

Floods & Emergency Permitting Process

2026 Transportation and Environment Conference

Responding to flood emergencies and what to expect regarding the permitting process

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Transportation Review Unit
Water Resources Division
U.P. District Office



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY



M-94 at East Branch
Chocolay River



Emergency Procedures

Permits are still required for emergency situations

Not obtaining the proper permits may subject an agency to civil and/or criminal liabilities/loss of federal/state emergency funding

If the structure is not permittable, it is possible that it will need to be replaced with a structure that is.

What's in the law....

- Section 30105 of Part 301 Inland Lakes and Streams
- (6) In an emergency, the department may issue a conditional permit before the expiration of the 20-day period referred to in subsection (3) (refers to the Public Notice process).

R281.821 Conditional Permits under Part 301

- Rule 11 (1) The department may issue a conditional permit when emergency conditions warrant a project to protect property or the public health, safety or welfare

(2) Conditional permits shall be issued only under emergency conditions. Upon a determination by the department that a project would be in the best interest of both the applicant and the public, the department may declare an emergency condition to exist and issue a conditional permit. Physical and economic factors shall be considered in determining whether an emergency condition exists.

(3) Bridge or culvert repairs or replacements may be made under emergency conditions upon submitting an application and receiving a conditional permit. A written report which details of the needed emergency repairs shall accompany the application. The department shall give such applications timely response

Emergency Procedures



CR-601 at Black River



1 ½ Mile Road – Sugar Island

- The Transportation Review Unit (TRU) will work with Act 51 eligible agencies to assist in expedient handling of regulated road repairs in emergency situations
- Contact the transportation field staff the next working day after an emergency occurs if they cannot be reached on the day of the emergency (ideally before structure is replaced)



Is this an
“emergency”
or something
that needs to
be expedited?

- **“To protect property or the public health, safety or welfare”**
- Obvious examples include failure on a primary road or dead-end road with the potential to strand residents/impact emergency access. Additional circumstances may apply
- If roadway doesn’t need to be reopened immediately or structure was only damaged, a minor project or conditional permit issuance may be more efficient process
- Communicate with the EGLE staff person regarding the circumstances
- Missing a bad culvert for an upcoming paving project may be inconvenient, but is not necessarily an emergency

The old paper form



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION

EMERGENCY INFORMATION SHEET FOR BRIDGE OR CULVERT FAILURE

GENERAL INFORMATION:

ROAD NAME		STREAM NAME	
T	R	Section	
TOWNSHIP		COUNTY	

EXISTING CONDITIONS: (Before failure)

Was the culvert perched (waterfall at outlet)?

Is there erosion of the banks upstream or downstream?

Was the invert buried?

Was the structure properly aligned with the stream?

Are there wetlands adjacent to the site?

Will adjacent wetlands be affected by the proposed construction?

Has water ever overtopped the road?

Does this structure control the water elevation of a wetland, pond, or lake?

What is the width of the base flow channel (outside the influence of the structure?) _____ feet

What is the bankfull width? _____ feet

Stream invert 100-200 feet from the structure: Upstream - distance _____ feet, elevation _____ feet
Downstream - distance _____ feet, elevation _____ feet

YES	NO
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

EXISTING STRUCTURE: culvert or bridge metal concrete timber

CULVERT ENTRANCE: projecting mitered headwall wingwalls

Diameter _____ feet Span _____ feet Rise _____ feet

Length of culvert _____ feet Width of bridge _____ feet

Waterway (end area) opening (ft²) _____

Low chord elevation (ft) _____

Invert elevation (ft) structure _____

Invert elevation (ft) stream _____

High-water elevation (ft) _____

Road grade elevation at structure (ft) _____

PROPOSED STRUCTURE: culvert or bridge metal concrete timber

CULVERT ENTRANCE: projecting mitered headwall wingwalls

Diameter _____ feet Span _____ feet Rise _____ feet

Length of culvert _____ feet Width of bridge _____ feet

Waterway (end area) opening (ft²) _____

Low chord elevation (ft) _____

Invert elevation (ft) structure _____

Invert elevation (ft) stream _____

High-water elevation (ft) _____

Road grade elevation at structure (ft) _____

Elevation of low point of approach (ft) _____

DESCRIPTION: (Construction staging including soil erosion control measures to be implemented)

Signature: _____ (owner) Phone: _____ Date: _____

Print Name: _____ (owner) Agency: _____

Please mail completed form to:

TRANSPORTATION AND FLOOD HAZARD UNIT
WATER RESOURCES DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
PO BOX 30458
LANSING MI 48909-7958

- 52 - CR AF at tributaries to Lake Michigamme
- Dashboard
- Details
- Start a New Form
- Submissions
- Permits
- Evaluations
- Violations
- Compliance and Enforcement Actions
- Environmental Projects
- Financials
- Financial Assurance
- Documents
- Authorized Users

< BACK

Apply for a New Permit, License, or Entrance into a Program

Type in "trans"

