

Snow Survey and Water Supply Forecasting (SSWSF) Program

Alaska Data Collection Office (AKDCO)



A little history . .



- The Snow Survey Program's mission since 1935 has been to collect snowpack data in the Western U.S. and Alaska to develop reliable water supply forecasts.
- The Westwide Snow Program is a Federal –State-Private Cooperative Program.
- The first snow surveys in Alaska were May 1st, 1951 – 75 years ago this week.

Snow Courses and Aerial Markers



SNOTELS and SNOLITES



SNOTEL Components

Wind

Snow Depth

Air Temperature

Tipping Bucket (rain gauge)

Electronics Shelter

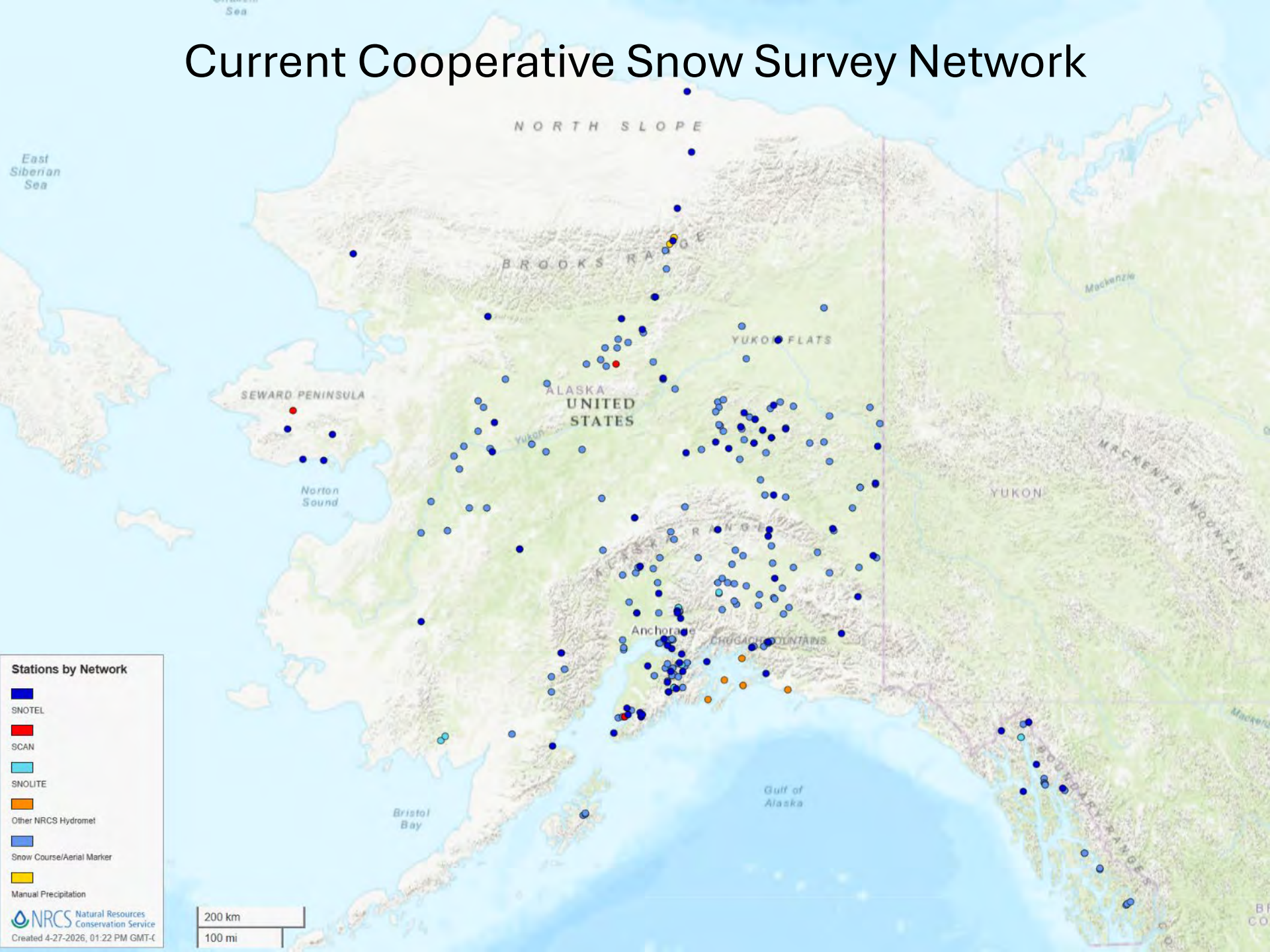
All-season (storage) precipitation gauge

