

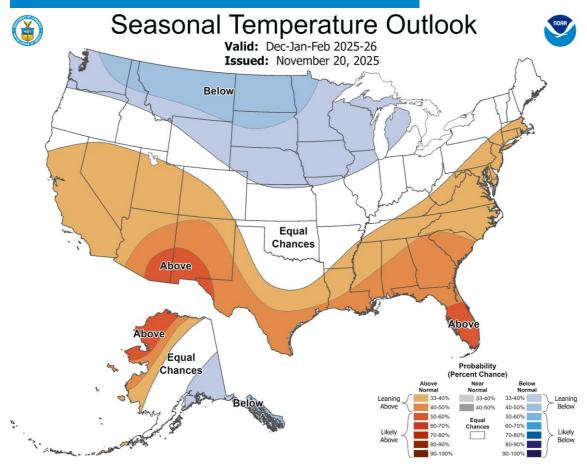
2025-2026 Winter Outlook

90 Day Outlook Valid Dec 1, 2025 to Feb 28, 2025

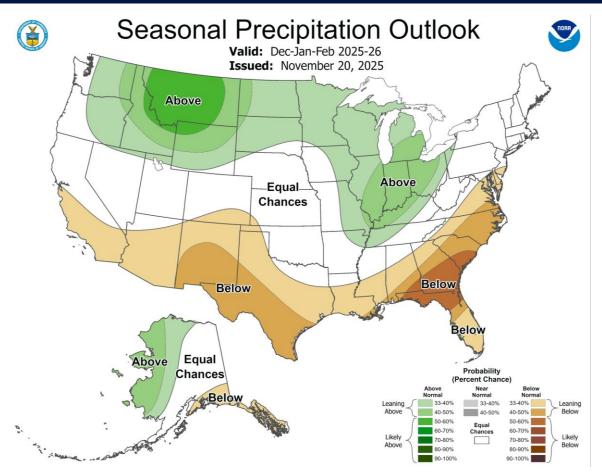
NWS Detroit, MI

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

Official CPC Winter Outlook



The winter temperature outlook leans slightly toward below normal for northern and western Lower MI, including parts of the Saginaw Valley. Equal chances for above, near, or below normal temperatures exist across Southeast MI.

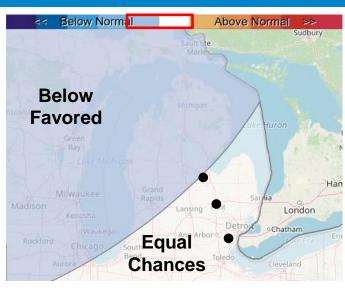


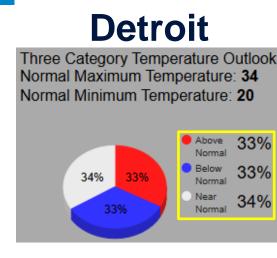
The winter precipitation outlook leans toward above normal precipitation across all of Southeast MI.

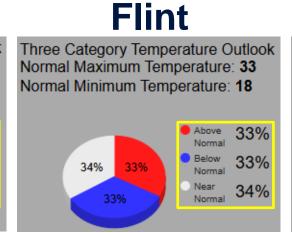
emperature

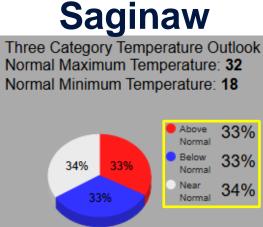
Precipitation

Official CPC Winter Outlook Probabilities



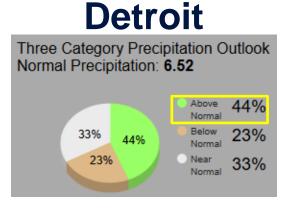


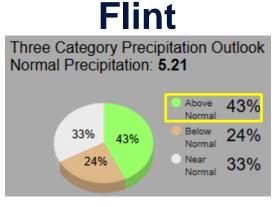


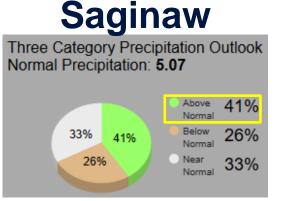


Equal Chances for Above, Near, or Below Normal









Leaning Toward Above Normal Precipitation

State of ENSO

El Niño and La Niña are the warm and cool phase of ENSO, a recurring climate pattern in the tropical Pacific Ocean that can influence global weather patterns on a seasonal scale.