Displaying 3 of 55 Application forms

Form to use

- Digital PUBLIC TRANSPORTATION AGENCY Projects EGLE/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosion Areas and Critical Dune Areas
Site Name: 52 - CR AF at tributaries to Lake Michigamme
Form Description: null
Program Area: WRD - Resources [Begin](#)
- Digital Transportation Emergency Request Form
Site Name: 52 - CR AF at tributaries to Lake Michigamme
Form Description: null
Program Area: WRD - Resources [Begin](#)
- Dry Cleaning Transfer of Ownership for Unlicensed Facilities
Site Name: 52 - CR AF at tributaries to Lake Michigamme
Form Description: null
Program Area: AQD - Dry Cleaners [Begin](#)

- 52 - CR AF at tributaries to Lake Michigamme
- Dashboard
- Details
- Start a New Form
- Submissions
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- Documents
- Authorized Users

Submissions

[Assign Users to Submission](#) Filter by status: All Submissions (1)

Form Name	Form Type	Created By	Received Date	Due Date	Submission Reference Number	Agency Contact	Assigned Users	Instructions	Status
Application - Transportation Emergency Request	Application	Pam Skytta	06/22/2022		HPJ-MEBS-N6883 Revision 2				Completed

1 result found

Applying in MiEnviro Portal

Digital Transportation Emergency Request Form MiEnviro Form

Question	Existing	Proposed
Structure width (parallel to stream) (feet)	39	38
Culvert length or bridge span (length perpendicular to stream) (feet)	4	4
Height of culvert prior to burying (if bridge enter 0)	2	4
Depth culvert buried (feet) (if bridge enter 0)	.5	.8
Bottom of bridge beam (feet) upstream (if culvert enter 0)	0	0
Bottom of bridge beam (feet) downstream (if culvert enter 0)	0	0
Stream invert elevation at bridge (feet) upstream	92.18	91.95
Stream invert elevation at bridge (feet) downstream	92	92

6/22/2022 2:35:03 PM

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Question	Existing	Proposed
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	2	4
Total structure waterway opening above streambed (square feet)	6.2	12.6
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
Elevation of road grade at structure (feet)	96.62	96.62
Elevation of low point in road (feet)	96.10	96.10
Distance from low point in road (feet)	100	100
Length of approach fill from edge of bridge/culvert to existing grade (feet)	0	0

Culvert Type

Existing	Proposed
Circular	Circular

Culvert Material

Existing	Proposed
Corrugated Metal	Corrugated Metal

Structure Entrance Design Type:

Existing	Proposed
Projecting	Projecting

Certification Upload

NONE PROVIDED

Comment

NONE PROVIDED

WRD staff may:

- Give verbal or email approval for repair or replacement upon receipt of an emergency application
- If the activity qualifies for a Minor Project (MP) (i.e. spans bankfull and meets other criteria), staff can issue a permit using the emergency form if acceptable plans are submitted
- Issue a conditional emergency permit to be made final after Public Notice, when required by statute

Plans/cross sections

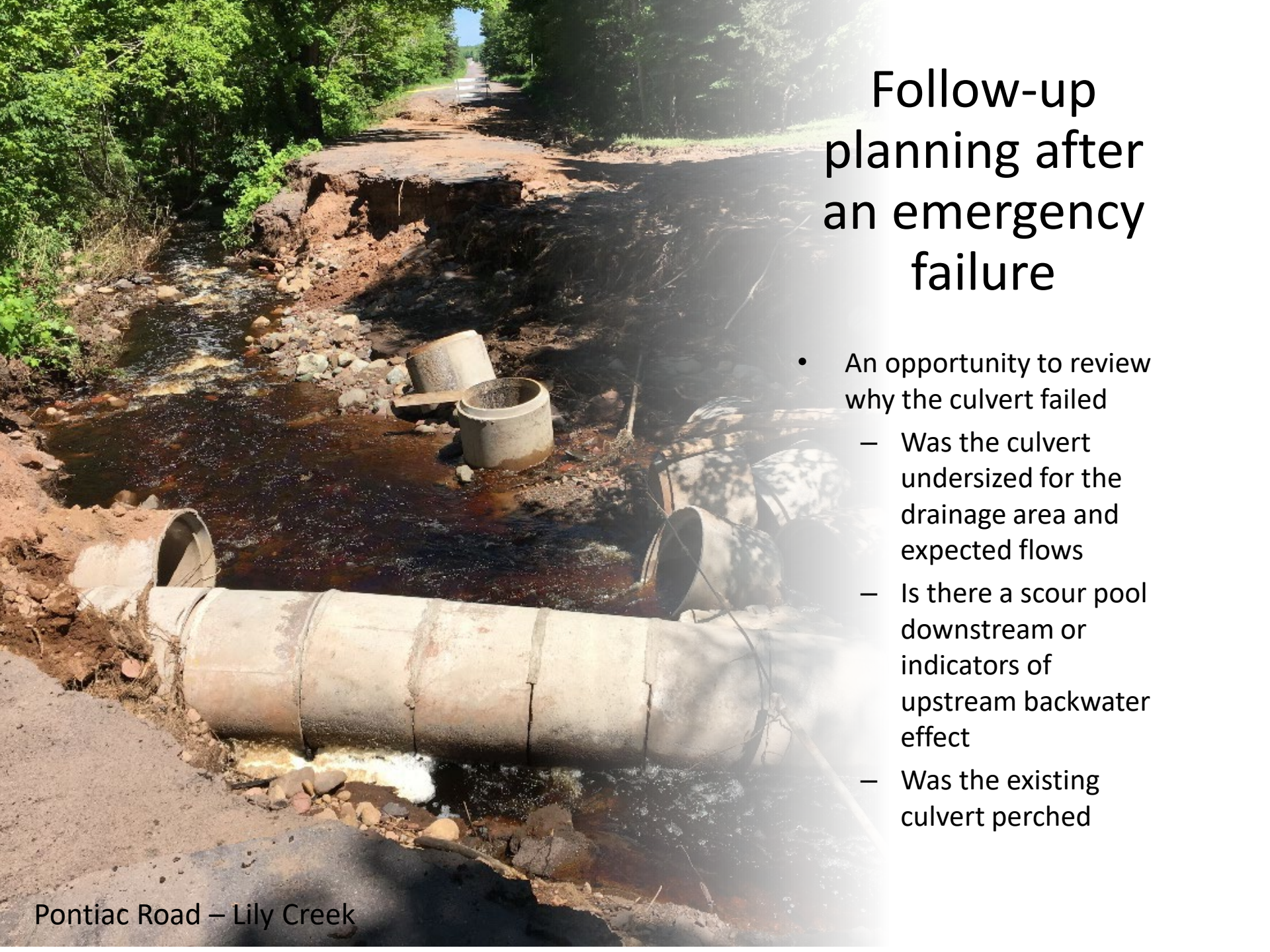
- In order to effectively issue a permit, plans and cross sections need to be provided. Try to gather minimum of information when assessing damaged crossing if able
- Full plans typically required for final approval with a minor/conditional permit



