

**El Nino is Coming ! And coming in strong !!  
Always fun to watch this every few years.**

<https://tinyurl.com/4fcfzs55>

Lots of El Nino Weather Watchers out there...  
Here's a summary of interesting ones to explain:

- How did we get here,
- Summer weather pattern,
- What's happening in Pacific,
- What's happened in past,
- What analog years are currently being used,
- Can we still use the past to hedge our outlooks on the future – next post we'll look at past Strong El Nino Years at a watershed near you...

"El Nino" Chris Farley

YouTube · Christopher Farr · Dec 10, 2008

YouTube



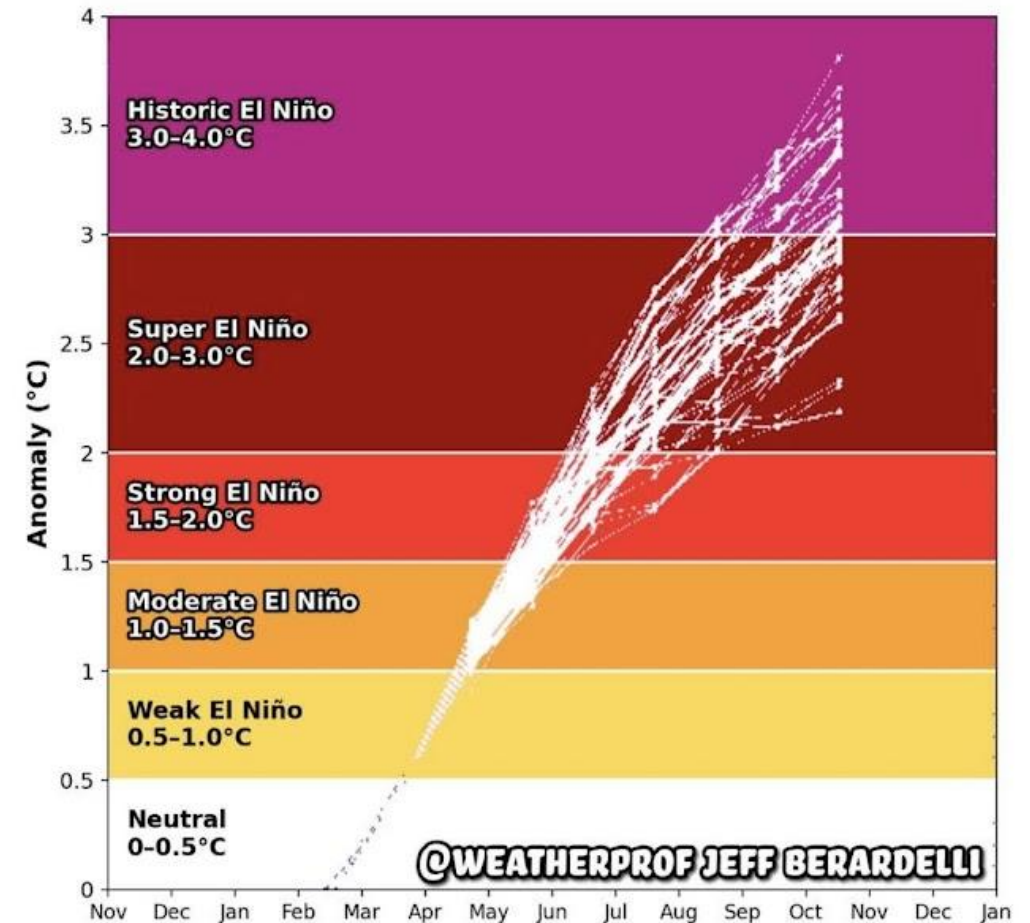
**WFLA Jeff Berardelli** ✓  
Suggested for you · 20h · 🌐



Holy guacamole 🥑 ... See more

# NEW EL NINO FORECAST

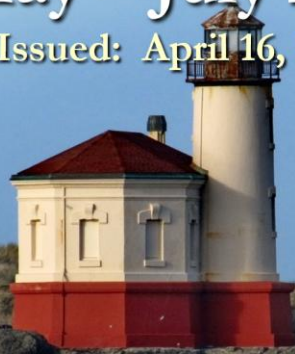
**NINO3.4 SST Anomaly Plume**  
ECMWF Forecast from 1 May 2026



# Seasonal Climate Forecast

## May – July 2026

Issued: April 16, 2026



Contact: ODF Lead Meteorologist Pete Parsons  
503-945-7448 or [peter.gj.parsons@odf.oregon.gov](mailto:peter.gj.parsons@odf.oregon.gov)

How did we get here ?

Current Analog Years based on current conditions as of end of March 2026 show development of this year's El Niño track with analog years.

It's still early - these Analog Years are based on March conditions. Selected Analog Years may/probably will change as the stage is set and ENSO reaches full potential this fall. See NOAA's May 14, 2026 ENSO Alert Status below.

# El Niño Southern Oscillation (ENSO) Current Status and Forecast

- There were multiple changes in analog years this month. 1963 remained, but 1968 & 2018 were replaced by 1997 & 2002.

CLIMATE PREDICTION CENTER/NCEP/NWS  
14 May 2026

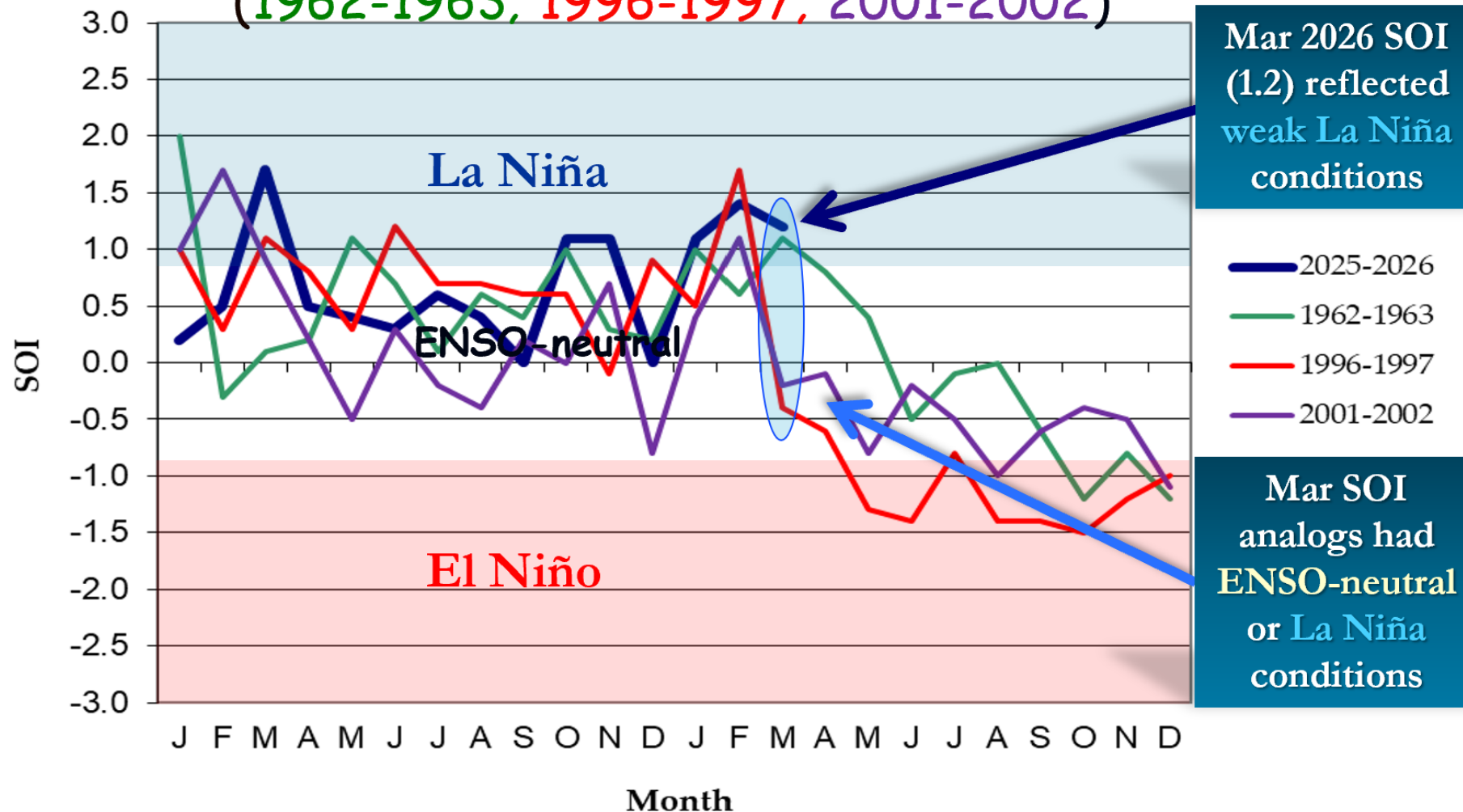
ENSO Alert System Status: **El Niño Watch**

**Synopsis:** El Niño is likely to emerge soon (82% chance in May-July 2026) and continue through Northern Hemisphere winter 2026-27 (96% chance in December 2026 – February 2027).

**Current Analog Years Based on Current SOI, ONI and PDO conditions:**  
1963                      1997                      2002

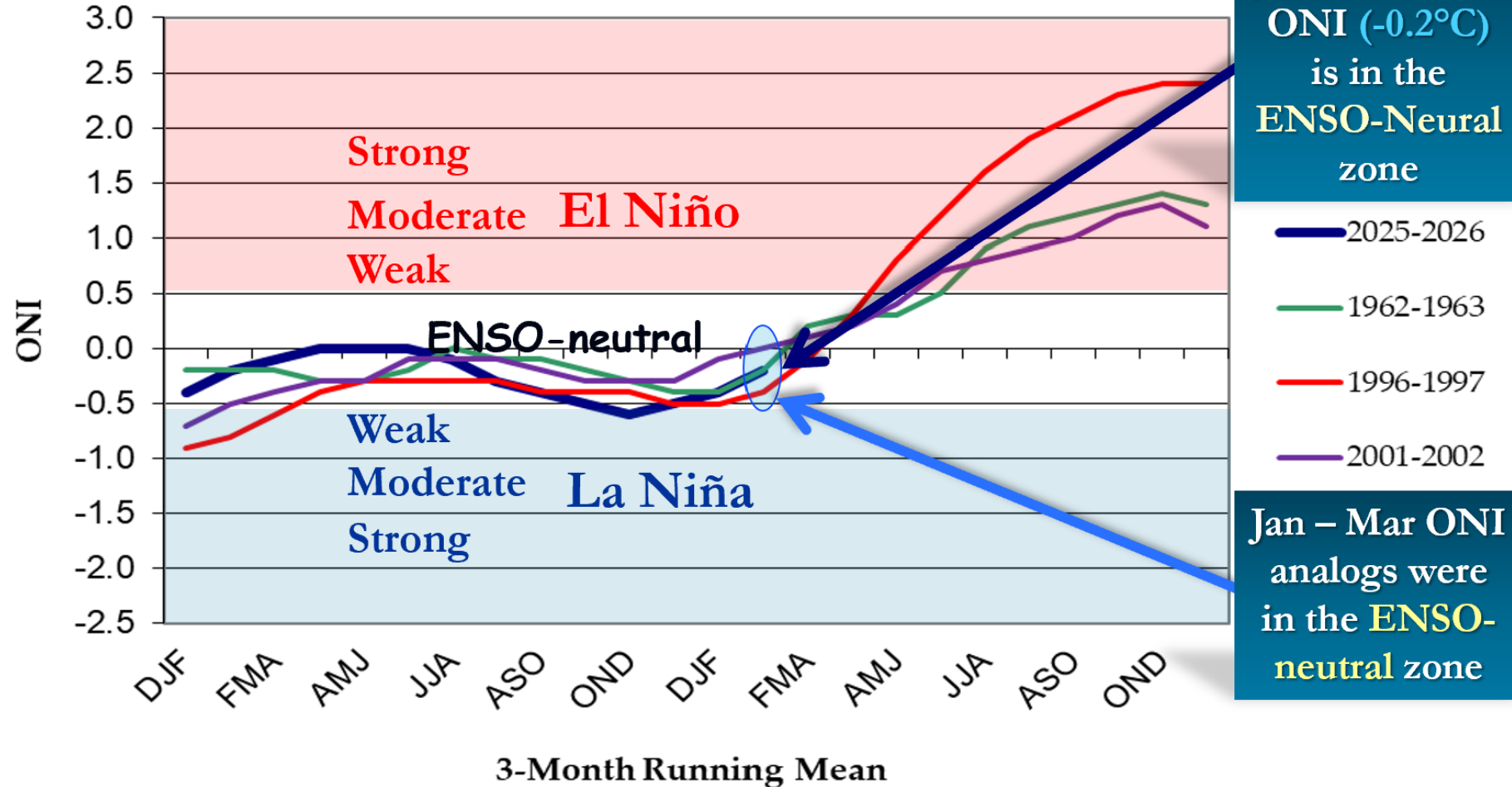
# Southern Oscillation Index (SOI)

