BUREAU OF RECLAMATION

Klamath Project
Initiation of Temporary Operating Procedures

January 13, 2023

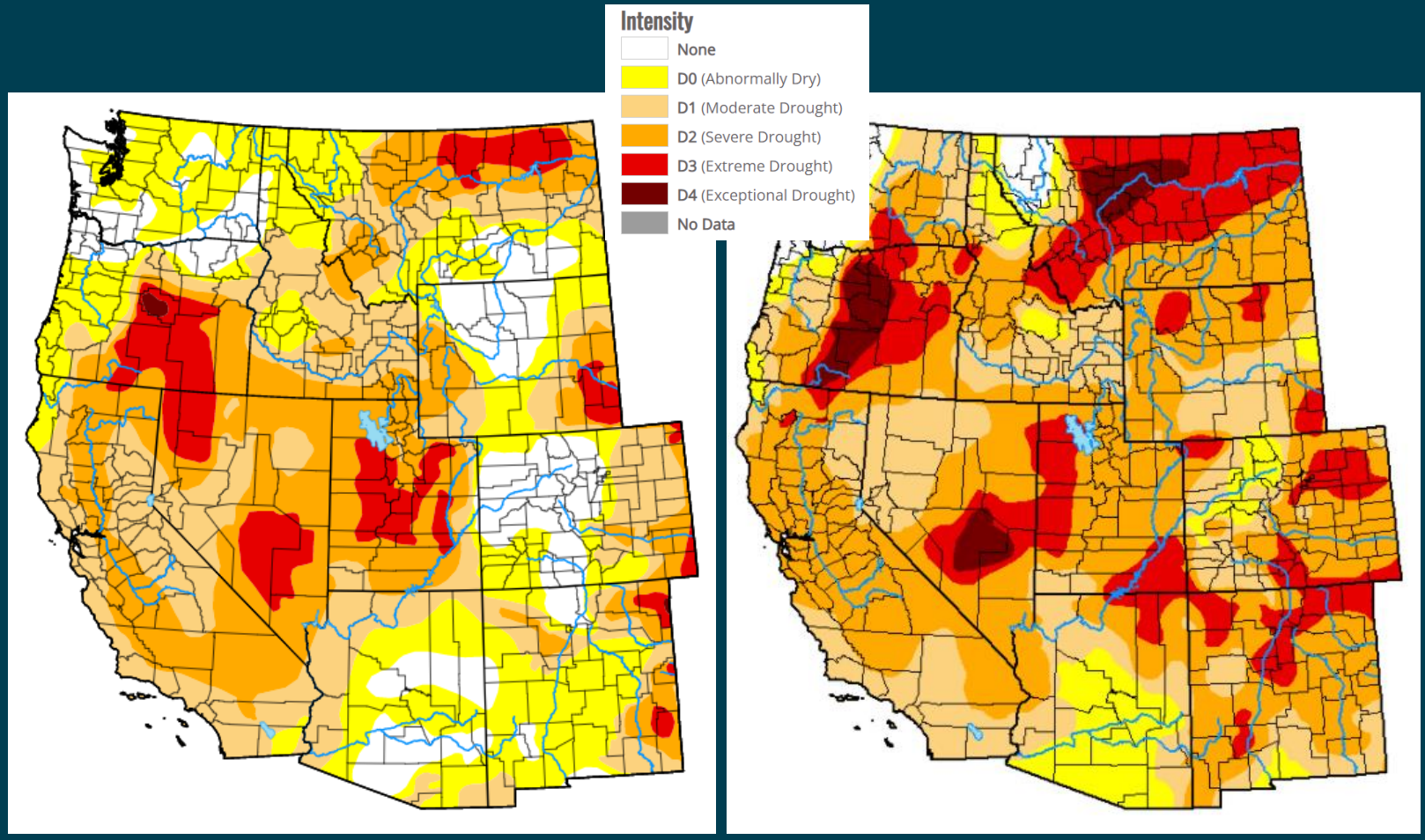
Presentation Outline

- Technical input received

- **Monitoring Information**
- **Current Forecasts and Reclamation Interpretation**
- **Temporary Operating Procedures**
- **Schedule for Input and Action**

