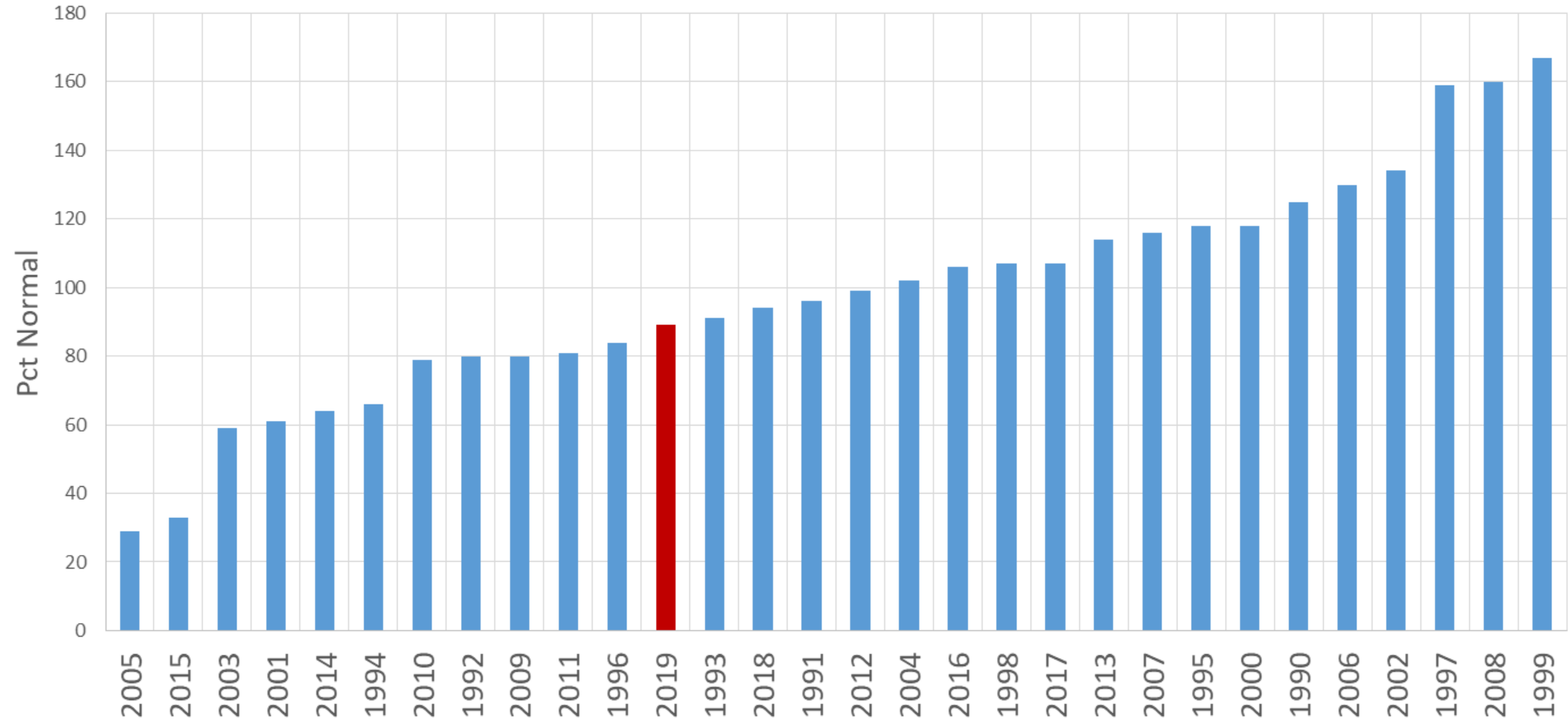


Water Supply Availability Meeting  
+1-240-454-0887 US Toll  
Access code: 805 526 415

| Time          | Subject  | Responsible                 | Representing                             |
|---------------|--|-----------------------------|--|
| 10:00 – 10:05 | Welcome/Information for Media  | Jeff Marti                  | Ecology                                  |
| 10:05 – 10:20 | Regional Climate Perspective<br>1. Recent precipitation and temperature<br>2. Seasonal forecasts/ENSO  | Karin Bumbaco and Nick Bond | Office of Washington State Climatologist |
| 10:20– 10:30  | Snowpack   | Scott Pattee                | NRCS                                     |
| 10:30 – 10:40 | Streamflow Observations  | Mark Mastin                 | USGS                                     |
| 10:40-10:55   | River Forecasts  | Brent Bower                 | NWS                                      |
| 10:55-11:05   | Probabilities of Exceedance for State Drought Threshold (75% of Normal)  | Jeff Marti                  | Ecology                                  |
| 11:05-11:10   | Input from Water Managers  | All                         |  |
| 11:10 – 11:15 | Drought Impact Reporter  | Jeff Marti                  | Ecology                                  |
| 11:15-11:20   | Key Upcoming Dates<br><ul style="list-style-type: none"> <li>• BOR Yakima Forecast -- March 7<sup>th</sup></li> <li>• WSAC – March 8<sup>th</sup></li> <li>• EWEC – Potentially week of March 11<sup>th</sup></li> </ul> |                             |  |

