented by / Title	Presented by / Title
1:20 – 1:40 PM	Break to re-set room following lunch	<u>Alan Lulloff</u> Changing Water Levels on the Great Lakes	Break to re-set room following lunch	<u>Victoria Harris et al.</u> Diving Duck Use of Lower Green Bay Before and After Dreissenid Mussel Invasions
1:40 – 2:00	<u>Tracy Valenta et al.</u> Hypolimnetic Intrusions in Southern Green Bay	<u>Jason Laumann</u> Calculating and Mapping Stable Slope Setbacks on Wisconsin's Great Lakes	<u>Mary Stewart Adams</u> Great Skies Over the Great Lakes and Why it Matters	<u>Timothy R. Strakosh and S.R. Hensler</u> Aquatic Invasive Species Early Detection Monitoring Program Development in Lake Michigan
2:00 – 2:20	<u>J. Val Klump et al.</u> Developing a Summertime Oxygen Budget for Green Bay	<u>Chin H. Wu and William Roznik</u> Comparison of Sediment Budgets of Nearshore Environment for Two High Bluffs on Lake Michigan	<u>Mark Walter and Victoria Harris</u> Restoring the Cat Island Chain of Barrier Islands in Southern Green Bay	<u>Susan Eichelkraut et al.</u> Wisconsin's Ballast Water Program Implementation: Step 1 in the Fight Against New Aquatic Invasive Species Introductions to the Great Lakes
2:20 – 2:40	<u>Shelby LaBuhn and Val Klump</u> Evaluation of Benthic Exchanges in Green Bay Sediment	<u>Adam Bechle and Chin H. Wu</u> Meteotsunamis in Lake Michigan	<u>Thomas Sear et al.</u> Sheboygan River Area of Concern Habitat Restoration Projects, Sheboygan, Wisconsin	<u>Maureen McManus</u> Aquatic Invasive Species Education and Outreach in the Grand Traverse Bay Watershed; Encouraging Public Participation

THURSDAY, OCTOBER 17TH (CONT.)

	<i>Salon A</i>	<i>Salon G</i>	<i>Salon B, C, D</i>	<i>Salon F, E</i>
2:40 – 3:00 PM	<u>Hector Bravo</u> et al. Water Turbidity Effect on Green Bay stratification	<u>Brian A. Caufield</u> , <u>Laura Kelliher</u> and <u>Ken Hinterlong</u> Avoiding Loss and Reducing Risk along Lake Michigan: Identifying, Mapping, and Mitigating Coastal Flood Hazards	<u>Andrew Struck</u> Restoration of Degraded Fish and Wildlife Habitat and Populations in the Milwaukee Estuary AOC	<u>Tim Campbell</u> and <u>Erin Vennie-Volrath</u> Decontamination Recommendations for Aquatic Invasive Species
3:00 – 3:20	<u>Michael Zorn</u> et al. Continuous Monitoring of Phosphate, Nitrate, Dissolved Oxygen and Temperature in Green Bay, Lake Michigan	<u>Jeff Stone</u> Coastal Resilience Planning in the Great Lakes	<u>Maureen McManus</u> <i>Phragmites australis</i> Reduction in Grand Traverse County: a GLRI Success Story	<u>Kira Davis</u> Paradise Lake Pilot Boat Washing Station: Preventing the Spread of AIS in the Lake Michigan Watershed and Engaging a Community

Poster Session

Posters listed in alphabetical order by author last name.

ALM, EW, D. JORDAN, and T. GEHRING, T.

Using Border Collies to Exclude Gulls at Great Lakes Beaches

ANAN'EVA, TAMARA, KURDAS, S., CREEKMUR, J., and KINZELMAN, J.

Use of Predictive Modeling in Conjunction with QPCR Rapid Molecular Testing to Assess Recreational Water Quality at the North and Zoo Beaches in Racine, WI

ARENSON, J., COHN, M., HARRISON, L., BUSSE, K., KLEINHEINZ, G.K., MCDERMOTT, C.M., CORSI, S. and CARVIN, R.

Comparison of Predictive Models, Persistence Models, and Microbiological Enumeration of *E. coli* at Beaches in Manitowoc County, 2013

BRADY, AMIE, BUSHON, R., KANNAPPAN, V., ALBRECHT, S., COALE, C., and BRIGGS, S.

Comparison of the IMS/ATP Rapid Method and Culture-based Method for *E. coli* at Great Lakes Beaches in Michigan

BRUNNER, JOEL

Using Microbial Source Tracking to Increase Water Quality at Beaches in Kenosha, WI and the Economic Impact of Restored Beaches

COLTON, DAVE

Don't Feed the Gulls; In the Great Lakes; during the summer of 2013; How Many Times will Parents Have to tell their Children that they can't Swim or Play at the Beach Today, IT'S CLOSED!

DIEDERICHS, B., BUSSE, K., KLEINHEINZ, G.T., and MCDERMOTT, C.

Beach Management of Crescent Beach and Monitoring of Non-point Source Pollutants in the Ahnapee River Watershed in Algoma, WI

DUNCKER, JAMES J., JACKSON, P.R., JOHNSON, K.K., and RENEAU, P.C.

