

MIDLAND COUNTY OFFICE OF EMERGENCY MANAGEMENT

IMPROVING COMMUNITY RESILIENCY IN THE SAGINAW BAY WATERSHED

OVERVIEW

Extreme storm events present a serious threat to community health, safety, and economic stability. The full impacts of extreme storms extend far beyond flooding to include a range of issues such as erosion, infrastructure destabilization, runoff pollution, waterborne diseases and damage to crops.

In recent decades, extreme storms across the U.S. have increased in frequency and intensity. This trend has been especially notable in the Midwest where the amount of precipitation falling in the heaviest 1 percent of storms increased by 37 percent between 1958 and 2012.

The Saginaw Bay watershed is particularly vulnerable to storm hazards because of the region's unique topography and land use patterns. A complex network made up of 7,000 miles of rivers and streams, the Saginaw Bay watershed drains roughly 15 percent of the state of Michigan. This massive watershed includes both urban and agricultural lands. The watershed drains into Saginaw Bay, a highly productive wildlife habitat that includes the largest contiguous freshwater coastal wetland system in the country.

Because the watershed covers such a large flat area, extreme storm impacts are quickly magnified. Communities within the Saginaw Bay watershed face a major challenge in adapting to increased frequency and intensity of storm events.

PROJECT DESCRIPTION

This project supports improved community resiliency across the Saginaw Bay watershed through a two-phase approach. Phase 1 will assess key decision-makers' perceptions of storm hazards, stormwater runoff, and resiliency strategies in the Saginaw Bay watershed. Phase 2 will develop a suite of education and outreach materials focused on filling gaps in awareness, knowledge, and technical capacity identified during the assessment.

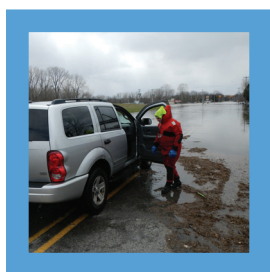
The project will target stakeholders involved with community planning, hazard mitigation and regional development in order to reach leaders with both a strong interest in resiliency issues and the capacity to influence change at the community-wide scale.

EXPECTED OUTCOMES

Phase 1

Action: Use a combination of individual surveys and focus groups to assess perceptions of coastal storm hazards, stormwater runoff and resiliency strategies.

Objective: Develop a comprehensive picture of what strategies currently are being implemented across the watershed to address extreme storm impacts. Understand what types of tools and resources could improve existing strategies and what potential new strategies would be most relevant in the watershed.



DAVID SOMMERS



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Phase 2

Action: Develop education and outreach materials including workshops, online tools and social marketing campaigns targeted at filling gaps in awareness, knowledge and technical capacity identified during the Phase 1 assessment.

Objective: Improve community resiliency in the Saginaw Bay watershed by providing targeted stakeholders with the resources needed to enhance existing resiliency strategies and implement relevant new strategies.

WHAT IS COMMUNITY RESILIENCY?

The term resiliency often takes on different meanings depending on the context it is used in. In this project, community resiliency refers to a community's ability to adapt to the changing frequency and intensity of storms and to recover quickly from the impacts of extreme storm events. Resiliency strategies are policies or actions that improve community resiliency. For example: building setback requirements that move structures away from expected shoreline erosion and re-vegetation of shorelines are some resiliency strategies used to decrease erosion impacts of storms.

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SURVEY

This survey is the first stage in a project led by Michigan Sea Grant, Michigan State University Extension, and several local organizations funded through the National Oceanic and Atmospheric Administration Coastal Storms Program. The survey is designed to assess and improve extreme storm preparedness and community resiliency in the Saginaw Bay watershed. Your answers will directly inform future projects in the watershed addressing issues of extreme storms.

The survey should take approximately 10 minutes to complete. Cumulative survey results will be published in a summary report. All individual responses will remain anonymous and none of the information collected will be used for commercial purposes.

**Take the survey at <http://ow.ly/S17nM>
or scan the QR code with your
smartphone.**