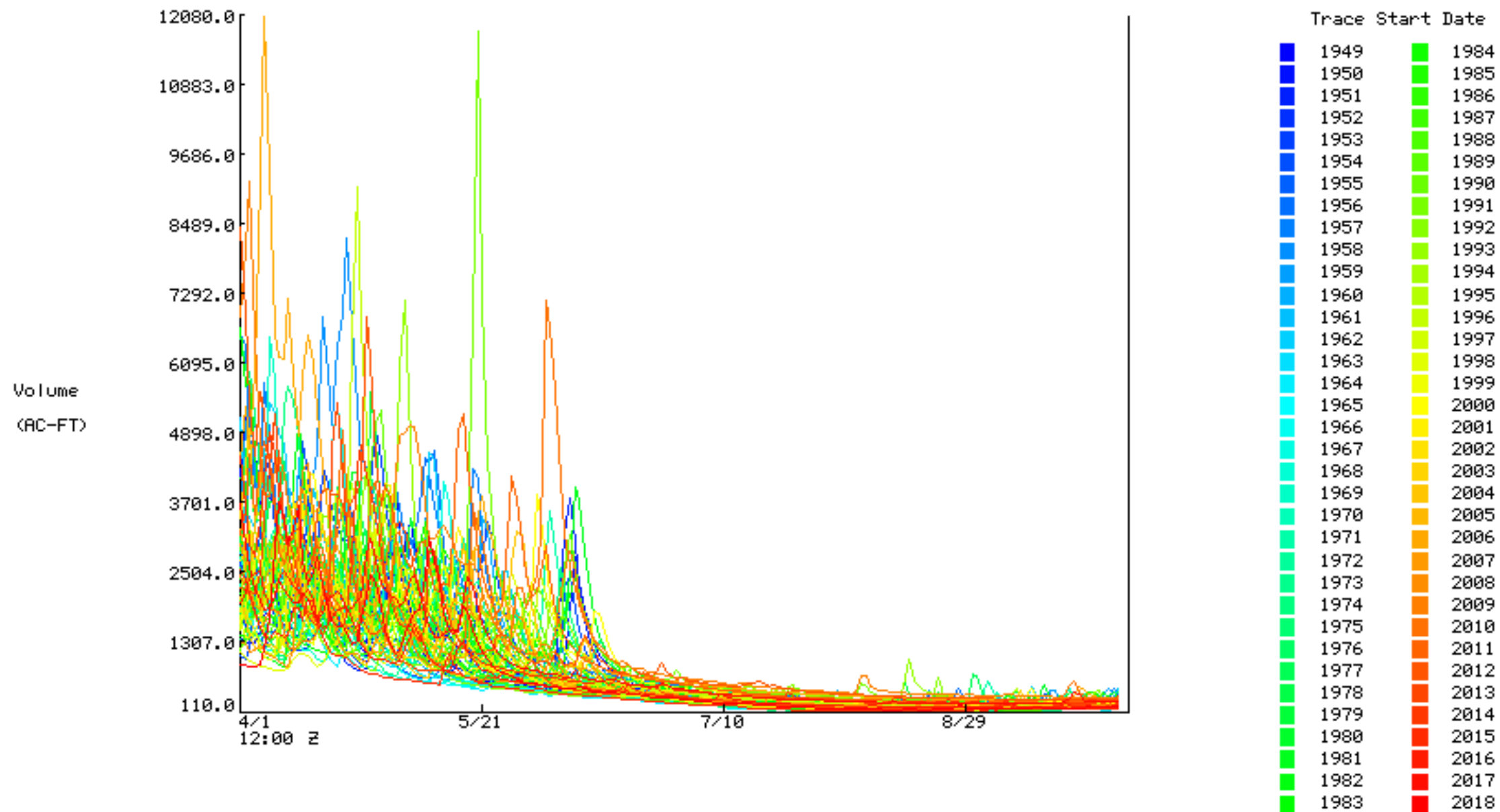
Snow.WaterEquivalent  
Statewide Average 1990 - 2019  
February 14th