- **Supplemental Information**

United States Drought Monitor – West Region

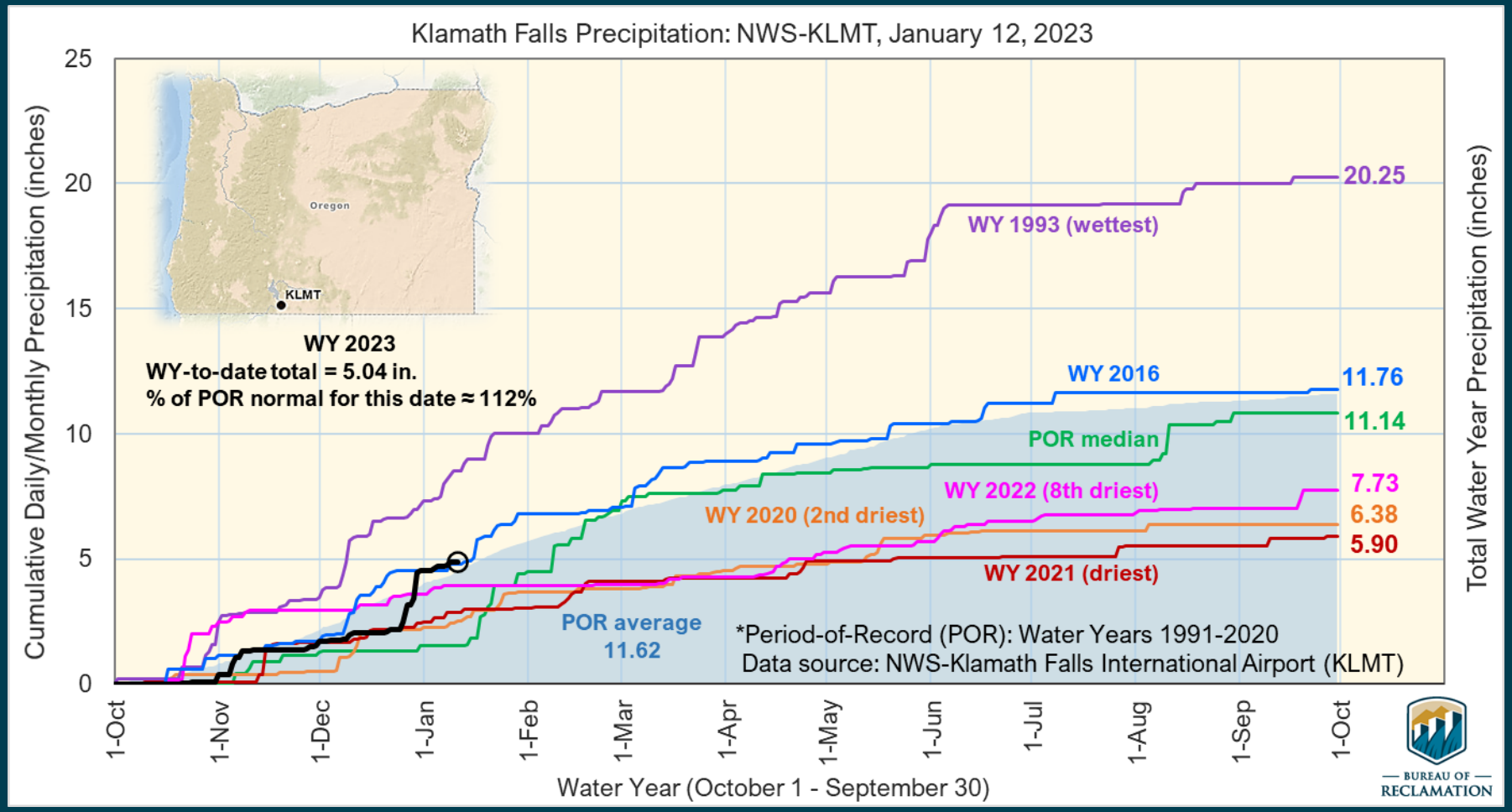


January 10, 2023

January 11, 2022

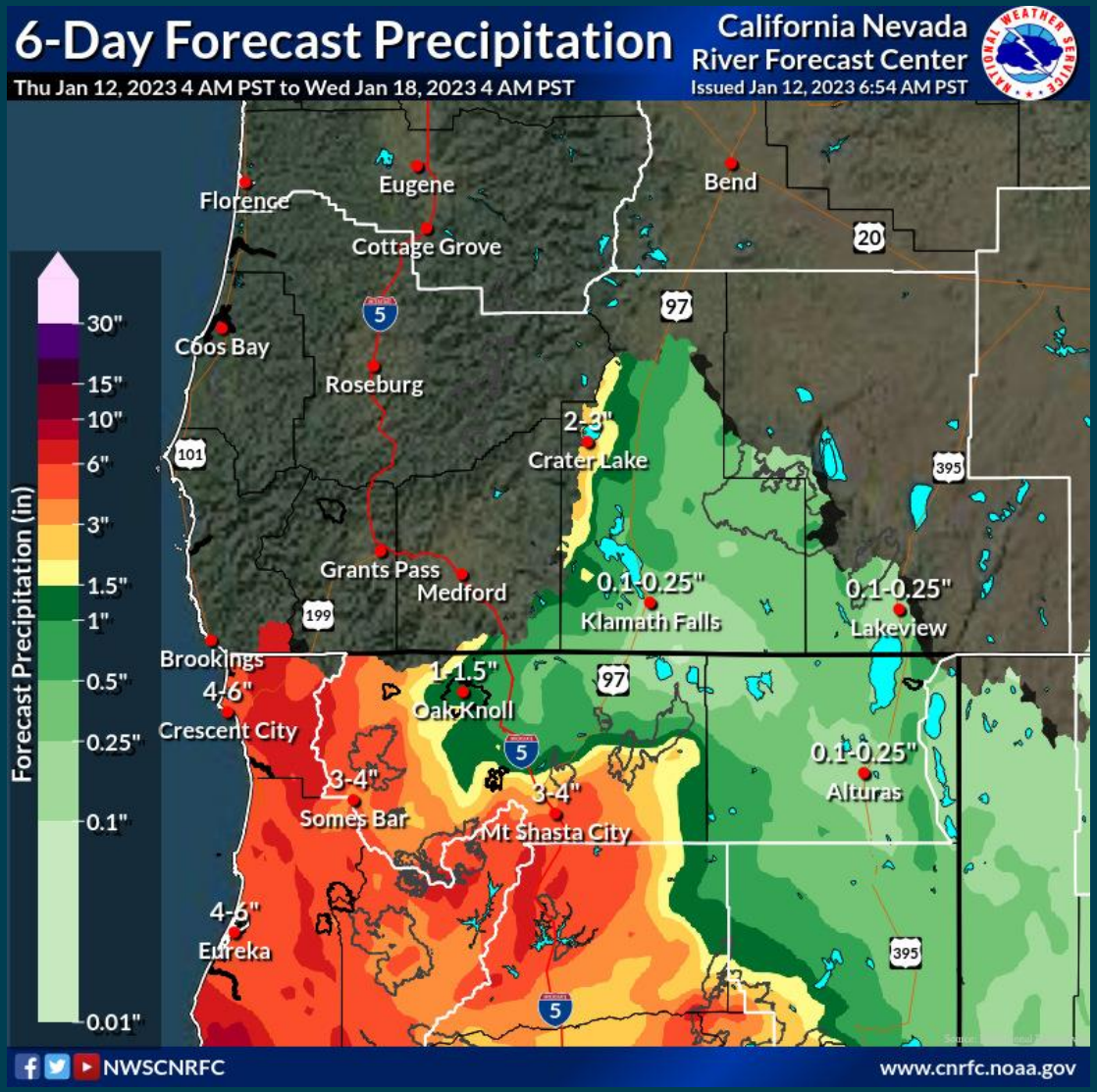
https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

Klamath Falls Airport Met Station – National Weather Service



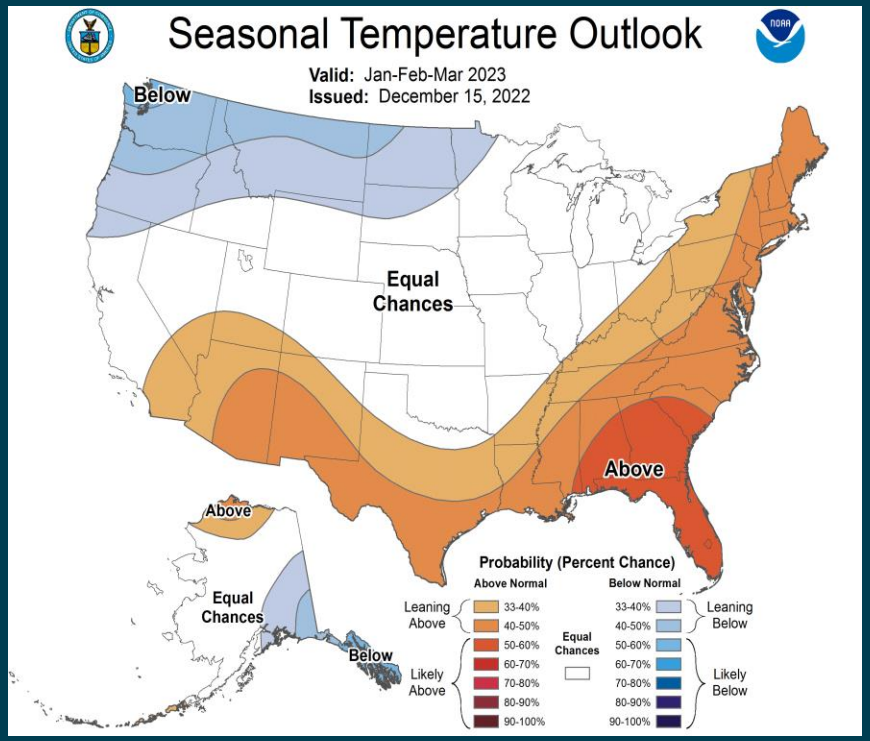
https://www.weather.gov/wrh/climate?wfo=MFR

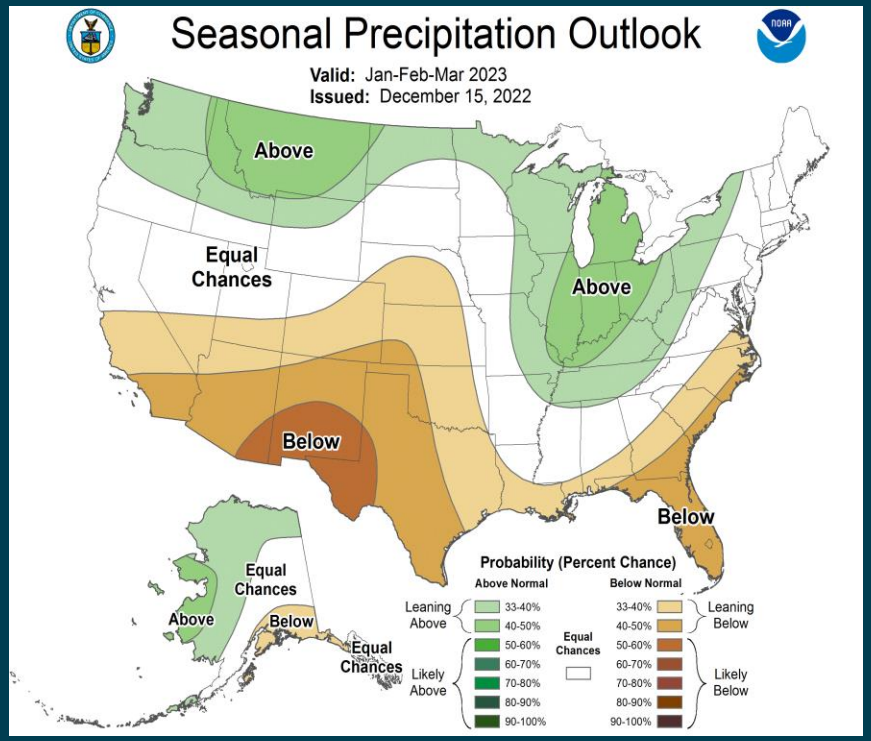
6-Day Precipitation Forecast – California Nevada River Forecast Center
Accumulated Total



