

A CASE STUDY IN REGIONAL RESILIENCY OUTREACH AND ASSESSMENT

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The Saginaw Bay watershed is the largest in Michigan covering 8,700 square miles with more than 7,000 miles of rivers and streams. Over the past two centuries, the watershed has lost more than 2,800 square miles of wetlands due to urban development and agricultural expansion. This change in land use patterns combined with the unique topography of the Saginaw Bay watershed makes the region particularly vulnerable to extreme storm impacts. The region is dominated by clay heavy soils with low water retention capacity and there is only twenty feet of elevation change between the highest and lowest points in the watershed. Often water deposited by heavy rainfall events upstream takes days to move through the watershed exposing several different communities to flooding, erosion, and runoff pollution along the way. While sharing a common vulnerability to storm hazards, communities in the Saginaw Bay watershed are highly diverse in other aspects ranging from industrialized manufacturing cities to small agricultural towns.

Regional resiliency planning would allow these communities to leverage collective resources and knowledge. With funding from the National Oceanic and Atmospheric Administration (NOAA) Coastal Storms Program, this project assesses stakeholder perceptions of storm hazards and risk reduction strategies across the Saginaw Bay watershed. The assessment utilizes the Great Lakes Planning and Mitigation Needs Assessment of Coastal Storm Hazards to examine stakeholder perceptions of storm impacts, barriers to effective resiliency planning, and community data, tools, and training needs in the Saginaw Bay region. By using a combination of online surveys, mail in surveys, and focus groups the needs assessment was able to reach stakeholders from several diverse economic, social, and geographic sectors across the watershed. Assessment results will be used to inform development of new resiliency outreach and education materials in the region. This presentation will explore assessment findings and discuss implications for resiliency outreach and hazard preparedness efforts at a watershed scale within the Saginaw Bay region.