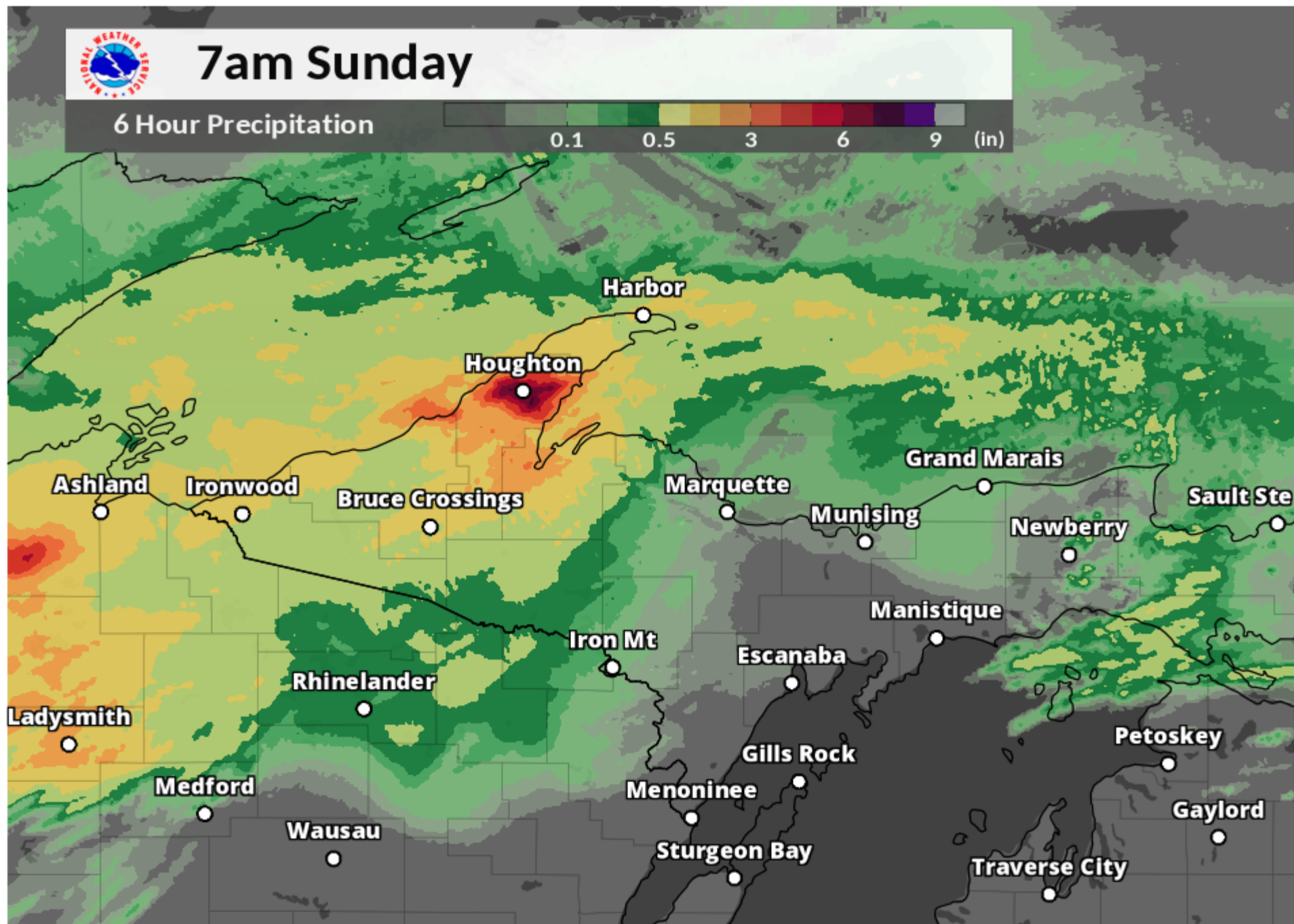


June 15-17, 2018

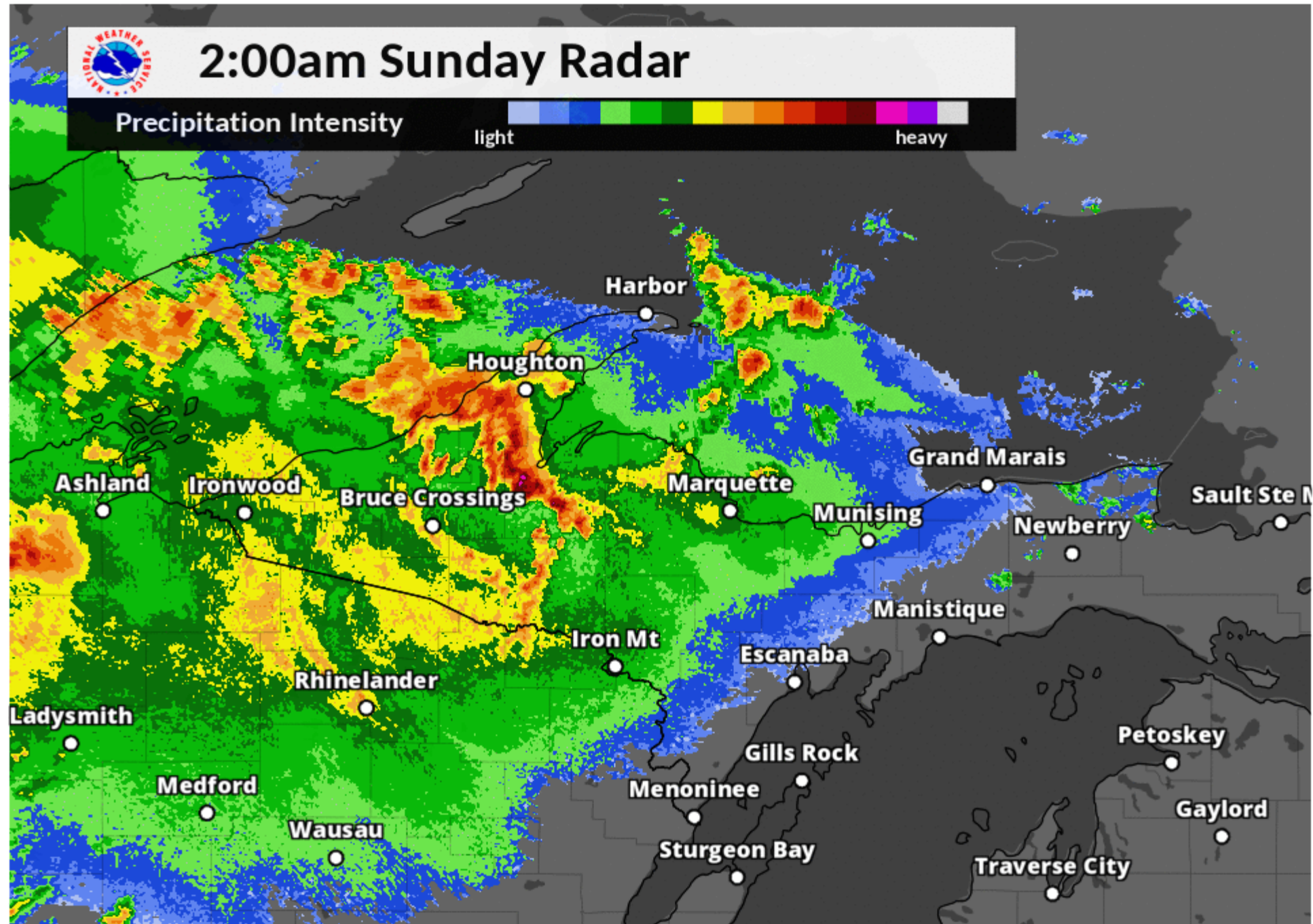
Houghton County flood disaster





