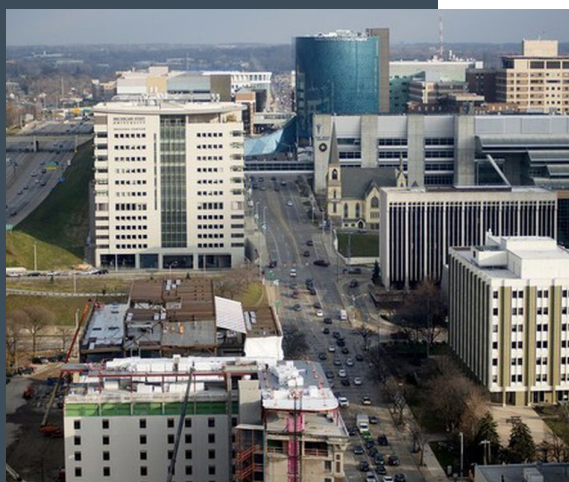


Overview

- **Purpose:** To support private sector decision-makers by providing resources that foster discussions around climate vulnerability, leading to the creation of an adaptation toolkit for businesses.
- **Partner:** WMSBF
- **People:** Four Western Michigan businesses, including a hospitality/restaurant chain, a manufacturer, a health care system, and a public school system
- **Impact:** Facilitated creation of an adaptation toolkit (the self-assessment, the climate summary, the climate matrix, etc.), to help practitioners and businesses prepare for and adapt to climate change. The toolkit's use by four Western Michigan businesses serves as a pilot for other organizations in industry networks.

In 2015-2017, a partnership between the West Michigan Sustainable Business Forum (WMSBF) and the Great Lakes Integrated Sciences and Assessments (GLISA) developed resources for business resiliency champions to lead their organizations through a climate vulnerability assessment. WMSBF is a regional network of business, government, non-profit organizations, and educational institutions promoting environmentally, economically, and socially responsible business practices. Prior to this project, WMSBF had conducted a regional climate adaptation planning project for Western Michigan businesses. While that project spurred organizations to examine climate change internally, many realized that they lacked sufficient information to perform vulnerability assessments or integrate climate science into their decision-making.

To better support private sector decision-makers, WMSBF decided to create sector-specific adaptation toolkit that could be scaled-up to other locations and sector sin the future. WMSBF and the Sustainable Research Group (SRG) led the development of a self-assessment survey to help businesses frame climate planning relative to their long-term objectives, such as finances and product delivery. In addition to providing a small grant to support the project, GLISA collaborated with WMSBF to identify and customize climate data specific to Grand Rapids, MI, and the weather/climate events that pose business concerns (including high winds and freeze-thaw cycles). This project was GLISA's first time working with and developing climate information for organizations in sectors like hospitality/food service, health care, and manufacturing. The climate event matrix created by SRG helps organizations evaluate the effect of possible climate impacts on their business concerns. For example, in walking through the evaluation process, an organization may rank the vulnerability of its supply chain to flooding and heavy rain as high risk, but equipment and facilities may be low risk. After ranking preparedness and vulnerability for all key business concerns,



Highland Park's Rosewood Ravine.
Image: Lloyd Degrane.

“ Our organization had been working to educate our stakeholders on climate adaptation for a number of years before this project, and had struggled to find a resource that fit the needs of the businesses and institutions that we knew would be impacted. We were telling them that they should be concerned about their operations and buildings but weren't able to answer their questions about how they should respond. ”

– Daniel Schoonmaker, Executive Director,
West Michigan Sustainable Business Forum

an organization will have a starting place for climate adaptation planning.

The adaptation toolkit is comprised of the self-assessment, the climate summary, the climate matrix, and other resources; it helps individuals internally pitch the business case for resiliency and adaptation planning and assists them in leading their organizations through that process. WMSBF piloted the toolkit with four Western Michigan organizations: a hospitality/restaurant chain, a manufacturer, a health care system, and a public school system. The pilot cases serve as examples to other organizations in industry networks, encouraging use of the adaptation toolkit and raising awareness of climate risk among relevant decision-makers.



The Need for a Toolkit: Flooding in downtown Grand Rapids required a 2,000-volunteer sandbagging effort in 2013. Source: West Michigan Environmental Action Council.

“Having specific climate data to inform these discussions is helping the organizations we work with accurately assess how they are vulnerable to climate change.”

– Daniel Schoonmaker, Executive Director, West Michigan Sustainable Business Forum

About GLISA *Advancing Climate Knowledge for Adaptation and Resilience with Great Lakes Communities*

Established in 2010, GLISA is a collaboration between the University of Michigan and Michigan State University, supported by the National Oceanic and Atmospheric Administration (NOAA). As one of 11 NOAA Regional Integrated Sciences and Assessments (RISA) teams, GLISA works at the boundary between climate science and decision-makers, striving to enhance Great Lakes communities' capacity to understand, plan for, and respond to climate impacts now and in the future. Our team of social and physical scientists collaborates to:

- Develop usable climate information tailored to stakeholder needs;
- Develop, implement, and evaluate resources and tools to apply climate information to decision-making;
- Facilitate collaborative activities, education, and training and support stakeholder networks; and,
- Investigate emerging climate issues and synthesize findings for practitioners.



Great Lakes Integrated Sciences + Assessments (GLISA)

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Example of GLISA's boundary chain model of stakeholder engagement for the Great Lakes Climate Adaptation Network (GLCAN). Climate information is tailored and moves through different boundary organizations (links in the chain) to connect science to users. Adapted from Lemos et al. 2014.