Photos, Photos, Photos

Temporary replacements

- Can be used if necessary while permanent design is being completed
 - Generally, applies to larger crossings
 - Damaged crossings waiting for funding sources for replacement
 - Important considerations for those with Part 31 authority



Follow-up planning after an emergency failure

- An opportunity to review why the culvert failed
 - Was the culvert undersized for the drainage area and expected flows
 - Is there a scour pool downstream or indicators of upstream backwater effect
 - Was the existing culvert perched



South Shunk Road at
tributary to School Creek

Follow-up: continued

- Can the crossing be improved to avoid future maintenance issues, while improving the stream crossing and associated resources
 - Spanning bankfull width
 - Culvert set on correct slope and properly recessed
 - Culvert properly aligned with stream flow

Mistakes to avoid when undertaking an emergency replacement

- Installing a culvert that does not match the stream size and may not meet the regulatory criteria under Parts 301 and 31



Mistakes to avoid

- Putting in a structure with less waterway opening than what previously existed
 - Especially those with Part 31 authority





Mistakes to avoid:

- Raising the road grade – Part 31 considerations



Mistakes to avoid:

- Failure to properly install the culvert (recess)

Mistakes to avoid:

- Improper alignment
- Improper soil erosion measures



- Ensure that temporary soil erosion measures are installed as soon as possible after failure or flooding
- Remove as much road fill and other material from downstream as possible



Link to the previous information on EGLE website

Home > About Us > Divisions and Offices > Water Resources > Transportation Review

The Transportation Review Unit (TRU) of the Water Resources Division reviews permit applications submitted by Public Transportation Agencies under a Memorandum of Understanding between the Michigan Department of Transportation and EGLE.

Information

- Transportation Review Unit - Overview of Services
- Transportation & Hydraulic Review
 - [PDF Bridge and Culvert Guidelines](#)
 - [PDF Early Coordination Project Types](#)
 - [PDF Voluntary Preliminary Review - Guidance and Form](#)
- Preliminary T&E Reviews for Local Agency Program Projects (that don't require a resource permit)
- Transportation Review Staff Contacts
 - [PDF Transportation Review Staff Map](#)
 - [PDF Transportation Projects Hydraulic Review Staff Map](#)

<https://www.michigan.gov/egle/maps-data/mienviroportal>

Permits

- EGLE/USACE Joint Permit Application
- Permit Categories
 - [MiEnviro Information page](#)
- MiEnviro Application - includes Voluntary Preliminary Review Form
 - [PDF MiEnviro Instructions for Public Transportation Agencies](#)
- MiEnviro Training resources
 - [PDF Permit Guidelines for Public Transportation Agencies](#)
 - [PDF Emergency Permitting Guidance](#)
 - [PDF Expedited Permits](#)
- Frequently Asked Questions - Transportation Project Permitting


Contact

Jim Watling, Supervisor
WatlingJ@Michigan.gov
517-599-9002

[Transportation Review Staff Map](#)

