Eastern Pacific Oscillation in the US

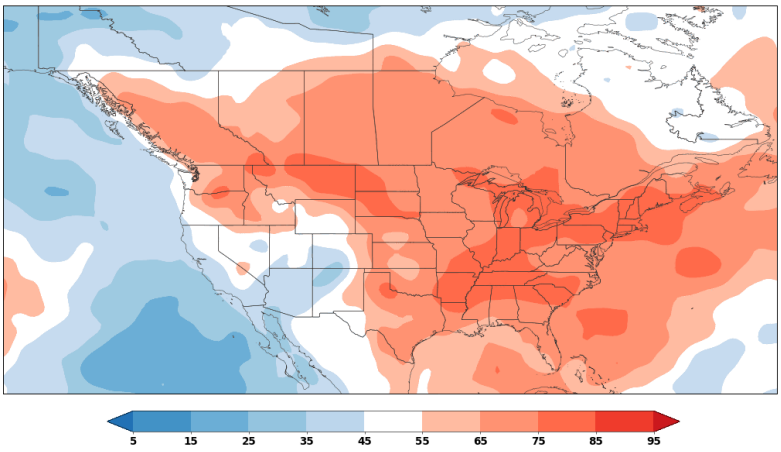
World Climate Service

Positive Phase - Winter

Below-normal surface pressure over Alaska and high pressure northeast of Hawaii

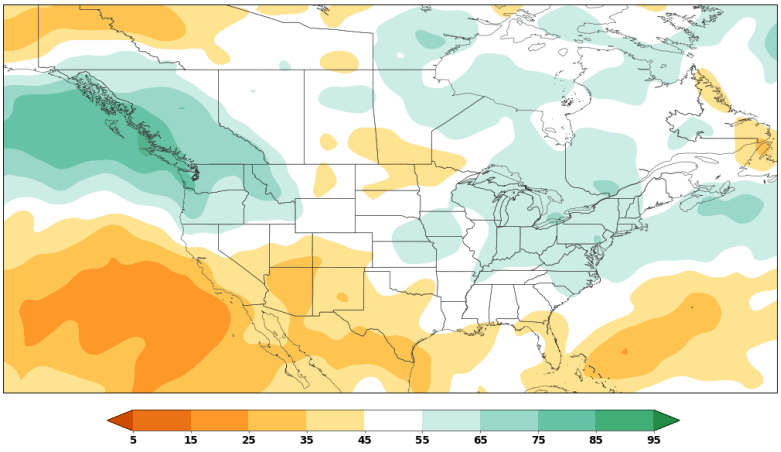
Percent of Years Having Above-Trend DEC-FEB 2m Temperature

1951 1952 1953 1954 1957 1963 1964 1966 1970 1973
1974 1975 1997 1998 2001 2006 2007 2011 2019 2020



Percent of Years Having Above-Normal DEC-FEB Precipitation (ERA5 Reanalysis)

1951 1952 1953 1954 1957 1963 1964 1966 1970 1973
1974 1975 1997 1998 2001 2006 2007 2011 2019 2020



More Heat Overall

More Rain in the Pacific Northwest

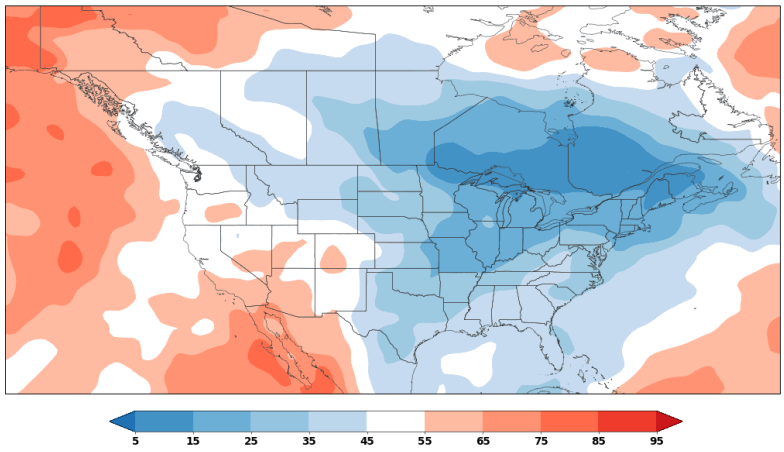
Less Rain in the Desert Southwest

Negative Phase - Winter

Above-normal surface pressure over Alaska and low pressure northeast of Hawaii

Percent of Years Having Above-Trend DEC-FEB 2m Temperature

1956 1961 1962 1967 1976 1977 1980 1984 1985 1990
1992 2000 2002 2004 2008 2009 2013 2014 2017 2018



Percent of Years Having Above-Normal DEC-FEB Precipitation (ERA5 Reanalysis)

1956 1961 1962 1967 1976 1977 1980 1984 1985 1990
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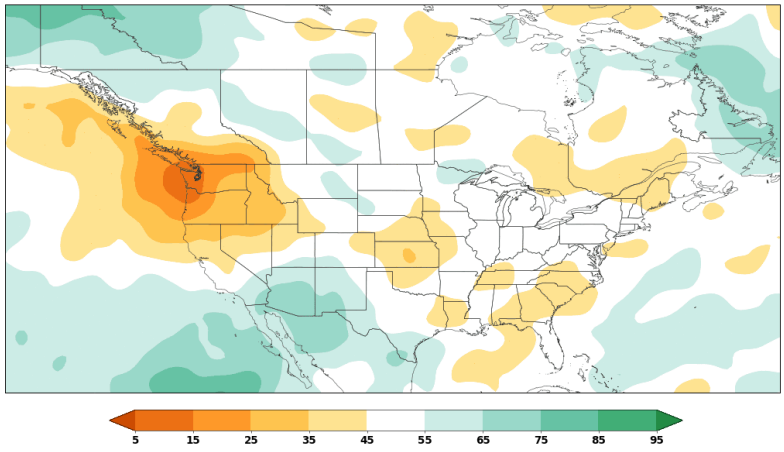

Less Heat Overall

Less Rain in the Pacific Northwest

More Rain in the Desert Southwest

The EPO is only one factor in a complex system that influences the US climate. Long-range forecasts provided in the WCS Monthly Reports are the best guide to the season ahead.