



2025

Summer Outlook for Southeast Michigan

Seasonal Outlook Valid June 1 to August 31, 2025





Official CPC Summer Outlook

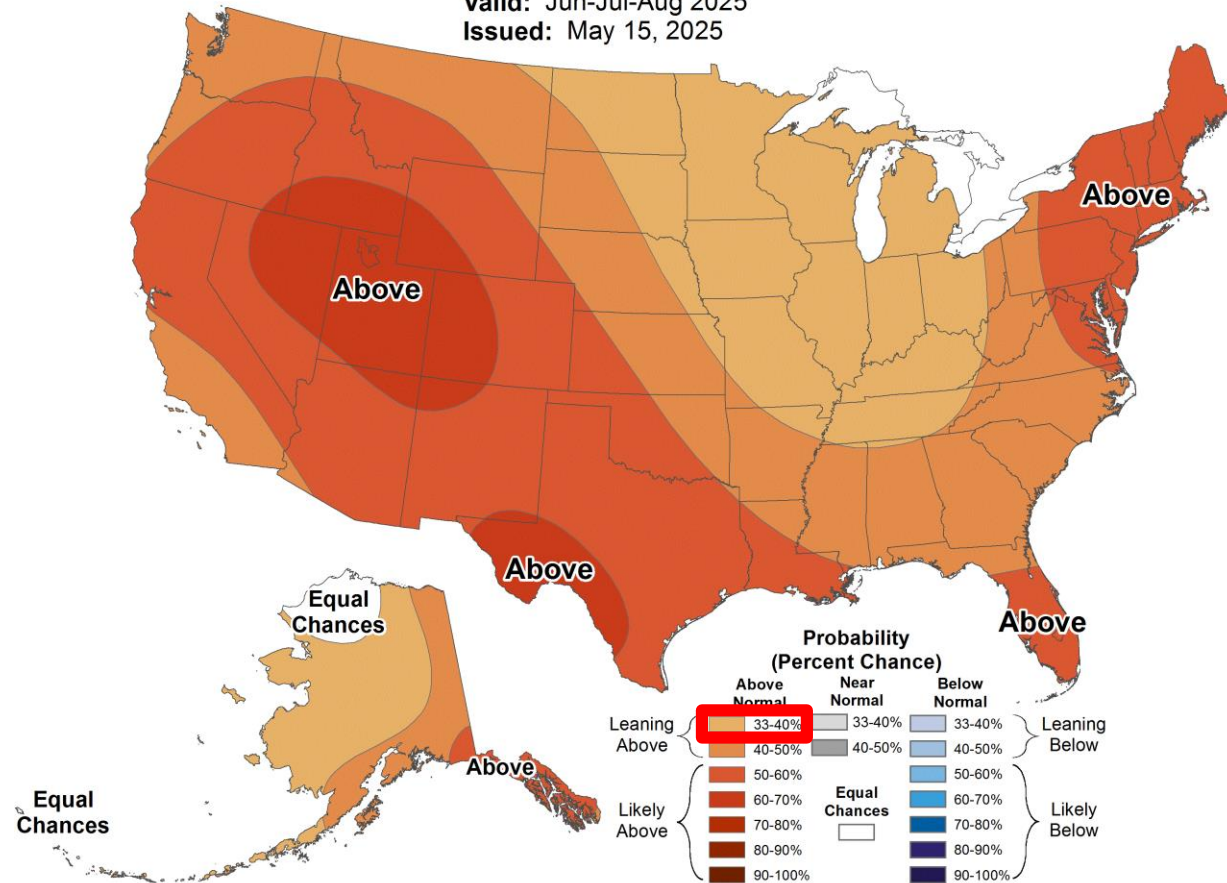
2025 Summer Outlook for SE MI



Seasonal Temperature Outlook



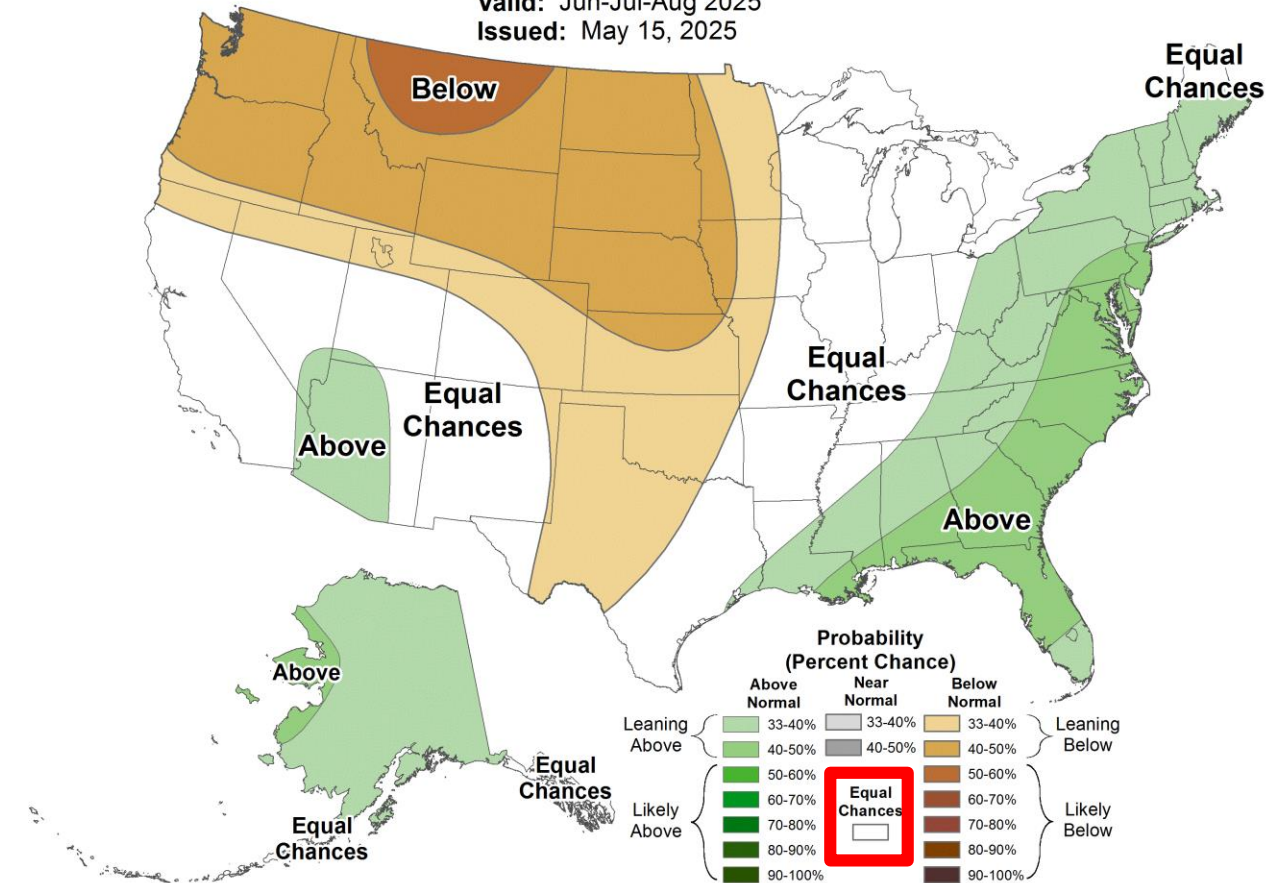
Valid: Jun-Jul-Aug 2025
Issued: May 15, 2025



Seasonal Precipitation Outlook



Valid: Jun-Jul-Aug 2025
Issued: May 15, 2025



In the official summer outlook from the Climate Prediction Center, probabilities lean toward **above normal temperatures** for Southeast Michigan. Meanwhile, we have **equal chances for above, near, or below normal precipitation**. This outlook accounts for many factors including ENSO, dynamical guidance such as the NMME, statistical tools, soil moisture conditions, and trends in recent years.





