

# National Petroleum Reserve in Alaska (NPR-A) Weekly Weather and Tundra Travel Report

Bureau of Land Management Alaska, Arctic District Office

Data pulled week of December 1, 2023.

## BACKGROUND

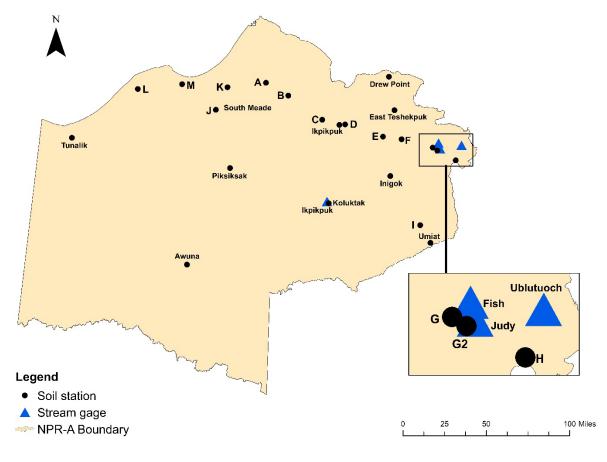
The Bureau of Land Management (BLM) permits snow trail construction in the NPR-A for use by industry and residents in local communities. Along with the U.S. Geological Survey (USGS), BLM Alaska maintains remote monitoring stations to track tundra conditions year-round. BLM shares the data leading up to permitted snow trail construction and throughout the permitted snow trail season. These stations report real-time data\* on snow and soil conditions that may be used to help support the planning of tundra travel within NPR-A. For reference, the tundra may be considered open for off-road travel when soil temperatures reach a minimum of 23°F (-5°C) at 12 inches deep (30 cm) and snow depths average a minimum of 6 inches (15 cm). The number of stations reporting, and the dates of their last report may change throughout the winter due to transmission delays or failures. Station locations are depicted on the map below. \*The data shown is considered raw data and is reported "as-is." Weekly averages are calculated using only data from stations that have successfully transmitted for that reporting week. Water stage height is measured in feet relative to Mean Sea Level (MSL).

### CONCLUSION

**Soil temperature** at 12 inches (30 cm) depth now **averages 30.5°F** (-0.8°C), which is **down 0.2°F from last week**. Tundra soils are not yet sufficiently frozen for overland travel. **Snow depths now average 9.1**" (23.1cm), an **increase of 0.1**" **from last week**. Average snow depth has reached the 6" minimum for off-road travel and permitted snow road prepacking activities may begin. However, due to soils not being sufficiently frozen to reach minimum frost penetration requirements, non-low-ground-pressure vehicles (ground pressure greater than 4 PSI) are not yet permitted. Smaller streams within the NPR-A have begun to freeze.

For more information: please contact BLM Alaska Arctic District Office staff:

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Soil Station C Soil Temp @ 12": 32.1°F Snow Depth: 15.4"

Soil Station E Soil Temp @ 12": 31.6°F Snow Depth: 8.3"

Soil Station F Soil Temp @ 12": 29.1°F Snow Depth: 9.1"

<u>Soil Station G</u> Soil Temp @ 12": 31.8°F Snow Depth: 13.0"

<u>Soil Station G2</u> Soil Temp @ 12": 30.7°F Snow Depth: \*

Soil Station H Soil Temp @ 12": 30.5°F Snow Depth: 13.4"

<u>Soil Station I</u> Soil Temp @ 12": 31.1°F Snow Depth: 13.0" Soil Station J Soil Temp @ 12": 21.5°F Snow Depth: 0.4"

Soil Station K Soil Temp @ 12": 31.4°F Snow Depth: 24.8"

Soil Station M Soil Temp @ 12": 29.4°F Snow Depth: 4.3"

Soil Station N Soil Temp @ 12": 30.9°F Snow Depth: 3.9"

Soil Station Drew Point Soil Temp @ 12": 28.5°F Snow Depth: 1.1"

Soil Station Umiat Soil Temp @ 12": 31.8°F Snow Depth: 9.9"

Lake 145 Soil Temp @ 12": 31.4°F Snow Depth: 13.0" <u>Soil Station Tunalik</u> Soil Temp @ 12": 31.9°F Snow Depth: \*

Soil Station Koluktak Soil Temp @ 12": 30.4°F Snow Depth: 6.8"

Soil Station Awuna Soil Temp @ 12": \* Snow Depth: \*

<u>Soil Station Piksiksak</u> Soil Temp @ 12": 31.8°F Snow Depth: 9.1"

<u>Soil Station East Teshekpuk</u> Soil Temp @ 12": 31.7°F Snow Depth: 5.0"

Soil Station Ikpikpuk Soil Temp @ 12": 31.1°F Snow Depth: 9.2"

Soil Station South Meade Soil Temp @ 12": 30.9°F Snow Depth: 3.5"

#### **Stream Gauge Fish Creek**

Water Stage Height (Stage 2): 18.8' (above MSL) Water Temp (Temp 1): 32.0°F Air Temp (1-week high): 27.9°F Air Temp (1-week low): -6.3°F Air Temp (1-week avg): 10.8°F Max Wind Speed (1-week high): 16.4 MPH

## **Stream Gauge Judy Creek**

Water Stage Height (Stage 2): 22.1' (above MSL) Water Temp (Temp 1): 30.2°F Air Temp (1-week high): 26.8°F Air Temp (1-week low): -8.0°F Air Temp (1-week avg): 9.4°F

#### **Stream Gauge Ikpikpuk River**

Air Temp (1-week high): 27.5°F Air Temp (1-week low): -1.1°F Air Temp (1-week avg): 13.2°F Max Wind Speed (1-week high): 14.0 MPH

#### Stream Gauge Ublutuoch River

Water Stage Height (Stage 2): 7.7' (above MSL) Water Temp (Temp 1): 31.8°F Air Temp (1-week high): 27.3°F Air Temp (1-week low): -8.9°F Air Temp (1-week avg): 9.2°F