https://www.cnrfc.noaa.gov/precipForecast.php?cwa=MFR&imgNum=1&mobile=0

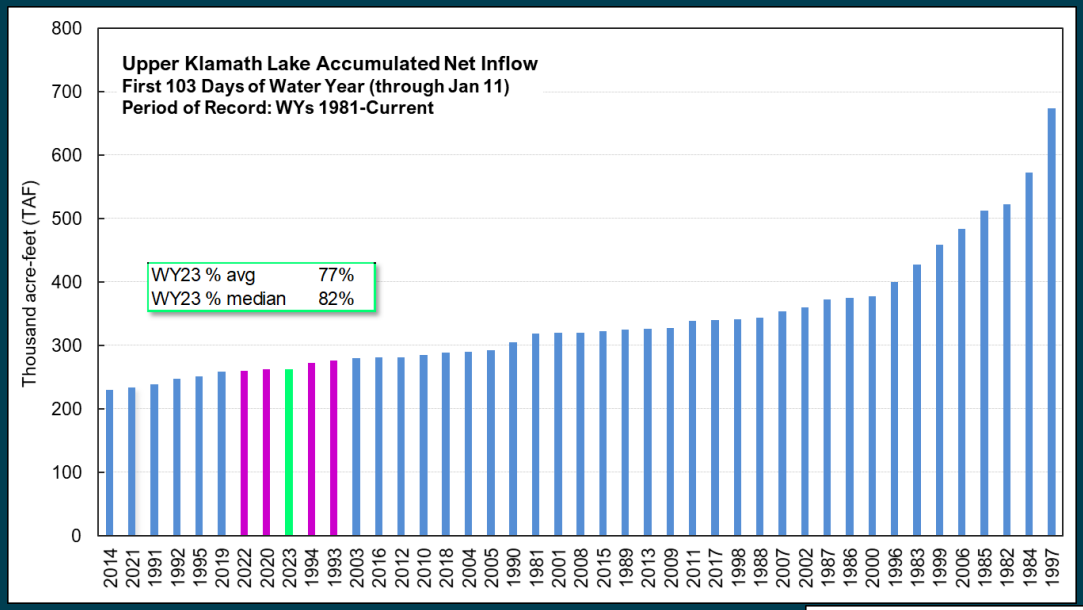
January-March Weather Outlook



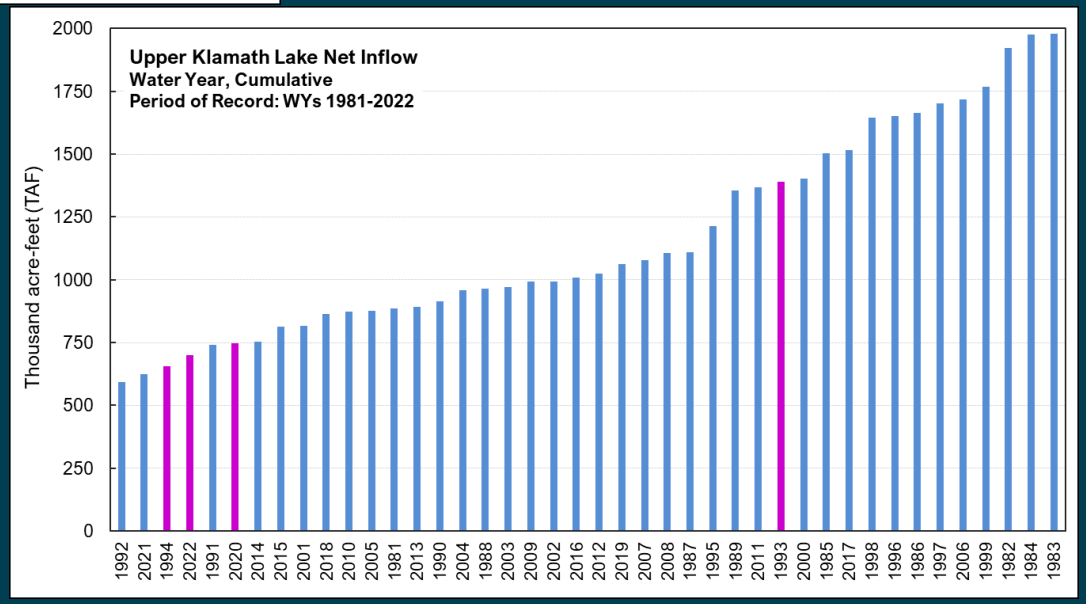


https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

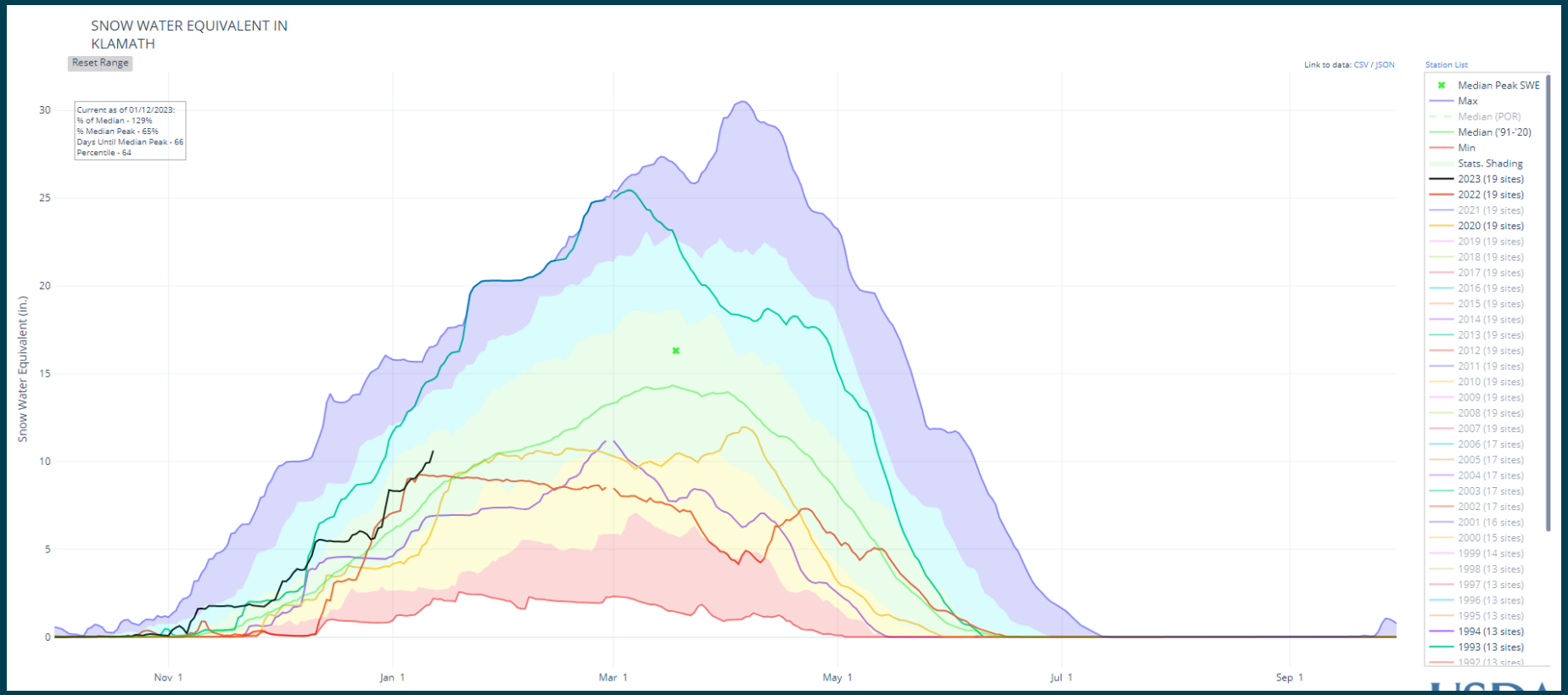
UKL Net Inflow Water - Year 2023 & Nearest Neighboring Water Years for Net Inflows to-Date