A weak La Niña is ongoing and forecast to persist through the winter season (Dec-Feb). Probabilities favor the return of ENSO neutral (60% chance) by Jan-Mar with increasing likelihood for ENSO neutral through the spring and summer. Read more about the La Niña Watch and the latest forecast from CPC <u>here</u> (updated weekly).

The presence of La Niña offers some forecast skill in the Great Lakes at the seasonal time scale. Typical impacts of La Niña are described on the following slide, but it's important to note that every La Niña winter is unique. La Niña tilts the odds towards certain outcomes, but does not guarantee them.

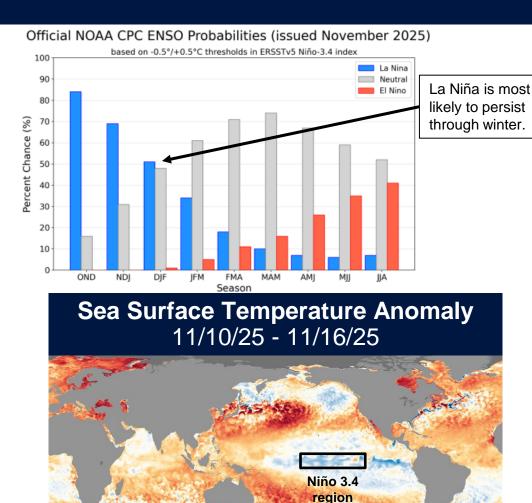


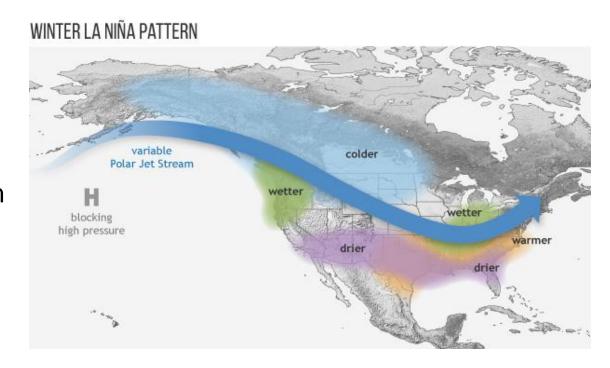
Image Courtesy NOAA View

Typical La Niña Impacts

La Niña will likely influence the atmospheric circulation pattern this winter, with implications on the local conditions for the Great Lakes.

What this can mean:

- An active jet stream pattern across the northern/eastern tier of the US that directs storm systems across the local area. More often than not, La Niña winters are wetter than normal for Southeast ML
- High sub-seasonal variability in temperatures (alternating cold outbreaks and mild periods) dependent on the placement of the jet stream.



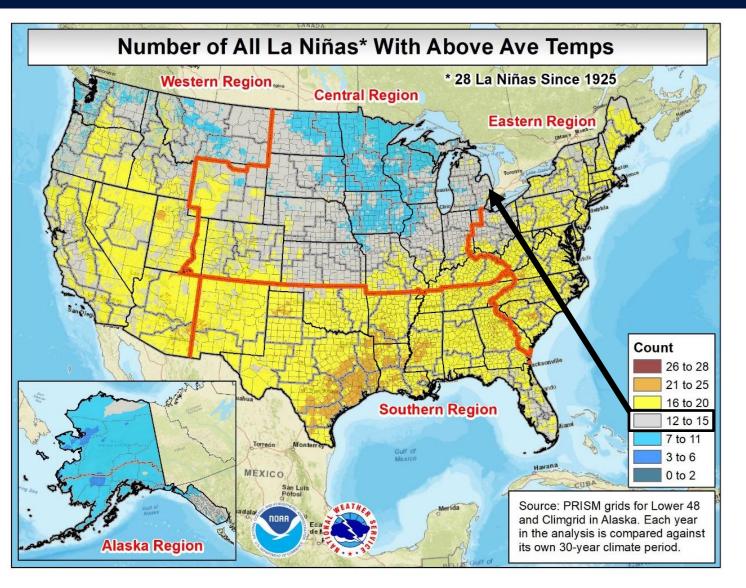
What we don't know:

