United States Senate

WASHINGTON, DC 20510

October 3, 2016

The Honorable France Córdova
Director
National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

Dear Dr. Córdova:

The Great Lakes region boasts a large geographic footprint, and is a strong driver of the North American economy. With economic output of $5.8 trillion, the region is responsible for nearly 1 million manufacturing jobs, and hundreds of thousands of jobs in tourism and recreation, shipping, agriculture, fishing, and food production. The Great Lakes region's world-class fishery alone is valued at more than $7 billion annually.

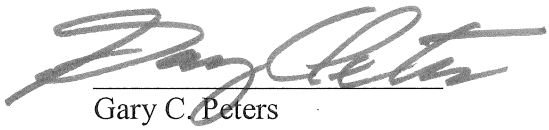
As it is such an economically and socially important region, active research is ongoing in the fields of biology, chemistry, physics, and geology in an effort to understand the Great Lakes ecosystem. This work includes study of the natural processes that shape the ecosystem, as well as the effects of human activity on the lakes and their associated economic resources. This research includes subjects such as ensuring a reliable supply of clean water, study of invasive species like zebra mussels, long term coastal erosion monitoring, near-shore carbon-cycling processes, mitigation of heavy-metal-laden mining byproducts, and strategies for solving freshwater resource conflicts.

The NSF has provided several specific initiatives that offered opportunities to researchers and educators interested in the Great Lakes. One such example is the Coastal Science, Engineering and Education for Sustainability (SEES) program, which considered the North American Great Lakes eligible for participation. Additionally, NSF is funding a new site for the Long-Term Ecological Research (LTER) program, which focuses on ocean or coastal ecosystems, and specifically included the Laurentian Great Lakes in this definition.

Given the importance of this region's ecological stability to the national economy, we are interested in the NSF's view on the impact the recent National Academy of Sciences report, *Sea Change,* will have on Great Lakes research and education opportunities in the future. The physical and economic scale of the Great Lakes region, and the overlap in research questions to those in the open ocean, suggest that the lessons from *Sea Change* may apply equally to the Great Lakes region. We would appreciate receiving information on the investment NSF has provided in recent years to support basic research and education activities related to the Great Lakes and information on future opportunities available to support Great Lakes related basic research and education activities.

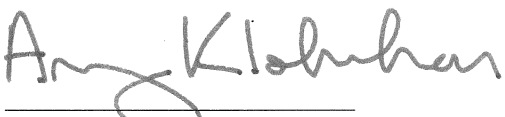
We are all grateful for the efforts the Foundation makes on a continuing basis to maintain the health of the nation's research enterprise, and we thank you for your continued commitment to science and education.

Sincerely,

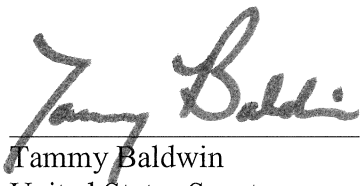


Gary C. Peters
United States Senator

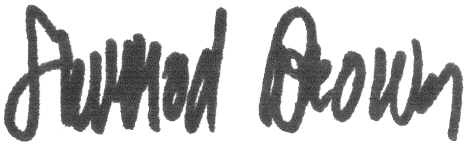
Debbie Stabenow
United States Senator



Amy Klobuchar
United States Senator



Tammy Baldwin
United States Senator



Sherrod Brown
United States Senator