

Colorado River Water Supply Report August 2023

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CAWCD Board Meeting
August 3, 2023

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Colorado River Water Supply Report



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Colorado River Water Supply Report

As of July 23, 2023

System Contents: 25.95 MAF

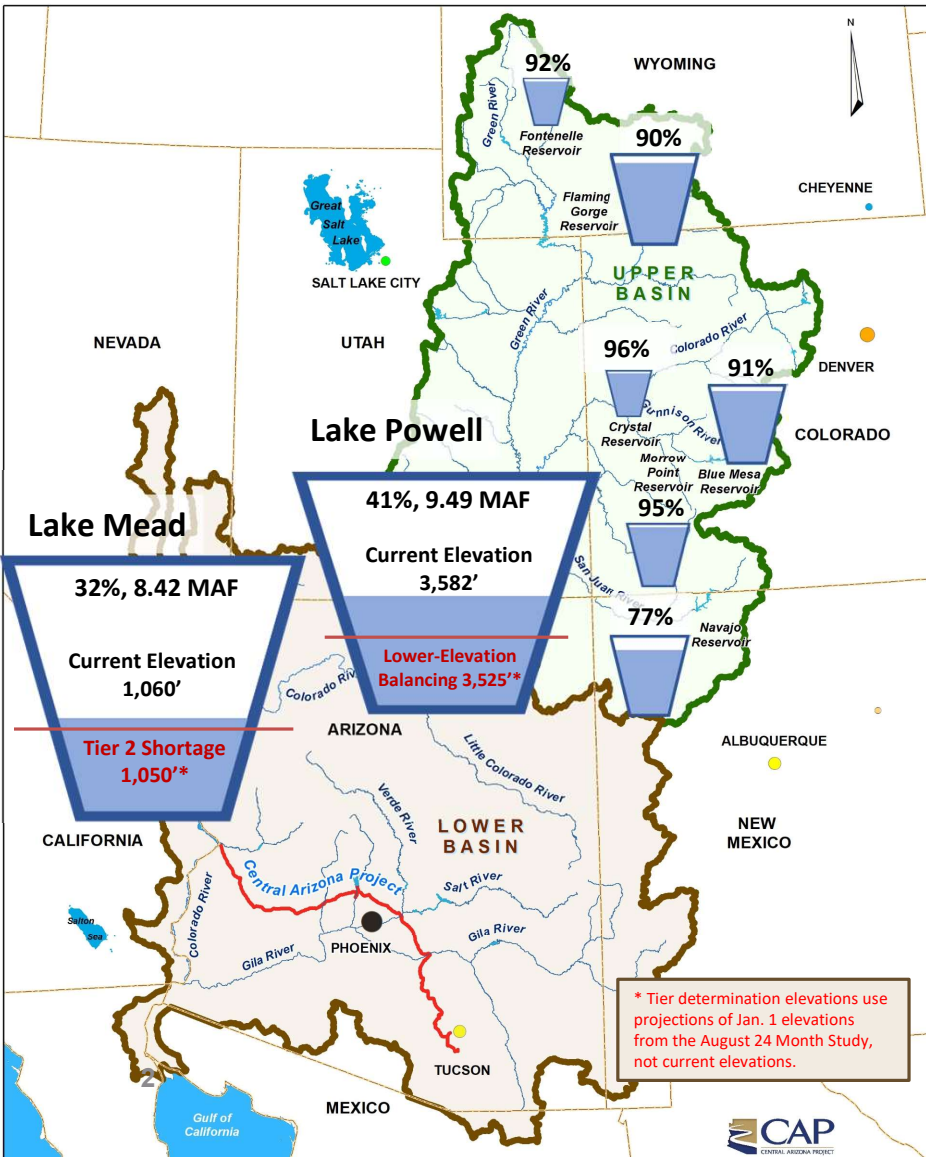
Last Year System Contents: 20.13 MAF

Reservoir Capacities (MAF)			
Reservoir	Current	Change*	Maximum
Lake Mead	8.42	+ 0.28	26.12
Lake Powell	9.49	+ 0.02	23.31
Flaming Gorge Reservoir	3.32	+ 0.11	3.67
Fontenelle Reservoir	0.31	0.00	0.33
Navajo Reservoir	1.27	- 0.02	1.65
Blue Mesa Reservoir	0.75	- 0.01	0.82
Morrow Point Reservoir	0.11	0.00	0.12
Crystal Reservoir	0.02	0.00	0.02