SOI values from the top "analog years" compared with the current period (2025-2026)  
(1962-1963; 1996-1997; 2001-2002)



# Oceanic Niño Index (ONI)

ONI values from the top "analog years"  
compared with the current period (2025-2026)  
(1962-1963; 1996-1997; 2001-2002)



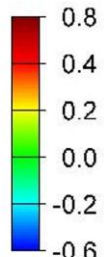
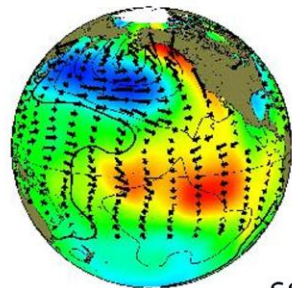
# North Pacific Ocean

(Poleward of 20°N Latitude)

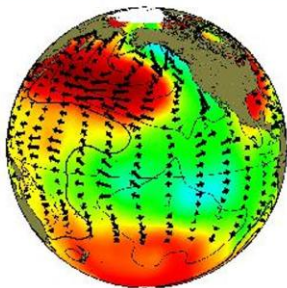
The Pacific Decadal Oscillation (PDO)  
(Reflects SST "Phase" in the North Pacific Ocean)

Positive (Warm)  
"Phase"

Negative (Cool)  
"Phase"

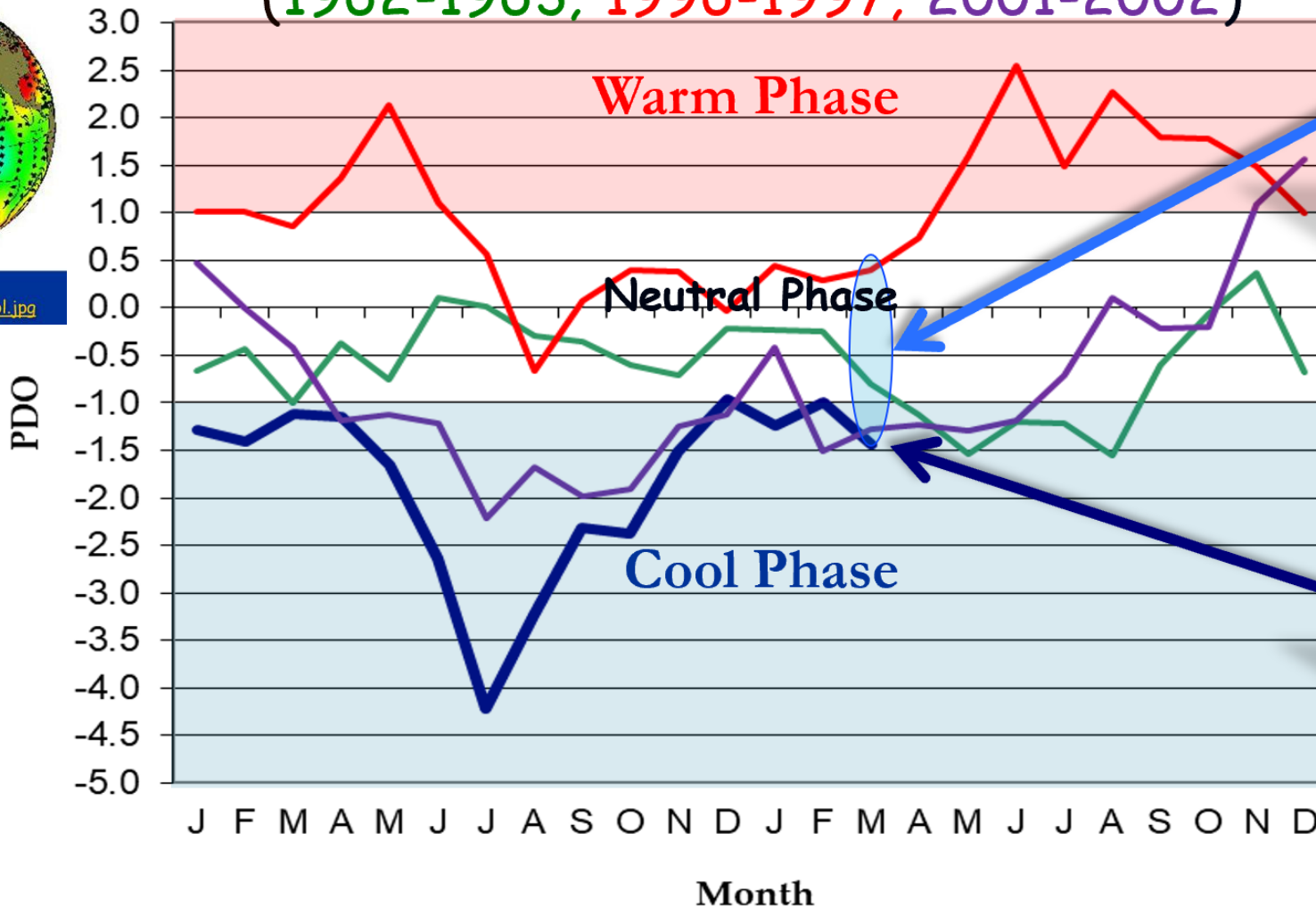


SST Anomalies



Courtesy: [http://research.jisao.washington.edu/pdo/img/pdo\\_warm\\_cool.jpg](http://research.jisao.washington.edu/pdo/img/pdo_warm_cool.jpg)

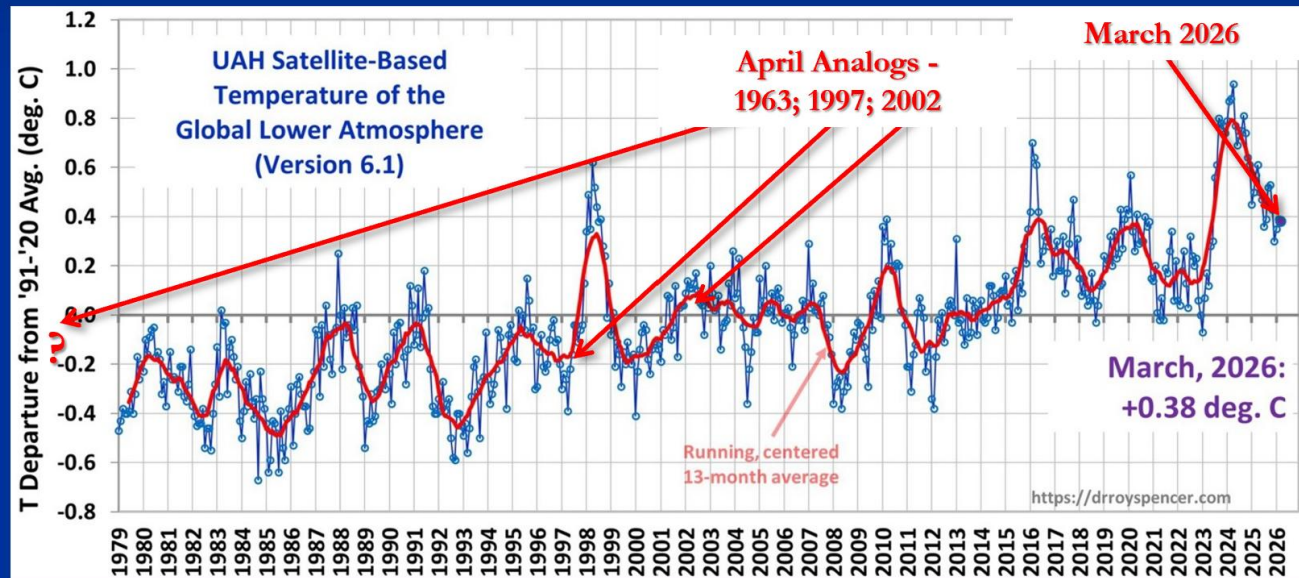
PDO values from the top "analog years" compared  
with the current period (2025-2026)  
(1962-1963; 1996-1997; 2001-2002)



March PDO  
analogues were  
in the  
"Neutral" or  
"Cool" Phase

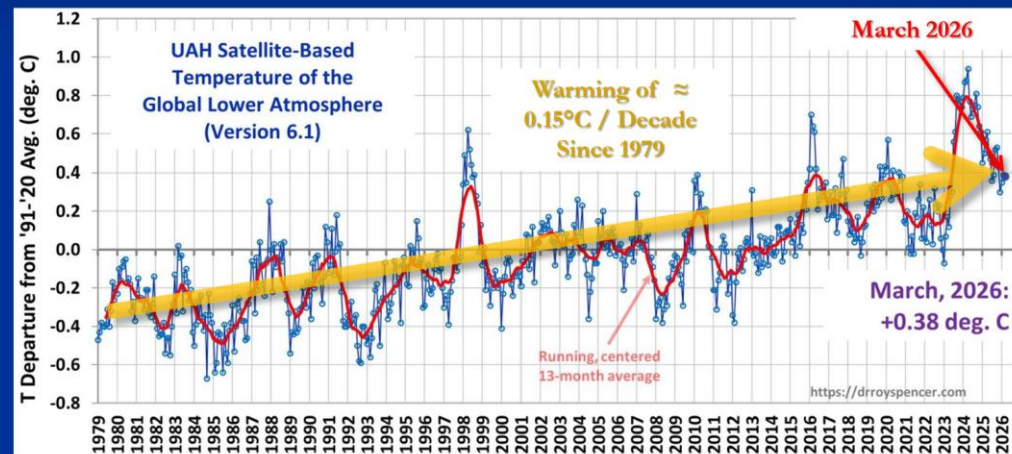
March 2026  
PDO (-1.44) in  
"Cool" Phase

# How Do Analog Years Align With Global Temperature Fluctuations?



Courtesy: <http://www.drroyspencer.com/latest-global-temperatures/>

## Global Temperature Changes Increase Error in Analog Forecasts!



Courtesy: <http://www.drroyspencer.com/latest-global-temperatures/>

Below is also the latest extended ECMWF long-range forecast for the next few months. This shows a strong El Niño developing into 2026, easily exceeding the +2 degrees super event threshold and pushing it into the extreme event in the +3 values. Most ensemble members exceed this boundary, aiming for a historical event, if verified.

A Super El Niño event would lead to more extreme weather shifts, turning typical seasonal changes into high-impact events like massive flooding, severe droughts, and significantly altered storm tracks that can affect the entire planet.

The latest ECMWF forecast for the meteorological period shows a strong El Niño anomaly already present across the tropical Pacific. The values exceed +2 degrees across the whole ENSO region, a remarkable anomaly already during the summer season.



