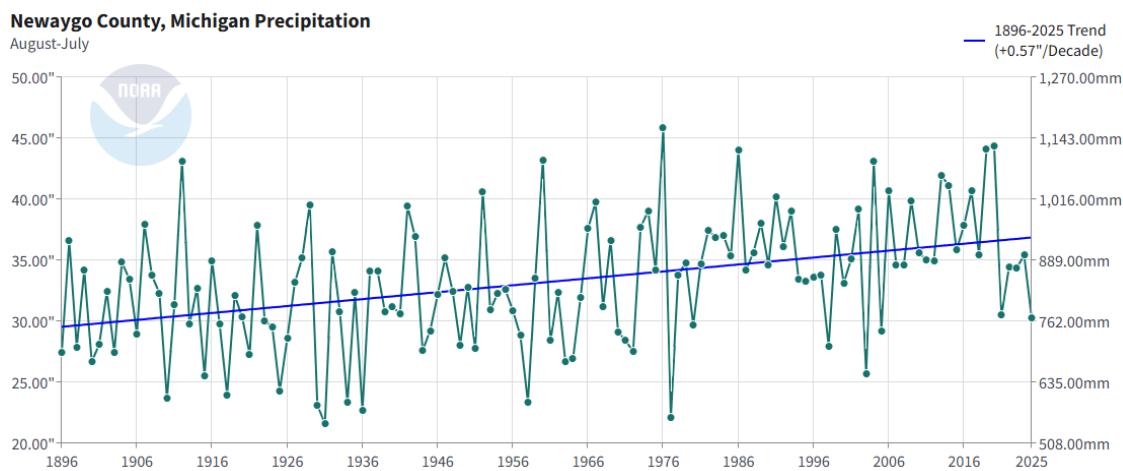


Rain and Drought Information for Newaygo County Water Levels

Rainfall:

The nearest official observing station is in Fremont. Since June 1 to present (Meteorological Summer runs June 1 to Aug 31) 6.61 inches of rain has fallen, compared to a NORMAL amount during this time period of 9.10 inches. This pattern is playing out at virtually all of our rain measurement locations around West-Central Michigan. We've had roughly 2/3 of our normal amount of rain so far this summer.

Zooming out a little bit, lets take a look at the last 12 months of precipitation overall for Newaygo County as a whole, and comparing it to official data from the last 120 years in Newaygo County. We see we're drier than the long term "normal" line (the blue line), so this supports the idea that we're in a relatively dry multi-year period even though the long-term trends are for wetter conditions.

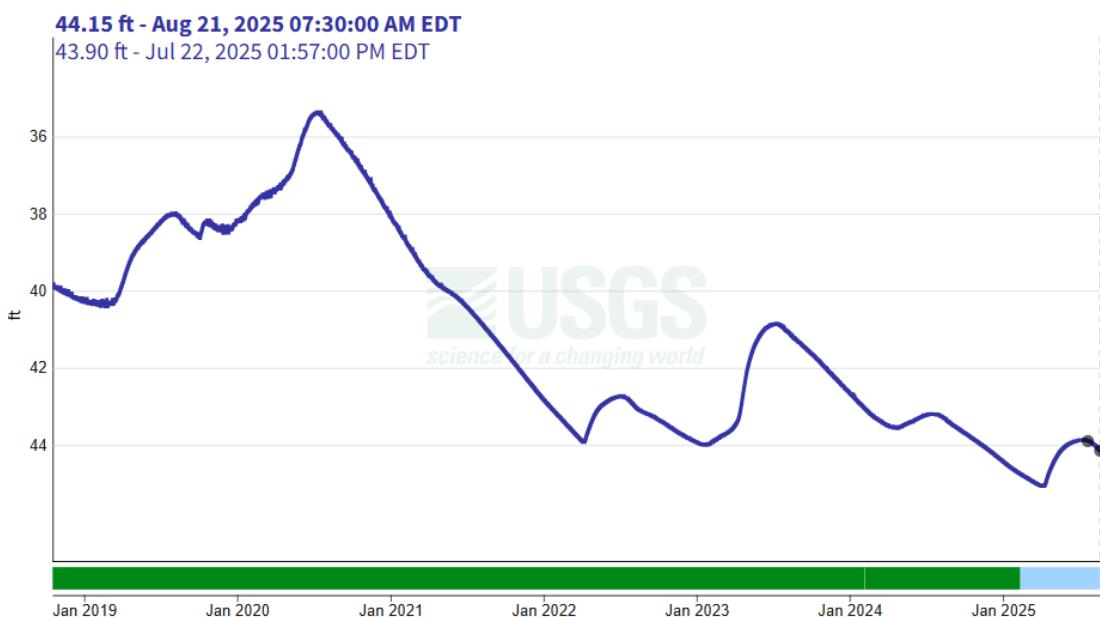


Once the snowmelt water is fully "out of the system" by May-ish, summertime river and groundwater levels reflect the rainfall patterns, so lets take a look at those:

Groundwater:

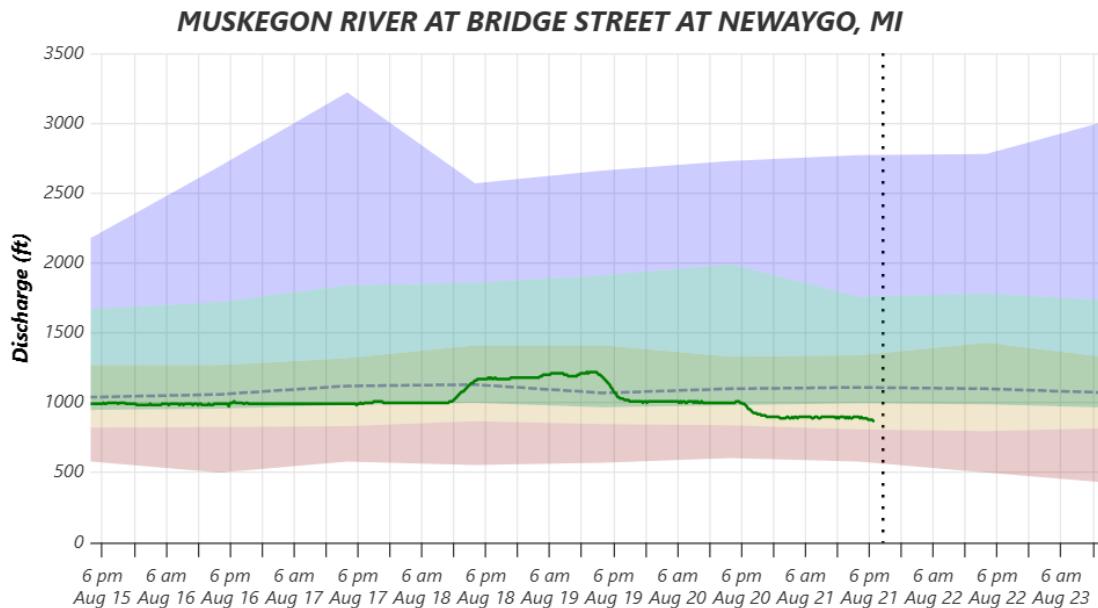
Groundwater is what helps maintain water levels at many inland lakes in Michigan, so looking at groundwater levels is useful. Groundwater typically reaches its annual high point in early July here, as spring rains give way to drier summer conditions. The nearest groundwater monitoring station is in Hesperia, and it shows that the early July yearly high point for 2025 is the lowest yearly high point since this station was installed in 2018. Here's a look at the graph of groundwater levels in Hesperia from 2018 to present. Groundwater levels are down nearly 9 feet since the high water episodes in 2020, and nearly 1 foot lower even than last summer (2024). This would also support the idea that many lake levels are being observed lower than they've been in the last several/many years. Here's that data:

- using custom time span -
 October 17, 2018 - August 21, 2025
Depth to water level, feet below land surface



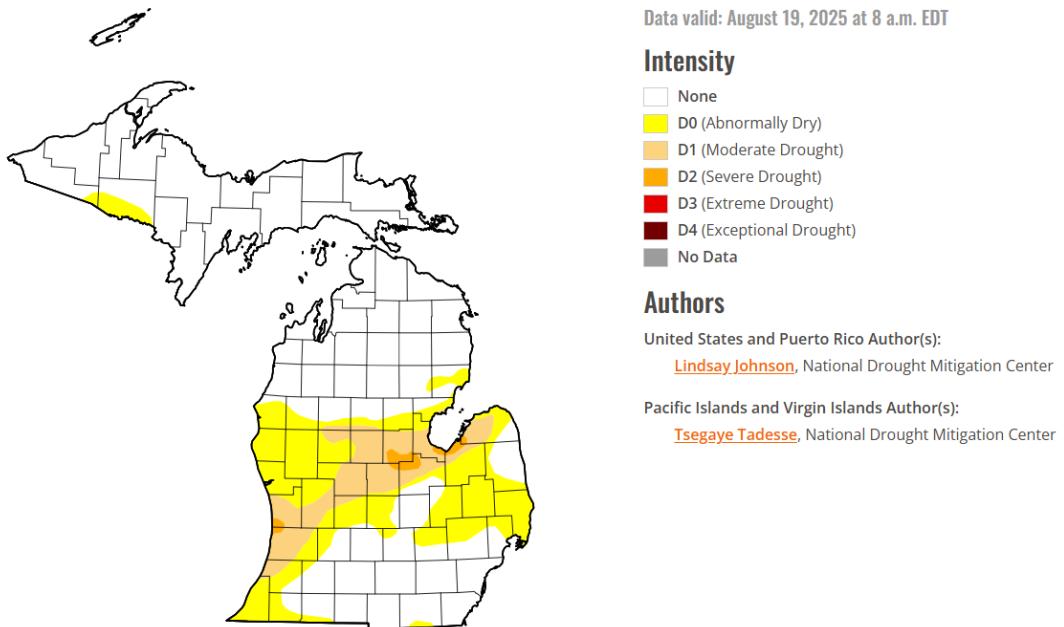
River Levels:

Rainfall and groundwater levels both work together to keep water flowing through the rivers, so checking long-term trends of river levels is also useful. Here's the current water levels on the Muskegon River at Newaygo. The green line is this years observation, and the shaded bars are long-term statistics. The dashed gray line is the long-term average level. This shows that current levels are LOWER than normal, and are currently between the 10th and 25th percentiles for this time of year - which means that river levels are HIGHER than this about 8 out of every 10 years - so we're definitely on the low end right now.



Drought:

The U.S. Drought Monitor looks at all kinds of data and produces weekly maps of drought levels across the country. Much of Lower Michigan has been in various levels of drought for most of the summer, which is slowly getting more dramatic. It shows "Moderate Drought" is approaching Newaygo County from both the east and also from the south. Here's the current map for Michigan that was released yesterday, August 21:



Even more dramatically, one of the images they produce that incorporates soil moisture and rainfall on long time scales looks even more dramatic for mid-Michigan. Yikes!