Synoptic Survey of Near Shore Water Quality and Circulation in Lake Michigan along the Chicago Lakefront

DÜRR, HANS H., MITCHELL, K., DRIEDGER, A., BRANCAZI, E., and VAN CAPPELLEN, P.

Remote Sensing of Plastic Debris

DÜRR, HANS H., REZANEZHAD, F., VAN CAPPELLEN, P, ROBINSON, C., SMEATON, C., BACCA-CORTES, G.F., SALERNO, J., and THRASHER, K.

Biogeochemical Investigation of Groundwater – Lake Interactions at Beaches of the Great Lakes: First Results

EBERT, S., ROTHE, J., BOHR, M., MUELLER-SPITZ, S., KLEINHEINZ, G., and MCDERMOTT, C.

Managing Fecal Contamination through Beach Remediation Efforts-Door County, WI

GAO, LEI, ZHOU, Z. and GUO, L.

Dynamics of Inorganic and Organic Nitrogen at the River-lake Interface in Southwest Lake Michigan

LIN, PENG and GUO, LAODONG

Spatial Variations in Chemical Speciation of Phosphorus Across the River-lake Interface in southwest Lake Michigan

MALOTT, SPENCER, COOK, A., ROBINSON, C., and O'CARROLL, D.

Quantification of Water Exchange Across the Sediment-water Interface at Beaches of the Great Lakes

MAREK, MIKE

McKinley Marina North: An Integrated Concept that Celebrates Milwaukee's Place at the Waterfront

MEDNICK, ADAM, CYTERSKI, M., GALVIN, M., WOLFE, K., BROOKS, W., CORSI, S., RODDICK, T., and ROCKWELL, D.,

Advanced Decision-Support for Coastal Beach Health: Virtual Beach 3.0.

MILLER, JENNIFER, SAICHEK, R., THAI, L., and SEMMLER, J.

Indiana Harbor and Canal Dredging Up-date

MILLER, ROGER G.

Sheboygan Harbor Centre South Pier District: A Case Study of Sustainable Coastal Redevelopment

OXLEY, TONY

Methodology for Designing Beach Naturalization

QUALLS, THERESA, HARRIS, H.J., and HARRIS, V.

State of Green Bay: An Environmental Assessment Report

ROCKWELL, DAVID, BEACHER, D., CAMPBELL, K., FENELON, E., MANN, G., WAGONMAKER, R., NEVERS, M., and GRONEWOLD, D.

2013 Swimming Season NOAA Beach Water Quality Experimental Forecasts

ROCKWELL, DAVID, MEDNICK, A. WIRICK, H., and JOSEPH JOSHI, S.

Beach Information Needs Survey 2013

RUSZAJ, ANIA, AMBROZ, DUANE, TECIC, D., LEGGE, J., and COTNER, L.,

Progress on Removing Beneficial Use Impairments in Waukegan Harbor Area of Concern

SAMPLES, AMY, LAPORTE, E., MARSEE, T., ARIGANELLO, S., and GUNN, J.

Clean Marina Classroom: Online training as an additional vector of education

SCHRANK, CANDY, RASMUSSEN, P., and WEAVER, M.

Trends in PCB Concentrations in Lake Michigan Salmonids, 1975 - 2010

SCHRANK, CANDY, WEAVER, MEGHAN, ANDERSON, H., and IMM, P.

Concentrations of Fatty Acids in Wisconsin Sport Fish: Preliminary Implications for Consumption Advice

SCUDDER EIKENBERRY, B., BELL, A., BURNS, D., and TEMPLAR, H.

Baseline Data for Potential Delisting of Benthos and Plankton in Wisconsin AOCs

STALEY, ZACHERY, VOGEL, L., ROBINSON, C., and EDGE, T.

Quantification of Fecal Indicator Bacteria at the Surface-water Interface at Four Great Lakes Beaches

STOKES, Y.F., WAGNER, C.A. and WILLIAMS, V.A.

A Comparison of Case Studies: What Impacts Whether Summer Gull Management Programs can be Effective at Improving Levels of *Escherichia coli* in 3 Chicago Beaches

STRAKOSH, TIMOTHY R., ANDERSON, K.R., HENSLER, S.R., and CHAPMAN, D.C.

Dreissenid Veligers as a Food Source for Silver and Bighead Carp in Lakes Erie and Michigan: a Bioenergetics Model

VALENTA, TRACY, DOLAN, D.M., KLUMP, VAL, KENNEDY, J., and SAGER, P.

Oxygen Depletion in Green Bay

VARMA, MANJU, SIEFRING, S., WADE, T., SAMS, E., COCHRAN, S., BRAUN, S., SIVAGANENSAN, M, and HAUGLAND, R.A.

Comparison of EPA Guideline-based Beach Action Decisions from *Enterococcus* qPCR Target Sequence-adjusted Cell Density Estimates and Culture Methods

WIJESINGHE, RASANTHI U., OSTER, R.J., FOGARTY, L.R., HAACK, S.K., TUCKER, T.R., and RILEY, S.

Detection and Quantification of *Clostridium botulinum* Type E Toxin Gene (*bontE*) in *Cladophora* at Great Lakes Beaches

ZHOU, ZHENGZHEN and GUO, L.,

Source and Composition of Dissolved Organic Matter in Southwest Lake Michigan as Characterized by Fluorescence EEM and PARAFAC Techniques