

### **Hazard Mitigation Strategy**

### FEMA-4381-DR-MI

Declared August 2, 2018 Incident Period: June 16, 2018 - June 18, 2018

Public Assistance in Gogebic, Houghton, and Menominee Counties Hazard Mitigation statewide





### **HAZARD MITIGATION STRATEGY**

### OBJECTIVES AND PRIORITIES FEMA-4381-DR-MI Declared August 2, 2018

#### **Declaration**

On August 2, 2018, President Donald Trump issued a major disaster declaration for the State of Michigan, making available federal Public Assistance (PA) to eligible applicants in Gogebic, Houghton, and Menominee counties due to severe storms, flooding, landslides, and mudslides that occurred between June 16 and June 18, 2018. In addition, federal Hazard Mitigation Grant Program (HMGP) funding was made available statewide. On August 20, 2018, a FEMA/Michigan virtual Joint Field Office (JFO) was established, with physical office space used as needed in the offices of FEMA Region V (Chicago, IL and Aurora, IL), Michigan State Police (Dimondale, MI), and Finlandia University (Hancock, MI).

#### **Purpose**

This joint Hazard Mitigation Strategy identifies action items and plans for activities following the disaster declaration for FEMA-4381-DR-MI. It provides the steps for implementing short-and long-term cost-effective solutions to reduce statewide disaster damage from future events and provides guidance to the JFO and state hazard mitigation staff. The priorities listed here are consistent with the Michigan Hazard Mitigation Plan, approved by FEMA on April 23, 2014, as a Standard State Mitigation Plan under the Disaster Mitigation Act of 2000.

### **Background of Flooding Event**

A storm system moved over the western region of the Upper Peninsula (U.P.) starting in the late evening of Saturday, June 16, 2018 and continuing through the early morning of Sunday, June 17, 2018. The storm produced historically heavy rainfalls of up to approximately seven inches in parts of Gogebic, Houghton, and Menominee counties. Although the storm lasted over 12 hours, nearly all the rainfall occurred during a 6-hour period from 1:00 AM to 7:00 AM on June 17, 2018. The National Weather Service shows that 6.72 inches of rain fell in the city of Hancock, located in Houghton County. According to an official with the National Weather Service, the heavy rainfall caused by the storm system can be described as a 1000-year rain event. These "Father's Day Floods" had recorded rain totals between June 16 and June 18, 2018 as follows: up to 8.40 inches in Houghton County, up to 7.82 inches in Gogebic County, and up to 5.63 inches in Menominee County.

Due to the steep and hilly topography of the disaster area, particularly Houghton County, the rainfall caused unusual amounts of debris. In addition to the vegetative debris commonly seen during flood disasters, the flow of water caused sediment and rocks to loosen and wash down hills. On the way downhill, landslides and heavy debris damaged buildings and infrastructure, often depositing further debris on private property in the valleys. The heavy rain also caused the Sturgeon River near Alston to reach 8.14 feet as of 12:00 PM EDT on June 18, 2018, rising above the Minor Flood Stage.

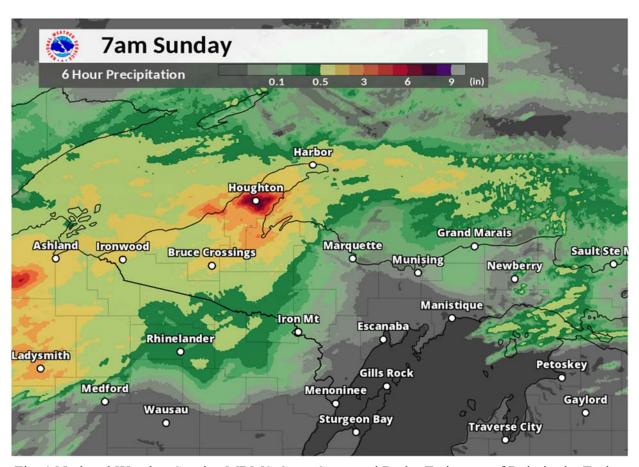


Fig. 1 National Weather Service MRMS Gage Corrected Radar Estimates of Rain in the Early Morning June 17th

While the severe storms, flooding, landslides, and mudslides had extensive impacts on households and businesses, by far the most tragic aspect of this disaster is the confirmed death of a 12-year old child, which was directly attributed to the severe flash flooding. The rapidly-rising flood waters caused the child to sustain fatal injuries after being trapped in the basement of a collapsed home.

