

# USDA-NRCS Snow Survey and Water Supply Forecasting Program Networks

## Objective

This document identifies and defines automated data collection networks managed by the USDA-NRCS Snow Survey and Water Supply Forecasting (SSWSF) Program. All unique networks required for internal and external purposes are identified, named, and clearly defined.

## Networks, Definitions, and Assignments

All stations are assigned to a single Network. Stations are assigned to a Networks based on a cascading bin schema. All stations are evaluated at the top of the Network hierarchy against defined Network criteria. These criteria are primarily sensor based, although there are secondary and tertiary criteria defined to deal with tie-breakers between SCAN and SNOTEL (rare) and special situations. Stations that do not meet the criteria cascade to the next Network until they meet the criteria for a specific Network. This is guaranteed by the definition of the Networks.

To be assigned to the SNOTEL, SCAN, or SNOLITE groups, the site must meet these requirements:

- Minimum reporting frequency: Daily
- Method of data collection: Telemetered (meteor burst, satellite, etc.)
- Site maintenance and data QC is the responsibility of NRCS staff (or NRCS contract staff)

Network	Primary Criteria (Sensor Configuration)	Secondary Criteria (Monitoring Purpose)	Tertiary Criteria (Internal Use only?)
<b>SNOTEL</b>	At least 3 of 4*: Snow Water Equivalent, Snow Depth, All Phase Precipitation, Air Temperature	Mountain Snowpack and Precipitation	No
<b>SCAN</b>	At least 4 of 6*: Soil Moisture/Temperature, Air Temperature, Relative Humidity, Liquid (or All Phase) Precipitation, Wind Speed, Incoming Solar Radiation	Agriculturally Significant Soils	No
<b>SNOLITE</b>	Snow Water Equivalent* or Snow Depth*, Air Temperature*	Mountain Snowpack	No
<b>EXPERIMENTAL</b>	N/A	Research and Development	Yes
<b>OTHER NRCS HYDROMET</b>	Does not meet criteria for SNOTEL, SCAN, SNOLITE or EXPERIMENTAL Networks	Any	No

\* Sensors must adhere to published NRCS standards ([Title 210, NEH Part 622, Chapter 2, Data Parameters](#)) in order to count toward minimum sensor count requirement.

**Network**

**Assignment**

**Flow Chart**

