

## Fact Sheet

May 2023

### Who We Are

The Midland Business Alliance (MBA) is the economic development organization and chamber of commerce for Midland County, Michigan. In 2021, the MBA Board of Directors formed a task force to examine infrastructure issues that affect the quality of life and economic vitality of mid-Michigan.

As its first task, this **MBA Advisory Committee on Infrastructure** was charged with finding the best ways to work with local, state, and federal partners to address longstanding flooding issues that affect the citizens, business community, and economic development in the region. Two areas of concern are the legacy challenges of severe flooding throughout Midland County and surrounding areas, as well as sanitary sewer issues in Midland. We are committed to finding solutions to reduce the frequency and severity of flooding and to build greater resilience in Midland and the mid-Michigan region.

The advisory committee is made up of volunteers and includes MBA Board members, members of the community at large, an MBA staff representative, and ex officio (non-voting) representatives. The committee functions under the Midland Business Alliance Foundation, a 501(c)(3) organization. Visit [www.MBAmi.org/FloodStudy](http://www.MBAmi.org/FloodStudy) for more information.

### About the Tittabawassee River Watershed

According to the Michigan Department of Natural Resources “Tittabawassee River Assessment,” the watershed covers 2,471 square miles, including all or part of the following counties: Arenac, Bay, Clare, Gladwin, Gratiot, Isabella, Mecosta, Midland, Montcalm, Ogemaw, Osceola, Roscommon, and Saginaw. The main stem of the Tittabawassee River is more than 90 miles long, with more than 600 miles of contributing tributaries, including the Tobacco River, Pine River, and Chippewa River. Located in the center of Michigan’s Lower Peninsula, this watershed is the fifth largest in the state. In turn, the Tittabawassee River flows into the Saginaw River and then into the Saginaw Bay and Lake Huron.

Midland receives the waters from four river systems: the Tobacco River and Tittabawassee River to the north and the Pine River and Chippewa River to the west. The waters of these rivers and their tributaries meet at the confluence of the Tittabawassee and Chippewa in downtown Midland.



### Flooding History

Significant rains and flooding have occurred regularly in the Midland area. This includes historic river crests that exceeded the “major flood stage” (28 feet) in Midland, which happened in 1986, 2013, 2014, 2017, and 2020, plus many more years where the “flood stage” (24 feet) was reached.

In May 2020 after days of heavy rains, we were expecting a major flood, similar to the level of 2017, when both the Edenville and Sanford Dams were breached – causing even greater catastrophic flooding in Sanford, Midland, and properties up and down the river system. Flash flood emergencies were issued, and approximately 10,000 Edenville, Sanford, and Midland residents were evacuated. More than 2,500

homes were damaged or destroyed – with some buildings swept off foundations and down the river. Damage to the 2,500 buildings was estimated at \$200 million in this single flood event. In July 2020, a federal major disaster declaration was approved for Midland County and the surrounding area. The rebuilding process continues.

Time and again, flooding has negatively impacted individuals, jobs, property values, tax revenues, and economic growth in Midland and across the Tittabawassee River Watershed. Reducing the frequency and severity of flooding is essential for the region's continued economic growth. Homeowners, businesses, industry, and healthcare providers must have the assurance that their investment will not be flooded out each time it rains.

### **Reducing Flooding, Building Resiliency**

The MBA Advisory Committee on Infrastructure has the goal of finding and developing innovative, long-term options that could reduce the frequency and severity of flooding. While future flooding cannot be eliminated completely, the committee is focused on making lasting improvements and improving resilience by working with the City of Midland, Midland County, surrounding counties, area citizens, businesses and organizations, and other local, state, and federal stakeholders. Whenever feasible, the committee is focused on environment-based flood reduction measures, which potentially could include the creation of wetlands, natural floodplains, and eco-sensitive approaches to optimize the flow rate of rivers, creeks, and streams during significant rain events. Our interests also include: reducing soil sediment movement into the Saginaw Bay and the Tittabawassee River Basin; preserving and restoring natural areas that can benefit wildlife, provide recreation opportunities, and improve sediment and erosion control; and enhancing clean water by reducing sediment and fertilizer loads entering the Saginaw Bay.

