

STRENTHENING THE LINKS BETWEEN

SCIENCE AND MANAGEMENT

INFORMING REAL-WORLD DECISION-MAKING ACROSS LAKE MICHIGAN'S ECOSYSTEMS AND COMMUNITIES

State of Lake Michigan 2026 Agenda

Meeting Program and Guide

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MEETING INFORMATION

The State of Lake Michigan Meeting, supported in part by Illinois-Indiana Sea Grant, University of Illinois Extension, and Purdue University's Institute for Sustainable Futures, will be held November 4–6, 2026, in Michigan City, Indiana.

This meeting revives the lake-specific format previously hosted by IAGLR, offering a cost-effective space where researchers, resource managers, outreach professionals, and partners from across the basin can connect. The focus this year is on strengthening the link between science and management, highlighting work that informs real-world decision-making across Lake Michigan's ecosystems and communities.
We hope you will enjoy the program we have developed that highlights emerging research, innovative management strategies, collaborative projects, and community-engaged approaches that advance understanding and protection of the Lake Michigan ecosystem.

It took a village to make this meeting come to life, and we want to thank Blue Chip Hotel & Casino, Visit Michigan City LaPorte, and those that participated as part of the planning team:

Indiana Department of Environmental Management: Nicole Messacar, Michael Spinar
IL-IN Sea Grant/Purdue University: Angie Archer, Stuart Carlton, Paris Collingsworth, Pat Charlebois, Laura Esman, Tomas Höök, Sarah Peterson, Aaron Thompson, Cary Troy, Dominique Turney, Les Warren
Michigan Department of Environment, Great Lakes, and Energy: Shannon Brigss, Matt Preisser
University of Michigan: Jake Downey, Jared Merchant
US National Park Service: Erin Argyilan
Wisconsin Department of Natural Resources: Stacy Hron
Wisconsin Sea Grant: Jennifer Hauxwell

Thank you for attending this meeting. We hope you take this opportunity to share ideas, ask questions, strengthen existing partnerships, and identify new collaborations. We are all here because we value Lake Michigan and the resources it provides. Keep doing good work and enjoy the meeting!

VENUE MAPS



Figure 1: Satellite image of the building with the conference venue outlined in red



Figure 2: Line drawing map of venue interior with callout for entrance and event location

MEETING AGENDA

DAY 1: NOVEMBER 4, 2026

PLENARY SESSION: 10:00AM–12:00PM | FREEMONT BALLROOM

Welcome

Invited Guest Presentations

KEYNOTE PRESENTATION



Changing Great Lakes Food Webs – Insights from Longterm Data, Models, and Intuition

Lars Rudstam, Emeritus Professor

Lars Rudstam is a retired professor in fisheries and aquatic sciences in the Department of Natural Resources and the Environment, Cornell University and the former director of the Cornell Biological Field Station. He is an immigrant from Sweden with a background in engineering, zoology, limnology and marine biology and work with scientist across the globe on various issues in aquatic ecology and fisheries. His extensive research heavily features lower trophic level dynamics in the Laurentian Great Lakes, and the long-term ecosystem impacts of invasive species in Oneida Lake.

LUNCH: 12:00–1:00PM

Stardust Ballroom

CONCURRENT SESSION A: 1:00–2:30PM

HABITAT HETEROGENEITY IN LAKE MICHIGAN: IMPLICATIONS FOR FOOD WEBS, FISH, AND FISHERIES | FREMONT BALLROOM

Moderated By: Tomas Höök and Les Warren, *Purdue University*, and Carl Ruetz, *Grand Valley State University*

- ▲ **Spatial Patterns in Fish Assemblages among Connected Habitats in a Lake Michigan Tributary**, Leo Varitek, *Annis Water Resources Institute, Grand Valley State University*
- ▲ **Mixed Stock of Yellow Perch in Eastern Lake Michigan and Adjacent Drowned River Mouths**, Noah Pyle, *Purdue University*
- **Habitat Use, Trophic Support, and Movement of Lake Sturgeon in a Great Lakes Estuary: Linking Milwaukee Harbor to the Nearshore Zone of Lake Michigan**, Brandon Gerig, *University of Wisconsin-Milwaukee*
- **Using Environmental Tracers to Determine Early-Life Habitat Utilization of Alewife, *Alosa pseudoharengus***, Les Warren, *Purdue University*

AQUATIC INVASIVE SPECIES IN LAKE MICHIGAN: NEW APPROACHES FOR MANAGEMENT | FREMONT 1

Moderated By: Katie O'Reilly, *Illinois-Indiana Sea Grant, University of Illinois*

- **Be a Hero: New Approaches to Aquatic Invasive Species Prevention and Outreach**, Katie O'Reilly, *Illinois-Indiana Sea Grant, University of Illinois*
- **Dreissena Spatial Organization in Lake Michigan**, Nikolai Barulin, *Great Lakes Center, SUNY Buffalo State University*
- **Invasive Mussel Control to Restore Native Lake Whitefish Spawning Habitat: Results of the First Experimental Treatment in Northern Lake Michigan**, Kasia Przybyla-Kelly, *US Geological Survey*
- ▲ **Mussel Puberty: Defining Size Thresholds for Quagga Mussel Reproduction Across a Depth Gradient in Lake Michigan**, Amelia Myers, *University of Miami*

