



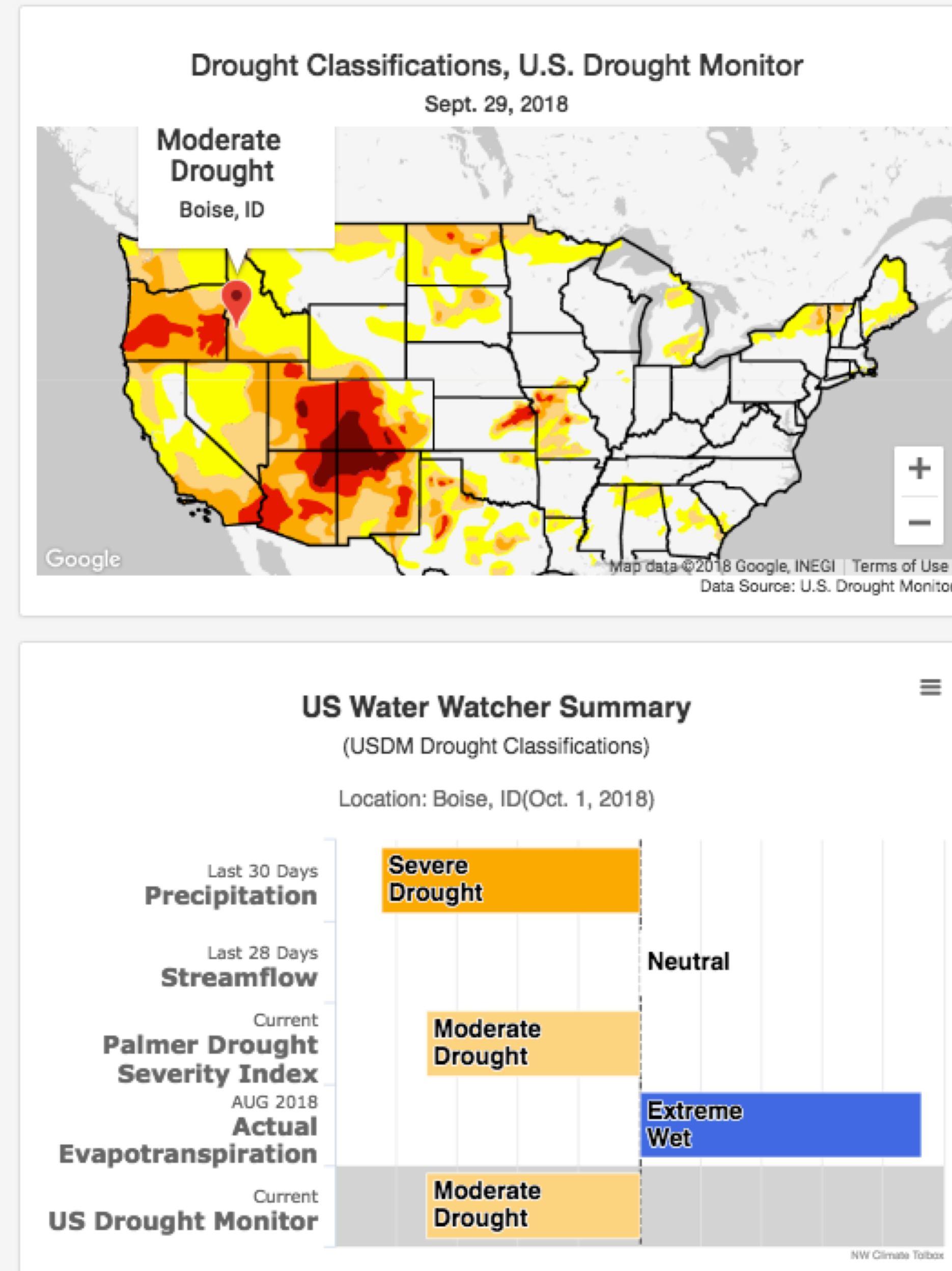
