



## Weather & Climate Summary Bering Land Bridge National Preserve Fall 2017

### Nome Fall 2017 Weather

Temperatures were near-normal for most of September in Nome. The high temperature for the month was 60°F on September 6. Cold temperatures the last week of September brought the monthly low of 22°F on the 29th. Precipitation was also near-normal for the month with 2.73 inches, most of that fell during the first two weeks of the month. A trace of snow was recorded on the 19th, but otherwise all precipitation was recorded as liquid rainfall. Overall, the average temperature for the month was 0.9°F cooler than normal at 41.9°F. The total precipitation for September was 2.73 inches, which is 111% of average.

October was warmer and wetter than normal. The average monthly temperature was 31.7°F, which is 3.0°F above normal. Monthly precipitation was well above normal, totaling 3.12 inches which is the 8th wettest October on record. The 0.87 inches of rain measured on October 12 was a record for that date. Overall, October precipitation was 194% of normal. Snowfall was 204% of normal and ended up as the snowiest October since 2000.

November was warm and snowy. High temperatures the first week of the month were above freezing and almost 7 inches of snow fell on the 8th. Another 8 inches of snow fell November 18-21 with high temperatures in the 20's. The minimum temperature for the month was -4°F on the 24th. The average monthly temperature was 23.6°F, 6.7°F warmer than normal and the 11th warmest November on record. Total snowfall for the month was 22.2 inches, 183% of normal.

The average fall temperature at Nome was 32.4°F which is 2.9°F warmer than the 1981-2010 normal. The total fall

precipitation was 7.75 inches, 149% of normal (Figures 1 and 2; Tables 1, 2, and 3). It was the snowiest fall in two decades, with 31.6 inches recorded for the season.

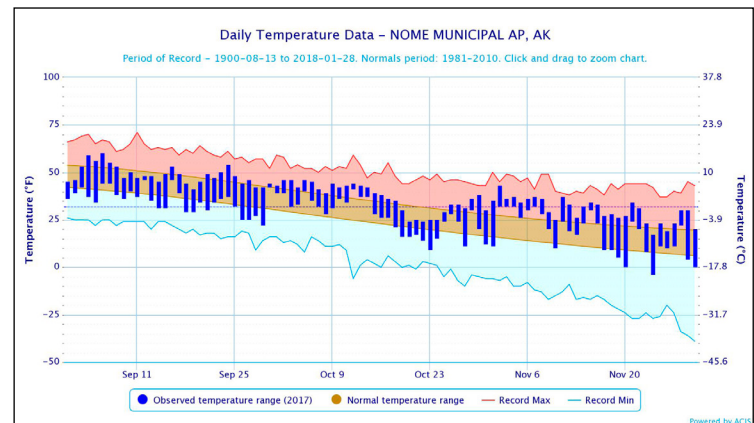


Figure 1. Fall 2017 daily temperatures at Nome showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

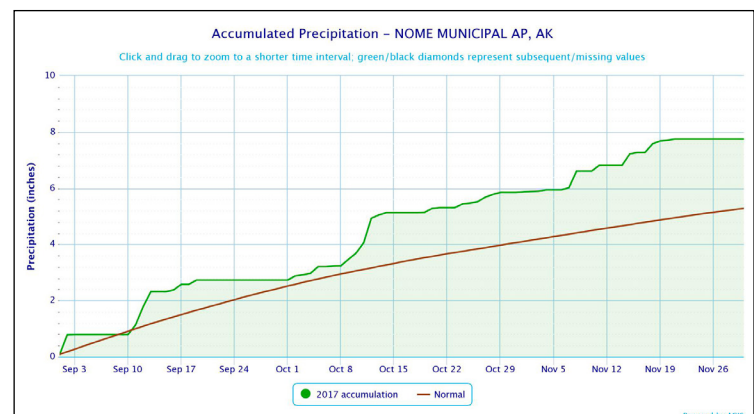


Figure 2. Fall 2017 accumulated precipitation at Nome (green) compared to normal (brown line).

Table 1. Temperature: Fall 2017 average monthly temperatures compared to the 1981-2010 normal.

| Fall 2017 | Average Monthly Temp °F | 1981-2010 Normal °F | Departure from Normal °F | Monthly High °F / Date | Monthly Low °F / Date |
|-----------|-------------------------|---------------------|--------------------------|------------------------|-----------------------|
| September | 41.9                    | 42.8                | -0.9                     | 60 / Sept. 6           | 22 / Sept. 29         |
| October   | 31.7                    | 28.7                | +3.0                     | 46 / Oct. 2, 3, 5      | 9 / Oct. 23           |
| November  | 23.6                    | 16.9                | +6.7                     | 43 / Nov. 2            | -4 / Nov. 24          |

Fall Season Temperature Departure from Normal: +2.9°F.