CONTAMINANTS OF EMERGING CONCERN IN THE LAKE MICHIGAN WATERSHED | FREMONT 2

Moderated By: Beth Meschewski, *Illinois Sustainable Technology Center, University of Illinois*, and Sarah Zack, *Illinois-Indiana Sea Grant*

- **Trifluoroacetic Acid in Great Lakes Waters**, Marta Venier, *Indiana University*
- **From Highways to Waterways: Evaluating Road-derived Contaminant Flow into Lake Michigan**, Andres Prada*, University of Illinois. Presented by John Scott, Illinois Sustainable Technology Center, University of Illinois*
- **PFAS Transfer through Stream Food Webs Across Lake Michigan Watersheds**, Daniele de Almeida Miranda, *University of Notre Dame*
- **Marine Debris in the Great Lakes: Highlighting Impacts, Actions, and Opportunities**, Haley Dalian, *National Oceanic and Atmospheric Administration (NOAA), Marine Debris Program*

COASTAL RESILIENCE MONITORING IN THE GREAT LAKES | FREMONT 3

Moderated By: Shelby Brunner and Michael Sutherland, *Great Lakes Observing System*

- **The Great Lakes Observing System Development**, Shelby Brunner, *Great Lakes Observing System*
- **Automated Nearshore Observations of Great Lakes Coastal Dynamics Using the Integrated Radar Monitoring System (IRaMS)**, Jesse McNinch, *US Army Corps of Engineers*
- **High-Frequency Radar in the Straits of Mackinac**, Timothy Havens, *Michigan Technological University*
- **An Open-Source Framework for Continuously Updated Coastal Elevation Models in the Great Lakes**, Christopher Amante, *Cooperative Institute for Research in Environmental Science/NOAA National Centers for Environmental Information*

BREAK AND SNACK: 2:30–3:00PM

Fremont Prefunction Area

▲ denotes the presenter is a student

CONCURRENT SESSION B: 3:00–5:10PM

HABITAT HETEROGENEITY IN LAKE MICHIGAN: IMPLICATIONS FOR FOOD WEBS, FISH, AND FISHERIES | FREMONT BALLROOM

Moderated By: Tomas Höök and Les Warren, *Purdue University*, and Carl Ruetz, *Grand Valley State University*

- ▲ **Abundance, Growth, and Diet Analysis of Larval Yellow Perch from Lake Michigan and Connected Tributary Habitats**, Mallory Wagner, *Purdue University*
- **Seasonal Differences in Alewife Habitat Use in Lake Michigan under Contemporary and Historic Conditions**, Ralph Tingley, *US Geological Survey*
- **Habitat Type and Tropic Position Influence Habitat Connectivity in Lake Michigan Food Webs**, Joel Hoffman, *University of Minnesota*
- **Stable Isotope Analysis Reveals Trophic Structure of Nearshore Food Webs in Lake Michigan**, Scott McNaught, *Central Michigan University*
- **Recent Opposing Trends in Crustacean Zooplankton and Mysis in Lake Michigan**, James Watkins, *Cornell University*
- ▲ **Comparison of Larval Bloater, *Coregonus Hoyi*, Diets across Lake Michigan**, Collin Frost, *Purdue University*

REMEDIATION, RESTORATION, AND REVITALIZATION AT GREAT LAKES AREAS OF CONCERN | FREMONT 1

Co-Moderated By: Stacy Hron, *Wisconsin Department of Natural Resources* and Michael Spinar, *Indiana Department of Environmental Management*

- **Grand Calumet River AOC: Navigating the Challenges in Designing the Junction Reaches and Junction Marsh Remedy**, Carol Nissen, *Tetra Tech, Inc.*
- **Monitoring in the Grand Calumet River Area of Concern to Assess the Status of a Designated Eutrophication Impairment after Restoration**, Becky Hammer-Lester, *US Geological Survey*
- **Measured Recovery to PCB Exposure in Fish and Wildlife in the Lower Fox River and Green Bay,** Rae-Ann Eifert, *Wisconsin Department of Natural Resources*
- **From Sediment to Habitat: Advancing Restoration in the Milwaukee Estuary Area of Concern Through Collaboration**, Brennan Dow, *Wisconsin Department of Natural Resources*
- **Connecting Restoration to Stewardship: Using Immersive Education and Community Partnerships to Engage Youth in the Grand Calumet River Area of Concern**, Megan Gunn, *Illinois-Indiana Sea Grant, Purdue University*

CONTAMINANTS OF EMERGING CONCERN IN THE LAKE MICHIGAN WATERSHED | FREMONT 2

Moderated By: Beth Meschewski, *Illinois Sustainable Technology Center, University of Illinois*, and Sarah Zack, *Illinois-Indiana Sea Grant*

