

Spring Breakup Outlook for Alaska Valid May 23, 2025 <u>Alaska-Pacific River Forecast Center</u> Next Product Issuance: May 30, 2025 www.weather.gov/aprfc

EXPERIMENTAL PRODUCT Spring Breakup Outlook for Alaska

Statewide Summary

Breakup has largely concluded across areas south of the Brooks Range. Remaining intact ice is primarily limited to the lower Kobuk River and much of the Porcupine River. Streams and Rivers will continue to respond to higher elevation snowmelt with gradual increases in water levels. Attention has now shifted to breakup on the North Slope, where winter conditions persist and snowmelt has been minimal to nonexistent. **The flood risk for North Slope rivers is increasing due to above average late season snowpack combined with the potential for a rapid warm-up in early June.**

Northwest Alaska: On Thursday, May 22nd, webcam imagery indicated breakup on the Kobuk River near Ambler. Satellite imagery and on-the-ground reports confirm that ice remains in place from downstream of Ambler to the river's mouth; however, no flooding is anticipated. The Noatak River has broken up at Noatak and open water extends downstream, upstream sections still contain some intact ice.

Porcupine River: The Porcupine River adjacent to Fort Yukon is open. Areas upstream are still ice-covered. The river ice continues to slowly degrade with a gradual onset of snowmelt beginning upstream from Old Crow. The risk of snowmelt flooding at Fort Yukon is low.

Chena Basin: A notable late-season snowpack persists at higher elevations in the Chena Basin, with several sites near 3,000 feet still reporting over two feet of snow. This snow is melting rapidly. Below 2,500 feet, little to no snow remains. Given the current temperature forecast, ongoing snowmelt is expected to cause modest rises in the Chena River, but flooding is not anticipated in the coming week.

North Slope

Snowpack remains widespread across the North Slope, with snow depths varying between 1 to 2 feet with nearly 4 feet reported at Atigun Pass (4,800 ft)—well above average for this time of year. Snow depth gauges across the region show little to no indication of spring melt (see graph below).



Valid May 23, 2025



Atigun Pass (4800 ft) current snow depth plot (red) compared to median (black)

Climate Prediction Center (CPC) guidance indicates that below-average temperatures are likely to persist into early June (see below), further delaying snowmelt and river breakup across the region.





However, recent CPC forecasts suggest the potential for a rapid warm-up beginning late in the first week of June (see below). This abrupt transition from cold to warmer conditions, combined with the significantly above-average snowpack, raises concerns about breakup-related flooding and erosion—particularly along the Sagavanirktok (Sag) and Kuparuk Rivers—in early June.





Summary of 2025 Breakup Dates

| Tanana-Fairbanks | | | | |
|------------------|------------------------|---------------------------|--------------------|-------------------------|
| River-Reach | Location | Median Breakup Date | Years of Record | 2025 Breakup Date |
| | | | | |
| Chena River | | | | |
| | Chena Lakes Project | | | 4/23** |
| Tanana River | | | | |
| | Northway | 4/26 | 32 | 4/25** |
| | Salcha | 4/26 | 3 | 4/28** |
| | Fairbanks | 4/30 | 22 | 4/30** |
| | Nenana | 4/30 | 45 | 4/27** |
| | Manley HS | 5/3 | 33 | 5/2** |

** indicates date of actual breakup in 2025



| Yukon River | | | | |
|------------------------|------------------|---------------------------|--------------------|-------------------------|
| River-Reach | Location | Median Breakup Date | Years of Record | 2025 Breakup Date |
| Yukon River (Upper) | | | | |
| | Dawson, YT | 5/4 | 45 | 4/30** |
| | Eagle | 5/4 | 45 | 5/1** |
| | Circle | 5/9 | 41 | 5/5** |
| | Fort Yukon | 5/11 | 41 | 5/6** |
| | Beaver | 5/11 | 28 | 5/12** |
| | Stevens Village | 5/11 | 26 | 5/13** |
| | Rampart | 5/12 | 28 | 5/13** |
| Yukon River (Mid) | | | | |
| | Tanana | 5/8 | 40 | 5/8** |
| | Ruby | 5/9 | 39 | 5/7** |
| | Galena | 5/11 | 44 | 5/8** |
| | Koyukuk | 5/10 | 18 | 5/9** |
| | Nulato | 5/12 | 27 | 5/9** |
| | Kaltag | 5/12 | 39 | 5/10** |
| | Anvik | 5/14 | 36 | 5/12** |
| | | | | |
| Yukon River (Lower) | | | | |
| | Holy Cross | 5/14 | 38 | 5/12** |
| | Russian Mission | 5/15 | 38 | 5/12** |
| | Marshall | 5/15 | 33 | 5/12** |
| | Pilot Station | 5/13 | 28 | 5/12** |
| | Mountain Village | 5/15 | 38 | 5/13** |
| | Alakanuk/Emmonak | 5/20 | 39 | 5/17** |