How other climate signals such as the Arctic Oscillation, North Atlantic Oscillation, and stratospheric warming events will affect local temperature and precipitation patterns on shorter (weekly-to-monthly) time scales. These influences are not predictable at the seasonal (3-month) time scale.

Historical La Niña Impacts – Temperature

The graphic shows that in roughly half of La Niña winters since 1925, Southeast MI has observed above normal temperatures. In other words, La Niña doesn't have a strong relationship with wintertime temperatures. Higher sub-seasonal temperature variability is common in La Niña, but historically there has been no consistent lean toward above or below normal temps overall.

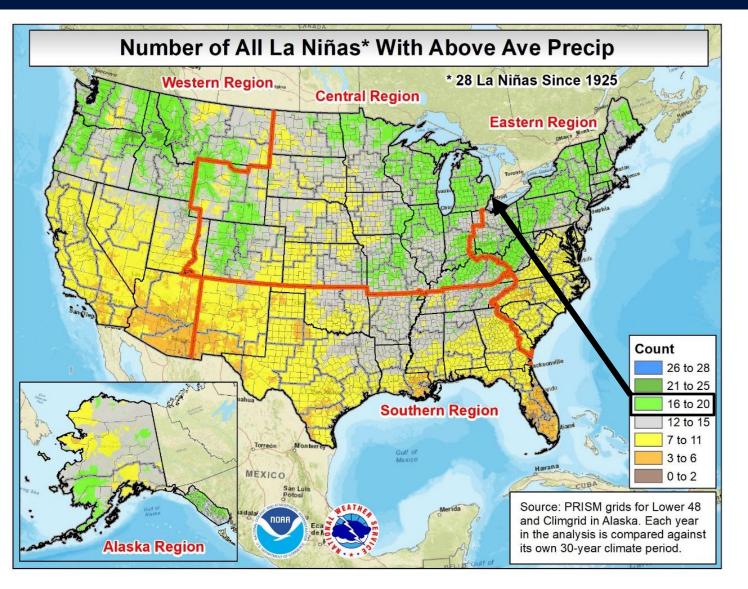
This graphic accounts for trends in average winter temperatures over the years.



Historical La Niña Impacts – Precipitation

The graphic shows that Southeast MI has observed above normal precipitation in more than half of the La Niña winters since 1925. This tells us that more often than not, La Niña winters have been wetter than normal for the region.

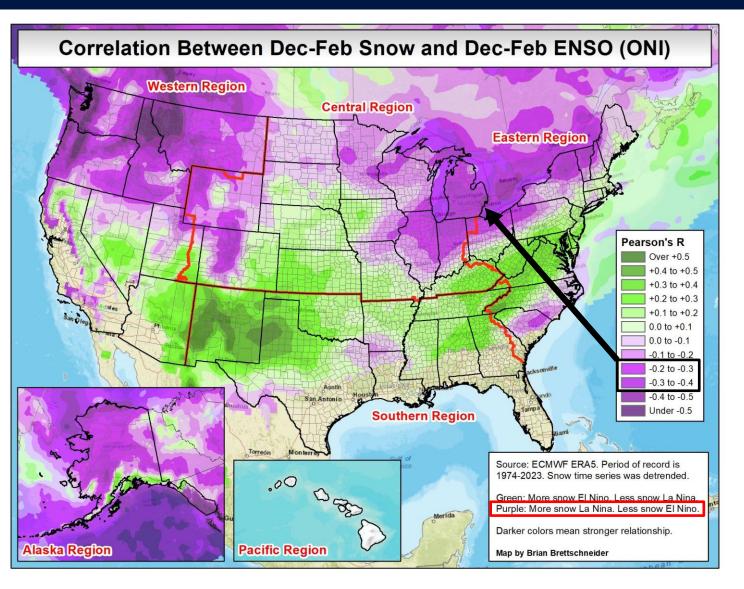
This graphic accounts for trends in average winter precipitation over the years.