Snow Pillow (SWE)

Soil Probes at 2", 8", 20" from surface (not shown)



Current Cooperative Snow Survey Network



Stations by Network

- SNOTEL
- SCAN
- SNOLITE
- Other NRCS Hydromet
- Snow Course/Aerial Marker
- Manual Precipitation

Natural Resources Conservation Service
Created 4-27-2026, 01:22 PM GMT-C

Chukchi Sea

SNOTEL Network Expansion Plans

ALASKA

Fairbanks

YUKON

Anchorage

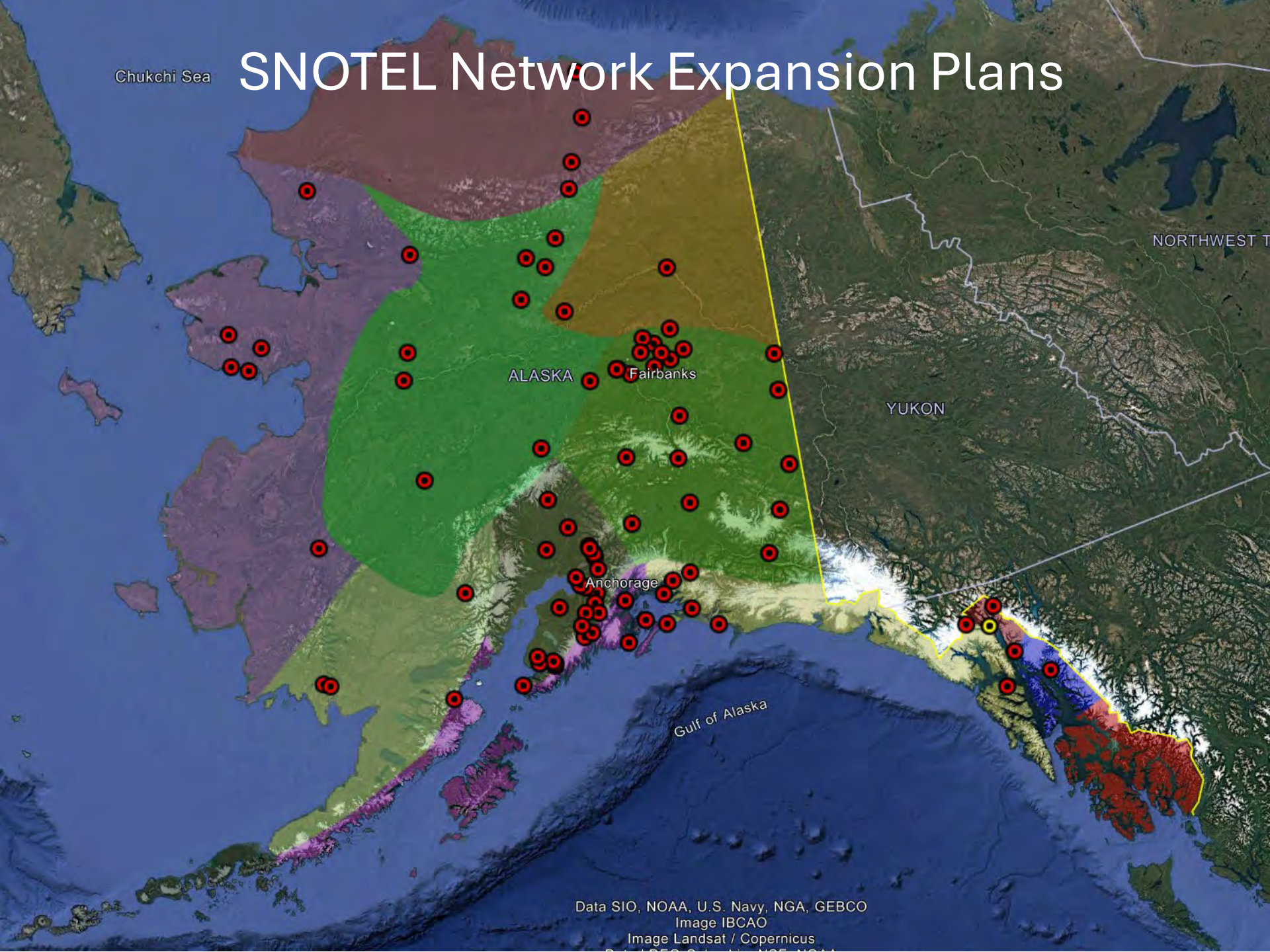
Gulf of Alaska

NORTHWEST T

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image IBCAO

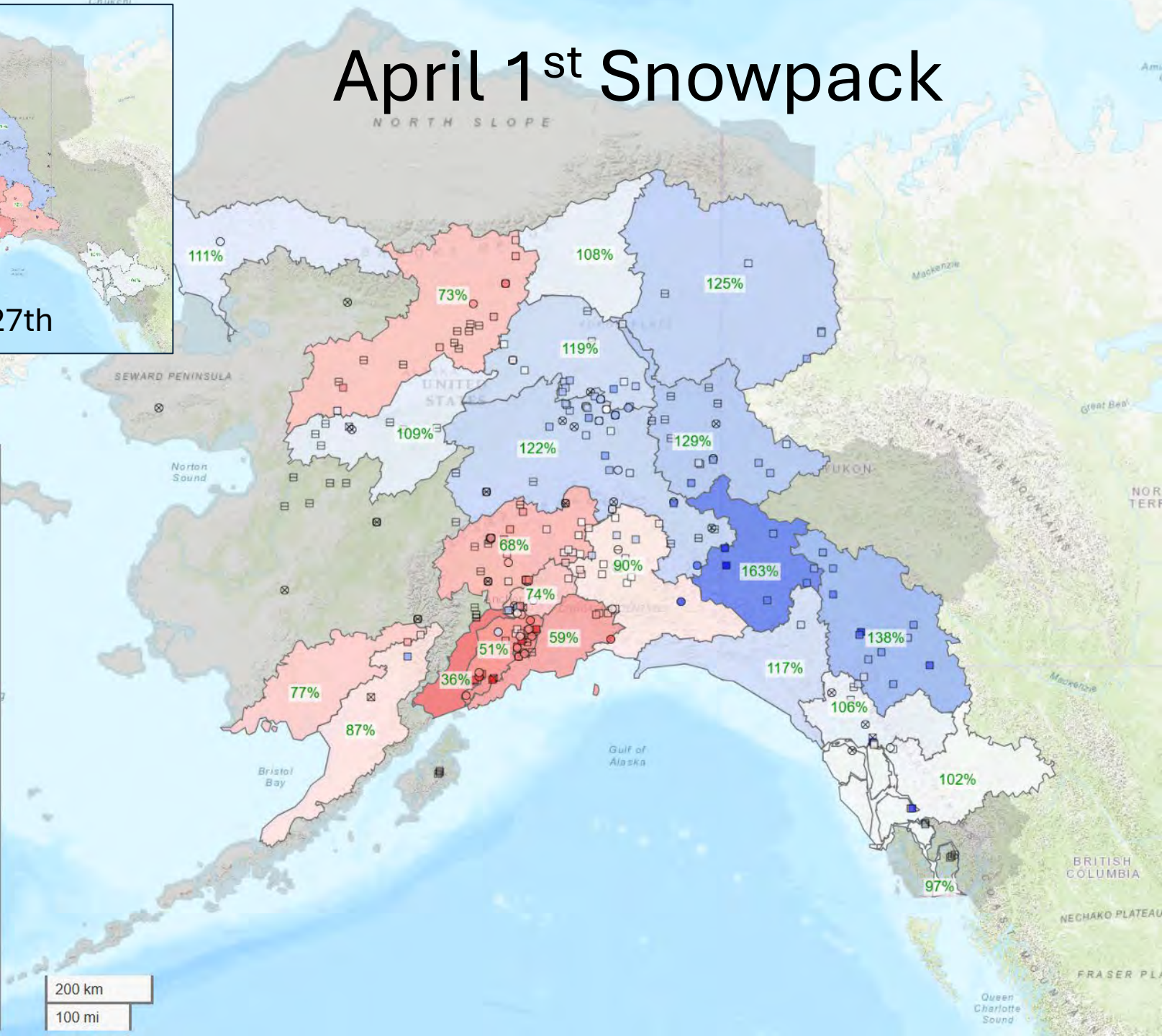
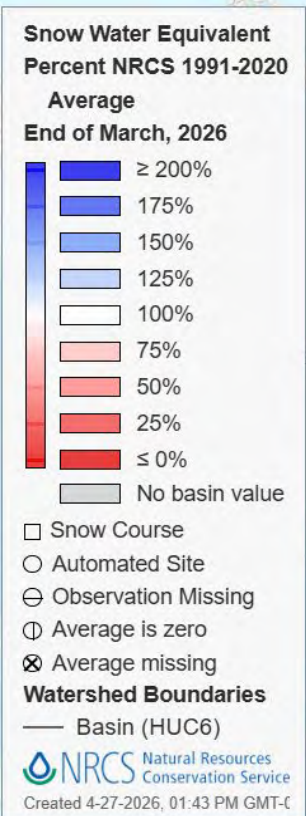
Image Landsat / Copernicus

