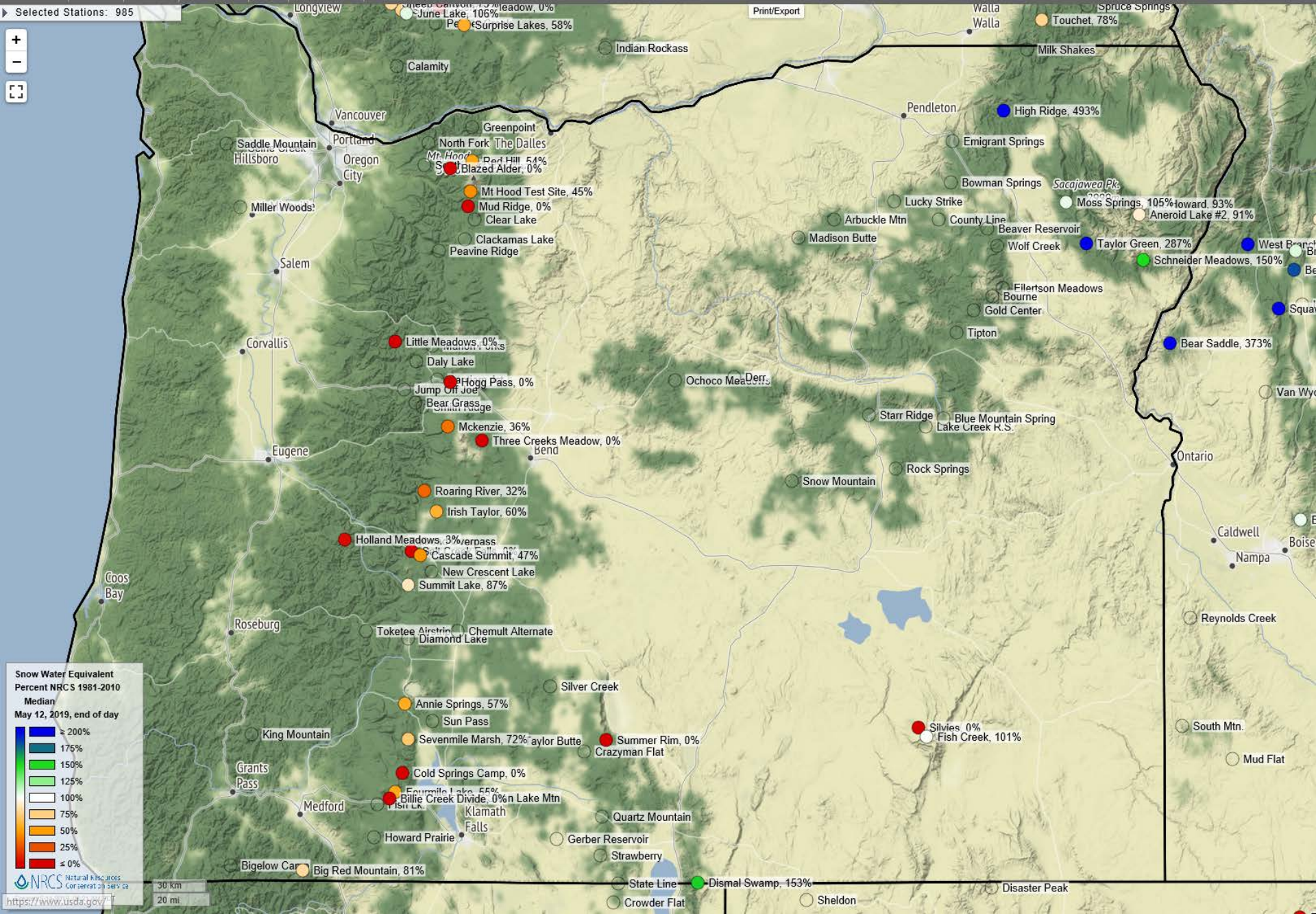
Water Supply Conditions Report

Drought Readiness Council

OREGON
WATER RESOURCES
DEPARTMENT

Ken Stahr
Oregon Water Resources Department

May 16, 2019

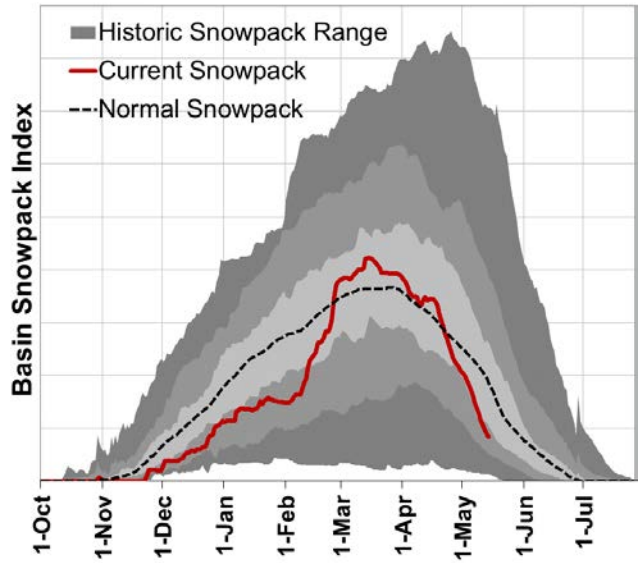

Selected Stations: 985
Print/Export
June Lake, 106%
Surprise Lakes, 58%
Indian Rockass
Calamity
Touchet, 78%
Milk Shakes
High Ridge, 493%
Pendleton
Emigrant Springs
Vancouver
Greenpoint
Saddle Mountain
Portland
North Fork The Dalles
Hillsboro
Oregon City
Blazed Alder, 0%
Mt Hood Test Site, 45%
Mud Ridge, 0%
Clear Lake
Miller Woods
Clackamas Lake
Peavine Ridge
Bowman Springs
Sacajawea Pk.
Lucky Strike
Moss Springs, 105%
Howard, 93%
Aneroid Lake #2, 91%
Arbuckle Mtn
County Line
Beaver Reservoir
Madison Butte
Wolf Creek
Taylor Green, 287%
Schneider Meadows, 150%
Salem
Ellertson Meadows
Bourne
Gold Center
Tipton
Corvallis
Little Meadows, 0%
Bear Saddle, 373%
Daly Lake
Hogg Pass, 0%
Jump Off Joe
Bear Grass
Ochoco Meadows
Starr Ridge
Blue Mountain Spring
Lake Creek R.S.
Mckenzie, 36%
Three Creeks Meadow, 0%
Eugene
Bend
Ontario
Rock Springs
Snow Mountain
Roaring River, 32%
Irish Taylor, 60%
Holland Meadows, 3%
Cascade Summit, 47%
New Crescent Lake
Summit Lake, 87%
Caldwell
Nampa
Coos Bay
Roseburg
Toketee Airstrip
Chemult Alternate
Diamond Lake
Reynolds Creek
Silver Creek
Annie Springs, 57%
Sun Pass
King Mountain
Sevenmile Marsh, 72%
Summer Rim, 0%
Crazyman Flat
Silvies, 0%
Fish Creek, 101%
South Mtn.
Mud Flat
Grants Pass
Cold Springs Camp, 0%
Billie Creek Divide, 0%
Lake Mtn
Medford
Klamath Falls
Quartz Mountain
Howard Prairie
Gerber Reservoir
Strawberry
Bigelow Cam
Big Red Mountain, 81%
State Line
Dismal Swamp, 153%
Disaster Peak
Crowder Flat
Sheldon
Snow Water Equivalent
Percent NRCS 1981-2010 Median
May 12, 2019, end of day
≥ 200%
175%
150%
125%
100%
75%
50%
25%
≤ 0%
30 km
20 mi

Basin SWE Summary – May 14, 2019 – Statewide SWE % of Normal = 58%

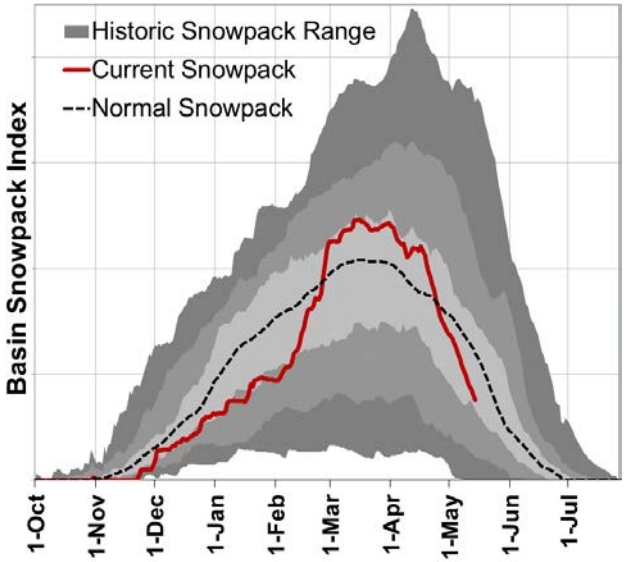
Willamette	6/23 SNOTEL sites with measurable SWE (0 site with SWE below 4500')
Rogue, Umpqua	5/12 SNOTEL sites with measurable SWE (0 sites with SWE below 5500')
Hood, Sandy, Lower Deschutes	2/8 SNOTEL sites with measurable SWE
Upper Deschutes, Crooked	5/14 SNOTEL sites with measurable SWE (0 sites with SWE below 4500')
Klamath	4/18 SNOTEL sites with measurable SWE (0 sites with SWE below 5500')
Lake County, Goose Lake	1/9 SNOTEL sites with measurable SWE (Dismal Swamp 7360')
Umatilla, Walla Walla, Willow	3/8 SNOTEL sites with measurable SWE (All sites with SWE above 4920')
John Day	0/13 SNOTEL sites with measurable SWE
Harney	1/9 SNOTEL sites with measurable SWE (Fish Creek 7660')
Grande Ronde, Powder, Burnt, Imnaha	8/17 SNOTEL sites with measurable SWE (All sites with SWE above 4920')
Malheur	0/3 SNOTEL sites with measurable SWE
Owyhee	1/8 SNOTEL sites with measurable SWE (Jack Creek 7377')