# Probability of Exceeding the State Drought Threshold

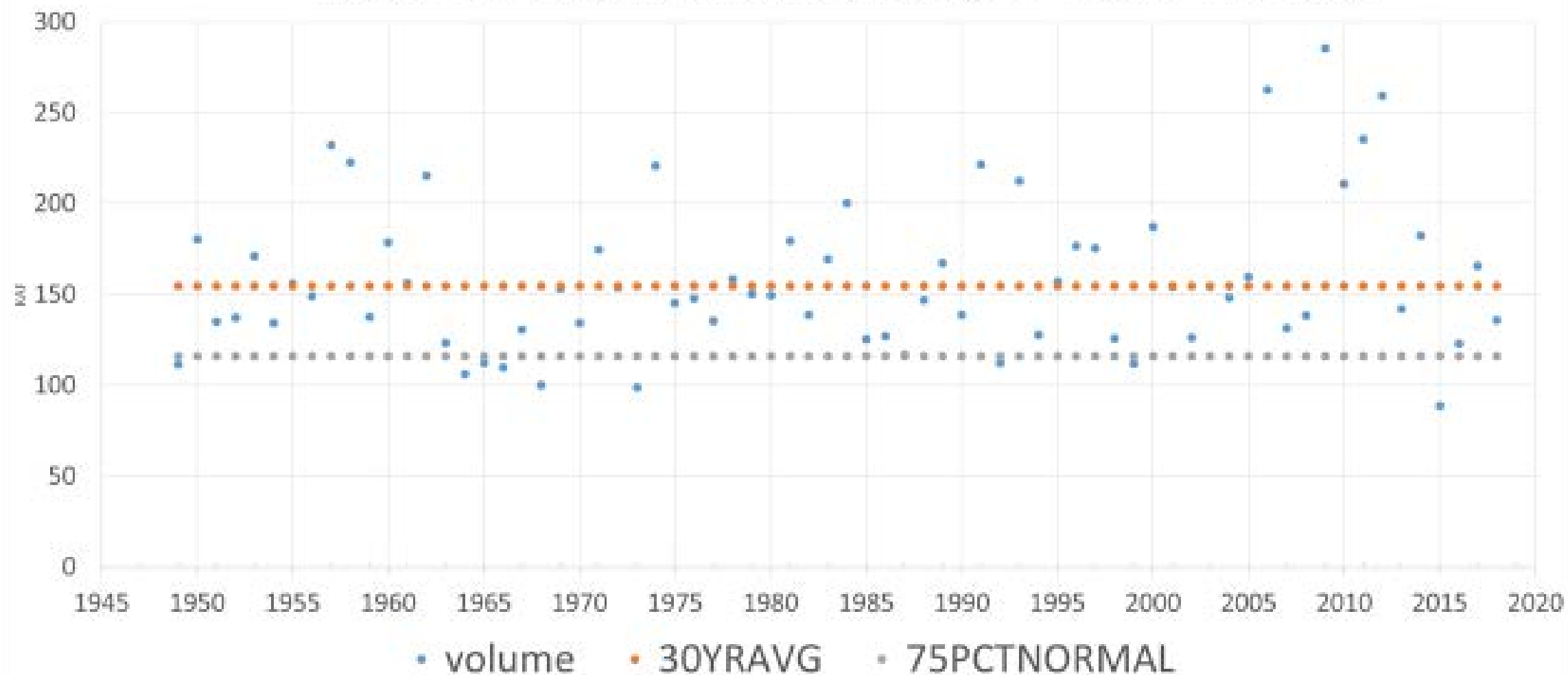
- River forecasts provide an estimated volume of seasonal runoff at given exceedance level, expressed as Percent of Normal
- The hydrologic threshold for drought in state statute is 75 percent of normal
- I want to know, even where a forecast is currently for a runoff volume above 75 percent of normal, what is the risk that river might fall below the threshold? 40 percent? 30 percent? 10 percent?
- This can be determined by determining the forecasted exceedance level of the flow volume corresponding to 75 percent of normal

ESP Trace Ensemble of WALLA WALLA RIVER at NR TOUCHET, WA  
 Latitude: 46.0 Longitude: -118.7  
 Forecast for the period 4/1/2019 12h - 9/30/2019 12h  
 This is a conditional simulation based on the current conditions as of 2/10/2019