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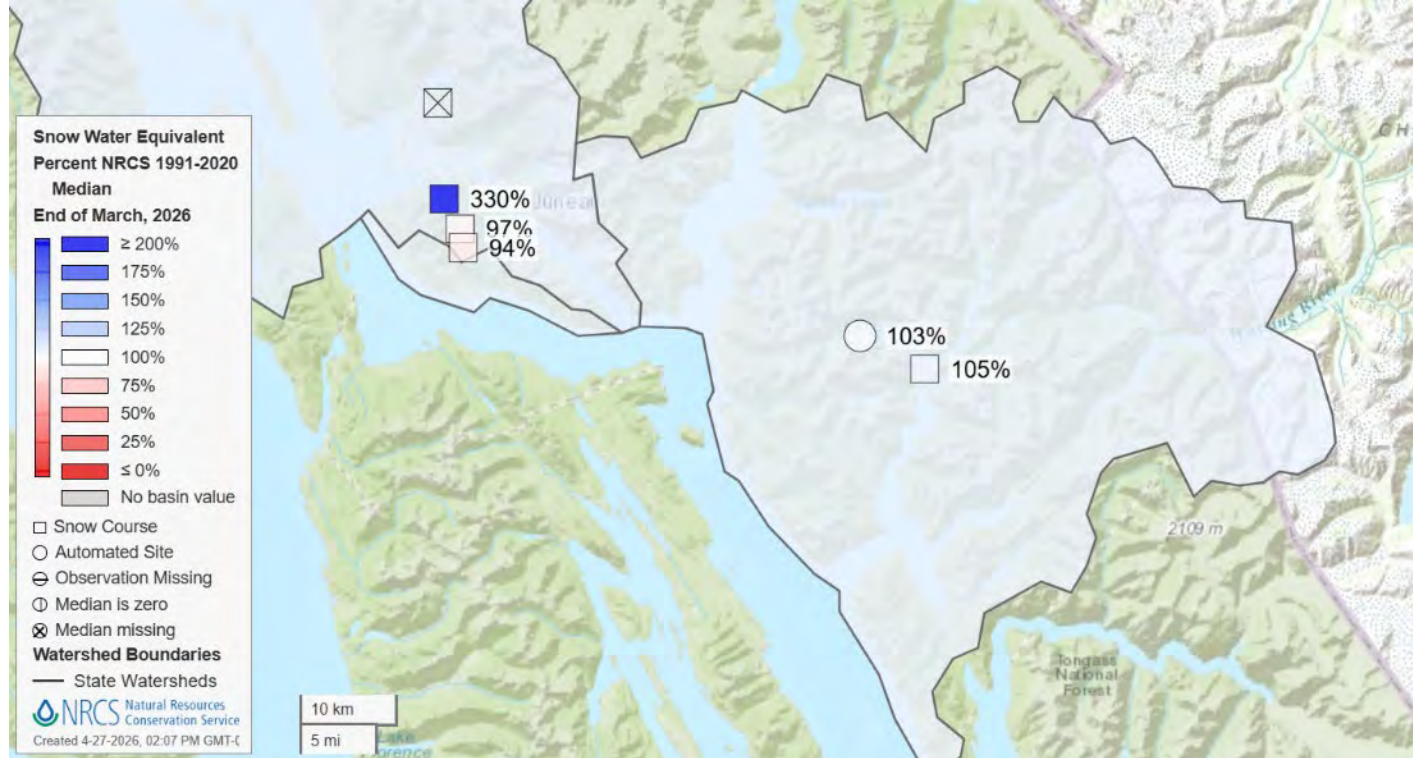