Water Year 2019 – May 14th

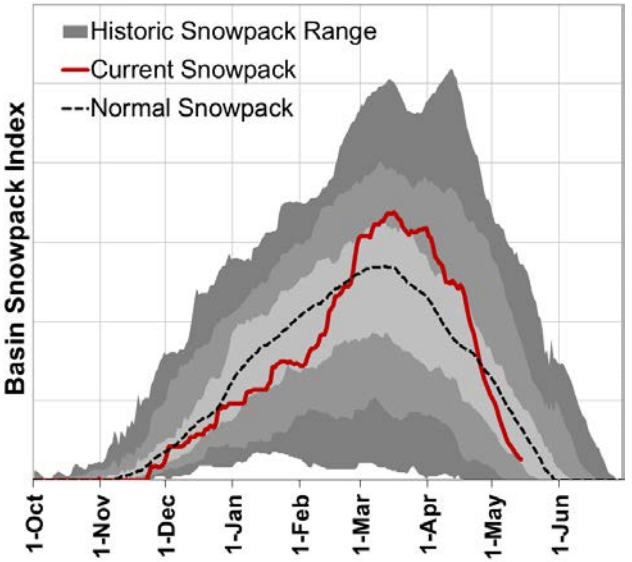
Willamette



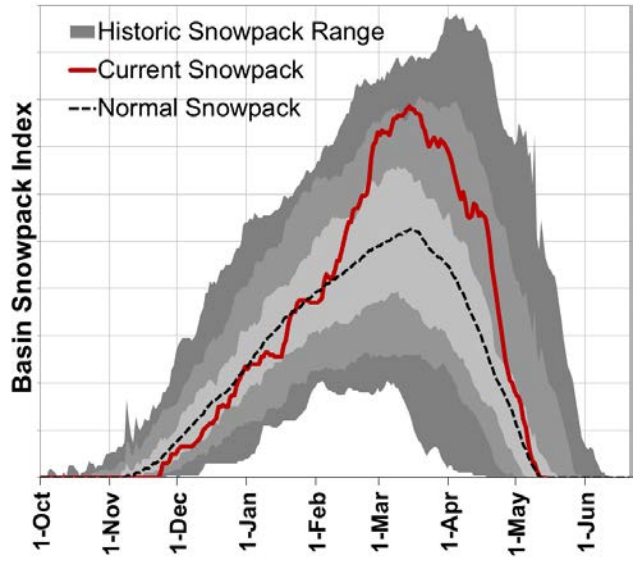
Rogue/Umpqua



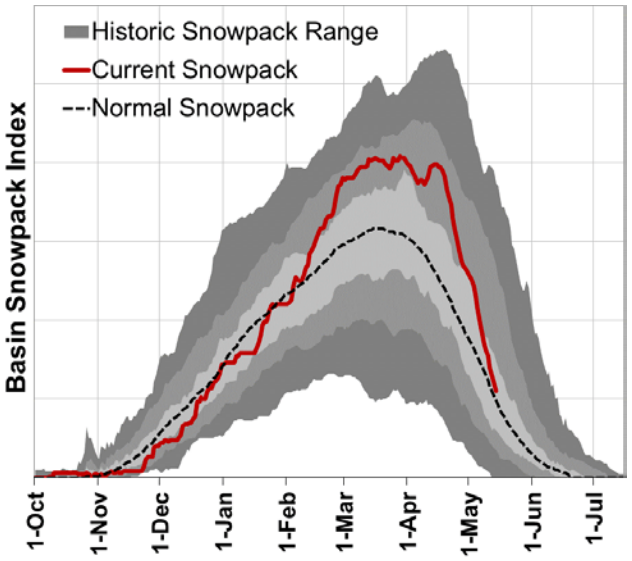
Klamath



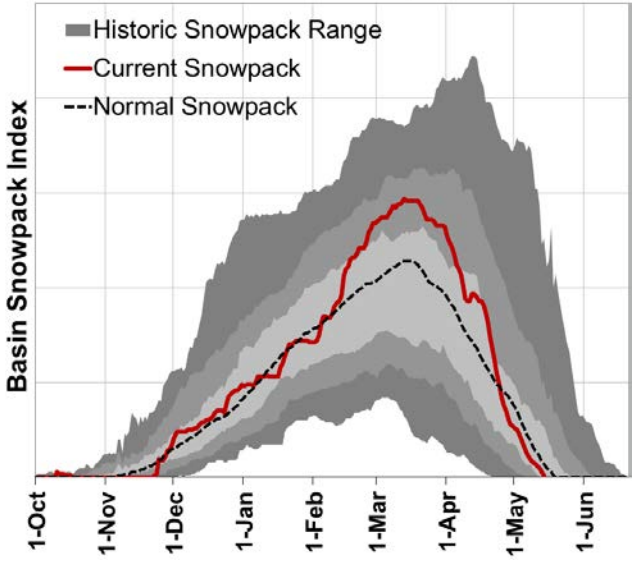
John Day



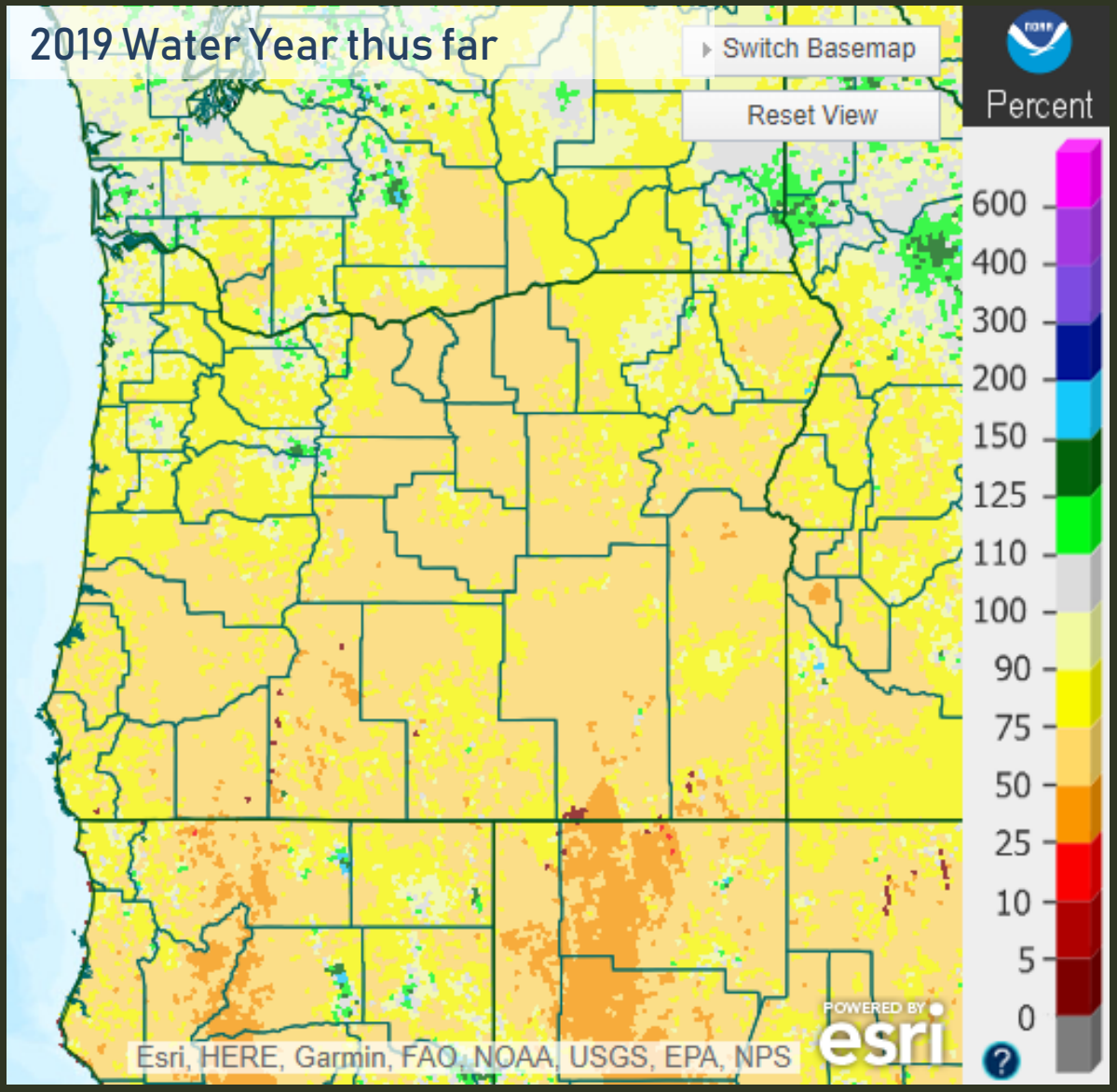
Grande Ronde/Powder/Burnt



Owyhee/Malheur

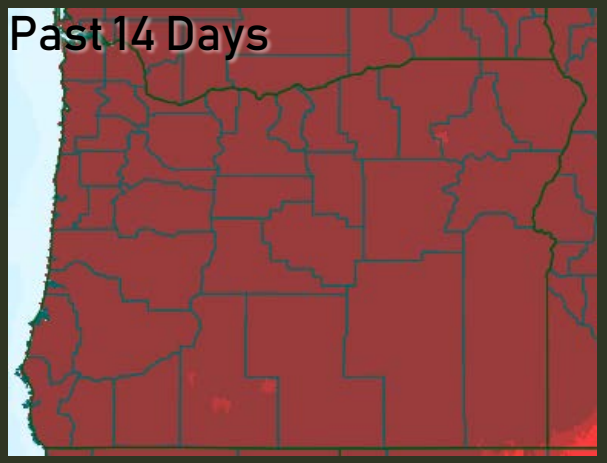


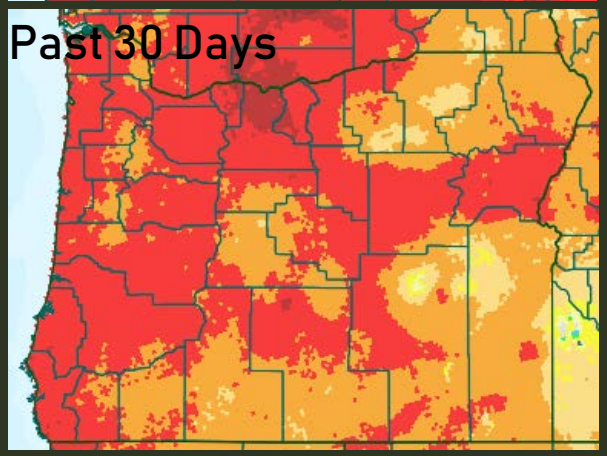
Precipitation % of Average

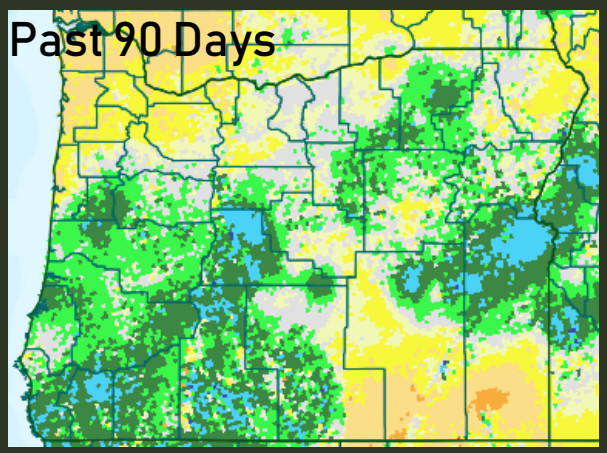


Precipitation Data as of May 12, 2019

Source: water.weather.gov/precip/index.php?location_type=wfo&location_name=pqr

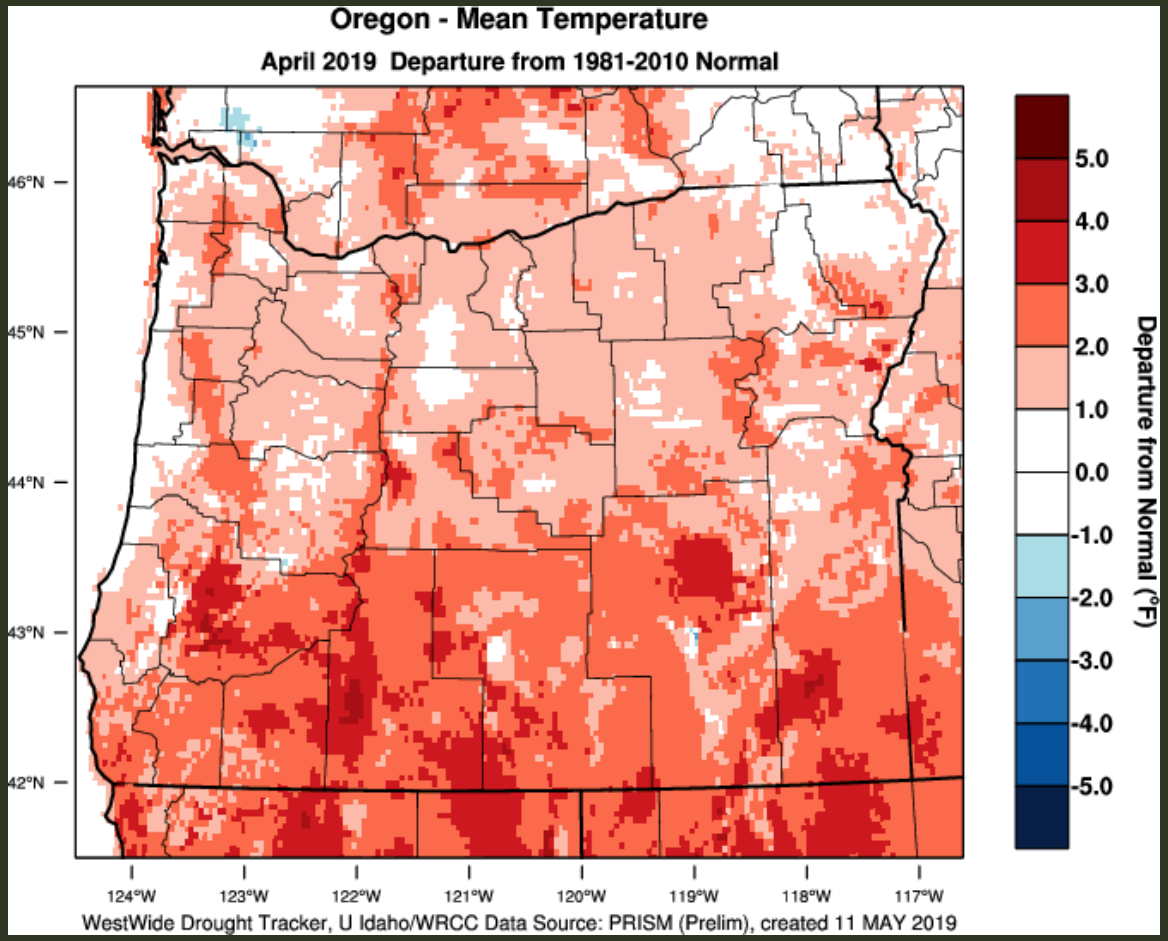






Recent Temperatures

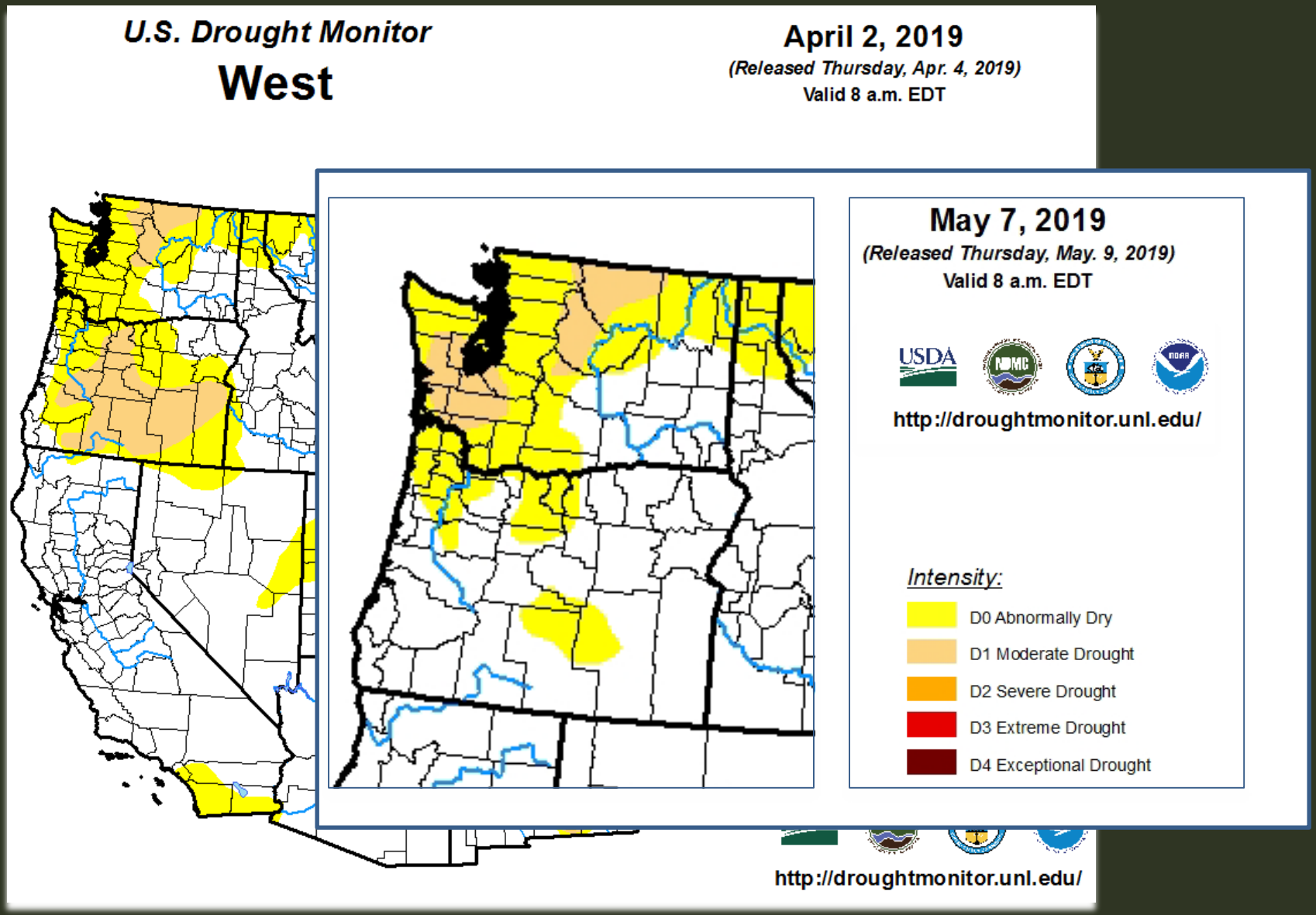
April 2019



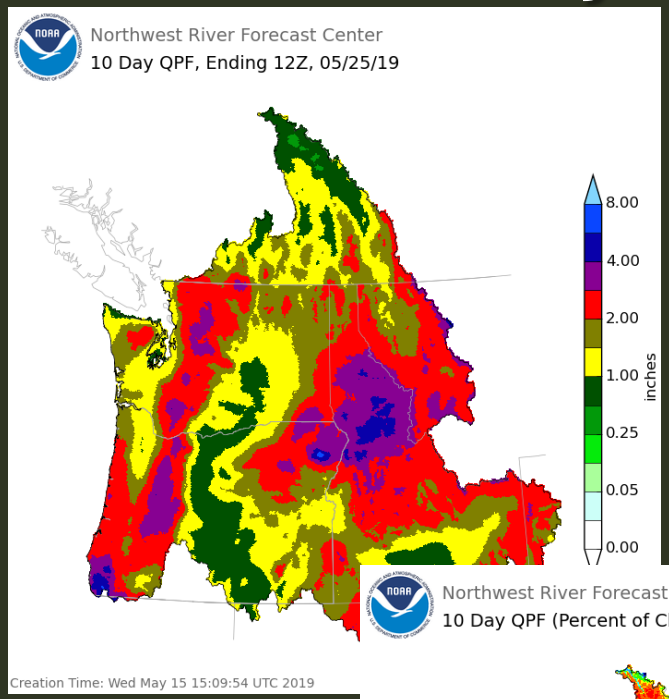
Temperatures thus far in May 2019:
2 to 8 degrees above normal

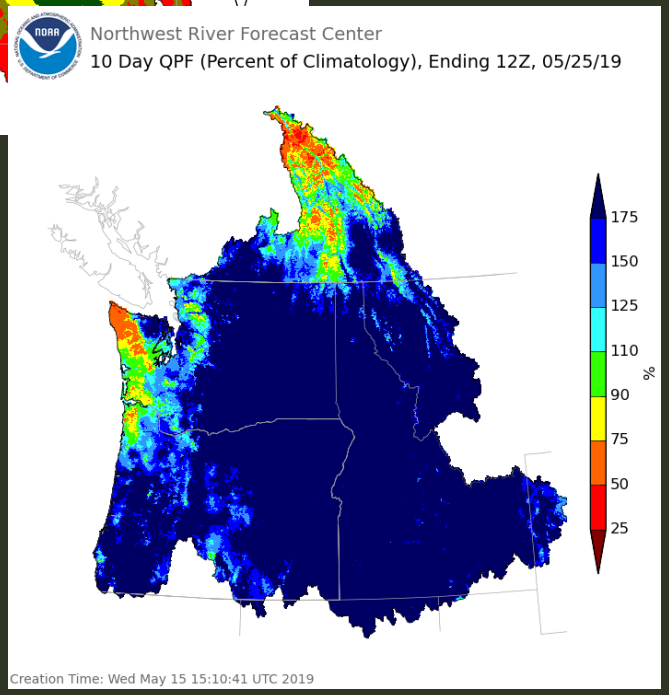
https://wrcc.dri.edu/wwdt/current.php?folder=mdn1