- **Beyond Standard Exposure Models: Tribal Lifeways, Exposure Pathways, and Emerging Contaminant Risk Assessment**, Kade Lenz, *Great Lakes Inter-Tribal Epidemiology Center*
- **Emerging Contaminants in the Lake Michigan Watershed: Science, Stewardship, and Solutions**, John Scott, *Illinois Sustainable Technology Center, University of Illinois*

Panel Discussion Moderators: Beth Meschewski, *Illinois Sustainable Technology Center, University of Illinois*, and Sarah Zack, *Illinois-Indiana Sea Grant*

- Haley Dalian, *Great Lakes Regional Coordinator, NOAA Marine Debris Program*
- Carol Hawbaker, *Manger, Office of Toxicity Assessment, Illinois Environmental Protection Agency*
- Kade Lenz, *Program Director, Great Lakes Inter-Tribal Epidemiology Center*
- John Scott, *Associate Director, Illinois Sustainable Technology Center*

COASTAL RESILIENCE MONITORING IN THE GREAT LAKES | FREMONT 3

Moderated By: Shelby Brunner and Michael Sutherland, *Great Lakes Observing System*

- **Strengthening Coastal Resilience Through Water Level Monitoring in the Eastern Basin of Lake Erie**, Jeanne Beiter, *Buffalo Niagara Waterkeeper*. Presented by Nick DiNardo, *Buffalo Niagara Waterkeeper*
- **Expanding Wave Observations to Improve Maritime Safety and Coastal Resilience in Lower Green Bay, Lake Michigan**, Sarah Bartlett, *Green Bay Metropolitan Sewerage District*
- **Expanding and Modernizing the Great Lakes Coastal Observing Network in Michigan's Upper Peninsula**, Jeff Koch, *Superior Watershed Partnership*

POSTER SESSION AND NETWORKING: 5:30–7:00PM | PREFUNCTION AREA

Explore current Great Lakes research during this interactive poster and networking session. Researchers will be present at their poster to discuss their work and answer questions. We will also be hosting representatives from federal agencies who will be on hand to share information about their programs, research, and management activities throughout the Great Lakes. This session will also offer an excellent opportunity to network with meeting participants while enjoying heavy appetizers and a cash bar.

Dinner on your own.

POSTERS

- ▲ **Coupled Topobathymetric Surveys and Satellite Imagery Analysis Reveal Nearshore Bar Dynamics on Event to Annual Timescales**, Emma Bean, *Michigan State University*
- **Assessing PFAS in the Lake Michigan Food Web Along the Wisconsin Coast**, Rae-Ann Eifert, *Wisconsin Department of Natural Resources*
- ▲ **DendroDune: Forest-Dune Dynamics Inferred from Tree Rings**, Sabrina Hinz, *University of Illinois Urbana-Champaign*
- **Mercury Cycling in Lake Michigan: A Contemporary View of Spatial Variation and Bioaccumulation**, Sarah Janssen, *US Geological Survey*
- ▲ **Walleye Exposure to PFAS and Associated Gene Expressional Effects**, Kylie Lawson, *University of Notre Dame*
- **Condition-Adjusted Wetland Ecosystem Accounting for Nutrient Reduction and Watershed Planning: A Statewide Illinois Framework Applied to the Lake Michigan Basin**, Bo Pange, *University of Illinois Urbana-Champaign*
- **Environmental DNA in Conservation and Restoration Programs: Applications in Lake Michigan**, Dawn Shively, *Michigan State University/US Geological Survey*
- **Detection of Spawning Cisco (*Coregonus artedi*) in Great Lakes Tributaries by Environmental DNA**, Ashley Spoljaric, *Michigan State University*
- **Reconstructing the Historical Diversity and Contemporary Origins of Lake Michigan Cisco (*Coregonus artedi*) Using Genetic and Morphometric Evidence**, Ralph Tingley, *US Geological Survey*

KNOW YOUR FEDERAL AGENCIES

- National Oceanic and Atmospheric Administration
    - Great Lakes Environmental Research Laboratory, *Mark Rowe*
    - National Weather Service, *Eric Lenning*
    - Office for Coastal Management, *Chiara Zuccarino-Crowe*
- US Army Corps of Engineers, *Johhna Potthoff and Carl Platz*
- US Fish and Wildlife Service, *Jared O'Brien*
- US Forest Service, *Drew Hart*
- US Geological Survey – Great Lakes Science Center, *Ralph Grundel*

▲ denotes the presenter is a student

DAY 2: NOVEMBER 5, 2026

CONCURRENT SESSION C: 8:00–9:50AM

HABITAT HETEROGENEITY IN LAKE MICHIGAN: IMPLICATIONS FOR FOOD WEBS, FISH, AND FISHERIES | FREMONT BALLROOM

Moderated By: Tomas Höök and Les Warren, *Purdue University*, and Carl Ruetz, *Grand Valley State University*