WY2022/2023 data are provisional and subject to revision

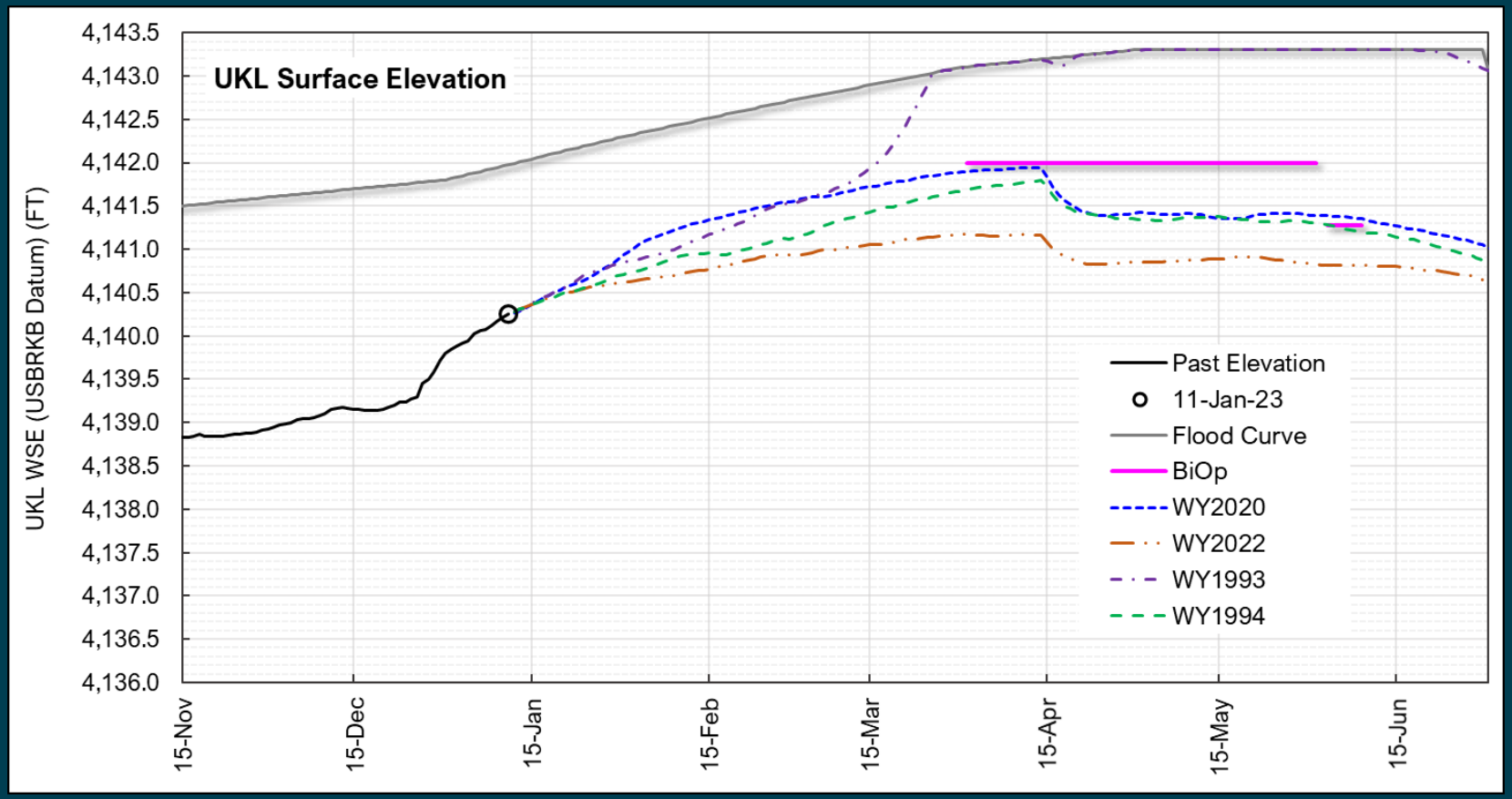


NRCS Upper Klamath Basin Snow Water Equivalent (SWE) Water Year 2023 & Nearest Neighboring Water Years for Net Inflow-to-date

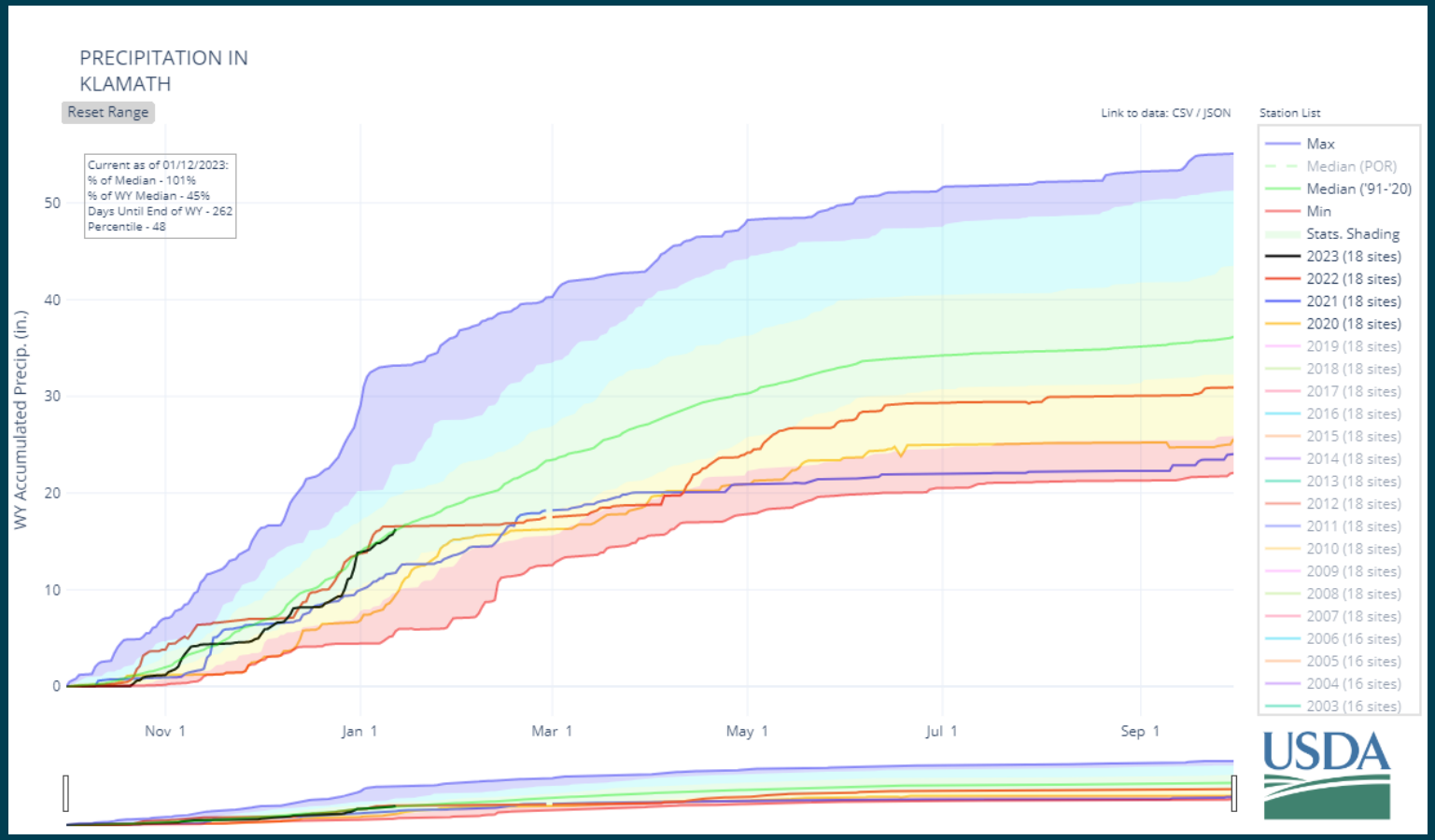


https://www.nrcs.usda.gov/Internet/WCIS/AWS_PLOTS/basinCharts/POR/WTEQ/assocHUC6/180102_Klamath.html

