



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

### Extreme Weather Event Fact Sheet

Event : Tornado

Location : Goderich, Ontario

Date : Sunday, August 21, 2011

### RECENT EXTREME WEATHER EVENT

On the afternoon of Sunday, August 21, 2011 a tornado tore through the lakeside town of Goderich, Ontario. At approximately 4:00 pm the tornado entered the harbour area from the west (off Lake Huron), travelled up the lake bank moving through the entire town in less than two minutes. Residents received twelve minutes warning before the tornado struck. The F3 tornado, the strongest to hit Ontario since 1996, lasted about fifteen minutes in total, with a total track of 20 km and peak winds of 280 km/h (175 mph) recorded.

### IMPACTS OF EXTREME WEATHER EVENT

**Public health impacts:** The tornado resulted in 1 death and 37 people injured.

**Public infrastructure and utilities damage and service interruptions:** The town's historic downtown and homes in the surrounding area were severely damaged by the tornado. In total, 54 buildings were demolished by the tornado (19 commercial, 35 residential) and an estimated 283 buildings required repair.



**Critical infrastructure impacts:** Power poles were snapped or uprooted and power lines were downed, leaving most of the town without power. There were natural gas leaks reported in several locations due to damaged mains and the natural gas supply was turned off for the entire town as a precaution.

The estimated cost of damages was \$150 million (CAD).

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

Photos: Canada.com (p.1), Bryan Spear (left p.2), Town of Goderich (right p.2).

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



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

### Extreme Weather Event Fact Sheet

Event : Tornado

Location : Goderich, Ontario

Date : Sunday, August 21, 2011

### WHAT CHANGES IN CLIMATE CAN GODERICH EXPECT?

Impacts of climate change in southern Ontario are expected to include annual temperature increases, along with increases in the number of hot days and more frequent and intense heat waves. Annual precipitation is likely to become more variable, and an increase in occurrence and intensity of extreme weather events is also expected. In addition, Goderich may be affected by lower water levels and an increase in algal growth in Lake Huron.

### MUNICIPAL RESPONSE AND LESSONS LEARNED

Emergency services and the assistance of Emergency Management Ontario were invaluable to the clean-up and recovery efforts following the tornado. Professional and Trained Volunteer Resources, including police services, public works crews and the Red Cross, also played a central role. Throughout the process of recovery, clear communication remained imperative, as did public consultation and updates. Since the tornado, funding from the Ontario Disaster Relief Assistance Program has been made available to homeowners, tenants, small businesses, farmers and non-profit organizations with expenses related to the tornado damage that are not covered by insurance.