ENSO and Snowfall

The graphic shows that there is a negative correlation between the Oceanic Niño Index and snowfall across the Great Lakes. This means that during La Niña winters, we have generally seen more snow than we have during El Niño winters.

This graphic accounts for trends in average winter snowfall over the years.

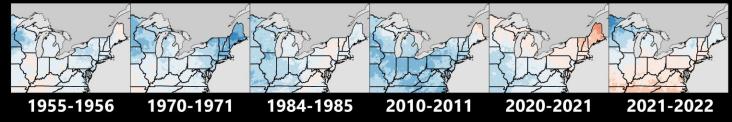


LA NIÑA EVENTS: TEMPERATURE





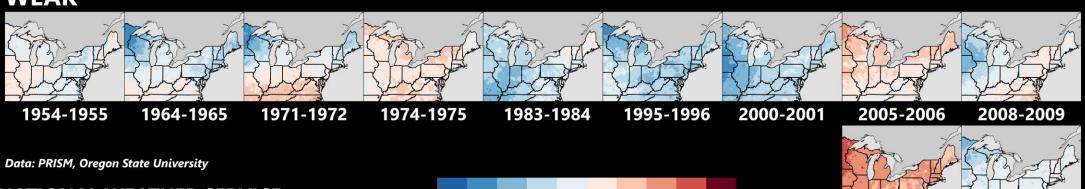
MODERATE



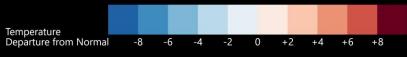
La Niña's effect on winter temperatures across the Great Lakes generally offers little forecast skill. These maps show how each La Niña winter played out across the region.

A weak La Niña is forecast this year.





NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

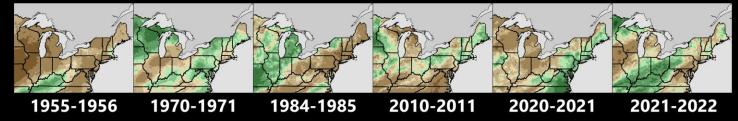


LA NIÑA EVENTS: PRECIPITATION

STRONG

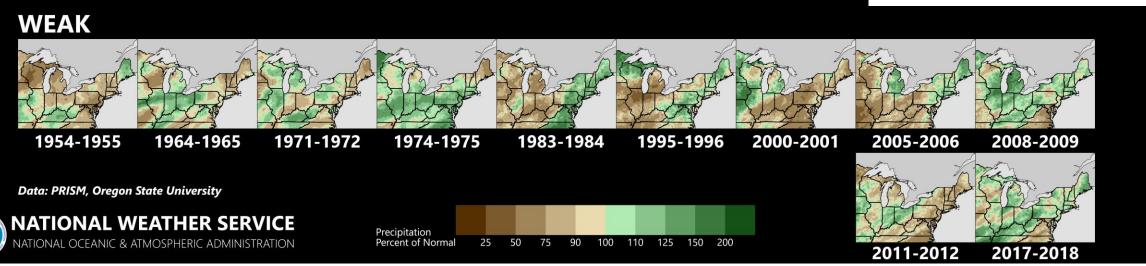


MODERATE



La Niña's effect on winter precipitation has some predictability in the Great Lakes, but no two La Niñas are the same. These maps show how each La Niña winter played out across the region.

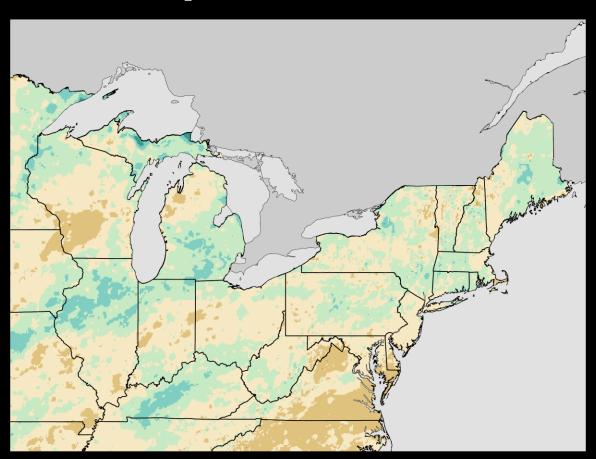
A weak La Niña is forecast this year.

