

A COMMUNITY'S RESPONSE TO THE 2017 FLOODING



Central Michigan District Health Department
Promoting Healthy Families, Healthy Communities

THE BEGINNING.....THE FORECAST FROM THE NATIONAL WEATHER SERVICE GRAND RAPIDS WEATHER FORECAST OFFICE

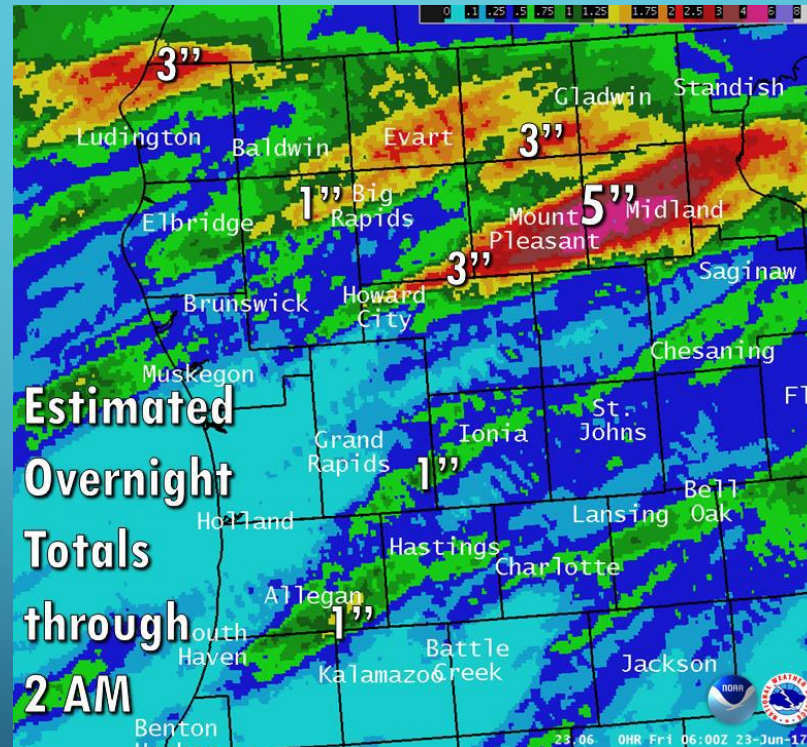
Date: Thu, Jun 22, 2017 at 12:50 PM

Thunderstorms Likely Thursday Evening/Overnight

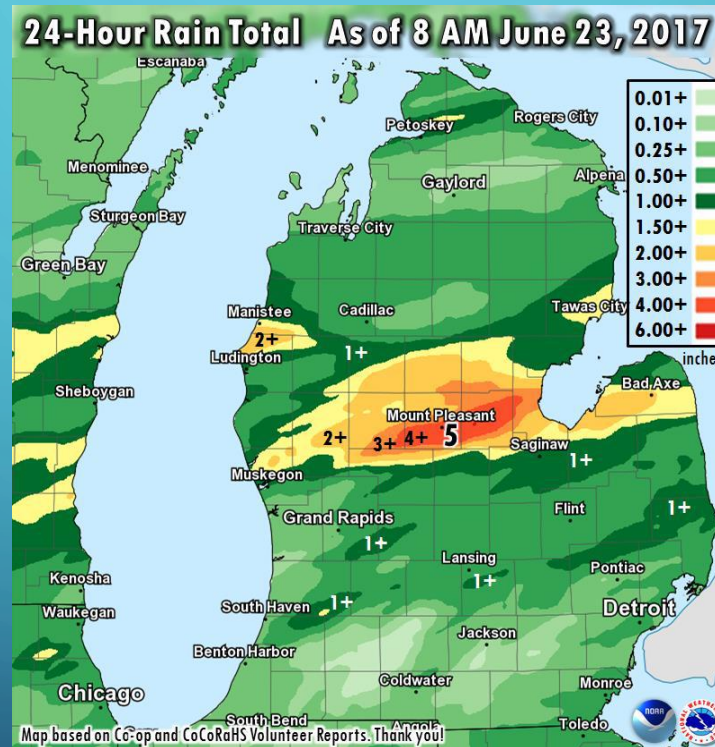
Isolated Severe Storms Possible

- * Storms may develop overhead this evening around 8 PM.
- * Additional storms may move in from Wisconsin late tonight after 11 PM.
- * Isolated damaging wind gusts and large hail are possible this evening.
- * Repeated storms especially areas north of I-96 could produce rainfall amounts over 1 or 2 inches, cause water ponding on roadways.