Across the disaster area, the combination of heavy rain, stockpiling of debris, and sediment flows from subsequent landslides caused extensive damages to homes and destroyed mechanical and electrical systems and personal belongings within many dwellings.

Preliminary Damage Assessments determined that 3 homes were destroyed, 50 sustained major damage, and 172 sustained minor damage.

Damages to roadways constituted the most severe impact on public infrastructure. Many roadways in the affected counties were damaged or impassable, and over 200 roads had to be closed across the disaster area. Road failures and closures slowed down emergency response times, particularly in in the City of Houghton, Torch Lake Township, Portage Township, and the Village of Lake Linden in Houghton County. In the Village of Ripley, roads washed out on both sides of a fire hall, leaving personnel stranded and unable to respond. The local road commissions and the Michigan Department of Transportation (MDOT) engaged in emergency restorations of roadways and arranged barricades to restrict public access to closed roads immediately. As the severity and widespread nature of the damages to roads overwhelmed local resources, it became necessary to activate the Michigan National Guard (MING) to make emergency repairs and ensure temporary access to public roadways. Overall, initial local damage assessments estimated approximately \$40 million in road repair costs alone.

Approximately 50 miles of Michigan Department of Natural Resources (MDNR)-managed recreation trails were compromised or destroyed due to the flooding. Many culverts and water control structures at the base of the ravines failed during the flooding, causing numerous trails and grades to be destroyed, which impacted or put at risk approximately 4,000 residents in the communities below. Many homes, yards, basements, stream beds, streets and roads were filled with material from the grade washouts. There were 151 washouts altogether on the trail system, with the biggest impacts located between the communities of Dollar Bay and Calumet on the Lake Linden Grades in Houghton County. In the highly impacted areas, MDNR owns and manages two elevated and abandoned railroad grades as rail-trails, which are built into a hillside and span large ravines above the communities of Tamarack City, Hubbell, and Lake Linden. The grades and trails are popular tourist locations and are heavily used for recreational activities such as snowmobiling, biking, and horseback riding, but are also utilized by residents for non-recreational transportation via snowmobile during the winter months. Initial damage assessments estimated costs of \$19.8 million for trail reconstruction and engineering, \$125,000 for emergency work and establishment of a command post, and \$4.5 million for remediation work on the Lake Linden Grade, which will be necessary to restore streambeds, remove sediment, and stabilize slopes. In addition to the MDNR trails, MDOT owns and manages approximately 12 miles of rail-trail in Houghton County, which have suffered estimated damages of \$1.3 million.

The response by voluntary relief organizations has been both timely and extensive. From the outset, the American Red Cross, the Michigan Voluntary Organizations Active in Disasters, the Salvation Army, Team Rubicon, other disaster relief volunteer organizations, and volunteers organized through the Michigan Community Service Commission have actively provided relief assistance to those in need in the affected areas. Unfortunately, due to limited resources, significant unmet needs still exist in the areas of: debris removal on private

property; housing repair and restoration, including furnaces and water heaters; replacement of essential household items; and mold and other contaminant abatement.

There was a uniform lack of insurance for flood hazards in the affected areas. Michigan's initial assessments, confirmed later by PDA teams, established that only one percent of the affected households have flood insurance that would have covered the damage incurred in this disaster.

The Joint Preliminary Damage Assessments for Individual Assistance and Public Assistance were conducted from June 26 through June 28, 2018 in the three counties. On July 9, 2018, Governor Rick Snyder requested that Individual Assistance and Public Assistance be activated for the designated communities, and the Hazard Mitigation Grant Program statewide. On August 2, 2018, the major disaster declaration FEMA-4381-DR was issued, authorizing Public Assistance for Gogebic, Houghton, and Menominee Counties and the Hazard Mitigation Grant Program statewide (Appendix 1). On August 6, 2018, the request for Individual Assistance in the designated communities was denied based upon the review of all information available, including the Joint Individual Damage Assessment. On August 14, 2018, the Individual Assistance denial was appealed. That appeal was denied on August 27, 2018.