UKL Surface Elevation
Nearest Neighboring Water Years for Net Inflows to-Date



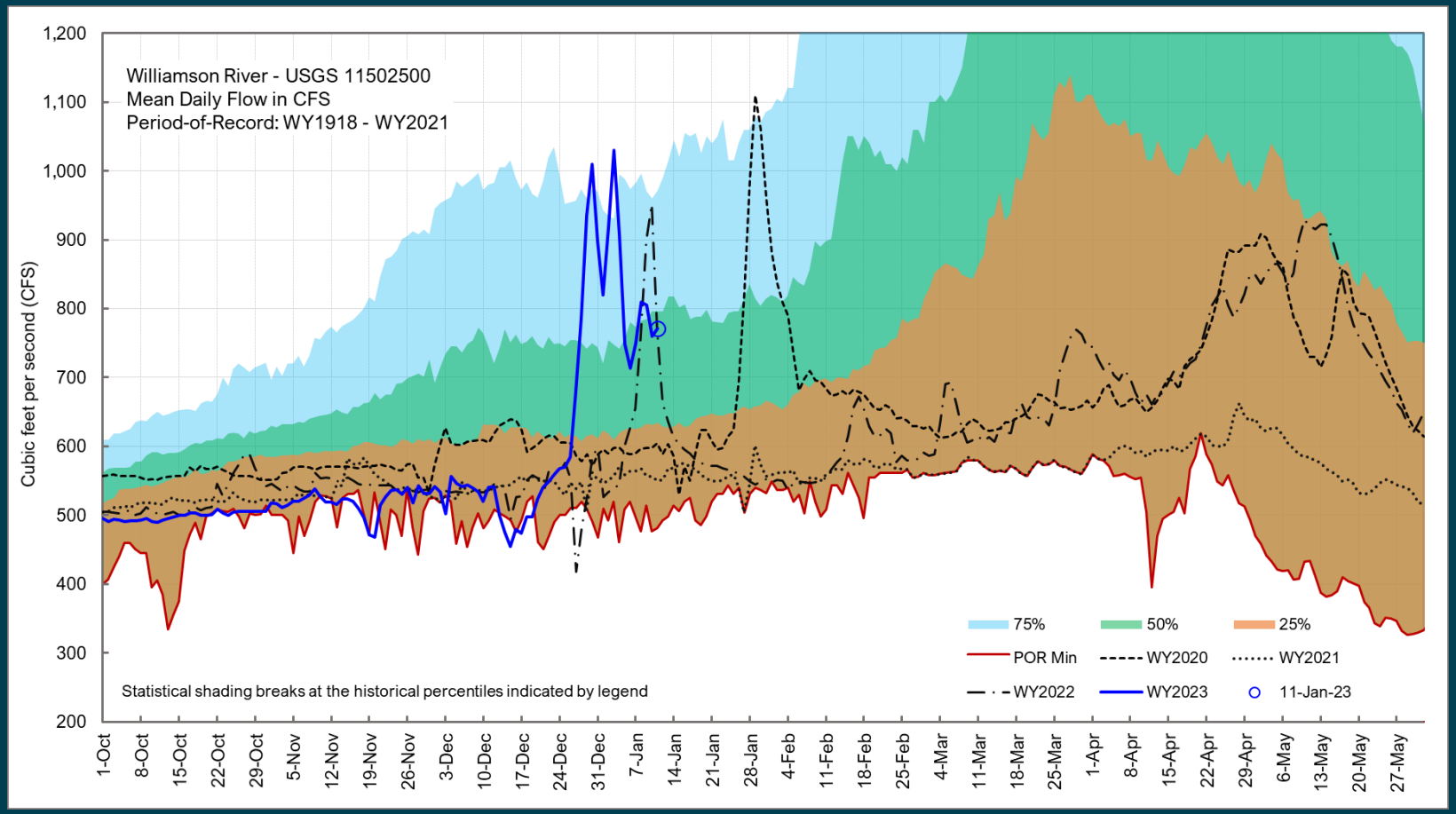
Upper Klamath Basin Precipitation - NRCS Water Year 2023



Statistical shading breaks at 10th, 30th, 50th, and 90th Percentiles
WY2023 displayed as black trace

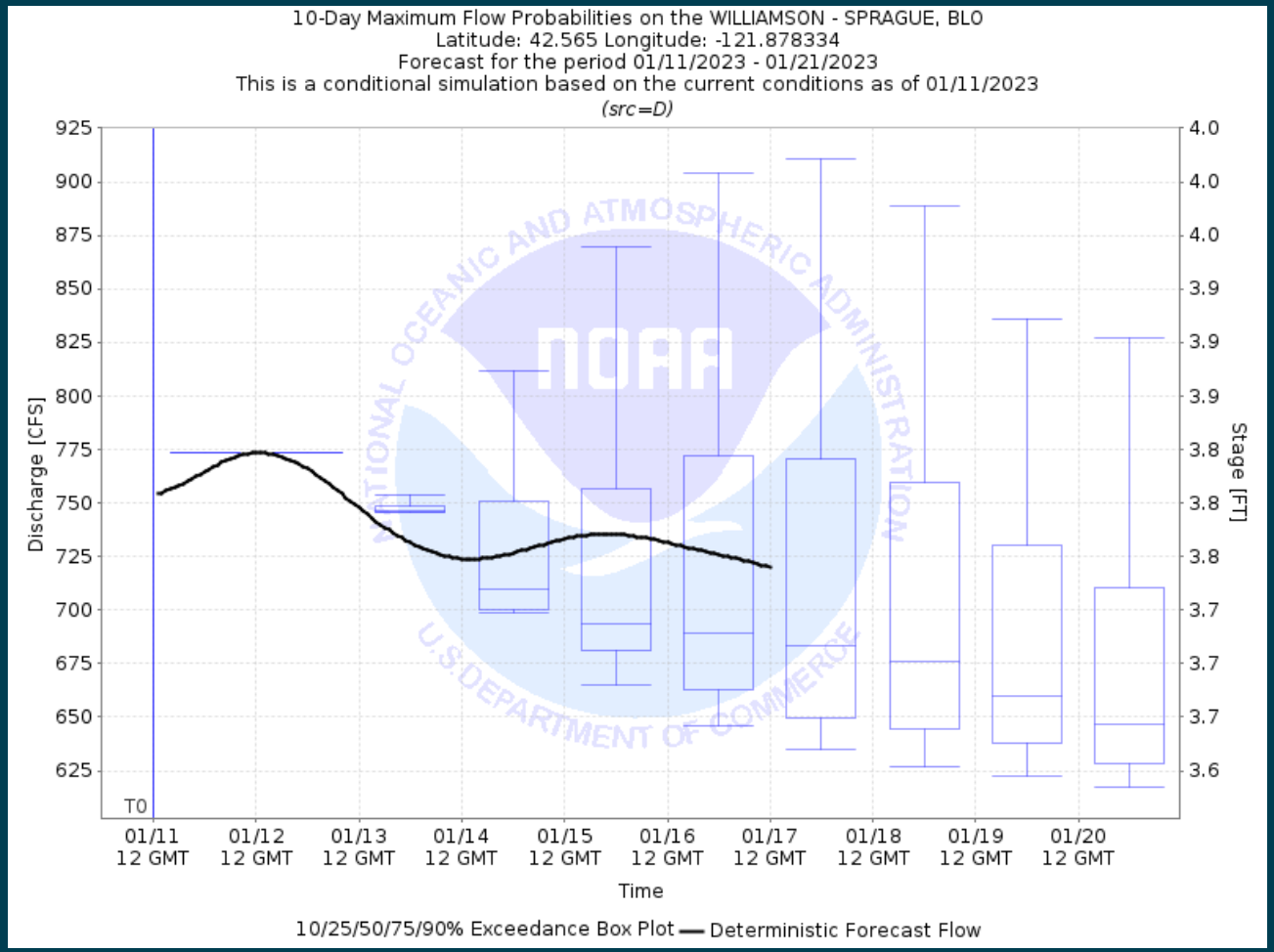
https://www.nrcs.usda.gov/Internet/WCIS/AWS_PLOTS/basinCharts/POR/PREC/assocHUC6/180102_Klamath.html

