



# Great Lakes and St. Lawrence Cities Initiative Municipal Adaptation and Resiliency Service (MARS)

## Extreme Weather Event Fact Sheet

Event : Flood

Location : Grand Rapids, MI

Date : April 2013

### RECENT EXTREME WEATHER EVENT

On Wednesday, April 17th, 2013 the city of Grand Rapids, Michigan began to experience significant flooding lasting for several days. Heavy rainfall caused the water levels of the Grand River, which flows through Grand Rapids, to rise significantly. On April 18th the Grand River rose above what is classified as a minor flood stage and on the 21st water levels crested at 21.85 feet, the highest water levels charted in recorded Grand Rapids' history. Officials declared a state of emergency on the 21st.

### IMPACTS OF EXTREME WEATHER EVENT

**Public and Private property:** Some downtown buildings experienced basement flooding. The Plaza Tower, a mixed-use high-rise building containing apartments, condos and a hotel, were evacuated on April 20th. Riverside Park, the largest park in the Grand Rapids park system within city limits, was also closed with some areas of the parks fully submerged by the flooding.



**Critical Infrastructure:** The flooding caused several closures of bridges and roads, deemed unsafe because of the high water levels.

**Economic Cost of Weather Event :** FEMA approved estimates for costs of the damage caused by the flooding for public facilities amounted to \$1.167 million USD.

For more information on MARS, visit <http://www.glslcities.org/MARS.cfm> or contact Nicola Crawhall, at [nicola.crawhall@rogers.com](mailto:nicola.crawhall@rogers.com).

Photos : Mlive.com (right, p.1), Imgur (left, p.1), City of Grand Rapids (p.2)

Funding for this program is provided by the Ontario Ministry of the Environment.



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### WHAT CHANGES IN CLIMATE CAN GRAND RAPIDS EXPECT?

Grand Rapids is expected to experience increased average temperatures and precipitation, with summer being the only season that is predicted to become drier. As well, climate change is expected to increase the frequency and severity of extreme storm events.

### MUNICIPAL RESPONSE AND LESSONS LEARNED

The recent investment by the City of Grand Rapids in upgrading its flood protection system was effective in protecting residences and businesses throughout the City during a record flooding event. At the height of the flooding, the recorded water level for the Grand River was still three feet below the maximum height of the City's flood walls.



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