



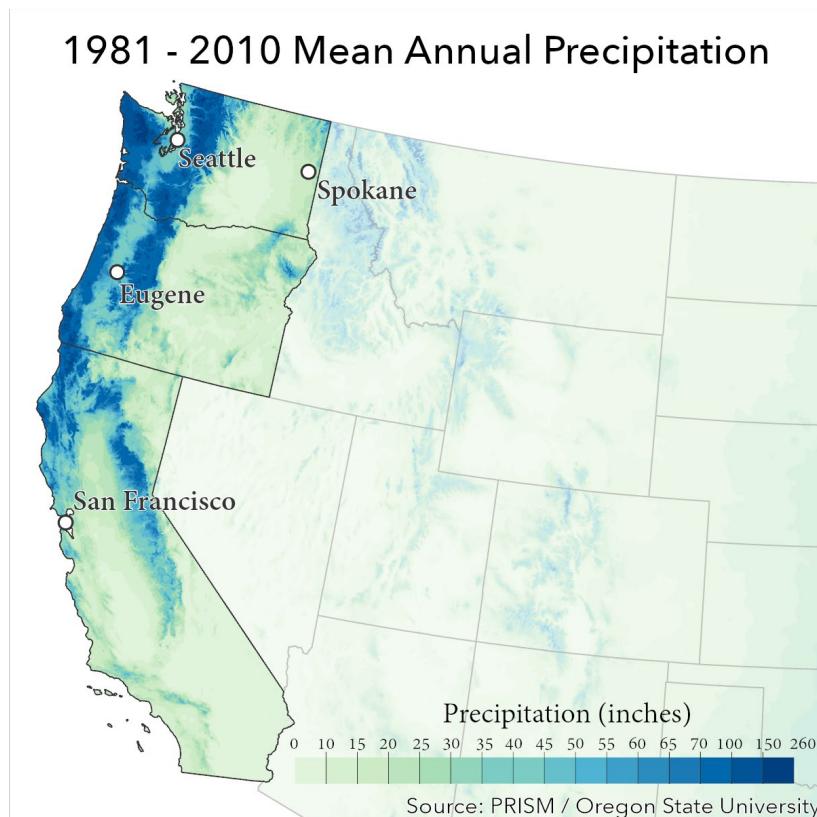
Condition Monitoring Reporting Guide: Pacific Northwest

Regional Background

Along the coast, the Pacific Northwest is famously rainy. Summer is relatively dry, but rainfall is frequent throughout the rest of the year. Temperatures are relatively moderate along the coast in all seasons, meaning that most winter precipitation at lower elevations falls as rain rather than snow. The eastern interior of the region is a rain shadow with very little precipitation. The interior is characterized by hot summers and cold winters, though the lack of humidity keeps night-time temperatures cool all year. (CoCoRaHS observers in Southern California should consult the Southwest Reporting Guide.)

