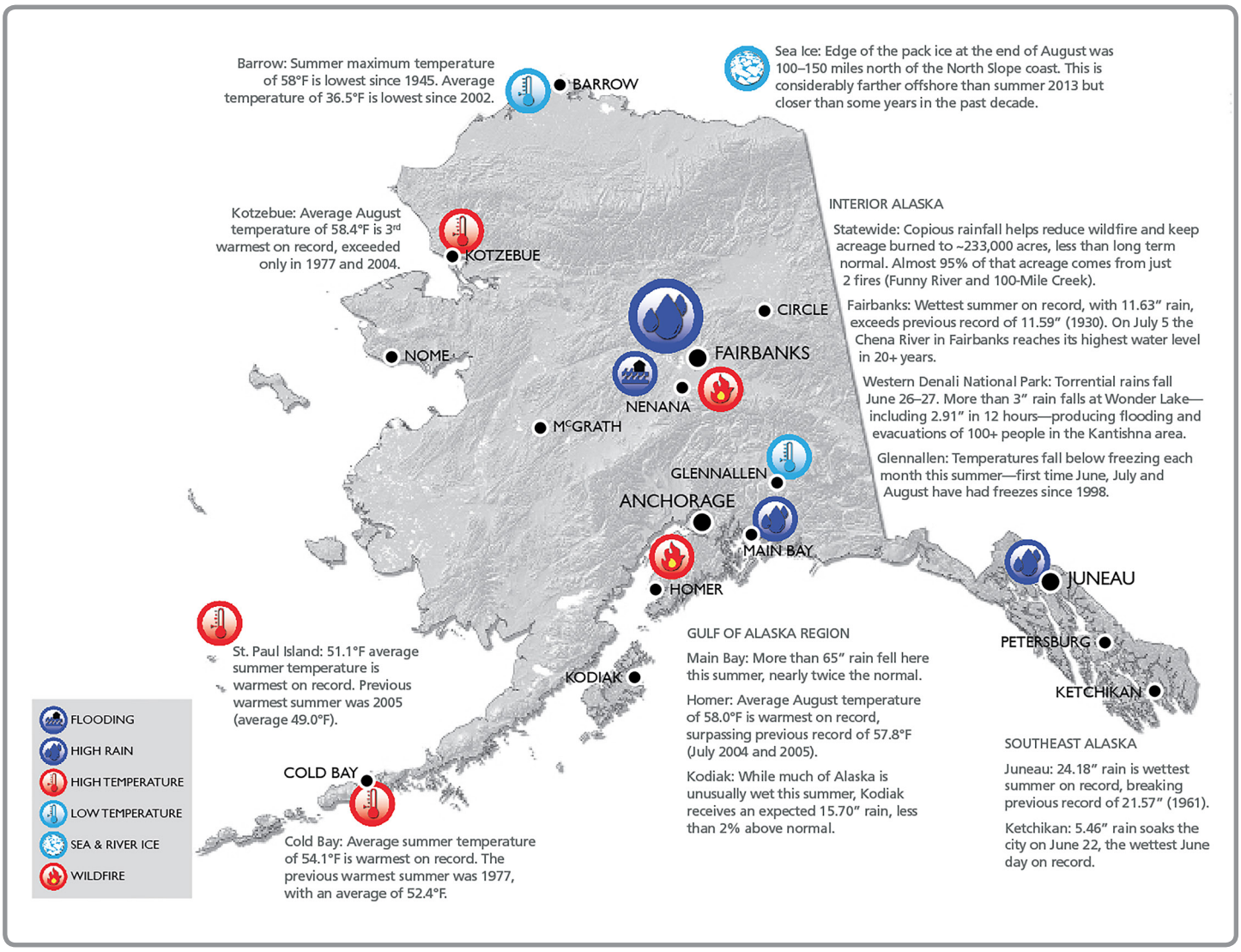
Quarterly Climate Impacts and Outlook

Alaska Region

Summer 2014

Alaska Weather and Climate Highlights - *June 2014–September 2014*



Barrow: Summer maximum temperature of 58°F is lowest since 1945. The average temperature of 36.5°F is the lowest since 2002.

