

# ALASKA and NORTHWESTERN CANADA

Weather and Climate Highlights and Impacts, Dec. 2016 - Feb. 2017; Climate Outlook Apr. 2017 - Jun 2017

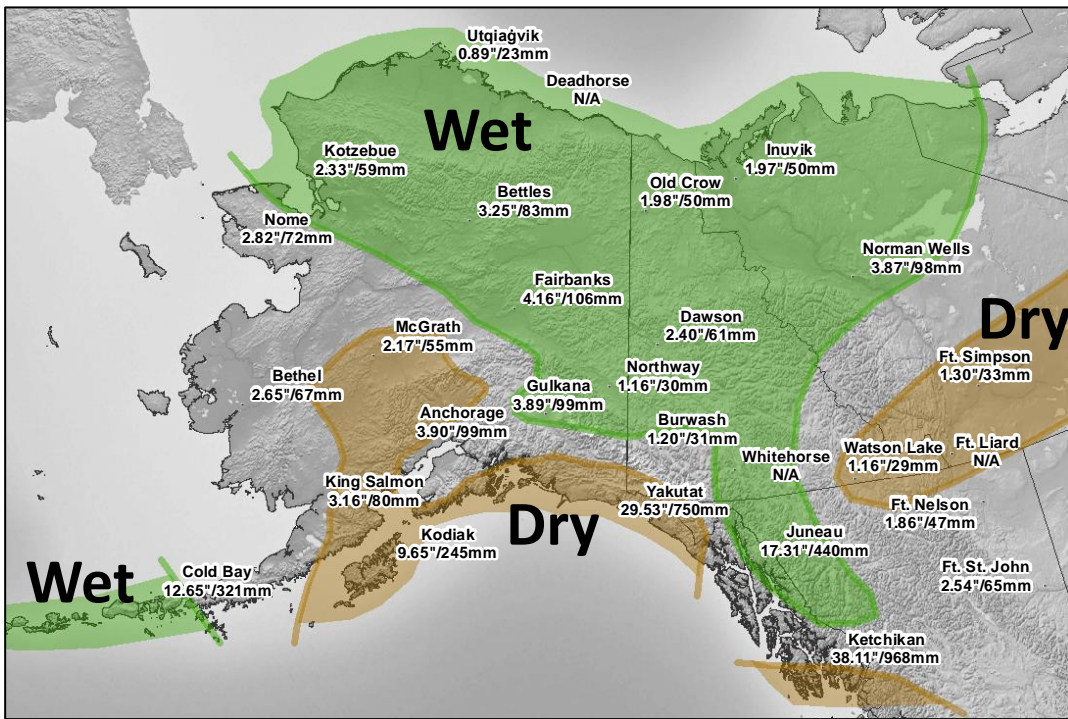


Environment and  
Climate Change Canada

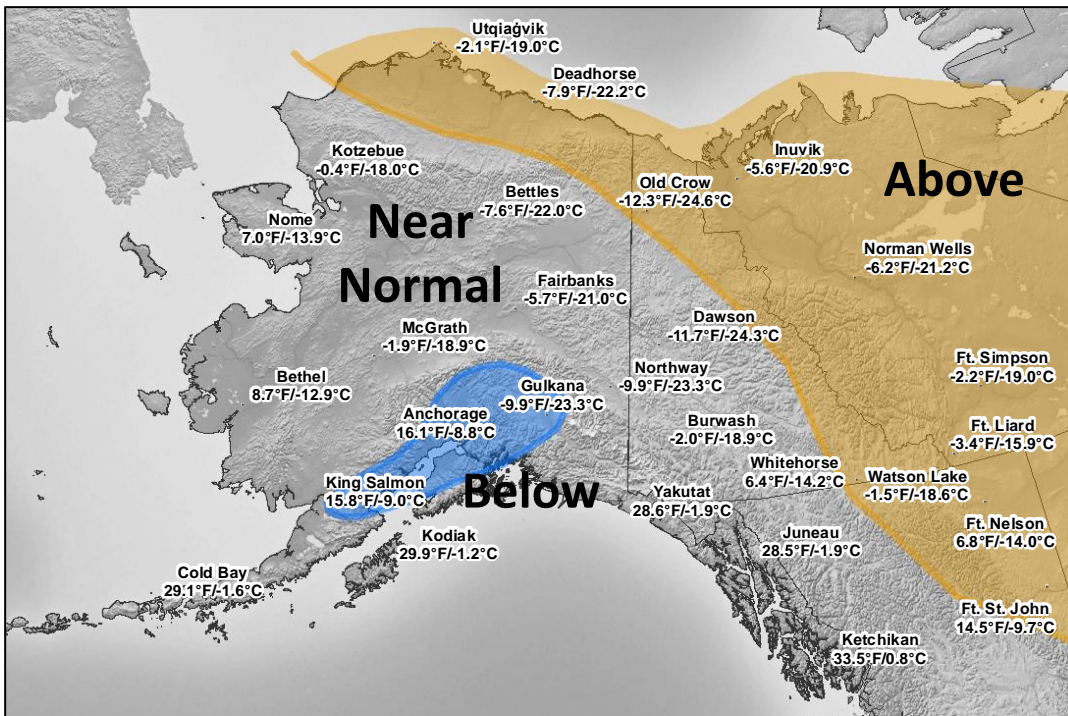
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Total Precipitation for December to February  
Source: NOAA and ECCC