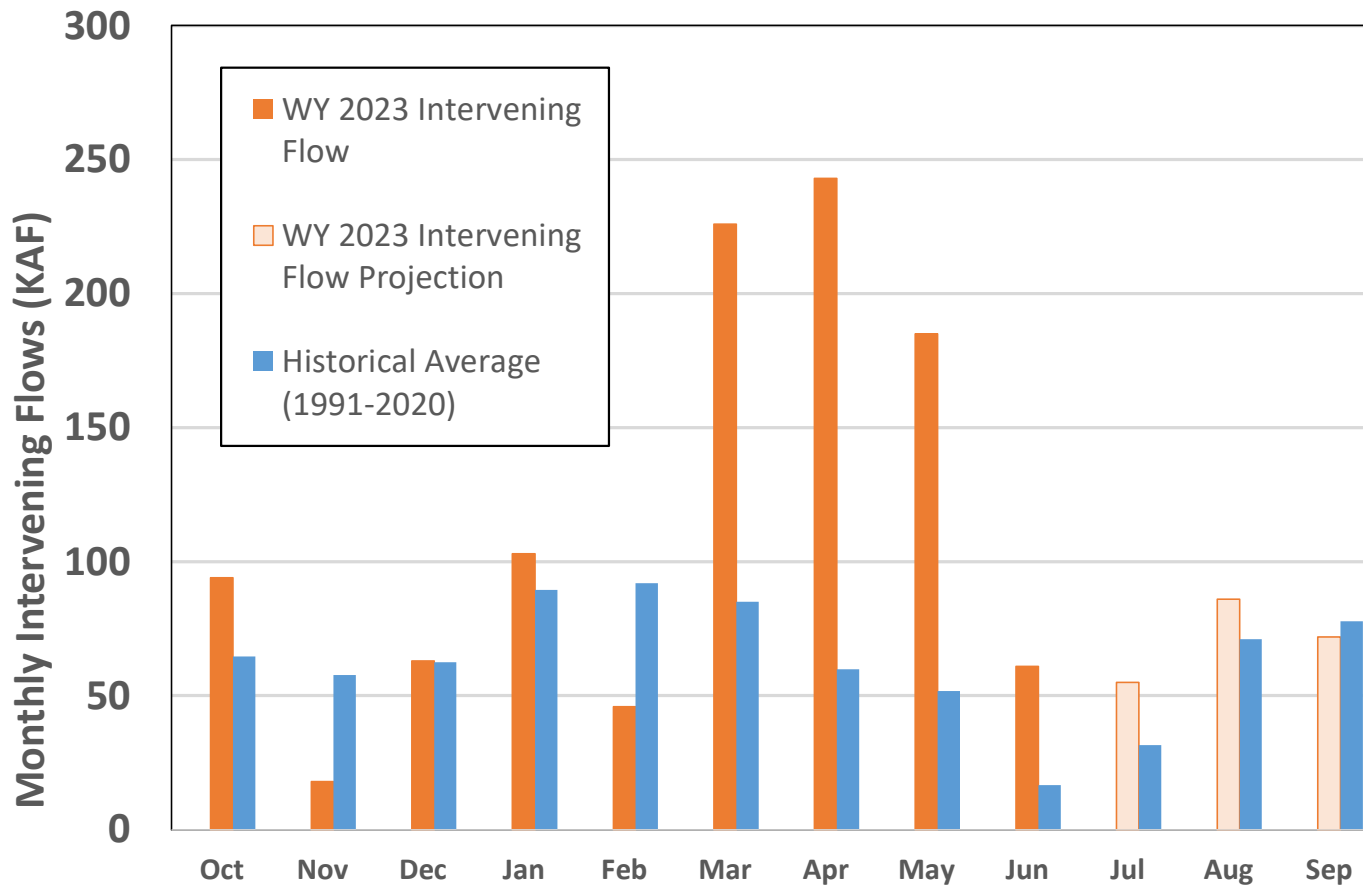
*With respect to previous month's report