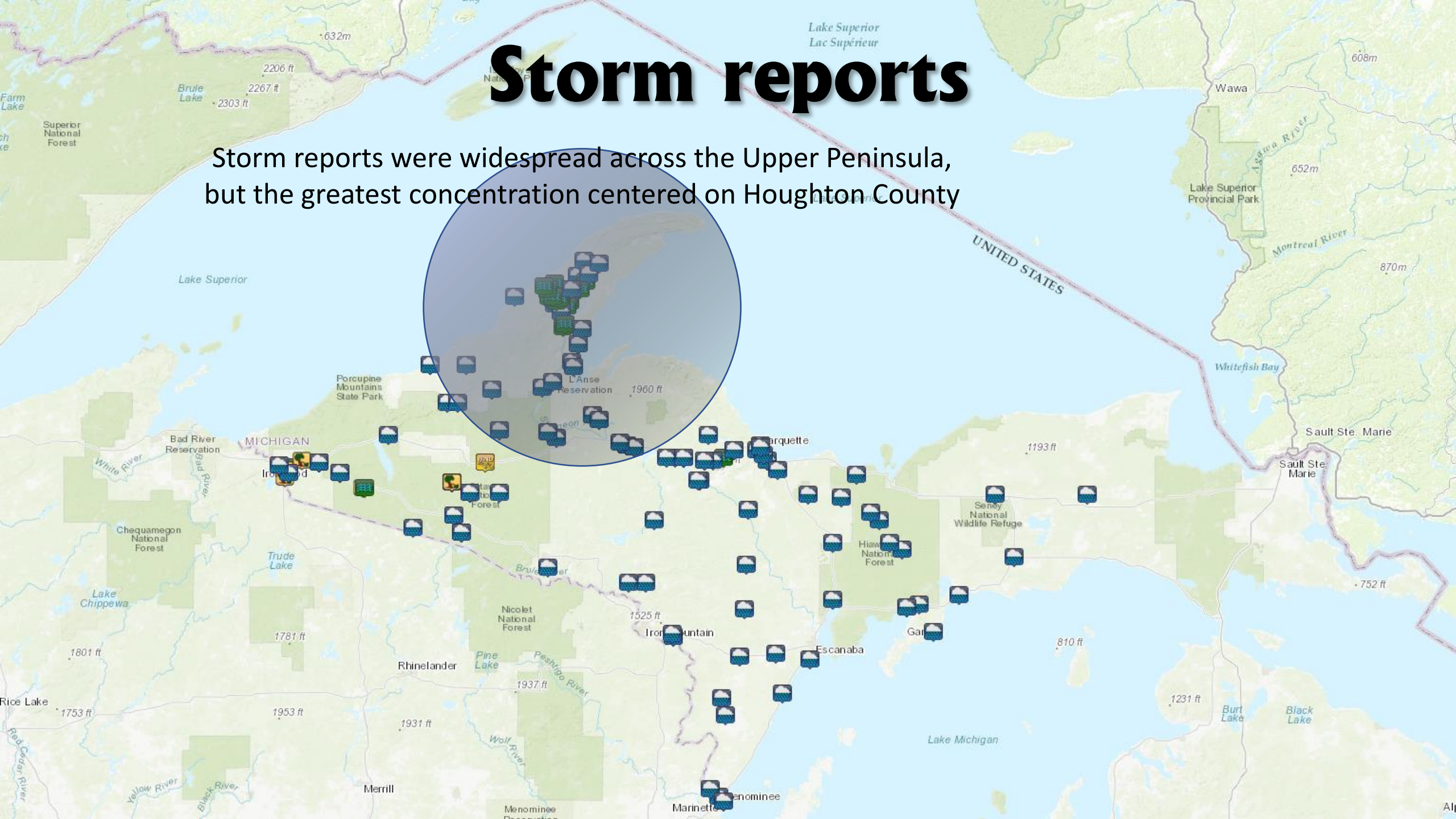
Father's Day weekend, June 15-17, 2018, the western Upper Peninsula was struck by unrelenting rain. Hardest hit was Houghton County, which saw over 7 inches of rain in a three-hour period devastate the region.