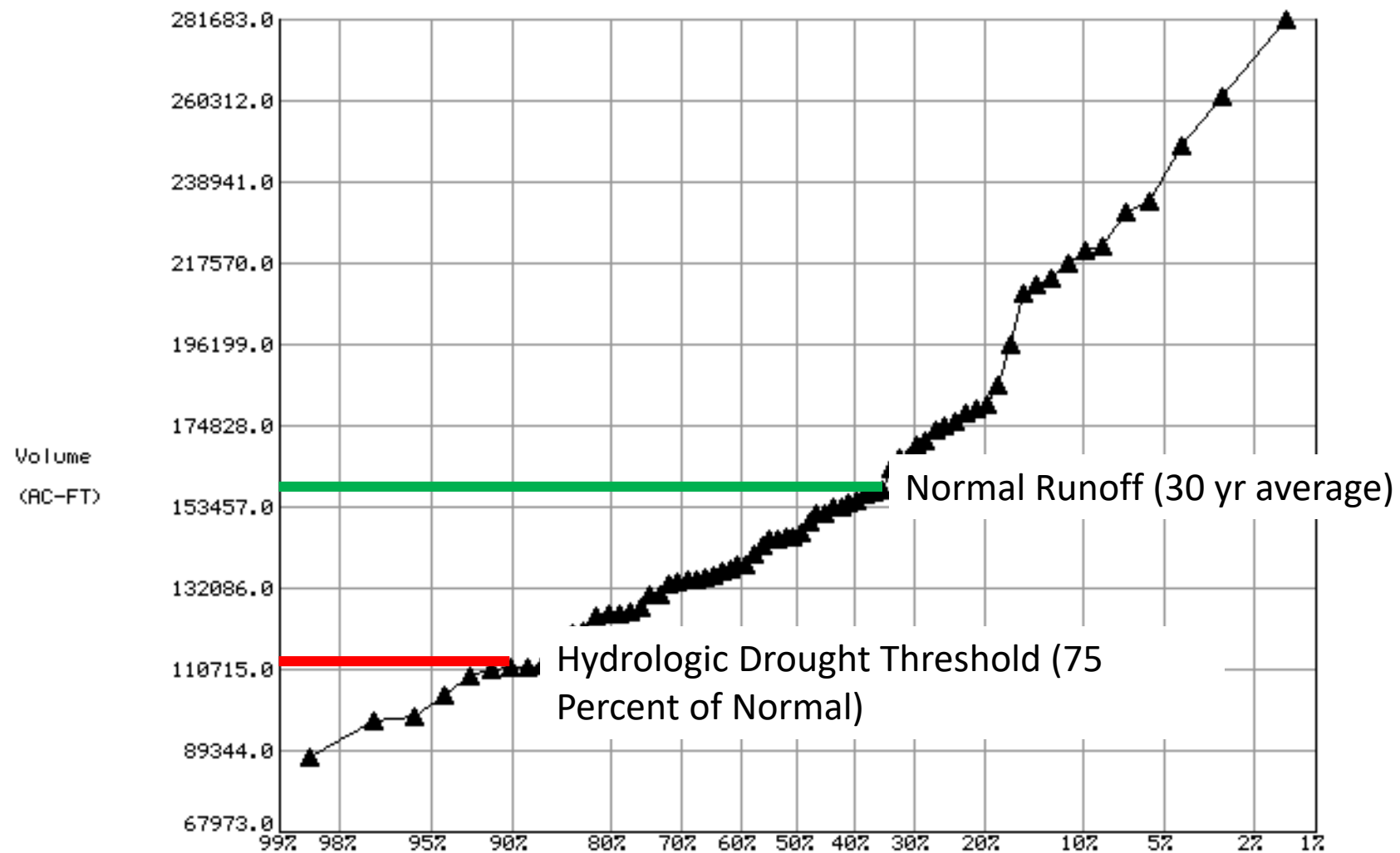


# Walla Walla APR-SEPT Forecast

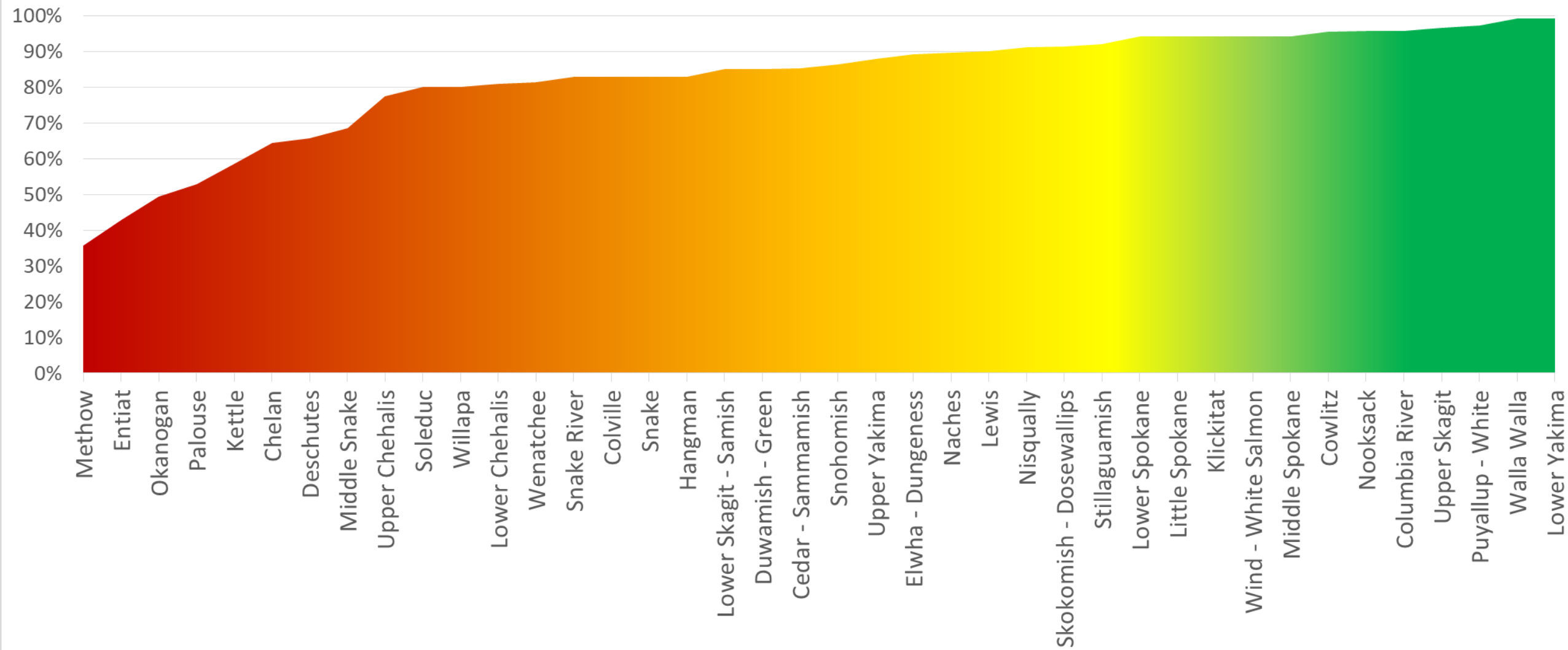
## Ensemble Year vs Normal and 75 Pct of Normal



