# April 2023 Northern Michigan Climate Summary

## **Alpena**

Avg Temp	Avg Temp Departure	Precip	Precip Departure	Snowfall	Snowfall Departure
44.3°F	+3.1°F	4.40"	+1.47"	0.2"	-6.4"

## **Houghton Lake**

Avg Temp	Avg Temp Departure	Precip	Precip Departure	Snowfall	Snowfall Departure
44.8°F	+2.6°F	2.65"	-0.45"	0.2"	-4.2"

#### Sault Ste. Marie

Avg Temp	Avg Temp Departure	Precip	Precip Departure	Snowfall	Snowfall Departure
40.6°F	+1.2°F	4.75"	+2.12"	22.2"	+14.6"

# **Gaylord**

Avg Temp	Avg Temp Departure	Precip	Precip Departure	Snowfall	Snowfall Departure
45.2°F	+6.5°F	2.88"	-0.04"	2.8"	-5.2"

## **Traverse City**

Avg Temp	Avg Temp Departure	Precip	Precip Departure	Snowfall	Snowfall Departure
48.3°F	+4.9°F	3.84"	+0.40"	2.9"	-1.8"

The weather pattern was quite active the night of March 31st into April 1st, as a large cyclone brought heavy precipitation to the region. Northern lower experienced mainly rain, but the story was much different on the other side of the Mackinac Bridge. Being on the colder side of the system precipitation fell as all snow in eastern upper Michigan, and given the higher moisture content of this springtime system, significant accumulations were prevalent. As a matter of fact, Sault Ste. Marie shattered its daily snowfall record for April 1st (and set the record for the snowiest April day since records began in 1889) with 18.6" of snow, which was equal to 1.82" of liquid precipitation, also breaking the daily liquid/rainfall record.

The active weather didn't stop there. Overnight April 4th into the 5th, another large system brought a potent surge of Gulf moisture into the region, ushering in rounds of thunderstorms producing heavy rain and small hail through the night. Unfortunately, the warmth from this system was confined to well above the surface, which resulted in patchy icing across far northern lower, but a much colder airmass was in place at the surface north of the bridge, and the thunderstorms produced significant icing of up to 0.50"+ as temperatures in the upper 20s led to freezing rain, coupled with the small hail, and a lack of snowmelt owing to the cold temperatures.

Despite temperatures starting off near to below normal as larger systems kept colder air overhead to start the month, a stretch of record-shattering warmth built after the 10th of the month, with most spots seeing record high temperatures between April 12-15 as temperatures generally soared into the upper 70s to upper 80s. The highest temperature seen at one of the climate sites was 87°F at Traverse City on April 15th. Following this stretch of mid-summer-like warmth, temperatures fell back to near or below normal for the second half of the month, but the stretch of record warmth (20-30°F above normal) led to all sites observing a warmer than normal month.

While precipitation tapered in the middle of the month in conjunction with warmth, the snowpack across the eastern U.P. melted quickly. This led to flooding despite it being sunny and very warm. A culvert even washed out near Barbeau in Chippewa County as some 4-6" of liquid equivalent snowpack melted rapidly and rushed into the area creeks and rivers.

The second half of the month featured chillier temperatures, but a lack of larger systems led to very light rain and snow. This wasn't enough to bring snowfall above normal for most, but the early month snowfall brought Sault Ste. Marie well above normal for both snowfall and liquid precipitation. The active weather at the beginning of the month propelled most other sites to above normal liquid equivalent precipitation, with the exception of Gaylord and Houghton Lake, which wound up slightly below average for the month.