

## 2021/2022 Crop Year Precipitation Update

Mylen Bohle, OSU Extension Service (*July 28, 2022*)

**Crop Water Year** (Oct. – Sept. and September – June) Precipitation, at selected Central Oregon sites (with weather station I.D., and elevation). <http://uspest.org/OR/index.html>

	Madras Agrimet (2440')	Terrebonne CWOP (2867')	Prineville CWOP/ APRSWX (2913')	Powell Butte Agrimet (3199')	Prineville Airport METAR (3250')	Bend Agrimet (3650')	Salt Creek RAWS (4155')	Xmas Valley Agrimet (4360')	Teepee Draw RAWS (4735')	Ochoco <sup>2</sup> Meadows Snotel (5200')	Allison RAWS (5320')	Derr <sup>2</sup> Snowtel (5670')	Badger Creek RAWS (5710')	Brer Rabbit RAWS (5719')
Month- Year	Precipitation (inches)													
Sep. 2021	1.27	1.02	1.01	1.01	0.78	0.87	1.10	1.19	0.70	3.7	1.09	1.5	1.25	1.22
Oct. 2021	1.12	1.10	1.18	1.00	0.92	0.78	0.88	0.83	1.08	4.3	1.83	2.1	1.45	1.59
Nov. 2021	1.48	1.57	1.39	1.19	1.16	0.95	0.84	1.09	0.93	3.4	1.97	2.4	1.51	1.85
Dec. 2021	1.21	0.23	0.68	0.86	0.48	0.47	0.43	0.61	0.47	3.9	1.34	3.7	0.99	0.63
Jan. 2022	0.92	0.91	0.93	0.92	0.60	0.82	0.52	0.32	0.67	3.0	1.72	2.1	1.32	0.62
Feb. 2022	0.28	0.09	0.06	0.12	0.00	0.08	0.23	0.09	0.18	1.6	0.12	1.3	0.55	0.39
Mar. 2022	0.52	0.92	0.68	0.58	0.29	0.35	0.45	0.28	0.22	2.2	0.75	1.6	0.74	0.91
Apr. 2022	1.00 (7.80)	0.94 (6.78)	0.94 (6.87)	0.78 (6.46)	0.31 (4.54)	0.56 (4.88)	0.70 (5.15)	0.98 (5.39)	1.14 (5.61)	5.3 (27.4)	0.18 (10.73)	4.4 (19.1)	2.19 (10.00)	2.18 (9.39)
May 2022	0.53	0.64	0.85	0.74	0.52	0.49	1.49	0.64	0.45	5.2	2.08	3.4	2.22	2.50
June 2022	1.08	1.24	1.49	1.34	1.10	1.92	1.49	0.77	1.27	3.6	1.77	2.9	2.80	3.18
Oct. - June	8.14	7.64	8.20	7.53	5.38	6.42	7.01	5.61	6.63	32.5	13.49	23.9	13.77	13.85
Sept. - June	9.41	8.66	9.21	8.54	6.16	7.29	8.11	6.80	7.33	36.2	14.58	25.4	15.02	15.07
Sept. – June <i>Approx. Estimated. Forage<sup>1</sup> (lb/ac)</i>	640	540	640	460	430	500	540	430	500	>1,400	>1,400	>1,400	>1,400	>1,400

- + Prineville (KRCO Radio Station Site) “long-term average” precipitation is around 10 inches. The station no longer records precip.
- + 41-degree base temperature GDD’s is the growth temperature for grass and alfalfa and using “growing degrees” model.
- + Teepee Draw Station is just across the county line in Deschutes County south of Bend/Burns Hwy near Millican.
- + Salt Creek Station is on SE Roberts Road in Crook County.
- + Allison Station is just across the Crook County line in Harney County.
- + Brer Rabbit Station is just across the Crook County line in Wheeler County.
- + Growing degree-days ahead of long-term average and previous years would show that earlier warmer temperatures are melting the snowpack earlier.
- + If moisture is not available to the plants in early – late spring, the plants would not have been able to take advantage of the GDD’s for earlier

growth.

<sup>1</sup> Sept-June approximate estimated forage (air dry weight of lb/ac). Dryland pasture production (lb of air-dry forage per acre) response to precipitation (*September through June*) in Harney County (about 4300 feet elevation) based on Forrest Sneva and D.H. Hyder research at Burns, Oregon is in the graph below.

<sup>2</sup> Derr and Ochoco Meadow sites measures to the nearest one tenth of inch.

Here are the NRCS Snotel sites:

<https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/imap#version=158&elements=&networks=!&states=!&counties=!&hucs=&minElevation=&maxElevation=&elementSelectType=any&activeOnly=true&activeForecastPointsOnly=false&hucLabels=false&hucIdLabels=false&hucParameterLabels=true&stationLabels=&overlays=&hucOverlays=2&basinOpacity=75&basinNoDataOpacity=25&basemapOpacity=100&maskOpacity=0&mode=data&openSections=dataElement,parameter,date,basin,options,elements,location,networks&controlsOpen=true&popup=671:OR:SNL&popupMulti=&popupBasin=&base=esriNgwm&displayType=station&basinType=6&dataElement=WTEQ&depth=-8&parameter=PCTMED&frequency=DAILY&duration=1&customDuration=&dayPart=E&year=2022&month=4&day=12&monthPart=E&forecastPubMonth=4&forecastPubDay=1&forecastExceedance=50&seqColor=1&divColor=7&scaleType=D&scaleMin=&scaleMax=&referencePeriodType=POR&referenceBegin=1991&referenceEnd=2020&minimumYears=20&hucAssociations=true&lat=44.6843&lon=-119.5587&zoom=9.0>

And specific to the Crooked River Basin:

Ochoco Meadows

[https://wcc.sc.egov.usda.gov/reportGenerator/view/customChartReport/daily/671:OR:SNL|id=%22%22|name/CurrentWY,CurrentWYEnd/WTEQ::value,WTEQ::median\\_1991,PREC::value,PREC::median\\_1991?fitToScreen=false](https://wcc.sc.egov.usda.gov/reportGenerator/view/customChartReport/daily/671:OR:SNL|id=%22%22|name/CurrentWY,CurrentWYEnd/WTEQ::value,WTEQ::median_1991,PREC::value,PREC::median_1991?fitToScreen=false)

[https://www.nrcs.usda.gov/Internet/WCIS/AWS\\_PLOTS/siteCharts/POR/WTEQ/OR/Ochoco%20Meadows.html](https://www.nrcs.usda.gov/Internet/WCIS/AWS_PLOTS/siteCharts/POR/WTEQ/OR/Ochoco%20Meadows.html)

Derr

[https://wcc.sc.egov.usda.gov/reportGenerator/view/customChartReport/daily/440:OR:SNL|id=%22%22|name/CurrentWY,CurrentWYEnd/WTEQ::value,WTEQ::median\\_1991,PREC::value,PREC::median\\_1991?fitToScreen=false](https://wcc.sc.egov.usda.gov/reportGenerator/view/customChartReport/daily/440:OR:SNL|id=%22%22|name/CurrentWY,CurrentWYEnd/WTEQ::value,WTEQ::median_1991,PREC::value,PREC::median_1991?fitToScreen=false)

1953-1961 Average Dryland Grass Yield Response to September to June Precipitation in Harney County