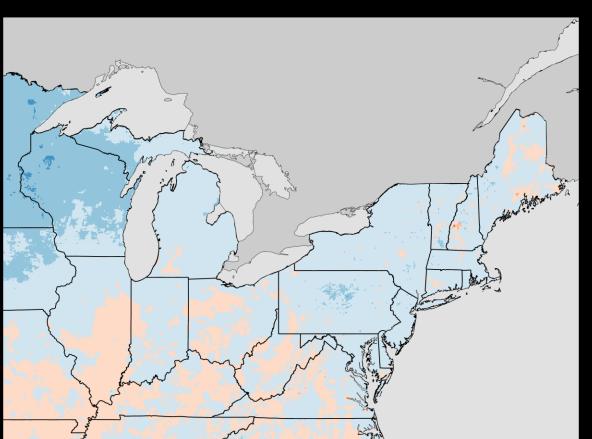


WEAK LA NIÑA CASES

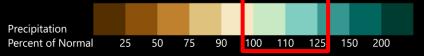
Precipitation Median

Temperature Median





Based on 12 weak La Niña cases since 1950





Previous Weak La Niña Winter Stats for Southeast MI

	Normal Winter Avg Temp
Detroit	28.4
Flint	25.5
Saginaw	25.5

	Observed Winter Avg Temp During Weak La Niñas (°F)													
1954-1955 1964-1965 1971-1972* 1974-1975 1983-1984* 1995-1996* 2000-2001 2005-2006 2008-2009 2011-2012* 2016-2017 2017-2018* 2022-2										2022-2023				
28.1	27.5	27.2	28.1	24.0	25.3	25.0	30.3	24.4	32.9	33.0	27.4	33.4		
24.2	24.8	25.6	28.1	21.9	22.9	22.8	27.4	21.8	31.1	30.3	24.3	31.1		
23.3	23.0	24.1	27.7	22.2	22.5	22.3	26.6	21.4	30.6	29.5	24.6	30.3		



	Normal Winter Precipitation
Detroit	6.56
Flint	5.56
Saginaw	5.54

Observed Winter Precipitation During Weak La Niñas (inches)													
1954-1955 1964-1965 1971-1972* 1974-1975 1983-1984* 1995-1996* 2000-2001 2005-2006 2008-2009 2011-2012* 2016-2017 2017-2018* 2022-										2022-2023			
5.90	8.42	6.07	9.55	5.87	4.46	6.20	8.47	7.29	7.70	6.89	7.11	8.38	
5.45	6.18	6.68	7.25	2.93	4.42	7.96	7.19	6.32	5.85	7.14	7.26	5.14	
5.17	8.41	7.09	5.91	3.15	5.58	6.58	6.17	7.57	4.55	5.88	4.96	6.13	

Below Normal
Near Normal
Above Normal

	Normal Winter Snowfall
Detroit	35.4
Flint	39.5
Saginaw	37.1

	Observed Winter Snowfall During Weak La Niñas (inches)													
1954-1955	1964-1965	1971-1972*	1974-1975	1983-1984*	1995-1996*	2000-2001	2005-2006	2008-2009	2011-2012*	2016-2017	2017-2018*	2022-2023		
20.4	31.3	19.8	47.3	38.5	14.4	31.4	28.6	55.1	25.2	30.8	52.7	18.7		
26.8	43.0	34.7	40.4	32.6	17.4	45.4	47.5	56.4	28.6	32.5	65.3	28.4		
37.2	42.2	33.3	22.2	19.2	32.5	55.0	36.5	66.5	34.9	28.3	31.1	30.9		



Years marked with a * indicate a La Niña event that reached moderate strength at some point in its evolution, but was weak during the winter (DJF) season.