### **Strategic Goals**

Goals, objectives and tasks have been established for this disaster for the FEMA Hazard Mitigation Branch: Floodplain Management and Insurance (Goal 1); Grants and Planning (Goal 2); and Hazards and Performance Analysis (Goal 3).

The goals of the FEMA Hazard Mitigation Branch are based on the current State Hazard Mitigation Plan, the conditions in the State and the priorities of the Federal Coordinating Officer (FCO), and are as follows:

- GOAL 1: FEMA will provide technical assistance to the State of Michigan and communities for post-disaster NFIP compliance and insurance issues and outreach opportunities
- GOAL 2: FEMA will partner with the State of Michigan to assist communities in the development of hazard mitigation plans and projects
- GOAL 3: FEMA will provide engineering and technical data to enable communities affected by this disaster to become less vulnerable to future events

Individual Assistance is not available under DR-4381, and therefore the Community Education and Outreach (CEO) efforts are less robust and do not fall under a stand-alone CEO goal. Nevertheless, individuals and communities must understand the hazards that pose a risk to them and the options for reducing those risks in order to make informed decisions not only about

mitigation but also about where to live or purchase property. Individuals are often unaware of the risks they face.

When disasters occur, local jurisdictions face numerous challenges. One of these challenges is creating an awareness of how to properly recover from and mitigate against future disaster events. FEMA and the State can assist communities with this challenge by implementing a public awareness and education campaign geared toward disaster-specific issues.

In light of all of the foregoing, FEMA and the State advocate the use of the following public websites to deliver the mitigation message to the citizens of Michigan:

 Community Education and Outreach Publication List on the FEMA Disaster Mitigation Resources website: www.fema.gov/disaster/mitigation-resources

This list contains links to current publications on flood insurance, clean-up, and hazard mitigation measures and will remain available indefinitely.

• Western U.P. Flooding page on the Michigan State Police website: https://www.michigan.gov/msp/0,4643,7-123-72297 60152 86856---,00.html

This webpage contains news releases and information on the event along with resources on public safety issues and flood insurance, and will remain available until June 2019.

Tailored hazard mitigation messages and publications will also be delivered directly to communities in the declared area, as detailed in Goals 1 and 2 below.

#### HAZARD MITIGATION BRANCH MANAGEMENT

FEMA Hazard Mitigation Branch Management advises the FCO on all hazard mitigation issues, manages the Hazard Mitigation Branch operation in the JFO, provides Federal leadership by forging partnerships to provide effective planning and recovery strategies at the State, Tribal and local levels, and assures the public gets timely and effective information to mitigate the effects of future hazard events.

#### I. FLOODPLAIN MANAGEMENT AND INSURANCE

Long-term mitigation can best be achieved through consistent enforcement of comprehensive local floodplain management regulations. In support of local officials' important work, the Michigan Department of Environmental Quality (MDEQ) and FEMA will provide technical assistance and training to affected communities in meeting NFIP requirements. FEMA targeted outreach will be conducted to reduce myths about flood insurance availability and coverage.

# GOAL 1: FEMA will provide technical assistance to the State of Michigan and communities for post-disaster NFIP compliance and insurance issues and outreach opportunities

### **Objective 1.1** - FEMA will assist state and local efforts regarding post-disaster NFIP compliance.

- FEMA and MDEQ will provide NFIP support to participating communities to ensure continued compliance with minimum NFIP regulations (COMPLETED and ongoing as needed).
- FEMA will conduct Community Assistance Contacts (CACs) in coordination with MDEQ in the 21 participating communities within the three declared counties, in person or via telephone (COMPLETED).
- FEMA and MDEQ will conduct substantial damage education to participating communities during CACs and follow up with phone calls and visits where requested/necessary (COMPLETED).
- FEMA, in coordination with MDEQ, will provide printed materials in person or by mail to non-participating/never mapped communities regarding how the NFIP works and how to join the program, to be completed by end of September 2018.

### **Objective 1.2** - FEMA will target insurance outreach to the needs of communities in the affected area.

- MDEQ will send information letters to non-participating communities highlighting the benefits of the NFIP and the process of joining (COMPLETED).
- FEMA will visit the three sanctioned communities within the declared counties to encourage NFIP participation (COMPLETED).
- FEMA will send information letters to sanctioned communities explaining what it means to be a sanctioned community and the process to join or re-enroll in the NFIP (COMPLETED).