Chances of Exceeding River Levels on the WALLA WALLA RIVER at NR TOUCHET, WA  
Latitude: 46.0 Longitude: -118.7  
Forecast for the period 4/1/2019 - 9/30/2019  
This is a conditional simulation based on the current conditions as of 2/10/2019



Exceedence Probability at 75 Percent of Normal  
State Drought Threshold  
(RFC Forecast Ensemble Files 02-15-2019)



# Drought in Washington

Residents in drought:

**547,000**

1,143,000 more in abnormally dry areas.

This is:

**8%**

of the state's population,  
17% more in abnormally dry areas.

SELECT A STATE

Alabama

GO



Report Your Drought Impacts

Last Month

Last Week

Current

Enter a city or zip code to add location to map



Add to Map

Clear All

Highlight Counties that Produce:

Select None

The U.S. Drought Monitor (USDM) is a map that shows the location and intensity of drought across the country. The data is updated each Tuesday and released on Thursday. This map shows the drought conditions on February 05, 2019.

Learn more about the US Drought Monitor



## D0 - Abnormally Dry

- Short-term dryness slowing planting, growth of crops
- Some lingering water deficits
- Pastures or crops not fully recovered

**48.1%**  
of State

**58.8%**  
D0-D4



## D1 - Moderate Drought

- Some damage to crops, pastures
- Some water shortages developing
- Voluntary water-use restrictions requested