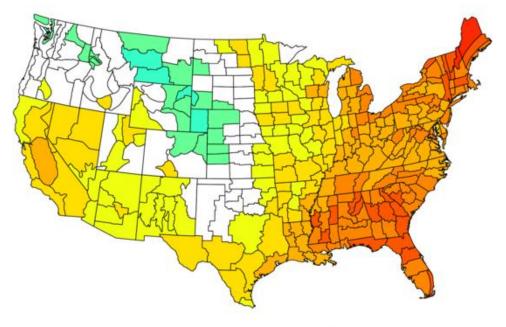
These charts use the NOAA NCEI 1991-2020 U.S. Climate Normals and do not account for trends over time.

Trends in Recent Winters

Beyond ENSO, a skillful predictor at the seasonal time scale is to account for how trends have evolved in observed data over the past 10 to 15 years. Composite anomalies of the past 15 years show that winters have trended warmer across Lower MI. Meanwhile, there is no strong signal for precipitation trends.

Temperature

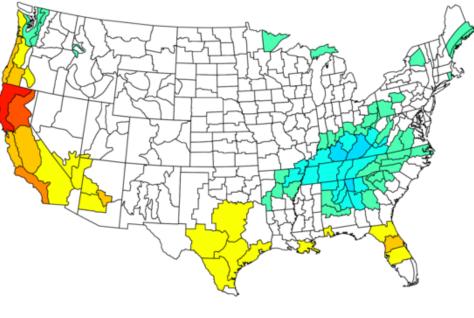
NOAA/NCEI Climate Division Composite Temperature Anomalies (F) Dec to Feb 2010-11 to 2024-25 Versus 1991-2020 Longterm Average





Precipitation

NOAA/NCEI Climate Division Composite Precipitation Anomalies (in) Dec to Feb 2010-11 to 2024-25 Versus 1991-2020 Longterm Average

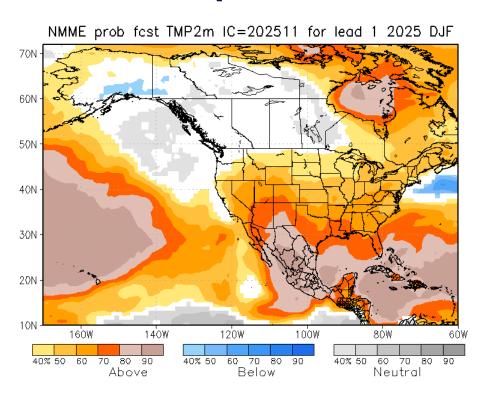




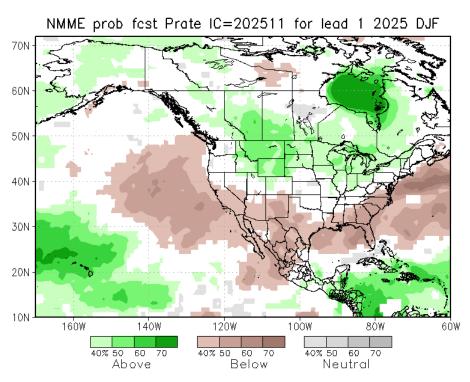
Model Ensemble Guidance

The North American Multi-Model Ensemble (<u>NMME</u>), a seasonal forecasting system featuring coupled models from US and Canadian modeling centers, is another tool that provides additional guidance to inform seasonal forecasts. The latest output offers increased probabilities for above normal temperatures and precipitation across the Great Lakes.

