

# Seattle-Tacoma, Washington Climate Report for 2019/20

**Synopsis:** Some climate patterns are setting up, suggesting a high likelihood for a significant rainfall deficit along the west coast of the United States this fall, similar to 2013 when a pattern known as the “ridiculously resilient ridge” formed along the west coast, significantly reducing fall precipitation for the region. Winter has a high probability of featuring near normal to slightly drier than normal conditions. Warmer than average or near normal temperatures are favored for both the fall and winter seasons, with only small chances for cooler than normal conditions.

## **Fall (October-December Average) Rainfall:**

Average Rainfall in the Seattle-Tacoma region for October-December is 15.6”, based on 1948-2018 SeaTac station data provided by NOAA

## **Qualitative Fall Rainfall Forecast:**

- >>70-75% chance of drier than normal conditions
- >>10-15% chance of near normal rainfall\*
- >>10-15% chance of wetter than normal conditions

\*Near normal conditions defined as within 2.5” of the average 15.6”

## **Quantitative Fall Rainfall Forecast:**

- >>25-30% chance of 7” or more drier than normal
- >>25-30% chance of 4.5” to 7” drier than normal
- >>20% chance of 2.5” to 4.5” drier than normal
- >>10-15% chance of near normal conditions, less than 2.5” wetter than normal to less than 2.5” drier than normal
- >>3-5% chance of 2.5” to 4.5” wetter than normal
- >>3-5% chance of 4.5” to 7” wetter than normal
- >>3-5% chance of 7” or more wetter than normal

## **Fall (October-December Average) Temperature:**

Average Mean Temperature in the Seattle-Tacoma region for October-December is 46.6°F (average of the high and low temperatures for the day), based on a 30-year average. 1989-2018 was taken as the average. The most recent 30 years were taken as the average to reduce bias associated with warming temperatures in recent decades.

## **Qualitative Fall Temperature Forecast:**

- >>45-50% chance of warmer than normal conditions

- >>40-45% chance of near normal conditions\*
- >>10% chance of cooler than normal conditions

\*Near normal conditions defined as within 1°F of the average mean temperature for October-December (46.6°F at SeaTac Airport as defined above).

### **Quantitative Fall Temperature Forecast:**

- >>5-10% chance of 3°F or more warmer than average
- >>25-30% chance of 2°F to 3°F warmer than average
- >>10-15% chance of 1°F to 2°F warmer than average
- >>40-45% chance of 1°F cooler than average to 1°F warmer than average (near normal)
- >>3-4% chance of 1°F to 2°F cooler than normal
- >>6-7% chance of 2°F to 3°F cooler than normal
- >>Less than 2% chance of 3°F or more cooler than normal

### **Winter (December-February Average) Rainfall:**

Average Rainfall in Seattle-Tacoma region for December-February is 15.5", based on 1948-2018 SeaTac Station Data Provided by NOAA

### **Qualitative Winter Rainfall Forecast:**

- >>60% chance of drier than normal conditions
- >>30-35% chance of near normal rainfall\*
- >>5-10% chance of wetter than normal conditions

\*Near normal conditions defined within 2.5" of the average 15.5"

### **Quantitative Winter Rainfall Forecast:**

- >>10-15% chance of 7" or more drier than normal
- >>10-15% chance of 4.5" to 7" drier than normal
- >>30-35% chance of 2.5" to 4.5" drier than normal
- >>30-35% chance of near normal conditions, less than 2.5" wetter than normal to less than 2.5" drier than normal
- >>2-5% chance of 2.5" to 4.5" wetter than normal
- >>2-5% chance of 4.5" to 7" wetter than normal
- >>Less than 2% chance of 7" or more wetter than normal

## **Winter (December-February Average) Temperature:**

Average Mean Temperature in the Seattle-Tacoma region for October-December is 42.1°F (average of the high and low temperatures for the day), based on a 30-year average. 1989-2018 was taken as the average. The most recent 30 years were taken as the average to reduce bias associated with warming temperatures in recent decades.

### **Qualitative Winter Temperature Forecast:**

- >>50% chance of warmer than normal conditions
- >>35-40% chance of near normal conditions\*
- >>10-15% chance of cooler than normal conditions

\*Near normal conditions defined as within 1°F of the average mean temperature for December-February (42.1°F at SeaTac Airport as defined above).

### **Quantitative Winter Temperature Forecast:**

- >>20% chance of 3°F or more warmer than average
- >>20% chance of 2°F to 3°F warmer than average
- >>10% chance of 1°F to 2°F warmer than average
- >>35-40% chance of 1°F cooler to 1°F warmer than average (near normal conditions)
- >>10-15% chance of 1°F to 2°F cooler than average
- >>Less than 2% chance of 2°F to 3°F cooler than average
- >>Less than 2% chance of 3°F or more cooler than average