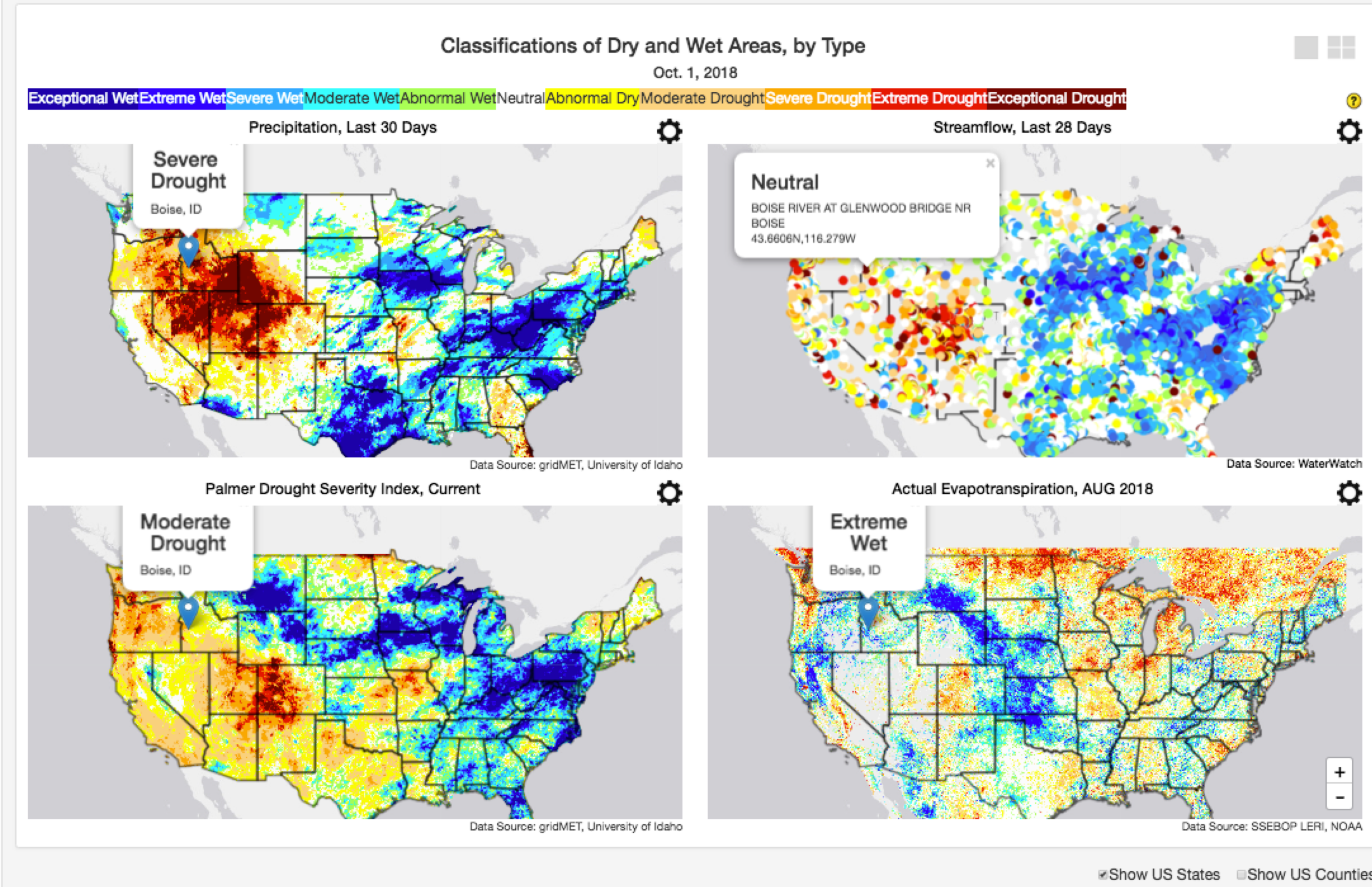
## US WATER WATCHER TOOL