**10.7%**  
of State

**10.7%**  
D1-D4

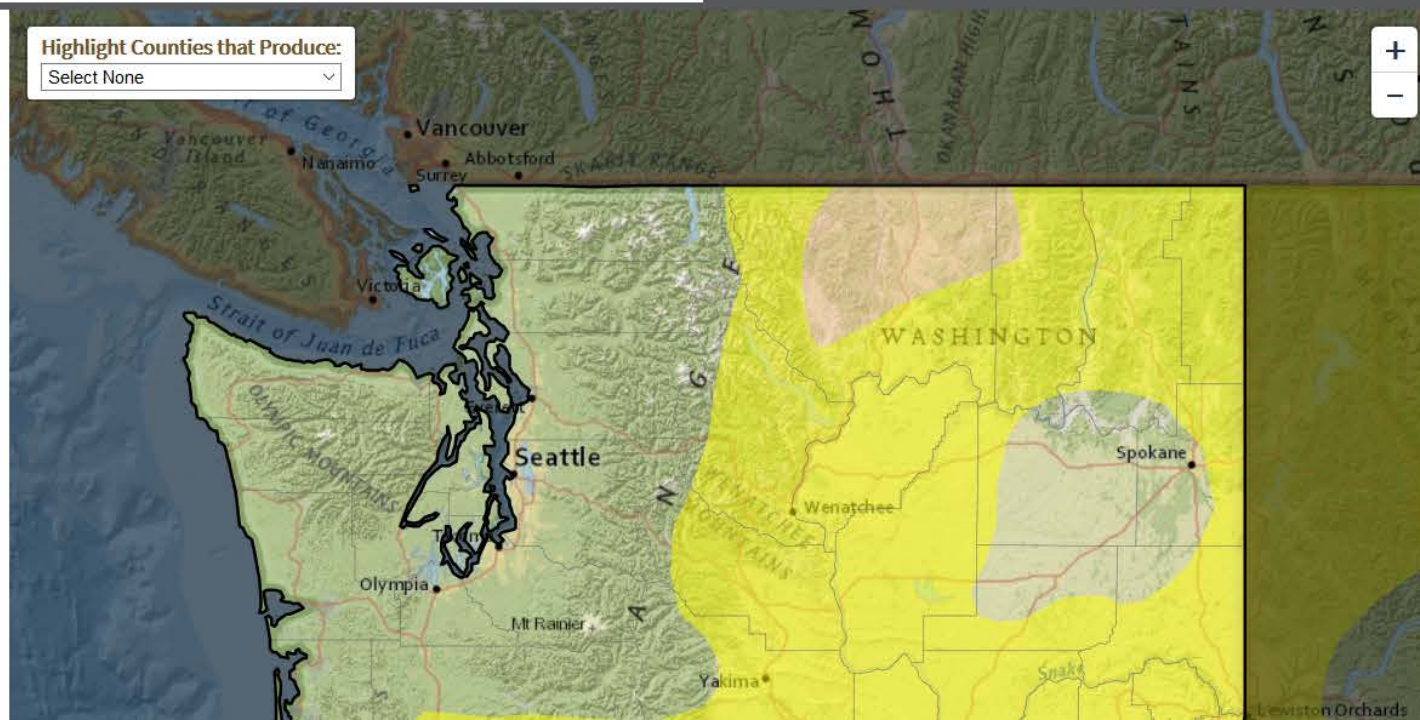


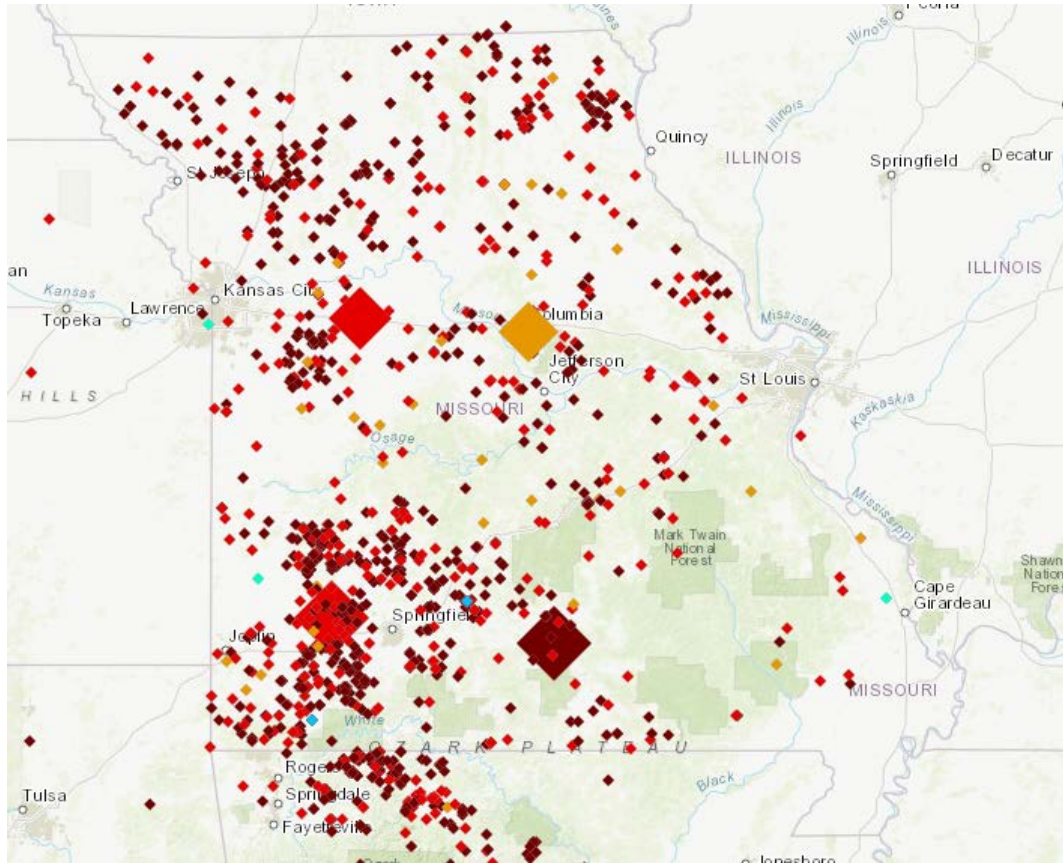
## D2 - Severe Drought

- Crop or pasture loss likely
- Water shortages common

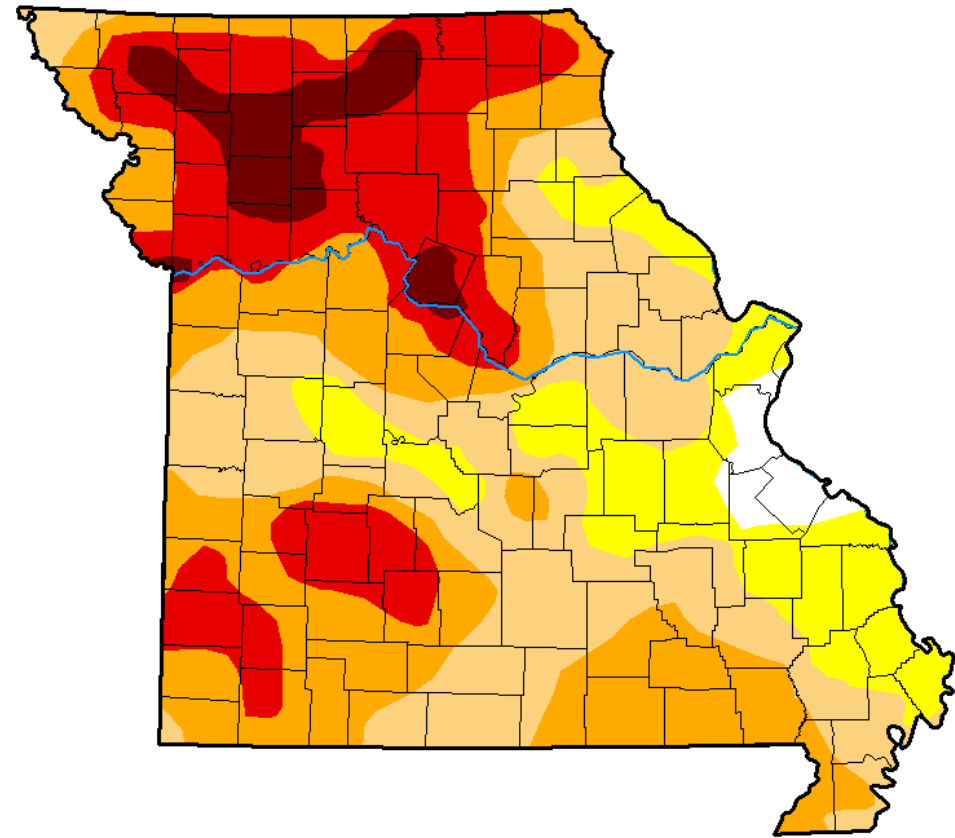
**0.0%**  
of State

**0.0%**  
D2-D4





Volunteer-submitted observations from Missouri in 2018 described the effects of drought.