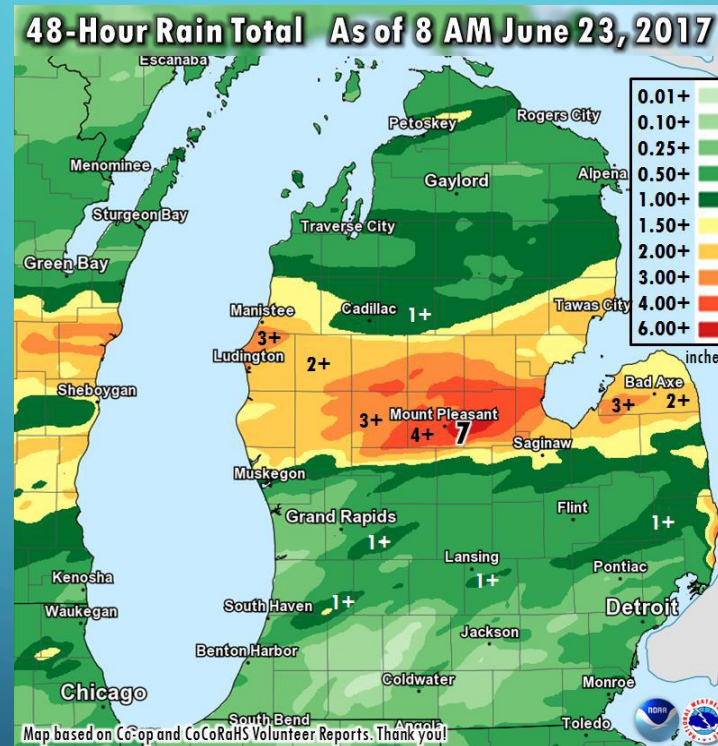
RADAR ESTIMATED TOTALS AT 2 A.M. ON JUNE 23



24 HOUR RAIN TOTAL AS OF 8 A.M. ON JUNE 23



48 HOUR RAIN TOTAL AS OF 8 A.M. ON JUNE 23



ACTIVATING AND REPORTING TO THE EOC.....

- County Emergency Manager received a call from 911 Central Dispatch
- Isabella EOC was activated at approximately 5 a.m. on 6/23/17.
- CMDHD Emergency Preparedness Coordinator reported to the EOC upon request from the county emergency manager at 1:13 p.m. on 6/23/17.
- Press Conference took place, facilitated by the Isabella County Administrator/Controller (and designated Public Information Officer) at 2:19 p.m. on 6/23/17.
- CMDHD Health Officer reported to the EOC at 3:02 p.m. on 6/23/17.
- The EPC, Health Officer, and EH Director represented CMDHD in the EOC between 6/23/17 and 7/5/17.

TWO COUNTIES IN CMDHD'S JURISDICTION AT THE SAME TIME

- Isabella County fully activated their Emergency Operations Center.
- Gladwin County partially activated their Emergency Operations Center.

OVER 100 ROADS COMPROMISED OR WASHED OUT



MANY HOMES SURROUNDED BY WATER



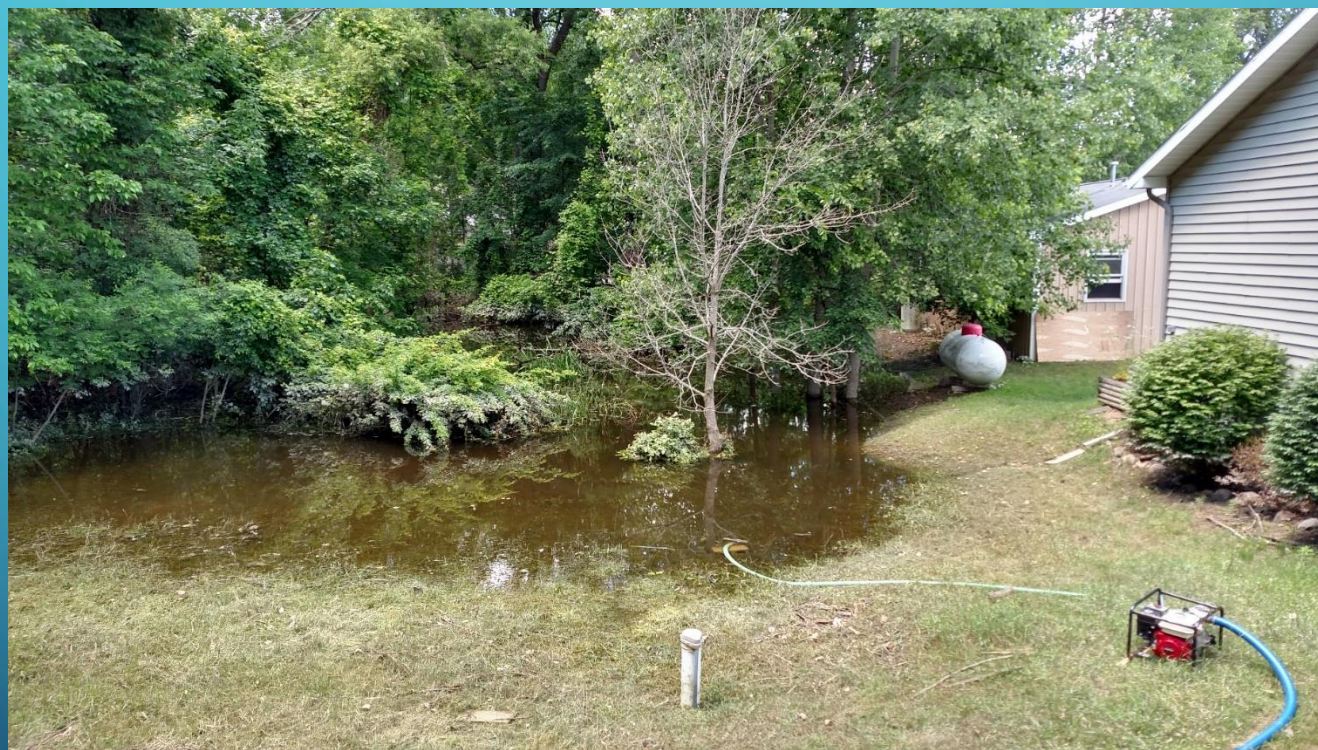
WATER, WATER, WATER (WELL WATER TESTING)

