

Highs and Lows

Western Lake Superior Water Levels Conference • December 11 • Duluth, MN

When:

December 11th, from 9:00 a.m. - 4:30 p.m. An optional social hour will follow the day's events. Registration opens at 8:15 a.m. Coffee and light refreshments will be available.

Where:

Holiday Inn & Suites Great Lakes Ballroom (200 W. First Street, Duluth, MN)

- Free parking is available in the Holiday Inn Parking Ramp on the left side of 1st St under the white awning.

Agenda

8:15 Registration opens. Coffee and light refreshments will be available. The formal program begins promptly at 9:00 a.m.

9:00 Welcome and Introductions

Karina Heim, Lake Superior National Estuarine Research Reserve
Music from Lyz Jaakola

9:25 Lake Superior Water Levels History, Drivers, and Trends...Oh, My!

Starting the day with a grounding in the science of Lake Superior water levels, this session will feature two presentations on lake level observation and forecasting from agency representatives.

Great Lakes Water Levels

Melissa Kropfreiter, PE, Hydraulic Engineer at U.S. Army Corps of Engineers Hydrology and Hydraulics Detroit Office

A general overview of Great Lakes water levels and the factors that contribute to their rise and fall. The presentation will discuss historic levels, current conditions, and projected water levels for the next six months.

Lake Superior Water Levels and Coastal Impacts

Brandon Krumwiede, Great Lakes Regional Geospatial Coordinator, NOAA Office for Coastal Management

Water levels within Lake Superior have changed from near record lows to near record highs over the last several years and led to rapid changes along our shorelines. This presentation will look at the interplay between historical water levels, current water levels,

and the impacts and changes that we are seeing along our shores. Additional information will be shared on the data and tools available to help understand these changes.

10:25 Morning Break

10:40 Local Perspectives on Water Level Impacts

This session is a panel discussion featuring voices from around the region sharing the felt impacts of dynamic Lake Superior water levels.

Moderator: *Todd Breiby, Program Coordinator, Wisconsin Coastal Management Program*

Panelists:

Kari Hedin - Watershed Specialist for the Fond du Lac Band of Lake Superior Chippewa

Jim Filby Williams - Director of Public Administration for the City of Duluth

Michelle Shrider - General Manager of Washburn Marina

Neva Maxwell - Environmental Services Specialist, Lake County Planning and Zoning

11:40 Water Level Impacts: Table Discussions

Using post-its and a chart, you and those seated with you at your table will document your own experiences with water level impacts in your communities.

12:15 Lunch & Networking

1:00 Spotlight on Resources and Tools

Coastal organizations will highlight available tools and share risk communication strategies. This session will feature three lightning talks and a “mini-training.”

Ceil Strauss, State Floodplain Manager, Minnesota Department of Natural Resources

- Floodplain Mapping & Insurance Updates

Joseph Moore, Warning Coordination Meteorologist, National Weather Service Duluth Office

- How the National Weather Service Warns for Lakeshore Flooding

Adam Bechle, Coastal Engineering Outreach Specialist, Wisconsin Sea Grant

- Living on and Adapting to a Changing Coast: Options and Resources for Great Lakes Coastal Property Owners

Tricia Ryan, Training and Engagement Program Manager, NOAA Office for Coastal Management

- Risk Communication Essentials

2:45 Afternoon Break

3:00 What do you Need?

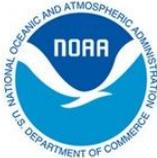
In this “float and vote” session, move around the room in groups and identify critical resources that would help your community address lake level impacts and improve resilience. This session asks you to focus your brainstorming on three resource categories: Information & Data, Professional Expertise, and Funding. At the end of this round robin exercise, each of you will be asked to vote on your highest-priority resource needs.

4:30 Reflections & Close

4:45 Social Hour

All are invited to adjourn upstairs to Lyric for conversation and networking

Thank you for coming!



About today's speakers

Missy Kropfreiter is a licensed civil engineer in the State of Michigan who graduated from Wayne State University in December 2003 with a Bachelors of Science in Civil and Environmental Engineering. She has worked in water resources for 20 years and has been with the U.S. Army Corps of Engineers Great Lakes Hydrology and Hydraulics Detroit Office for 12 years. She has extensive experience in water level monitoring, forecasting, outflow regulation, and hydraulic modeling. Missy was born and raised in southeast Michigan and spends her summer vacations in different Great Lakes coastal towns with her husband and three boys.