The US Water Watcher is a web tool which shows maps of real-time water metric percentiles over regions of the US. These percentiles are shown with the same colors and ranges as the US Drought Monitor(USDM). This allows simultaneous display of USDM with a water picture in terms of many different flavors of drought and/or wetness.

### US Water Watcher

View different types of drought & moisture patterns in real-time over the contiguous USA.

Location: Boise, ID (43.64° N, 116.30° W)



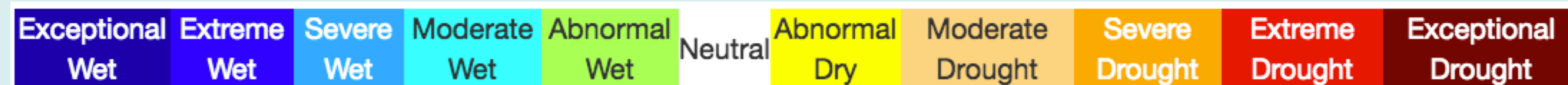
## DATA

The data for the US Water Watcher come from modelled gridded climate & hydrology, station observations and processed satellite imagery.

Dataset	Source	Resolution	Coverage	Metrics
Climate	gridMET dataset	4-km (1/24°)	CONUS	<ul style="list-style-type: none"> <li>Precipitation</li> <li>Potential Evapotranspiration</li> <li>PDSI</li> <li>Energy Release Component</li> <li>Burning Index</li> <li>100-hr Fuel Moisture</li> </ul>
Hydrology	VIC-gridMET dataset	4-km (1/24°)	Pacific Northwest	<ul style="list-style-type: none"> <li>Snow Water Equiv.</li> <li>Soil Moisture</li> <li>Total Runoff</li> </ul>
Hydrology	NRCS	Stations	CONUS	<ul style="list-style-type: none"> <li>Snow Water Equivalent</li> <li>Reservoir levels</li> </ul>
Streamflow	Water Watch	Stations	CONUS	<ul style="list-style-type: none"> <li>Streamflow</li> </ul>
Groundwater	Ground Water Watch	Stations	CONUS	<ul style="list-style-type: none"> <li>Groundwater</li> </ul>
Reservoir Levels	NRCS	Stations	CONUS	<ul style="list-style-type: none"> <li>Reservoir Levels</li> </ul>
Hydrology	GRACE (Satellite)	12-km (1/8°)	CONUS+ parts of Mexico & Canada	<ul style="list-style-type: none"> <li>Groundwater</li> <li>Soil Moisture -Surface</li> <li>Soil Moisture – Root Zone</li> </ul>
Evaporation	Landscape Evaporative Response Index (LERI)	1-km (1/96°)	CONUS + parts of Mexico & Canada	<ul style="list-style-type: none"> <li>Actual Evapotranspiration</li> </ul>