Multiple rounds of heavy rain slammed Houghton and surrounding counties throughout the weekend, causing massive amounts of damage to the cities of Houghton and Hancock and was especially damaging to the state and local roads in its path. According to the National Weather Service in Marquette, the storm was a 1,000-year rain event.



Storm reports

Storm reports were widespread across the Upper Peninsula, but the greatest concentration centered on Houghton County



State of emergency

Old Mill Hill



Tweet



Governor Rick Snyder

@onetoughnerd



I have declared a state of disaster for Houghton and Menominee counties after severe weather and heavy rainfall struck both counties, resulting in widespread flooding damage. bit.ly/2MCHifq

“ ”

I appreciate the dedication of our state and local emergency response teams and volunteers who have been working diligently to protect the public health and safety of our residents affected by this severe flooding. This declaration will ensure additional state resources are available so that damages can be repaired as quickly as possible.

Governor Rick Snyder

6/18/18, 3:15 PM

The numbers

- **\$30 million** in damages on the Houghton County road system
- **60 sinkholes** created by flash flooding in the Keweenaw Peninsula
- **150 road washouts**, including 15 massive washouts
- **150+ roads** affected by the flood with varying degrees of damage

Source: Houghton County Road Commission, July 2018



Coles Creek Road



Old Mill Hill

**According to MDOT,
this marks
the largest emergency
Federal Highway
Administration claim
in Michigan history**

Affected Road Name	City or Township	Total Site Estimate ¹ calculated
1-A Canal Rd by Old Mill Rd 3135	Stanton	\$ 160,021
Liminga Rd 3172	Stanton	\$ 205,000
Larson Rd 3174	Stanton	\$ 55,000
Obenhoff Rd 3174	Adams	\$ 75,000
5A South of Denton Rd Area 3149	Portage	\$ 201,502
Green Acres Rd 3141	Portage	\$ 55,000
Chassell Painesdale Rd 3164	Chassell, Portage, Adams	\$ 150,000
Salo Rd 3145	Hancock Twp	\$ 1,140,100
9-A Lower Forsman Rd 3170	Franklin, Osceola	\$ 130,994
Boston Rd 3153	Franklin	\$ 134,400
Superior Rd 3141	Portage	\$ 125,000
Tapiola Rd 3131	Portage	\$ 180,000
Airport Park Rd 3157	Franklin	\$ 1,050,000
Baltic Onkalos Corner 3141	Adams and Portage	\$ 125,000
Lake Annie Rd 3145	Quincy and Hancock	\$ 264,500
Industrial Drive 3157	Franklin Twp	\$ 37,000
Bootjack Rd 3177	Schoolcraft and Torch Lake	\$ 350,000
1B- Canal Rd Coles Creek Culvert 3135	Adams	\$ 1,023,490
1C- Canal Rd East of Gedvillas Rd 3135	Stanton	\$ 75,058
1-D Canal Rd Gedvillas Rd Area 3135	Stanton	\$ 208,539
1-E Canal Rd west of Gedvillas Rd 3135	Stanton	\$ 80,948
1-F Canal Rd West of Gedvillas Rd 3135	Stanton	\$ 89,550
1-G Canal Rd West of Gedvillas Rd 3135	Stanton	\$ 98,079
1-H Canal Rd West of Gedvillas Rd 3135	Stanton	\$ 183,537
1-I Canal Rd West of Gedvillas Rd 3135	Stanton	\$ 49,007
1-J Canal Rd East Side of Markhams Marina 3135	Stanton	\$ 540,715
1-K Canal Rd Markham's Marina House area 3135	Stanton	\$ 756,870
1-L Canal Rd Anderson Farm Area 3135	Stanton	\$ 317,548
1-M Canal Rd Weber Lane Area 3135	Stanton	\$ 56,395
1-N Canal Rd Rocky Shores Rd Area 3135	Stanton	\$ 187,537
1-O Canal Rd west of Rocky Shores Rd 3135	Stanton	\$ 42,424
1-P Canal Rd Blue Top Cabin Rd Area 3135	Stanton	\$ 135,930
1-Q Canal Rd Schotts Creek Oscar Bay Culvert 3135	Stanton	\$ 1,177,200
5-B Paradise Rd Pilgrim River approaches and Bridge 3149	Portage	\$ 2,512,048
9-B Forsman Rd 36" culvert 3170	Franklin	\$ 130,758
9-C Forsman Rd 42" Culvert 3170	Franklin	\$ 90,982
9-D Forsman Rd Box Culvert 3170	Franklin	\$ 985,400
9-E Forsman Rd washout 3170	Osceola Twp	\$ 1,087,010
		\$ 14,230,542