April 1st Snowpack

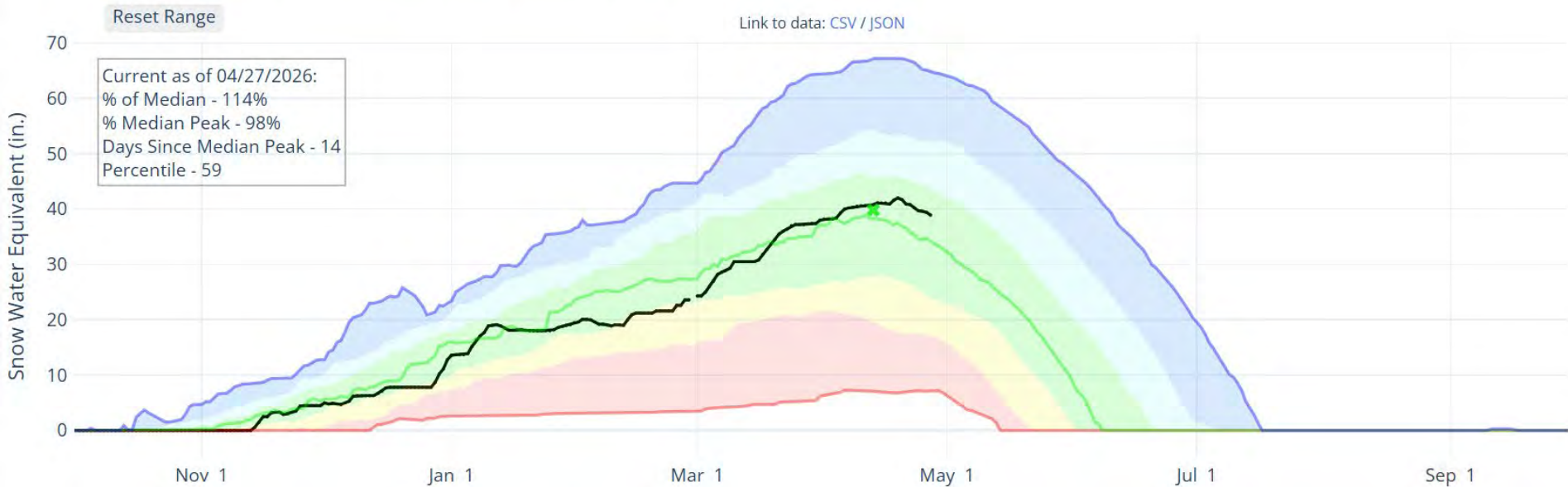
April 27th



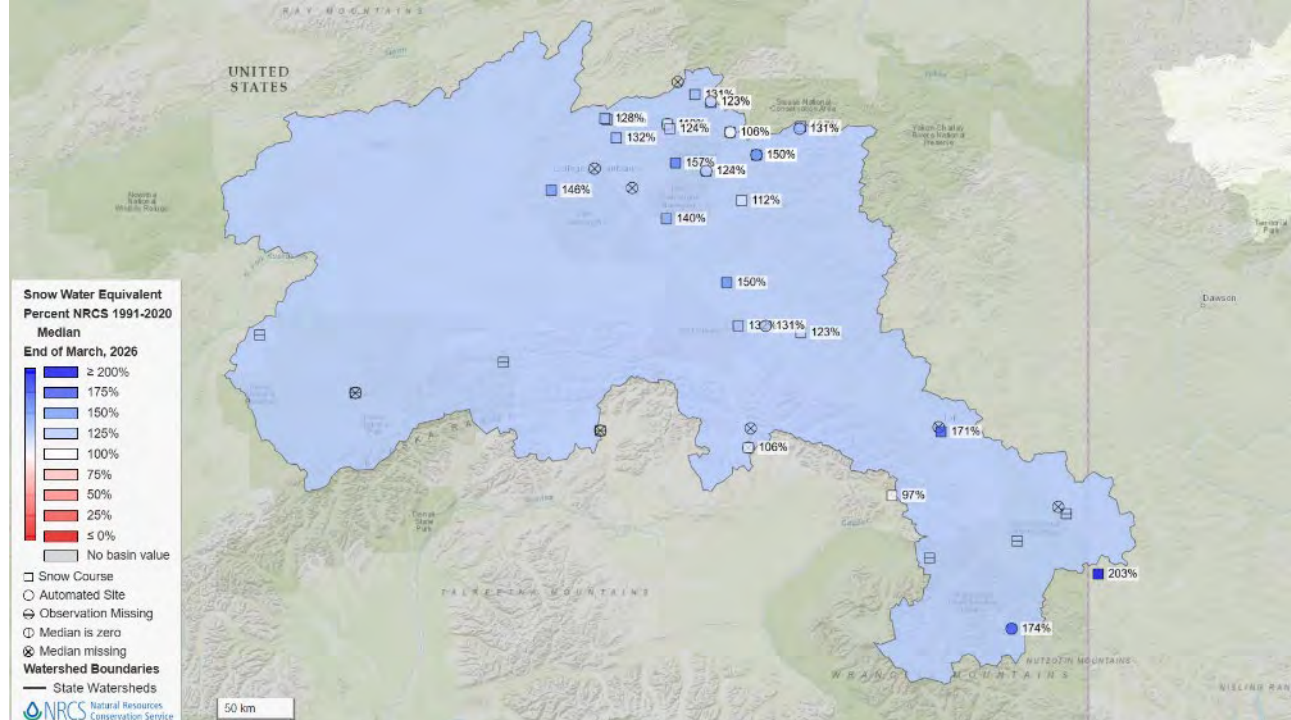
