

Seminar and Brainstorming Session

Great Lakes Evaporation – Identifying Research Needs and Opportunities

Date: noon – 4pm, Tuesday, April 11, 2017 (lunch provided)

Location: U-M Graham Sustainability Institute, 214 S. State St, Ann Arbor, MI.

Sponsors: U-M College of Engineering the Cooperative Institute for Limnology and Ecosystems Research, and the Water Center

Measuring over-lake evaporation for large water bodies like the Great Lakes presents unique challenges but is critically important for water resource management. This co-sponsored seminar will include short presentations about sensor technology, modeling strategies and ways evaporation measurements can inform lake level and weather forecasting. Discussion will be encouraged throughout the seminar to explore new ideas for expanding the existing sensor network and identify collaboration opportunities.

The meeting will be facilitated by Drew Gronewold from NOAA's Great Lakes Environmental Research Lab, Brad Cardinale from the Cooperative Institute for Limnology and Ecosystems Research and Jennifer Read from the Water Center.

Agenda

Noon	Lunch and Introductions – Jen Read, U-M
12:45	Introduction and Applications <ul style="list-style-type: none">• A next step opportunity with CILER – Brad Cardinale, CILER• An introduction to Great Lakes evaporation – Drew Gronewold• Implications for water resource management, John Allis, US Army Corps of Engineers• Evaporation and weather forecasting, Greg Mann, National Weather Service <i>Discussion objective – How can we best demonstrate real world needs?</i>
	Sensor Technology <ul style="list-style-type: none">• Great Lake Evaporation Network, John Lenters, Univ. of Wisc.• Buoy mounted sensors, Branko Kerkez, U-M• Exploring ideas for sensor technology, Bill Schultz, U-M <i>Discussion objective – What technology could help expand the existing sensor network?</i>
2:15	Break
	Modeling Strategies <ul style="list-style-type: none">• Heat flux modeling, Eric Anderson, NOAA Great Lakes Environmental Research Lab• Lake ice and the thermodynamic fluxes, David Richter, Notre Dame• Two phase flow and turbulence modeling, Jesse Capelatro, U-M <i>Discussion objective – What modeling strategies could improve evaporation estimates?</i>
	Next Steps – Brad Cardinale, CILER <ul style="list-style-type: none">• The role of CILER summits and workgroups• Brainstorm – goals, products, timeframe, participants• Other funding opportunities and considerations
4:00	Adjourn , optional happy hour