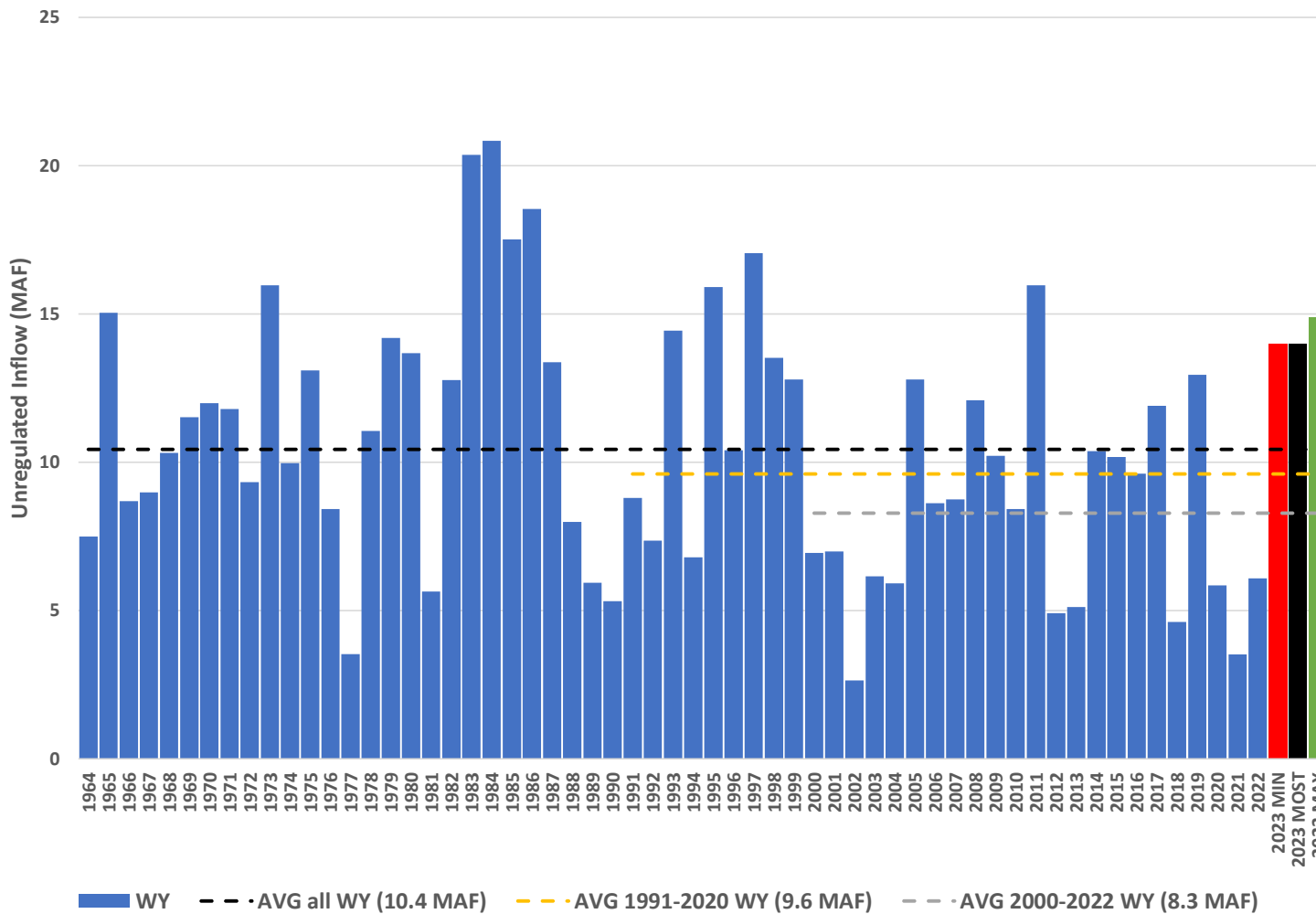
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WY 2023 Intervening Flows to Lake Mead