Williamson River - USGS 11502500

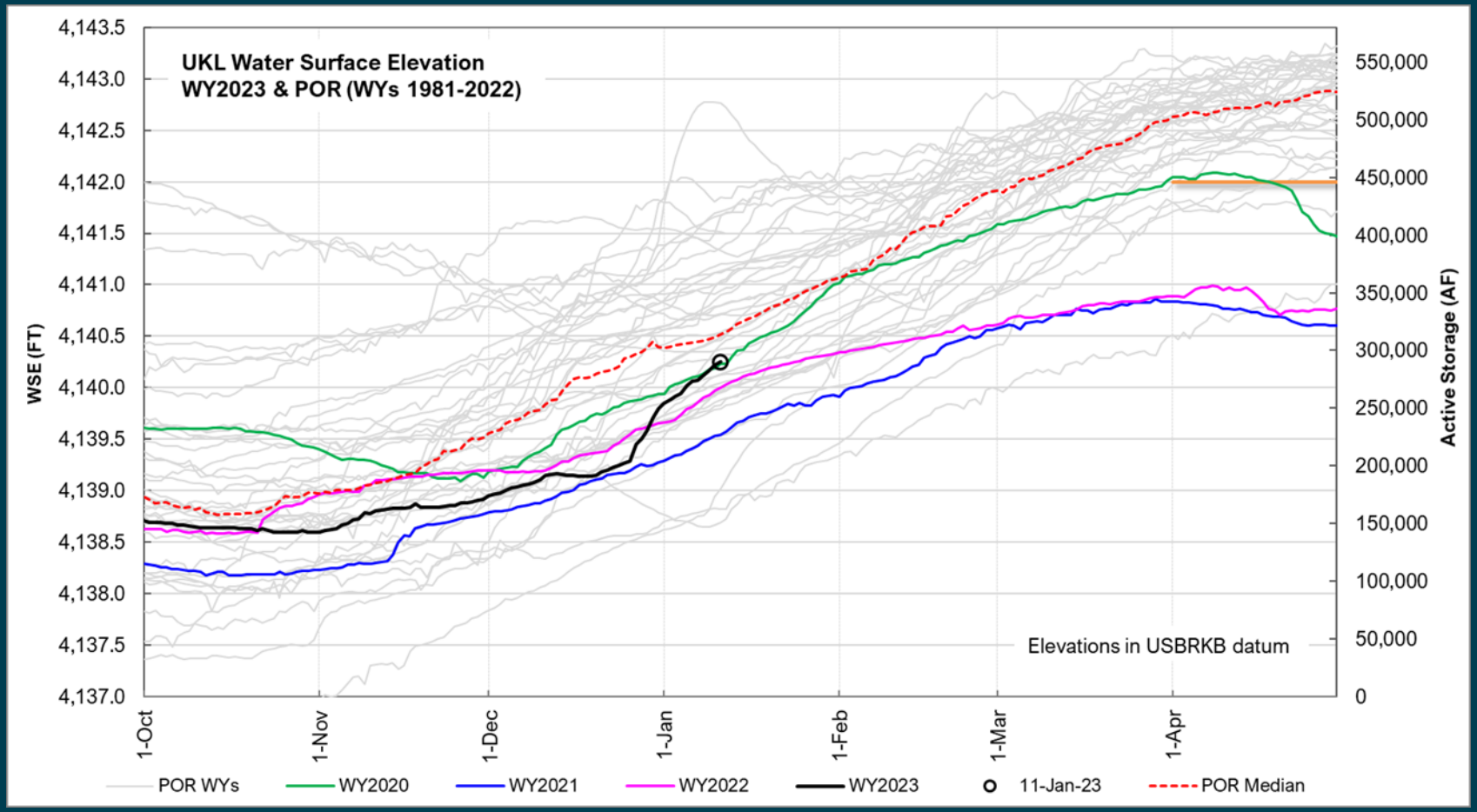


WY2022/2023 data are provisional and subject to revision

Williamson River Forecast Expected to Return to Below Median Inflow Range over Next 10 Days (45th percentile)



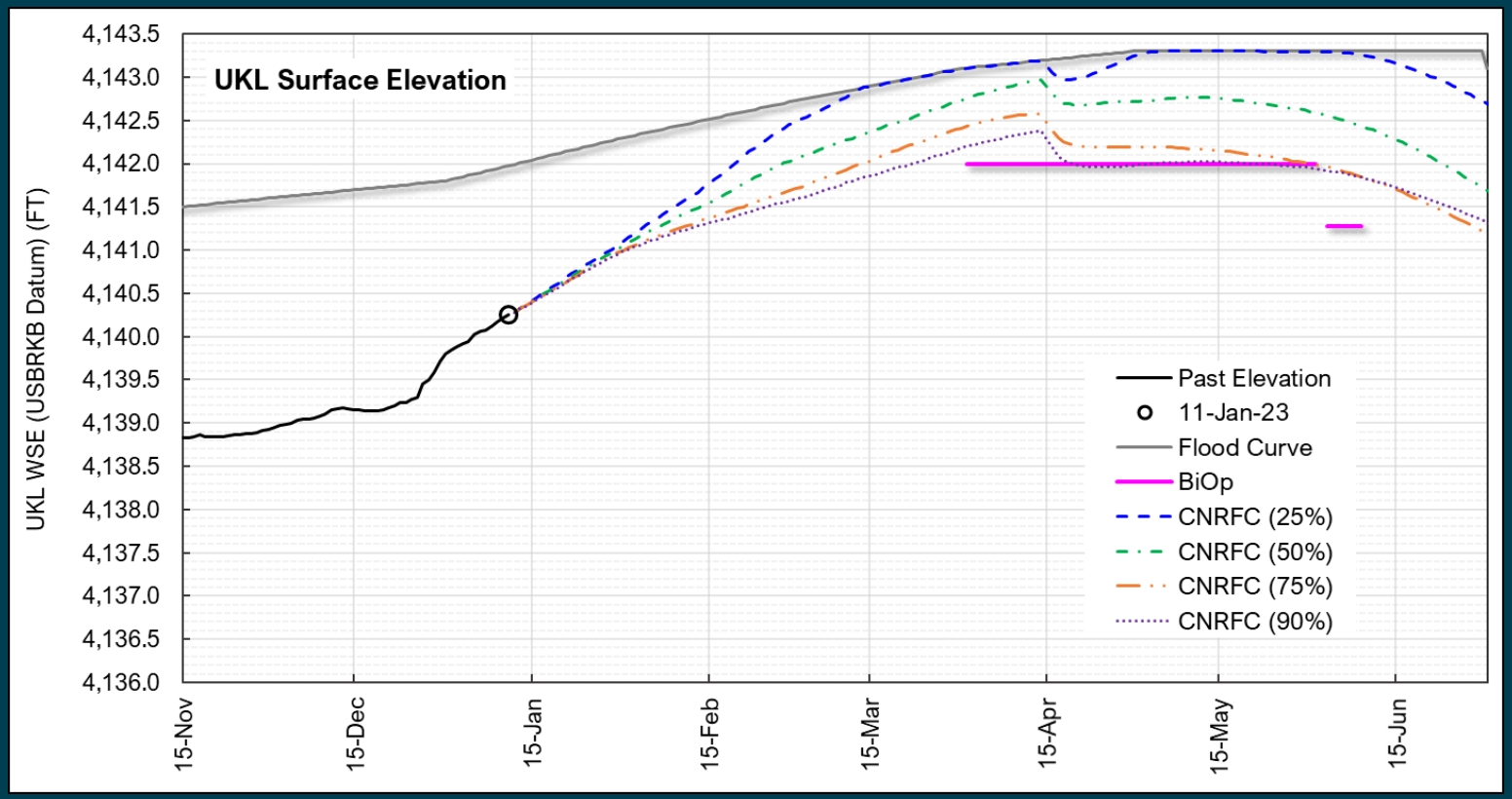
UKL Water Surface Elevation
Water Year 2023 & Period-of-Record-to-Date