### **Our Progress**

- **Private sector fundraising** – Initially, the committee raised \$877,500 in private funds from 10 local companies and foundations for a large, multi-year hydraulic/hydrologic study with the U.S. Army Corps of Engineers and for community engagement and advocacy efforts. This early funding was provided by the Charles J. Strosacker Foundation, Corteva Agriscience, Dow Company Foundation, Fisher Companies, Hemlock Semiconductor Corporation, Midland Area Community Foundation, MyMichigan Health, Patricia and David Kepler Foundation, Rollin M. Gerstacker Foundation, and Three Rivers Corporation. Additional funds are being raised to continue our efforts.
- **First study** – Called a Planning Assistance to States (PAS) study by the Corps of Engineers, our initial hydraulic/hydrologic study began in 2021 and is scheduled to be completed in 2024. Working in collaboration with Midland County and the Corps, the MBA Advisory Committee on Infrastructure provided the local 50% cost-share for this study, thanks to our donors. We also hired local engineering consultants, the Spicer Group, to complete the required river surveying and GIS data needed by the Corps to complete the new hydraulic/hydrologic computer model of the watershed. The largest modeling project undertaken by the Corps' Detroit District, this model will: show current/existing conditions and where flooding would occur under many different rain/ground saturation conditions; help engineers determine where – and how much – potential floodwater detention is needed to reduce the impact of flooding; and be integral to predicting how a potential solution would impact the watershed.
- **Short- and mid-term projects** – We have worked with federal and state lawmakers and agencies to successfully fund multiple flood reduction, recovery, and resiliency projects. To date, we have secured \$16.4 million for mid-Michigan. This is a “return on investment” of the donor dollars of 18.7:1. (Refer to the “Return on Investment 2022” document at [www.MBAmi.org/FloodStudy](http://www.MBAmi.org/FloodStudy) for details.)



## ADVISORY COMMITTEE ON INFRASTRUCTURE

- **Second study** – Called a General Investigations (GI) study by the Corps of Engineers, this major study could begin as soon as the federal legislature approves the FY 2024 budget. The proposed budget includes funding for the Corps' portion of the first year of the study. The MBA Advisory Committee on Infrastructure has secured funding for Midland County's local match (50% cost-share) for this study, which is expected to last three years and cost an estimated \$3 million. Using the model and data from the first study, the GI study develops potential actionable projects and determines their feasibility. After a GI study is successfully completed and approved by Corps leadership, this would allow the Corps to construct flood control solutions – after congressional authorization, appropriations, and local funding. (In a future construction phase, the cost-share would be 65% federal and 35% local, which would be a significant benefit.)
- **Interim projects** – Clearly, the studies and engineering by the Corps will be a long-term effort. In the meantime, we asked Spicer Group to develop ideas to reduce some of the local flooding. The "Midland Flood Reduction Plan" was created (see the document at [www.MBAmi.org/FloodStudy](http://www.MBAmi.org/FloodStudy)). The projects include floodwalls, berms, flood gates, and pump stations to prevent Tittabawassee floodwaters from "backing up" into Snake Creek, Sturgeon Creek, and the Inman Drain. The floodwalls/berms would be set to 0.3 feet below the 100-year flood elevation, which is similar to the 2017 flood event. An estimated 650 residential and commercial structures would be protected under these conditions. This is one group of projects that could be pursued in parallel to the studies by the Corps. We are currently seeking infrastructure funding for this plan.

### Additional Partners

- **Support of parallel efforts** – The committee is supportive of organizations like the Four Lakes Task Force and its work to repair and restore the network of dams on Sanford, Wixom, Smallwood, and Secord Lakes. While we are not directly involved in their efforts, we have benefited from information and data sharing with the organization.
- **Advocacy and partnerships** – The committee is engaging with federal, state, and local leaders, agencies, and offices. This includes working closely with local governments and with agencies and organizations such as the U.S. Army Corps of Engineers, the Federal Emergency Management Agency (FEMA), the U.S. Department of Agriculture (USDA), the National Oceanic and Atmospheric Administration (NOAA), the Michigan Department of Environment, Great Lakes, and Energy (EGLE), as well as environmental organizations like the Chippewa Nature Center, Little Forks Conservancy, the Saginaw Bay Watershed Initiative Network, Ducks Unlimited, and the Nature Conservancy. We are working with the law firm Squire Patton Boggs in Washington, D.C., and the Lansing-based firm Muchmore Harrington Smalley & Associates to assist with maximizing federal and state resources for flood reduction and resiliency.
- **Community involvement and communication** – An important goal is to create broad and wide community engagement and participation from individuals, community groups and leaders, neighborhoods, businesses, and various organizations. This will include regular communication and community programs and workshops. We have obtained the services of AMPM, Inc., a Midland-based communication firm, to assist our efforts in ensuring significant community involvement as we go forward.

### More Information

Watch the local news media for updates on the committee's progress. We will also share information at these locations:

[www.MBAmi.org/FloodStudy](http://www.MBAmi.org/FloodStudy)

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