Unregulated Inflow to Lake Powell by Water Year (1964-2022)



Water Year 2023 Forecast¹
 July Min Prob = 14.00 MAF (146%)
 July Most Prob = 14.00 MAF (146%)
 Apr Max Prob = 14.9 MAF (155%)

Mid July Update (released July 17)
 July Most Prob = 13.90 MAF (145%)

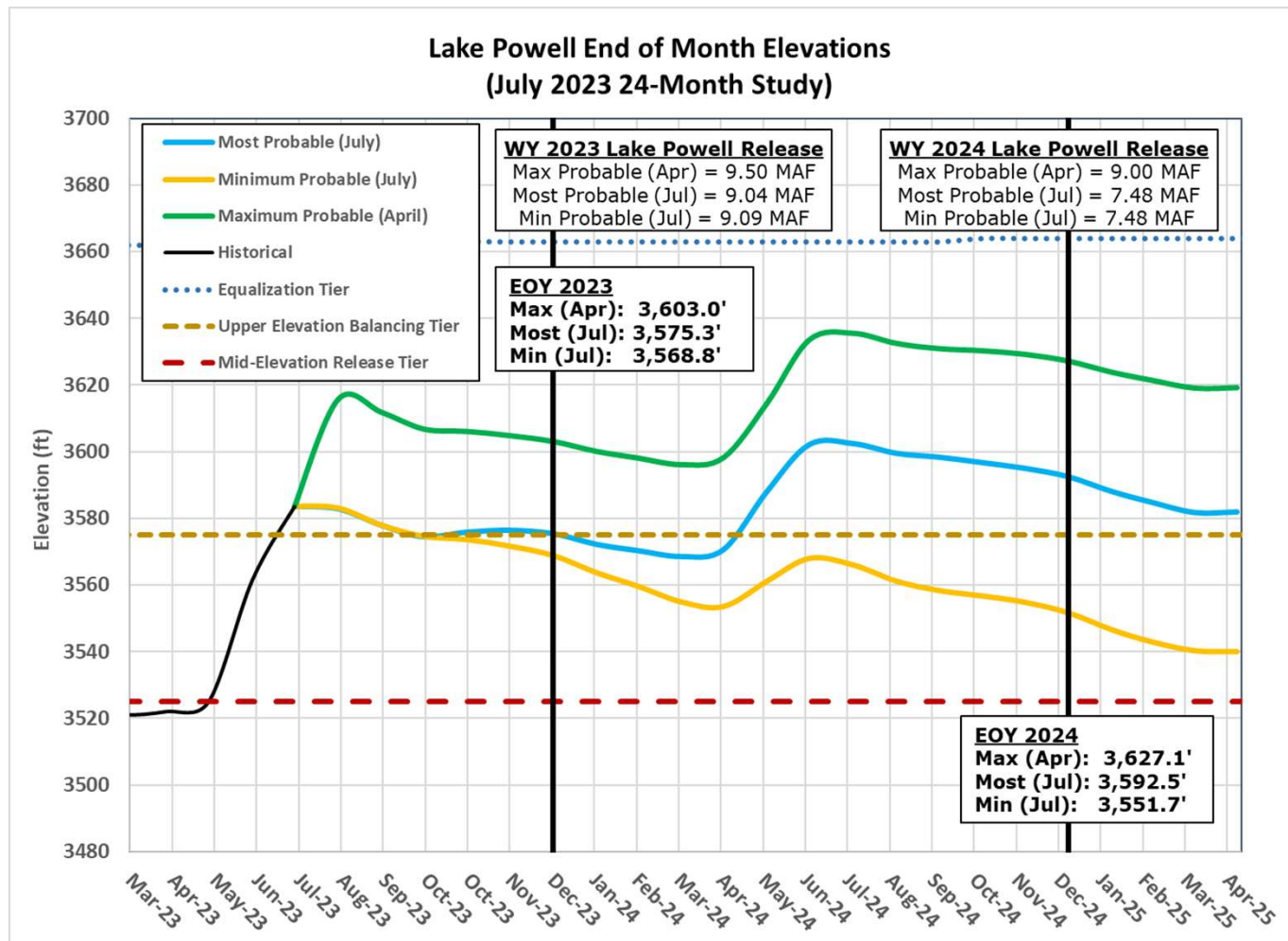
¹Water Year statistics are based on the 30-year period of record from 1991-2020, Average 1991-2020 – 9.60 maf