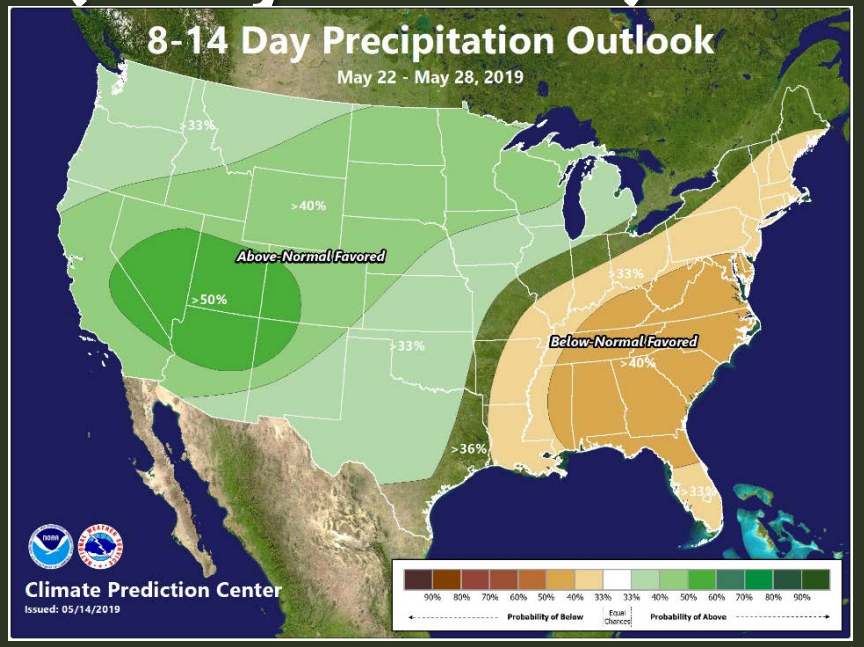
Drought Monitor

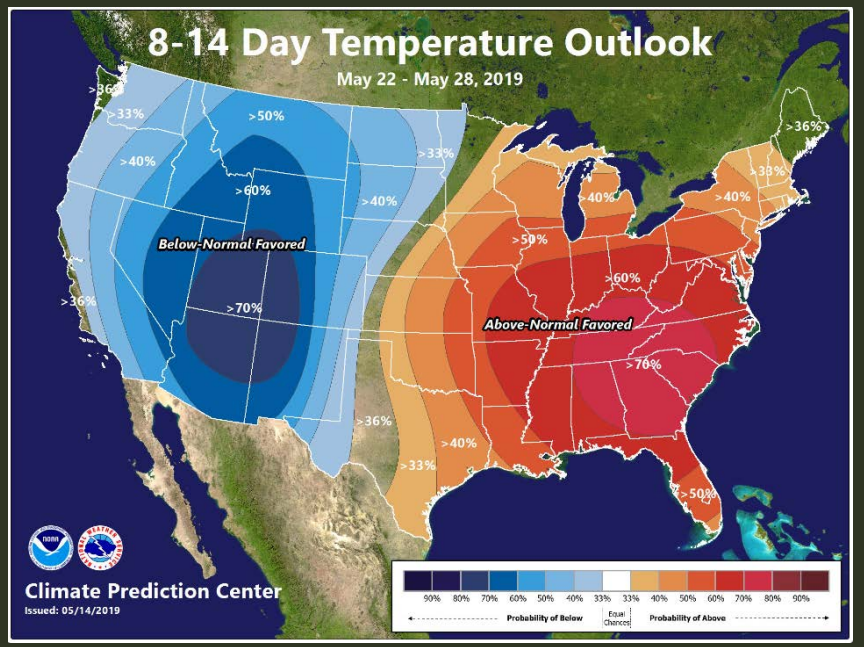


8-14 Day Outlook (May 22-28)