## DROUGHT FLAVORS

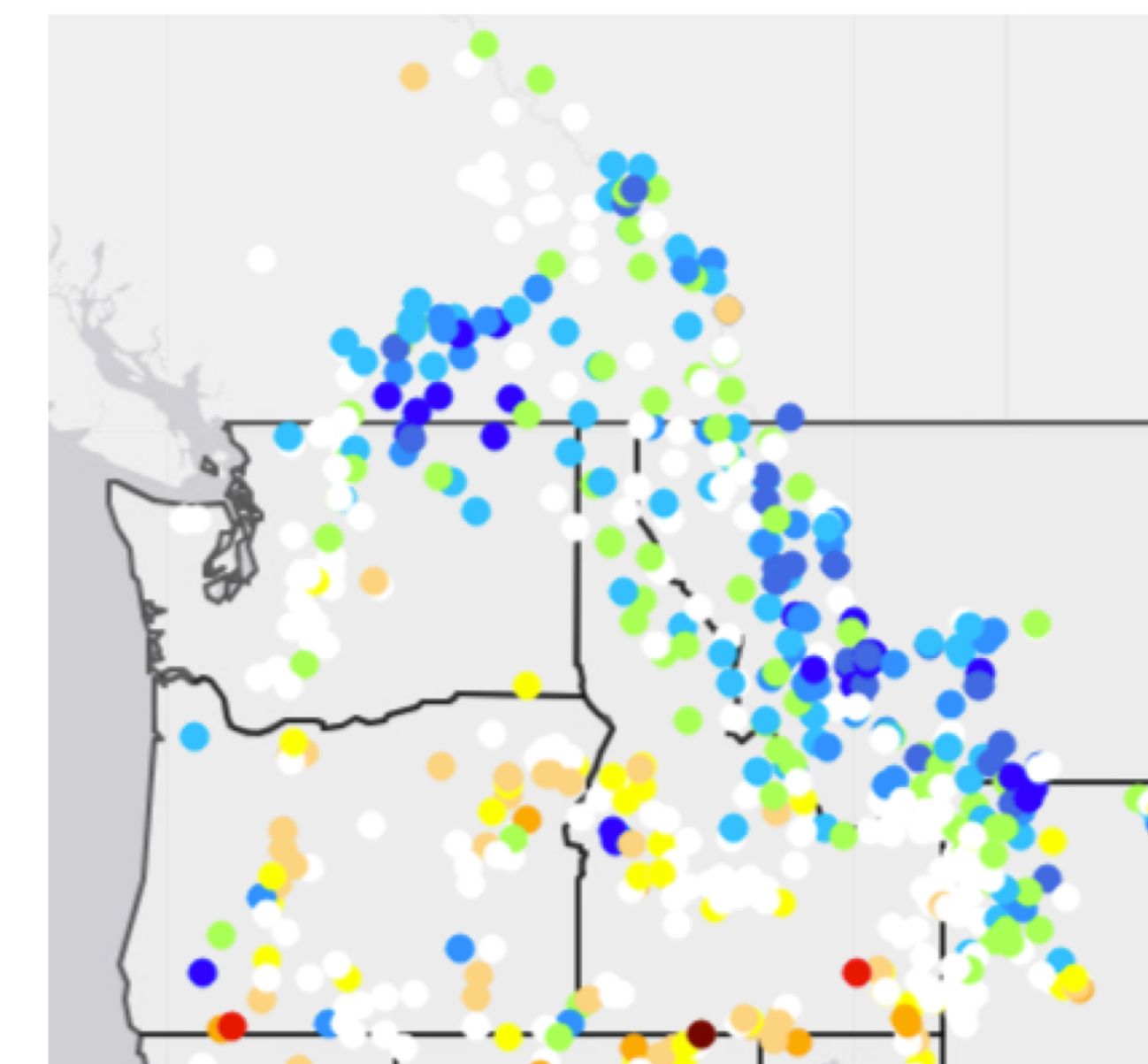
The tools show maps of percentiles in different water metrics cast in the same colors & percentile ranges as the US Drought Monitor. These metrics represent many different types of drought (or flavors).