- ▲ **Quantifying Sunburn in Larval Fishes Collected from Lake Michigan Nursery Habitats of Varying UV Transparencies**, Jason Haag, *Miami University*
- **Between a Rock and Something Like a Hard Place?**, John Janssen, *University of Wisconsin-Milwaukee*
- **A Comparative Approach to Quantifying the Ecological and Sedimentary Impacts of Nearshore Reefs in Southern Lake Michigan**, Amber Schmidt, *University of Illinois*
- **Assessing Physical, Chemical, and Biological Benefits of Historic Artificial Sediment Mounds in Nearshore Lake Michigan**, Brett Hayhurst, *US Army Corps of Engineers*
- **Calumet Region Smallmouth Bass: Movement and Habitat Use in an Area of Anthropogenic Complexity**, Charles Roswell, *Illinois Natural History Survey*

ENVIRONMENTAL SENSING | FREMONT 1

Moderated By: Kendahl Klatt, *Purdue University*

- **Buoy BFFs: Maintaining a Long-Term Lake Michigan Observing Network Through Collaboration & Community**, Jessie Grow, *University of Wisconsin – Milwaukee, School of Freshwater Science*
- **Winter Autonomous Vehicle Deployments on Lakes Michigan and Erie**, Steve Ruberg, *NOAA Great Lakes Environmental Research Laboratory*
- ▲ **Evaluating Mysid (*Mysis diluviana*) Densities in Lake Michigan with Two Decades of Fisheries Acoustics Data**, Kayden Nasworthy, *Cornell University*
- ▲ **Regional Patterns of Shoreline Recovery Along Lake Michigan Following Record High Water Levels**, Kendahl Klatt, *Purdue University*

ADVANCING COASTAL RESILIENCE IN LAKE MICHIGAN: FROM SCIENCE TO PRACTICE | FREMONT 2

Moderated By: Sarah Peterson, *Illinois-Indiana Sea Grant*

- **A Binational Framework for Resilient Great Lakes Coastal Ecosystems**, Nathan Kroeze, *Great Lakes Commission*
- **Resilient Coastal Habitat Restoration along WI's Lake Michigan Shores**, Stacy Hron, *Wisconsin Department of Natural Resources*
- ▲ **Lake Michigan Coastal Shoreline Changes: Spatial Variability and Geomorphic Implications**, Rachel Lau, *Michigan State University*

▲ denotes the presenter is a student

- ▲ **Mapping Potential Longshore Sediment Transport Pathways and Variability Across Lake Michigan**, Muhammed Nadim Sahvelet, *Purdue University. Presented by Cary Troy, Purdue University*
- ▲ **UAV-Based 3D Reconstruction for Visualizing and Assessing Coastal Change along Lake Michigan**, Wei Wu, *Purdue University*

SCIENCE TO SUPPORT RESTORATION OF IN STREAM AND NEARSHORE HABITATS | FREMONT 3

Moderated By: Erin Argyilan, *US National Parks Service*

- **The Quality and Quantity of Connectivity along the U.S. Coastal Zone: Featuring Lake Michigan Connectivity**, Lindsay Hunt, *US. Geological Survey*
- **Spatial Patterns of Great Lakes Searocket at Illinois Beach State Park**, Mike Krellwitz, *University of Illinois*
- **Dominance and Decline in Butterfly Communities Across 25 Years in Midwestern Oak Savannas**, Joseph Deas Jr., *US Geological Survey, Great Lakes Science Center*
- **Weevil Infestations and Other Insects Observed on Pitcher's Thistle (*Cirsium pitcheri*), a Threatened Plant Endemic to the Great Lakes, Throughout the Indiana Dunes National and State Parks**, Bethany Dennis, *US. Geological Survey*
- **Conserving Coastal Dunes from the Perspective of Pitcher's Thistle (*Cirsium pitcheri*)**, Noel B. Pavlovic, *US Geological Survey*

BREAK AND SNACK: 9:50-10:20AM

Fremont Prefunction Area

CONCURRENT SESSION D: 10:20AM–12:00PM

HABITAT HETEROGENEITY IN LAKE MICHIGAN: IMPLICATIONS FOR FOOD WEBS, FISH, AND FISHERIES | FREMONT BALLROOM

Moderated By: Tomas Höök and Les Warren, *Purdue University*, and Carl Ruetz, *Grand Valley State University*

- **Changes in the Black Bass Fishery in Indiana Waters of Lake Michigan**, Ben Dickinson, *Indiana Department of Natural Resources*
- **Nearshore-Offshore Movements and Feeding Dynamics of Lake Michigan Forage Fish**, Dominique Turney, *Illinois-Indiana Sea Grant*, *Purdue University*
- ▲ **A Quantification of Different Algal Types: Benthic Algae Community Composition in Nearshore Areas of Four Great Lakes with Special Emphasis on Lake Michigan**, Madeline Betz, *Purdue University*
- ▲ **Effects of Bio-Oregon and Otohime Feeds on Larval Lake Trout *Salvelinus namaycush* Growth, Condition, and Thiamine Levels**, Jared Merchant, *University of Michigan*