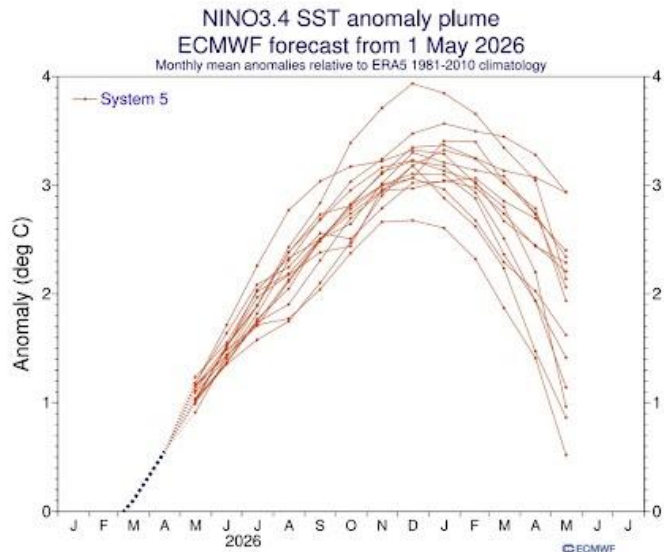
## Highlights from May 7, 2026:

### SEVERE WEATHER EUROPE

**Atmospheric Code Red: 2026 Super El Niño Now Trending Toward Record-Breaking Intensity**

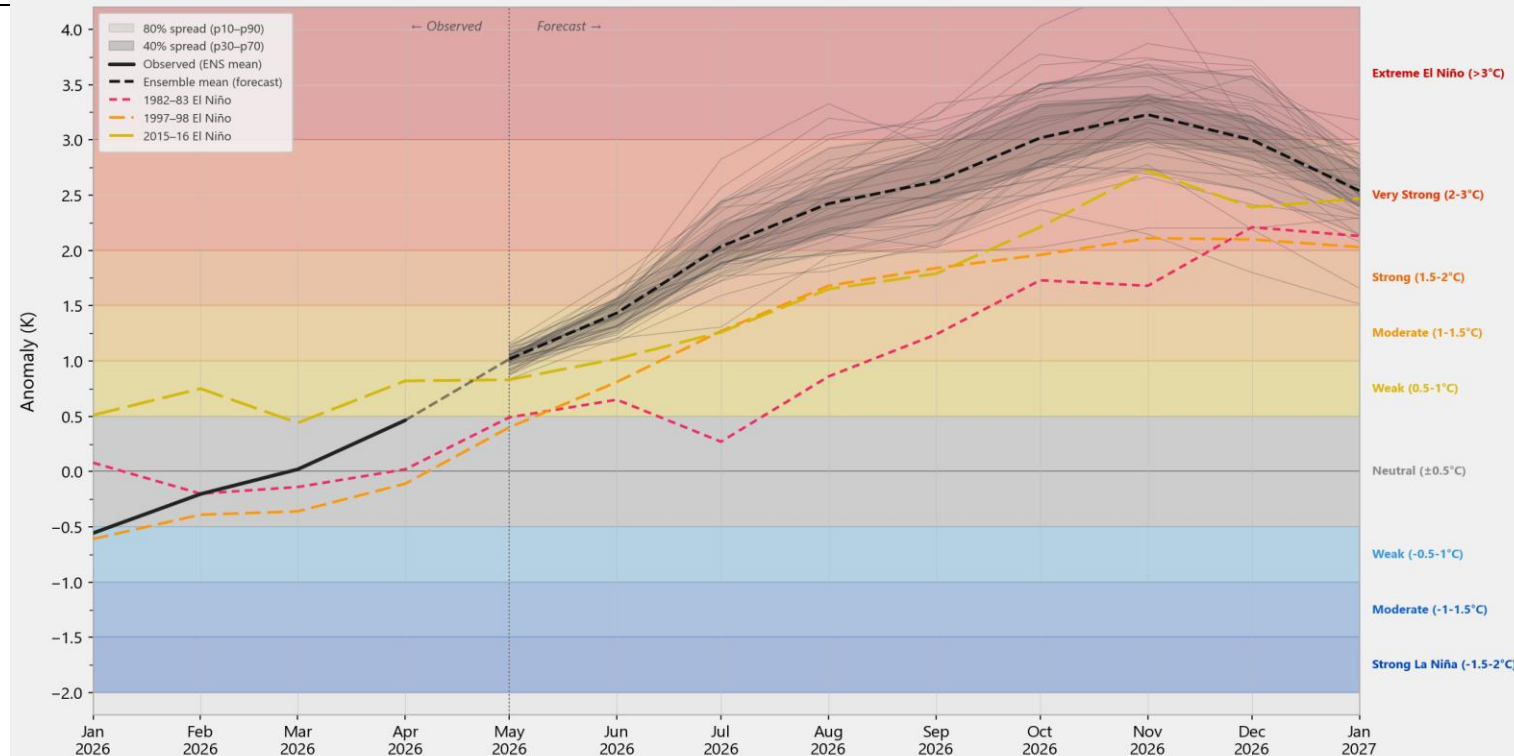
By Author [Andrej Flis](#)

Posted on Published: 07/05/2026



### CFSv2 Forecast — Niño 3.4 Anomalies (K)

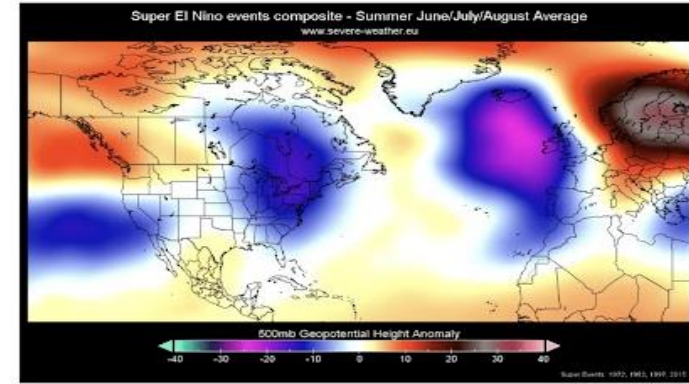
Initial conditions: 25-04 May 2026 | Climatology: 1991-2020 | Range: Jan 2026 – Jan 2027



# Interesting analysis of summer weather pattern that also reflect a developing El Niño's.

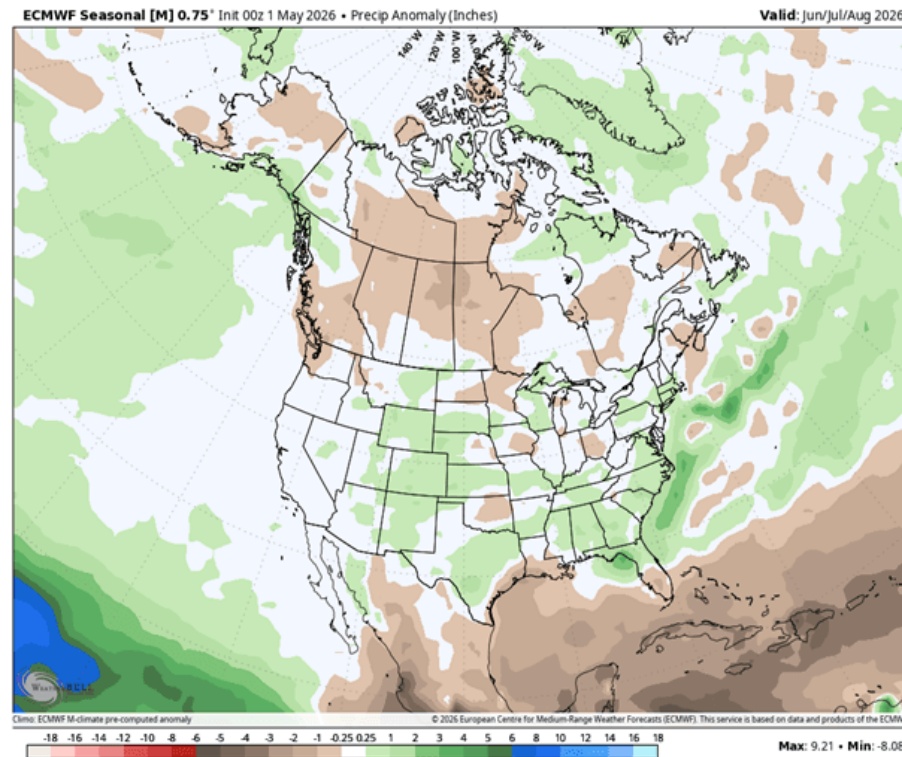
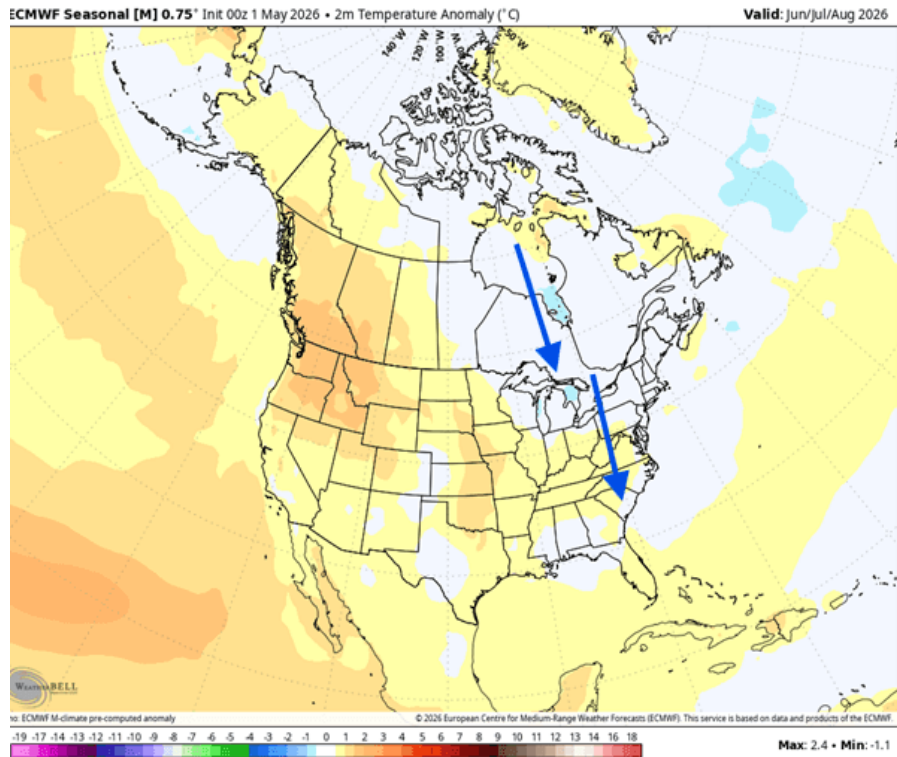
## Temp Anomaly for Jun/Jul/Aug

## Precip Anomaly for Jun/Jul/Aug



We can see this pattern reflected in the latest June-August forecast: a low-pressure area over the eastern U.S. or eastern Canada supports a more northerly flow, bringing normal summer temperatures across eastern Canada, the Midwest, the northeastern United States, and the East Coast. Above-normal temperatures are forecast for the central and western U.S. and western Canada.

The rainfall pattern also reflects a developing El Niño influence, as that usually brings a stronger subtropical jet stream across. This creates more rainfall over the southern half of the United States, but the forecast also shows more rain over the northern Plains and in the upper Midwest.



## El Niño and Rainfall

El Niño conditions in the tropical Pacific are known to shift rainfall patterns in many different parts of the world. Although they vary somewhat from one El Niño to the next, the strongest shifts remain fairly consistent in the regions and seasons shown on the map below.