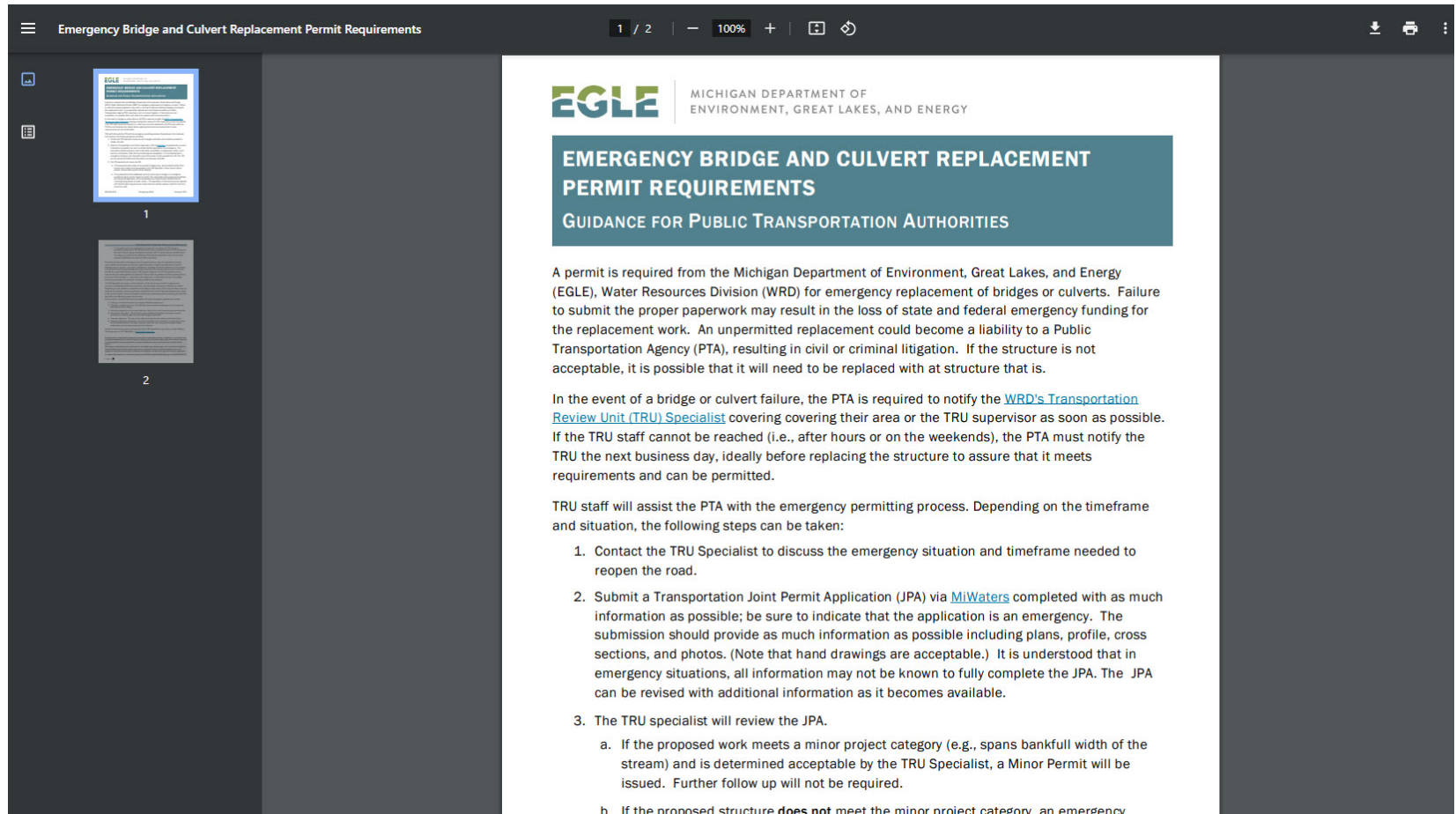
Related Links

- [Request a Flood or Low Flow Discharge Form](#)
- [PDF BMP's for Treated Wood in Aquatic Environments](#)
- [Floodplain Mapping](#)
- [Newsletters and Guidebooks](#)
- [Hydraulic Programs and Report Guidelines](#)
- [Relevant Laws and Rules](#)
- [Joint Agency Transportation Committee](#)



<https://www.michigan.gov/egle/about/organization/water-resources/transportation>

Emergency permitting FAQ



Emergency Bridge and Culvert Replacement Permit Requirements

1 / 2 | 100% | Search | Refresh | Print

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

EMERGENCY BRIDGE AND CULVERT REPLACEMENT PERMIT REQUIREMENTS

GUIDANCE FOR PUBLIC TRANSPORTATION AUTHORITIES

A permit is required from the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD) for emergency replacement of bridges or culverts. Failure to submit the proper paperwork may result in the loss of state and federal emergency funding for the replacement work. An unpermitted replacement could become a liability to a Public Transportation Agency (PTA), resulting in civil or criminal litigation. If the structure is not acceptable, it is possible that it will need to be replaced with a structure that is.

In the event of a bridge or culvert failure, the PTA is required to notify the [WRD's Transportation Review Unit \(TRU\) Specialist](#) covering covering their area or the TRU supervisor as soon as possible. If the TRU staff cannot be reached (i.e., after hours or on the weekends), the PTA must notify the TRU the next business day, ideally before replacing the structure to assure that it meets requirements and can be permitted.