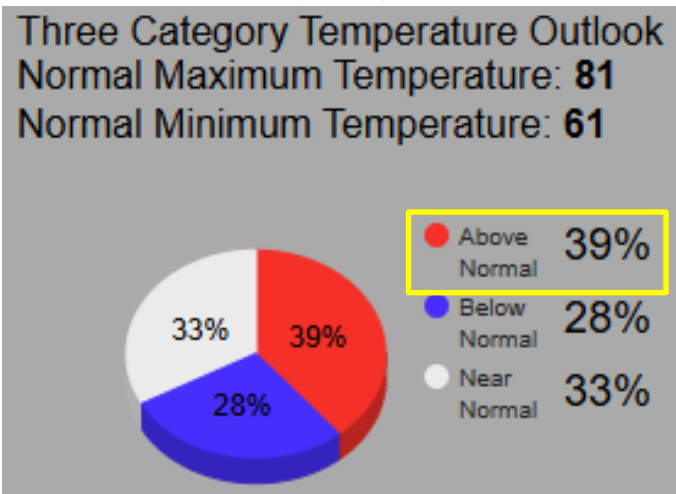
Official CPC Summer Outlook Probabilities

2025 Summer Outlook for SE MI

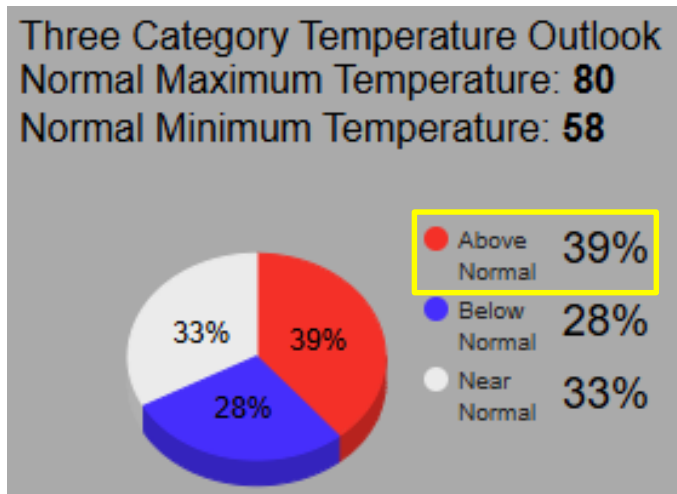
Temperature



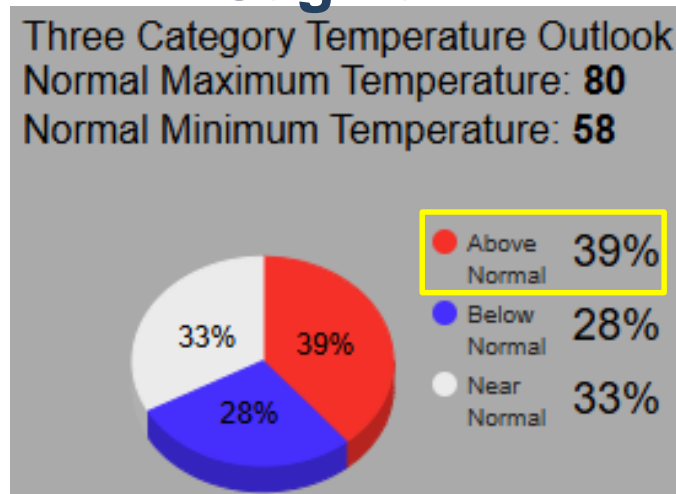
Detroit



Flint

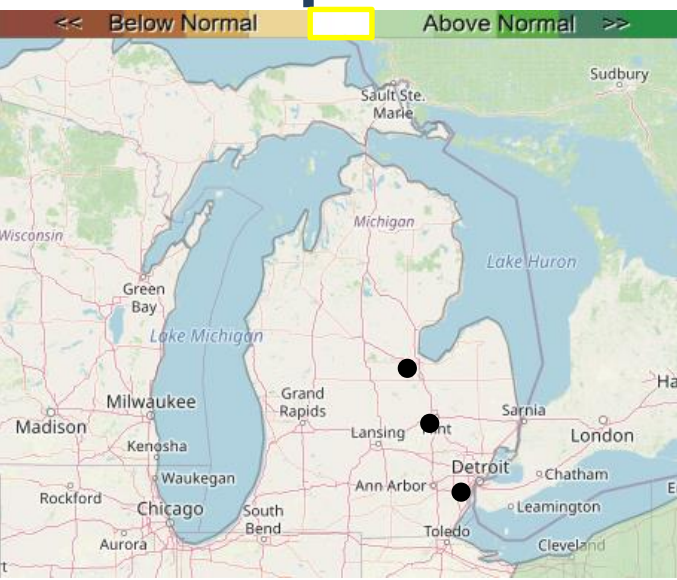


Saginaw

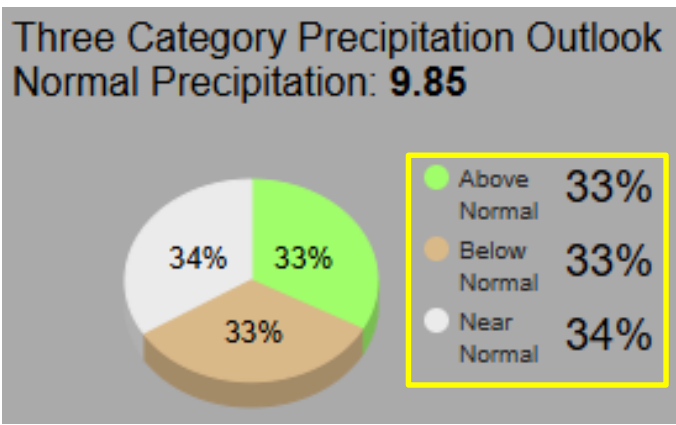


Leaning Toward Above Normal Temperatures

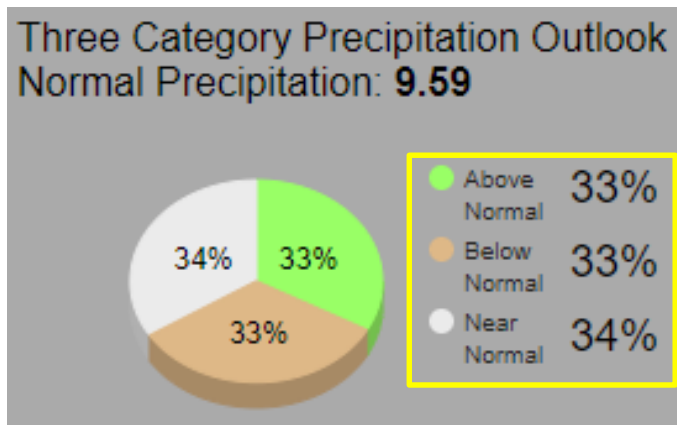
Precipitation



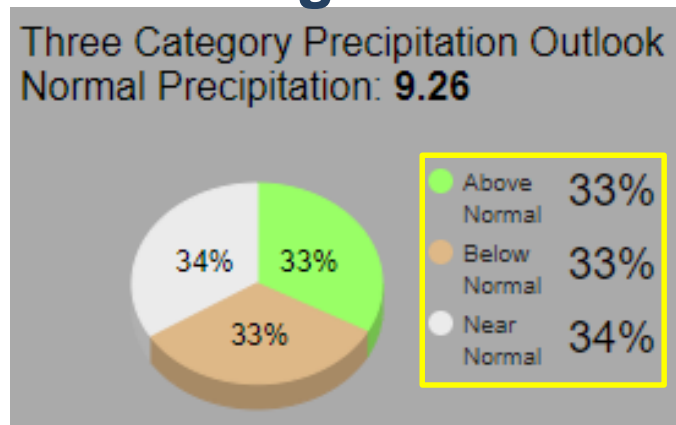
Detroit



Flint



Saginaw



Equal Chances for Above, Below, or Near Normal Precipitation

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/interactive/index.php

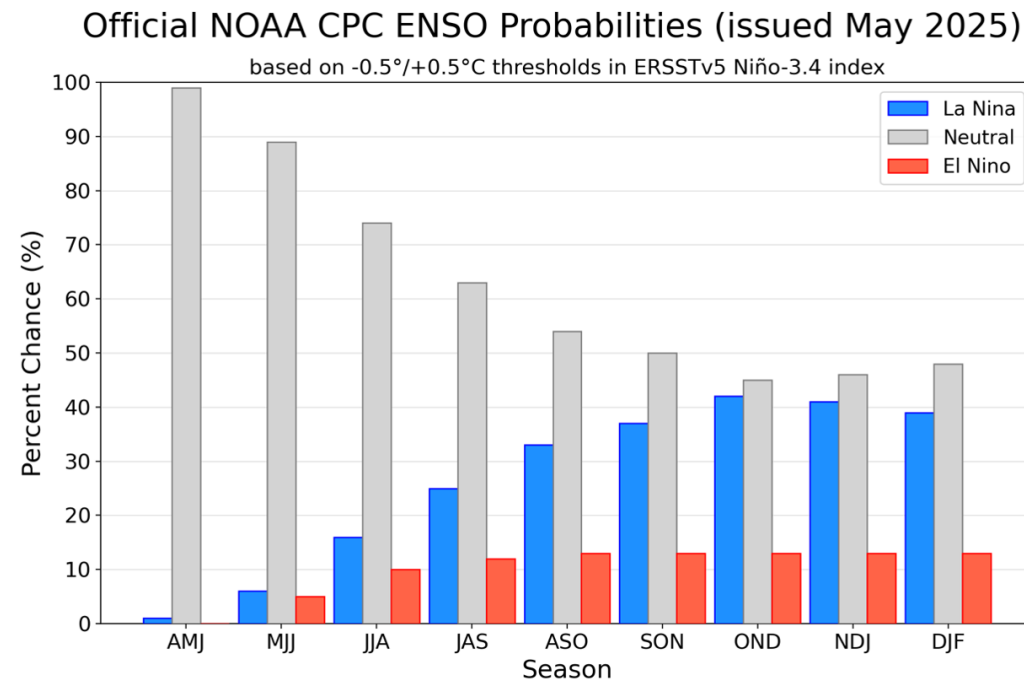




ENSO Outlook

2025 Summer Outlook for SE MI

CPC/IRI Probabilistic ENSO Forecast

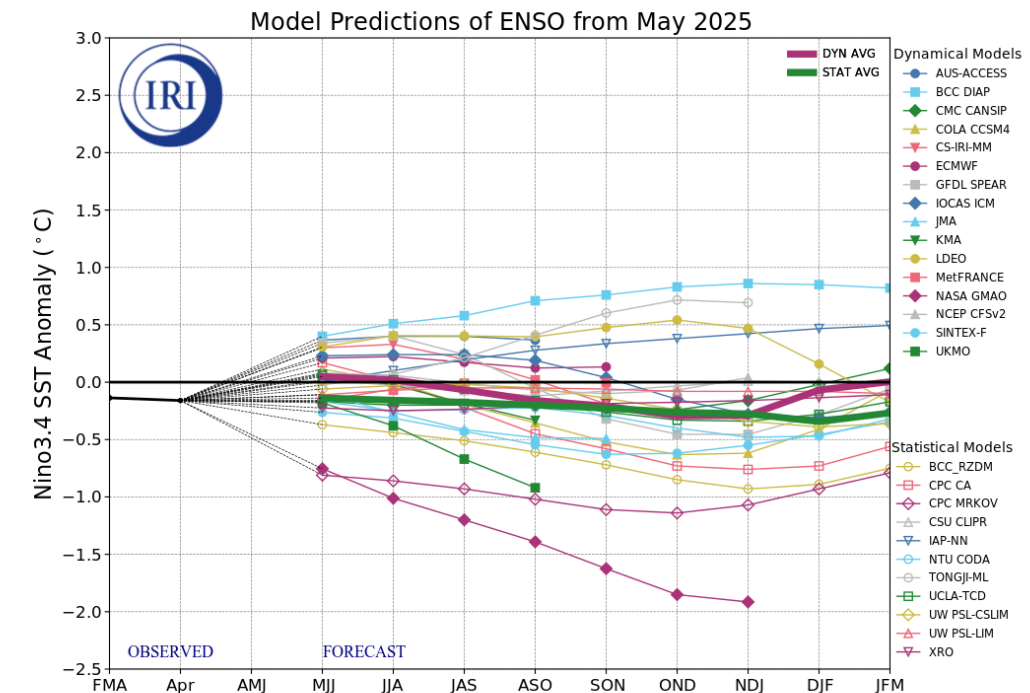


<https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/>