### Snow

April 1<sup>st</sup>, 2018:  
Record snow packs in ID, WA

Snow Water Equivalent, April 1st

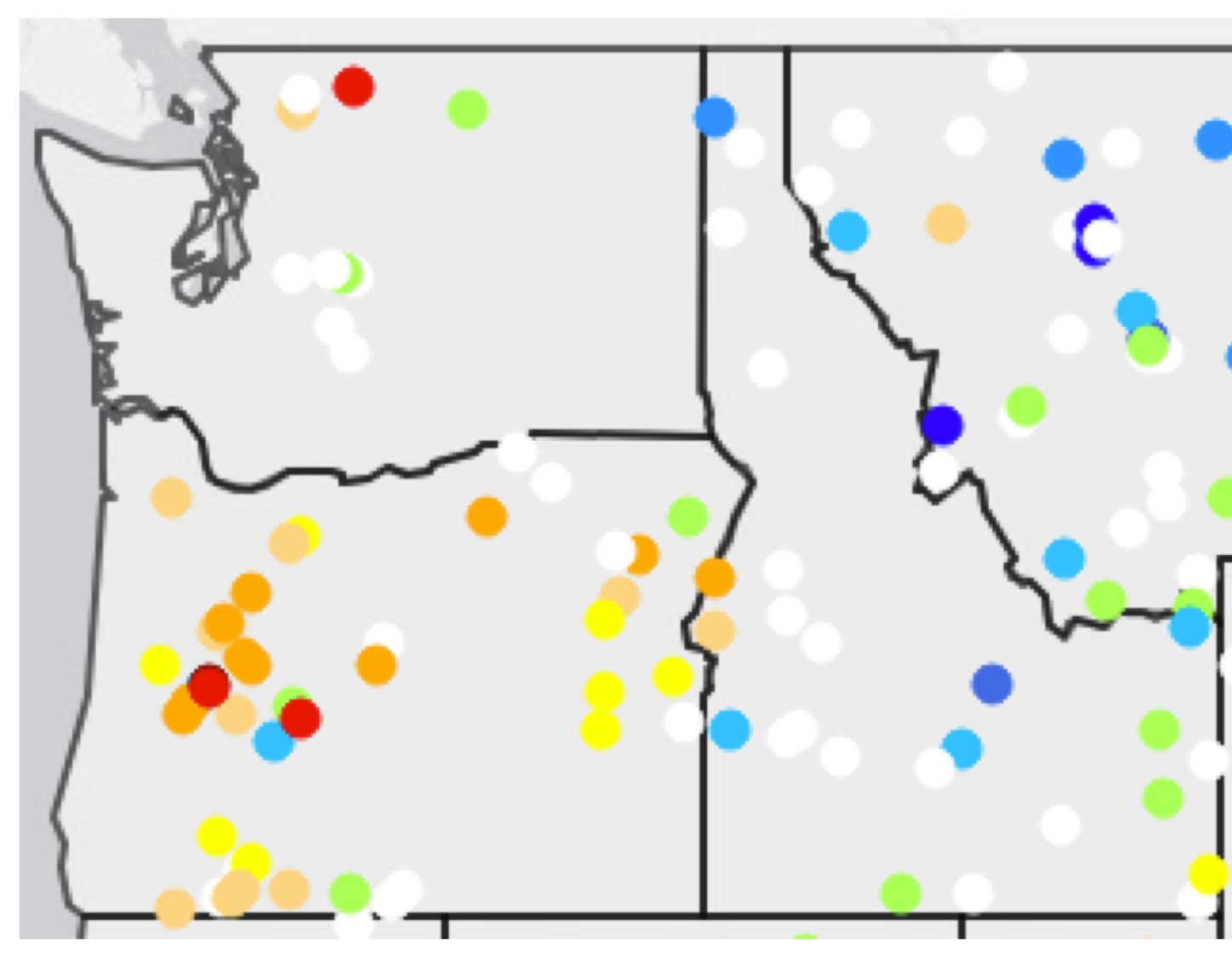


Apr 1, 2018 NRCS

### Hydrological

September 1<sup>st</sup>, 2018:  
Low Reservoir Levels in Oregon

Reservoir Levels, September 1st

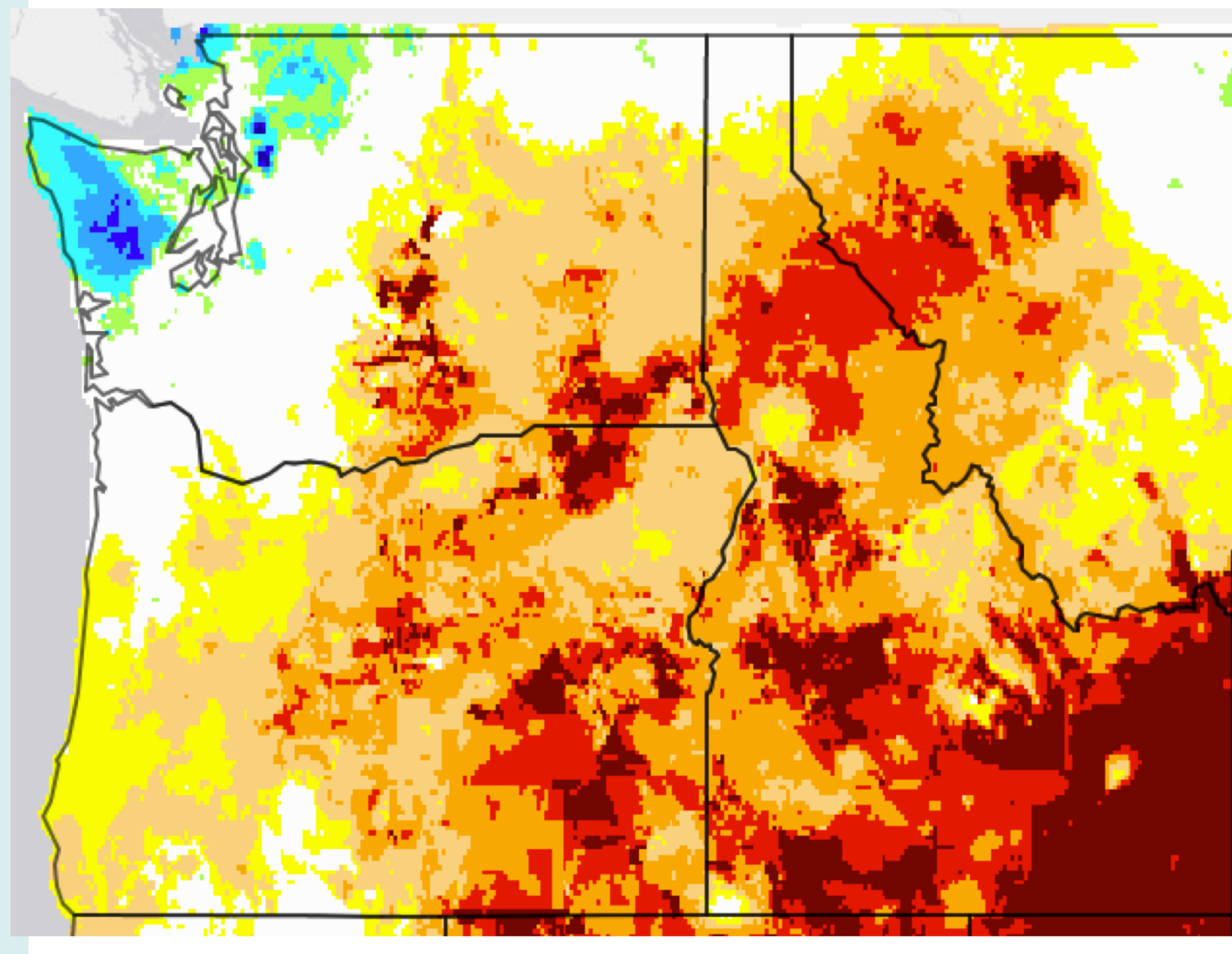