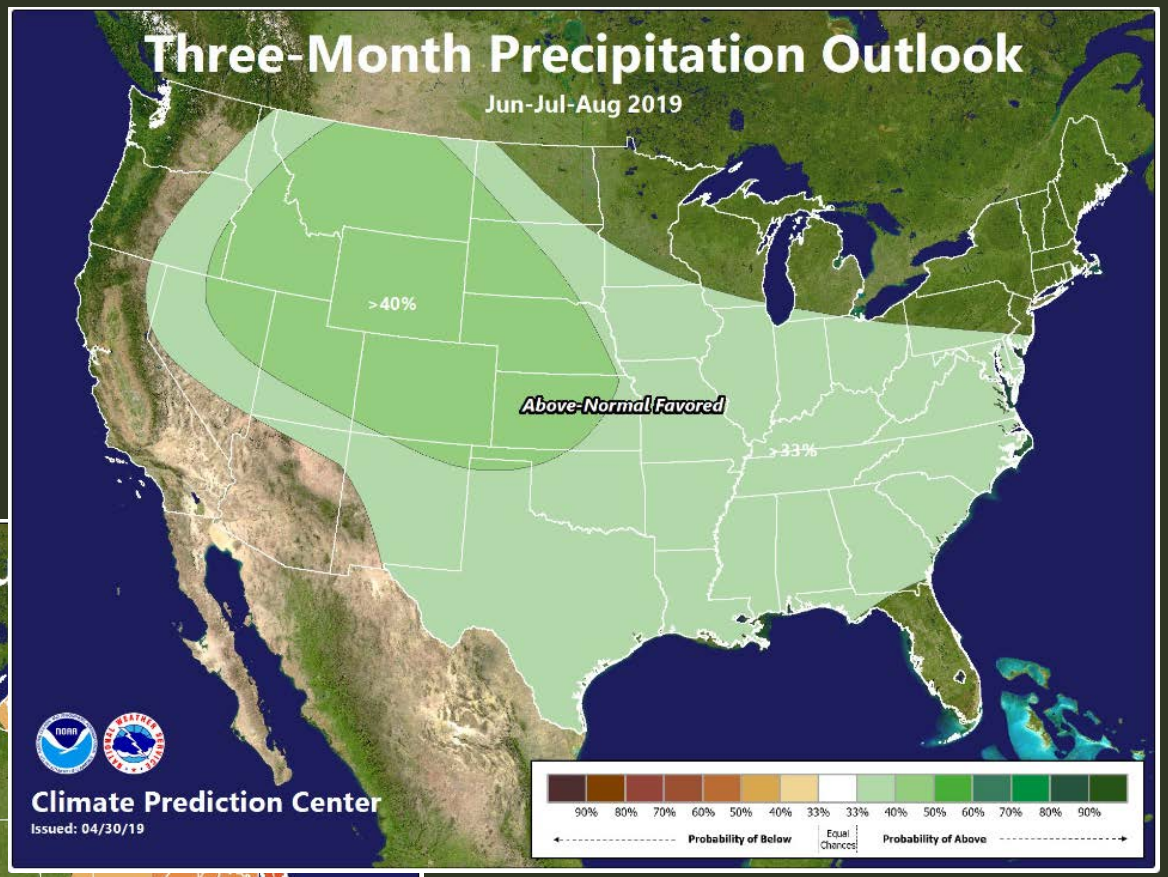


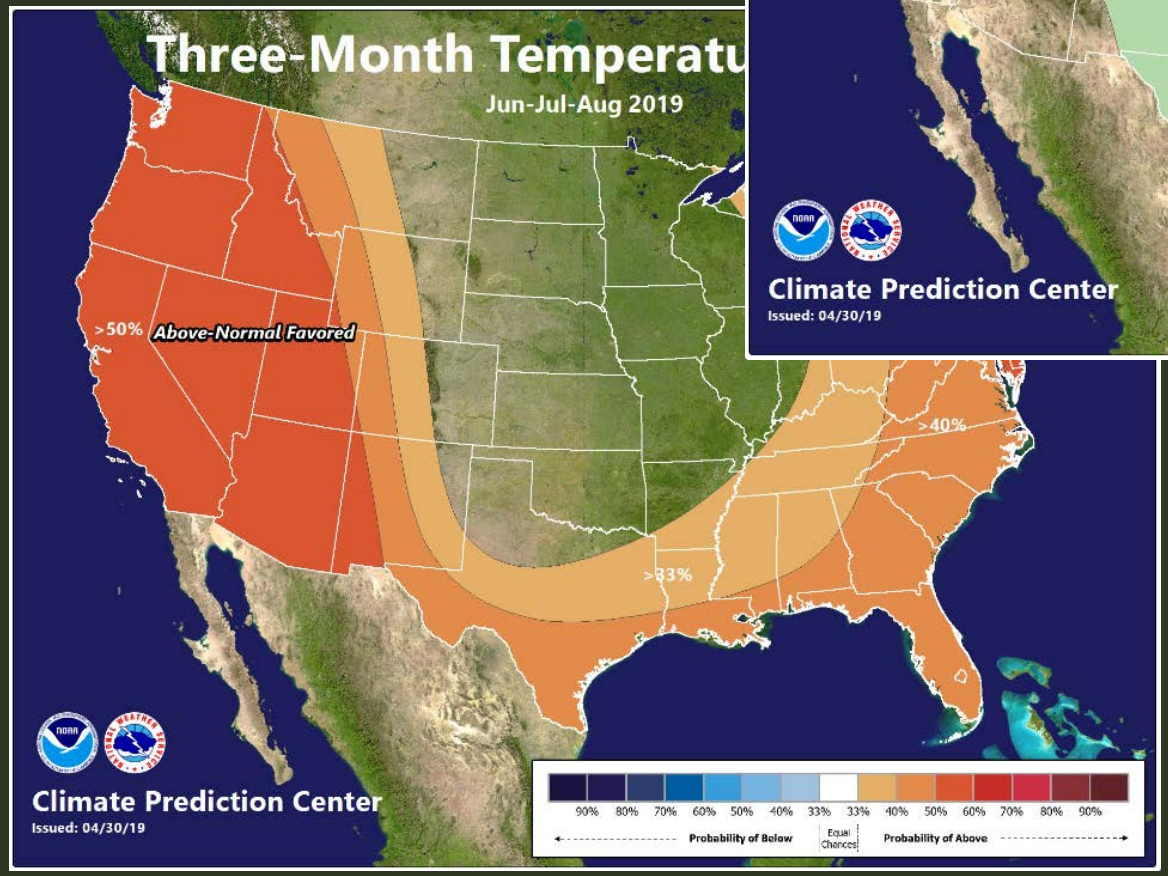




https://www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php?tab=3

June-July-August Outlook

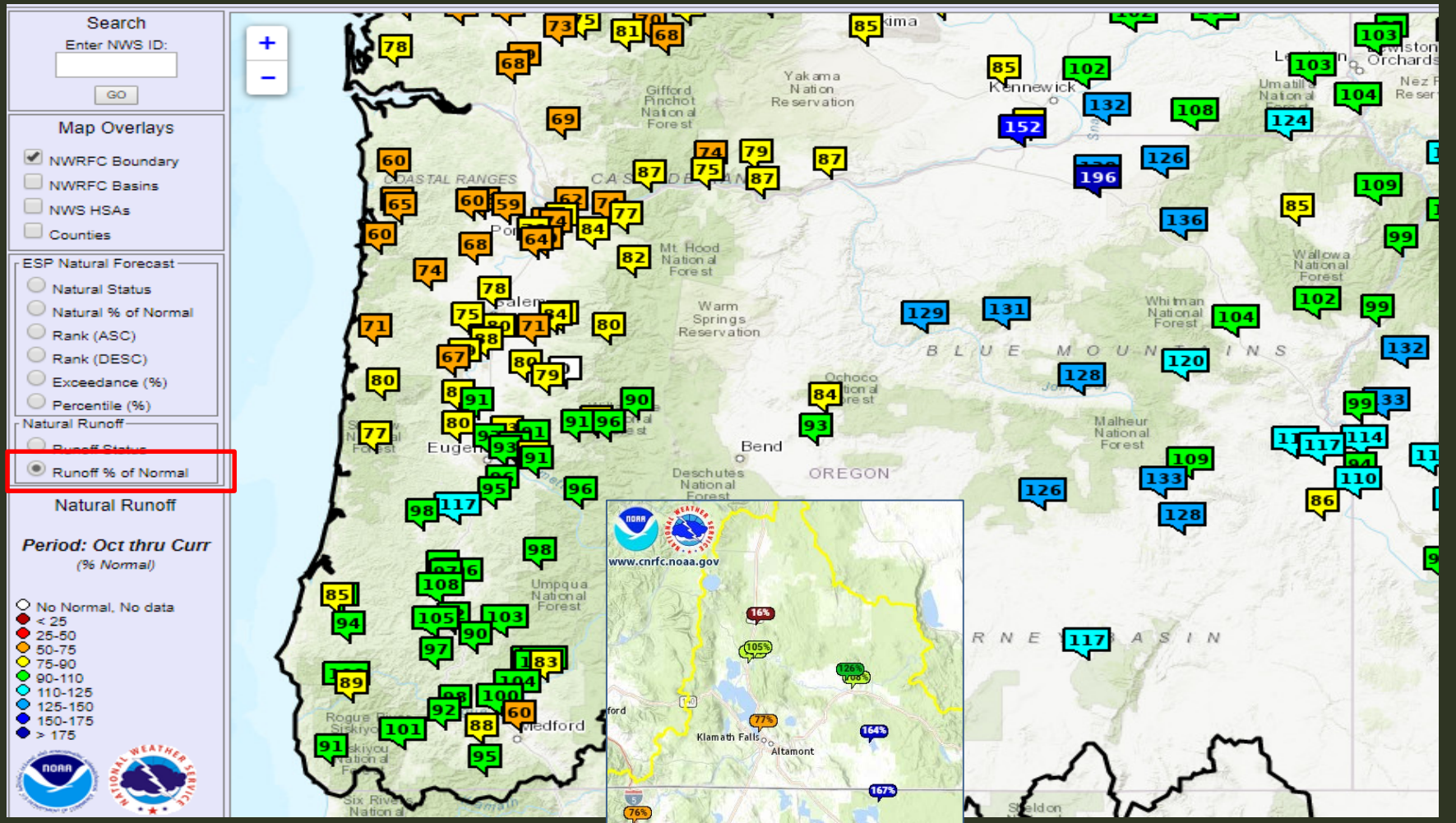




https://www.wrh.noaa.gov/images/sto/GIS_NEW/

Natural Runoff – Oct 1 To Current

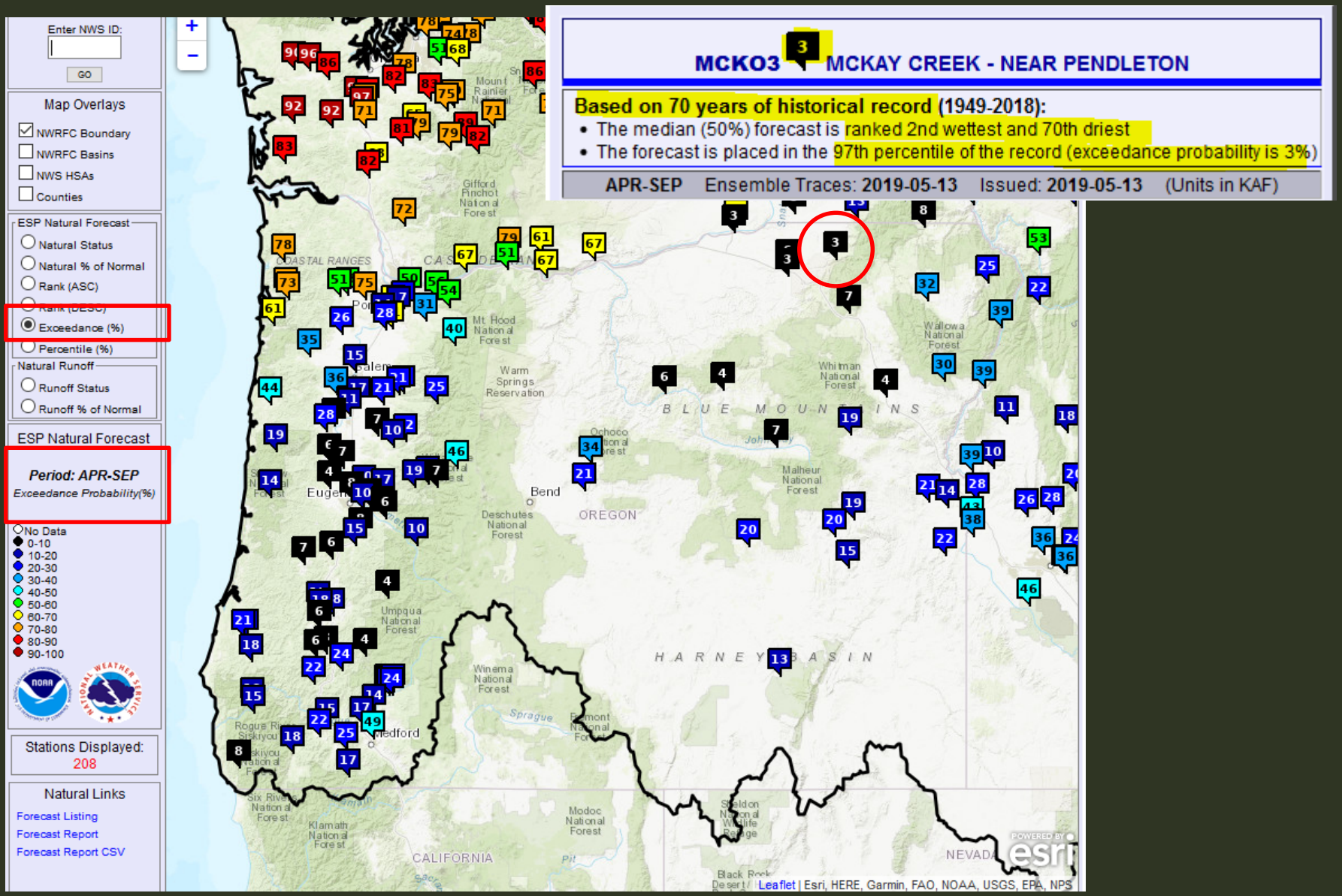
NWRFC, Natural Runoff Estimates

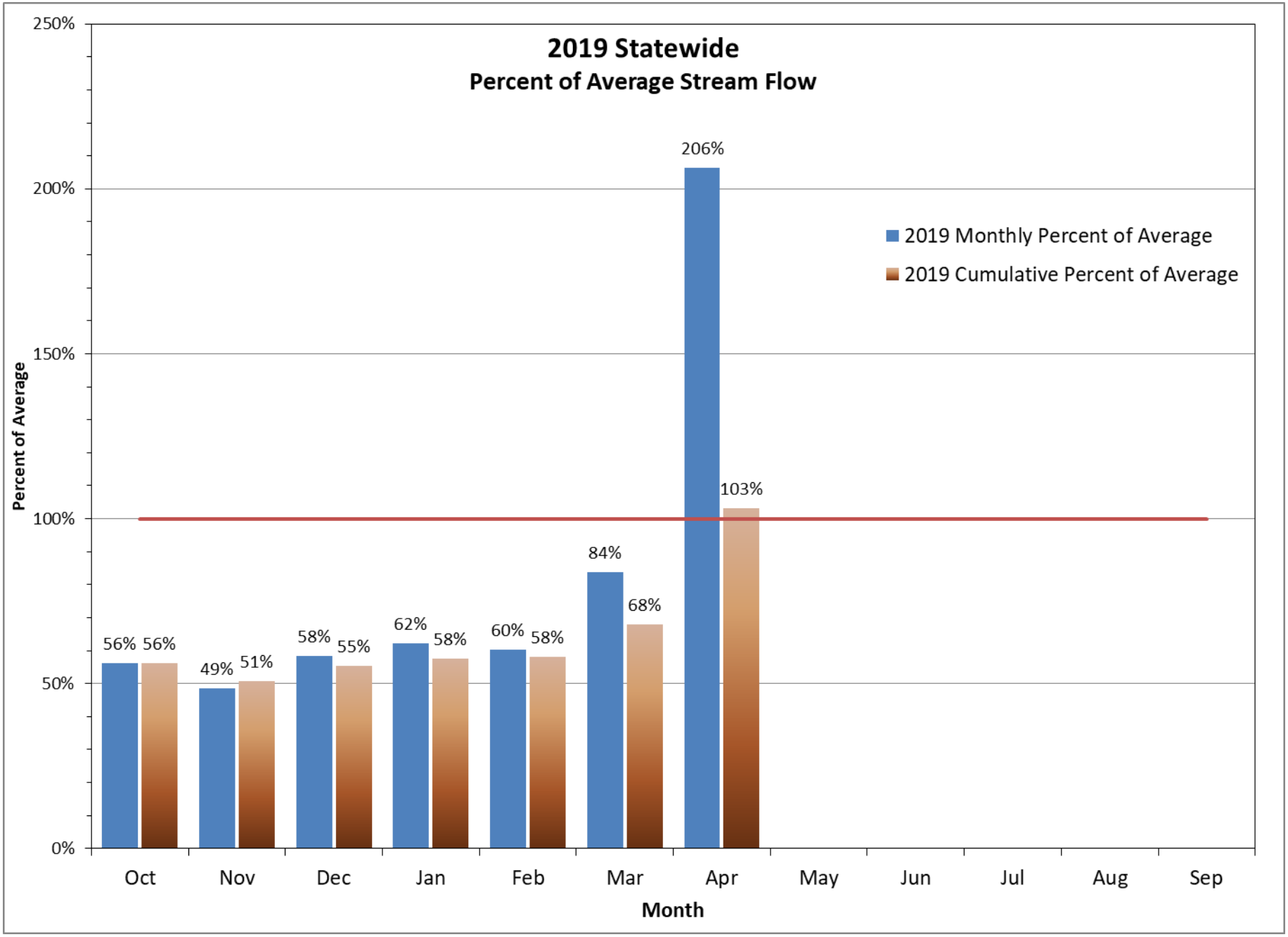


https://www.nwrfc.noaa.gov/natural/index.html?version=20181015v2
https://www.cnrfc.noaa.gov/ol.php?product=espWS

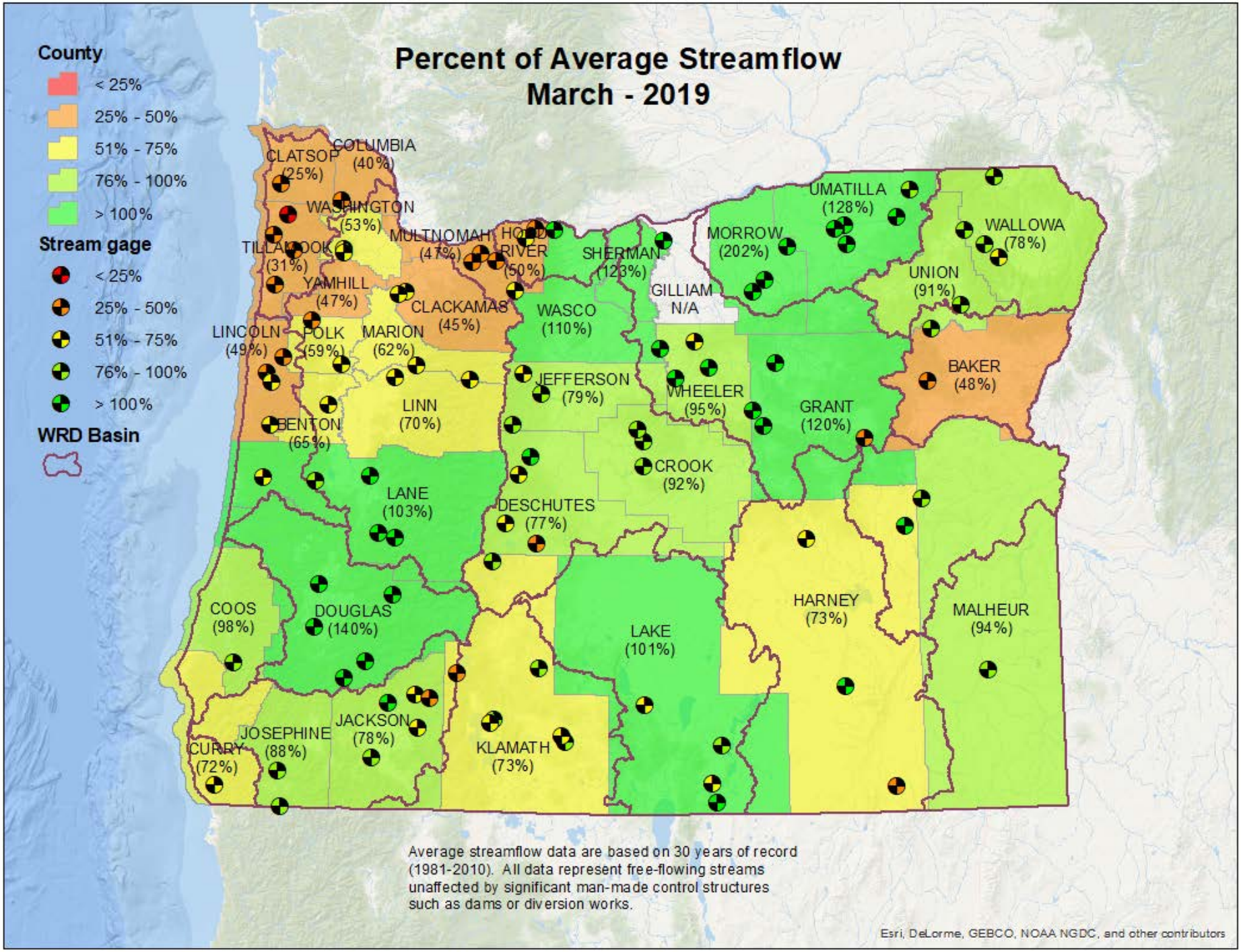
Klamath RO: California Nevada RFC

Seasonal Water Supply Forecasts

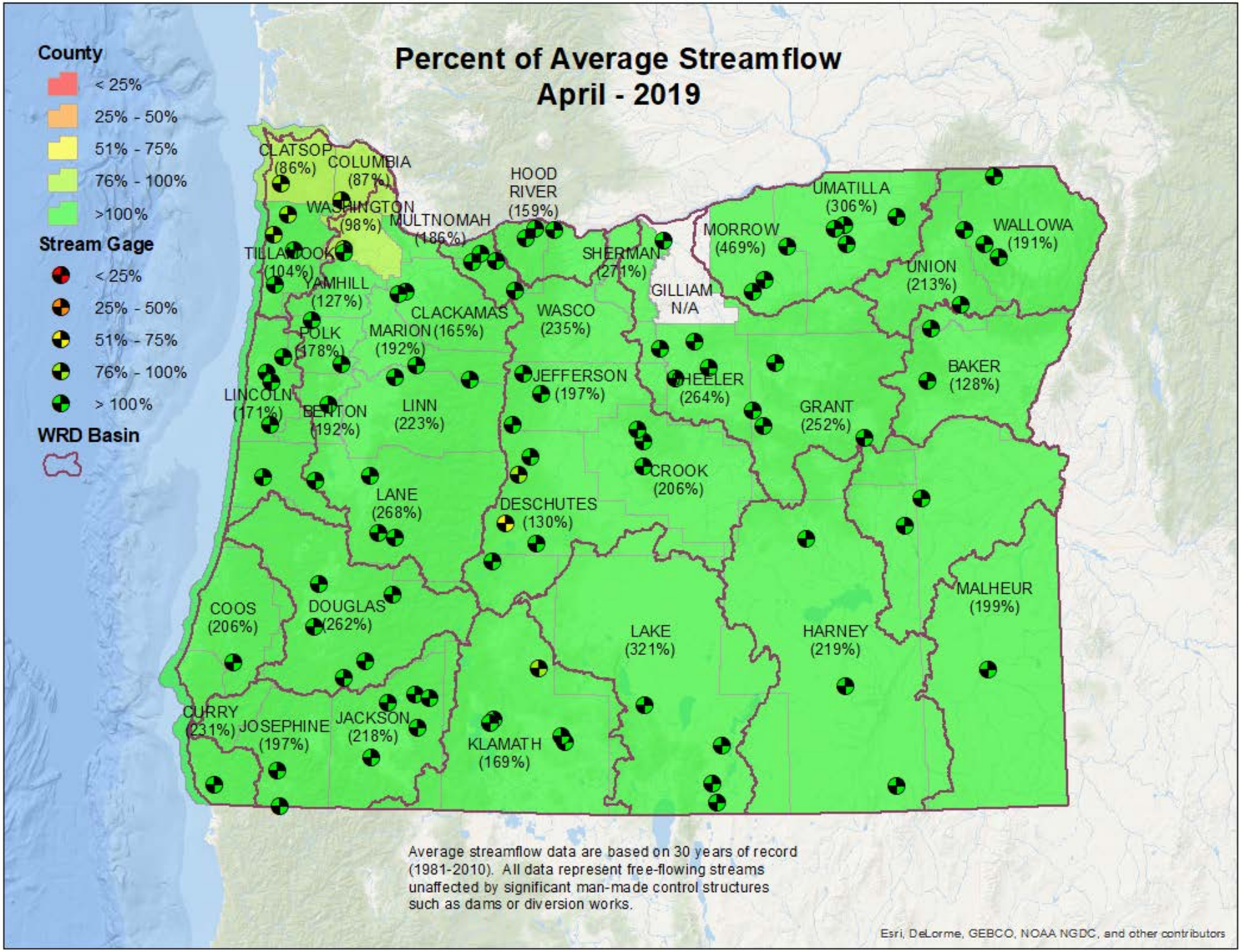



2019 Statewide
Percent of Average Stream Flow
250%
200%
150%
100%
50%
0%
Percent of Average
206%
103%
84%
68%
62%
58%
60%
58%
58%
55%
56%
56%
49%
51%
2019 Monthly Percent of Average
2019 Cumulative Percent of Average
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Month

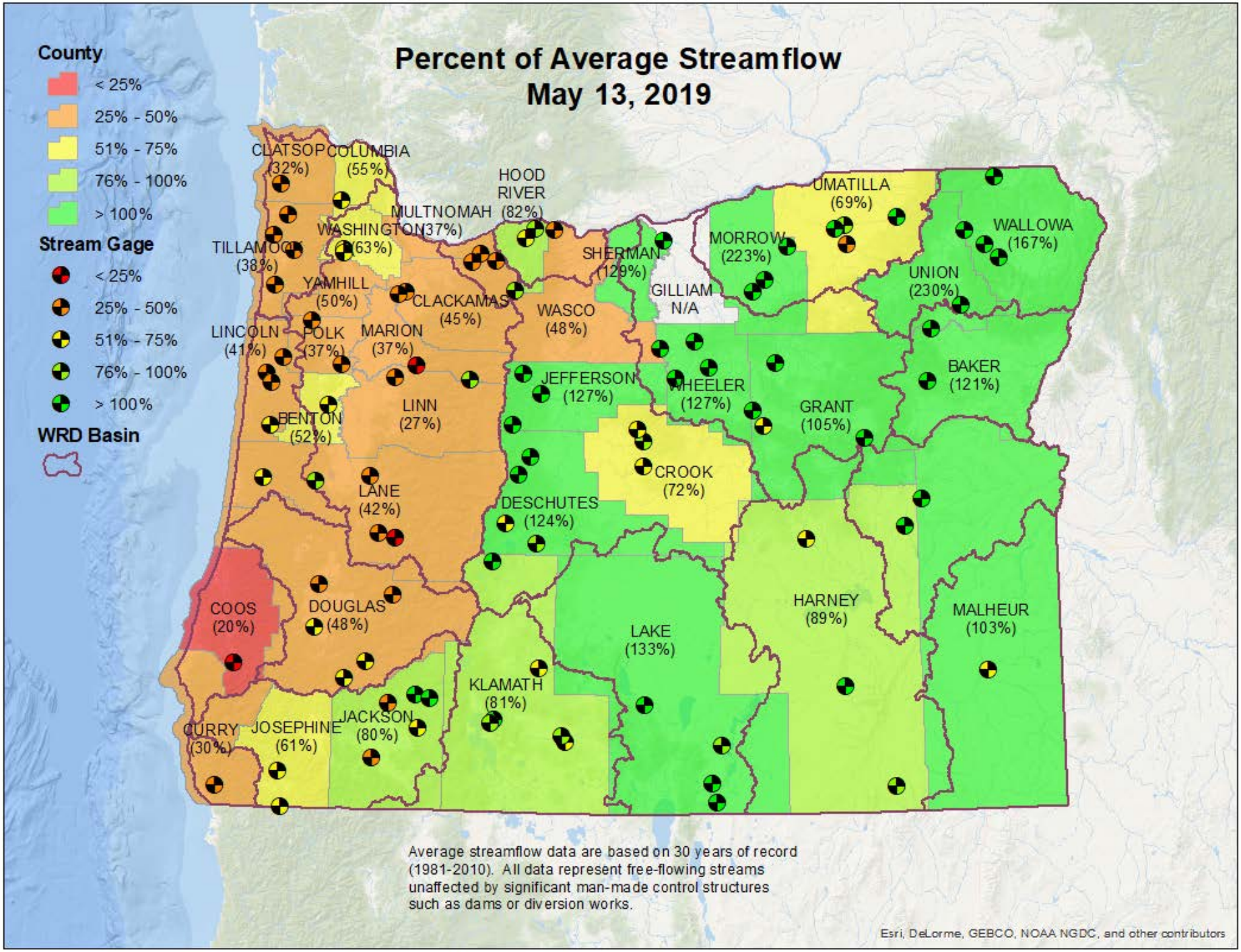
Percent of Average Streamflow
March - 2019



Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.


