

Tittabawassee River, Saginaw River & Bay Site

# June 2017 Flooding

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CAG Meeting July 17, 2017



# June 2017

- Major flooding of the Tittabawassee River
  - Particularly near the City of Midland
  - Prior minor flooding in April 2017
- Saginaw River flooding was in the minor range

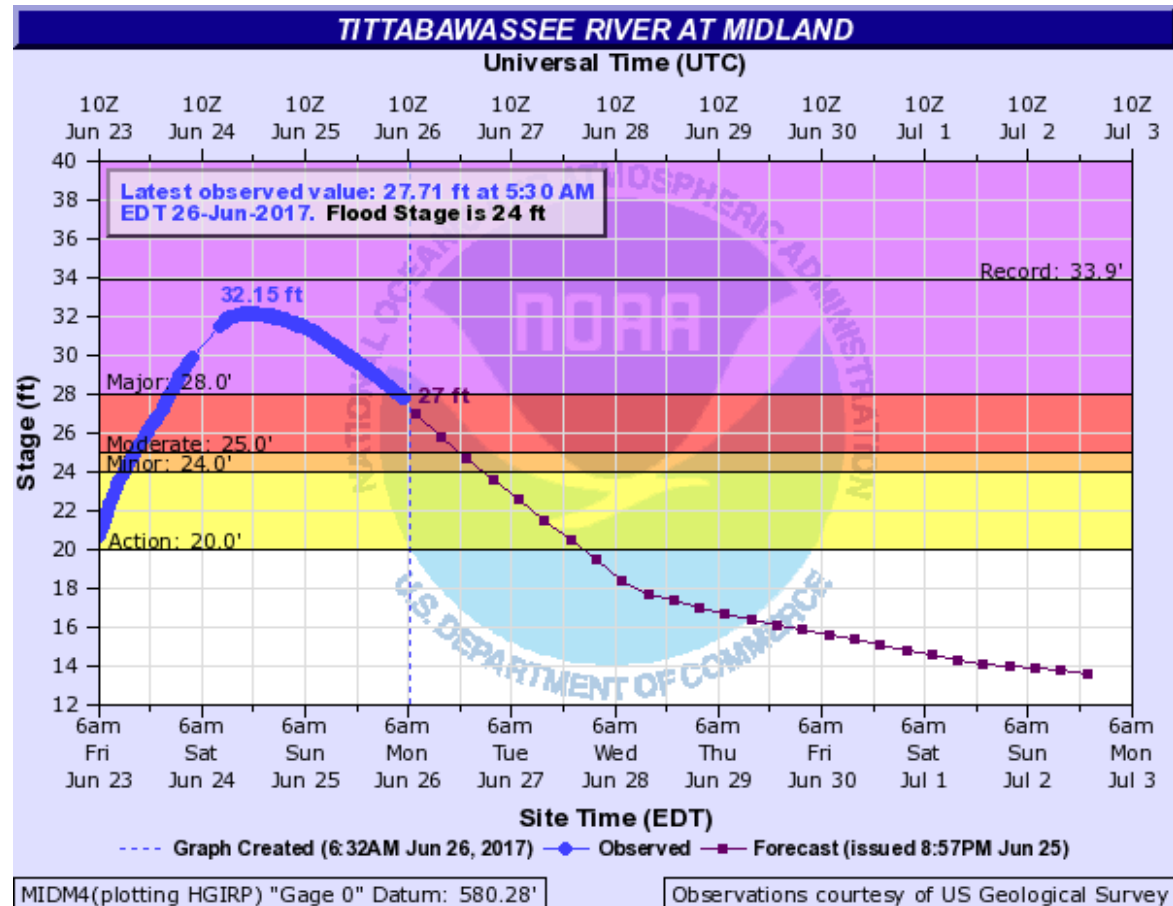
# Tittabawassee River Crest Heights

- **Historic Crests**

- (1) 33.89 ft on 09/13/1986
- (2) 29.70 ft on 03/28/1916
- (3) 29.50 ft on 03/21/1948
- (4) 28.80 ft on 03/08/1946
- (5) 28.37 ft on 04/20/2013