Drought peaked in Missouri on August 14, 2018, the date of the U.S. Drought Monitor map above.

Observer reports help people understand how drought is affecting local conditions. Observations may highlight the need for the weekly U.S. Drought Monitor author to take a closer look at data used to make the U.S. Drought Monitor map. Sometimes reports can help reconcile conflicting data or validate data. The U.S. Drought Monitor map triggers various drought responses, including USDA disaster relief and Internal Revenue Service tax provisions. State agencies may also make use of understanding how dry or wet conditions are affecting different areas for decisions such as where to position fire-fighting equipment, or where to direct assistance for health and safety-related issues such as dry wells.

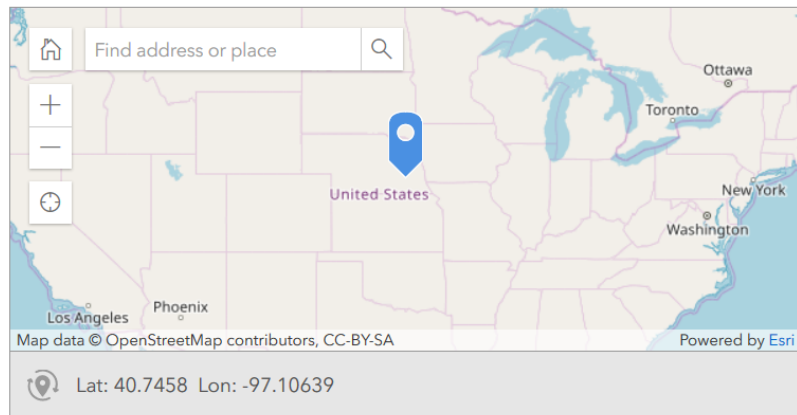
## Drought Condition & Impact Reporting

### Introduction

Report drought-related conditions and impacts within the U.S. This is a nation-wide service provided by the National Drought Mitigation Center, based at the University of Nebraska, in partnership with the National Integrated Drought Information System. Information submitted by this form appears on [this map](#).

### Where are you?\*

Please click on the map to tell us the location of your observation. Click on the compass icon to select your current location.



### Select your state and county: ✓

Select a state:

Select a county:

## 2019 Survey

Overview

Crop Production

Livestock Production

Water Supply

Habitat

Recreation/Tourism

Business/Industry

Public Health

Fire

Photos

### Legend

What is the date?

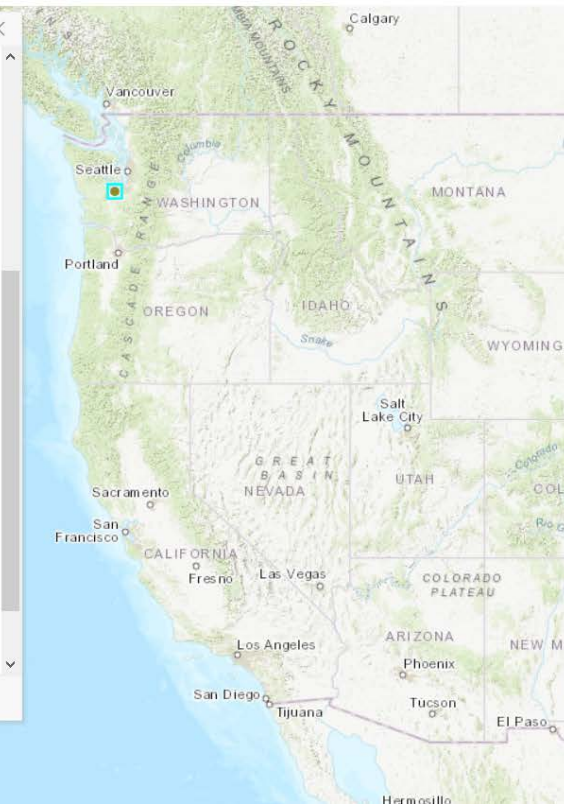
- > 10/31/2019
- 8/30/2019
- 6/30/2019
- 4/30/2019
- < 2/28/2019

Use drop down menu in top right portion of map to filter map layers based on sector sub-impacts.

Showing 1 information

Washington State. The governor declared an emergency. A lot of schools and state office buildings are closed. Kids are experiencing the joy of playing in the snow and sledding in their own neighborhoods. Attached picture is from LBA Park in SE Olympia. There have been lots of power outages from falling trees and limbs. In the mountains, snowpack is still below normal over much of the state.