Percent of Average Streamflow
April - 2019
County
< 25%
25% - 50%
51% - 75%
76% - 100%
>100%
Stream Gage
< 25%
25% - 50%
51% - 75%
76% - 100%
> 100%
WRD Basin
CLATSOP (86%)
COLUMBIA (87%)
WASHINGTON (98%)
MULTNOMAH (186%)
HOOD RIVER (159%)
TILLAMOOK (104%)
YAMHILL (127%)
CLACKAMAS
MARION (165%)
POLK (178%)
WASCO (235%)
SHERMAN (271%)
GILLIAM N/A
MORROW (469%)
UMATILLA (306%)
WALLOWA (191%)
UNION (213%)
BAKER (128%)
JEFFERSON (197%)
WHEELER (264%)
GRANT (252%)
LINCOLN (171%)
BENTON (192%)
LINN (223%)
CROOK (206%)
LANE (268%)
DESCHUTES (130%)
MALHEUR (199%)
COOS (206%)
DOUGLAS (262%)
LAKE (321%)
HARNEY (219%)
CURRY (231%)
JOSEPHINE (197%)
JACKSON (218%)
KLAMATH (169%)
Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Percent of Average Streamflow
May 13, 2019

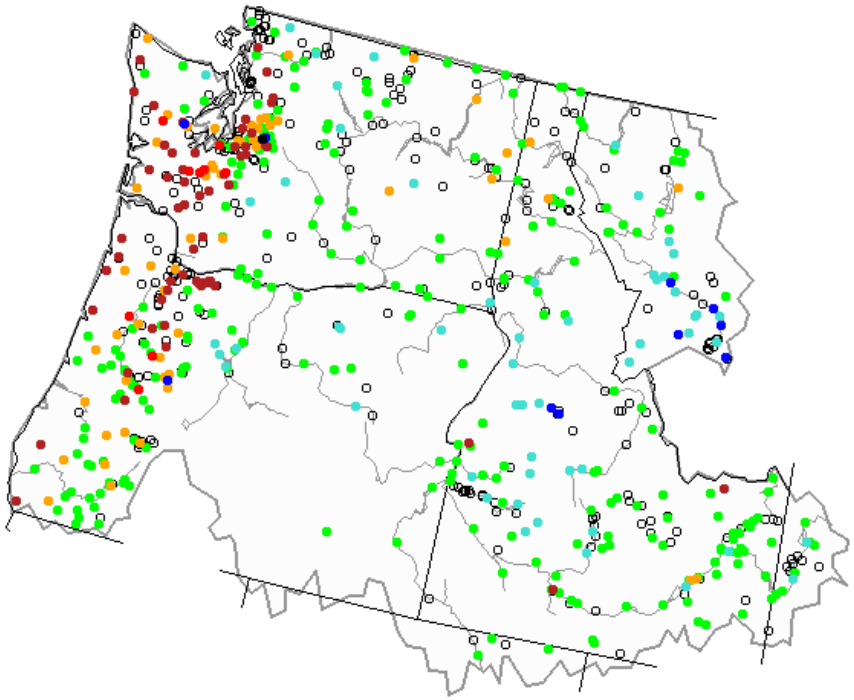


Average streamflow data are based on 30 years of record (1981-2010). All data represent free-flowing streams unaffected by significant man-made control structures such as dams or diversion works.

Map of 7-day average streamflow compared to historical streamflow for the day of the year (Pacific Northwest)

State or 17 Pacific Northwest All Days

Tuesday, May 14, 2019



USGS

Search USGS streamgage

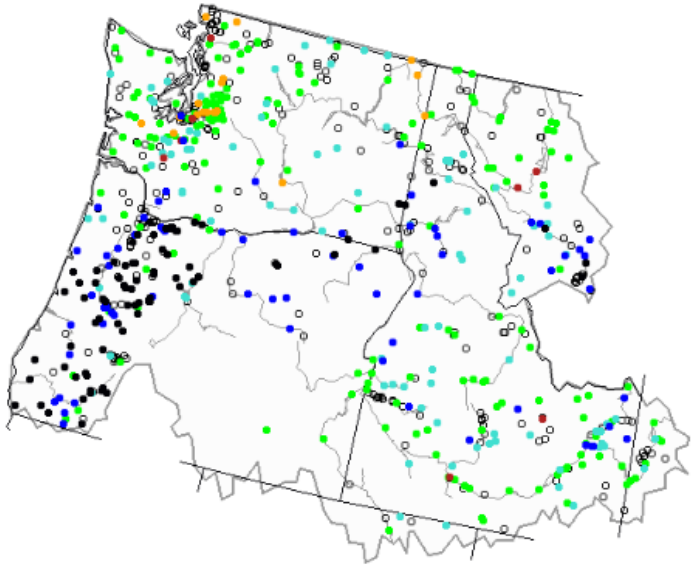
Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

USGS

Map of current 7-day average streamflow compared to historical streamflow for the day of the year (Pacific Northwest)