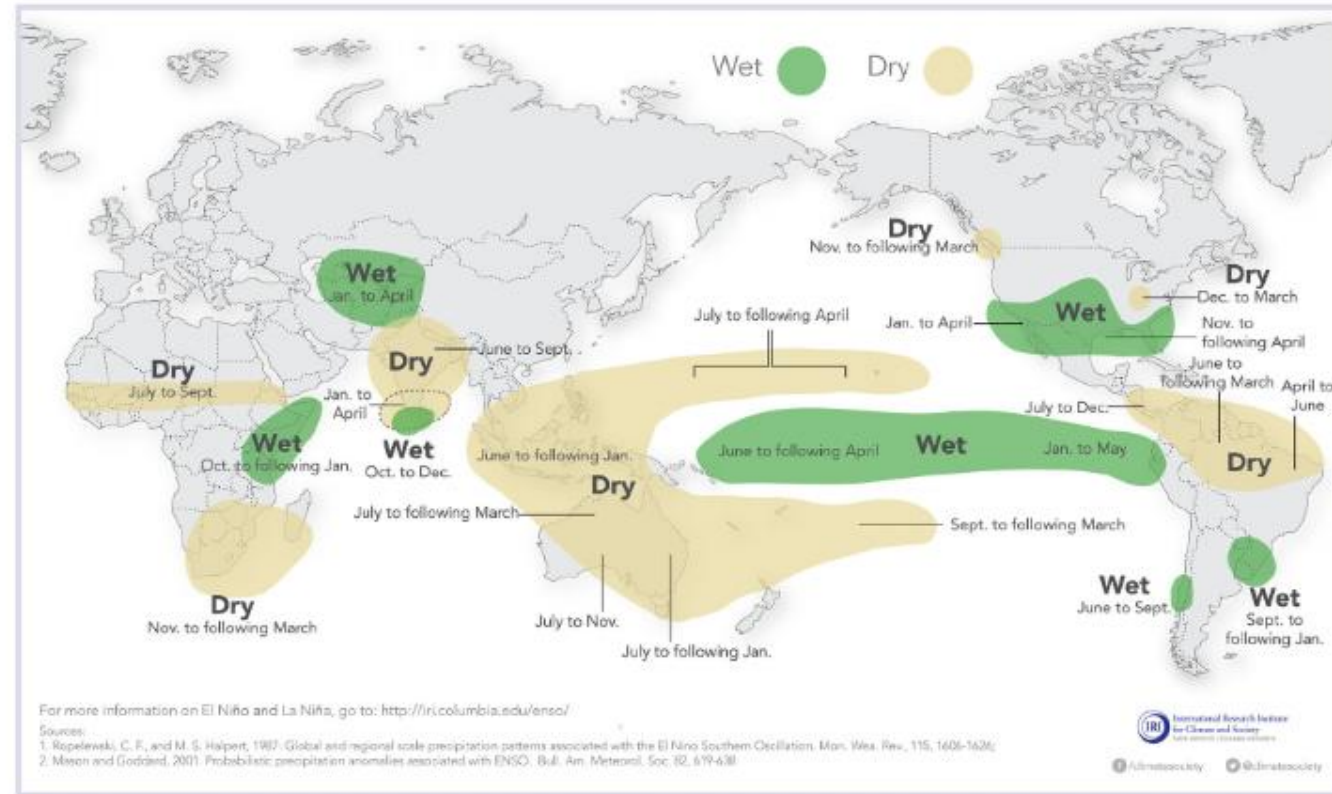


Fig. 1 Map of El Niño-related rainfall patterns in various locations around the globe. Source: IRI (n.d.)

Int J Disaster Risk Sci  
<https://doi.org/10.1007/s13753-020-00275-w>



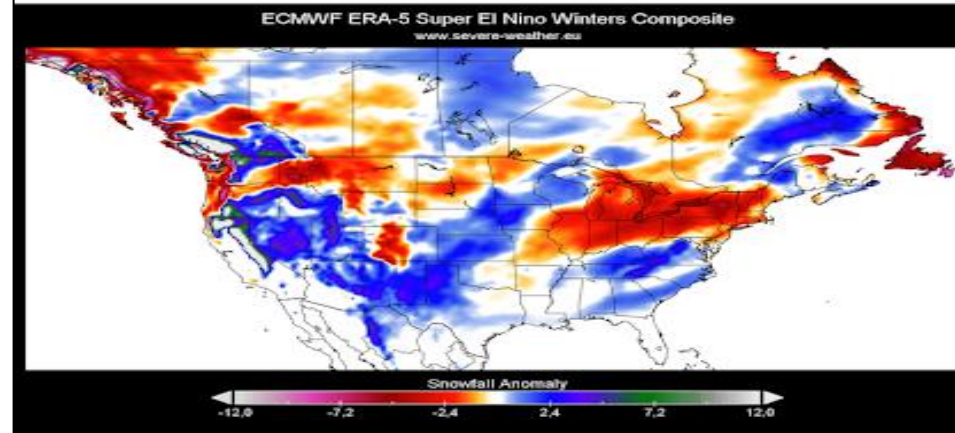
[www.ijdrs.com](http://www.ijdrs.com)  
[www.springer.com/13753](http://www.springer.com/13753)

SHORT ARTICLE

## Reviewing the Oceanic Niño Index (ONI) to Enhance Societal Readiness for El Niño's Impacts

Michael H. Glantz<sup>1</sup> · Ivan J. Ramirez<sup>1,2</sup>

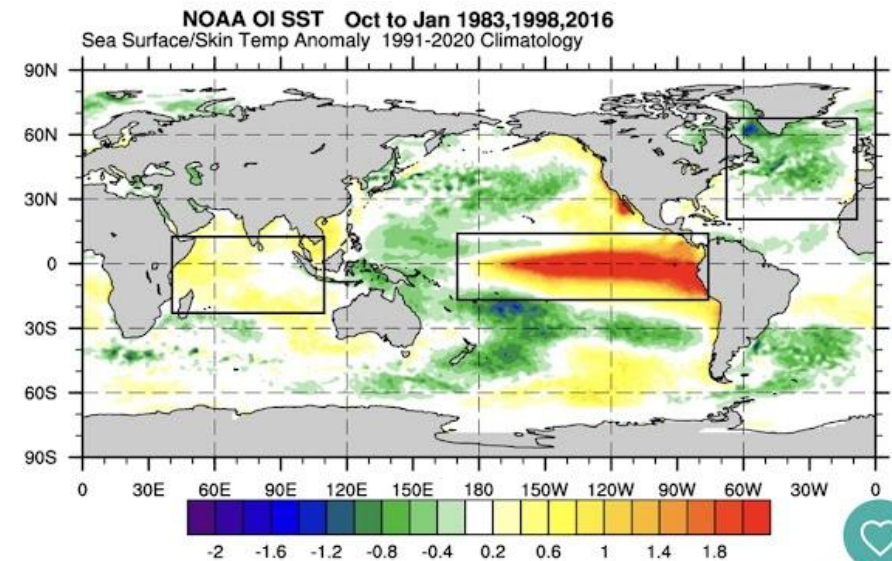
An El Niño event also significantly alters **snowfall patterns**. Below is a snowfall analysis of all recent Super El Niño winters, combining their data to produce an average snowfall pattern for such winters. You can see increased snowfall in the western and southern United States during a Super El Niño, as well as over parts of the Southeast.



We can also see increased snowfall in the belt from the central Plains up towards the upper Midwest. But there was less snowfall around the Great Lakes, over the northern U.S., and towards the Northeast. Canada shows a more sporadic pattern, with more snowfall in the southeastern and south-central parts.

El Niño events happen every few years. But Super events tend to occur once per decade or less. The last three such events were in 2015/16, 1997/98, and 1982/83. Below are graphs from [NCEI](#), showing the monthly progression of each event, starting in spring and peaking during the Winter season, breaking the Super event threshold (+2 degrees).

Below is the combined analysis image of the last 3 Super El Niño events, showing ocean temperature anomalies. You can see a strong warm anomaly in the ENSO region in the Pacific. But also note the cooler North Atlantic and another anomaly in the Indian Ocean.



# Latest Forecasts Show a Super El Niño Event Developing, Bringing a Global Weather Disruption in 2026/2027

By Andrej Flis  
Published: 09/04/2026  
Long range / seasonal forecast

**LATEST UPDATE – May 7th, 2026:** We produced a new update article with the latest forecast and analysis data:

[Atmospheric Code Red: 2026 Super El Niño Now Trending Toward Record-Breaking Intensity](#)

The global weather system is currently undergoing a massive **atmospheric reset** as the tropical Pacific transitions from a multi-year La Niña into a potential **record-breaking Super El Niño**. Latest subsurface ocean analysis reveals a rapid shift below the ocean surface occurring in the western Pacific, similar to how the past Super El Niño events emerged.

A Super El Niño acts as a massive **planetary heat engine**, releasing vast amounts of stored **oceanic energy** into the atmosphere and significantly altering the global jet stream. Studies have confirmed that a Super El Niño can affect global climate for several years, transforming typical **seasonal patterns** and altering everything from international agriculture to **winter storm tracks**.

**This sums up Why - why I've learned to watch Strong El Nino Years but also the year after !! Looking forward to this Winter 2026-2027 and the next Winter 2027-28 !! See last slide about the year after !**

**A Super El Niño acts as a massive planetary heat engine, releasing vast amounts of stored oceanic energy into the atmosphere and significantly altering the global jet stream. Studies have confirmed that a Super El Niño can affect global climate for several years, transforming typical seasonal patterns and altering everything from international agriculture to winter storm tracks.**

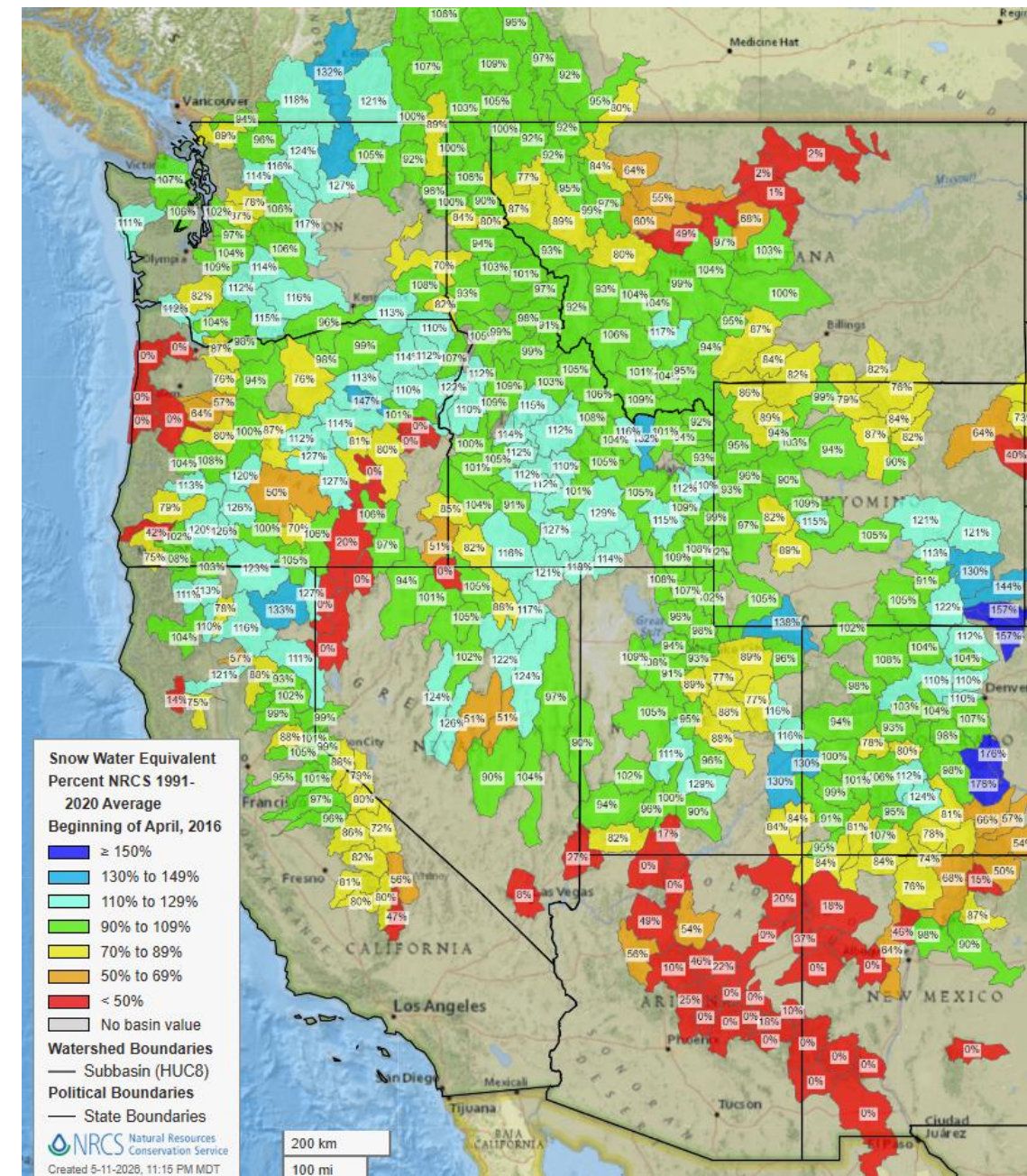
# Atmospheric Code Red: 2026 Super El Niño Now Trending Toward Record-Breaking Intensity