▲ denotes the presenter is a student

ENVIRONMENTAL SENSING | FREMONT 1

Moderated By: Kendahl Klatt, *Purdue University*

- ▲ **Response and Recovery of the Indiana Nearshore Morphology to a High-Water Period, 2013-2025**, Owen Hodges, *Purdue University*
- ▲ **Topobathymetric Monitoring of the Indiana Shoreline for Coastal Resilience,** Max Ahrbecker, *Purdue University*

ADVANCING COASTAL RESILIENCE IN LAKE MICHIGAN: FROM SCIENCE TO | FREMONT 2

Moderated By: Sarah Peterson, *Illinois-Indiana Sea Grant*

- **Advancing Shoreline Resilience: Helping Municipalities Address Coastal Challenges through the Resilient Coastal Projects Initiative**, Matthew Doss, *Great Lakes and St. Lawrence Cities Initiative*
- **The State of Beach Nourishment in Lake Michigan**, Michael Morphey, *Edgewater Resources*
- **Leveraging Physics when Engineering with Nature**, Jack Cox, *Edgewater Resources*
- **Illinois Beach State Park Shoreline Regeneration**, Jack Cox, *Edgewater Resources*

COOPERATIVE SCIENCE AND MONITORING (CSMI) EFFORTS IN LAKE MICHIGAN | FREMONT 3

Moderated By: Paris Collingsworth, *Illinois-Indiana Sea Grant, Purdue University*

- **Lake Michigan CSMI 2025 – Water Quality Spatial Data Summary and Nutrient Uptake of Green Bay**, Terri Jicha, *US Environmental Protection Agency*
- **Biophysical Modeling in Support of Cooperative Science and Monitoring Initiative Lake Michigan-Huron 2020-2025**, Mark Rowe, *NOAA Great Lakes Environmental Research Laboratory*
- **Delineating Tributary Regions of Influence in Lake Michigan-Huron with Biophysical Modeling and Remote Sensing**, Alexander Kain, *Cooperative Institute for Great Lakes Research*
- **Sounding Out the Future: Acoustic Survey Comparability Between Autonomous and Crewed Vessels in Lake Michigan**, Hafez Ahmad, *Cornell University*

LUNCH: NOON–1:00PM

Stardust Ballroom

▲ denotes the presenter is a student

CONCURRENT SESSION E: 1:00–2:30PM

ILLINOIS COASTAL MONITORING: PARTNERING FOR SUCCESS | FREMONT BALLROOM

Moderated By: Carla Rosenfeld, *Illinois Department of Natural Resources*

- **Overview of the Illinois Coast and Coastal Management Program and the Need for Strategic Monitoring**, Carla Rosenfeld, *Illinois Department of Natural Resources*
- **Sediment Dynamics: Understanding Sediment Transport and Morphodynamics Using Integrated Coastal Monitoring Along the Illinois Shoreline**, Mitchell Barklage, *Prairie Research Institute-Illinois State Geological Survey*
- **Shoreline Protection Structures as Nearshore Habitat Enhancement in Illinois Beach State Park**, Hillary Glandon, *Illinois-Indiana Sea Grant, Illinois Natural History Survey*
- **Floristic Inventory and Plant Communities Updates: 50 Years of Changes at Illinois Beach State Park**, Jacob Churulo, *University of Illinois*

COLLABORATING ACROSS RESEARCH, MANAGEMENT, OUTREACH, AND EDUCATION – SUCCESS IN PARTNERSHIP | FREMONT 1

Moderated By: Julie Fiorito and Kristin TePas, *Illinois-Indiana Sea Grant*

- **Hosah Prairie - an Exceptionally Biodiverse Lakefront Ecosystem Under Threat**, Kathleen Garness, *Morton Arboretum*
- **Dressing Up as Alien Researchers to Educate about Lake Michigan: Using Cosplay to Reach New Audiences**, Karter Burgdorf, *Illinois-Indiana Sea Grant*
- **Bridging Classrooms and Open Waters: Partnership Between Illinois-Indiana Sea Grant and Chicago Public Schools**, Gerard Kovach, *Chicago Public Schools*
- **Collaborative Approaches to Lake Michigan Outreach Through Loanable Education Kits**, Janice Milanovich, *Illinois-Indiana Sea Grant*

CONNECTING ON COASTAL RESILIENCE: EXPLORING MULTI-SCALE COMMUNITIES OF PRACTICE, NETWORKS, AND COLLABORATIONS IN LAKE MICHIGAN | FREMONT 2

Moderated By: Sarah Peterson, *Illinois-Indiana Sea Grant*

- **CALM: Addressing Coastal Hazards through a Regional Community of Practice**, Jake Kolanowski, *Wisconsin Coastal Management Program*
- **Building Flood Resilience Together: The East River Collaborative's Community-Driven Approach in Northeast Wisconsin**, Kari Hagenow, *The Nature Conservancy*
- **The Resilient Illinois and Indiana Shorelines (RIIS) Network: Exploring Cross-Agency Collaboration to Foster Resilience in Southern Lake Michigan**, Sarah Peterson, *Illinois-Indiana Sea Grant*, Joe Exl, *Indiana Department of Natural Resources, and Esther N. Chavira-Meza and Carla Rosenfeld, IL Department of Natural Resources*
- **Planning and Public Values for Coastal Adaptation and Conservation**, Aaron Thompson, *Purdue University*