Local roads eligible for federal aid:
38 damaged areas to
20 local roads and bridges
totaling **\$14,230,542**

Local roads not eligible for federal aid:
142 damaged areas to
local roads and bridges
totaling **\$15,478,328**

(Detailed over the next 6 pages)

DAMAGED FACILITY	Township / Community	DIMENSIONS / QUANTITIES	TOTAL
Fishermans Road	Calumet		
Oikerinen Road	Calumet		\$ 48,700.00
Pepin Road	Calumet		
South Cloverland Road	Calumet		\$ 53,381.88
Waasa Road	Calumet		\$ 46,500.00
E 12th	Hubbell		\$ 205,372.76
Ave B	Hubbell		\$ 15,794.48
W 9th	Hubbell		\$ 37,076.78
11th	Hubbell		
W 12th	Hubbell		\$ 23,588.96
E 13th	Hubbell		\$ 48,433.43
W 14th	Hubbell		\$ 41,934.55
W 15th	Hubbell		\$ 9,650.00
E 15th	Hubbell		\$ 73,311.28
E 16th	Hubbell		\$ 51,922.39
W 32nd	Hubbell		
Summit Road	Hubbell		\$ 170,131.44
Cemetery Road	Schoolcraft	8ft CMP with concrete headwalls, 56 ft long; DEQ proposes: 10ft x 6ft box culvert 56 ft long	\$ 160,000.00
Sawmill Road #1	Schoolcraft		\$ 336,672.94
Sawmill Road #1	Schoolcraft		\$ 22,300.00
Hanson Rd	Schoolcraft	DEQ - May require upsize	
Gas Plant Road	Schoolcraft		
Post Road	Schoolcraft		\$ 9,100.00
Normand Road	Schoolcraft		\$ 39,900.00

Rimfetti Road	Schoolcraft		
Rice Lake Road	Schoolcraft		
Seivi Road	Schoolcraft		\$ 6,086.00
Mud Lake Road	Torch Lake		\$ 824,015.75
Bridge St. (By Louies)	Torch Lake		\$ 500,000.00
Baulman Road	Torch Lake		\$ 92,478.41
Senter Road	Torch Lake		\$ 63,627.55
Lower Point Mills Road	Torch Lake		\$ 96,208.35
N. Gross Pointe Shores Road	Torch Lake		
Red Barn Road	Torch Lake		\$ 59,632.24
Beaver Dam Road	Torch Lake		
Birdseye Road #1	Torch Lake		\$ 108,029.82
Birdseye Road #2	Torch Lake		\$ 39,900.00
Deer Field Road	Torch Lake		\$ 46,253.42
McCollum Road	Torch Lake		
Oak Ridge Road 1	Torch Lake		\$ 78,190.12
Oak Ridge Road 2	Torch Lake		\$ 54,640.00
Orchard Road	Torch Lake		
Paradise Lane (Alley) Road	Torch Lake		\$ 102,396.38
Rabbit Bay Road	Torch Lake		
School Forest Road	Torch Lake		
White Tail Road	Torch Lake		
43 Roads			subtotal \$ 3,465,228.90