By Andrej Flis  
Published: 07/05/2026  
Long range / seasonal forecast

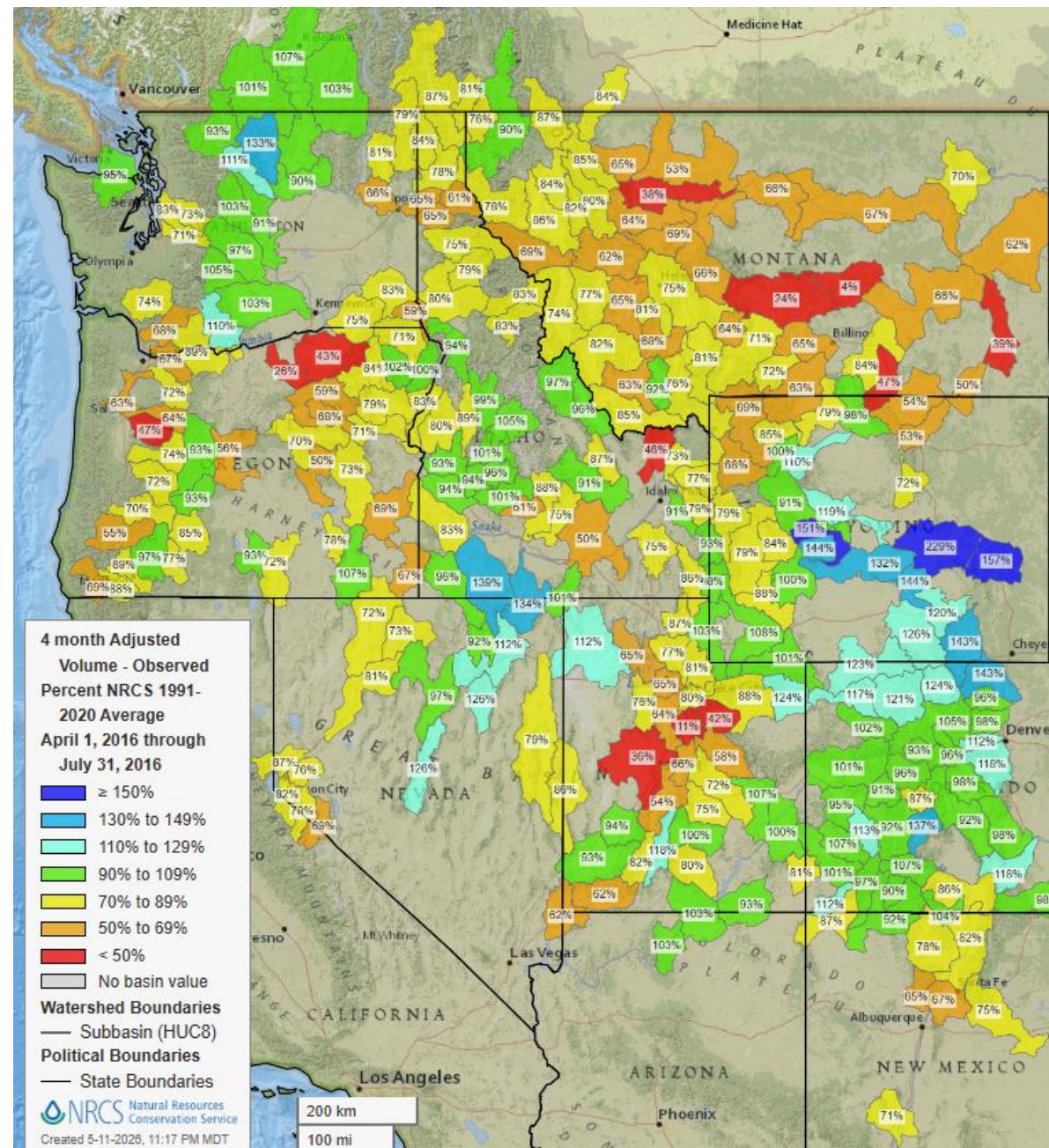
A major atmospheric change is about to start, as the latest oceanic data confirms the 2026 El Niño is intensifying below the ocean surface. New ensemble model runs from the ECMWF, NOAA, and BOM now align on a high-impact trajectory, with several forecasts suggesting this event could become the **strongest El Niño in modern history**, potentially surpassing the record-breaking event of 1877-1878.