Reporting Reminders

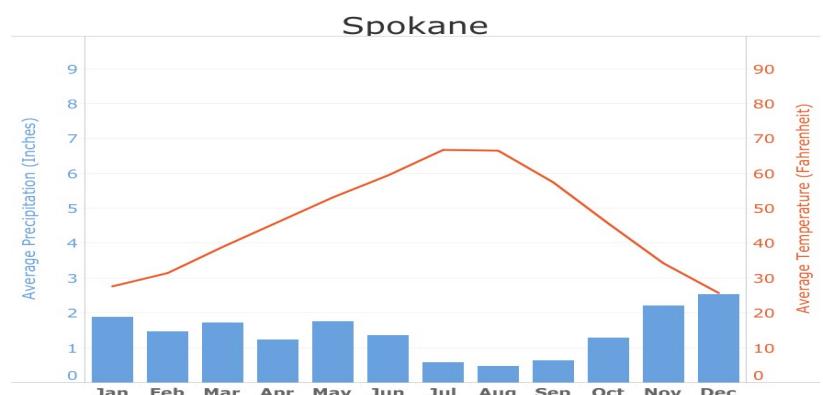
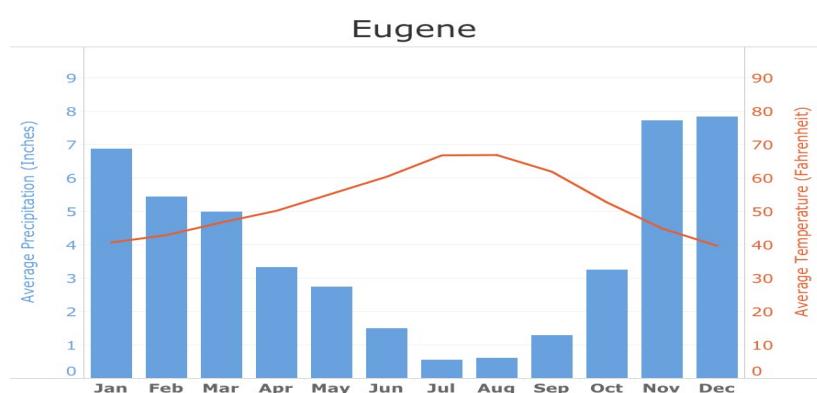
- Use “Severe” categories sparingly: overuse of these labels can make it hard for researchers to identify the hardest hit areas.
- Sometimes, minor events may still have major human impacts, or vice versa. Don’t worry if your precipitation measurements seem to conflict with the severity reflected in your reports: differentiating between magnitude and human impact is valuable to researchers and decision makers!
- While heat and drought often go together, be careful to note that impacts of heat (e.g., wilting plants) are not necessarily indicative of drought conditions.
- Droughts don’t end instantly. Rain after long droughts may mean *less dry* conditions, but not necessarily a reset to “Near Normal” conditions. Think *long term*.
- In addition to rain measurements, notes on a storm’s duration, power outages, road closures, and other such impacts are helpful to include.



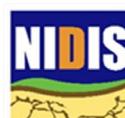
Average Monthly Climate Data

These sample climate charts represent normal monthly precipitation and temperature in your region. Pick a city near you and use the data below as a baseline for your “near normal” conditions. Explore these resources for climate data in other locations:

- [National Drought Mitigation Center](#)
- [NOAA National Centers for Environmental Information](#)
- [NOAA Regional Climate Centers](#)
- [American Association of State Climatologists](#)



Data Source: NOAA National Centers for Environmental Information



What to Look For

The following tables provide examples of the types of conditions you might observe during different wet or dry periods. **These lists are designed as an aid.** The first table shows the condition monitoring scale bar categories and the types of conditions that correspond to those categories. The second table organizes different types of conditions and impacts by sectors and areas of interest. Be sure to note any other observations that you think may relate to dry or wet conditions.

SEVERELY WET	MODERATELY WET	MILDLY WET	NEAR NORMAL	MILDLY DRY	MODERATELY DRY	SEVERELY DRY
<ul style="list-style-type: none"> • Use this category sparingly • Wet conditions have persisted for several weeks • Major flooding • Soil is saturated 	<ul style="list-style-type: none"> • Wet conditions have persisted for a few weeks, or there has been a major rainfall event • Standing water and minor flooding • Soil is very damp 	<ul style="list-style-type: none"> • Frequent precipitation for several days • Standing water is common • Soil moisture is above normal 	<ul style="list-style-type: none"> • Observed conditions normal for this time of year • This should be your default entry 	<ul style="list-style-type: none"> • Dry conditions have persisted for a few weeks • Soil is somewhat dry 	<ul style="list-style-type: none"> • Dry conditions have persisted for several weeks • Lakes and rivers are low • Water use restrictions start • Soil is very dry 	<ul style="list-style-type: none"> • Use this category sparingly • Dry conditions have persisted for months • Soil is completely dry • Water is scarce • State of Emergency