After a very brief and weak La Niña, the tropical Pacific is now in ENSO-neutral conditions. ENSO-neutral is expected to continue through the summer. Neutral is also the most likely outcome for this fall and winter, but chances of La Niña returning are a close second.

ENSO teleconnections are less pronounced during the summer compared to the winter, but La Niña or El Niño can still provide a background influence for upper air patterns across the northern hemisphere. **ENSO-neutral provides little predictability.** Read more about the latest ENSO status and forecast from CPC [here](#) (updated weekly).

CPC/IRI ENSO Predictions Plume



<https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/>

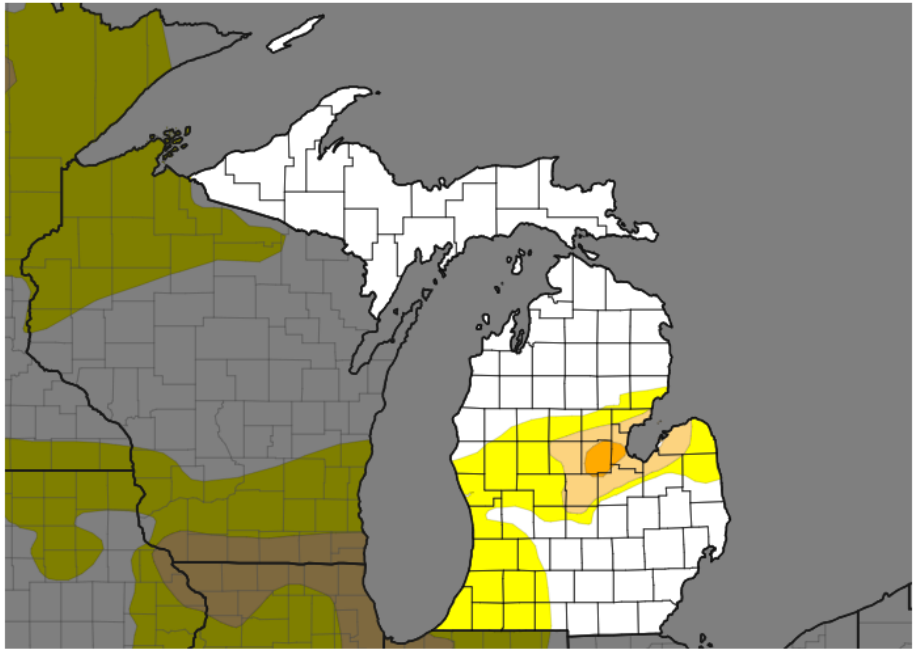




Local Drought Status and Seasonal Drought Outlook

2025 Summer Outlook for SE MI

U.S. Drought Monitor: Michigan



Drought & Dryness Categories	
D0 - Abnormally Dry	20.7%
D1 - Moderate Drought	5.3%
D2 - Severe Drought	1.0%
D3 - Extreme Drought	0.0%
D4 - Exceptional Drought	0.0%
Total Area in Drought (D1-D4)	6.3%