Cold Bay: Average summer temperature of 54.1F° is by far the warmest on record. The previous warmest summer was 1977, with an average of 52.4°F.

Fairbanks: Wettest summer of record, with 11.63" of rain, exceeded the previous record of 11.59" in 1930. On July 5, the Chena River in Fairbanks reached its highest water level in more than 20 years, though there was no major flooding thanks to the Moose Creek flood control project.

Western Denali National Park: Torrential rains fell across the western portions of Denali National Park on June 26 and 27. More than three inches of rain fell at Wonder Lake, including 2.91" in 12 hours. This produced flooding in the Kantishna area, and more than 100 visitors and staff were forced to higher ground and later evacuated by air and bus.

Juneau Airport: 24.18" of rain makes this the wettest summer on record, easily breaking the previous record of 21.57" set in 1961.

Glennallen: The temperature fell below freezing each month this summer. This was the first time June, July, and August have had freezes since 1998.

Kotzebue: The average temperature in August of 58.4°F made this the third warmest August on record, exceeded only by 1977 and 2004.

Main Bay: One of the wettest low-elevation places in Alaska, more than 65" of rain fell this summer, nearly twice the normal amount.

Saint Paul Island: Average summer temperature of 51.1°F is by far the warmest on record. The previous warmest summer was 2005, with an average of 49.0°F.

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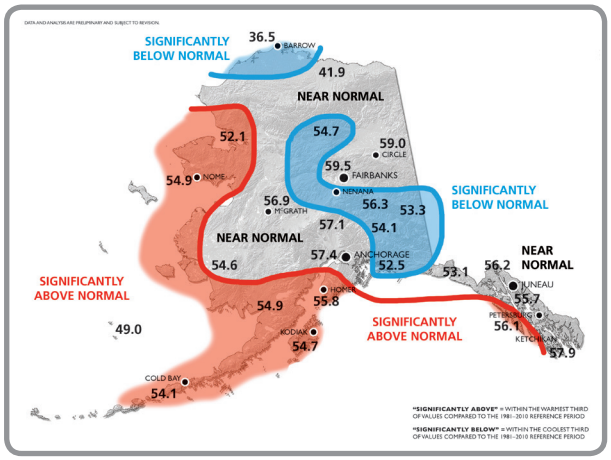
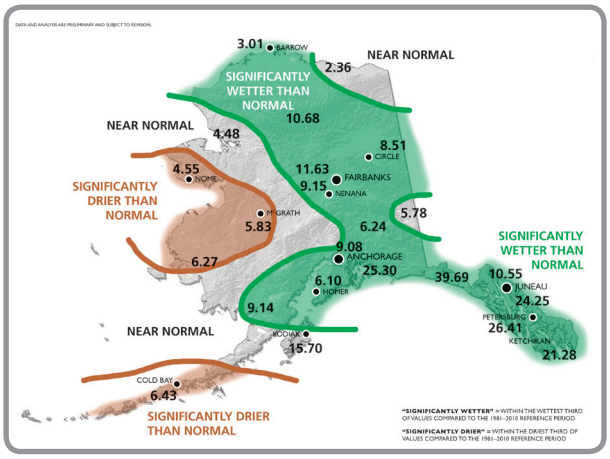
Regional Highlight - *Precipitation Significantly Above Normal*