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Brandon Krumwiede serves as the Great Lakes regional geospatial coordinator with CSS Inc at NOAA's Office for Coastal Management (OCM). His work is focused on utilizing remote sensing and GIS data for analysis and application to address coastal issues and provide solutions. He received his M.S. in geography from the University of Montana and his B.S. in geography with minors in geology and international studies from Bemidji State University and currently holds both a GISP and Certified Geospatial Intelligence Professional Remote Sensing and Imagery Analysis (CGP-R) certification. Brandon resides in Duluth, Minnesota.

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Kari Hedin has worked as a Watershed Specialist for the Fond du Lac Band of Lake Superior Chippewa for 12 years. In that role she monitors and analyzes lake, river, stream and wetland water quality and uses water quality assessments to maintain or restore good water quality for Band members. She serves on several local and national workgroups, including the Reserve Advisory Board for the Lake Superior Reserve, and is the national tribal co-chair for EPA's E-Enterprise Leadership Council. She received her Master's degree in Conservation Biology from the University of Minnesota.

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Michelle Shrider has been in the marine industry for over 30 years, primarily as a General Manager of marinas in the Apostle Islands/Chequamegon Bay region. She serves as Chair of the WI Marine Association, a non-profit organization that focuses on the issues facing the recreational boating industry in Wisconsin.

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Jim Filby Williams has been the Director of Public Administration for the City of Duluth since 2013. In that role, he oversees the Library, Parks and Recreation, Property and Facility Management, and Fleet Services Divisions. Prior to that, he served as a leader in the nonprofit sector for 15 years. Filby Williams holds a bachelor's degree from Yale University and a master's degree in public administration from the University of Minnesota Humphrey Institute.

Neva Maxwell is the Land Use Specialist for Lake County Environmental Services. Neva graduated from the College of Saint Benedict majoring in Biology and Environmental Studies. She began her career managing stream restoration projects at Carlton SWCD. At Lake County, Neva is the wetland LGU, septic inspector, and land use permit reviewer for the Planning & Zoning Department. She regularly works with Lake Superior property owners experiencing coastal erosion and looking for assistance.

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Ceil Strauss is the Minnesota State Floodplain Manager. Ceil has been in the Floodplain Program at Minnesota DNR since 2002, and worked with the Minnesota DNR an additional 14 years, mainly as an Area (or Field) Hydrologist in the western Twin Cities area. She is a past Chair of the national Association of State Floodplain Managers (ASFPM).

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Joseph Moore is the Warning Coordination Meteorologist at the National Weather Service in Duluth, MN, responsible for managing the office's hazardous weather preparedness, outreach, and education activities across northeast Minnesota and northwest Wisconsin. Joe works closely with the media, emergency managers, and other federal, tribal, state, and local government officials to ensure communities are ready when hazardous weather threatens. Joe has been with National Weather Service since 2011, previously working at offices in Silver Spring, MD and Goodland, KS before coming to Duluth in 2014.

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Adam Bechle is a coastal engineering outreach specialist at Wisconsin Sea Grant. Adam helps Wisconsin's Great Lakes communities build resilience to coastal hazards by communicating the latest hazard data, developing outreach products on best management practices, and providing local governments guidance to identify opportunities to better plan and prepare for coastal hazards. Adam has degrees in Civil and Environmental Engineering from the University of Wisconsin-Madison.

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Tricia Ryan is the manager of the Training and Engagement Program for NOAA's Office for Coastal Management. Tricia works with talented staff located across the country to oversee the delivery of eleven classroom courses, provide meeting and workshop facilitation services and conduct several fellowship programs. These training courses help coastal communities adapt to climate change, design nature-based solutions to address hazards and build facilitation, project planning and risk communication skills. The facilitation services provide process design support to address challenging coastal issues. Our fellowship programs are a partnership with NOAA's coastal and estuarine programs to provide professional development opportunities to new graduates to make real progress on the ground. Tricia has a master's degree in Organizational Development from the College of St. Scholastica and was once the manager of MN's Lake Superior Coastal Program.

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