• FEMA will provide insurance data and analysis, as requested, to state, local and tribal agencies (COMPLETED and ongoing as needed).

#### II. GRANTS AND PLANNING

Michigan has a Standard State Mitigation Plan, approved on April 23, 2014, as outlined in Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act). Per the guidelines established under Section 404 of the Stafford Act, the State is eligible to receive funding under the Hazard Mitigation Grant Program (HMGP). This funding is based on 15 percent of the total estimated federal disaster assistance and is available to all eligible applicants statewide. All submitted project applications will be rated and ranked by the State based on the State's funding priorities.

The Standard State Mitigation Plan Update is currently being developed. Monthly update calls will begin to track the plan's progress and ensure the plan is submitted in advance of the current expiration date of April 23, 2019. FEMA approval of the plan update is necessary for Michigan to remain eligible for the following programs:

- Public Assistance (Categories C-G)
- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation Grant Program (PDM)
- Flood Mitigation Assistance Grant Program (FMA)
- Fire Management Assistance Grant Program (FMAG)

Michigan currently has 85.4% of its population covered by a mitigation plan.

### GOAL 2: FEMA will partner with the State of Michigan to assist communities in the development of hazard mitigation plans and projects

<u>Objective 2.1</u> - FEMA will implement the HMGP with the Michigan State Police/Emergency Management and Homeland Security Division (MSP/EMHSD).

#### State Responsibilities:

- Submit the HMGP Administrative Plan\*
- Provide technical assistance on HMGP for tribal and local officials using the 2015
   Hazard Mitigation Assistance Guidance
- Perform initial review of the HMGP applications for project eligibility and completeness to ensure that all information and documentation is provided
- Submit HMGP applications to FEMA within 12 months of the date of declaration

Submit SF 424 and Assurances for the Disaster\*

\*Needs to be submitted/approved before any obligations occur

#### FEMA Responsibilities:

- Review and approve the HMGP Administrative Plan
- Provide technical assistance to the State, as necessary
- Provide State with 30-day and 6-month estimates, and 1-year lock-in amount
- Review and approve eligible, complete, technically feasible, and cost-effective applications submitted by the State

## <u>Objective 2.2</u> - FEMA will partner with the State to identify mitigation opportunities and solicit quality Hazard Mitigation Assistance (HMA) applications from eligible subapplicants.

- FEMA will provide Areas of Mitigation Interest (AOMI) data and information collected from the initial discovery stage of the Risk MAP cycle (COMPLETED).
- The State will review their HMGP priorities as defined in the state hazard mitigation plan by end of September 2018.
- The State will solicit input from County Emergency Management Coordinators, MDOT, MDEQ, and MDNR regarding HMGP project opportunities. This effort will specifically seek information regarding known at-risk areas that were not damaged from this event, to be completed by end of November 2018.
- FEMA will provide support to the State in soliciting interest from eligible subapplicants to apply for HMGP and other HMA funds, to include distribution of HMA materials as well as in-person meetings with community officials as needed, to be completed by end of November 2018.
- FEMA and the State will explore the use of Advance Assistance to develop mitigation strategies and/or obtain data to prioritize, select, and develop complete HMGP subapplications. This effort will focus on: the potential acquisition and demolition of homes that were destroyed or suffered major damage; and the mitigation of flooding that has affected storm water drains and culverts, streams and natural drainage ways, and historical railroad grade crossings in areas where steep ravines exist. To be completed by end of October 2018.
- At the request of the State of Michigan, FEMA will coordinate the delivery of the full suite of available HMA Grants Management training (to include application development workshop and benefit-cost analysis training) post-JFO, to allow for more complete HMA applications to be submitted to the State. To be completed by end of March 2019.

- FEMA and the State will coordinate ongoing efforts to ensure potential HMA subapplicants are able to take advantage of both pre- and post- disaster grant programs wherever possible in an organized fashion that maximizes mitigation opportunities.
- The State will solicit and review HMGP Notices of Intent (to Apply) from eligible subapplicants by end of February 2019.