	WET	DRY
Agriculture	Crops and grazing pastures will likely be green and in healthy conditions. Even with moderately wet conditions, need for irrigation may drop off noticeably. Orchard fruits and berries will likely yield larger and more plentiful fruit.	Without enough water, crops may develop late, show stunted growth, or yield smaller harvests. Irrigation systems in the interior may be strained. Livestock may be smaller or require supplemental water and feed, especially where the growth of pastureland is stunted. Ranchers may reduce their herd sizes.
Business	Rainy and muddy conditions may delay construction and infrastructure projects. Flooding or snow may result in school closures or lost work hours, particularly in rural areas where alternative routes may not be available.	Landscaping and similar businesses are likely to lose revenue as urban areas are pressured to reduce their water consumption. Algal blooms and diminished water quality may contribute to a decline in shellfish harvests.
Energy	Hydropower output may benefit from increased snowmelt. Periods of heavy rain or snow may create the risk of power outages due to wind, ice, or falling limbs.	Dying tree limbs, heat, and subsiding soil are threats to electrical infrastructure and may increase the likelihood of power outages. Utility bills may increase, especially in areas reliant on hydroelectric, coal, or nuclear plants. Increases in solar energy production are possible.
Fire	Fire danger declarations at or near minimum. Fire crews will often wait for wet conditions to perform prescribed burns to minimize the danger of unwanted spreading.	Wildfires will be larger and more common, as reflected by increases in Fire Danger ratings from the U.S. Forest Service. Firefighting groups may be strained and put out calls for volunteer firefighters. Fire season may begin earlier or last later into the season with dry conditions.
Plant & Wildlife	Rainy seasons may improve conditions for fish and shellfish. Increased growth of mosses can also be expected. Heavier-than-usual snowfall at high elevations may push animal populations farther down the mountain to forage, potentially resulting in more encounters with humans.	Scarcity of resources may push bears into residential areas. Fish migration may be impeded by low flows and populations of fish and shellfish may show signs of stress. Fish hatcheries may be forced to close. Damage to native tree populations may increase risk for outbreaks of pine beetles. Visible signs of disease may appear in bird populations.
Relief & Response	Restrictions on water use and outdoor burning are likely to be lifted or relaxed as weather shifts from dry to wet. Highway safety measures are possible on routes likely to be affected by fog, flooding, ice, or landslides.	Governments and other agencies may issue statements encouraging voluntary conservation of water and energy. These will often become mandatory if drought worsens. Regulations on outdoor burning and the use of fireworks are common, even at low levels of drought. Rangelands under the Conservation Reserve Program may be opened for emergency grazing.
Safety & Health	Heavy, saturated soil creates a risk of landslides and flooding in the region. In mountainous areas, weather can be highly variable throughout the year, making driving conditions dangerous. Pooling water can cause increases in mosquito populations following wet periods.	Areas of the Northwest's interior may experience dust storms as topsoil dries out. The shallowing of wetlands may increase the presence of stagnant water and contribute to higher mosquito levels. Pollen and diminished air quality may exacerbate allergies and asthma symptoms.
Tourism & Recreation	Relatively wet seasons may often work to the benefit of ski and rafting seasons. While the region is characterized by frequent rain, extended wet periods may still discourage hiking, camping, and other outdoor activities.	Ski seasons may be delayed or postponed, and there is likely to be decreased turnout to resorts. Boating and fishing may be harmed by warmer, shallower waters.
Water	Rivers and reservoirs may be at normal or above normal levels. Wetter years may experience greater alpine snowpack that lasts later into the season. Mountain streams fed by snowmelt may be at higher levels throughout the spring.	Ponds, small streams, and wells dry completely in severe conditions. Water quality will typically decrease due to increased temperature and decreased volume. There may be less snowpack at higher elevations, in turn resulting in lower springtime stream levels.