WY2022/2023 UKL water surface elevation observational data are provisional

Long-Term Upper Klamath Lake Inflow and Operations Forecasts

UKL Water Surface Elevation – CNRFC UKLNI Forecast

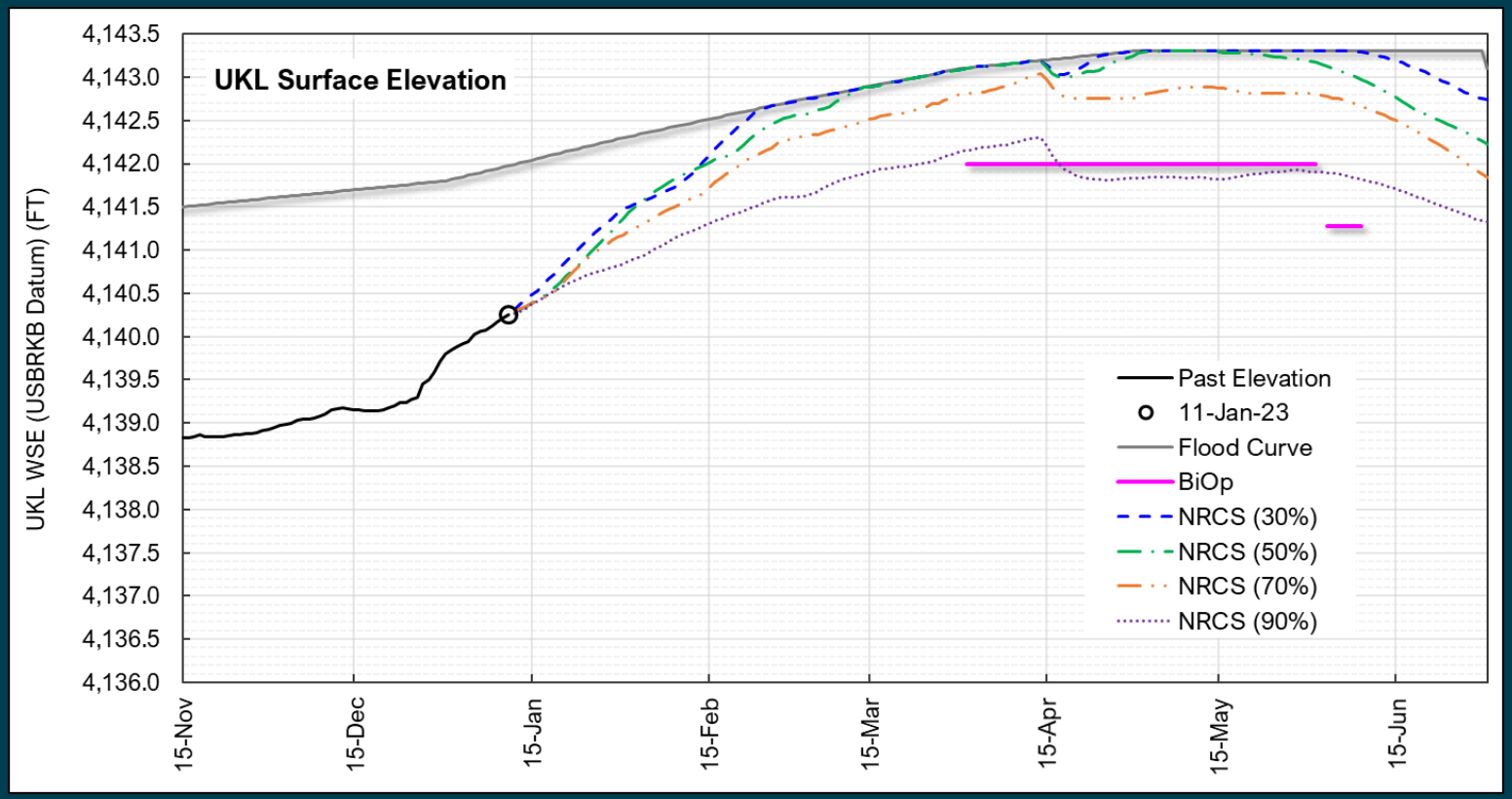


Projections, including WY2023 target elevations and surface elevation trajectories, are provisional and subject to revision based on future water supply forecasts, hydrologic conditions, and operational decisions

CNRFC UKL monthly probability net inflow forecast volumes at 25%, 50%, 75% and 90% probability of exceedance (POE) levels used in ensemble

WY2023 observed UKL water surface elevation data are provisional

UKL Water Surface Elevation – NRCS Jan 1 Klamath River Basin Water Supply Forecast

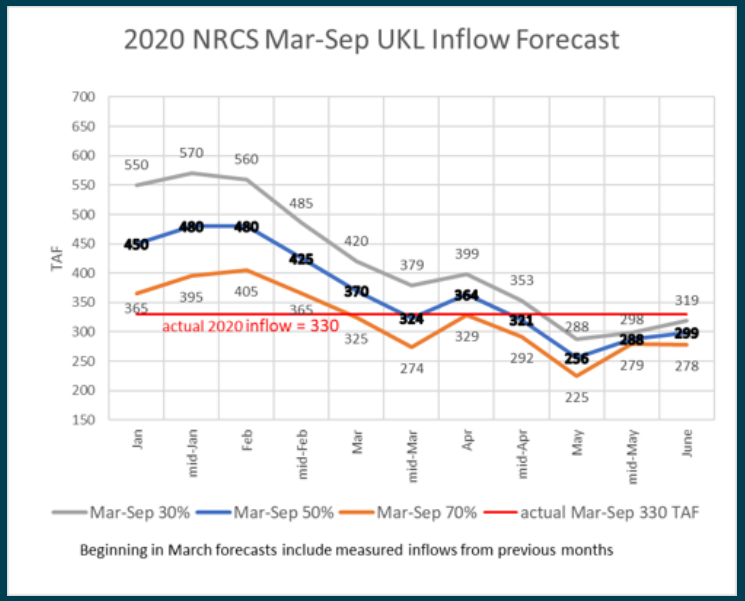


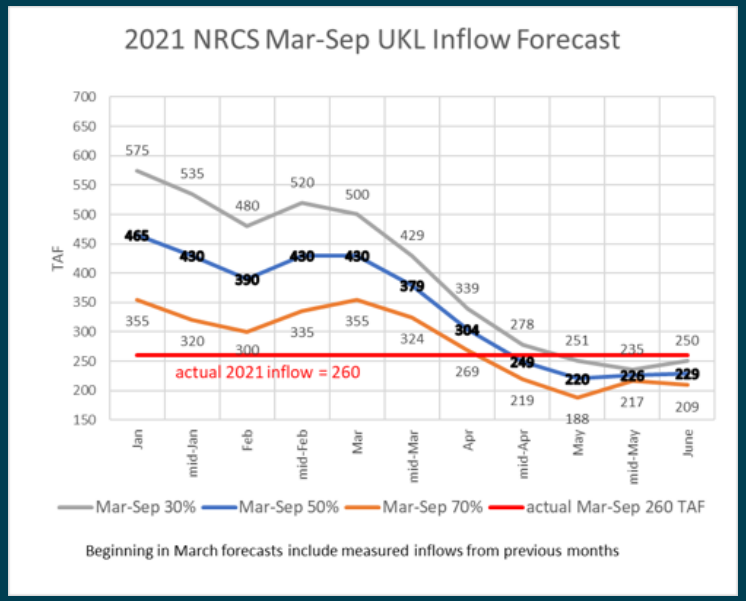
Projections, including WY2023 target elevations and surface elevation trajectories, are provisional and subject to revision based on future water supply forecasts, hydrologic conditions, and operational decisions