Mean temperatures for December to February  
Source: NOAA and ECCC

## Temperature & Precipitation, Dec. 2016 - Feb. 2017

Several areas saw above normal precipitation during winter 2016-17 including the northern half of Alaska, the majority of the Yukon and the northern region of the Northwest Territories. Areas further south including south-central Alaska experienced a drier than normal winter.

Alaska's North Slope, northeastern British Columbia and the whole Mackenzie Delta experienced significantly higher than normal temperatures this winter. These milder than normal conditions are because of a persistent southerly circulation of air along the eastern side of the Rockies throughout most of the winter. Temperatures over the majority of Alaska and the Yukon were close to normal except for the area between King Salmon and Gulkana, AK, which experienced colder than normal conditions.



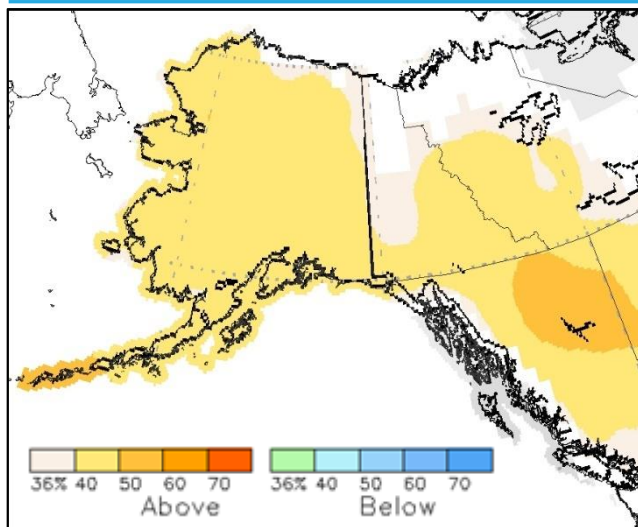
Despite near normal temperatures in Dawson, YK this winter, warm conditions in November reduced ice build-up which prevented the unofficial ice road crossing the Yukon River from remaining open. Photo credit: CBC.



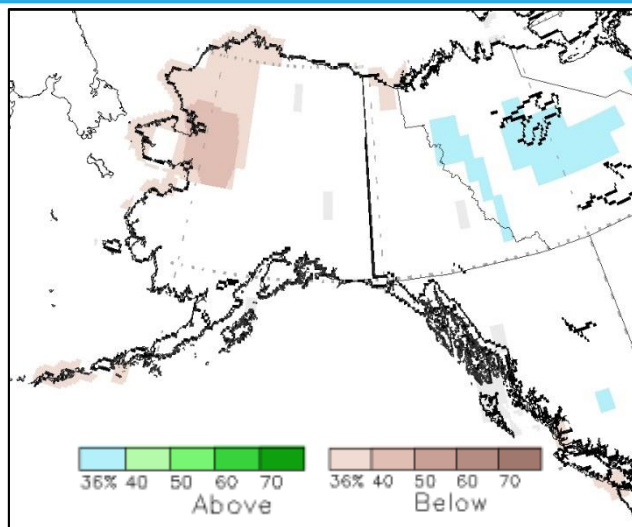
Damage to building in Savoonga, Alaska due to a December 31, 2016, storm. Winds gusting to 80mph (130 kph) damaged at least 30 structures. Photo: NOAA.



