

News Release

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Checkup: Assessing Ecosystem Health of the Detroit River and Western Lake Erie

Windsor/Detroit – Today, Canadian and U.S. partner organizations released the 11th biennial State of the Strait report titled "Checkup: Assessing Ecosystem Health of the Detroit River and Western Lake Erie." This report is based on the evaluation of long-term datasets on 61 indicators of ecosystem health and discussions at the State of the Strait conference held on November 19, 2020 at the University of Windsor, Ontario. More than 40 organizations contributed individual indicator reports and more than 200 people participated in this binational conference.

Although there has been considerable improvement in the Detroit River ecosystem and a surprising and heartening recovery of biota since the 1960s, much additional cleanup and restoration needs to be undertaken to restore the region's physical, chemical, and biological integrity as called for in the Canada-U.S. Great Lakes Water Quality Agreement. Western Lake Erie is now at risk of crossing several potential tipping points caused by the interactions of a variety of drivers and stresses. This report identifies eight key environmental and natural resource challenges that are threatening ecosystem health and recommends next steps to address them: climate change; eutrophication and algal blooms; toxic substance contamination; invasive species; habitat loss and degradation; nonpoint source pollution; human health and environmental justice; and population growth, transportation expansion, and land use changes.

Climate change is the most pressing environmental challenge of our time. Indeed, addressing any of the eight environmental and natural resource challenges identified in the report is demanding, but mitigating them all at once and in the face of the climate change crisis is daunting. Climate change will make the scientific understanding of many of the other environmental and natural resource challenges more difficult and will make solving them more complicated. Indeed, climate change has been called a "threat multiplier" where warmer, wetter, and wilder climatic conditions amplify other threats like harmful algal blooms, combined sewer overflow events, species changes, poor air quality effects on vulnerable residents, and more.

"This report is an excellent example of synthesis of science to comprehensively assess ecosystem health and of strengthening science-policy linkages in support of ecosystem-based management," notes Dr. Mike McKay, Executive Director of University of Windsor's Great Lakes Institute for Environmental Research. "Further, this report showcases how the intellectual capital of this binational region can be leveraged to help understand and address the region's most pressing environmental and natural resource challenges."

Continued priority must be placed on science-based, quantitative, target setting for ecosystem integrity. Long-term monitoring is essential in order to practice adaptive management that assesses state of the ecosystem, sets management priorities, and implements management actions in an iterative fashion for continuous improvement. Without a commitment to science-based quantitative target setting and long-term monitoring, management is flying blind.

The Detroit River and western Lake Erie are microcosms of human use and abuse of the Great Lakes and can be viewed as a "proving ground" for restoring ecosystem health and integrity and advancing ecosystem-based management. Further investment in this transnational network is warranted.

Report available at: http://web2.uwindsor.ca/softs/reports/SOFTS_2020_Report.pdf
For more information on this transnational network, visit: www.stateofthestrait.org

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