# Super El Nino Analog Years

## 2016 April 1 Snow Water Equivalent Map

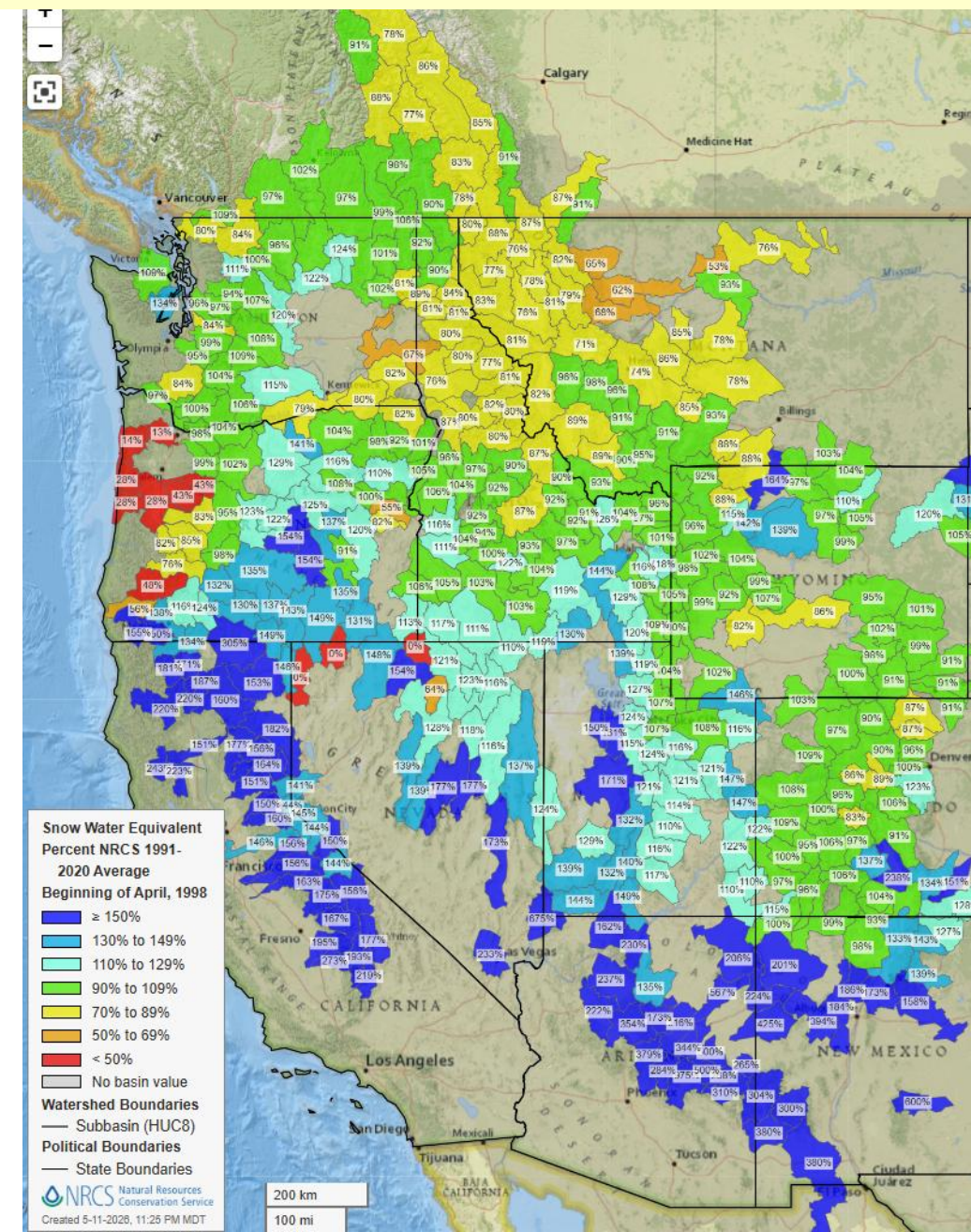


## 2016 April – Jul Observed Streamflow

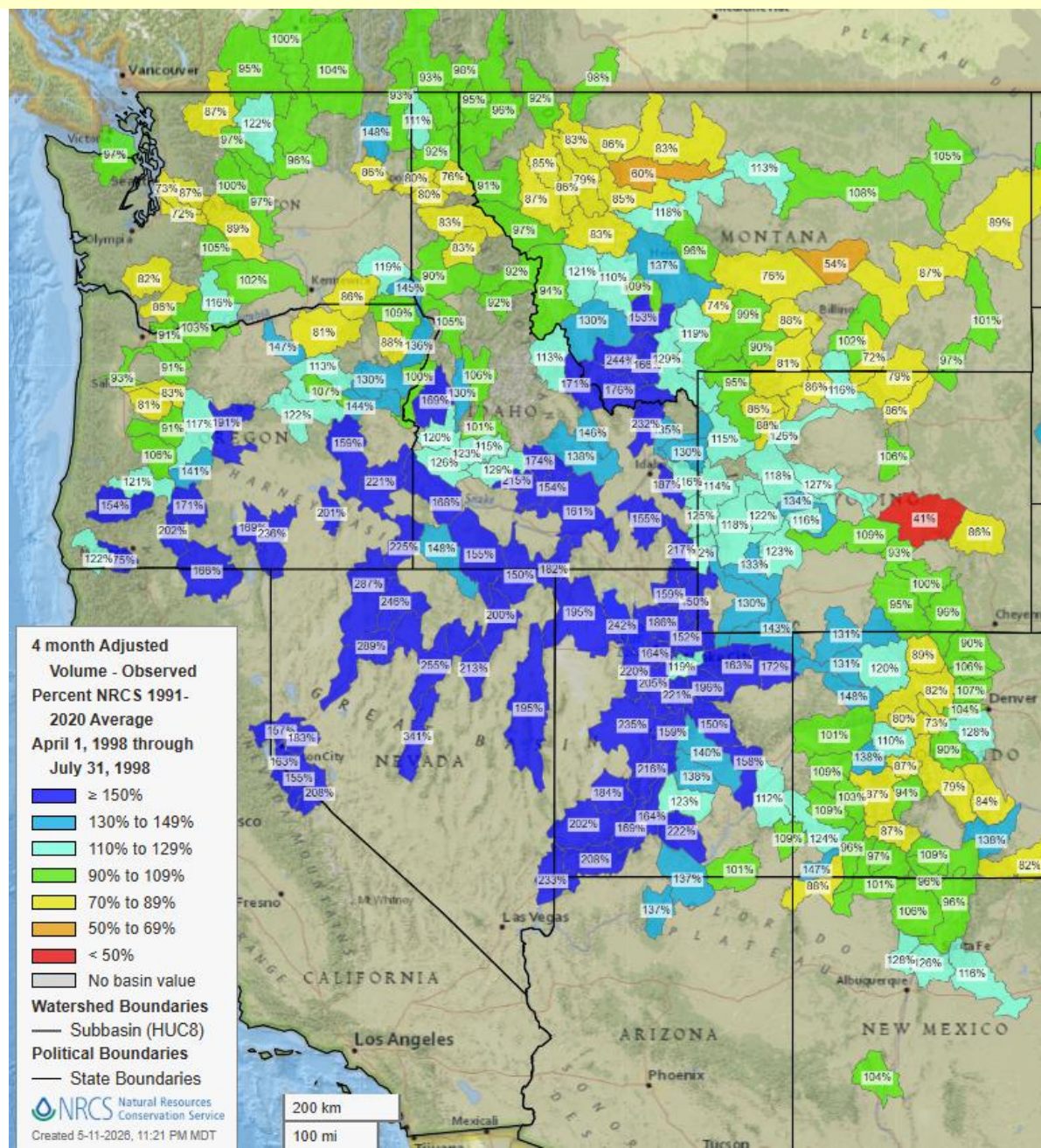


# Super El Nino Analog Years

## 1998 April 1 Snow Water Equivalent Map

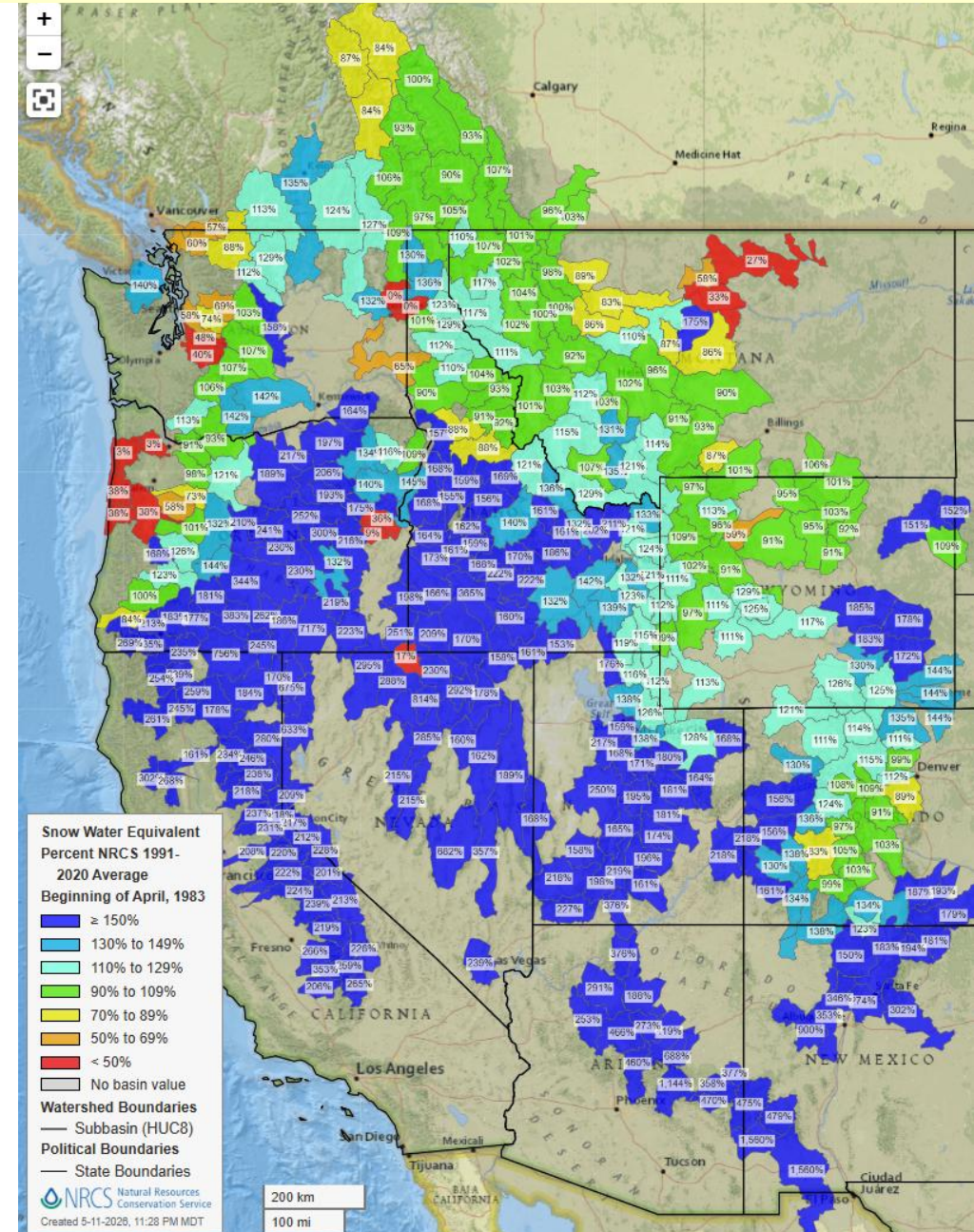


## 1998 April – Jul Observed Streamflow

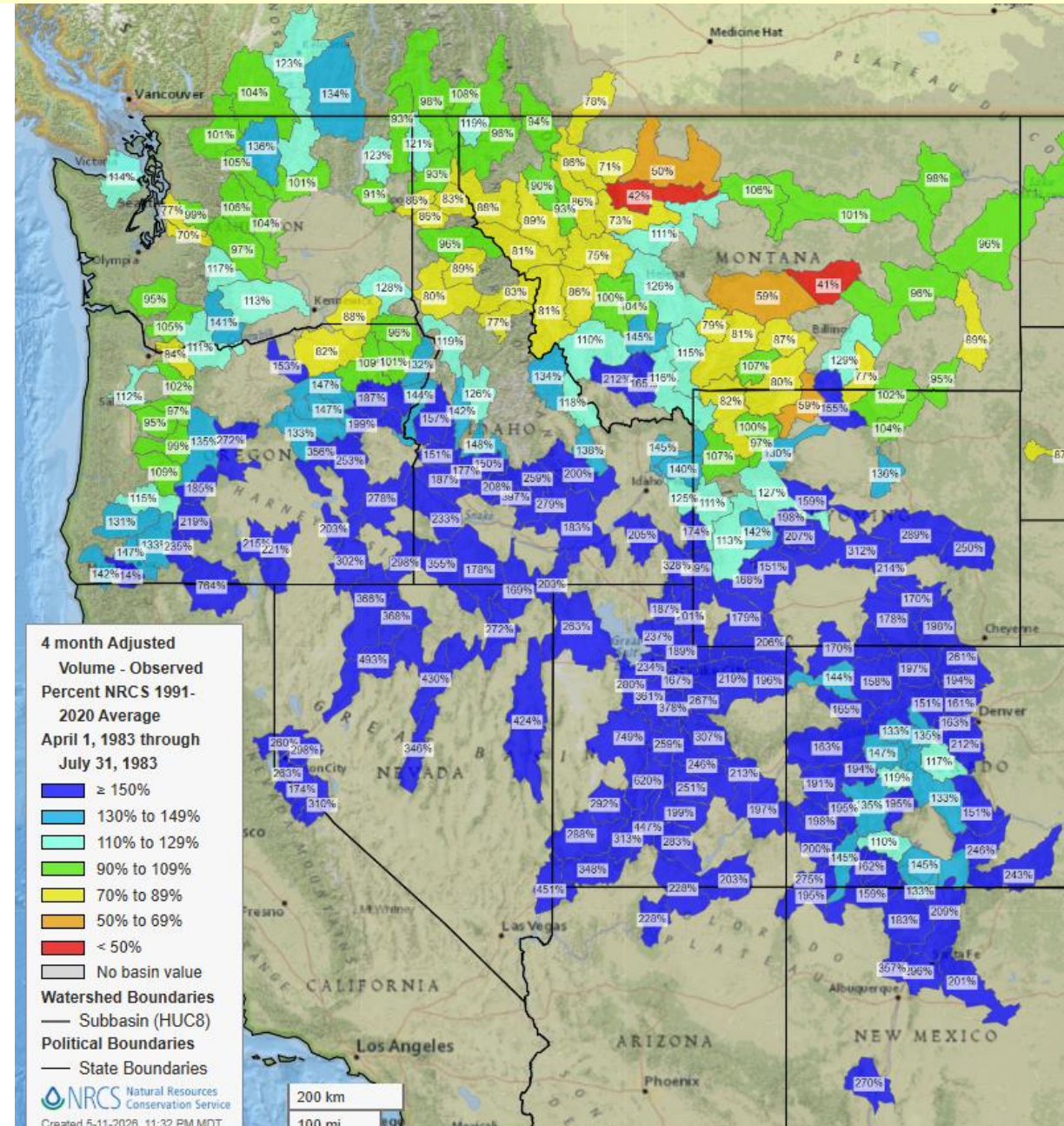


# Super El Nino Analog Years

## 1983 April 1 Snow Water Equivalent Map



## 1983 April – Jul Observed Streamflow



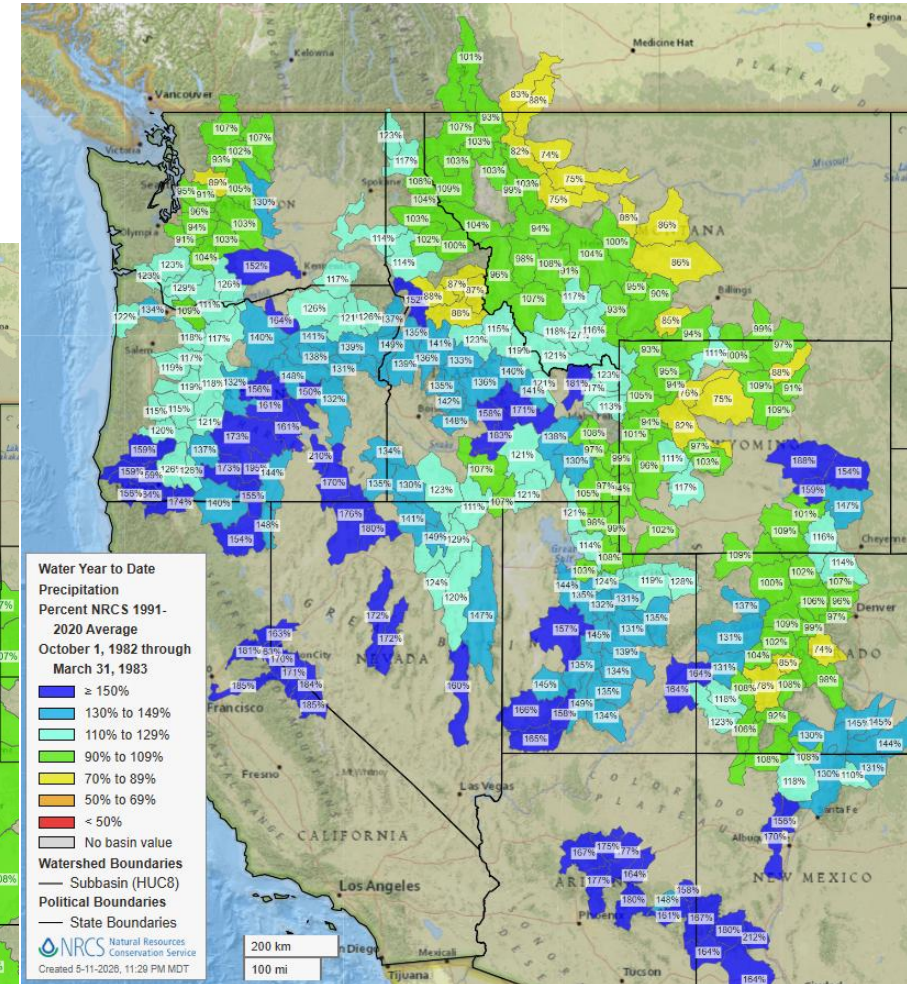
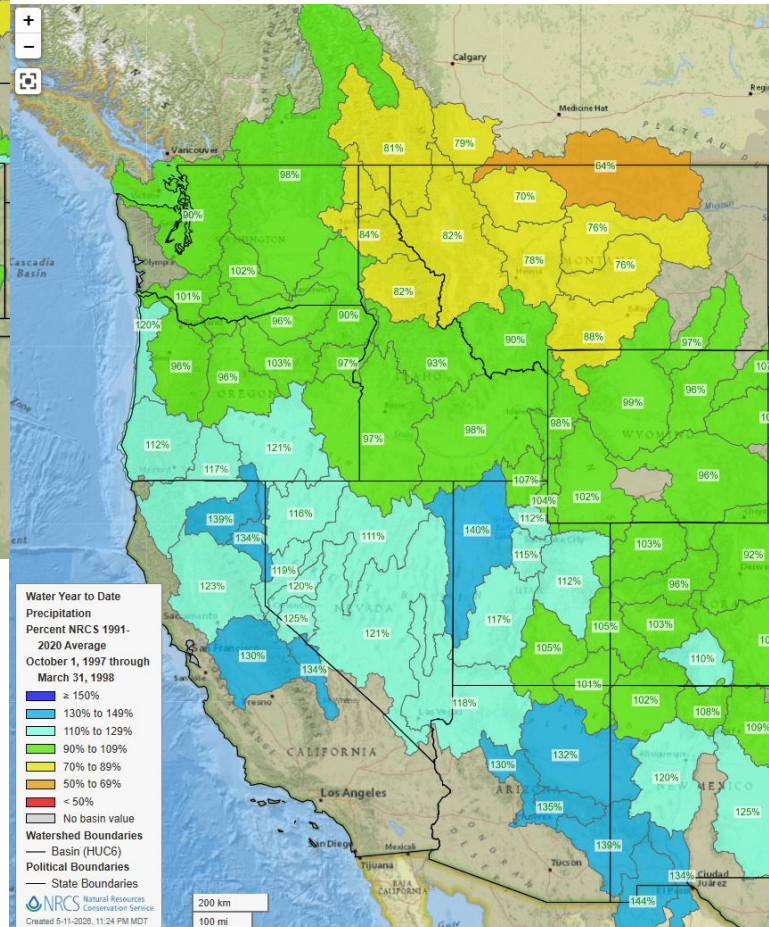
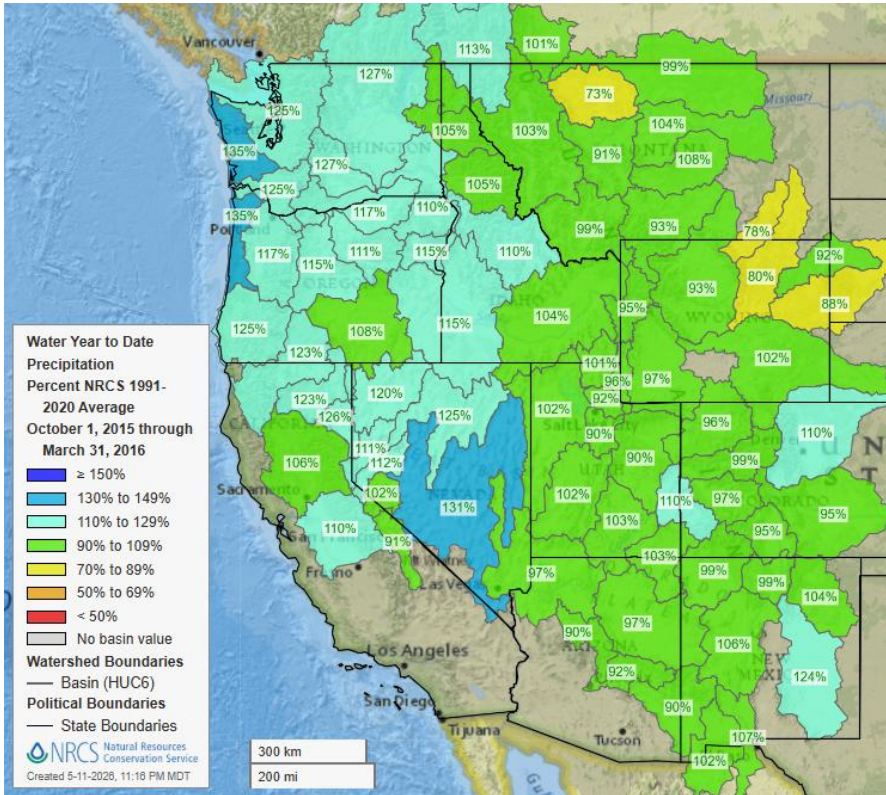
# Super El Nino Analog Years

## Water Year to Date October 1 – March 31 for each winter.

2016

1998

1983





The Earth is almost never shown like this. This is our planet from the side of the Pacific Ocean.



Why we study the Pacific Ocean ? It's Huge!  
Pacific Ocean view you don't always see.

SOI Correlation Map with spring /summer runoff.  
Same relationship can be found with Sea Surface Temps.

Key is – what happens during July-Nov correlates with our winter snowfall and summer streamflow in Western US.

Southern Oscillation Index (SOI)  
measure of the Pacific Atmosphere