- Well water testing
 - Multi-Agency Resource Center was opened in Isabella County for one day. 68 water test kits were distributed.
 - 25 water test kits were distributed through the health department branch office in Isabella County.
 - Initial estimates of 55 water wells being affected (from aerial footage) on 6/24/17.
 - County Damage Assessment Teams covered 16 townships, 3 villages, 1 city, 1 university, 1 sovereign nation
 - Sample fee waived for Isabella & Midland, then came request from Gladwin.

CAN YOU FIND THE WELL?



THERE IT IS.....



WATER, WATER, WATER (WASTEWATER TREATMENT PLANT)



WATER, WATER, WATER (BEACH SAMPLING)

- Beach sampling
 - At the beginning of sampling season (3 weeks in) so we didn't have a 30 day geomean to reference.
 - Areas that were high before the flood became higher.
 - Areas that weren't high became high.

WATER, WATER, WATER (RIVER ADVISORIES)

- River advisories
 - County was looking to public health for guidance on body contact with the river.
 - Three kayakers on the river on Saturday that had to be rescued.
 - First warning sign vs regular beach advisory sign for high levels of E. Coli
 - Closing a river is not routine whereas beach advisories are routine.
 - Saginaw Chippewa Indian Tribe samples along the river.
 - Concerns about kids wanting to “play” in the flood waters, rivers, etc.
 - Businesses (canoe liveries) wanted to put people in the water – city/county parks

ISLAND PARK IN MT PLEASANT



FOOD SERVICE

- Helicopter footage (aerial photos) from missing kayakers
- Made phone calls to facilities that were closest to the river – no impact; no power loss; no sewer back-up.

DEBRIS & GARBAGE REMOVAL



PUBLIC INFORMATION

- More than 65 phone calls came into Environmental Health (Isabella) in the two weeks following the flood.
- More than 17 phone calls came into Environmental Health (Gladwin) in the weeks following the flood.
- CMDHD and the City of Mt. Pleasant Division of Public Works issued 3 press releases regarding the sanitary sewer overflow.
- CMDHD contributed information for 13 press releases issued by Isabella County in the days following the flood – numerous press conferences and individual interviews by county PIO.
- CMDHD made 23 posts (or shared others' posts) on FB between 6/23/17 and 9/7/17.

A VISIT FROM GOVERNOR SNYDER



AGENCY COORDINATION & COMMUNICATION (INSIDE AND OUTSIDE)

- All functions of the EOC
- State EOC and CHECC
- Internal updates to staff
- Coordinated public information plan from the beginning – all messages were released in one press release by all entities.
- Who are your partners?

SUCCESSSES AND LESSONS LEARNED – PUBLIC HEALTH

Successes:

- “Three-deep” is the rule.
- Our Health Officer has an EH background.
- Our staff are trained in ICS.
- Staff trained in WebEOC/MI-CIMS.

Challenges:

- Have a plan for tracking staff time and activities (ICS 214)
- New system for notifying staff of office closure

INDIVIDUAL THINGS TO CONSIDER OVERALL

- | | |
|--|---|
| <ul style="list-style-type: none">• Describe the types of homes impacted• Average depth of the water in the structures and severity• What happens if the government doesn't help?• Unmet needs• Lack of temporary housing | <ul style="list-style-type: none">• Know special populations• Primary language is Chinese• Try to track location of displaced families early.• Compounding? Vehicles damage and no public transportation• Were furnaces and water heaters impacted?• Boil water orders issued or utility interruptions |
|--|---|

The background is a solid blue gradient. In the corners, there are decorative white line art elements resembling circuit boards or neural networks, with lines and small circles connecting them.

THANK YOU!

Melissa DeRoche, Emergency Preparedness Coordinator
(Collaboration with Steve King, Environmental Health Director)

Central Michigan District Health Department

&

Marc Griffis, Emergency Management Director

Isabella County