

Appendix B

Survey Results

Mackinac County

Flooding: Please describe the extent and locations of any known flood damages or risks in your community, whether from a lake shoreline, from river, creek, or drain overflow, or from problems with area sewer systems.

Marquette Twp. – has several miles of Lake Huron Shoreline

Garfield Twp – Millecoquin Lake has a shoreline where residential cabins have been built. Some of these cabins are close to the existing water levels. Should lake water level increase, these cabins would face damage from that situation. Mill Pond Park did experience high water level damage. Some of the walkways and sitting structures were exposed to this increased water level.

Wildfires: Please describe any known events or risks from wildfires in or near your community.

Marquette Twp. – some risk of forest fire in federal and State owned property. Grass fire from agricultural burning in spring.

Garfield Twp – Large portions of the township contain timber and brush acreage. Big Knob State Park and Hiawatha Sportsman Club are within this jurisdiction with hundreds of acres of wildland each. Though a devastating wildfire has not occurred, residential areas within Hiawatha Sportsman Club and Carnegie Trail Association could be threatened.

Ground Movement: Please describe any events or known risks from earthquake activity, landslides, mudslides, erosion, or sink holes (such as that from collapsing mine tunnels).

Marquette Twp – N/A

Garfield Twp – Earthquakes are not known in this area. Other addressed terrain concerns is not a real concern. Mining was not known to be in this area.

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Severe Winter Weather: Please describe the potential impact of severe winter weather conditions on your community, including the extent possible snow, sleet and ice and accumulation, extremely cold temperatures, and their impact on people, structures, infrastructure, business and services.

Marquette Twp – this area can experience severe winter conditions with roof failures, power failures, etc.

Garfield Twp. – Past winter storms have left the Township without electricity for days. Impact from this type of event could place people at risk due to life support systems may not function without extended independent power supply. Heat systems will not work. Local food supplies could be lost if power is out for extended periods. Vehicle fuel for at least emergency vehicles would not be readily available. The township has both a county road commission garage and MDOT garage located within it. This allows for 2 major routes, US-2 and M-117, to get opened. However, several side road do not get immediate attention and people needing assistance would be hindered until road crews could be routed to the need arrives there.

Severe Storms: Please describe the potential impacts of severe storms on your community, including the effects of heavy rains, hail, lightning, severe winds, and tornadoes; and their impact on people structures, infrastructure, business and services.

Marquette Twp – N/A

Garfield Twp – Power to access necessary functions is the key problem from any type of severe storm damage. Items addressed above would potentially apply here also.

Technological Hazards: Please describe the potential impacts of industrial accidents or mishaps such as explosions, hazardous materials release, nuclear material incidents, accidents involving oil and gas wells and pipelines, structural fires, scrap tire fires, dam failures, or similar events.

Marquette Twp – N/A

Garfield Twp – The township does have a risk from hazardous material transportation accidents. An active rail line and two major roadways move hazardous material daily.

Weather Patterns: Please describe how your community may be particularly affected by extreme summer heat, or by drought events.

Marquette Twp – only as it affects the agricultural community livestock and crops

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Garfield Twp – heat and lack of adequate rainfall will continue to challenge the local farming communities. Crop and animal production hinge on proper dry and wet conditions. Lack of rainfall will affect water tables where many residents have independent wells. Township funded and operated domestic water system is not available. However, this could be the only feasible means for domestic water needs due to water tables drying up and deeper wells are needed. People cannot afford those costs individually.

Human-Caused Incidents: Please describe how your community might be vulnerable to acts of terrorism, sabotage, or civil disturbances.

Marquette Twp – large prison nearby

Garfield Twp – Civil disturbances in this area are very unlikely to occur. Yet, given any harmful infusion of unrest from outside the Township, could inflate any affected group to act out. Acts of terrorism or sabotage have several potential problems. And explosive or biohazard released when schools is operating would be tasking. An act against the industrial rail system that would release a hazard within a built up area of the Township would also be very tasking. Sufficient services to handle any of these types of events are not immediately available. These services must be called in and time becomes the critical factor to getting the incident under control and mitigated.

Public Health Emergencies: Please describe how your community might be particularly affected by conditions of disease outbreak, contamination, etc. that would threaten public health.

Marquette Twp. – N/A

Garfield Twp. – The consolidated school would be source for this kind of concern. Another would be with the number of elderly people with the community that could have severe consequences on their health.

Large Scale Emergency Event: Please describe any special concerns relating to your community if some large-scale event (such as an enemy military attack, nuclear explosion, asteroid impact, etc.) were to occur.

Marquette Twp – N/A

Garfield Twp – considering the items outlined in the original request form, this Township is not prepared for any of them.

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Transportation Accidents: Please describe any special concerns or vulnerabilities your community might have from a larger-scale incident involving vehicles (aircraft, buses, ferries, ships, trains, etc.) carrying many passengers, or transporting hazardous materials.

Marquette Twp – N/A

Garfield Twp – These concerns have been addressed in previous subject items.

Infrastructure Failure: Please describe the concerns, potential impacts, or vulnerabilities your community might have as a result of a breakdown in critical services, energy shortages, etc. that are necessary for the normal functioning of your community.

Garfield Twp – Electrical power would be the main concern, as mentioned earlier. Heat during winter months would be a concern without power. Access to fuel to move emergency vehicles and operate critical power equipment would also be a concern.

Please identify which of the described hazards are the most threatening to your community.