Correlation Map of SOI  
with Spring-Summer Streamflow

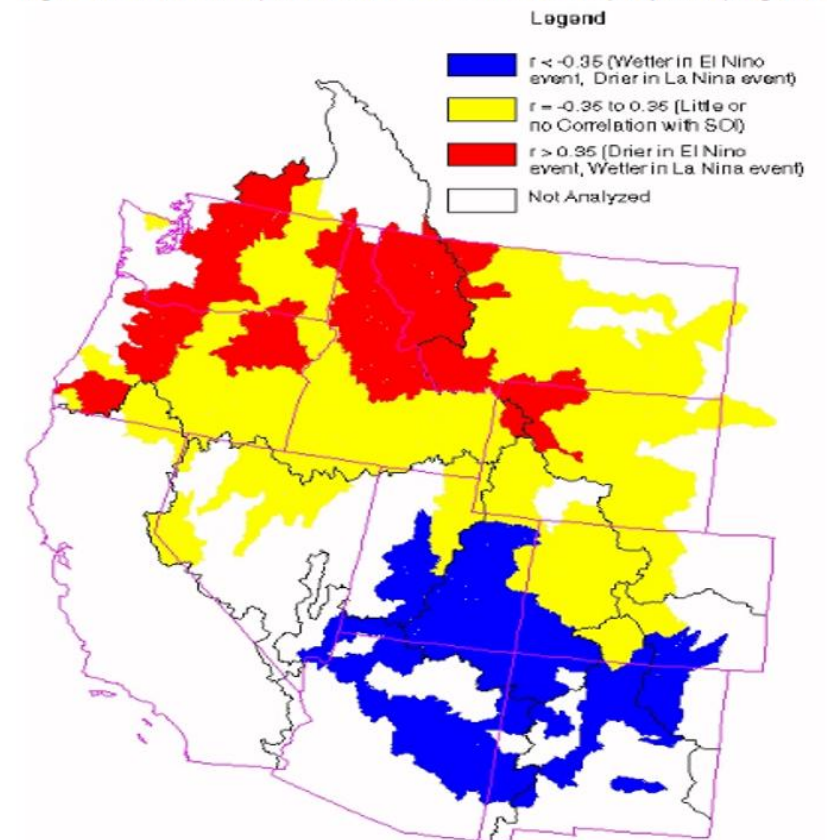
Red wetter in La Nina years.

Blue wetter in El Nino years.

Key is – what happens July-Nov in Pacific correlates with snowfall and summer streamflow in Western US.

Clearwater Basin has correlation value of 0.67

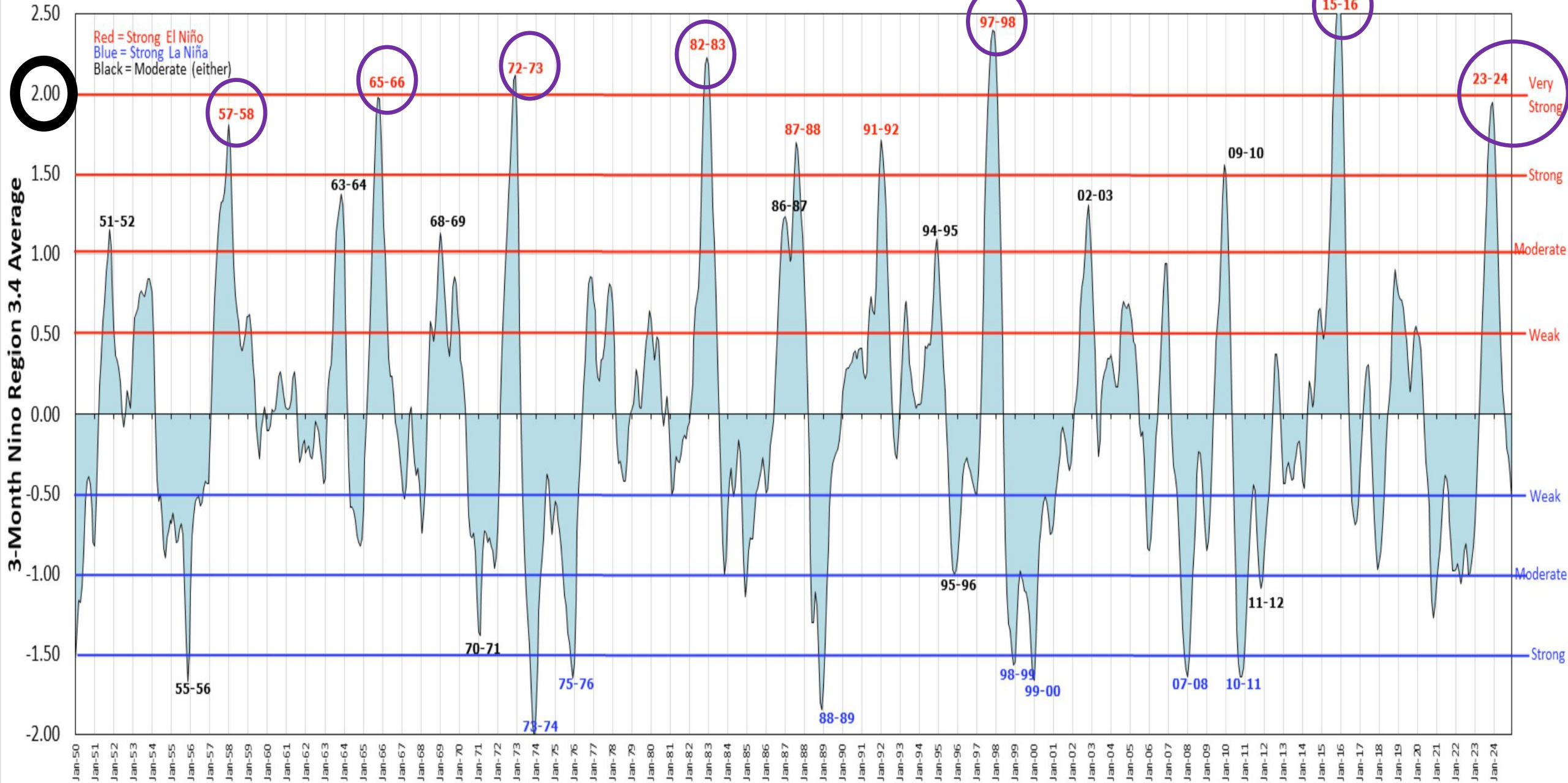
Figure 1. Correlation Map of the Southern Oscillation Index (SOI) with spring and summer streamflow in the Western US.



Strong El Niño Years

# Oceanic Niño Index (ONI)

[https://origin.cpc.ncep.noaa.gov/products/analysis\\_monitoring/ensostuff/ONI\\_v5.php](https://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php)



Sep 2025 – first ENSO Outlook I saw  
**El Nino is setting up for Winter 2026-27. I've never seen them calling this out so early, so must be feeling confident.**

The **CPC** official probabilistic ENSO forecast shows a clear shift into El Niño mode for 2026/2027, giving a full El Niño state by early Fall 2026. This shows the event peaking during Winter, potentially lasting for a second year. You can also see the rapid decline of the current La Niña event.

They even mention possible El Nino continuing into 2027-28, recently I've possible La Nina for second year.