### **Objective 2.3** - FEMA will partner with the State to assist in the development of hazard mitigation plans.

- FEMA will identify those communities without a mitigation plan, as well as those set to expire within 24 months, statewide (COMPLETED).
- FEMA will identify communities that have not yet adopted their local hazard mitigation plan (COMPLETED).
- FEMA and the State will develop a draft letter to send to communities that have not yet adopted their local mitigation plan by end of September 2018.
- FEMA and the State will provide HMA application information on grants to finance mitigation plan development by end of November 2018.
- FEMA and the State will provide technical assistance (may include in-person training, tools, outreach, etc.) as requested to help communities develop and update mitigation plans.
- FEMA will provide ongoing support and technical assistance to the State, as needed, for update of the state hazard mitigation plan which will expire on April 23, 2019.

### III. HAZARDS AND PERFORMANCE ANALYSIS (HPA)

The FEMA HPA Section provides engineering and scientific analysis in support of hazard mitigation programs. It is the focal point for data collection and analysis in support of hazard mitigation initiatives for all disaster services. The HPA Section brings related support through distribution of reports which outline ongoing and completed flood studies and data funded under annual (non-disaster) program allocations.

GOAL 3: FEMA will provide engineering and technical data to enable communities affected by this disaster to become less vulnerable to future events

**Objective 3.1** - FEMA will develop a memorandum to specifically identify and describe all available flood hazard data and products in the designated counties.

• HPA will create a memorandum, Guidance for Use of Available Information in Complying with 44 CFR § 9 and Executive Order 11988 (Floodplain Management), and provide it to the State of Michigan and those involved in recovery programs by end of October 2018 in order to enable stakeholders to make informed rebuilding decisions during the recovery process.

#### **SUMMARY**

The mitigation objectives and activities identified in this Hazard Mitigation strategy will be implemented through a strong FEMA/State partnership dedicated to preventing loss of life and property to the citizens of Michigan. The FEMA-4381-DR-MI JFO staff will provide a smooth transition to Region V office personnel at the point when coordination with the State is optimal.

Steven Johnson Federal Coordinating Officer FEMA-4381-DR-MI
2/8EP 2018  Date
Inspector Chris Bush State Coordinating Officer FEMA-4381-DR-MI
Date
Mary Beth Caruso, Mitigation Division Director U.S. Department of Homeland Security FEMA Region V  Date

Steven Johnson Federal Coordinating Officer
FEMA-4381-DR-MI
Date
Jane Chi Bal
Inspector Chris Bush State Coordinating Officer
FEMA-4381-DR-MI
9-27-18
Date
Mary Beth Caruso, Mitigation Division Director U.S. Department of Homeland Security
FEMA Region V
Date

Steven Johnson
Federal Coordinating Officer FEMA-4381-DR-MI
FEMA-4381-DK-MI
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Date
Inspector Chris Bush
State Coordinating Officer
FEMA-4381-DR-MI
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Mary Beth Caruso, Mitigation Division Director
U.S. Department of Homeland Security

FEMA Region V

### FEMA-4381-DR, Michigan Disaster Declaration as of 08/02/2018





#### Data Layer/Map Description:

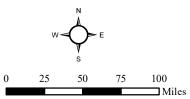
The types of assistance that have been designated for selected areas in the State of Michigan.

All areas in the State of Michigan are eligible for assistance under the Hazard Mitigation Grant Program.