COOPERATIVE SCIENCE AND MONITORING (CSMI) EFFORTS IN LAKE MICHIGAN | FREMONT 3

Moderated By: Paris Collingsworth, *Illinois-Indiana Sea Grant, Purdue University*

- **What Have We Learned From 28 Years of Quagga Mussel Population Dynamics in Lake Michigan?**, Alexander Karatayev, *Great Lakes Center, SUNY Buffalo State University*
- **Chironomidae Community Assemblage Shifts in Lake Michigan 2021-2025**, Kaira Kamke, *Great Lakes Center, SUNY Buffalo State University*
- **Lake Michigan Quagga Mussel Body Condition and Reproduction: A CSMI Perspective**, Ashley Elgin, *NOAA Great Lakes Environmental Research Laboratory*
- **Status and Temporal Trends in Lake Michigan Benthic Community**, Lyubov Burlakova, *Great Lakes Center, SUNY Buffalo State University*

BREAK AND SNACK: 2:30–3:00PM

Prefunction Area

CONCURRENT SESSION F: 3:00–4:50PM

ILLINOIS COASTAL MONITORING: PARTNERING FOR SUCCESS | FREMONT BALLROOM

Moderated By: Carla Rosenfeld, *Illinois Department of Natural Resources*

- **Using Drone Imagery to Classify Vegetative Communities in a Lake Plain Wetland Complex**, Susan McIntyre, *Illinois Natural History Survey, Prairie Research Institute, University of Illinois Urbana-Champaign*
- **Characterizing Wetland Hydrology and Water Quality at Illinois Beach State Park to Guide Coastal Wetland Restoration**, Nicolette Sheffield, *Prairie Research Institute, Illinois State Geological Survey*
- **From Classroom to Lakefront: Translating Prairie Research Institute Research for Multiple Audiences**, Jennifer Mui, *University of Illinois Urbana-Champaign*

AI-ENABLED DECISION SUPPORT FOR WATERSHED MANAGEMENT AND CONSERVATION IN THE LAKE MICHIGAN BASIN | FREMONT 1

Moderated By: Moh Aboelnour, University of Notre Dame

- **Bridging Science and Implementation: The Role of Regional Watershed Governance in Connecting Decision Support Tools to Local Water Management**, Matt Meersman, *St. Joseph River Basin Commission*
- **Accelerating Watershed Decision Support Through Hydrologic Modeling, Machine Learning, and Multi-Objective Optimization**, Moh Aboelnour, *University of Notre Dame*
- **▲ Leveraging Machine Learning to Improve Remote Sensing and Modeling Tools for Monitoring and Prediction of Nearshore Water Quality in the Great Lakes**, Karl Bosse, *Michigan Tech Research Institute*

▲ denotes the presenter is a student

- **Improving Phosphorus Predictions in Great Lakes Watersheds: Advances in SWAT Modeling and Machine Learning-Guided Calibration**, Margaret Kalcic and Lourdes Arrueta Antequera, *University of Wisconsin-Madison*
- **Future Changes in Surface Water and Groundwater in the Great Lake Basin**, Alan Hamlet, *University of Notre Dame*

SAFER SHORES, STRONGER PARTNERSHIPS: ADVANCING WATER SAFETEY ON LAKE MICHIGAN | FREMONT 2

Moderated By: Leslie Dorworth, *Illinois-Indiana Sea Grant, Purdue University Northwest*

- **The Great Lakes Water Safety Consortium: Connecting Research, Education, and Action**, Leslie Dorworth, *Illinois-Indiana Sea Grant, Purdue University Northwest*
- **The Burden and Circumstances of Drowning in Michigan: A Statewide Assessment to Inform Prevention**, Dylan Steigerwald, *CDC Foundation*
- **Data to Action: Using the Michigan Injury Indicators Dashboard to Support Drowning Prevention Work**, Ali Bianco, *Michigan Department of Health and Human Services*
- **A Review of Great Lakes Drowning Fatality & Rescue Statistics: Applications to Beach Forecasting and Water Safety Efforts**, Megan Dodson, *NOAA National Weather Service Northern Indiana & Great Lakes Water Safety Consortium*
- **Water Safety Education – Building Skills and Knowledge**, Mary Ann Best, *Blue Flow Great Lakes*

COOPERATIVE SCIENCE AND MONITORING (CSMI) EFFORTS IN LAKE MICHIGAN | FREMONT 3

Moderated By: Paris Collingsworth, *Illinois-Indiana Sea Grant, Purdue University*

- **Review of Previous Lake Michigan CSMI Larval Fish Surveys**, Paris Collingsworth, *Illinois-Indiana Sea Grant, Purdue University*
- **Assessing Larval Fish Recruitment Bottlenecks Through Intensive Collaborative Nearshore Sampling**, Ralph Tingley, *US Geological Survey*
- **Investigating Larval Coregonine Recruitment Bottlenecks in Beach Zones of Lake Michigan**, Cory Brant, *US Geological Survey*
- **Putting 2025 Age-0 Lake Whitefish CSMI Data into a Temporal and Ecological Context**, Steven Pothoven, *NOAA Great Lakes Environmental Research Laboratory*

FRIDAY, NOVEMBER 6

FIELD TRIPS | 7:00AM-12:30PM

Spaces for field trips are limited. Advance registration is required. Registration will be available on-site at the meeting, if space allows. See map below for meeting locations Friday morning.