DAMAGED FACILITY	Township / Community	DIMENSIONS / QUANTITIES	TOTAL
Beagle Farm	Chassell		\$ 13,309.89
Creamery	Chassell		\$ 37,051.85
Lower Worham	Chassell	10' span x 4.5' rise masonry box culvert with steel span and concrete deck - DEQ proposes: 10' x 5' box culvert	\$ 120,000.00
Lower Massie	Chassell		\$ 423,689.96
Hamar	Chassell		\$ 17,295.34
Lindala Road	Chassell		
Pike River Road	Chassell		
Sajdak Road	Chassell		
Upper Massie	Chassell		\$ 32,988.20
Upper Pike River	Chassell		\$ 62,544.84
Upper Worham	Chassell		\$ 16,222.26
Goat Hill	Franklin		\$ 224,203.81
Military Rd	Franklin		\$ 161,640.78
Pewabic	Franklin		\$ 193,589.56
North Royce	Franklin		\$ 250,000.00
Upper Forsman	Franklin		\$ 14,144.48
Upper Forsman	Franklin		\$ 652,968.95
Pontiac	Franklin	#1 = 48in x 48ft RCMP - DEQ Proposes: 72in x 48ft RCP; #2 = 2 26in x 60 ft concrete pipes with masonry headwalls DEQ proposes: 16ft x 4ft high box culvert	\$ 390,000.00
Hendrickson	Franklin		\$ 30,740.67
2nd St (Ripley)	Franklin		\$ 28,117.85
W. 3rd Street embankment erosion at dead end	Franklin	Flash flooding from atop Ripley caused severe embankment erosion west of 3rd street south of ripley falls - may be MTUs responsibility	\$ 50,000
Boston	Franklin		\$ 39,900.00
Coal Dock	Franklin		\$ 115,032.43
Crosscut Road	Franklin		

Hill Top Road	Franklin		
Pit	Franklin		\$ 9,100.00
Roosevelt	Franklin		\$ 9,290.36
Brooks	Hancock		\$ 174,700.60
Golf Course	Osceola		\$ 211,781.88
Dover 1	Osceola		\$ 170,000.00
Dover 2	Osceola		\$ 75,100.00
		#1 = 8 ft span, rise masonry box culvert, 40 ft long DEQ proposes: 10 ft x 4 ft concrete box culvert 40 ft long # 2 = 7.5 ft span 6.5 ft rise masonry box culvert, 40 ft long DEQ Proposes: to 8 ft span x 6 ft rise box culvert, 40 ft long	
Woodside	Osceola		\$ 230,000.00
Upper Point Mills	Osceola		\$ 116,291.24
Junction	Osceola		\$ 31,100.00
North Cloverland	Osceola		\$ 23,588.96
Old County	Osceola		\$ 9,100.00
Rhode Island	Osceola		\$ 22,300.00
Seeburg	Osceola		\$ 12,180.00
South Oneco	Osceola		\$ 13,500.00
Woodland Road	Osceola		
Spruce (TC)	Tamarack City		\$ 382,633.60
W 8th (TC)	Tamarack City		\$ 303,597.34
4th (TC)	Tamarack City		\$ 38,153.42
6th (TC)	Tamarack City		\$ 58,493.48
7th St (TC)	Tamarack City		\$ 19,120.05
7th (TC)	Tamarack City		\$ 23,588.96
8th (TC)	Tamarack City		\$ 76,766.87
Maple (TC)	Tamarack City		\$ 48,454.46
N Spruce (TC)	Tamarack City		\$ 10,566.67
Osceola Hill (TC)	Tamarack City		\$ 95,760.20
Tamarack Hill	Tamarack City		\$ 79,333.53
51 Roads		subtotal	\$ 5,117,942.48