- From

<http://water.weather.gov/ahps2/hydrograph.php?wfo=dtx&gage=MIDM4>



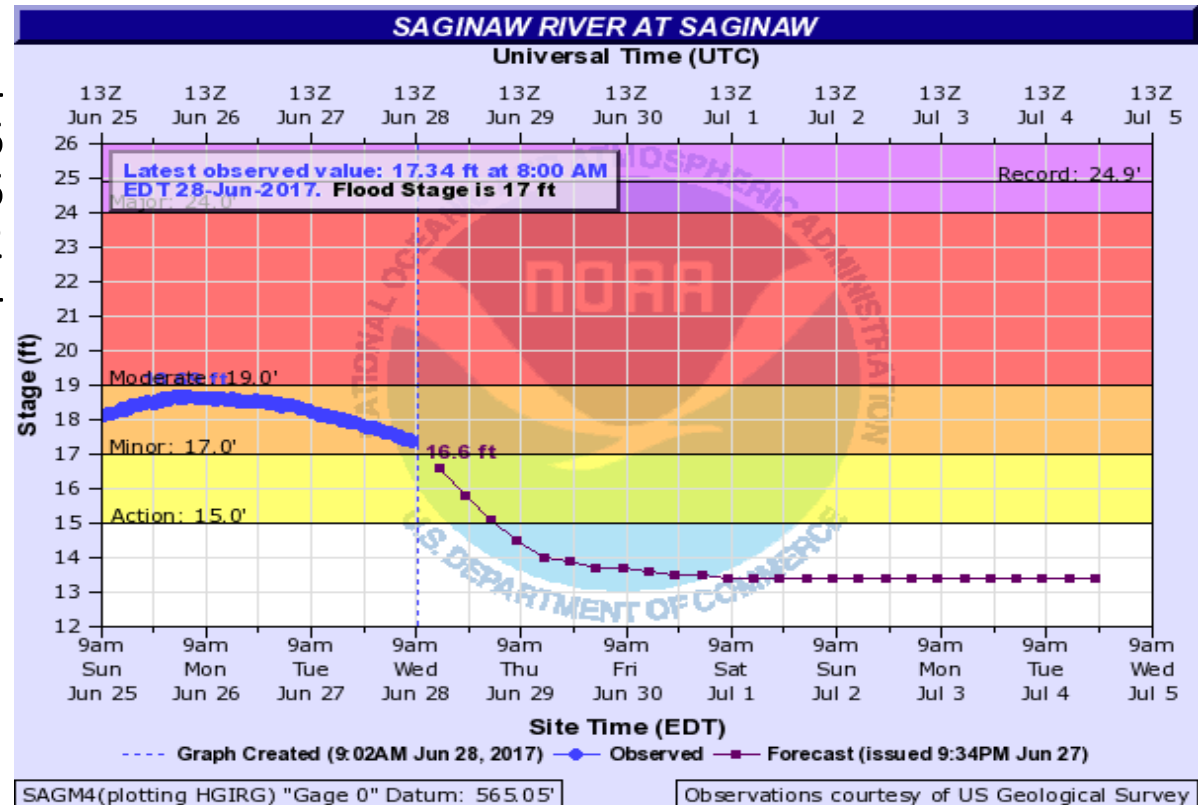
# Saginaw River Crest Heights

- **Historic Crests**

- (1) 24.90 ft on 03/30/1904
- (2) 24.30 ft on 03/31/1916
- (3) 24.16 ft on 09/15/1986
- (4) 24.10 ft on 05/24/1912
- (5) 24.05 ft on 03/29/1984

- From

<http://water.weather.gov/ahps2/hydrograph.php?gage=sagm4&wfo=dtx>



# Typical Questions

- **Does the flooding affect dioxin levels in/along the Tittabawassee River?**

Flooding regularly occurs along the Tittabawassee River. EPA does not expect a single flood event – even a large one like this – to substantially affect dioxin levels in or along the river.

- **Are there any increased risks of contamination or exposure to public health as a result of the flooding?**

All flood waters and mud or sediment left behind should be treated as if it may have sewage in it. State and local agencies recommended precautions for handling and disposing of potential sewage contaminated materials.

- **Is there monitoring of the river and affected areas after flooding?**

Yes, after flood events, monitoring is done at select cleanup locations to evaluate potential recontamination. Additionally, the riverbank and sediment remedies will be inspected.

# Typical Questions (cont.)

- **If I have a cleanup and it floods, will my property need another cleanup?**

That is not expected. Upstream river cleanups, combined with current management practices that control releases from Dow's facility, will help prevent recontamination. We are monitoring places with previous cleanups to assess the potential for recontamination. So far, it has not been a concern.

- **Will the cleanup include flood control?**

No. Modifying floodways or changing flood patterns is restricted under existing laws and regulations.

# Post-flood Project Activities

- Monitoring at select remediated properties
- Inspection of remedies
- Solids cleanup at public parks and boat launches

# Post-flood Monitoring

- Riverside Blvd.
  - Remediated in 2008
  - 5 post-flood samples through 2016
- West Michigan Park
  - Remediated in 2009
  - 8 post-flood samples through 2016
- Average results are below EPA's cleanup number for maintained residential properties



# Other Lines of Evidence

- Monitoring dioxin levels in river sediment
  - Overall surface weighted average concentration (SWAC) seems to be declining
- Concentrations in 100-year floodplain
  - Infrequently flooded areas are well below cleanup numbers
- Routine monitoring and maintenance

# Flooding in Midland – June 2017





# Homes along the TR – June 2017



**QUESTIONS?**