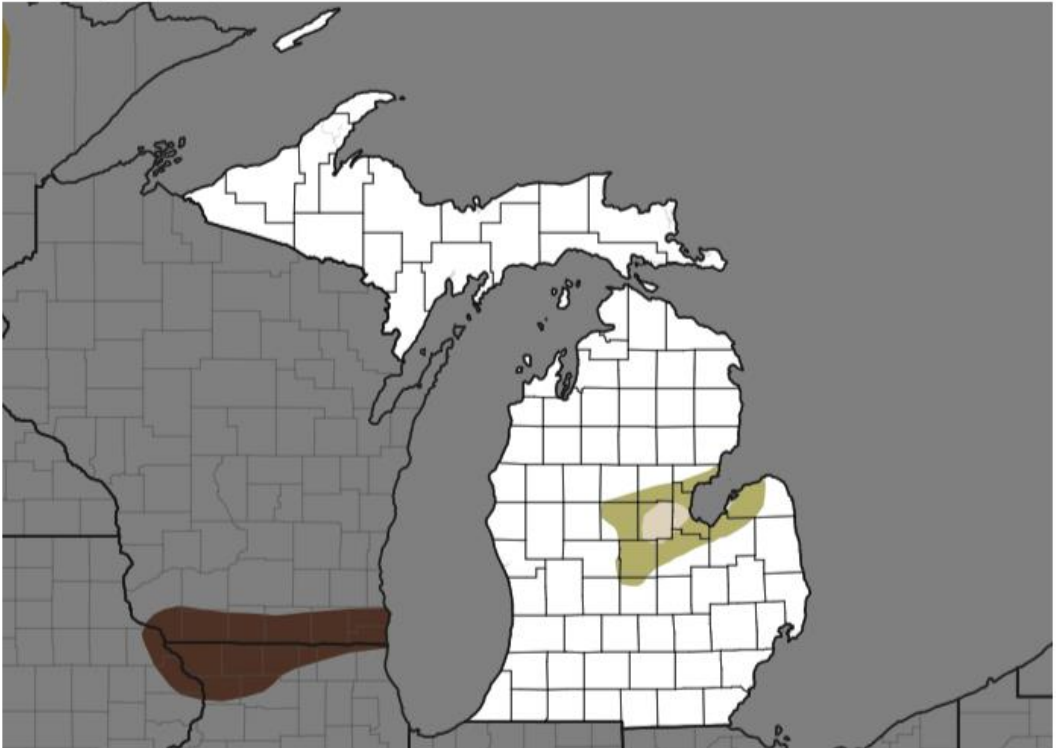
Source(s): NDMC, NOAA, USDA
Updates Weekly: 05/20/25

Drought.gov

Recent Rainfall

Rainfall (Departure)	Detroit	Flint	Saginaw
1 Month Apr 26 to May 25	3.88" (+0.21")	3.38" (-0.21")	3.78" (+0.43")
3 Months Feb 26 to May 25	8.87" (-0.14")	9.00" (+0.69")	8.97" (+0.75")
6 Months Nov 26 to May 25	14.55" (-1.19")	13.45" (-0.58")	12.70" (-1.18")
1 Year May 26, 2024 to May 25, 2025	30.57" (-3.75")	32.79" (+0.82")	26.75" (-5.37")
2 Years May 26, 2023 to May 25, 2025	66.30" (-2.34")	65.80" (+1.86")	59.06" (-5.18")

Seasonal (3-Month) Drought Outlook for May
15-August 31, 2025



Source(s): Climate Prediction Center
Last Updated: 05/15/25

Drought.gov

As of May 20, a moderate (D1) to severe (D2) long-term drought persists across the Saginaw Valley and Thumb regions. Rainfall amounts have been within a half inch of normal over the past month, but 1- to 2-year deficits are over 5 inches at Saginaw. **Drought conditions are predicted to improve** across the area in the latest seasonal drought outlook.