DAMAGED FACILITY	TOWNSHIP	DIMENSIONS / QUANTITIES	TOTAL
Old Mill	Adams		\$ 1,250,000.00
Atlantic Ave	Adams		\$ 121,713.83
3rd Street	Adams		
Cheese Factory Road	Adams		
Elsie	Adams		
Juntikka	Adams		
North Huron (aka Strauch)	Adams		
Shaft Road	Adams		
Donken Road	Elm River		
Lake Gerald	Elm River		
Pike Lake Road	Elm River		
Winona Road	Elm River		
Hazel Road	Laird		
S. Laird Road	Laird		
Main	Portage		\$ 649,158.66
Pilgrim	Portage		\$ 820,863.40
Denton	Portage		\$ 349,124.77
Boundry	Portage	5' span x 6' high masonry box with concrete headwalls length 48' DEQ proposes: elliptical culvert with a 5.5' span	\$ 73,628.04
Broemer	Portage		\$ 133,042.84
Lahti	Portage		\$ 225,904.51
Hongisto Road	Portage		
Horoscope Road	Portage		
Horseshoe Lane	Portage		
Mill Road	Portage		

Moskow Road	Portage		
Old Road	Portage		
Palo	Portage		\$ 12,976.43
River Road	Portage		
Superior Loc Road	Portage		
Coles Creek	Stanton		\$ 2,640,000.00
Beacon Hill Toivola	Stanton		\$ 200,000.00
Old Rink	Stanton		\$ 47,454.80
Agate Beach	Stanton		\$ 24,092.99
Salmi	Stanton		\$ 41,472.39
Superior View	Stanton		\$ 16,184.68
1st St Redridge	Stanton		\$ 16,392.59
3rd St (Beacon Hill)	Stanton		\$ 84,153.73
Ausamaa Road	Stanton		
Eiola Road	Stanton		
Fire Hall Road	Stanton		
Gedvillas Rd	Stanton		
Harma	Stanton		\$ 6,900.00
Maata Road	Stanton		
Niemi	Stanton		\$ 29,601.57
North Superior Road	Stanton		
Old Rink	Stanton		\$ 67,792.94
Osma Plat Road	Stanton		
Rauhala	Stanton		\$ 84,700.53
Superior Shores	Stanton		
48 Roads		subtotal	\$6,895,158.71

TOTAL \$15,478,328

2nd Street



8th Street



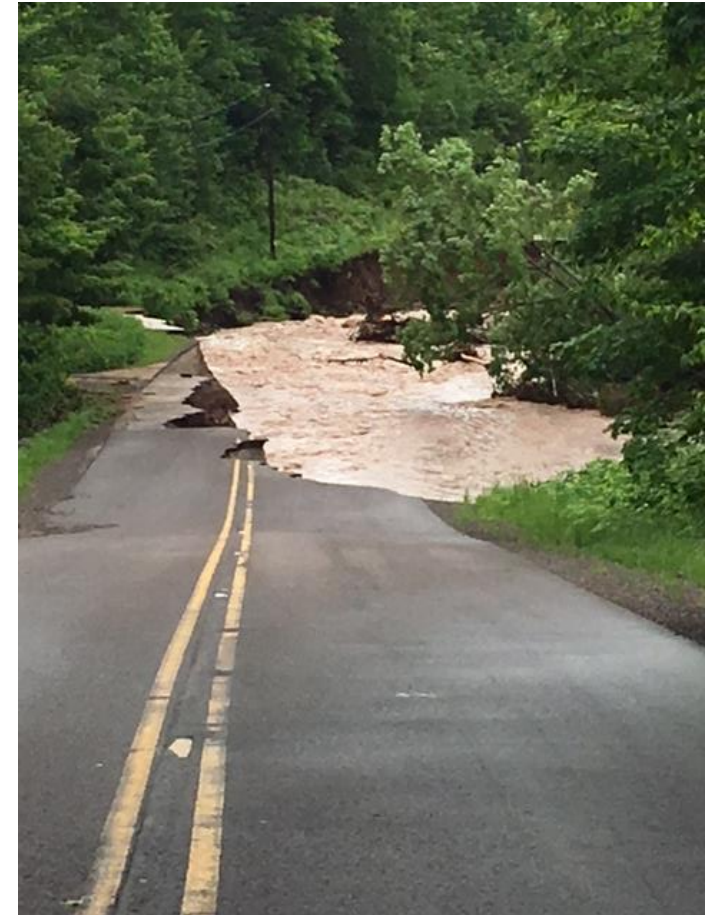
31st Street



Bridge Street



Coles Creek Road (partial)