Table 2. Precipitation: Fall 2017 monthly precipitation totals compared to normal.

| Fall 2017 | Total Monthly Precip. in. | 1981-2010 Normal in. | Departure from Normal in. | Greatest 24 -hr. total in. / Date | # Days with >=0.01 in. water |
|-----------|---------------------------|----------------------|---------------------------|-----------------------------------|------------------------------|
| September | 2.73                      | 2.45                 | +0.28                     | 0.70 / Sept. 2                    | 9                            |
| October   | 3.12                      | 1.61                 | +1.51                     | 0.87 / Oct. 12*                   | 21                           |
| November  | 1.90                      | 1.22                 | +0.68                     | 0.59 / Nov. 8                     | 13                           |

Fall Season Precipitation Departure from Normal: +2.47 inches (147% of normal); \*Record for that date.

Table 3. Snowfall: Fall 2017 monthly snowfall totals compared to normal.

| Fall 2017 | Total Monthly Snowfall in. | 1981-2010 Normal in. | Departure from Normal in. | Greatest 24 -hr. snowfall total in. / Date | Cumulative snowfall since 1-July in. |
|-----------|----------------------------|----------------------|---------------------------|--------------------------------------------|--------------------------------------|
| September | Trace                      | 0.6                  | -0.6                      | Trace / Sept. 19                           | Trace                                |
| October   | 9.4                        | 4.6                  | +4.8                      | 2.5 / Oct. 20                              | 9.4                                  |
| November  | 22.2                       | 12.1                 | +10.1                     | 6.9 / Nov. 8                               | 31.6                                 |

Fall Season Snowfall Departure from Normal: +14.3 inches (183% of normal).

### Climate Monitoring in Bering Land Bridge N. Pres.

NPS climate stations in Bering Land Bridge (BELA) complement the long-term record from the National Weather Service station in Nome. NPS stations are located at Serpentine Hot Springs, Midnight Mountain, Devil Mountain, and Ella Creek (Figure 3).

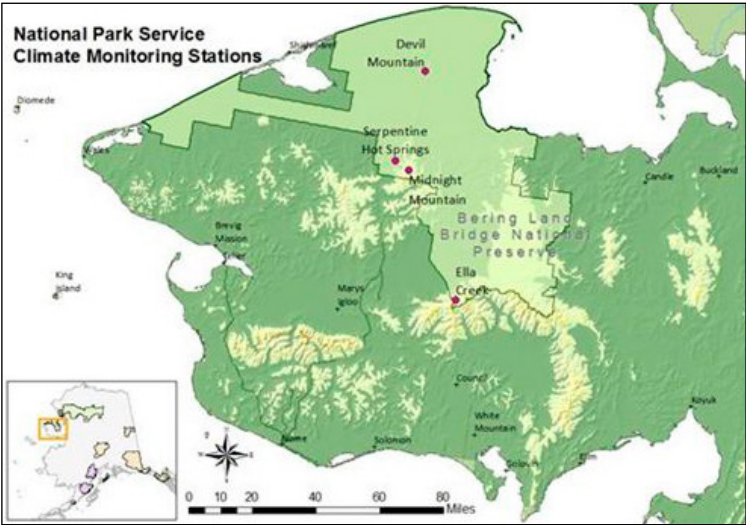


Figure 3. Map of climate stations in Bering Land Bridge.



### Record Low Ice Extent in Chukchi Sea

Sea ice extent in the Chukchi Sea at the end of November was the lowest on record based on satellite observations (1979-2017). Warm water from the Bering Sea funneled through the strait and into the Chukchi Sea in early summer 2017. This warm water persisted into the autumn, and combined with regular southwest winds, formation of new ice was sluggish. The lack of ice during the stormy autumn months led to coastal floods and erosion along many parts of the coast. Damage was recorded in Utqiagvik, Shishmaref, Norton Sound and several communities on the Kuskokwim Delta. For the Arctic as a whole, sea ice extent was the third lowest on record (Figure 4).

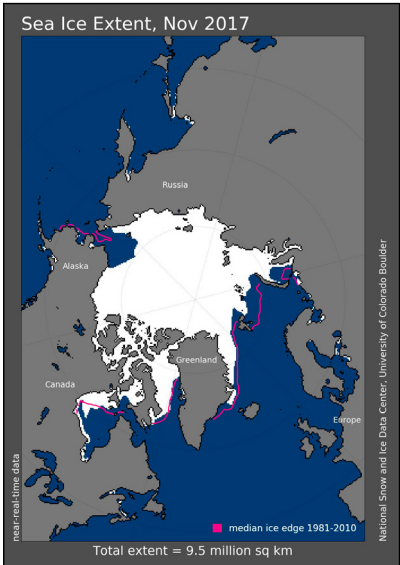


Figure 4. Arctic Sea Ice Extent, Nov. 2017. Source: <http://nsidc.org/arcticseaicenews/2017/12/>

### More Information

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[Current weather in BELA](#)