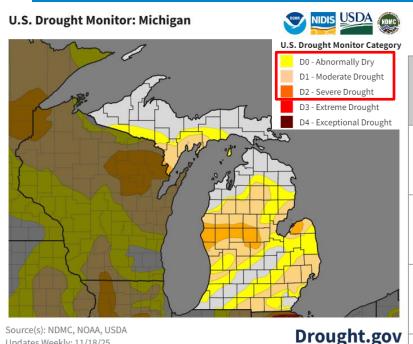
Temperature



Precipitation



Current Drought Status & Seasonal Outlook

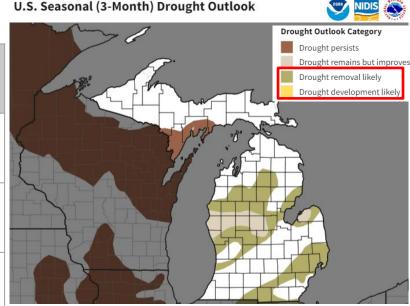


Abnormally dry to moderate drought conditions persist across most of Southeast MI, with severe drought present near Saginaw Bay. Rainfall deficits over the past month are near 1.50" below normal. Larger deficits exist when looking farther back, ranging between 1.50" and 5" below normal for the 3-month to 12-month periods. This dry period has persisted since last year.

Updates Weekly: 11/18/25

Recent Rainfall

Rainfall (Departure)	Detroit	Flint	Saginaw
1 Month	0.98"	1.02"	1.24"
Oct 20 to Nov 19	(-1.61")	(-1.50")	(-1.37")
3 Months	3.37"	5.46"	7.01"
Aug 20 to Nov 19	(-5.22")	(-2.80")	(-1.64")
6 Months	16.41"	14.73"	15.05"
May 20 to Nov 19	(-2.72")	(-3.89")	(-3.66")
9 Months	24.81"	23.02"	23.39"
Feb 20 to Nov 19	(-2.74")	(-3.19")	(-3.07")
1 Year Nov 20, 2024 to Nov 19, 2025	30.59" (-3.73")	27.86" (-4.11")	27.47" (-4.65")



Due to higher probabilities for a wet winter, drought is forecast to improve through February.

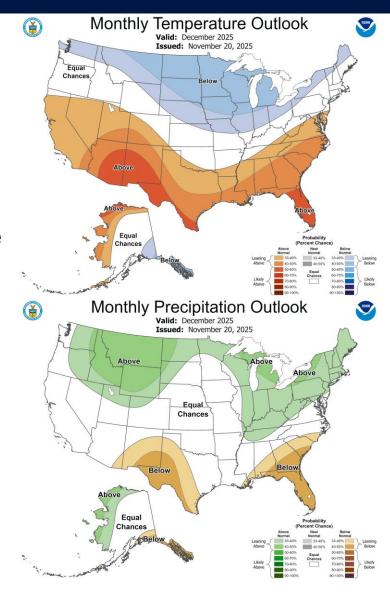
Source(s): Climate Prediction Center

Last Updated: 11/20/25

Drought.gov

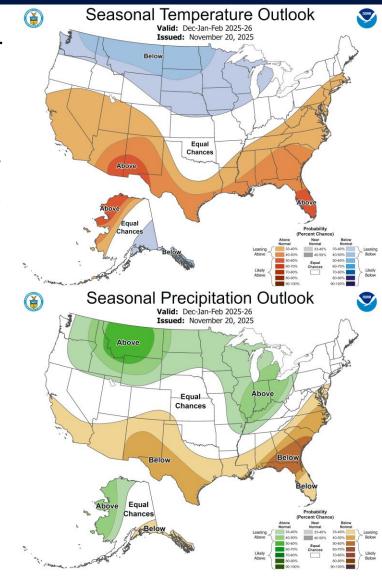
December Outlook

- Potential is being monitored for a significant pattern change to cooler temperatures for at least the beginning of December.
- The combined effects from the current La Niña, the Madden-Julian Oscillation (MJO), and the potential for a rare late November Sudden Stratospheric Warming (SSW) event are leading to higher probabilities for an arctic air outbreak from late November into early December.
- The conditions may also make additional arctic air outbreaks more likely through the rest of December and this winter.
- The December outlook highlights a 40-50% chance for below normal temperatures for the month as a whole.
- The precipitation outlook leans toward above normal precipitation.
- These factors indicate potential for a colder and snowier start to the season.