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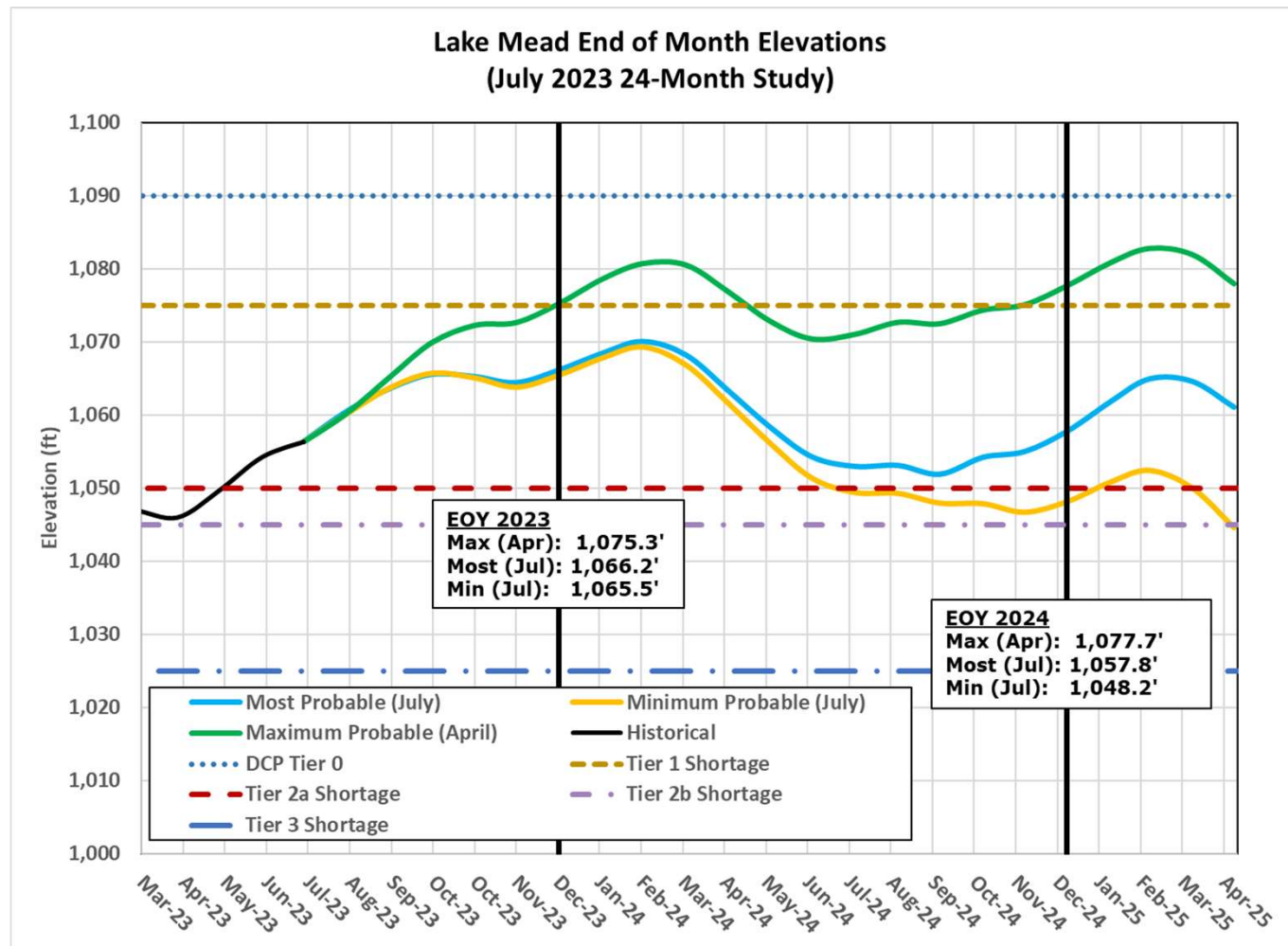
Lake Powell July 2023 24-Month Study