Coles Creek Road (partial)



Gedvillas Hill



Houghton Canal Road (partial)



Houghton Canal Road (partial)



Houghton Canal Road (partial)



Liminga Road



Old Mill Hill



The latest updates

HCRC's Federal Aid System

- HCRC is working directly with FHWA and MDOT to address the repairs to HCRC's Federal Aid System.
- These are **primary roads** such as:

Airport Park Road	Larson Road
Baltic/Onkalos Corner Road	Liminga Road
Bootjack Road	Lower Forsman Road
Boston Road	Obenhoff Road
Chassell/Painesdale Road	Paradise Road
Houghton Canal Road	Salo Road
Industrial Drive	Superior Road
Lake Annie Road	Tapiola Road
- Design is nearing completion on several roads and will be going out for bids in the near future.



Paradise Road

HCRC's Local System

- The HCRC is working with FEMA to address the repairs to the HCRC's Local System.
- There were over 150 roads affected from the flood with varying degrees of damage.
- The HCRC has bid out the installation of the larger culverts on Cloverland Road, Lower Worham, Cemetery Road, Woodside Road and Pontiac Road.
- Work should begin on these culverts between the end of August and the end of September.
- The other road damage is continuing to be reviewed by HCRC and FEMA, as more details are finalized we will be posting updates.

In addition ...

- In addition to these projects the HCRC will be working with the State to address the damage caused by the July 12 flood under Section 19 Disaster Assistance.

June 17th, 2018 Father's Day Flood
Houghton County Michigan
Local Government Impact

		Local Match		
	<u>Total Damage</u>	<u>FHWA Portion</u>	<u>FEMA Portion</u>	
			<u>FHWA 20%</u>	<u>FEMA 12.50%</u>
H.C. Road Comm.	\$30,000,000	\$15,000,000	\$15,000,000	\$3,000,000 \$1,875,000
City of Hancock	\$10,856,000	\$3,350,000	\$7,506,000	\$670,000 \$938,250
City of Houghton	\$14,018,000	\$2,378,000	\$11,640,000	\$475,600 \$1,455,000
Village of South Range	\$100,000	\$100,000		\$20,000
Townships of Franklin, Osceola, Torch Lake, Portage, Schoolcraft, and the Village of South Range and Lake Linden	\$6,854,000		\$6,854,000	\$856,750
Totals	\$61,828,000	\$20,828,000	\$41,000,000	\$4,165,600 \$5,125,000

Total Local Match
 FHWA 20% \$4,165,600
FEMA 12.5% \$5,125,000
 \$9,290,600

What's needed

To help recover from this storm and the resulting **\$30 million** in damages on the county road system:

- Houghton County must match **\$1,850,000** to receive Federal Emergency Management Agency (FEMA) funds and **\$3,000,000** to receive Federal Highway Administration (FHWA) funds, for a total of **\$4,875,000**.
- HCRC's distribution of MTF dollars was **\$5,056,572** in 2018 and is expected to be **\$5,469,447** in 2019 to service and maintain **318 miles** of primary roads, **526 miles** of local roads and **34 bridges**.

Houghton County Road Commission

Contact information

P.O. Box 269
20140 Gagnon Circle, M-26
Hancock, MI 49930
Phone: 906.482.3600
Fax: 906.482.9600
Website: houghtoncountyroads.org



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Thank you for your consideration and assistance.