TRU staff will assist the PTA with the emergency permitting process. Depending on the timeframe and situation, the following steps can be taken:

1. Contact the TRU Specialist to discuss the emergency situation and timeframe needed to reopen the road.
2. Submit a Transportation Joint Permit Application (JPA) via [MiWaters](#) completed with as much information as possible; be sure to indicate that the application is an emergency. The submission should provide as much information as possible including plans, profile, cross sections, and photos. (Note that hand drawings are acceptable.) It is understood that in emergency situations, all information may not be known to fully complete the JPA. The JPA can be revised with additional information as it becomes available.
3. The TRU specialist will review the JPA.
 - a. If the proposed work meets a minor project category (e.g., spans bankfull width of the stream) and is determined acceptable by the TRU Specialist, a Minor Permit will be issued. Further follow up will not be required.
 - b. If the proposed structure **does not** meet the minor project category, an emergency



Major flooding emergencies

- Major storm or runoff events that cause significant damage to road system and failures at many road stream crossing locations county or region-wide
- Usually damages to other infrastructure, property, etc.
- County emergency management/FEMA/FHWA /municipal governments
- Funding challenges – FEMA/FHWA/ERFO requirements

Thayer Road North at tributary to
Cisco Branch Ontonagon River

U.P. District Office flooding impacts



Lake Road at tributary to
Lake Superior



Paradise Road at Pilgrim River

- Major events since 2012
 - 2013 spring flooding in western UP
 - 2016 – Gogebic County
 - 2018 – Father’s Day/summer flooding
 - 2023 – spring flooding in western UP
 - 2025 – Baraga County flash flooding
 - Other minor/localized flood events (Chippewa, Marquette, Ontonagon Counties)

Lack of resources to replace problem culverts

- Continued issues with impacts to stream environment
 - Geomorphology (sediment transport, stream channel stability, perched culverts)
 - Aquatic organism passage
 - Impacts to streams/habitat from failure (majority of lost road fill is typically not recoverable after flooding)

Continued maintenance issues for county/state/municipal road agencies

- Loss of road fill due to higher likelihood of failure
- Roadway instability
- Impacts to traveling public for short term and long term on problem sites

There are
thousands
of road
stream
crossings
out there

- Many counties have done asset management and located culverts on their roads
 - Typically, haven't collected data on stream vs. cross culvert
 - Other efforts (DNR, Superior Watershed Partnership, Huron Pines, other resource partners to ID road stream crossing locations/GIS locations) to target and prioritize worst crossings
 - Available grant funding typically focuses on coldwater resources. Less opportunities for warmer water streams.

Examples of resources vs. need for spring 2023 flooding event - ~72 million requested

2023 STATE EMERGENCY DECLARATION - UP SNOW MELT/FLOODING EVENT

Summary of Road and Bridge Recovery/Repair Costs

Program/Road System	Baraga	Gogebic	Houghton	Iron	Marquette	Ontonagon	TOTAL
FEMA Program - Local Road System <i>Repair Costs, submitted to FEMA and NOT approved</i>	\$ 1,009,663	\$19,602,600	\$13,328,238	\$ 4,760,167	\$ 6,550,163	\$ 8,101,777	\$53,352,608
ER Program - Federal Aid System <i>20% local match requirement needed for approved repair costs</i>	\$ -	\$ 1,077,400	\$ 1,224,314	\$ 210,597	\$ 219,529	\$ 156,375	\$ 2,888,215
ER Program - Federal Aid System <i>Repair Costs NOT approved - 100% project repair cost needed</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ERFO Program - Local & Federal Aid System <i>Repair Costs approved, but dollars not currently appropriated</i>	\$ 5,183,500	\$ 1,572,349	\$ -	\$ -	\$ -	\$ -	\$ 6,755,849
ERFO Program - Local & Federal Aid System <i>Repair Costs NOT approved - 100% project repair cost needed</i>	\$ 398,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 398,000
TOTALS	\$ 6,591,163	\$22,252,349	\$14,552,552	\$ 4,970,764	\$ 6,769,692	\$ 8,258,152	\$63,394,672

TOTAL SUPPLEMENTAL APPROPRIATION NEEDED = \$ 63,394,672

1/18/2024

Table courtesy of Gogebic County Road Commission

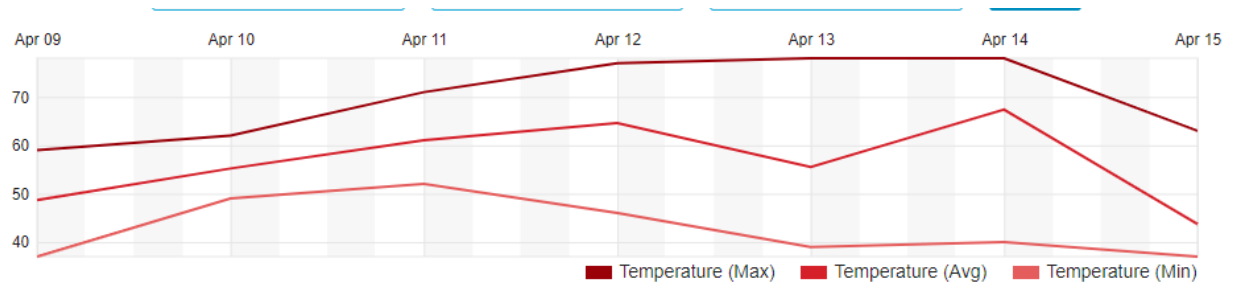
Disaster Relief Fund

- **Transportation Infrastructure Disaster Relief Fund**
- Michigan county road agencies experience \$1+ M disasters on their road systems about every other year. The damage frequently exceeds the county's available road improvement budget. Legislative action is then required, with success dependent on many factors. CRA proposes the Legislature establish and fund a Transportation Infrastructure Disaster Relief Fund administered by the Michigan Department of Treasury to assist county and municipal road agencies. The Fund would have an annual MTF allocation and be capped.