Picture1.png





[Water & Shorelines](#) > [Water supply](#) > [Water availability](#) > [Statewide conditions](#)

## Water supply

[Streamflow restoration](#)[Water rights](#)[Wells](#)[Water supply projects in Eastern Washington](#)[Dams](#)[Water availability](#)[Statewide conditions](#)[Water supply monitoring](#)[Watershed look-up](#)[Protecting stream flows](#)[Water recovery solutions](#)

# Statewide conditions

**Updated Jan. 25, 2019**

We closely monitor snowpack during the winter. Snowpack serves as an important water supply because it feeds rivers and streams as it melts in the spring and summer.

After one of the slowest starts for snowpack in 30 years, a stormy December helped the snowpack bounce to near-normal levels statewide by the new year. Since then, warmer than normal temperatures have caused us give back some of those gains. With warmer than average conditions expected to persist into the spring, it's unlikely, but not impossible, that the overall snowpack will achieve normal levels by April.

We will regularly post information on this webpage about snowpack and how conditions affect water supply forecasts.

## National Drought Information System - Report your drought impacts

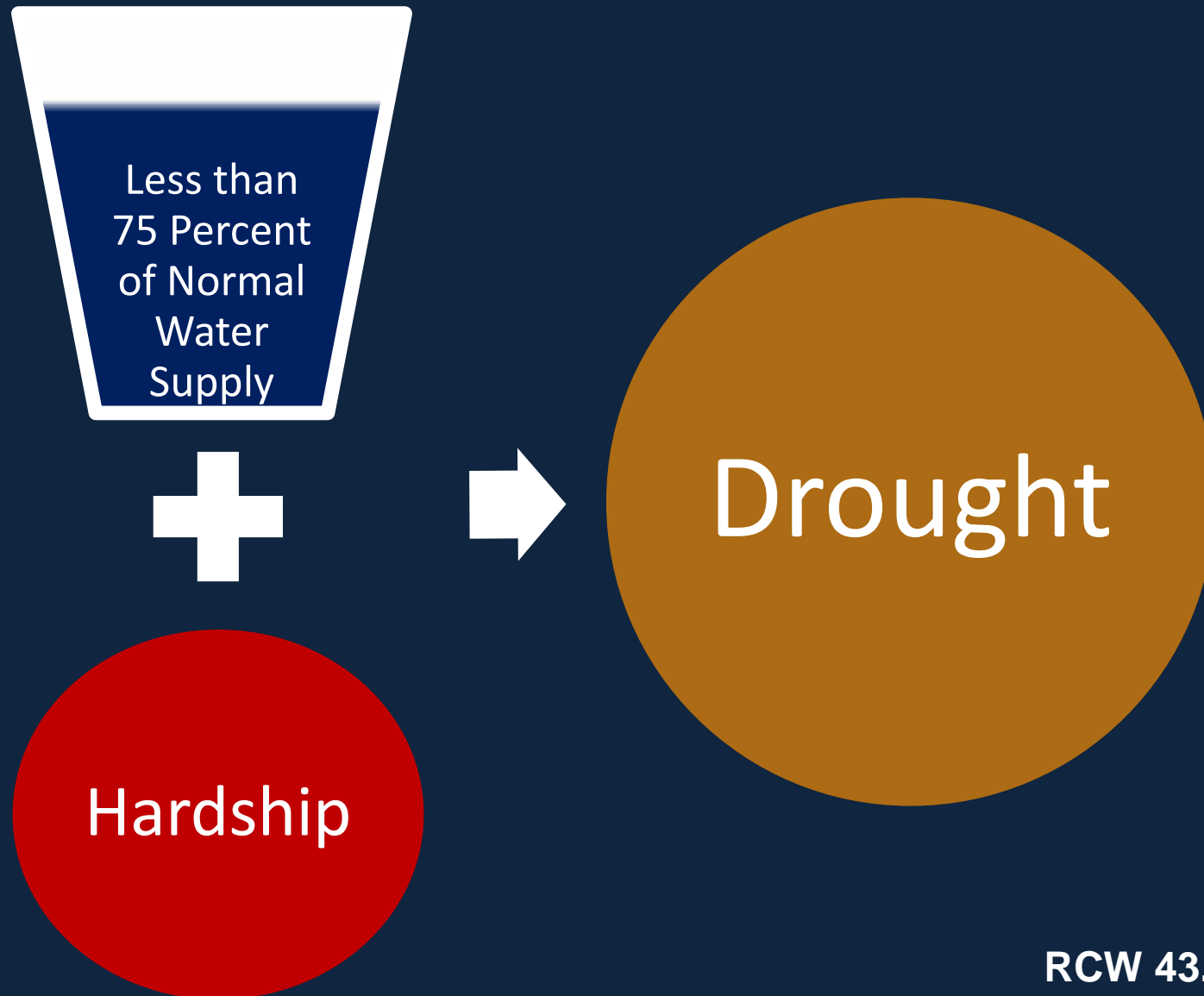
[Report Your Drought Impacts](#)

[Report drought-related conditions and impacts](#) within the U.S. This is a nation-wide service provided by the National Drought Mitigation Center, based at the University of Nebraska, in partnership with the National Integrated Drought Information System.

<https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Statewide-conditions>



# Washington State's Drought Trigger



RCW 43.83B.400