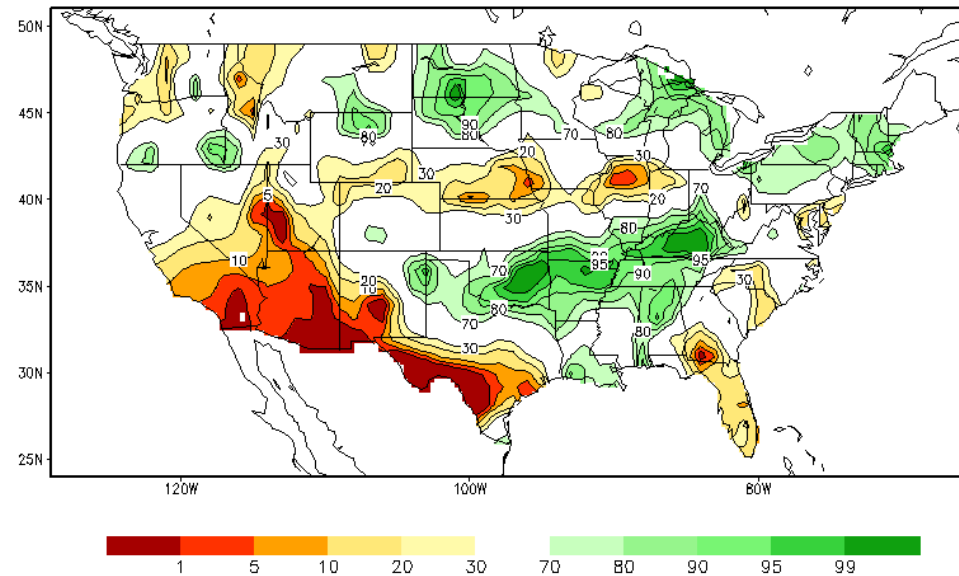


Recent Conditions

2025 Summer Outlook for SE MI

Soil Moisture

Calculated Soil Moisture Ranking Percentile
MAY 25, 2025

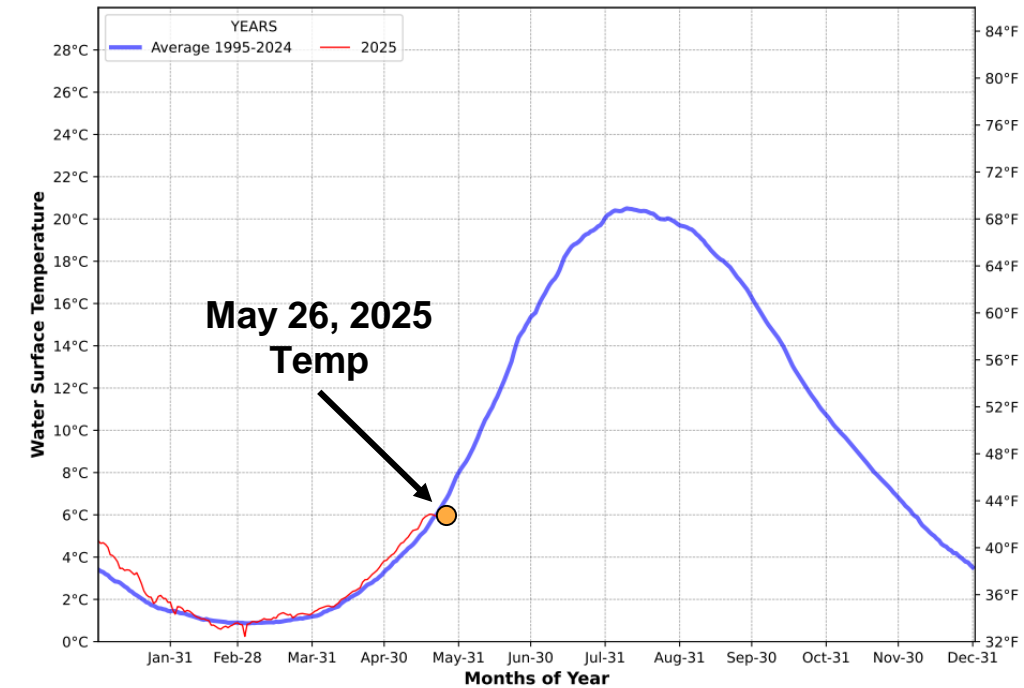


https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/Figures/daily/curr.w.rank.daily.gif

Lake Huron Temperature



Lake Huron Average Great Lakes Surface Environmental Analysis (GLSEA)
Surface Water Temperature Compared to Current Year



NOAA CoastWatch Great Lakes Node

May 26, 2025 06:40:09

https://apps.glerl.noaa.gov/coastwatch/webdata/statistic/pdf/avgtemps-h_1995-2025.pdf

Soil moisture is calculated to be above normal for parts of the Great Lakes region including parts of Southeast Michigan. These positive soil moisture anomalies may temper excessive heat potential, at least early in the season. Meanwhile, Great Lakes water temperatures (Lake Huron shown above) are running very near the long-term average for this time of year.





CPC Soil Moisture Analogs

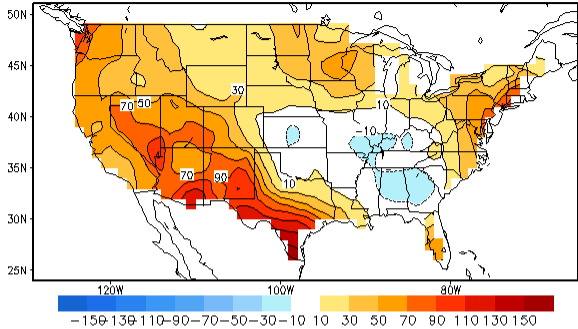
2025 Summer Outlook for SE MI

Temperature

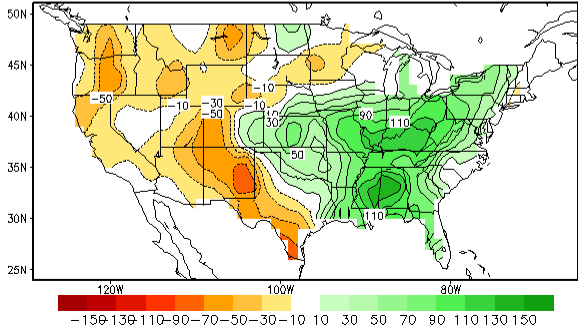
Precipitation

June

Lagged Averaged Temperature Outlook for JUN 2025
units: anomaly (sdX100), SM data ending at 20250525



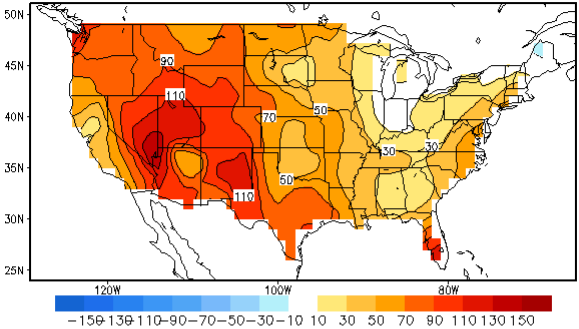
Lagged Averaged Precipitation Outlook for JUN 2025
units: anomaly (sdX100), SM data ending at 20250525



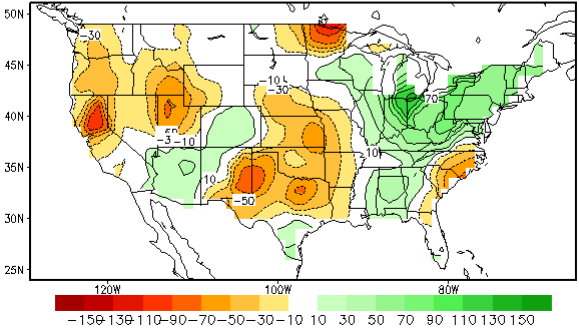
https://www.cpc.ncep.noaa.gov/soilmst/img/cas_pt_mon.lead1.gif

July

Lagged Averaged Temperature Outlook for JUL 2025
units: anomaly (sdX100), SM data ending at 20250525



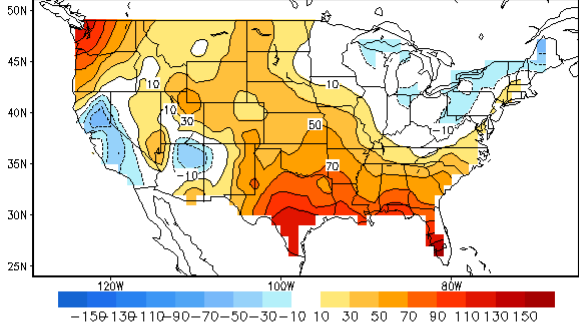
Lagged Averaged Precipitation Outlook for JUL 2025
units: anomaly (sdX100), SM data ending at 20250525



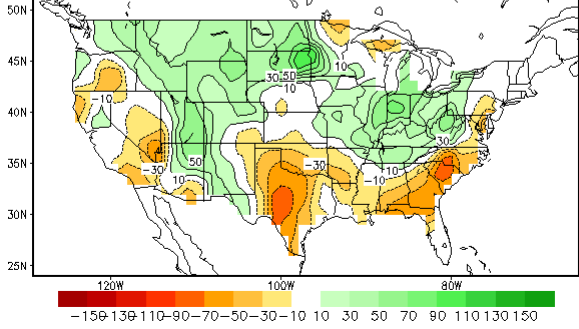
https://www.cpc.ncep.noaa.gov/soilmst/img/cas_pt_mon.lead2.gif

August

Lagged Averaged Temperature Outlook for AUG 2025
units: anomaly (sdX100), SM data ending at 20250525



Lagged Averaged Precipitation Outlook for AUG 2025
units: anomaly (sdX100), SM data ending at 20250525



https://www.cpc.ncep.noaa.gov/soilmst/img/cas_pt_mon.lead3.gif

Soil moisture and drought have predictive value leading into the summer, and CPC soil moisture analogs provide a depiction of how summers with similar antecedent conditions evolved. Analogs (above) with similar soil moisture conditions to this year showed a lean toward warmer than normal conditions across the Great Lakes for June and July, and cooler than normal for August. The analogs also showed a lean toward wetter than normal conditions for Lower Michigan.