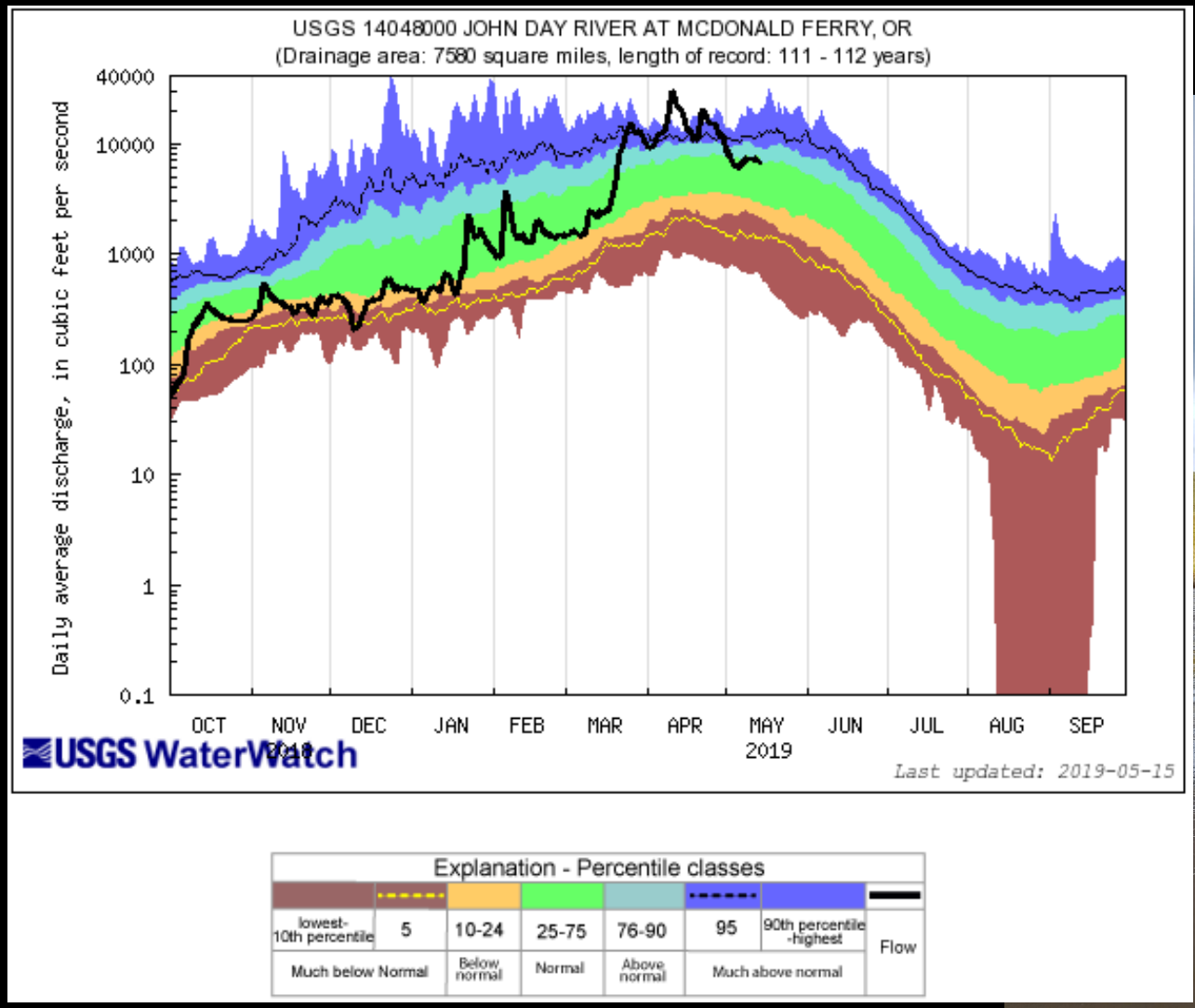
Daily Streamflow for April 7

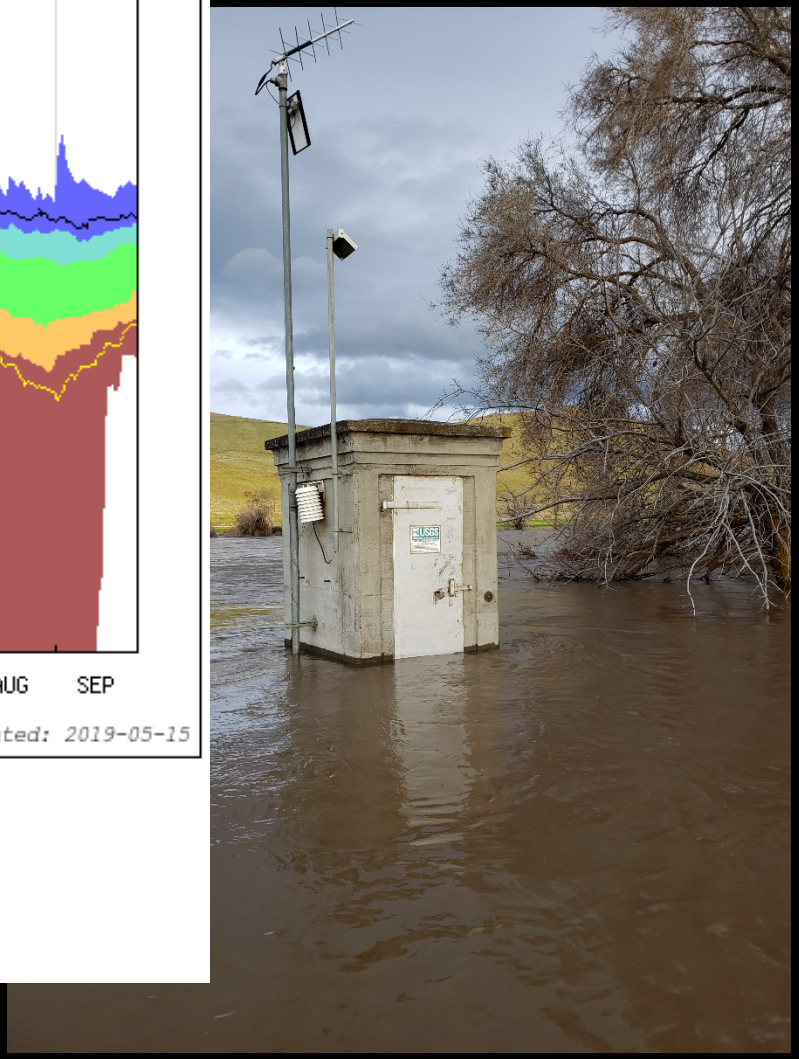
Sunday, April 07, 2019



USGS

14048000 John Day R at McDonald Ferry

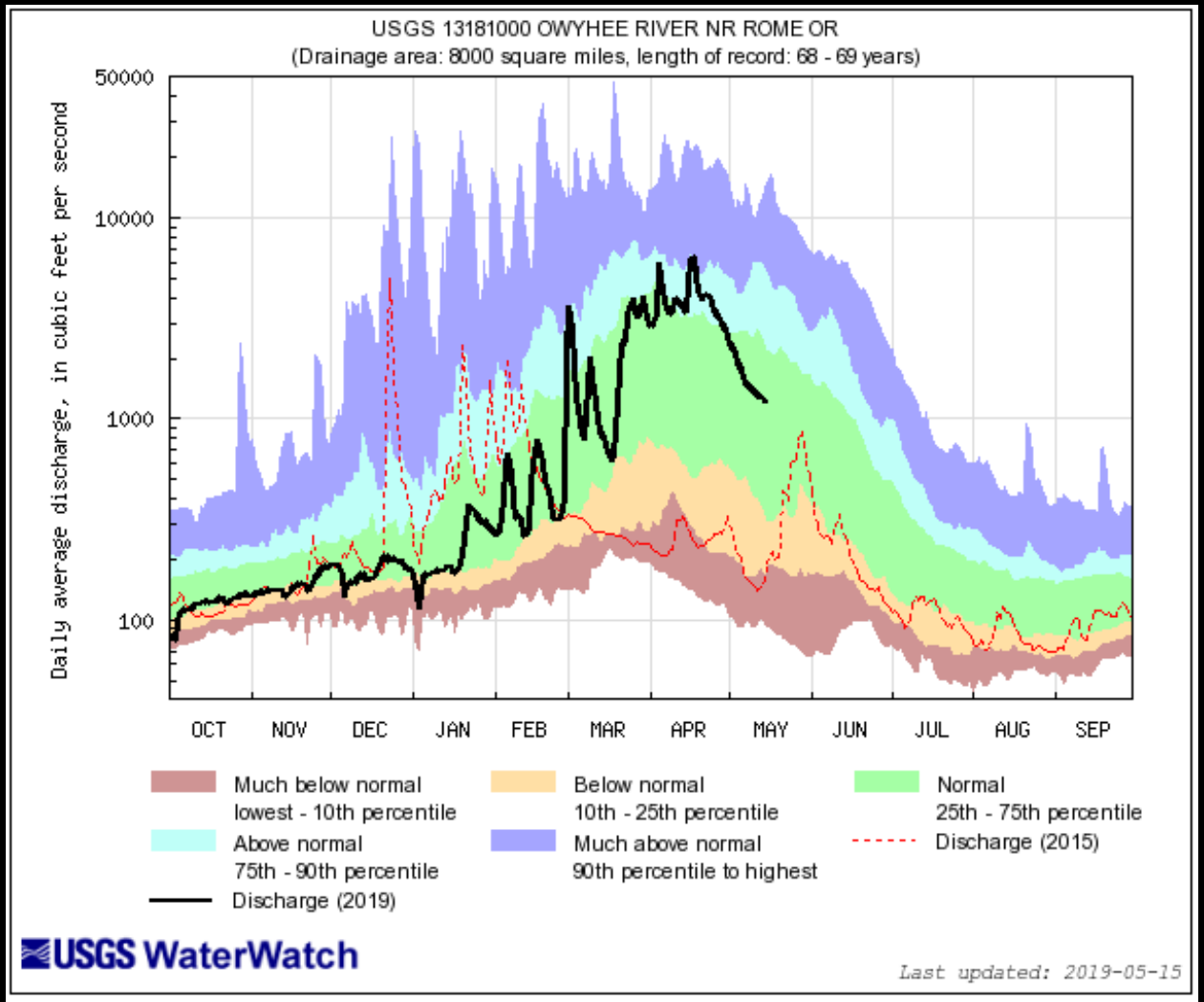




USGS

4/10/2019 photo by M Yates

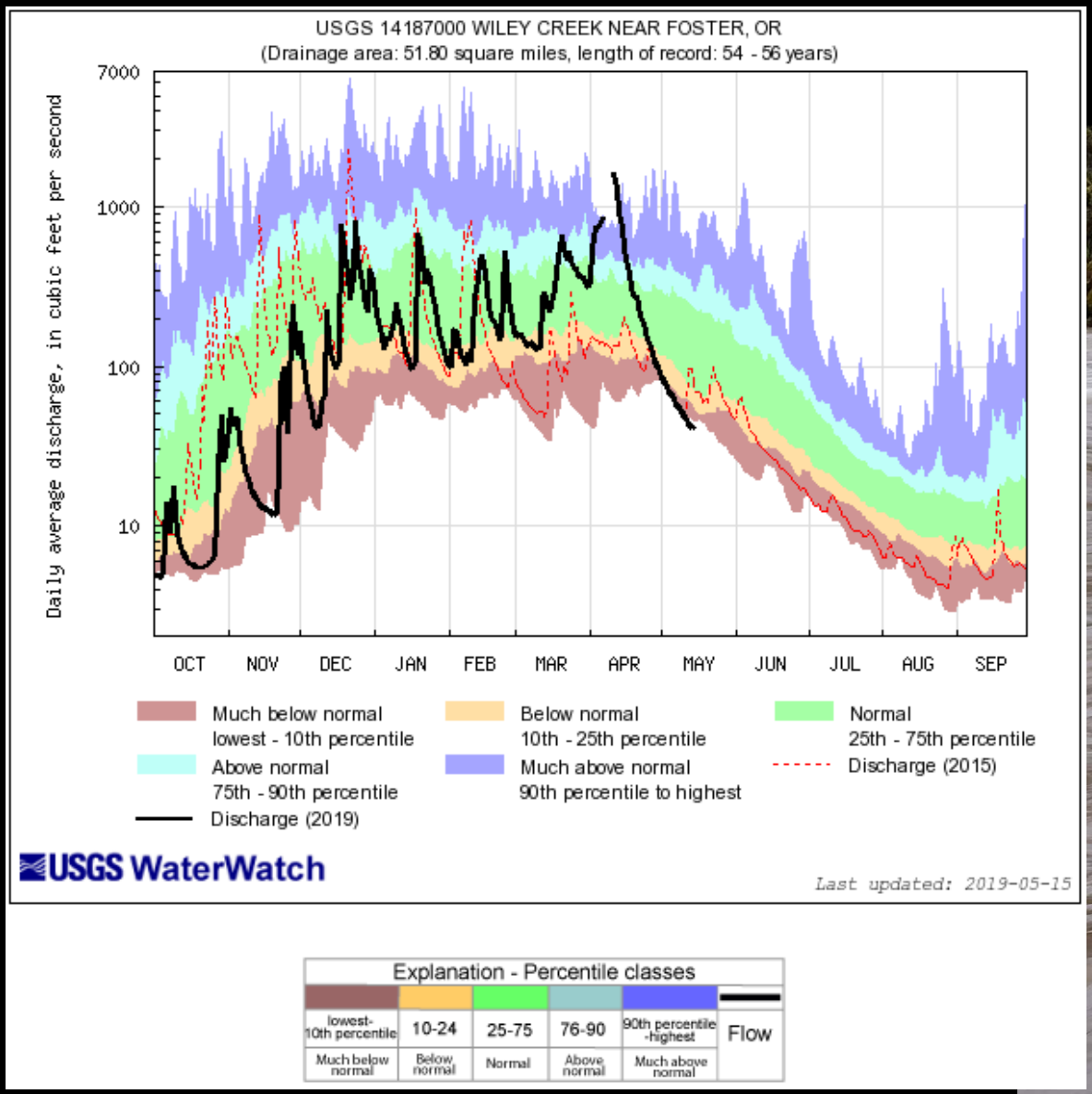
13181000 Owyhee River near Rome

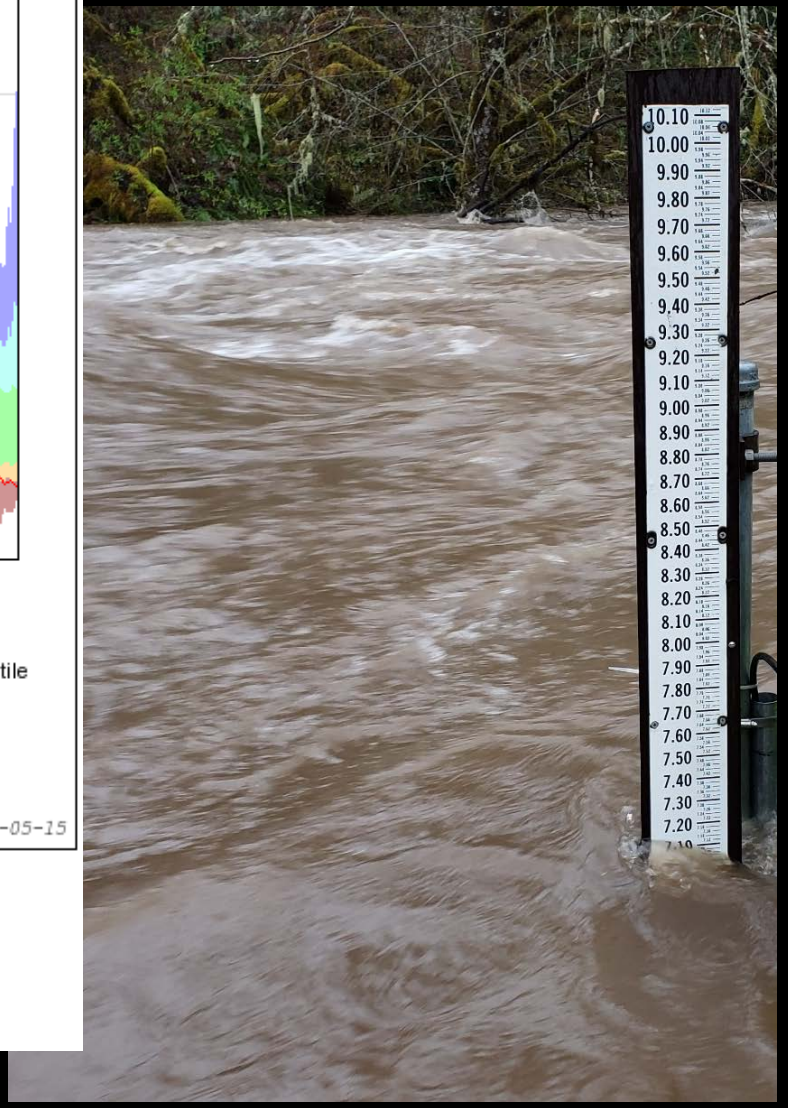


Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

USGS

14187000 Wiley Creek near Foster

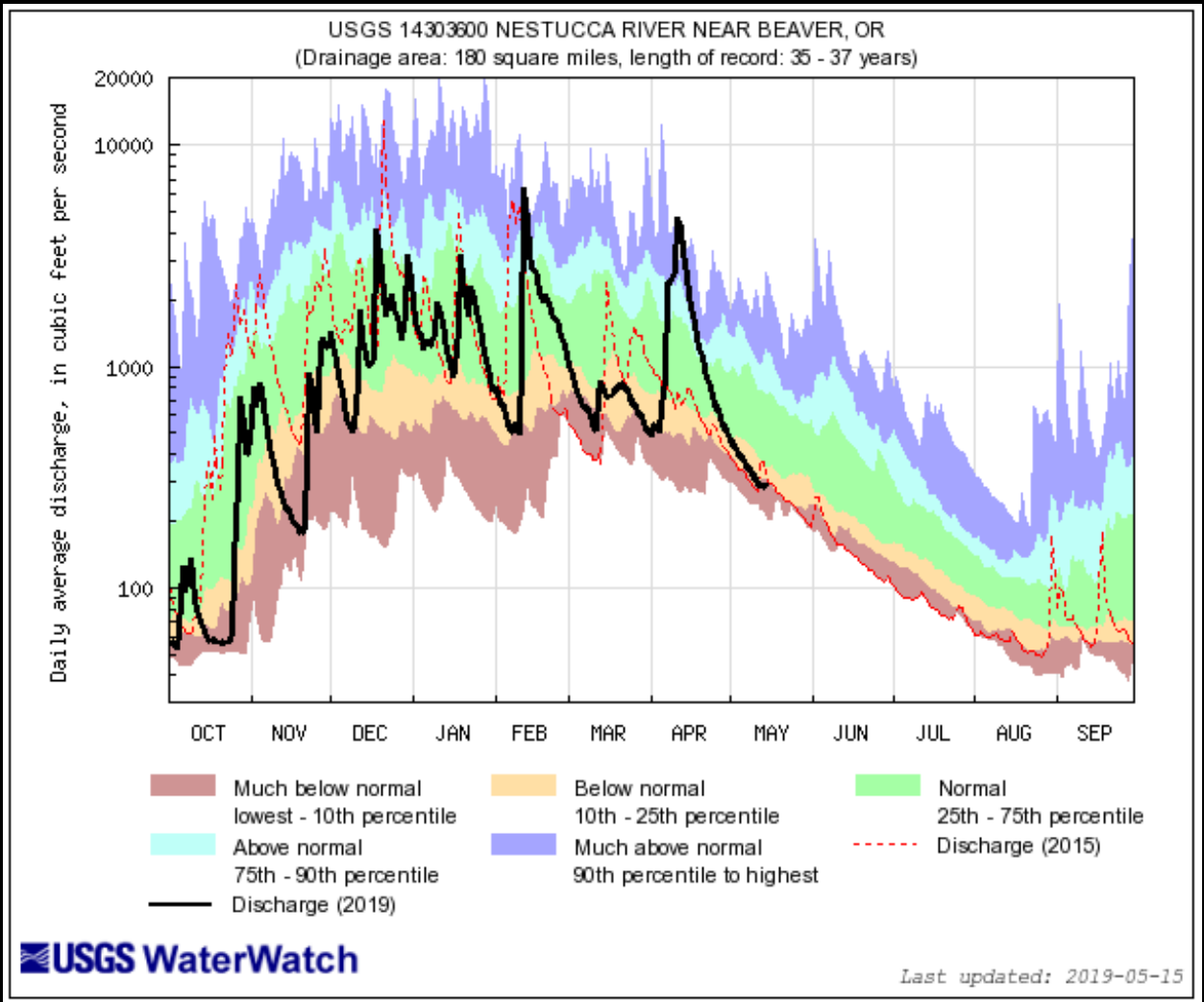




USGS

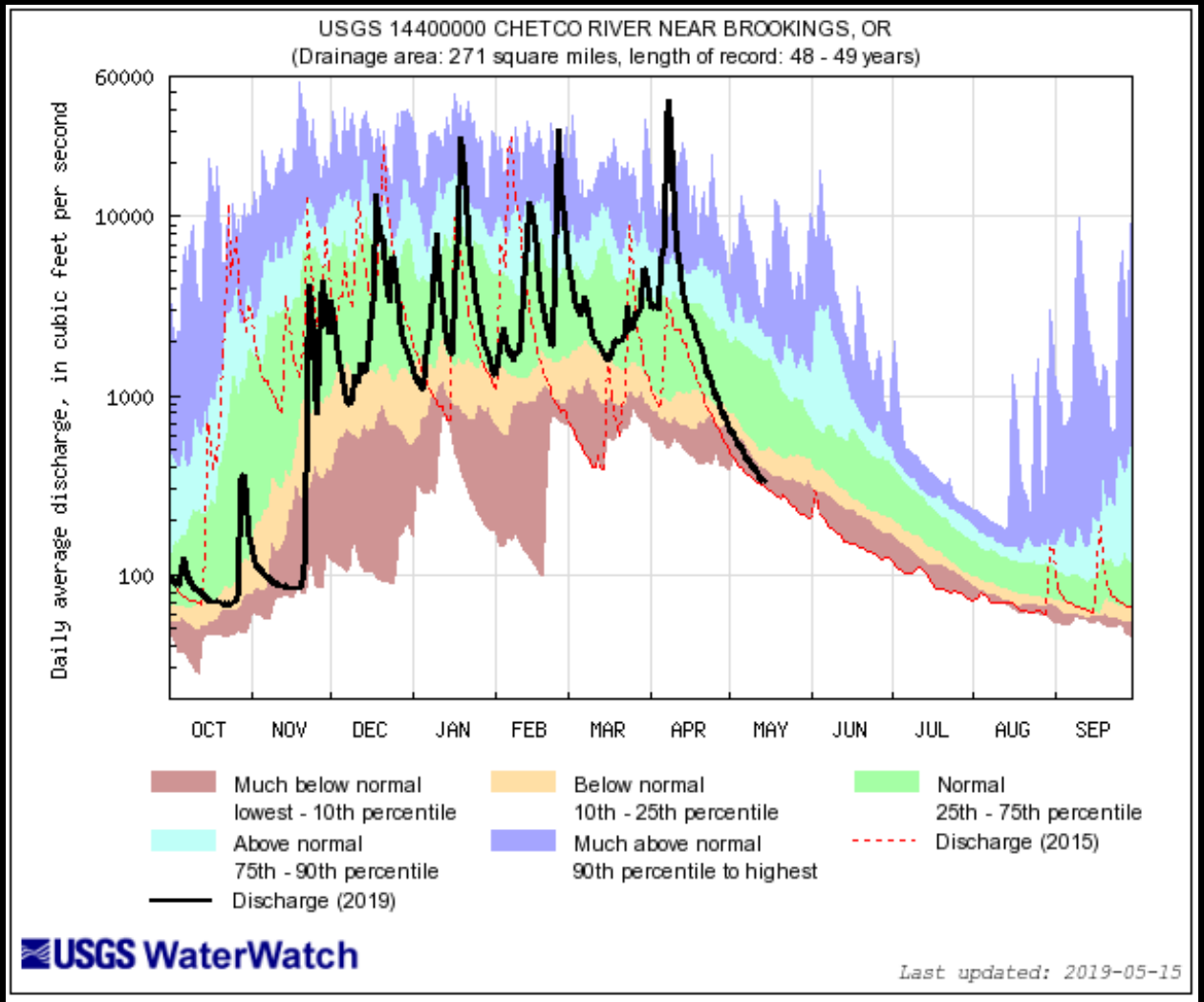
4/8/2019 Photo by C Galvin

14303600 Nestucca River near Beaver



Explanation - Percentile classes					
lowest-10th percentile	10-24	25-75	76-90	90th percentile -highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal	