Winter Outlook Summary

- La Niña is expected to be a primary driver of the upper air pattern this winter and the outlook is based heavily upon the typical impacts.
- La Niña often (but not always) results in wetter than normal winters for Southeast MI. Thus, probabilities lean toward above normal precipitation.
 - Note: This is not a snowfall outlook, but above normal precip could favor above normal snowfall if the precip events occur during cooler episodes.
- La Niña does not have a strong relationship with winter temperatures in Southeast MI, but observed trends over recent years and ensemble model guidance favor warmer conditions. However, a higher probability for a cool start to the season offers a conflicting signal and the outlook highlights equal chances for above, near, or below normal temperatures. Parts of the Saginaw Valley lean slightly toward below normal temps.
- Despite what outcomes the outlooks lean toward, that does not rule out shorter-term cold outbreaks, warm periods, dry streaks, and periods of heavy snow which remain a possibility like in any other winter.
- Drought conditions are forecast to improve over the winter.
- This outlook factors in ENSO, trends in recent winters, dynamical model guidance such as the NMME, and statistical tools. A technical discussion is available here.



weather.gov

Winter Records and Trivia – Temperature

Normal High Temp	December	January	February	Winter (DJF)	Normal Low Temp	December	January	Februar	y Winter (DJF)
Detroit	37.2	32.3	35.2	34.9	Detroit	25.3	19.2	20.8	21.8
Flint	34.9	29.9	32.8	32.6	Flint	22.5	16.0	16.7	18.4
Saginaw	34.7	29.5	31.8	32.0	Saginaw	23.1	16.4	17.3	18.9
Warmest	Temperature	Mor	nth	Winter (DJF)	Coolest	Temperature	Мо	nth	Winter (DJF)
Detroit	73 (2/27/2024)	41 (Dec. 2		37.0 (1881 – 1882)	Detroit	-21 (1/21/1984)	12 (Feb.		18.7 (1903 – 1904)
Flint	74 (2/27/2024)	41 (Dec. 2		34.0 (2023 – 2024)	Flint	-25 (2/20/2015 & 1/18/1976)	10 (Jan.	_	16.9 (1976 – 1977)
Saginaw	74 (2/27/2024)	39 (Dec. 2		33.2 (2023 – 2024 & 1931 – 1932)	Saginaw	-23 (2/5/1918)	9. (Jan.		15.7 (1962 – 1963)

Normal number of days per winter with a min temp at or below 0 degrees: Detroit: 3.4; Flint: 8.7; Saginaw: 6.5 All temps in °F; normals reflect 1991-2020 period

Winter Records and Trivia – Precipitation & Snowfall

Normal Precipitation	December	January	February	Winter (DJF)	Normal Snowfall	December	January	February	Winter (DJF)
Detroit	2.25"	2.23"	2.08"	6.56"	Detroit	8.9"	14.0"	12.5"	35.4"
Flint	1.89"	1.99"	1.68"	5.56"	Flint	11.4"	15.1"	13.0"	39.5"
Saginaw	1.85"	1.92"	1.77"	5.54"	Saginaw	11.8"	13.9"	11.4"	37.1"
Wettest	Month		Winter (DJF)		Snowiest	Мо	nth	Winter (DJF)	
Detroit	6.41" (Feb. 1881)		12.74" (1949 – 1950)		Detroit	39.1" (Jan. 2014)		78.0" (2013 – 2014)	
Flint	5.28" (Feb. 1954)		10.48" (1949 – 1950)		Flint	35.3" (Dec. 2000)		71.6" (2013 – 2014)	
Saginaw	6.10 (Feb. 1		11.95 " (1996 – 1997)		Saginaw	40 . (Dec.		75.7" (2007 – 2008)	
Driest	Mon	th	Winter	(DJF)	Least Snowy	Month		Winter (DJF)	
Detroit	0.04 (Feb. 1		2.24 " (2002 – 2003)		Detroit	0.0" (Dec. 1889)		5.6" (1889 – 1890)	
Flint	0.07" 1.51" (Jan. 1945) (1962 – 196			Flint	T (Jan. 1934)		5.8 (1936 –		
Saginaw	0.21" 1.86"			Saginaw	(Feb. 1987 &	r k Dec. 1943)	5.6 (1941 –		