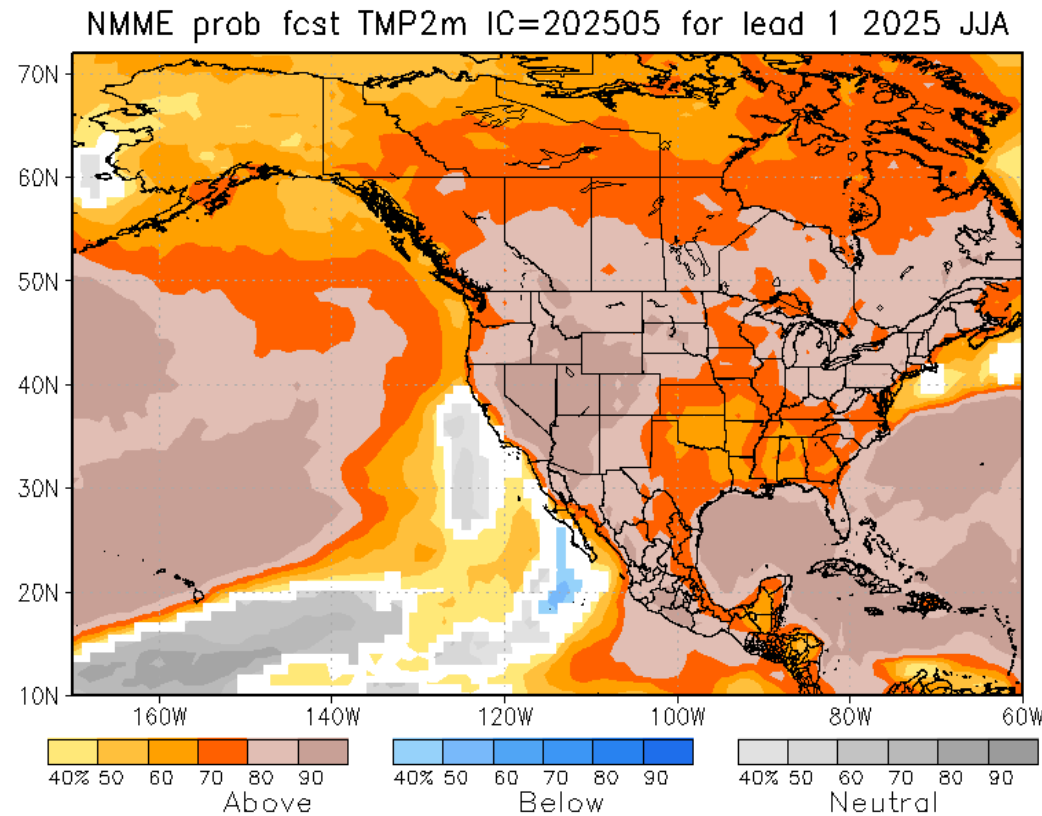
Model Ensemble Guidance

2025 Summer Outlook for SE MI

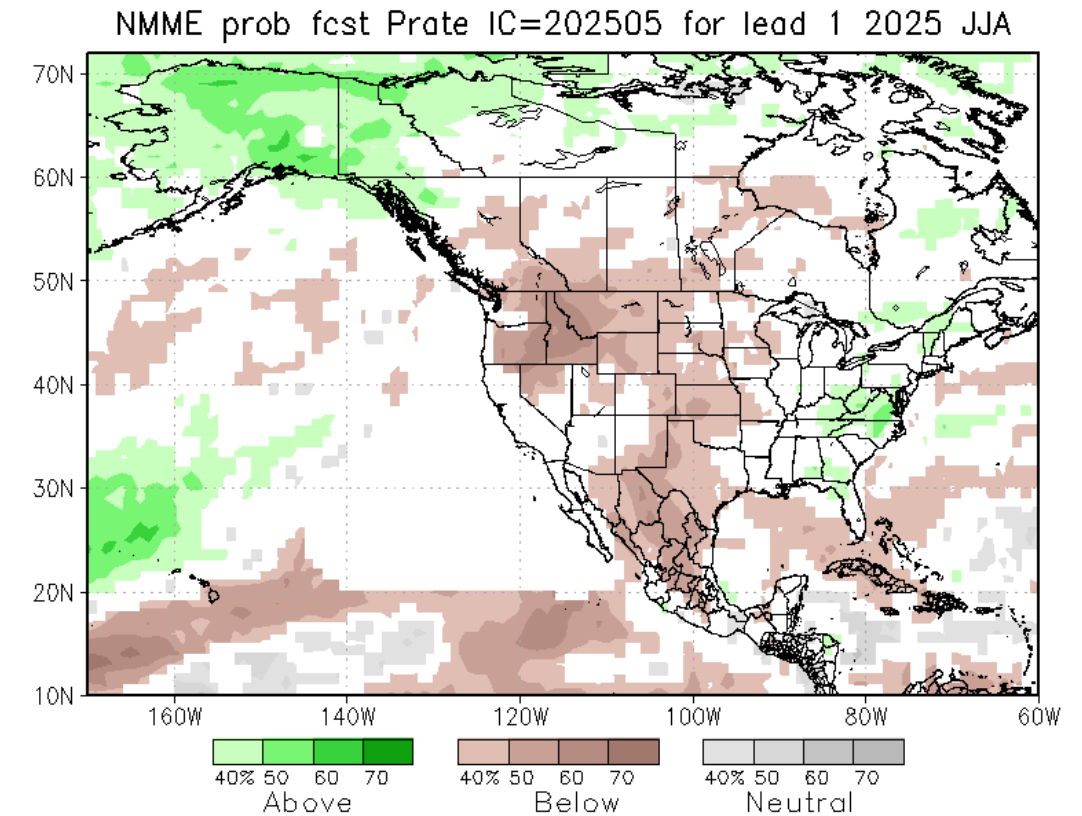
Temperature

Precipitation

The North American Multi-Model Ensemble ([NMME](#)), a seasonal forecasting system featuring coupled models from US and Canadian modeling centers, is another tool that provides additional guidance to inform seasonal forecasters. The latest output offers a 80-90% probability for **above normal temperatures** across the Great Lakes. Little signal is present for precipitation.



https://www.cpc.ncep.noaa.gov/products/NMME/prob/images/prob_ensemble_tmp2m_us_season1.png



https://www.cpc.ncep.noaa.gov/products/NMME/prob/images/prob_ensemble_prate_us_season1.png