14400000 Chetco River near Brookings



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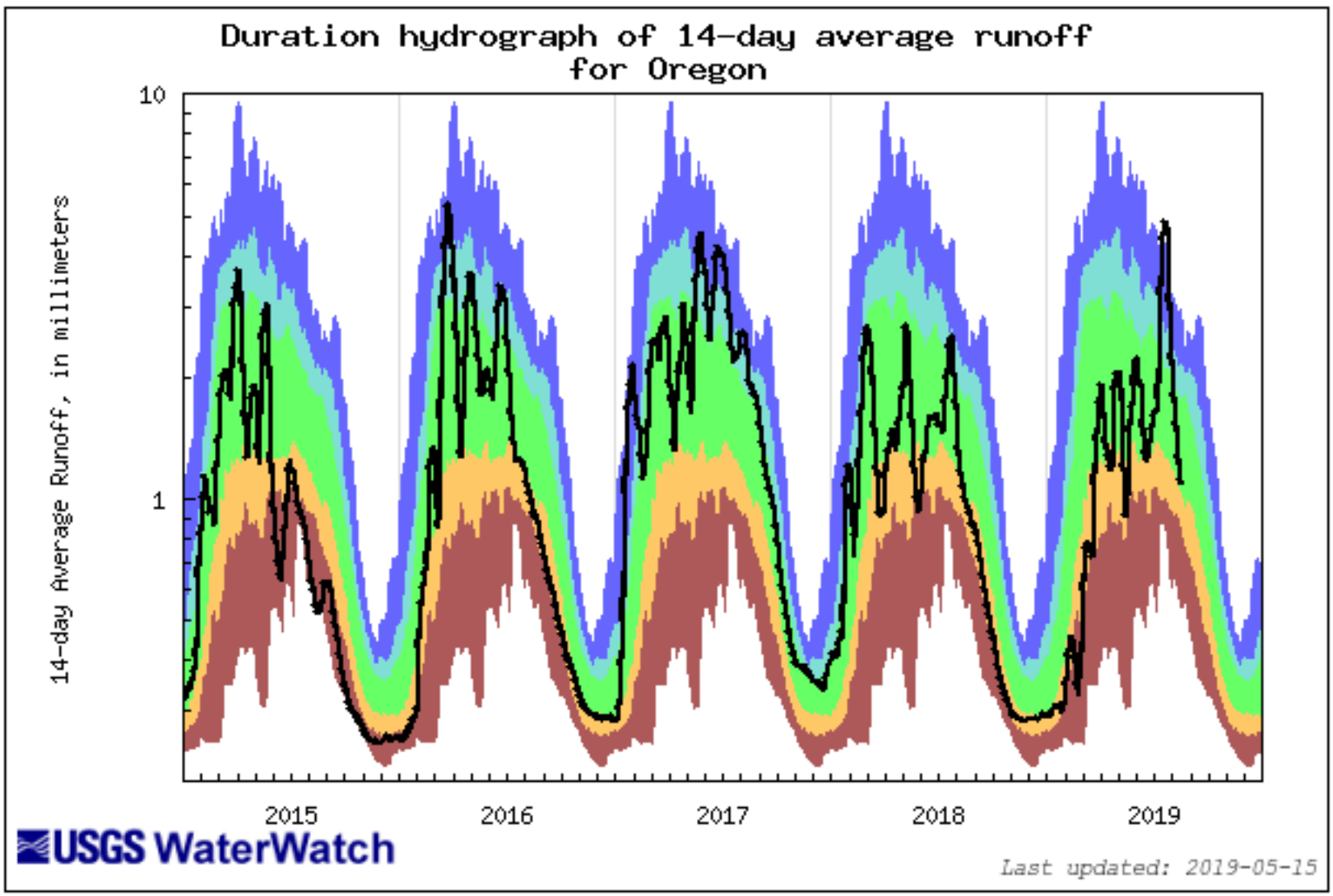
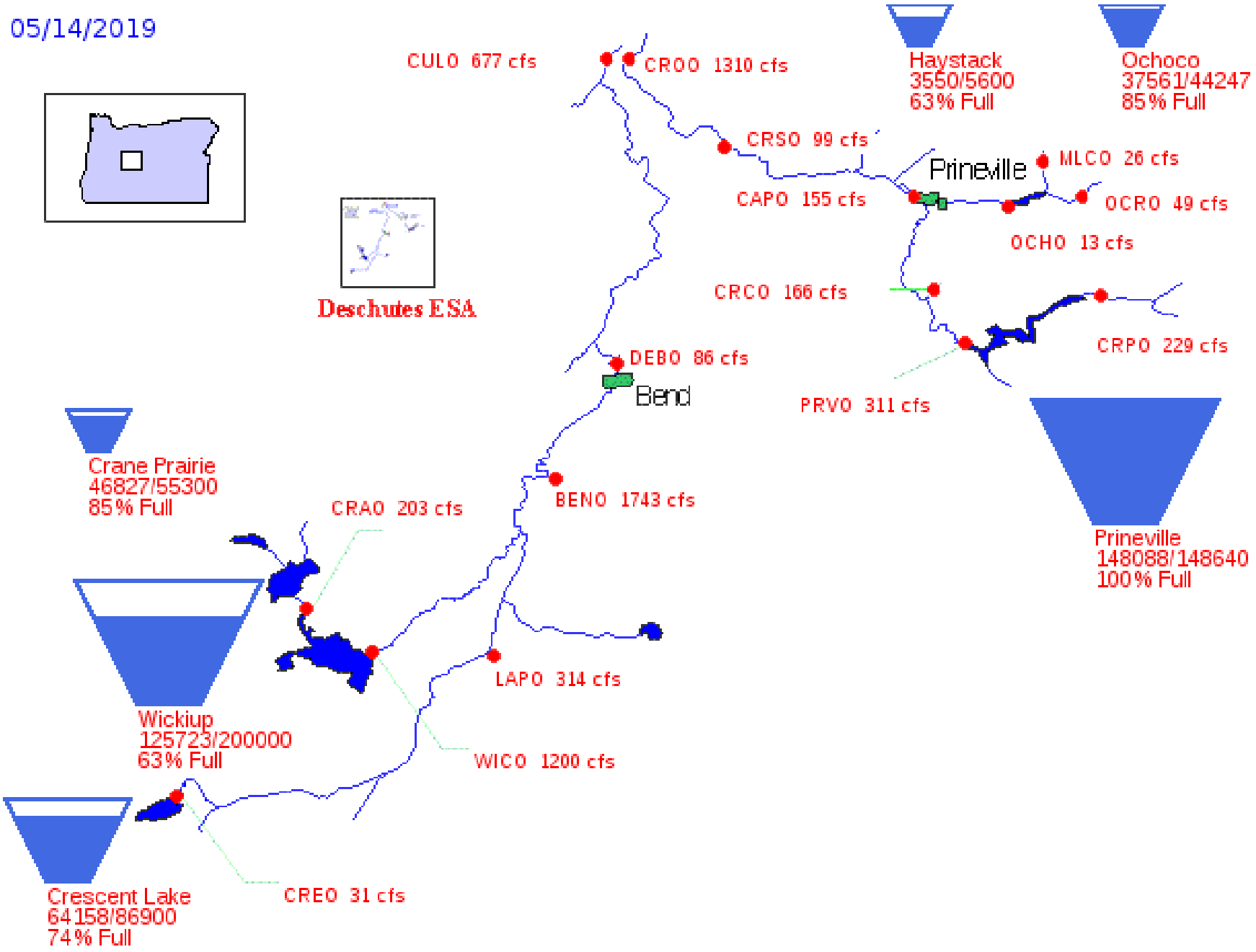
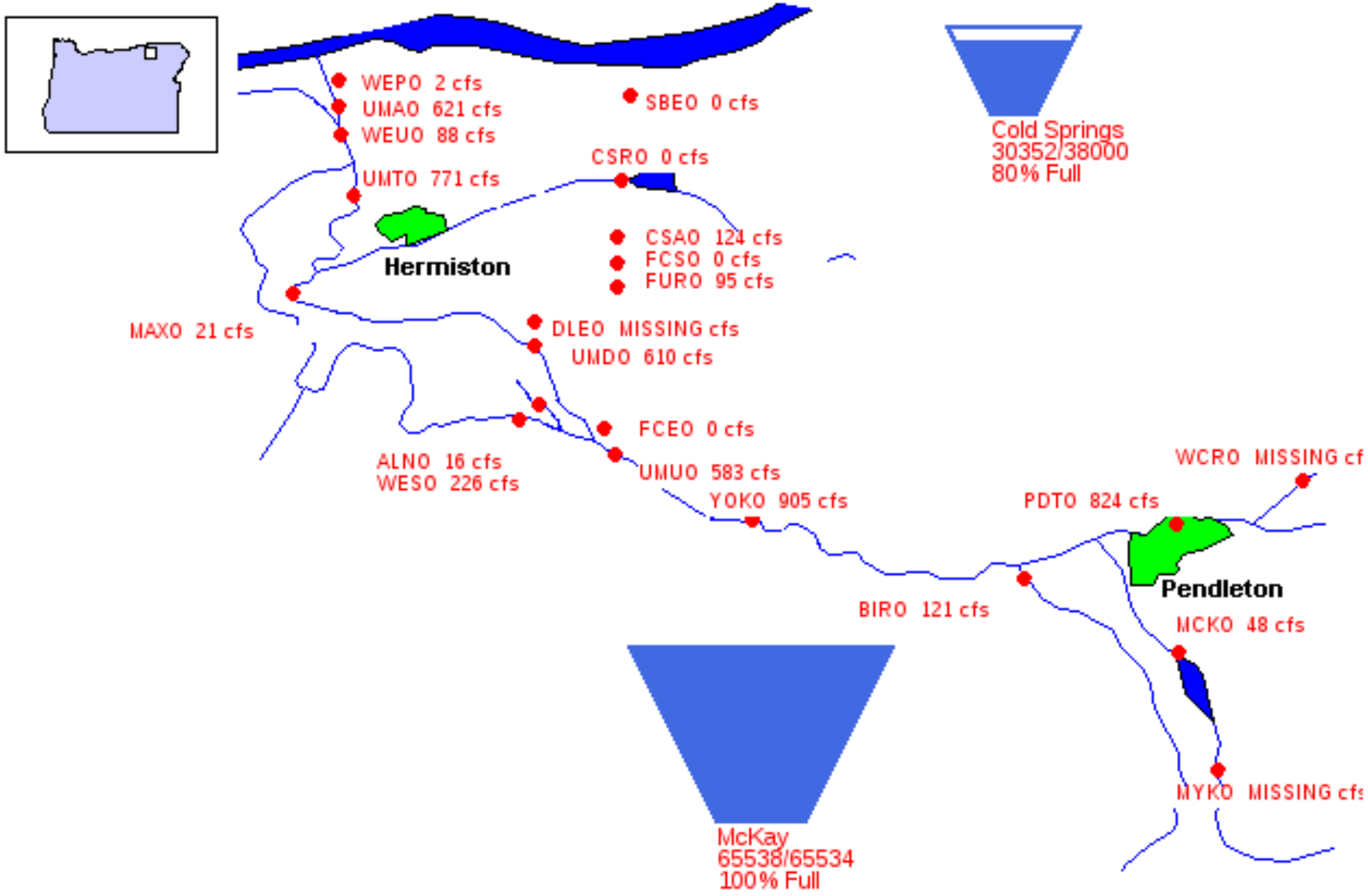
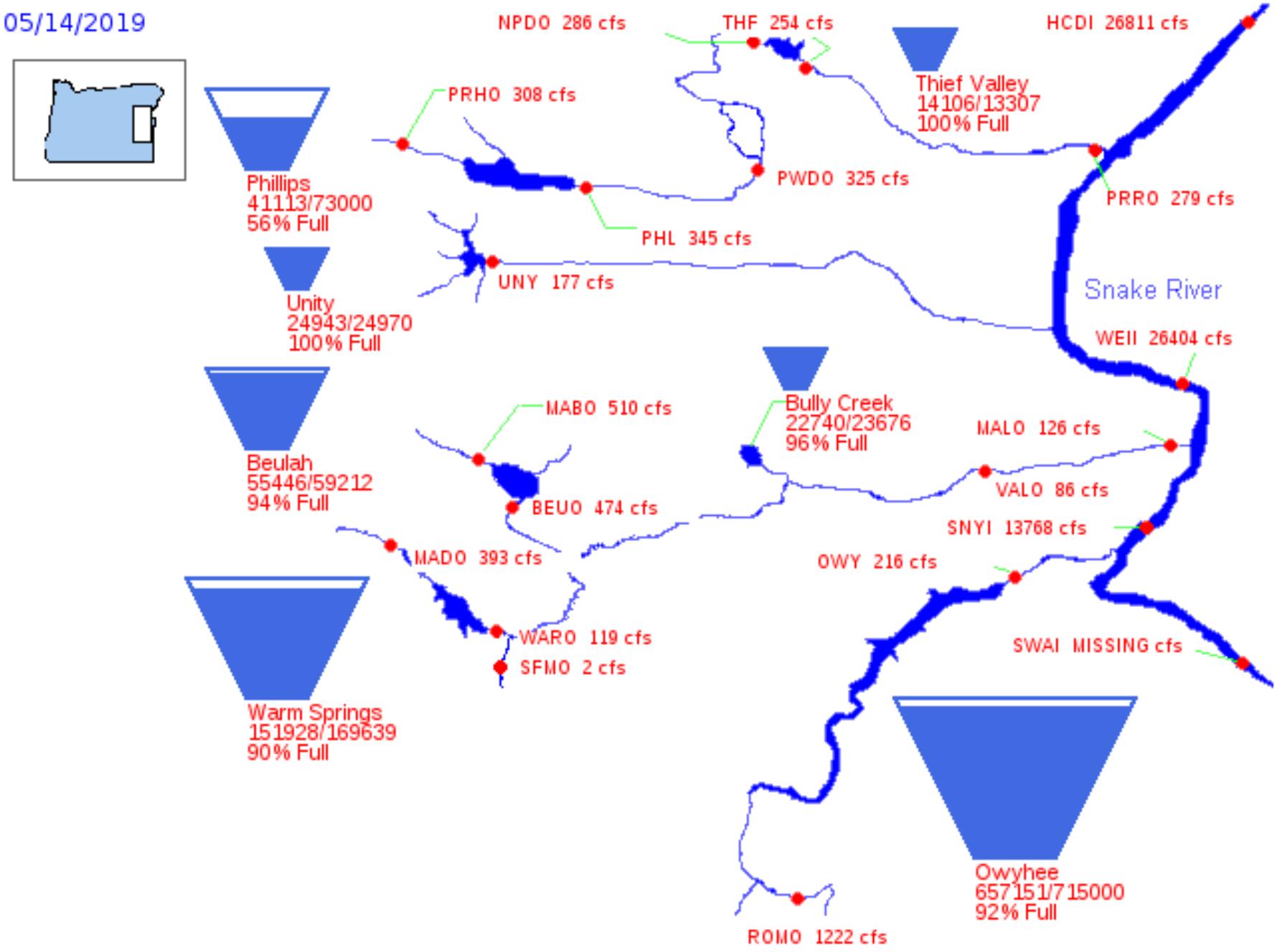

Duration hydrograph of 14-day average runoff for Oregon
14-day Average Runoff, in millimeters
10
1
2015
2016
2017
2018
2019
USGS WaterWatch
Last updated: 2019-05-15
Explanation - Percentile classes
lowest-10th percentile
10-24
25-75
76-90
90th percentile -highest
Runoff
Much below normal
Below normal
Normal
Above normal
Much above normal

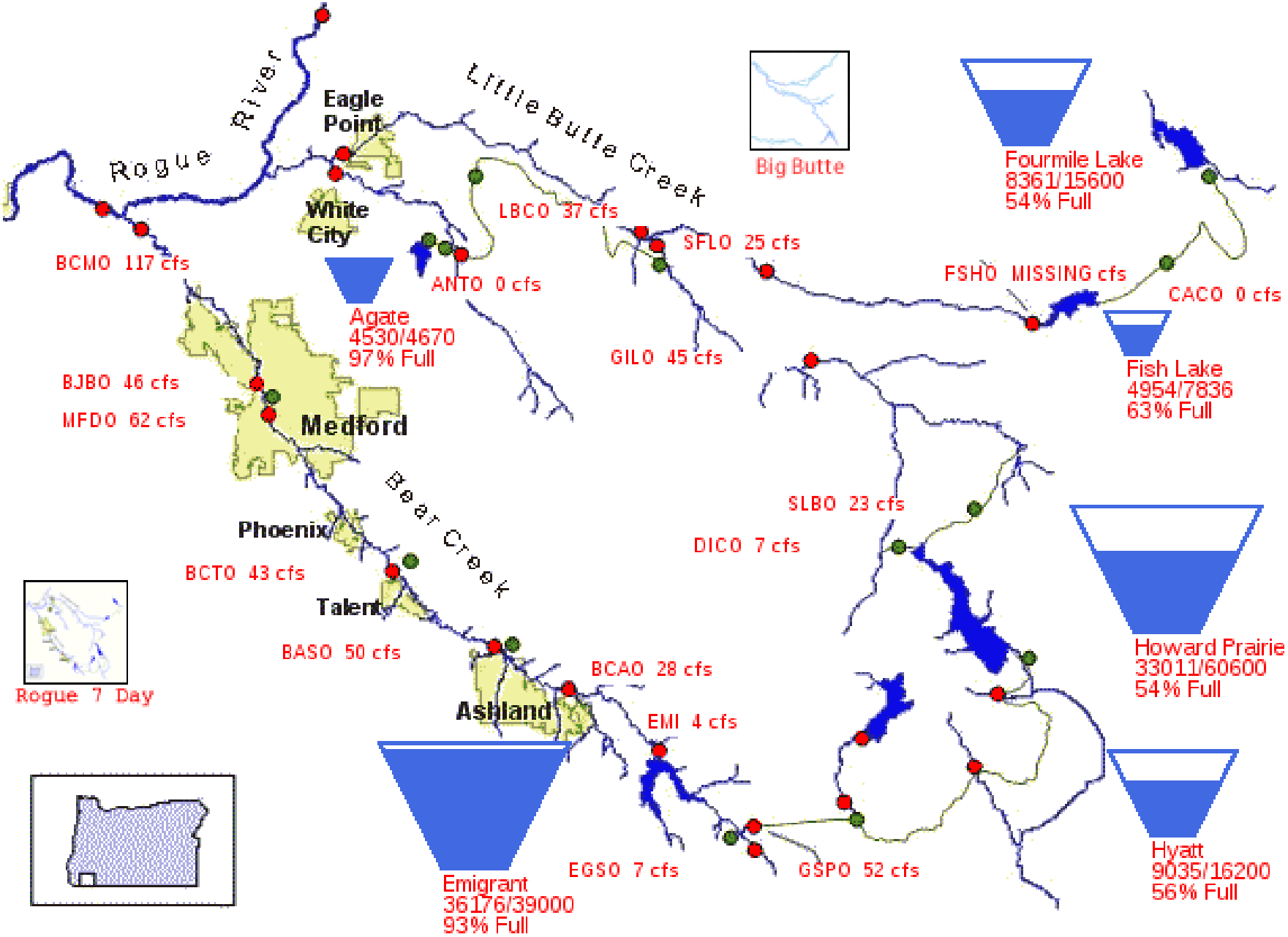

05/14/2019
CULO 677 cfs
CROO 1310 cfs
Haystack
3550/5600
63% Full
Ochoco
37561/44247
85% Full
CRSO 99 cfs
Prineville
MLCO 26 cfs
CAPO 155 cfs
OCRO 49 cfs
OCHO 13 cfs
Deschutes ESA
CRCO 166 cfs
CRPO 229 cfs
DEBO 86 cfs
Bend
PRVO 311 cfs
Crane Prairie
46827/55300
85% Full
BENO 1743 cfs
CRAO 203 cfs
Prineville
148088/148640
100% Full
LAPO 314 cfs
Wickiup
125723/200000
63% Full
WICO 1200 cfs
Crescent Lake
64158/86900
74% Full
CREO 31 cfs