- Lake Powell releases decreased to 9.0 MAF in WY2023, with balancing releases evaluated each remaining month of the water year
- WY2023 Max is 9.5 MAF, Min is 9.0 MAF
- Max Probable is from April



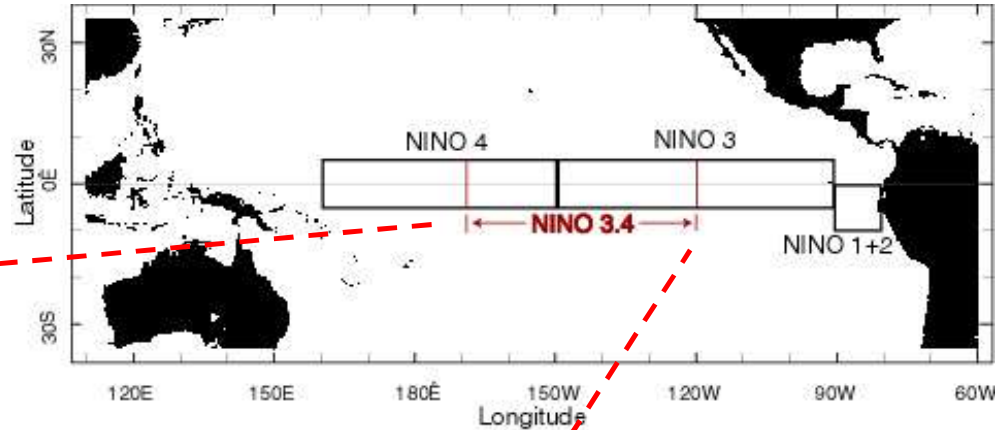
Lake Mead July 2023 24-Month Study

- Lake Mead is operating in Tier 2a shortage condition in 2023
- Lake Mead is currently projected to be in Tier 1 for 2024
- Tier determinations are based on physical elevations