### **Designated Counties**

No Designation

**Public Assistance** 



#### **Data Sources:**

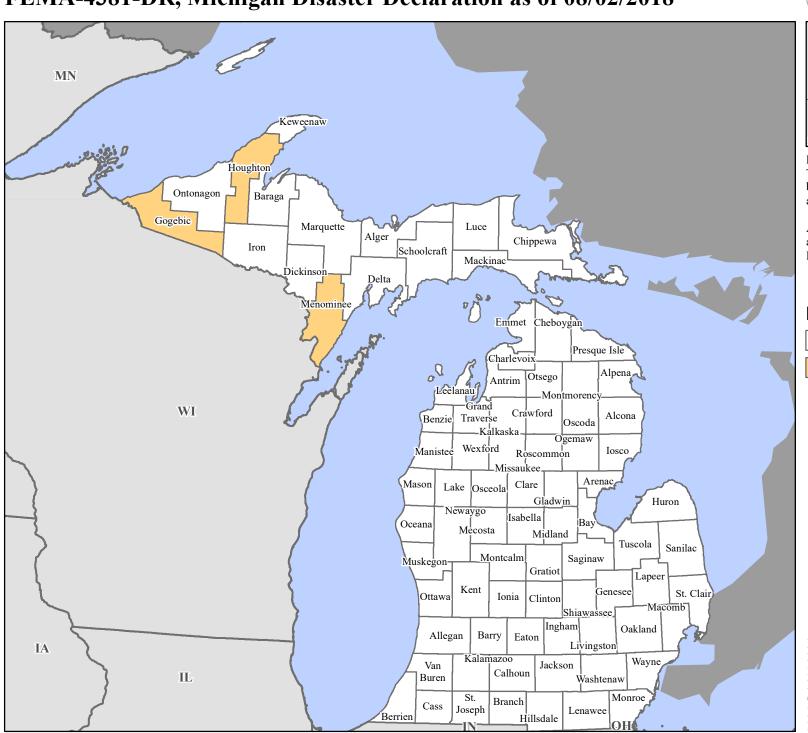
FEMA, ESRI;

Initial Declaration: 08/02/2018 Disaster Federal Registry Notice:

08/02/2018

Datum: North American 1983

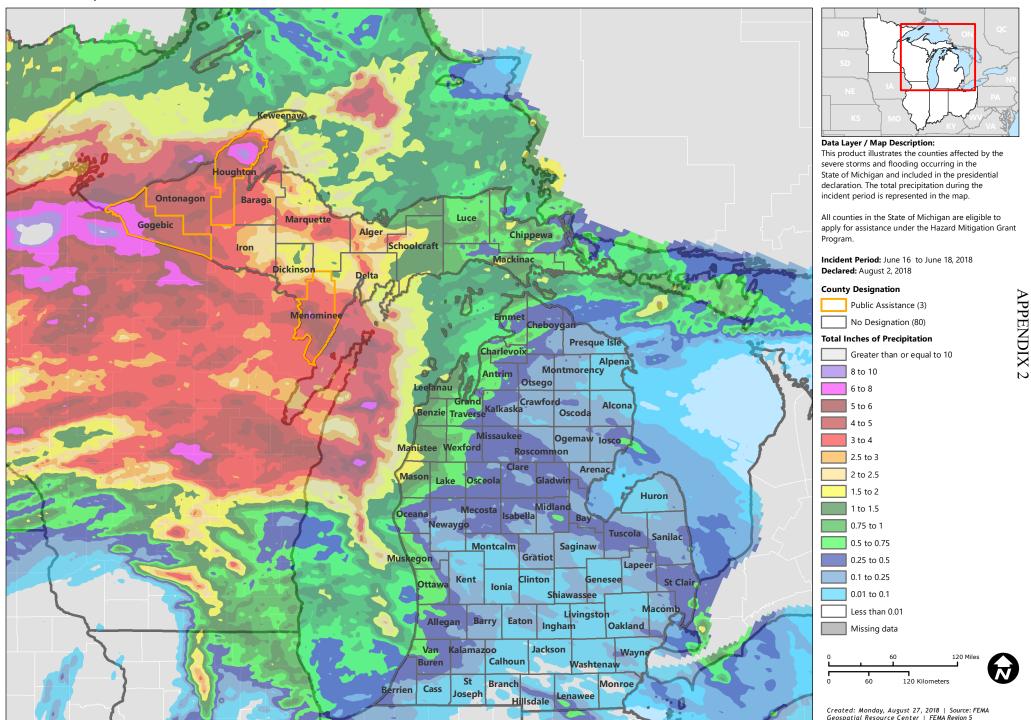
Projection: Lambert Conformal Conic



FEMA-4381-DR-MI - Severe Storms, Flooding, Landslides, and Mudslides

Total Precipitation Between 6/16/2018 - 6/18/2018





### Federal Emergency Management Agency Disaster Report - MICHIGAN Community Status - Detail

CID	Community	Status	Date Of Entry -Reg or Emer-	Date Of Current Effective Map	Date Of Init Map	Cnty Wide	Status of Studies	COBRA
	** GOGEBIC COUNTY **							
260404	WATERSMEET, TOWNSHIP OF	NOT PARTICIPATING			03/18/77(FHBM)	Yes	99999 MIP STUDY PROJECT	N
260298B	BESSEMER, CITY OF	PARTICIPATING	09/01/86(R)	09/01/86(L)	09/01/86	Yes	99999 MIP STUDY PROJECT	N
260081#	IRONWOOD, CITY OF	PARTICIPATING	07/17/78(R)	07/17/78	07/17/78	Yes	99999 MIP STUDY PROJECT	N
260403#	IRONWOOD, TOWNSHIP OF	PARTICIPATING	07/01/87(R)	07/01/87(L)	07/01/87	Yes	99999 MIP STUDY PROJECT	N
260567	WAKEFIELD, CITY OF	PARTICIPATING	05/25/84(R)	(NSFHA)	09/19/75(FHBM)	Yes	99999 MIP STUDY PROJECT	N
	Total: 5							
	** HOUGHTON COUNTY **							
260087	HANCOCK, CITY OF	NOT PARTICIPATING		(NSFHA)	06/14/74(FHBM)	N/A	N/A	N
260568	HOUGHTON, CITY OF	NOT PARTICIPATING		(NSFHA)	10/24/75(FHBM)	N/A	N/A	N
260412	LAKE LINDEN, VILLAGE OF	NOT PARTICIPATING		(NSFHA)	04/11/75(FHBM)	N/A	N/A	N
260612	SOUTH RANGE, CITY OF	NOT PARTICIPATING		,	10/17/75(FHBM)	N/A	N/A	N
260708	TORCH LAKE, TOWNSHIP OF	NOT PARTICIPATING		(NSFHA)	08/12/77(FHBM)	N/A	N/A	N
260411#	CHASSELL, TOWNSHIP OF	PARTICIPATING	12/05/90(R)	12/05/90	12/05/90	N/A	N/A	N
260413	OSCEOLA, TOWNSHIP OF	PARTICIPATING	03/06/08(R)		09/26/75(FHBM)	N/A	N/A	N
	Total: 7							
	** MENOMINEE COUNTY **							
261494#	CARNEY, VILLAGE OF	NOT PARTICIPATING		(NSFHA)	10/16/12	Yes	99999 MIP STUDY PROJECT	
261495#	DAGGETT, VILLAGE OF	NOT PARTICIPATING		10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	
260459#	NADEAU, TOWNSHIP OF	NOT PARTICIPATING		10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260460#	POWERS, VILLAGE OF	NOT PARTICIPATING		10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260659#	CEDARVILLE, TOWNSHIP OF	PARTICIPATING	06/24/93(R)	10/16/12	09/28/79	No	PMR PHYSICAL MAP REVISION	Υ
260690#	DAGGETT, TOWNSHIP OF	PARTICIPATING	02/01/13(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260689#	FAITHORN, TOWNSHIP OF	PARTICIPATING	04/27/17(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260455#	GOURLEY, TOWNSHIP OF	PARTICIPATING	11/05/09(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260456#	HARRIS, TOWNSHIP OF	PARTICIPATING	06/21/16(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260457#	HOLMES, TOWNSHIP OF	PARTICIPATING	11/05/09(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260660#	INGALLSTON, TOWNSHIP OF	PARTICIPATING	09/28/79(R)	10/16/12	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260908#	LAKE, TOWNSHIP OF	PARTICIPATING	10/16/12(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260692#	MELLEN, TOWNSHIP OF	PARTICIPATING	11/05/09(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260138#	MENOMINEE, CITY OF	PARTICIPATING	08/01/78(R)	10/16/12	08/01/78	Yes	99999 MIP STUDY PROJECT	N

# Federal Emergency Management Agency Disaster Report - MICHIGAN Community Status - Detail

			Date Of Entry	<b>Date Of Current</b>	Date Of	Cnty		
CID	Community	Status	-Reg or Emer-	Effective Map	Init Map	Wide	Status of Studies	COBRA
260702#	MENOMINEE, TOWNSHIP OF	PARTICIPATING	01/07/92(R)	10/16/12	03/28/80	Yes	99999 MIP STUDY PROJECT	N
260458#	MEYER, TOWNSHIP OF	PARTICIPATING	08/19/97(R)	10/16/12(M)	08/19/97	No	15XDS EXISTING DATA STUDY	N
260461#	SPALDING, TOWNSHIP OF	PARTICIPATING	11/05/09(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	N
260139#	STEPHENSON, CITY OF	PARTICIPATING	05/16/77(R)	10/16/12	05/16/77	Yes	99999 MIP STUDY PROJECT	N
261503#	STEPHENSON, TOWNSHIP OF	PARTICIPATING	12/21/12(R)	10/16/12(M)	10/16/12	Yes	99999 MIP STUDY PROJECT	