FROM INLAND WATERS TO LAKE MICHIGAN SHORES: A WATERSHED ECO-TOUR | 9:00AM-12:30PM

Join us for a guided tour of Michigan City's waterways and natural areas, highlighting environmental challenges and restoration efforts from Trail Creek to Lake Michigan. Stops include the Trail Creek lamprey barrier to learn about aquatic habitats, invasive species management, hydrology, and watershed monitoring, Karwick Nature Park to explore how Michigan City treats nearly 200 million gallons of urban stormwater runoff annually using over 9 acres of restored wetlands, and Washington Park Beach to discuss coastal processes, resilience, monitoring, and adaptation along the southern Lake Michigan coast. This field trip offers a unique "lamprey-to-lake" perspective on the connections between watersheds, habitats, and communities.

Participants should expect 20-30 minutes of light walking and dress appropriately for weather conditions.

SANDS TO SURF: A GUIDED HIKE FROM MOUNT BALDY TO THE SHORES OF LAKE MICHIGAN| 9:00AM-12:30PM

Join us for a guided hike and discussion of Indiana Dunes National Park's most famous "living dune" and the Lake Michigan shoreline. Led by Dr. Erin Argyilan of the Great Lakes Research and Education Center, the hike will examine the connections between sand dynamics in a sediment starved coast, shoreline processes, and coastal hazards.

Participants will tour the Mount Baldy dune and beach to learn about its geologic formation, Great Lakes water level history, dune dynamics, coastal challenges, and ongoing restoration efforts. Following the hike, the field trip will conclude at Washington Park Beach, an area with abundant sediment supply, where we'll discuss coastal processes, shoreline resilience, and adaptation strategies along the southern Lake Michigan coast.

Participants should plan for approximately 1-1.5 hours of moderate hiking on dunes and soft trails, including sandy and uneven terrain. Hiking shoes are strongly encouraged, and attendees should dress appropriately for weather conditions.

*PLEASE NOTE: If you drive your own car for this field trip, an entrance pass is needed.

RESILIENT ILLINOIS AND INDIANA SHORELINES (RIIS) NETWORK MEETING AND FIELD TRIP AT INDIANA DUNES STATE PARK| 9:00AM-1:20PM

Join the Resilient Illinois and Indiana Shorelines (RIIS) network and Great Lakes Observing System (GLOS) for a half-day visit to Indiana Dunes State Park, learning about coastal processes, observation collaborations, as well as efforts to build resilience in the park. The program will also include the first in-

person RIIS network meeting, featuring presentations, collaborative activities, and networking opportunities, along with a short 20–30-minute soft-trail hike. Attendees should come prepared for outdoor weather conditions.

Note: Due to limited capacity, registration priority will be given to RIIS network and GLOS community of practice members, with remaining spots available to other SOLM attendees on a space-available basis.

SCANNING THE SHORELINE: FALL BIRDING ON LAKE MICHIGAN| 7:00AM-10:30AM

Join us for a morning of birding on the shores of Lake Michigan. Participants will start at Washington Park in Michigan City, just a few minutes from Blue Chip Casino. After watching the skies and water, there is an option of moving west to three locations: Port of Indiana (ID required), Portage Lakefront & Riverwalk, and Marquette Park, where scanning the skies can produce spectacular birds if the winds are cooperating. Uncommon birds seen along the lake in late fall include scoter sp., Long-tailed Duck, Black-bellied Plover, jaeger sp., Black-legged Kittiwake, Iceland Gull, and Western Grebe.

The lake winds can be frigid; wear warm clothing and bring a hat. A spotting scope will be provided, and participants should bring binoculars.