Spring 2023 flooding

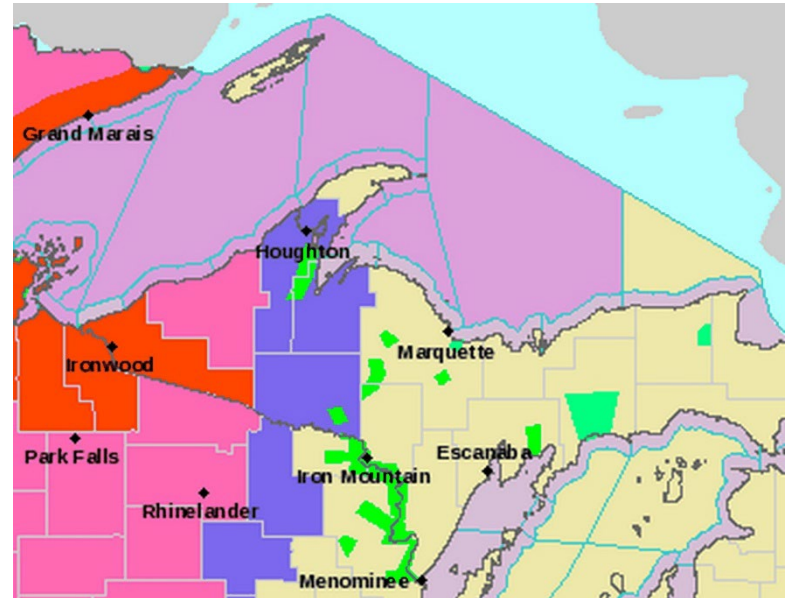
Western/Central U.P.
(Marquette, Baraga,
Houghton, Iron,
Ontonagon, Gogebic)

- Needs far outstrip agency's available resources
- State declared disaster almost immediately (April 14th)
- Federal declaration in limbo (did not meet FEMA threshold based on damage assessments but was not formally denied) – State was preparing appeal of denial
- Governor Whitmer sent letter to President Biden requesting declaration
- FEMA denied emergency request – State appeal denied



Weather week of April 9th, Ironwood

April 17, 2023 –
Blizzard warning



Sites with previous impacts that haven't been replaced since previous flooding events

• **2013 flooding sites and 2023 event**

Gogebic CRC

- Section 12 Road @ Siemens Creek
- Welch Creek Road at Welch Creek
- Beagle Club Road at Mud Creek
- Thayer North Road at trib to Cisco Branch of Ontonagon River – VPR in 2019

Ontonagon CRC

- Mile and One Half Road at Mile and One Half Creek
- Airport Road at trib to Cedar Creek

Iron CRC

- Bradley Road at Deer River
- Unnamed off Wagner Lake Road at Wagner Creek



NWS office Negaunee Michigan – spring 2023

Gogebic County Road Commission

- Upper right – Norlund Road at Spring Creek
- Center/bottom left/right – Washout and Summer 2025 repairs to Black River Road at Reed Creek



Photos courtesy of Gogebic County Road Commission

Gogebic CRC continued

- Junet Road at Welch Creek
- Top - during spring 2023 flooding
- Bottom – replacement structure



Ontonagon County Road Commission



Mile and One Half Road at Mile and One Half Creek



Amber Lake Road at Pine Creek

Iron County Road Commission



Wagner Lake Road at tributary to
Wagner Lake



Bradley Road at Deer River

Lake Road Gogebic County – 2016 flooding

Multiple large scale washouts of structures

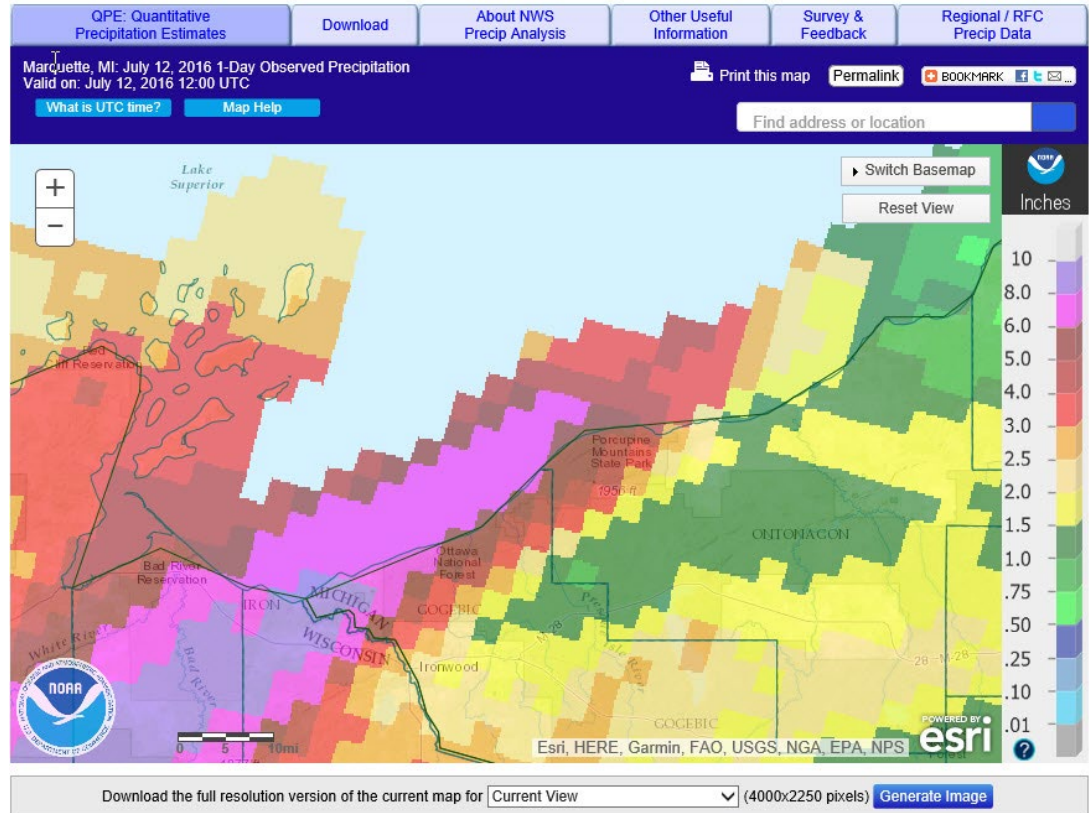
Some Lake Road culverts were replaced in 2015

