



Weather & Climate Summary Yukon-Charley Rivers National Preserve Spring 2017

Eagle Spring Weather 2017

March was much colder than normal. The average temperature for March was -5.8°F compared to a normal of 7.2°F . Every day of the month was colder than normal except for the last two days of the month when temperatures warmed by $\sim 20^{\circ}\text{F}$. There was only one day in March with any measurable snowfall; 0.5 inches was recorded on March 29. Normal snowfall for March is 6.1 inches. Total precipitation (water equivalent) was only 13% of normal. It was the 5th coldest and 10th driest March on record (1902-2017; only months with ≤ 5 days of missing data were included, $n=94$).

April was near normal in terms of temperature and precipitation. Most of the positive temperature deviations occurred during the first few days of the month with cooler than normal temperatures mid-month. The average monthly temperature ended up at 28.3°F compared to a normal of 28.9°F . A total of 0.22 inches of water equivalent was measured in April, which is 0.04 inches below normal. Unfortunately, snowfall and snow depth data are missing from the last few days of the month. The snow melt-out date occurred sometime between April 25 and May 1 at Eagle.

May was warmer and wetter than normal. The average monthly temperature was 2.4°F warmer than normal at 48.5°F . There was measurable rainfall on 14 days of the month culminating in a total of 1.84 inches, which is 167% of normal.

Even though May was warm and April was near normal, the average spring temperature at Eagle was 3.7°F cooler than normal, mostly due to a cold March. The total spring

precipitation was 2.11 inches (121% of normal), most of that fell as rain in May. Less than an inch of snow was recorded for spring 2017; it ranks as the 2nd driest spring period on record in terms of total snowfall. The snowfall total for the entire 2016-2017 season was 46.9 inches, which is $\sim 75\%$ of normal (Figures 1 and 2; Table 1, 2, and 3).

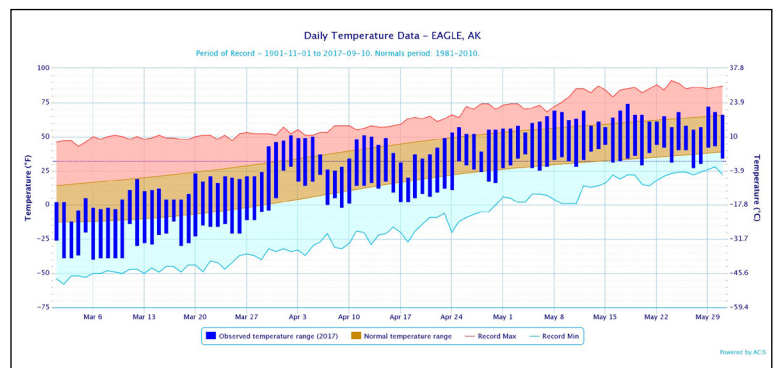


Figure 1. Spring 2017 daily temperatures at Eagle showing record maximum (red), record minimum (blue), normal (brown) and observed range (blue bars).

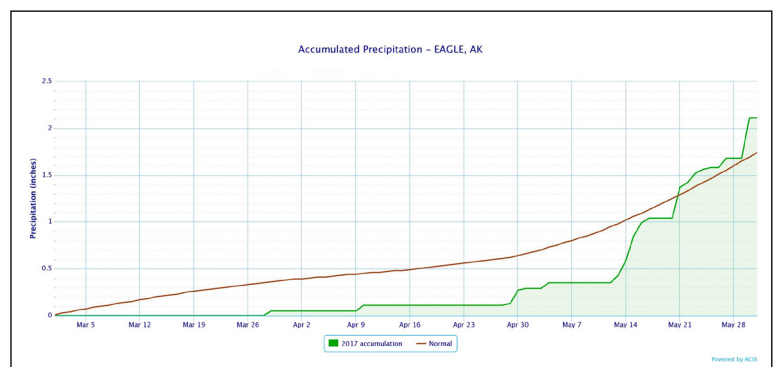


Figure 2. Spring 2017 accumulated precipitation (green) at Eagle compared to normal (brown line).