Total: 19

Total Unique Communities: 31

### Legend:

- # (AFTER CID) Z Fold Map
- E Emergency Éntry
- R Regular Entry
- M ALL ZONES A and C-NO ELE
- L ALL ZONES A and C-ORIG F
- A-Z (AFTER CID) MAP INDEX
- >>> (AFTER CID) Communities

Multiple Counties

### APPENDIX 4

### Federal Emergency Management Agency Community Declared Disaster - Participating MICHIGAN

			Entry Date	Current Eff
CID	County	Community	-Reg or Emer-	Map Date
260298B	GOGEBIC COUNTY	BESSEMER, CITY OF	09/01/86(R)	09/01/86(L)
260081#	GOGEBIC COUNTY	IRONWOOD, CITY OF	07/17/78(R)	07/17/78
260403#	GOGEBIC COUNTY	IRONWOOD, TOWNSHIP OF	07/01/87(R)	07/01/87(L)
260567	GOGEBIC COUNTY	WAKEFIELD, CITY OF	05/25/84(R)	(NSFHA)
260411#	HOUGHTON COUNTY	CHASSELL, TOWNSHIP OF	12/05/90(R)	12/05/90
260413	HOUGHTON COUNTY	OSCEOLA, TOWNSHIP OF	03/06/08(R)	
260659#	MENOMINEE COUNTY	CEDARVILLE, TOWNSHIP OF	06/24/93(R)	10/16/12
260690#	MENOMINEE COUNTY	DAGGETT, TOWNSHIP OF	02/01/13(R)	10/16/12(M)
260689#	MENOMINEE COUNTY	FAITHORN, TOWNSHIP OF	04/27/17(R)	10/16/12(M)
260455#	MENOMINEE COUNTY	GOURLEY, TOWNSHIP OF	11/05/09(R)	10/16/12(M)
260456#	MENOMINEE COUNTY	HARRIS, TOWNSHIP OF	06/21/16(R)	10/16/12(M)
260457#	MENOMINEE COUNTY	HOLMES, TOWNSHIP OF	11/05/09(R)	10/16/12(M)
260660#	MENOMINEE COUNTY	INGALLSTON, TOWNSHIP OF	09/28/79(R)	10/16/12
260908#	MENOMINEE COUNTY	LAKE, TOWNSHIP OF	10/16/12(R)	10/16/12(M)
260692#	MENOMINEE COUNTY	MELLEN, TOWNSHIP OF	11/05/09(R)	10/16/12(M)
260138#	MENOMINEE COUNTY	MENOMINEE, CITY OF	08/01/78(R)	10/16/12
260702#	MENOMINEE COUNTY	MENOMINEE, TOWNSHIP OF	01/07/92(R)	10/16/12
260458#	MENOMINEE COUNTY	MEYER, TOWNSHIP OF	08/19/97(R)	10/16/12(M)
260461#	MENOMINEE COUNTY	SPALDING, TOWNSHIP OF	11/05/09(R)	10/16/12(M)
260139#	MENOMINEE COUNTY	STEPHENSON, CITY OF	05/16/77(R)	10/16/12
261503#	MENOMINEE COUNTY	STEPHENSON, TOWNSHIP OF	12/21/12(R)	10/16/12(M)

Total: 21

### APPENDIX 5

### Federal Emergency Management Agency Community Declared Disaster - Non Participating

### **MICHIGAN**

### **Including Future Sanction Dates**

261495# N	MENOMINEE COUNTY	DAGGETT, VILLAGE OF	10/16/12(F)	10/16/13(F)
260459# N	MENOMINEE COUNTY	NADEAU, TOWNSHIP OF	03/25/77	03/25/78
260460# N	MENOMINEE COUNTY	POWERS, VILLAGE OF	07/11/75	07/11/76