Alaska Temperatures, °F
June–September 2014



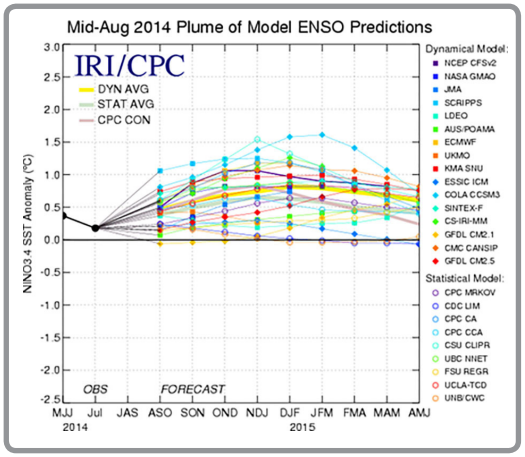
Alaska Precipitation, Inches
June–September 2014

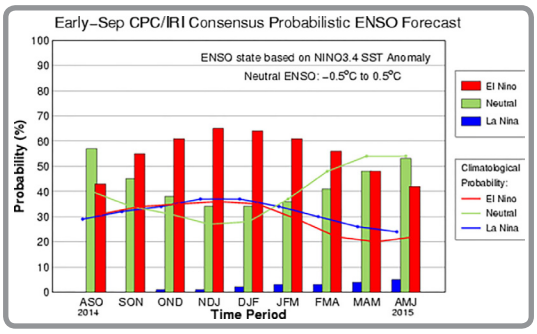


Regional Outlook *for October – November – December 2014*

Note on interpreting model forecasts

The following graph shows forecasts made by dynamical and statistical models for sea surface temperature (SST) in the Niño 3.4 region for nine overlapping three-month periods. Note that the expected skills of the models, based on historical performance, are not equal to one another. The skills also generally decrease as the lead time increases. Differences among the forecasts of the models reflect both differences in model design and actual uncertainty in the forecast of the possible future SST scenario.





During July–August, the observed El Niño Southern Oscillation (ENSO) conditions were neutral. Most of the ENSO prediction models indicate warming to El Niño levels coming around early Northern Hemisphere fall, peaking at weak strength during winter 2014-2015 and lasting into the first few months of 2015.

Alaska Region Partners

Alaska Center for Climate Assessment and Policy
www.accap.uaf.edu

Alaska Climate Research Center
http://climate.gi.alaska.edu/

Alaska Climate Science Center
http://www.doi.gov/csc/alaska/index.cfmg

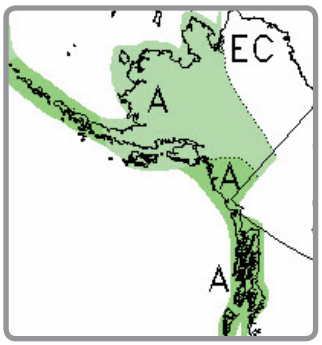
NOAA/NWS Weather Forecast Offices in Fairbanks, Anchorage and Juneau
pafc.arh.noaa.gov (NWS Anchorage)

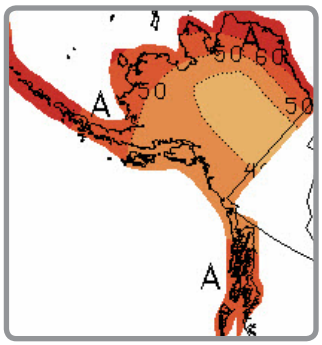
pafg.arh.noaa.gov (NWS Fairbanks)

pajk.arh.noaa.gov (NWS Juneau)

NOAA/NESDIS/NCDC
www.ncdc.noaa.gov

Scenarios Network for Alaska and Arctic Planning
www.snap.uaf.edu





The Climate Predication Center Outlooks for the autumn for Alaska call for increased chances for significantly warmer than normal temperatures statewide, with the greatest chances along the Arctic coast and over Southwest Alaska. Along the Arctic Coast, and especially the northwest this reflects the much later ice coverage early in the fall compared to the 1981-2010 normals period, while in Southwest Alaska very warm sea surface temperatures are expected to persist. The outlook also calls for increased chances for significantly above normal precipitation over the southern mainland and Southeast. This is consistent with typical late autumn precipitation during weak to moderate El Niño.

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