Southeast Snowpack



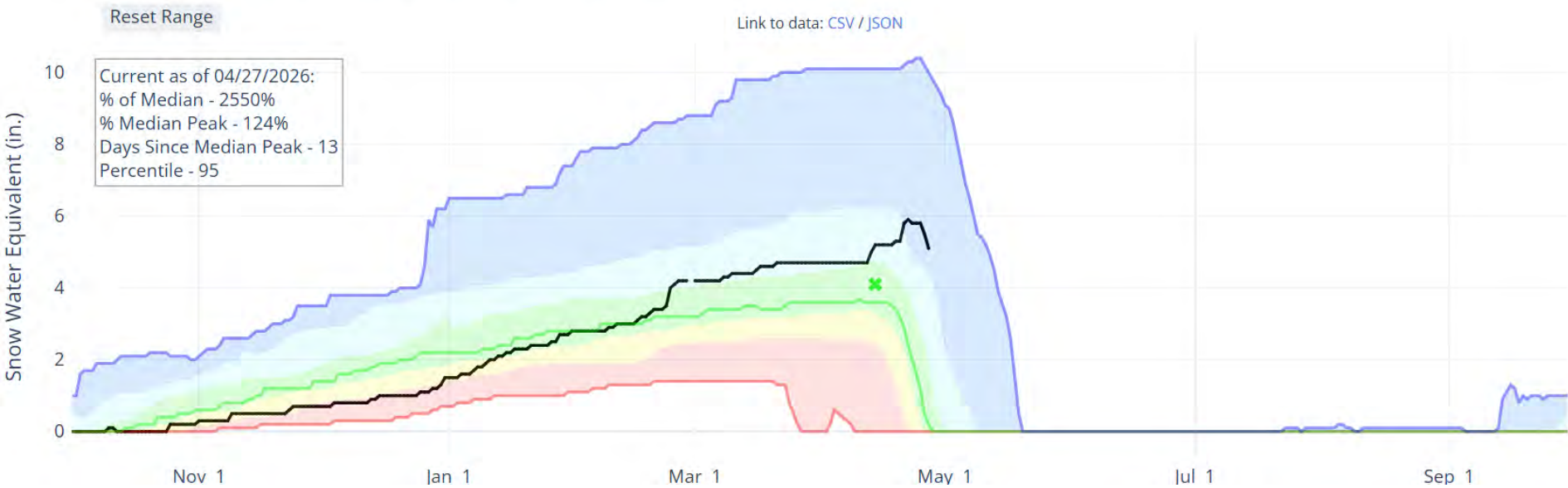
LONG LAKE, AK (1001) SNOW WATER EQUIVALENT