ENSO Alert System Status: **El Niño Watch**

**Synopsis:** El Niño is likely to emerge soon (82% chance in May-July 2026) and continue through Northern Hemisphere winter 2026-27 (96% chance in December 2026 – February 2027).

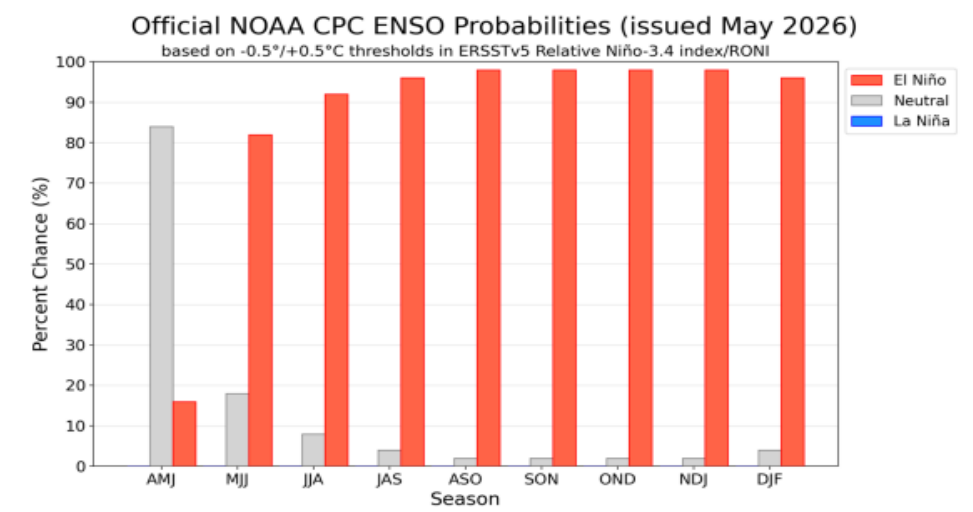
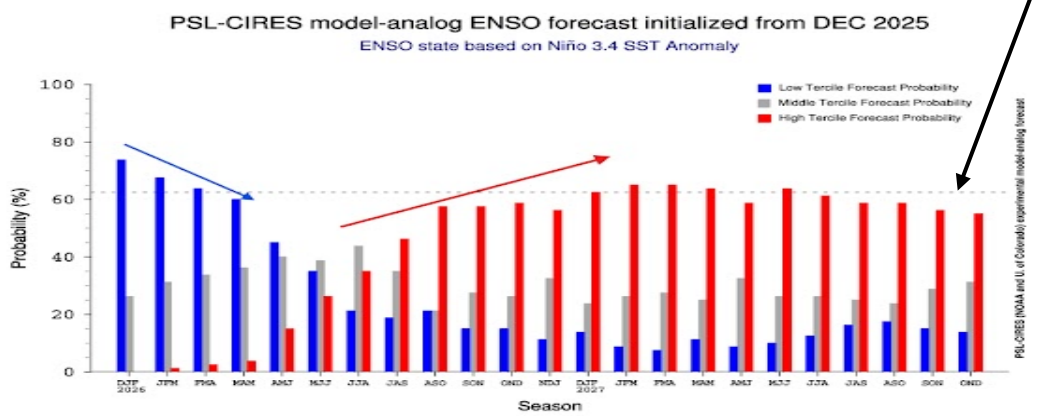
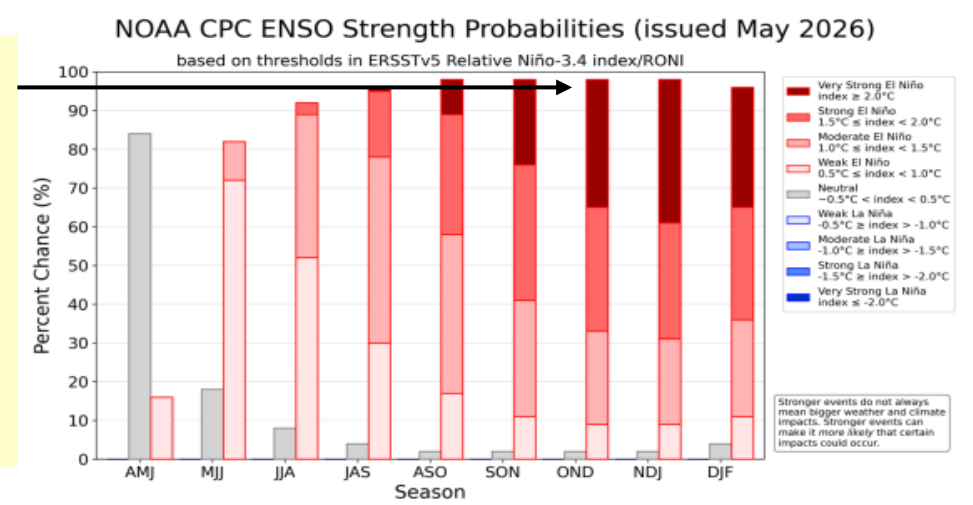


Figure 7. Official ENSO probabilities for the Niño 3.4 relative sea surface temperature index (5°N-5°S, 170°W -120°W) minus tropical mean (20°N-20°S). The relative index is re-scaled to match the variance of the traditional index. Figure updated 14 May 2026. Higher resolution image/table: [https://cpc.ncep.noaa.gov/products/analysis\\_monitoring/ens/roni/probabilities.php](https://cpc.ncep.noaa.gov/products/analysis_monitoring/ens/roni/probabilities.php)



**Good to see CPC upgraded now showing Strength Probabilities for this El Nino to reach Very Strong.**



Stronger events do not always mean bigger weather and climate impacts. Stronger events can make it more likely that certain impacts could occur.

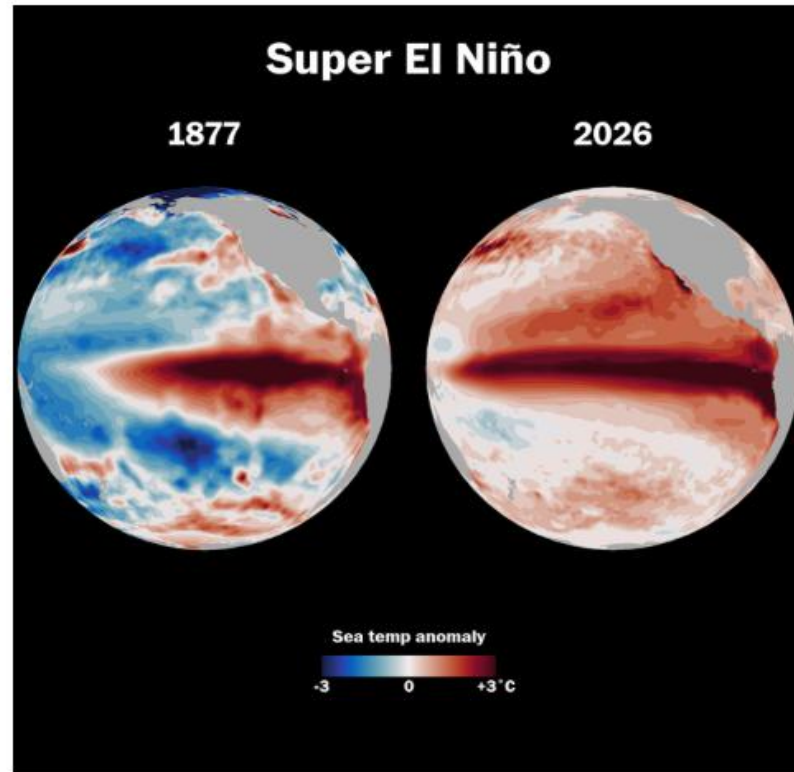
# A super El Niño wiped out millions of people in 1877. Are we better prepared now?

The climatic phenomenon is expected to return this year, but a lot has changed since what might have been the worst environmental disaster in human history.

May 12, 2026

🕒 5 min 🏷️ Summary ↗️ 📌 859

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The most intense El Niño event on record, which occurred from 1877 to 1878, contributed to famine that caused global population losses of 3 to 4 percent. (Ben Noll/the Washington Post; ECMWF/NOAA)

## Anybody got any 1800s historic climate or river data for Idaho?



By [Ben Noll](#)

As chances rise for one of the strongest El Niño events on record later this year, the potential for dangerous conditions has prompted comparisons to 1877, when such an event drove catastrophe around the globe.

Want to know how your actions can help make a difference for our planet? Sign up for the **Climate Coach** newsletter, in your inbox every Tuesday and Thursday. →

El Niño is a warming of ocean waters in the east-central tropical Pacific that develops every few years. This year, ocean temperatures there could surge 3 degrees Celsius (5.4 degrees Fahrenheit) above average and break records.

The climatic shift devastated crops nearly 150 years ago, raising the question of whether a similar disruption could threaten global food security yet again. The strongest El Niño on record from 1877 to 1878 fueled conditions that led to a global famine which killed more than 50 million people across India, China, Brazil and elsewhere. That was 3 to 4 percent of the estimated global population at the time, equal to at least 250 million people if it happened today.

# Ada County Flood History

Sorted high to low by CFS

Largest floods from snow melt during the April – Jun runoff period

Duration of high-water event (days of volume above flood stage) is critical to understand flood impacts.

Ada County Flood History						Rain on Snow			
Boise River mostly						Snow Melt			
Year	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Natural Flow Peak CFS
1862						Snow Melt			est 100,000+ cfs
1872					Snow Melt				est 50,000 cfs
1896						Snow Melt			35,500
1897					Snow Melt				29,500
1983						Snow Melt			24,296
2017				Snow Melt			Snow Melt		24,100
9,000+ in town, with 110 days > 6000 cfs in town									
1997		Rain on Snow				Snow Melt			24,053
1938						Snow Melt			19,000
1904					Snow Melt				19,200
1921					Snow Melt				18,700
1907					Snow Melt				16,100
1928						Snow Melt			16,000
1876					Snow Melt				15,200
1943					Snow Melt				
1936						Rain on Snow			17,700
1979		Rain on Snow							
1971		Rain on Snow							
1969		Rain on Snow							
1964	Rain on Snow								
1963			Rain on Snow						
1957			Rain on Snow						

7,000 CFS current Boise River Flood Stage

# Years Following Strong El Nino Events.

**2025 Runoff updated in Red box**

2025 Runoff - only a few basins had near normal runoff, and a few less than 80% of average.

★ 2025 March Forecasts were looking good but record dry Apr/May/June dissolved the higher flow predictions.

Here's a runoff summary about the year after Strong El Nino years.

Next post – more detailed analysis to zoom into your backyard / watershed to see past Strong El Nino impacts as we wait & watch to see if history repeats !

			Streamflow as % of 1991 - 2020 Average							
			Feb-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep	Apr-Sep
Strong & Very Strong El Nino Years	Year Following a Strong & Very Strong El Nino Year	ENSO	Owyhee River below Dam	Bruneau River	Sorted high to low	Payette River nr Horseshoe Bend	MF Salmon River at MF Lodge	Salmon River at White Bird	Selway River	Spokane River nr Post Falls
					Boise R nr Boise					
Very Strong										
2015-16	2017	LA	155	182	184	164	180	148	104	110
1982-83	1984	LA	363	343	162	146	NA	144	126	109
1997-98	1999	LA	100	116	138	140	121	124	112	126
Strong										
1972-73	1974	LA	120	104	185	188	182	164	145	189
1991-92	1993	N	165	125	124	128	NA	107	94	114
1965-66	1967	N	69	93	107	111	NA	119	109	110
1987-88	1989	LA	145	103	99	91	NA	78	102	114
1957-58	1959	EL	20	50	89	99	NA	101	124	136
2023-24	2025	LA	~100	66	90	101	88	84	80	~69
★ Mar 5 NWS 50% Exceedance Forecast			131%	121%	112%	115%	117%	103%	90%	83%
Mar 1 NRCS 50% Exceedance Forecast			127%	107%	117%	112%	104%	90%	108%	75%

Sorted high to low

Color Code for Streamflow as % of Average

- < 80%
- 80-110%
- 110-150%
- > 150%