Sept 1, 2018 NRCS

### Meteorological

September 2018:  
Low rainfall over most of PNW

Precipitation, Month of September

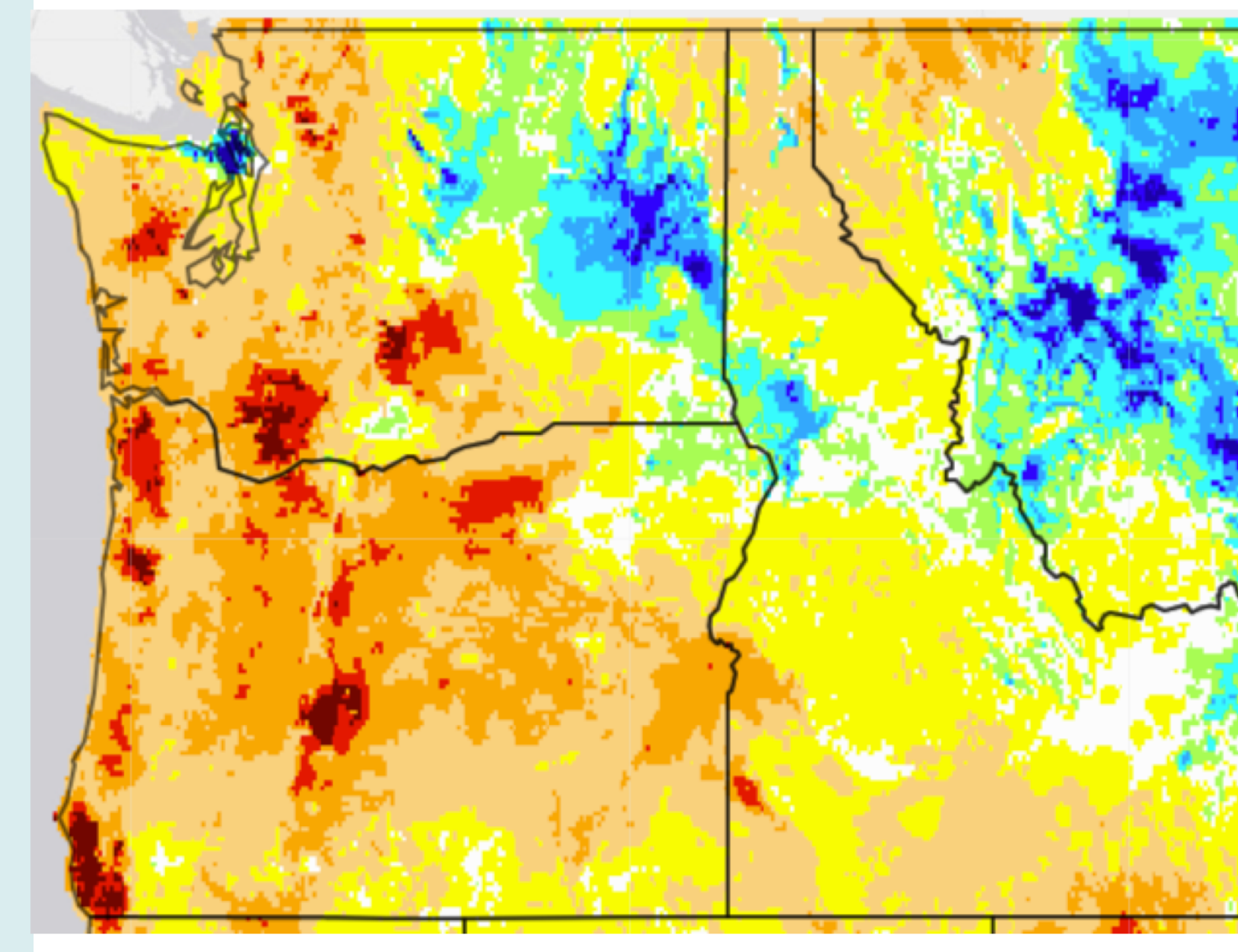


Oct 1, 2018 gridMET

### Agricultural

October 1<sup>st</sup>, 2018:  
Dry soils over OR, Western WA

Soil Moisture, October 1st

