

# Interactive Map Glossary

## Element Definitions

- **Snow Water Equivalent (SWE)** – A measurement of the amount of water contained in snowpack. It can be considered as the depth of water that would theoretically result if the whole snowpack instantaneously melts. Snow water equivalent is the product of snow depth and snow density.
- **Snow Water Equivalent Delta** – Change in snow water equivalent for a user-selected duration.
- **Snow Water Equivalent Water Year Peak** – Maximum daily snow water equivalent for a given water year. Current Water Year Peak is defined as maximum daily snow water equivalent to date. Not calculated if all daily data prior to January 1 is missing.
- **Snow Water Equivalent Date of Water Year Peak** – Date within a water year when peak daily snow water equivalent is reached (latest date if peak occurs on more than one date). Not calculated if all daily data prior to January 1 is missing.
- **Snow Depth** – Actual depth of snow from the snow surface to the ground.
- **Snow Depth Delta – Change** in snow depth for a user-specified duration.
- **Snow Depth Water Year Peak** – Maximum daily snow depth for a given water year. Current Water Year Peak is defined as maximum daily depth to date.
- **Snow Depth Date of Water Year Peak** – Date within a water year when peak daily snow depth is reached (latest date if peak occurs on more than one date).
- **Snow Density** – Mass of snow per volume as compared to the mass of water for the same volume. Snow Water Equivalent/Snow Depth. Not calculated if SWE value < 1”.
- **Snow Density Delta** – Change in snow density for a user-specified duration.
- **Precipitation** – Any type of water that forms in the Earth's atmosphere and then drops onto the surface of the Earth under the force of gravity. The most common types of precipitation are rain, hail, and snow.
- **Reservoir Storage** – Volume of usable water stored in a reservoir.
- **Reservoir Storage Delta** – Change in reservoir storage for a user-specified duration.
- **Streamflow – Adjusted Volume–Observed** – Volume of streamflow that would occur without the influences of major upstream reservoirs or diversions, otherwise known as *unregulated* or *naturalized flow*. Reservoirs and diversions are used as an adjustment based on size of reservoir/diversion relative to total streamflow volume and availability of historical records. Adjusted Volume datasets include streamflow points that are:
  - Adjusted due to the presence of major upstream reservoirs/diversions with historical records.
  - Not adjusted due to lack of major upstream reservoirs/diversions.
  - Not adjusted or partially adjusted due to lack of historical records for all major upstream reservoirs/diversions.

Volumetric Natural Resources Conservation Service (NRCS) water supply forecasts are for Adjusted Volume.

- **Streamflow – Adjusted Volume–Forecast** – Volumetric seasonal streamflow forecasts as issued by the NRCS Snow Survey and Water Supply Forecasting (SSWSF) Program.
- **Streamflow – Observed Volume** – Volume of streamflow as observed at a gaging station. In a watershed with major reservoir storage and/or diversions, the observed volume can be significantly different from the adjusted volume.
- **Streamflow – Diversion Discharge** – Flow rate as measured in or along a diversion structure.
- **Streamflow – Forecast Point** – Point within a watershed for which volume, threshold, and/or stage forecasts are published by the NRCS Snow Survey and Water Supply Forecasting Program.

## Parameter Definitions

- **Value** – Magnitude, quantity, or number of measured or calculated elements for selected date or duration.
- **Percent of Official Average** – Value as a percent of the Official NRCS 30-Year Average for selected date or duration (not available for all elements or stations).
- **Percent of Official Median** – Value as a percent of the Official NRCS 30-Year Median for selected date or duration (not available for all elements or stations).
- **Percent of POR Average** – Value as a percent of the Period of Record (POR) or user-selected reference period average for selected date or duration. Average calculation includes the value for the date being analyzed.
- **Percent of POR Median** – Value as a percent of the Period of Record (POR) or user-selected reference period median for selected date or duration. Median calculation includes the value for the date being analyzed.
- **Percent of Water Year Peak** – Value as a percent of Water Year Peak.
- **Percent of Average Water Year Peak** – Value as a percent of Average Water Year Peak from period of record or user-selected reference period.
- **Percent of Median Water Year Peak** – Value as a percent of Median Water Year Peak from period of record or user-selected reference period.
- **Anomaly – POR Median Departure** – Difference between value and period of record or user-selected reference period median for selected date or duration. Median calculation includes the value for the date being analyzed.
- **Percentile** – Percentage of period of record or user-selected reference period observations that are less than or equal to the value being analyzed for selected date or duration. Percentile =  $1 - ((m-1)/(n-1))$  where  $m$ =rank and  $n$ =number of observations.
- **Maximum Rank** – Rank or position of analyzed value within period of record or user-selected reference period observations for selected date or duration where rank=1 is the maximum value. If more than one value has the same rank, the top rank of that set of values is returned.

- **Minimum Rank** – Rank or position of analyzed value within period of record or user-selected reference period observations for selected date or duration where rank=1 is the minimum value. If more than one value has the same rank, the top rank of that set of values is returned.
- **Records** – Determines whether analyzed value is greater (less) or equal to the highest (lowest) or 2<sup>nd</sup> highest (2<sup>nd</sup> lowest) value in the period of record or user-selected reference period for the selected date or duration.
- **Official Average** – Official NRCS 30–Year Average updated every 10 years for selected date or duration. (Currently 1981–2010 average. Not available for all elements or stations.)
- **Official Median** – Official NRCS 30–Year Median updated every 10 years for selected date or duration. (Currently 1981–2010 average. Not available for all elements or stations.)
- **POR Average** – Period of Record (POR) or user-selected reference period average for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **POR Median** – Period of Record (POR) or user-selected reference period median for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **POR Minimum** – Period of Record (POR) or user-selected reference period minimum value for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **POR Maximum** – Period of Record (POR) or user-selected reference period maximum value for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **Year of POR Minimum – Calendar** year(s) of Period of Record (POR) or user-selected reference period minimum value for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **Year of POR Maximum** – Calendar year(s) of Period of Record (POR) or user-selected reference period maximum value for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.
- **Number of Observations** – Number of values in Period of Record or user-selected reference period dataset for selected date or duration. For Water Year Peak or Date of Water Year Peak, current Water Year is not included in the calculation.

## Parameter Display Rules

- **Minimum Data Requirements** – User configurable, but default minimum n=2/3 of reference period for selected date/duration required for map color display for Percentile, Maximum Rank, Minimum Rank, Records, POR average, Percent of POR Average, POR Median, Percent of POR Median, year of POR Minimum, Year of POR Maximum, and Anomaly–POR Median Departure.
- **Data Variability Rule** – For map color display for Percentile, Maximum Rank, Minimum Rank and Records.

If current value  $> 0$ , then need at least 10% of values in record for selected date/duration (including current value) to be  $> 0$ .

If current value = 0, then need at least 80% of values in record for selected date/duration (including current value) to be  $> 0$ .