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Detroit, MI



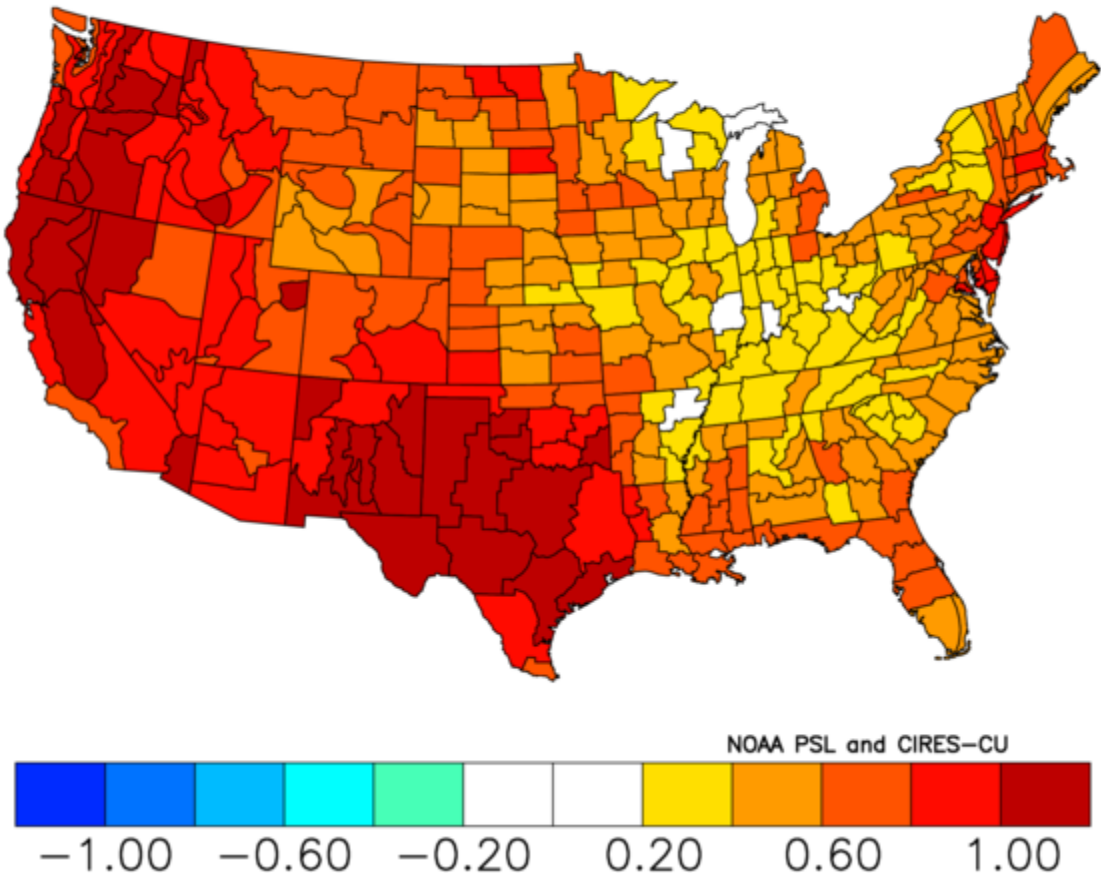
Trends in Recent Summers

2025 Summer Outlook for SE MI

Composite anomalies of the past 15 years show that **summers have trended warmer and wetter** across Southeast Michigan. These trends highlight the changing “normal” and are important to consider in the seasonal forecast. Given weak predictability coming from ENSO-neutral conditions, decadal trends hold the largest predictable signal in the summer outlook.

Temperature

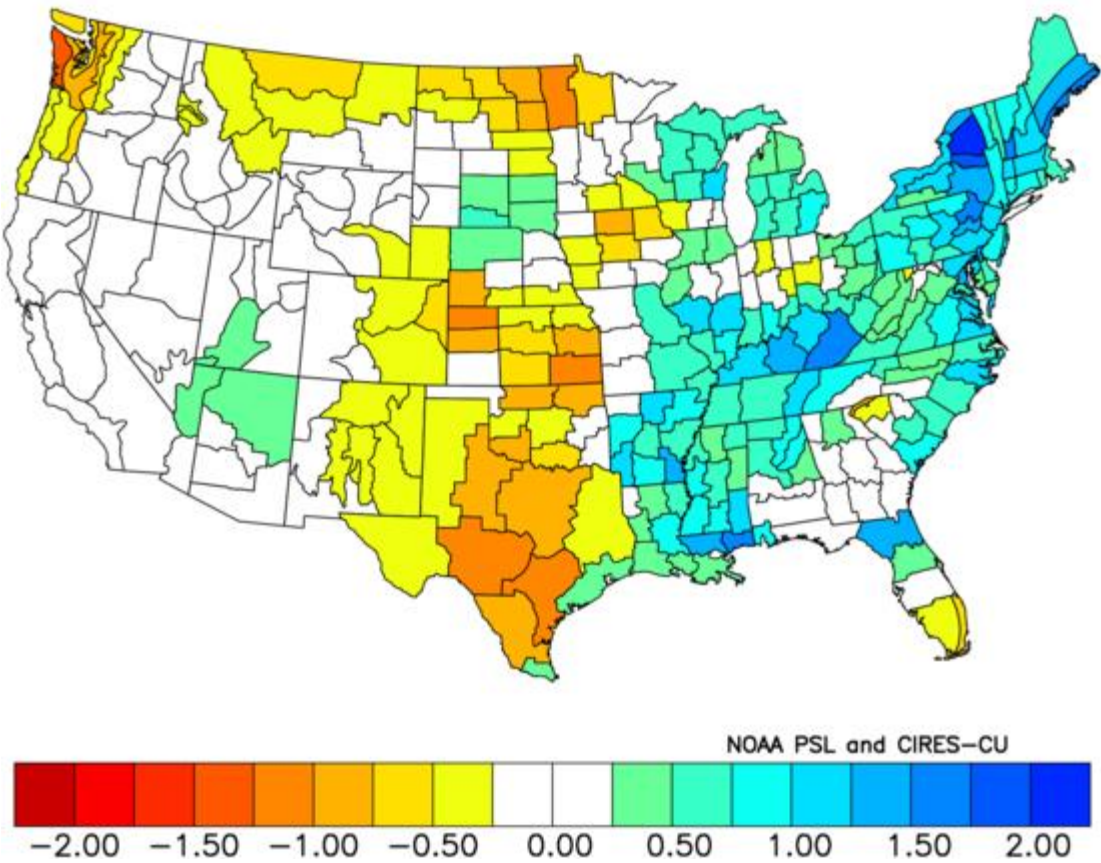
NOAA/NCEI Climate Division Composite Temperature Anomalies (F)
Jun to Aug 2009 to 2024
Versus 1991–2020 Longterm Average



<https://psl.noaa.gov/data/usclimdivs/>

Precipitation

NOAA/NCEI Climate Division Composite Precipitation Anomalies (in)
Jun to Aug 2009 to 2024
Versus 1991–2020 Longterm Average