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

Spring 2017	Average Monthly Temp °F	1981-2010 Normal °F	Departure from Normal °F	Monthly High °F / Date	Monthly Low °F / Date
March	-5.8	7.2	-13.0	46 / Mar 31	-40 / Mar 6
April	28.3	28.9	-0.6	57 / Apr 25	-2 / Apr 9
May	48.5	46.1	+2.4	74 / May 18	25 / May 6

Spring Season Temperature Departure from Normal: -3.7°F

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

Spring 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
March	0.05	0.38	-0.33	0.05 / Mar 29	1
April	0.22	0.26	-0.04	0.14 / Apr 30	3
May	1.84	1.10	+0.74	0.43 / May 30	14

Spring Season Departure from Normal: +0.37 inches (121% of normal)

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

Spring 2017	Total Monthly Snowfall in.	1981-2010 Normal in.	Departure from Normal in.	Greatest 24 -hr. snow-fall total in. / Date	Cumulative snowfall since 1-July in.
March	0.5	6.1	-5.6	0.5 / Mar 29	46.5
April	0.4	3.1	-2.7	0.4 / Apr 10	46.9
May	0.0	1.0	-1.0	–	46.9

Climate Monitoring in Yukon-Charley Rivers National Preserve

NPS climate stations in Yukon-Charley Rivers complement the long-term record available from the National Weather Service station at Eagle (Figure 3).

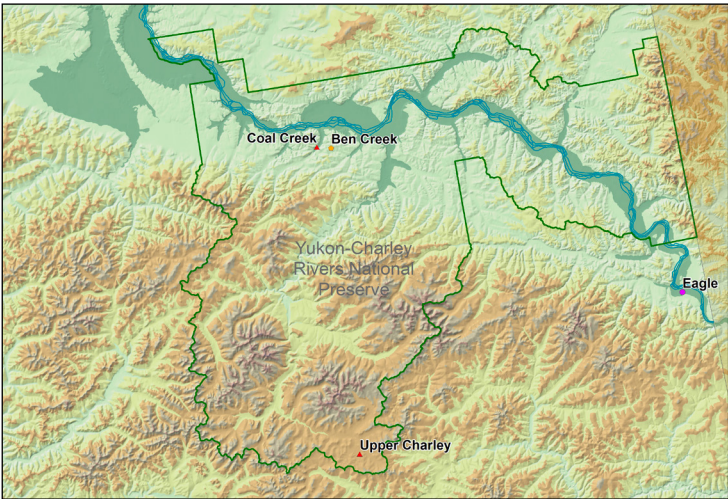


Figure 3. Map of climate stations in Yukon-Charley Rivers N Pres.

Yukon River Breakup 2017

The mean monthly temperature at Coal Creek for March 2017 was -3.6°F. This is the second coldest March on record for this site which was installed in 2005. Ten years ago, in March 2007, it was much colder at Coal Creek with an average monthly temperature that year of -9.6°F.

The breakup date of the Yukon River at Eagle was May 4, 2017, which is a few days earlier than the long-term median of May 8. Figure 4 shows the breakup dates since 1898 with a significant

decreasing trend over the long record. The breakup date was one day earlier upstream at Dawson City, Yukon (Figure 5).

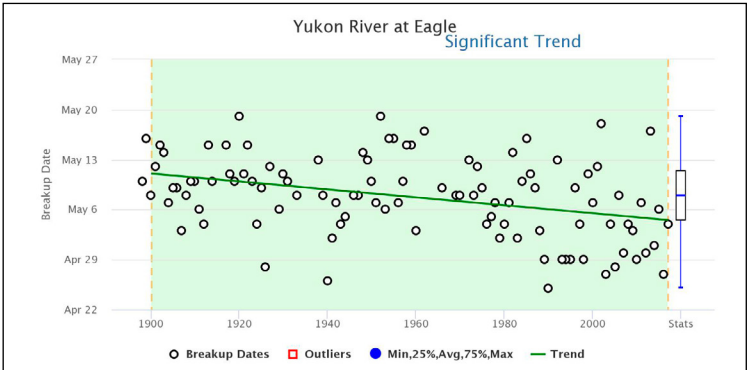


Figure 4. Breakup dates of the Yukon River at Eagle (graph: NWS).



Figure 5. The breakup in Dawson City, Yukon on May 3, 2017.

More Information

Pam Sousanes; pam_sousanes@nps.gov; ph 907-455-0677

Ken Hill; kenneth_hill@nps.gov; ph 907-455-0678

<http://science.nature.nps.gov/im/units/cakn>

[Current Weather in Yukon-Charley Rivers](#)