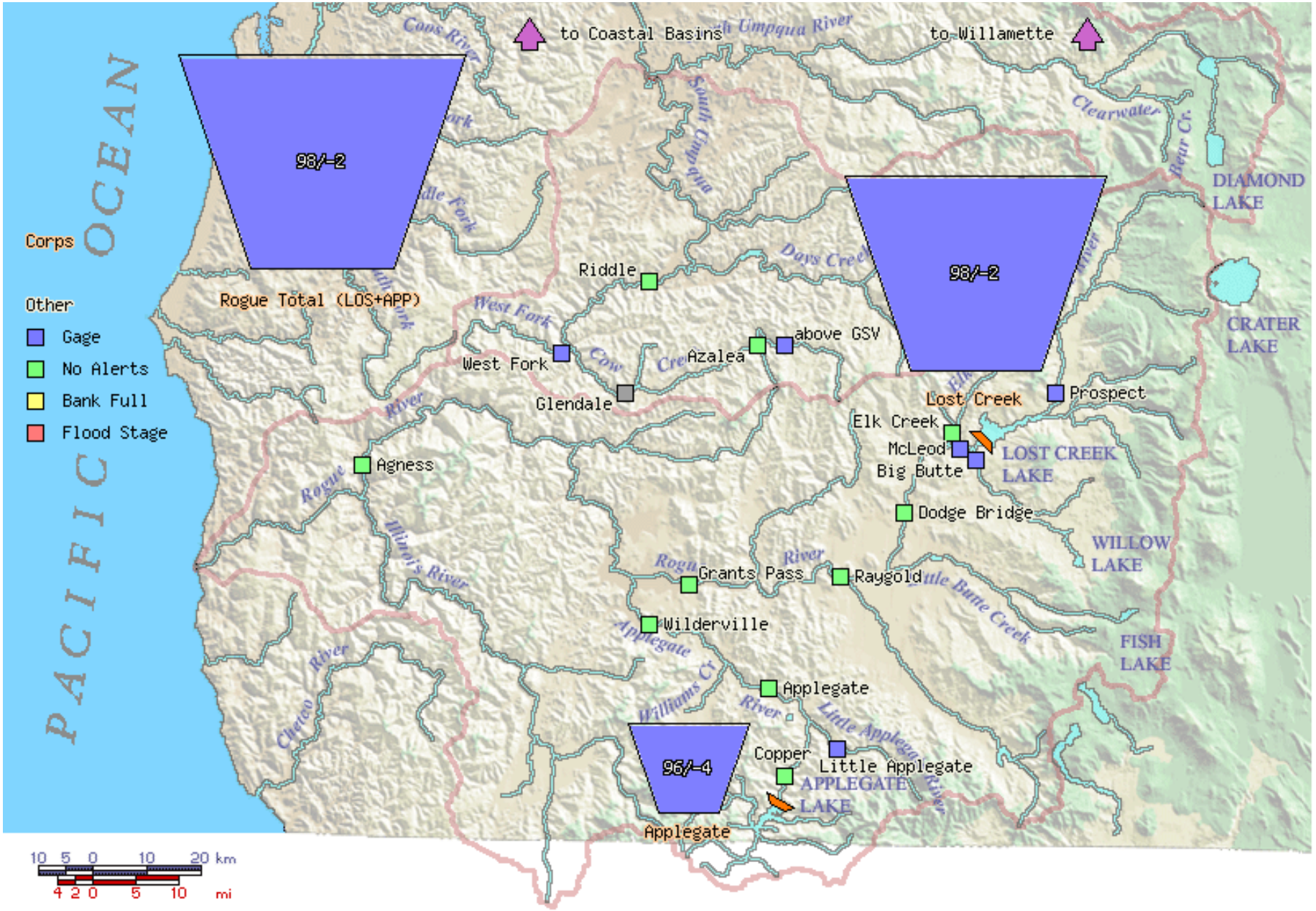
05/14/2019


WEPO 2 cfs
UMAO 621 cfs
WEUO 88 cfs
UMTO 771 cfs
SBEO 0 cfs
CSRO 0 cfs
Cold Springs
30352/38000
80% Full
CSAO 124 cfs
FCSO 0 cfs
FURO 95 cfs
Hermiston
MAXO 21 cfs
DLEO MISSING cfs
UMDO 610 cfs
FCEO 0 cfs
ALNO 16 cfs
WESO 226 cfs
UMUO 583 cfs
YOKO 905 cfs
WCRO MISSING cf
PDTO 824 cfs
Pendleton
BIRO 121 cfs
MCKO 48 cfs
McKay
65538/65534
100% Full
MYKO MISSING cfs


05/14/2019
NPDO 286 cfs
THF 254 cfs
HCDI 26811 cfs
Thief Valley
14106/13307
100% Full
PRHO 308 cfs
PWDO 325 cfs
PRRO 279 cfs
Phillips
41113/73000
56% Full
PHL 345 cfs
UNY 177 cfs
Unity
24943/24970
100% Full
Snake River
WEII 26404 cfs
Bully Creek
22740/23676
96% Full
MABO 510 cfs
MALO 126 cfs
Beulah
55446/59212
94% Full
BEUO 474 cfs
VALO 86 cfs
SNYI 13768 cfs
MADO 393 cfs
OWY 216 cfs
SWAI MISSING cfs
WARO 119 cfs
SFMO 2 cfs
Warm Springs
151928/169639
90% Full
Owyhee
657151/715000
92% Full
ROMO 1222 cfs

05/14/2019


Rogue River
Eagle Point
Little Butte Creek
Big Butte
Fourmile Lake
8361/15600
54% Full
White City
LBCO 37 cfs
SFLO 25 cfs
BCMO 117 cfs
ANTO 0 cfs
FSHO MISSING cfs
CACO 0 cfs
Agate
4530/4670
97% Full
GILO 45 cfs
Fish Lake
4954/7836
63% Full
BJBO 46 cfs
MFDO 62 cfs
Medford
SLBO 23 cfs
Bear Creek
Phoenix
DICO 7 cfs
BCTO 43 cfs
Talent
Howard Prairie
33011/60600
54% Full
BASO 50 cfs
BCAO 28 cfs
Rogue 7 Day
Ashland
EMI 4 cfs
Hyatt
9035/16200
56% Full
EGSO 7 cfs
GSPO 52 cfs
Emigrant
36176/39000
93% Full



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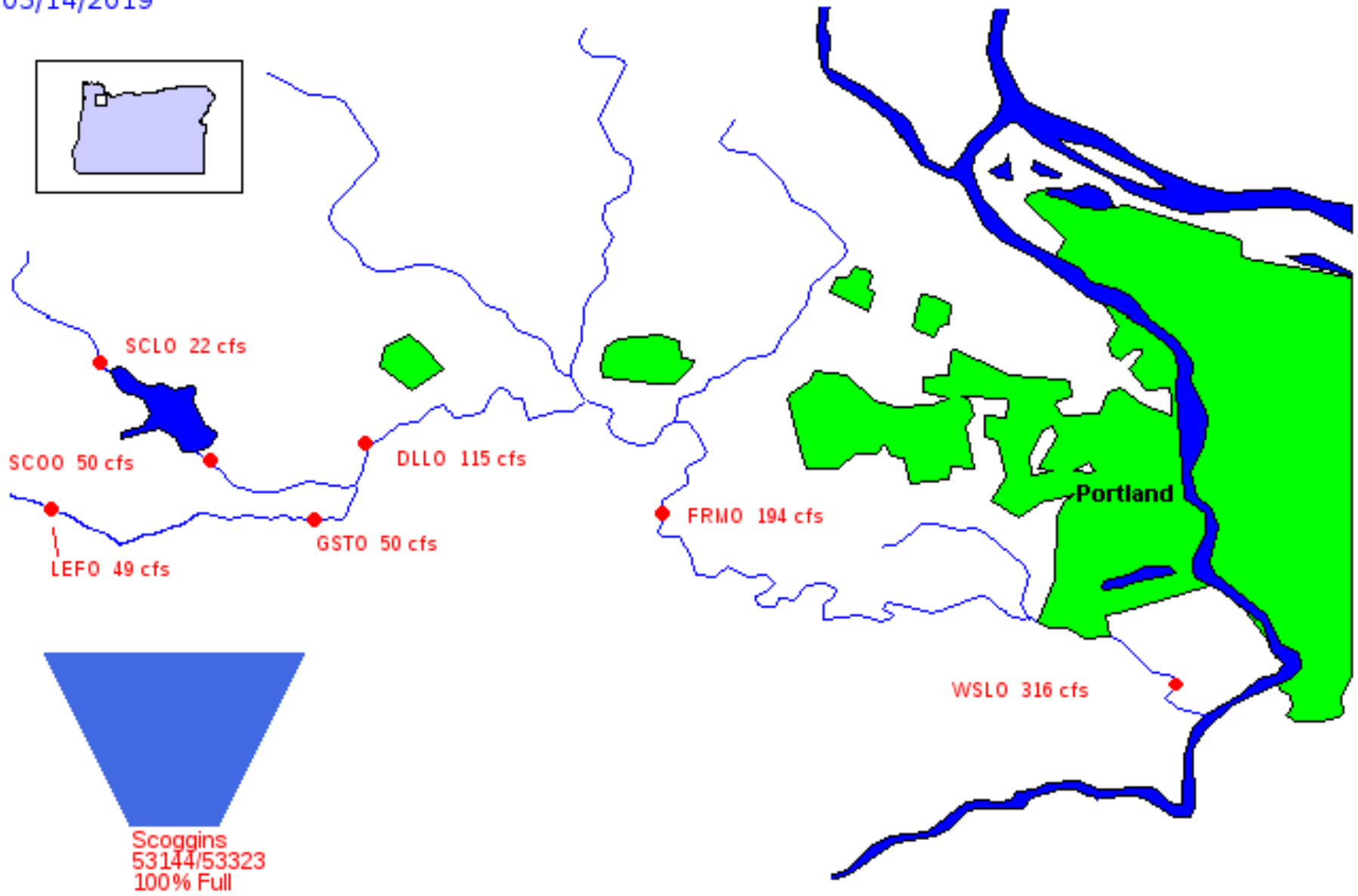
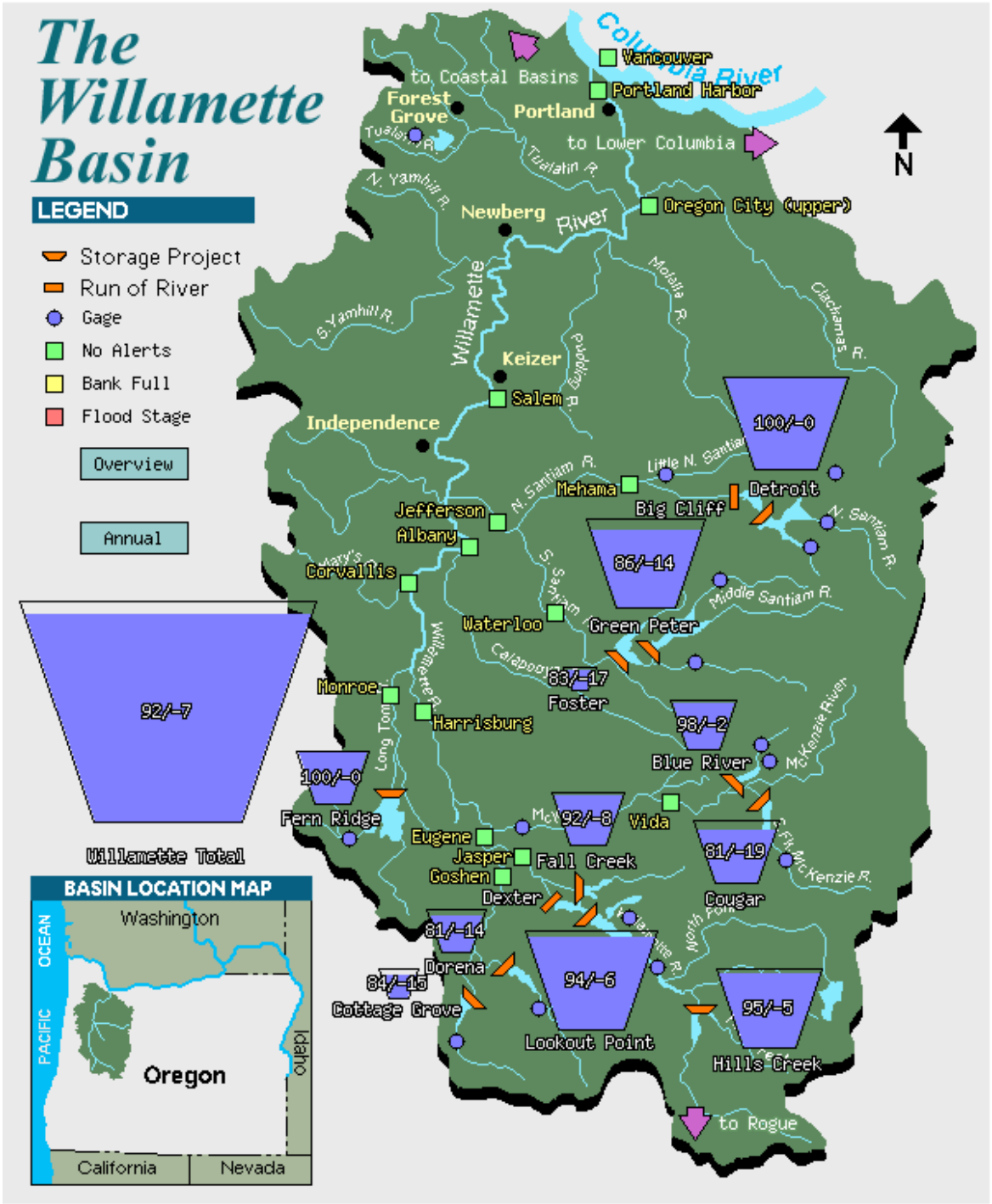

SCLO 22 cfs
SCOO 50 cfs
DLLO 115 cfs
LEFO 49 cfs
GSTO 50 cfs
FRMO 194 cfs
Portland
WSLO 316 cfs
Scoggins
53144/53323
100% Full



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OREGON
WATER RESOURCES
DEPARTMENT

Thank you.