- Minor upgrade to bankfull stream widths
- No issues during flood event – no roadway washout occurred at these locations
- Several crossings were culverts damaged in 2013 flooding and subsequently replaced



Gogebic County 2016

- July 11, 2016 flooding – 1000 year storm event
- Centered around the Little Girls Point area of northwest Gogebic County
- Impacts to local roads and 8 major washouts on Lake Road stranding multiple residents requiring detours through neighboring Wisconsin



Lake Road at Maki Creek



Lake Road washouts

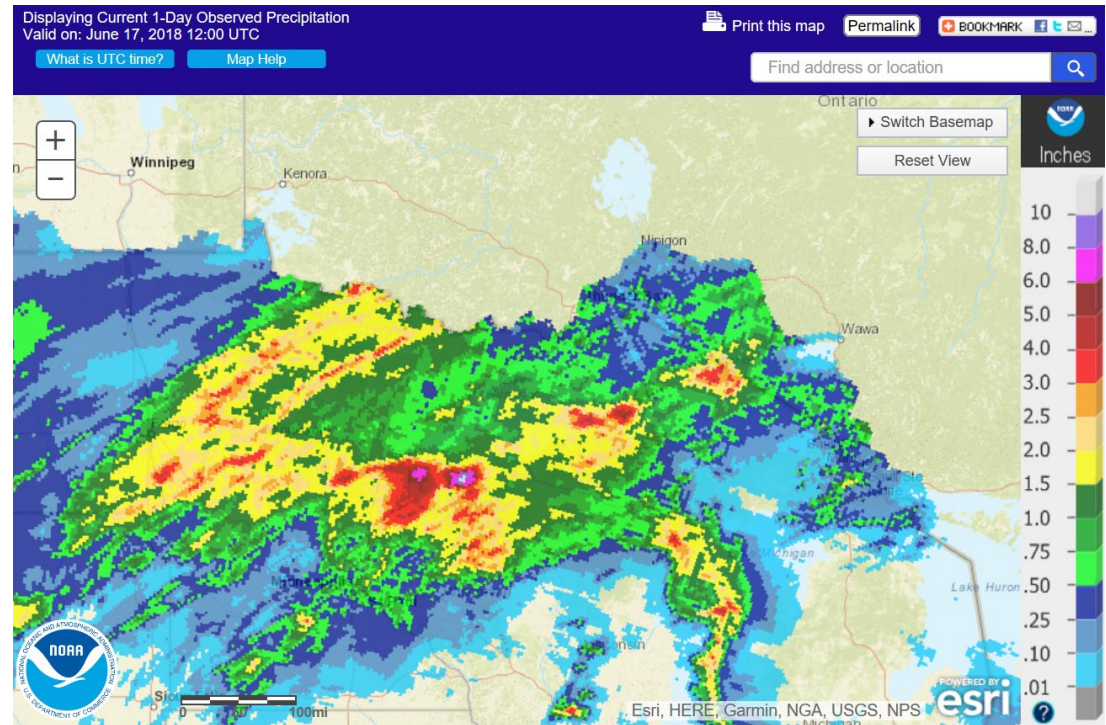




Lake Road repairs

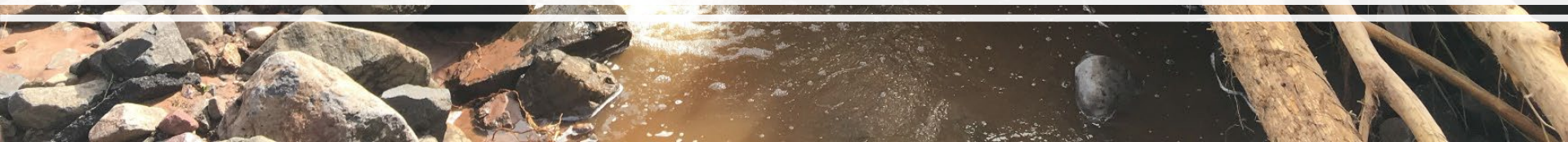
Houghton County 2018

- Father's Day flood – June 17th – 1000-year storm
- 100-year storm on July 12th
- More widespread area of impact and impact to population centers vs. 2016 Gogebic County flood





