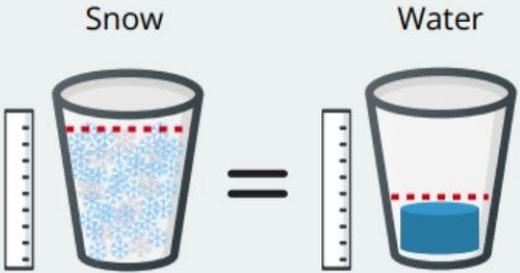


Snow water equivalent description from the Northwest Climate Hub

USDA Northwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE

SNOW WATER EQUIVALENT



Snow Water Equivalent, often called **SWE**, is a **measurement of how much water is in melted snow**. Because one inch of precipitation can produce between two inches of sleet to 50 or more inches of snow, depending on how cold the air is, SWE is a more reliable way to measure water supplies. It is used by hydrologists and water managers to plan for water use.

Snow water equivalent (SWE) determines the amount of water available in the snow. Measuring how much water is in snow can be difficult since the temperature of the air controls how much water is held in an inch of snow. Different storms bring different types of snow that can hold different amounts of water. Warmer-weather snowstorms can create two inches of sleet for an inch of rain, whereas very cold snowstorms may create over 50 inches of very dry, powdery snow for an inch of rain. Throughout winter, different storms bring different types of snow, so snow depth does not translate directly to the amount of water held in snow. Because of this variability, SWE helps to understand how much water the snow contains.

Detailed discussion - [Snow Water Equivalent \(SWE\) — Its Importance in the Northwest | USDA Climate Hubs](#)

Video from the Weather Channel - [Science with Steph: Snow Ratios](#)