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| Kuskokwim River | | | | | |
|--------------------|---------------|---------------------------|--------------------|-------------------------|--|
| River-Reach | Location | Median Breakup Date | Years of Record | 2025 Breakup Date | |
| Kuskokwim River | | | | | |
| | Nikolai | 4/23 | 39 | 4/22** | |
| | McGrath | 5/4 | 45 | 5/3** | |
| | Stony River | 5/2 | 37 | 4/27** | |
| | Sleetmute | 5/1 | 36 | 4/27** | |
| | Red Devil | 5/3 | 39 | 4/28** | |
| | Crooked Creek | 5/4 | 39 | 4/28** | |
| | Aniak | 5/5 | 42 | 5/1** | |
| | Kalskag | 5/5 | 36 | 5/5** | |
| | Tuluksak | 5/7 | 33 | 5/2** | |
| | Akiak | 5/8 | 39 | 5/7** | |
| | Kwethluk | 5/5 | 13 | 5/6** | |
| | Bethel | 5/9 | 45 | 5/6** | |
| | Napakiak | 5/10 | 30 | 5/8** | |



| Southeast-Southcentral | | | | |
|------------------------|------------|---------------------------|--------------------|-------------------------|
| River-Reach | Location | Median Breakup Date | Years of Record | 2025 Breakup Date |
| Southeast | | | | |
| Kenai River | | | | |
| Anchor River | | 4/17 | 16 | Early April** |
| Matanuska River | | | | |
| Susitna River | | | | |
| | Gold Creek | 5/2 | 9 | 4/25** |
| | Sunshine | 5/2 | 36 | 4/28** |
| Talkeetna | | | | |
| | Talkeetna | 4/28 | 5 | 4/24** |
| Yentna River | | | | |
| | Lake Creek | 5/1 | 33 | 4/23** |
| Skwentna River | | | | |
| | Skwentna | 4/30 | 30 | 4/24** |
| Copper River | | | | |
| | Gakona | 5/1 | 36 | 4/29** |
| | Gulkana | 5/1 | 34 | 4/29** |



| North Slope-Northwest | | | | |
|-----------------------|---------------------------------|---------------------------|--------------------|-------------------------|
| River-Reach | Location | Median Breakup Date | Years of Record | 2025 Breakup Date |
| Koyukuk River | | | | |
| | Bettles | 5/10 | 43 | 5/16** |
| | Allakaket | 5/11 | 38 | 5/12** |
| | Hughes | 5/11 | 38 | 5/13** |
| | | | | |
| Seward Peninsula | | | | |
| | Buckland | 5/18 | 35 | 5/15** |
| | | | | |
| Kobuk River | | | | |
| | Kobuk | 5/14 | 40 | 5/16** |
| | Shungnak | 5/16 | 32 | 5/16** |
| | Ambler | 5/16 | 38 | 5/22** |
| Noatak River | | | | |
| | Noatak | 5/19 | 27 | 5/20** |
| | | | | |
| Brooks Range | | | | |
| | Colville at Umiat | 5/25 | 22 | 5/22-5/28 |
| | Colville at Colville Village | 6/3 | 23 | 5/31-6/6 |



The next Spring Breakup Outlook will be published May 30, 2025.

For more detail and to see the Flood Potential Map refer to the APRFC website at: <u>https://www.weather.gov/aprfc/floodpotential</u>

This product is experimental. For more information and to submit comments, please contact:

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