Ripley Creek area





Woodbush Road – Tributary to Gooseneck Creek





Spruce Street – Dover Creek





Overland drainage – Lake Linden





M-203 at Swedetown Creek

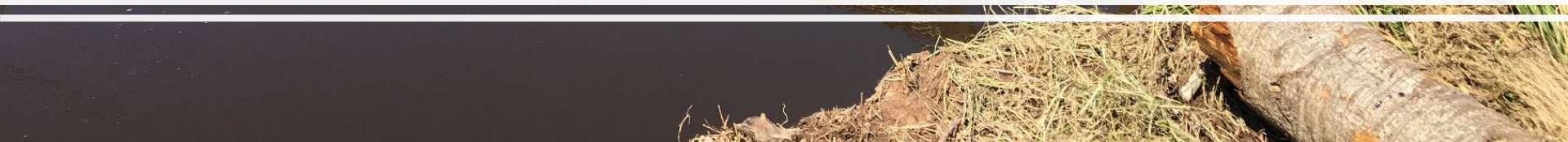


Salo Road at Lily Creek





Paradise Road at Pilgrim River

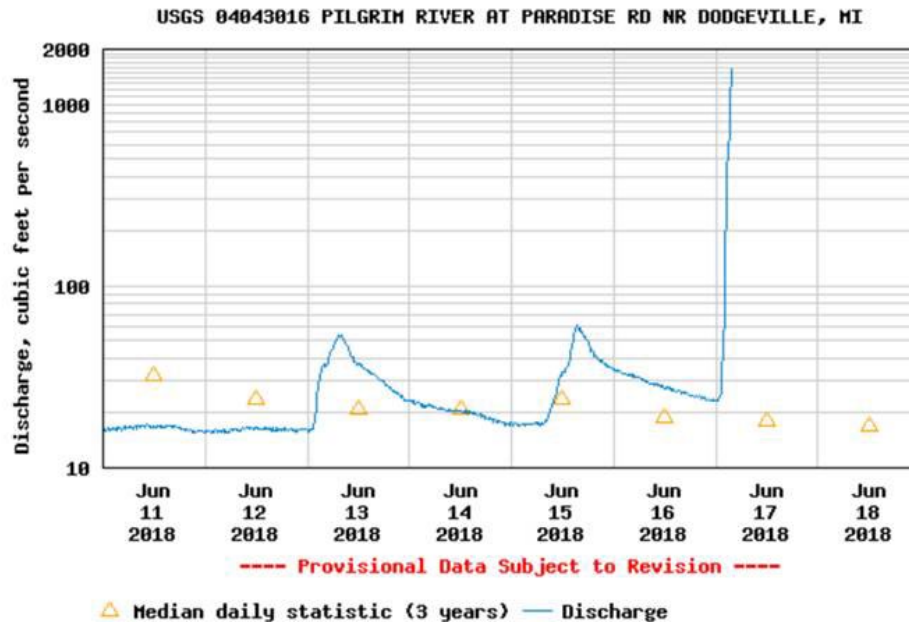


Paradise Road at Pilgrim River

June 17, 2018 at 0:30 AM EST the gage height was 5.04 feet and the flow 23.2 cfs, at 3:45 AM EST, when the gage stopped operating, the gage height was 11.35 feet and the flow 1,540 cfs. An increase of 6.31 feet in 3:15 hours at the gage.

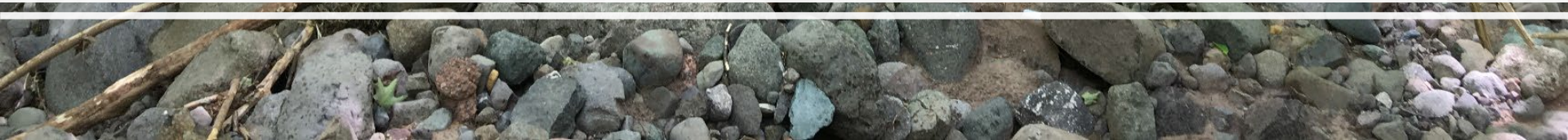
Discharge, cubic feet per second

Most recent instantaneous value: 1540 06-17-2018 03:45 EST





M-26 at Umbrella Tree Creek





Huron Creek area

Baraga County Flash Flooding 2025

- 100-200 year event – May 2025
- Caused damage to multiple area of road and stream crossings county-wide in areas surrounding Keweenaw and Huron Bays
- Majority of flood damage in area of Keweenaw Bay Indian Community





Indian Cemetery Road at tributary to Linden Creek





**Skanee Road at tributary to
Silver River**

**Pequaming
Road at
tributary to
Lake Superior**





**Pequaming Road at tributary
to Lake Superior**



**Jurmu Road at
tributary to Lake
Superior**

Beartown Road at tributary to Lake Superior



Beartown
Road at
tributary to
Lake
Superior



Misery Bay flash flooding July 2025

Localized heavy rain event in area of Misery Bay in Ontonagon/Houghton Counties and other parts of Houghton County

Caused failure of drainage system on M-26 just south of Houghton - impacts due to lane closures during repairs



Any
questions??