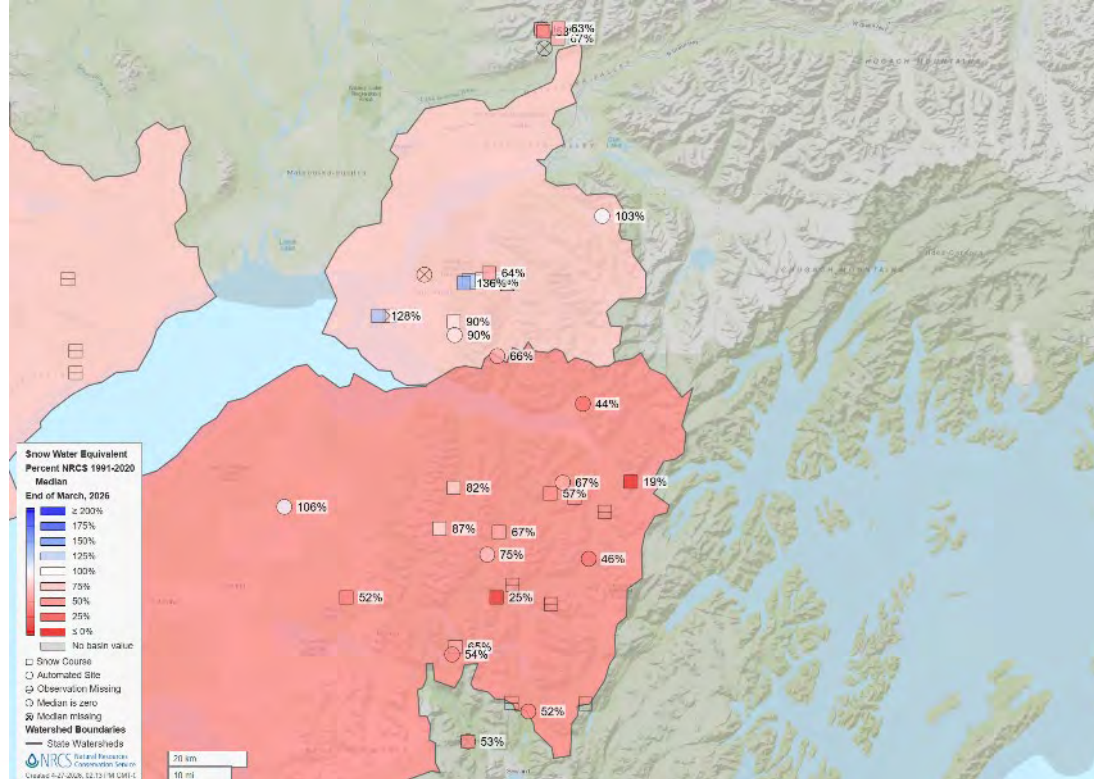
Tanana Snowpack



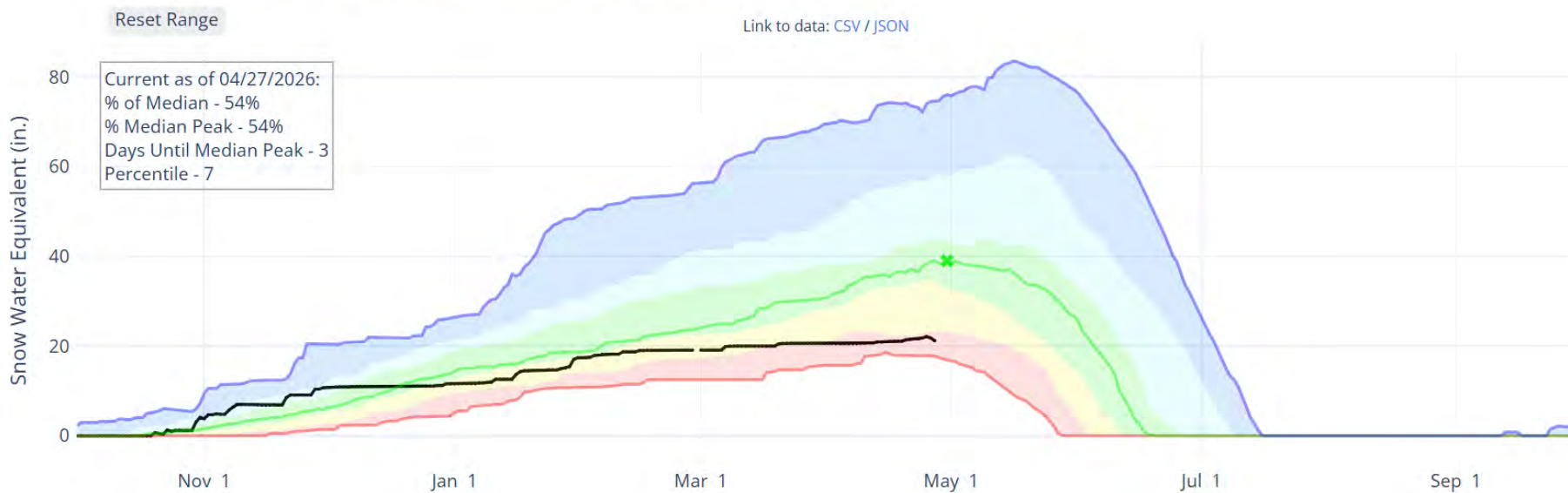
GRANITE CRK, AK (963) SNOW WATER EQUIVALENT