FRIDAY MORNING MEETING LOCATIONS FOR FIELD TRIPS

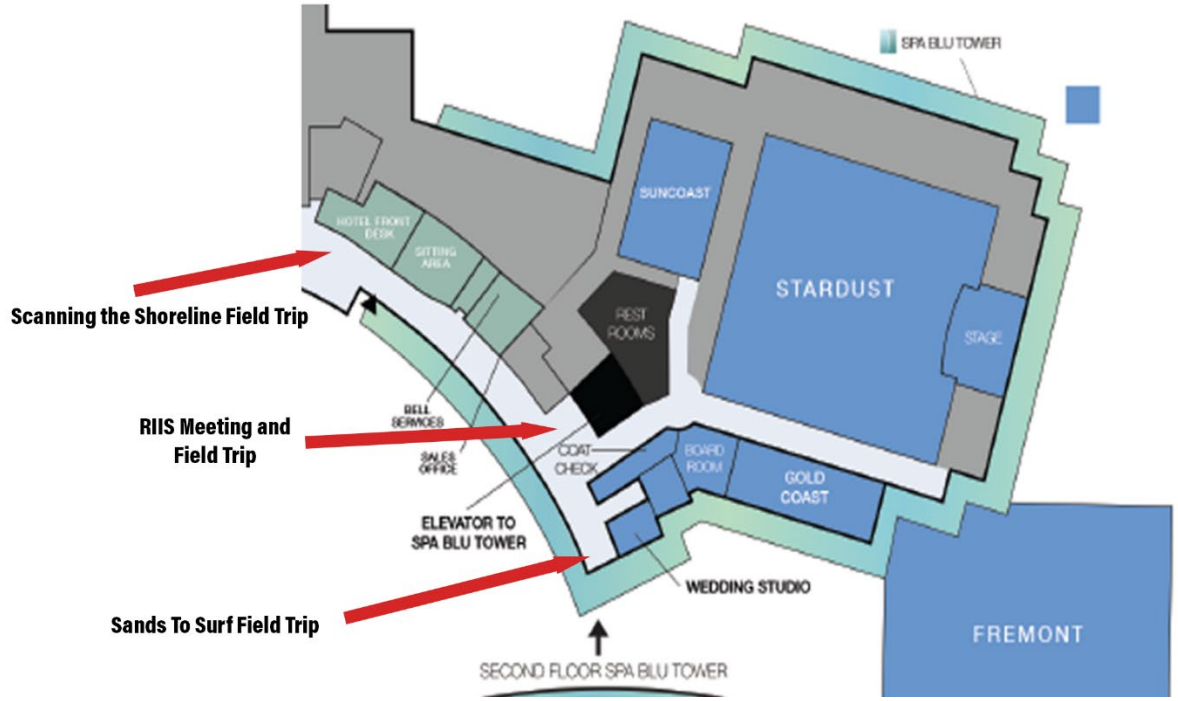


Figure 3: Meet-Up Locations for Field Trips

HOTEL INFORMATION

Blue Chip Casino Hotel | 77 Blue Chip Drive, Michigan City, IN 46360 | hotel website

For room reservations, please contact Blue Chip by phone at 888-879-7711 or online at https://bluechip.boydgaming.com/stay/group-reservation. Identify yourself as a member of the State of Lake Michigan Meeting (Group Code: SL1103G)

Room Rate:

- $109/night + 12% sales and accommodations tax for single or double occupancy
- Each room has a mandatory resort fee: $14.99 plus tax
- $10 surcharge for each third and fourth adult occupying a room. A maximum of four guests per room.
- All reservations must be guaranteed and accompanied with a first night room deposit or guaranteed by credit card.

Check-in time: 4:00PM Central
Check-out time: 11:00AM Central

TRANSPORTATION INFORMATION

PARKING

Hotel self-parking is complimentary. You may leave your vehicle parked in the hotel parking lot while you attend a field trip on Friday.

FROM CHICAGO O'HARE (ORD)

- By car (renting or rideshare): The drive is about 73 miles / 118 km (≈ 1 hour, 30–35 min), depending on traffic.
- By train (South Shore Line via Chicago): https://mysouthshoreline.com/plan-your-trip/train-schedules/
    - Take the CTA Blue Line from O'Hare to Jackson Station. You can then walk to Millennium Station (5-10 min) or use other transportation.
    - From Millennium Station, it's a direct ride to Michigan City's 11th Street station in about 90 minutes.
    - Note: you'll need onward transportation (taxi, rideshare, or shuttle) from the 11th Street station to the Blue Chip Casino Hotel — about 1.2 miles / 2 km, or a short walk.

FROM SOUTH BEND INTERNATIONAL AIRPORT (SBN)

- By car: Approximately 30–36 miles (45–58km) – geographically closer, but fewer flights
- By train (South Shore Line): https://mysouthshoreline.com/plan-your-trip/train-schedules/
    - Approximately 1 hour, 5 minutes train ride from South Bend Airport to 11th Street Station.
    - Note: you'll need onward transportation (taxi, rideshare, or shuttle) from the 11th Street station to the Blue Chip Casino Hotel — about 1.2 miles / 2 km, or a short walk.

FROM CHICAGO MIDWAY INTERNATIONAL AIRPORT (MDW)

- By car: Approximately 44 miles (71 km)
- By train (South Shore Line via Chicago): https://mysouthshoreline.com/plan-your-trip/train-schedules/
    - Take the CTA Orange Line from Midway to Adams/Wabash Station. You can then walk to Millennium Station (5-10 min) or use other transportation.
    - From Millennium Station, it's a direct ride to Michigan City's 11th Street station in about 90 minutes.
    - Note: you'll need onward transportation (taxi, rideshare, or shuttle) from the 11th Street station to the Blue Chip Casino Hotel — about 1.2 miles / 2 km, or a short walk.

QUESTIONS? CONCERNS?

If you have any questions or concerns while you attend the State of Lake Michigan meeting, please visit the Registration table.