<https://psl.noaa.gov/data/usclimdivs/>

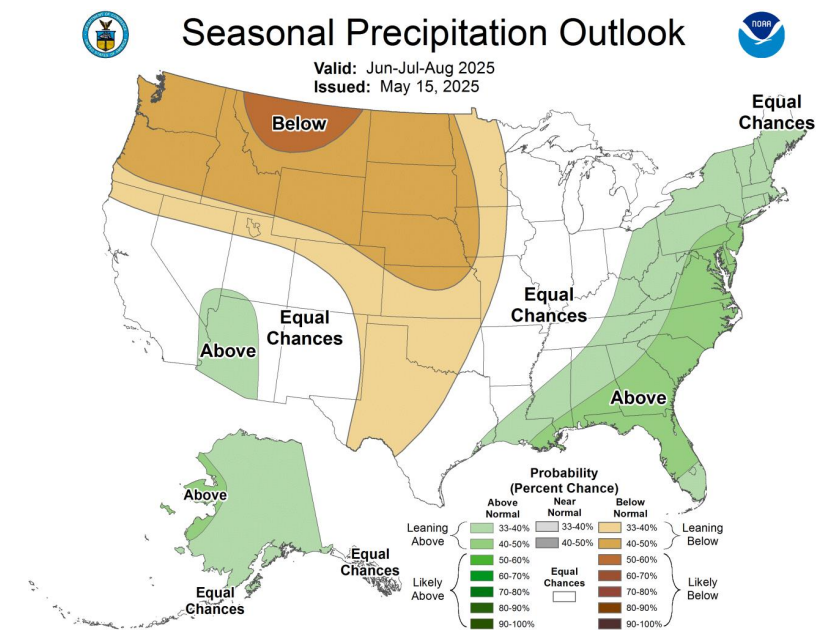
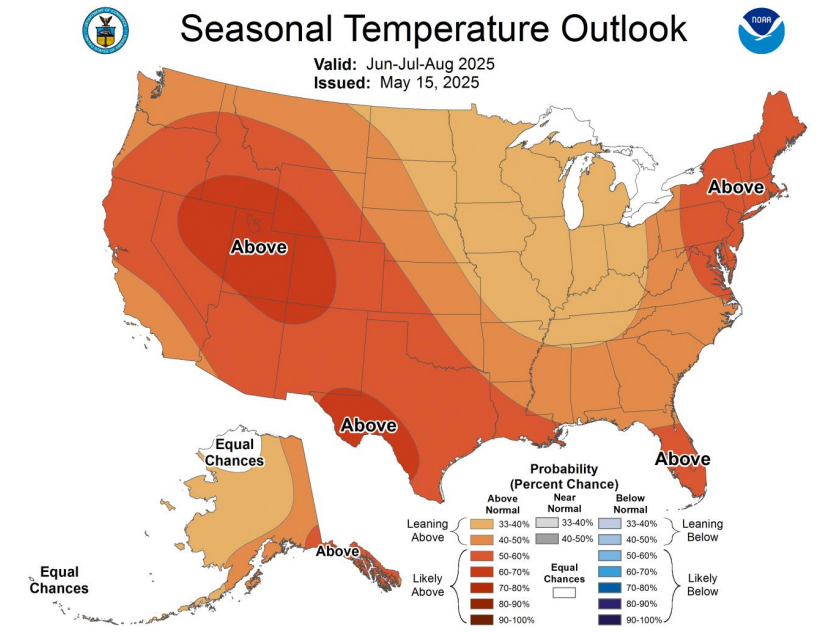




Outlook Summary

2025 Summer Outlook for SE MI

- The official summer outlook shows that **probabilities lean toward above normal temperatures** across the region. Meanwhile, we have **equal chances for above, below, or near normal precipitation**.
- Given ENSO-neutral conditions in the tropical Pacific, little predictability can be inferred from ENSO's associated teleconnections.
- The largest predictable signal for this outlook comes from trends over recent years/decades, and these trends show that summers in Southeast Michigan are gradually trending warmer and wetter.
- Despite odds favoring a warmer summer overall, that does not rule out periods of cooler weather at times.
- Drought conditions are not likely to expand across the area this summer. Ongoing drought conditions in the Saginaw Valley are forecast to improve.





Summer Records and Trivia – Temperature

2025 Summer Outlook for SE MI

Normal High Temp	June	July	August	Summer (JJA)
Detroit	79.7	83.7	81.4	81.6
Flint	78.2	82.1	79.9	80.1
Saginaw	78.5	82.2	80.0	80.2

Normal Low Temp	June	July	August	Summer (JJA)
Detroit	60.2	64.4	63.2	62.6
Flint	55.9	59.7	58.3	58.0
Saginaw	57.7	61.2	59.4	59.4

Warmest...	Temperature	Month	Summer (JJA)
Detroit	105 (7/24/1934)	79.3 (July 2011)	74.9 (2016)
Flint	108 (7/8/1936 & 7/13/1936)	78.0 (July 1921)	74.2 (1933)
Saginaw	111 (7/13/1936)	77.5 (July 1921)	73.0 (1931)

Coolest...	Temperature	Month	Summer (JJA)
Detroit	36 (6/1/1966 & 6/11/1972)	62.8 (June 1903 & June 1985)	66.5 (1915)
Flint	33 (6/1/1966 & 6/4/1998)	60.1 (June 1969)	65.4 (1992)
Saginaw	33 (6/10/1941 & 6/8/1949)	60.6 (June 1982)	64.8 (1915)

Normal number of 90+ degree days per summer: Detroit: 11.2; Flint: 9.7; Saginaw: 7.7

All temps in °F; normals reflect 1991-2020 period



Summer Records and Trivia – Precipitation

2025 Summer Outlook for SE MI

Normal Precipitation	June	July	August	Summer (JJA)
Detroit	3.26"	3.51"	3.26"	10.03"
Flint	3.12"	3.41"	3.16"	9.69"
Saginaw	3.28"	2.83"	3.85"	9.96"

Wettest...	Day	Month	Summer (JJA)
Detroit	4.74" (7/31/1925)	8.76" (July 1878)	16.96" (1896)
Flint	4.50" (8/8/1937)	11.18" (Aug. 1937)	18.39" (1937)
Saginaw	6.93" (8/10/2012)	10.76" (June 2017)	16.28" (1928)

Driest...	Month	Summer (JJA)
Detroit	0.16" (Aug. 1894)	3.58" (1911)
Flint	0.16" (July 1939)	3.76" (1930)
Saginaw	0.27" (Aug. 1927)	3.54" (1927)





Volunteer Weather Observers Needed!

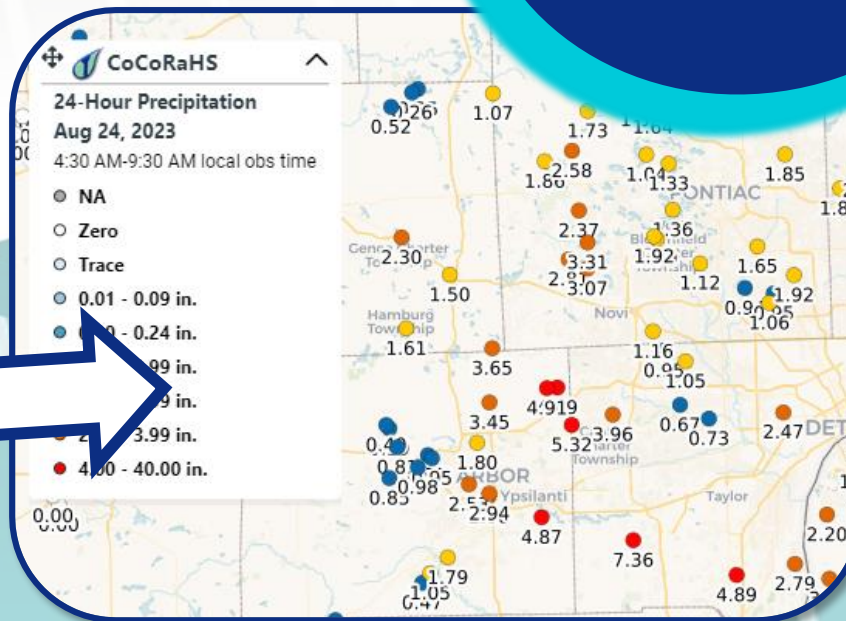
2025 Summer Outlook for SE MI

Measure precipitation in your own backyard with **CoCoRaHS**

The **Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS)** is a grassroots network of volunteers of all ages and backgrounds working together to **measure** and **map precipitation**. The only requirements are an enthusiasm for watching and reporting weather conditions and a desire to learn more about how weather can affect and impact our lives.

For more info and to sign up, visit **cocorahs.org**

Rainfall amounts can vary greatly even over short distances! This summer, help us get a more accurate picture of how much rain fell and where.



BECAUSE EVERY DROP COUNTS!



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Detroit, MI