



## UNITED STATES OF AMERICA AND CANADA, THE GREAT LAKES ST. LAWRENCE RIVER REGION Innovative Responses to Trans-Boundary Challenges

Authors: **Kathryn Bryk Friedman**, School of Architecture and Planning, State University of New York, USA  
**Irena F. Creed**, Department of Geography and Earth Sciences, Western University, Canada

The Great Lakes Region is a transboundary space identified by its single most significant asset – the Great Lakes St. Lawrence River Basin. The Basin represents the largest freshwater system on earth, spanning more than 94,000 square miles (244,000 km<sup>2</sup>) and containing more than 20 percent of the world's freshwater resources. As an ecologic system, the Basin is highly complex, comprising interrelated open water, coastal and watershed systems that support a high level of biological diversity. The Basin plays a significant role in the economies of the United States and Canada. Great strides in terms of ecological restoration have been made since the 1960s and 1970s, when severe environmental challenges, including the declaration that Lake Erie was “dead,” threatened ecological sustainability. Nonetheless, the Basin remains at tipping point, with a plethora of ecological and environmental pressures affecting its security as a resource. As recently as the summer of 2014, algal blooms caused a severe crisis by shutting down the water supply in Toledo for several days.

With the launch in 2012 of the Great Lakes Futures Project (GLFP), a new transboundary planning model emerged that emphasized process and stakeholder input, rather than institution building, to solve sustainability challenges. The GLFP was innovative for two reasons. Firstly it was a grassroots effort led by higher education researchers and secondly it used a tool in the transboundary context that is usually reserved for regional and municipal planning – scenario analysis. The GLFP scenario analysis spanned the past 50 years, the present, and the next 50 years

(1963-2063). In order to consider alternative futures, stakeholders created stories about the future that are not impossible to achieve by considering the following questions: What forces are driving changes? What are the key uncertainties associated with these drivers? How could these forces diverge the future from its current path? If the future unfolds as described in the scenarios, what would we do about it? Over the course of two years the project engaged more than 50 international Canadian and United States researchers, together with government and non-government participants.

The GLFP represents a new model for thinking and acting at the trans-boundary scale. The tool presented plausible futures for the region, creating awareness and consensus regarding the striking environmental and economy imbalances that will be faced if appropriate action is not taken. The experience has delivered an increased capacity for decision makers and end-users to overcome identified gaps in policy and to monitor policy effectiveness. Further to this, new, effective relationships in a transdisciplinary network of scholars and practitioners developed, creating partnerships for future research and engagement. The outcomes of GLFP will contribute to the long-term goal of ensuring effective policy in the Great Lakes Region, representing a truly collaborative strategic planning process not only for the Great Lakes Region, but also for other transboundary regions throughout the globe, as some forty percent of the world's population live in trans-boundary river and lake basins.