

WESTON ROUNDTABLE SERIES



Thursday, October 13, 2016 1163 Mechanical Engineering 1513 University Avenue 4:15 - 5:15 PM coffee, tea and cookies at 4:00 PM

Climate Change Projections and Implications for the Great Lakes Region

Michael Notaro

Associate Director, Center for Climatic Research University of Wisconsin – Madison



co-sponsored by the Department of Civil and Environmental Engineering and the Office of Sustainability full calendar available online at www.nelson.wisc.edu/sage/weston-roundtable/

The Laurentian Great Lakes Basin has been a regional hotspot of climate change, with rising air and lake temperatures, frequent heavy precipitation events, declining lake ice cover, enhanced lake-effect snowfall, and reduced cloud cover. To protect natural resources of the Basin, and to guide vulnerability assessments and adaptation efforts, reliable estimates of the range of future regional climate projections are needed; these must include the significant moderating effect of the Great Lakes on regional climate. Here, results are presented on application of dynamic downscaling from the global to the regional level through a high-resolution climate model, interactively coupled to a lake model, with focus on projected changes in lake temperature and ice cover, lake-effect snow, winter severity, and regional hydrology.