North Santiam Watershed Drought Stage Calculator

Month	November 2026

Indicator	Value	Drought Stage	Source
Air temperature	3.3	2	https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=6
Precipitation	44	3	https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=4
Snowpack			https://www.wcc.nrcs.usda.gov/ftpref/nwcc/basin-rpt/
Detroit Reservoir (+/- WCD)	-14.7	2	https://public.crohms.org/nwp/teacup/willamette/
Streamflow (Greens Bridge)	10-24 (Below Normal)	1	https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=huc-1709&view=default
Streamflow (Mehama)	>24	0	https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=huc-1709&view=default
Streamflow (Boulder Creek)	New low (Extreme drought)	4	https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=huc-1709&view=default
Water temperature (Greens Bridge)	12.8	1	https://waterdata.usgs.gov/monitoring-location/USGS-14184100/#period=P7D&dataTypeId=continuous-00010-0&showFieldMeasurements=true
Water temperature (Boulder Creek)	8.1	0	https://waterdata.usgs.gov/monitoring-location/USGS-14178000/#period=P7D&dataTypeId=continuous-00010-0&showFieldMeasurements=true
Water temperature (Little North Santiam)	9.7	0	https://waterdata.usgs.gov/monitoring-location/USGS-14181900/#period=P7D&dataTypeId=continuous-00010-0&showFieldMeasurements=true
Wildfire hazard	Low	0	https://www.fs.usda.gov/r06/willamette/fire
Boat ramps (Detroit elevation in ft)			https://public.crohms.org/nwp/teacup/willamette/
Salem water supply (Mehama)	1557	0	https://waterdata.usgs.gov/monitoring-location/USGS-14183000/#period=P1Y&dataTypeId=daily-00060-0&showFieldMeasurements=false

Number of Indicators	11
Average for drought stage	1.182
Drought Stage	**1**

Climate Indicators

Drought Stage	Air temperature (1 month departure from normal, °F): Santiam River basin, year-round	Precipitation (% normal for water year): Santiam River basin, October - May	Precipitation (% normal for water year): Santiam River basin, April - September
0	<0.5	81+	86+
1	0-2	71-80	81-85
2	2-4	61-70	71-80
3	4-6	41-60	61-70
4	6+	40 or <	60 or <

Hydrologic Indicators

Drought Stage	Snowpack (% normal snow water equivalent): North Santiam, December - February	Snowpack (% normal snow water equivalent): North Santiam, March - May
0	71+	86+
1	61-70	71-85
2	51-60	61-70
3	21-50	51-60
4	20 or <	50 or <

Drought Stage	Detroit Reservoir level (% above water control diagram): February - May	Detroit Reservoir level (% above water control diagram): June - October
0	>-3	>-3
1	-3 to -10	-3 to -10
2	-11 to -30	-11 to -20
3	-31 to -50	-21 to -35
4	-51 or <	-36 or <

Drought Stage	Streamflow (USGS 7-day flow class and percentile): Greens Bridge, year-round	Streamflow (USGS 7-day flow class and percentile): Mehama, year-round	Streamflow (USGS 7-day flow class and percentile): Boulder Creek, year-round
0	>24	>24	>24
1	10-24 (Below Normal)	10-24 (Below Normal)	10-24 (Below Normal)
2	6-9 (Moderate Drought)	6-9 (Moderate Drought)	6-9 (Moderate Drought)
3	<=5 (Severe Drought)	<=5 (Severe Drought)	<=5 (Severe Drought)
4	New low (Extreme drought)	New low (Extreme drought)	New low (Extreme drought)

Environmental Indicators

Drought Stage	Water temperature (above TMDL threshold, °C): Greens Bridge, September 1 - June 15	Water temperature (above TMDL threshold, °C): Greens Bridge, June 16 - August 31	Water temperature (above TMDL threshold, °C): Boulder Creek, year-round
0	<-1.0	<-1.0	<-1.0
1	-1.0 to 0	-1.0 to 0	-1.0 to 0
2	0.1 to 2.0	0.1 to 2.0	0.1 to 2.0
3	2.1 to 4.0	2.1 to 4.0	2.1 to 4.0
4	4.1+	4.1+	4.1+

Drought Stage	Water temperature (above TMDL threshold, °C): Little North Santiam, September - June	Water temperature (above TMDL threshold, °C): Little North Santiam, year-round
0	<-1.0	<-1.0
1	-1.0 to 0	-1.0 to 0
2	0.1 to 2.0	0.1 to 2.0
3	2.1 to 4.0	2.1 to 4.0
4	4.1+	4.1+

Drought Stage	Wildfire hazard (National Fire Danger Rating System): Willamette National Forest, year-round
0	Low
1	Moderate
2	High
3	Very High
4	Extreme

Socioeconomic Indicators

Drought Stage	Boat ramps served (feet): Detroit Reservoir, April - September	Salem water supply (7-day average streamflow, cfs): USGS gage at Mehama, year-round
0	>1558	>1000
1	1558-1556	901-1000
2	1555-1540	801-900
3	1539-1450	701-800
4	<1450	700 or <