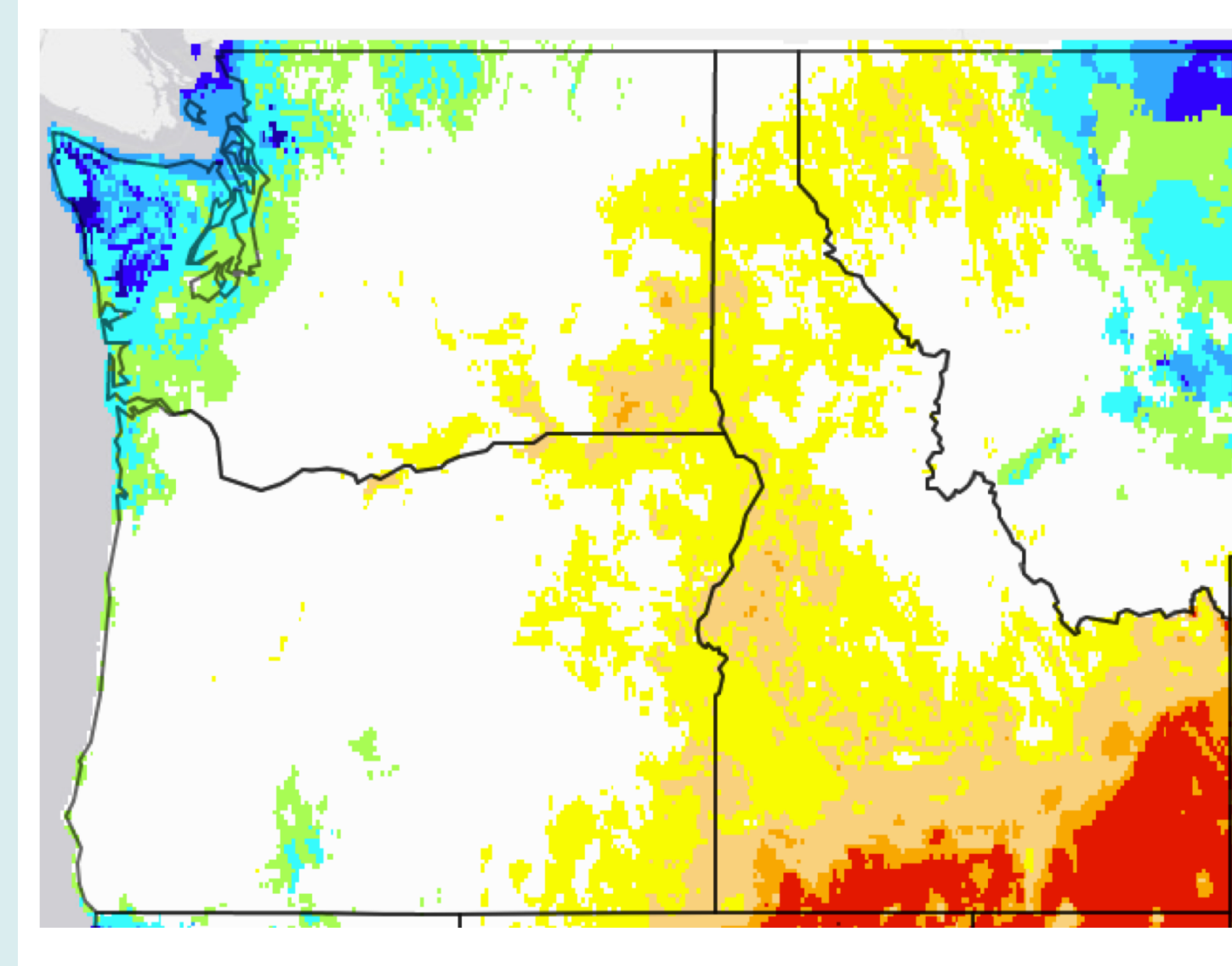


Oct 1, 2018 VIC-gridMET

### Ecological

October 1<sup>st</sup>, 2018 :  
Dry vegetation over Southern Idaho

Energy Release Component, October 1st



Oct 1, 2018 gridMET

## Classification

All maps are colored using the US Drought Monitor's colors & percentile ranges for the dry side and symmetric percentiles for the wet side.

Color	Class	Percentile
D4	Exceptional Drought	0-2
D3	Extreme Drought	2-5
D2	Severe Drought	5-10
D1	Moderate Drought	10-20
D0	Abnormal Dry	20-30
	Neutral	30-70
W0	Abnormal Wet	70-80
W1	Moderate Wet	80-90
W2	Severe Wet	90-95
W3	Extreme Wet	95-98
W4	Exceptional Wet	98-100