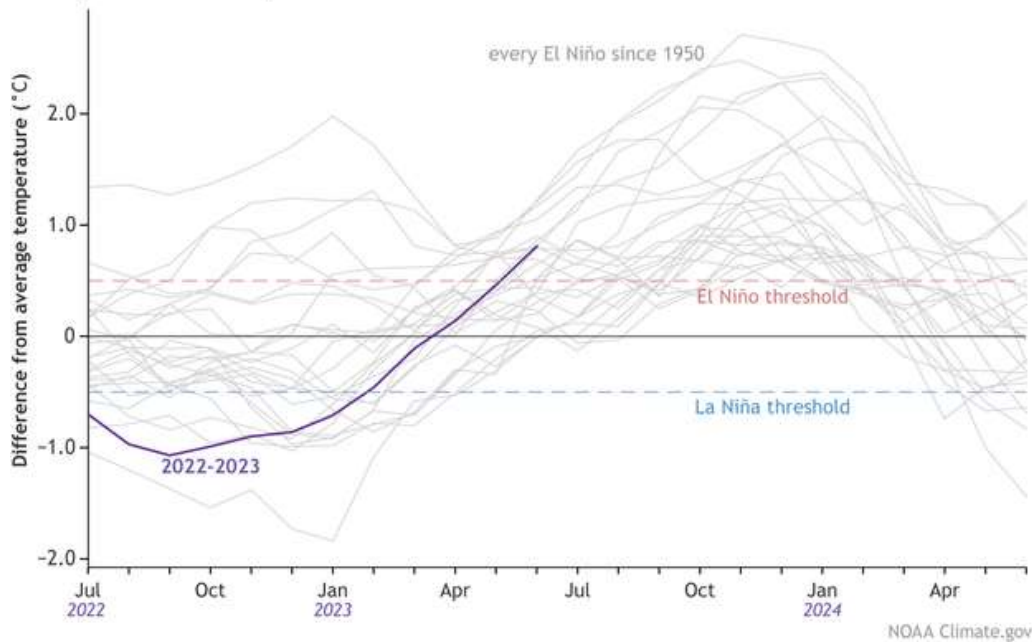


El Niño – Determination

- ONI – Oceanic Niño Index
- Long-term average (1991-2020)



Monthly sea surface temperature Niño 3.4 Index values



The Niño 3.4 Region

Must be > long-term average for 5 consecutive 3-month periods... Apr-Jun was #1

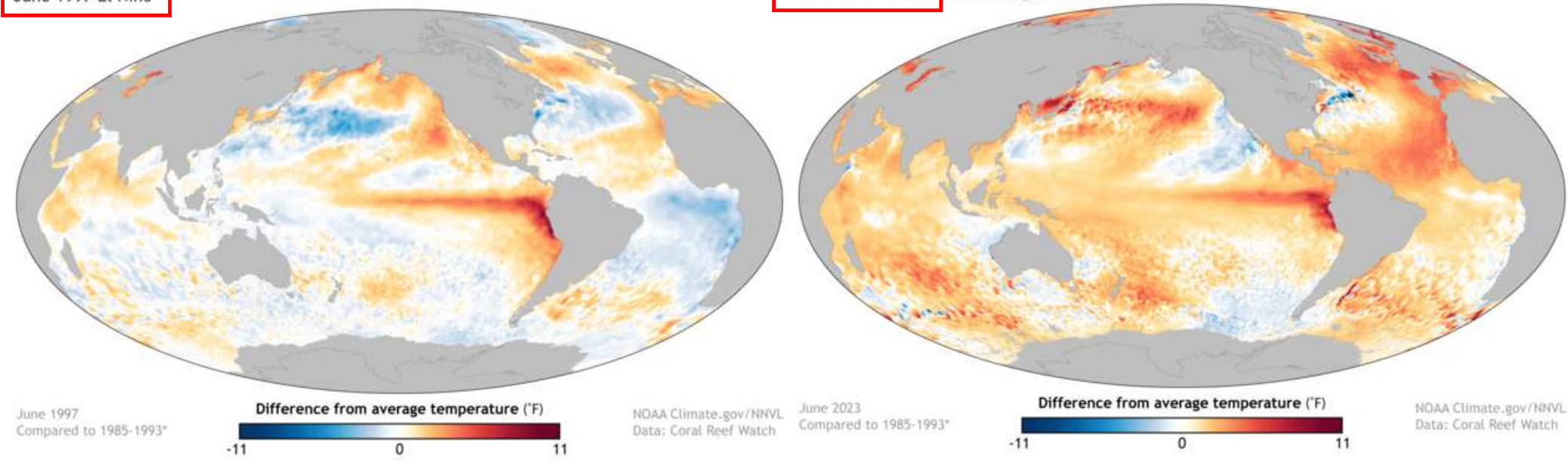


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Sea-Surface Temp. Anomaly (SSTA)

June 1997 El Niño

June 2023 El Niño with near-global ocean warmth



Difference from the 1985-1993 Average