Southcentral Snowpack



TURNAGAIN PASS, AK (954) SNOW WATER EQUIVALENT



New Product – Water Forecast Evolution Plots

Forecast Evolution Plots

Visualize the progression of NRCS forecasts throughout the water year

Select State

Alaska

Select Forecast Point

Gulkana R at Sourdough

Select Forecast Period

Primary Period

Select Forecast Year

2025

Load Data



Forecast Evolution

Gulkana R at Sourdough
WY2025 APR-JUL



- Official Forecasts
 - High
 - 30%
 - 50%
 - 70%
 - Low
- Observed
- 2025 Total
- 30-Yr Median
- 30-Yr Average
- POR Min
- POR Max



New Product –Site Data Generator

-Soil Moisture Plot Shown-

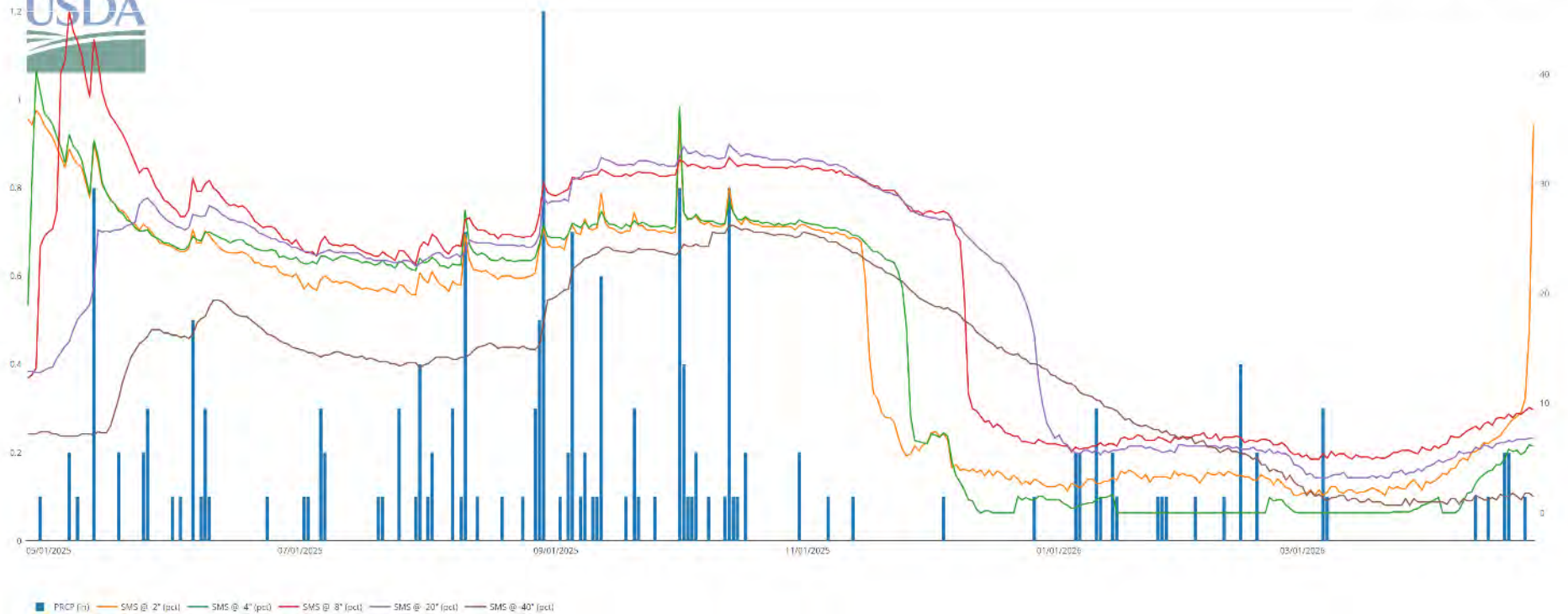
SOIL MOISTURE REPORT



Select an report or element

Click here for bookmark options.

Spring Creek (2044:AK:SNL)



We still produce
4 Winter Reports.

Alaska Snow Survey Report

May 1, 2025



Questions?