## Temperature Outlook: Apr-Jun 2017



## Precipitation Outlook: Apr-Jun 2017

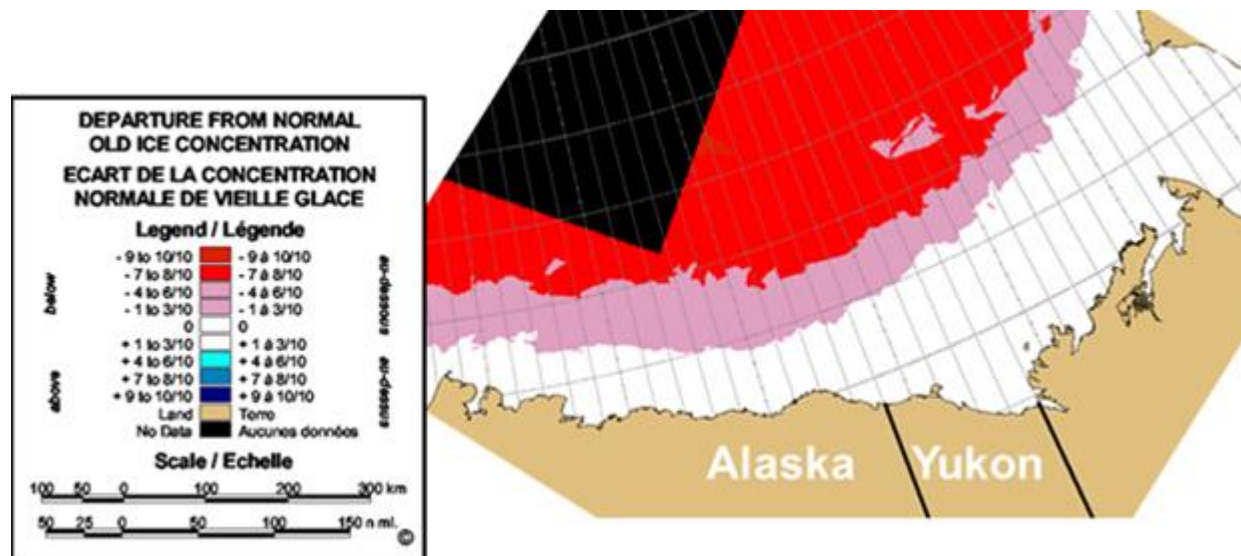


The graphics to the left show the most likely of the three possible categories (significantly above normal, near normal and significantly below normal) for the three months April through June 2017 according to the North American Multi-Model Ensemble (NMME) seasonal forecasts issued on March 7, 2017. Most of Alaska and northwestern Canada are depicted in the 40% to 50% likelihood for above normal temperatures. The northeastern corner of British Columbia has a slightly stronger warm signal.

The March through May time period is the driest three-month period of the year. The NMME forecast is for near normal precipitation across most of the region. The exception is for a drier season in northwest Alaska and slightly wetter in the Northwest Territories.

The April-June forecast reflects the recent demise of La Nina. Deterministic models are hinting at a return of El Nino. This may cause significant changes to the seasonal forecast.

## Old (Multi-Year) Ice Concentration Departure in the Beaufort Sea: February 2017



Source: Canadian Ice Services, Environment and Climate Change Canada

Ice conditions in the Beaufort Sea reached full wintertime coverage by the end of November 2016 and ice coverage has maintained a consistent value from December to February. The coverage of old (multi-year) ice compared to normal (depicted to the left), has been significantly below normal. This is due to very low old ice coverage in the Beaufort Sea in the fall of 2016.

December and January brought exceptionally low sea ice coverage to the northern Bering Sea. The first week of January saw open water at Little Diomed, which extended into the southernmost Chukchi Sea. This was the result of unfavorable weather for sea ice formation during the early winter as well as unusually warm ocean temperatures left over from summer 2016. There was such a lack of ice that on January 9<sup>th</sup> at Savooga, AK, the Siberian Yupik hunters of St. Lawrence Island landed a bowhead whale. For the first time in living memory, hunters were out in boats in January in completely ice-free waters hunting whales. During February, more favorable weather allowed sea ice to form around St Lawrence Island and push south. By the end of the month, ice had not yet reached St. Paul Island.

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ALASKA REGION PARTNERS: Western Region Climate Center, Alaska Climate Research Center, Alaska Climate Science Center, Cryosphere Today, NOAA / NWS Weather Forecast Offices, NOAA / NESDIS / NCEI, Scenarios Network for Alaska + Arctic Planning.

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