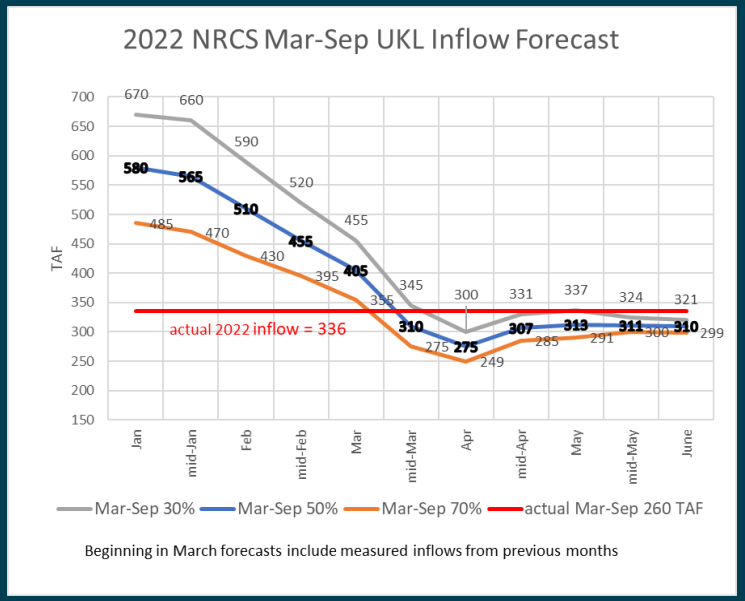
NRCS Jan 1 KRB WSF UKLNI forecast volumes at 30%, 50%, and 70% probability of exceedance (POE) levels used in ensemble

WY2023 observed UKL water surface elevation data are provisional

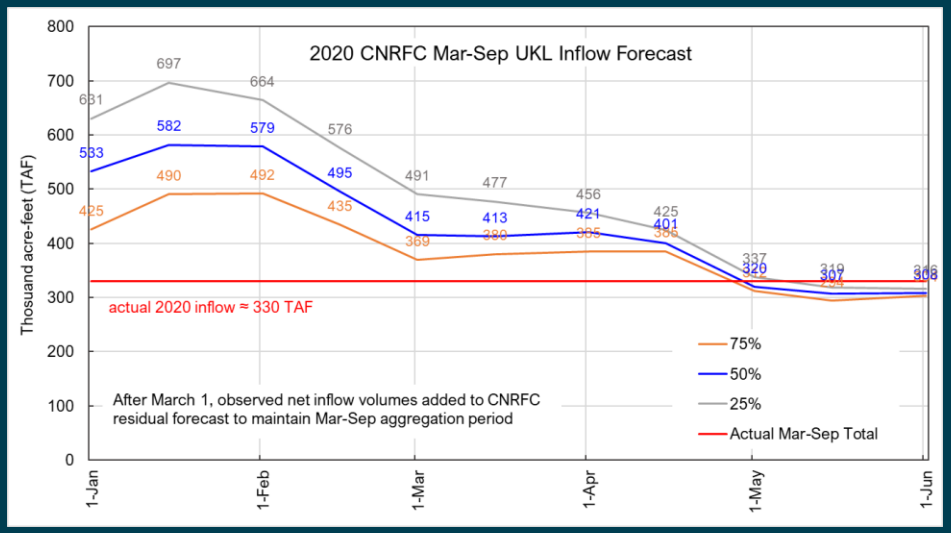
NRCS Klamath River Basin Water Supply Forecast
Last Three Water Years – March-September

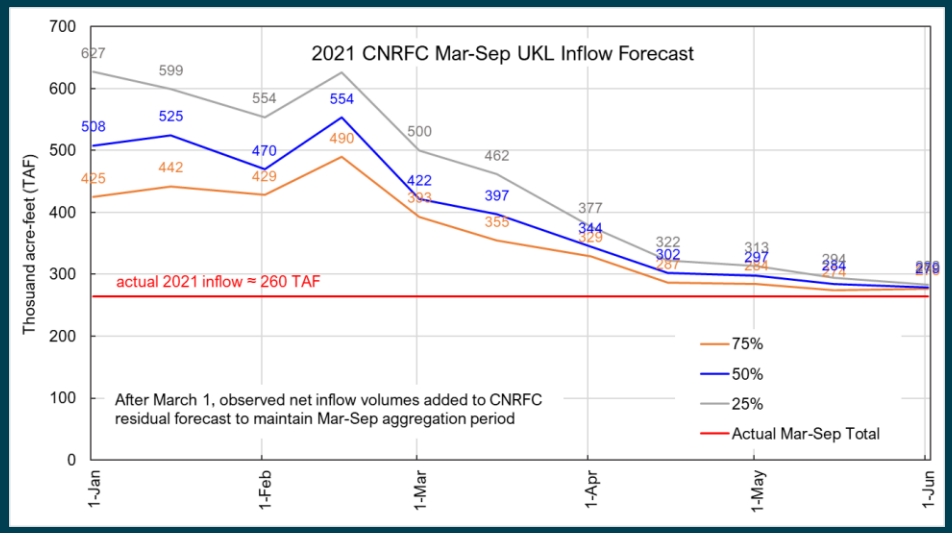


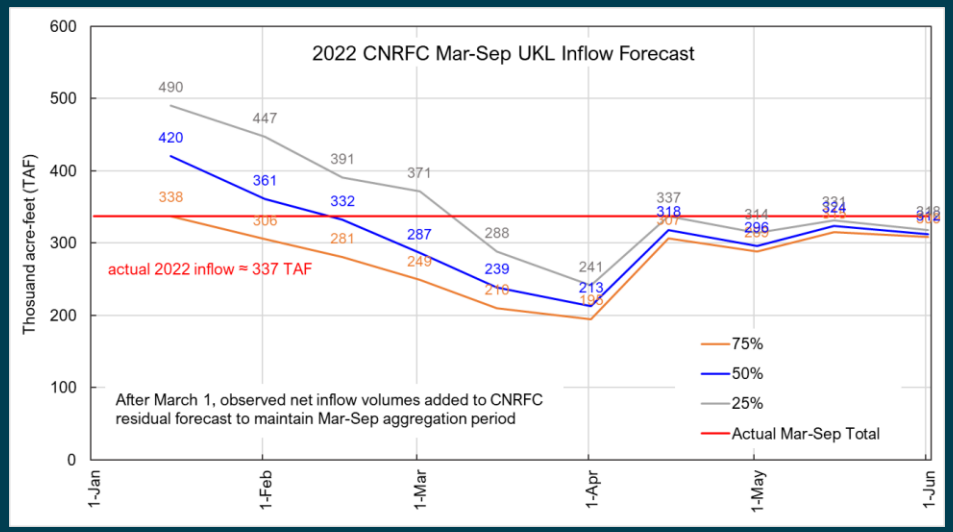




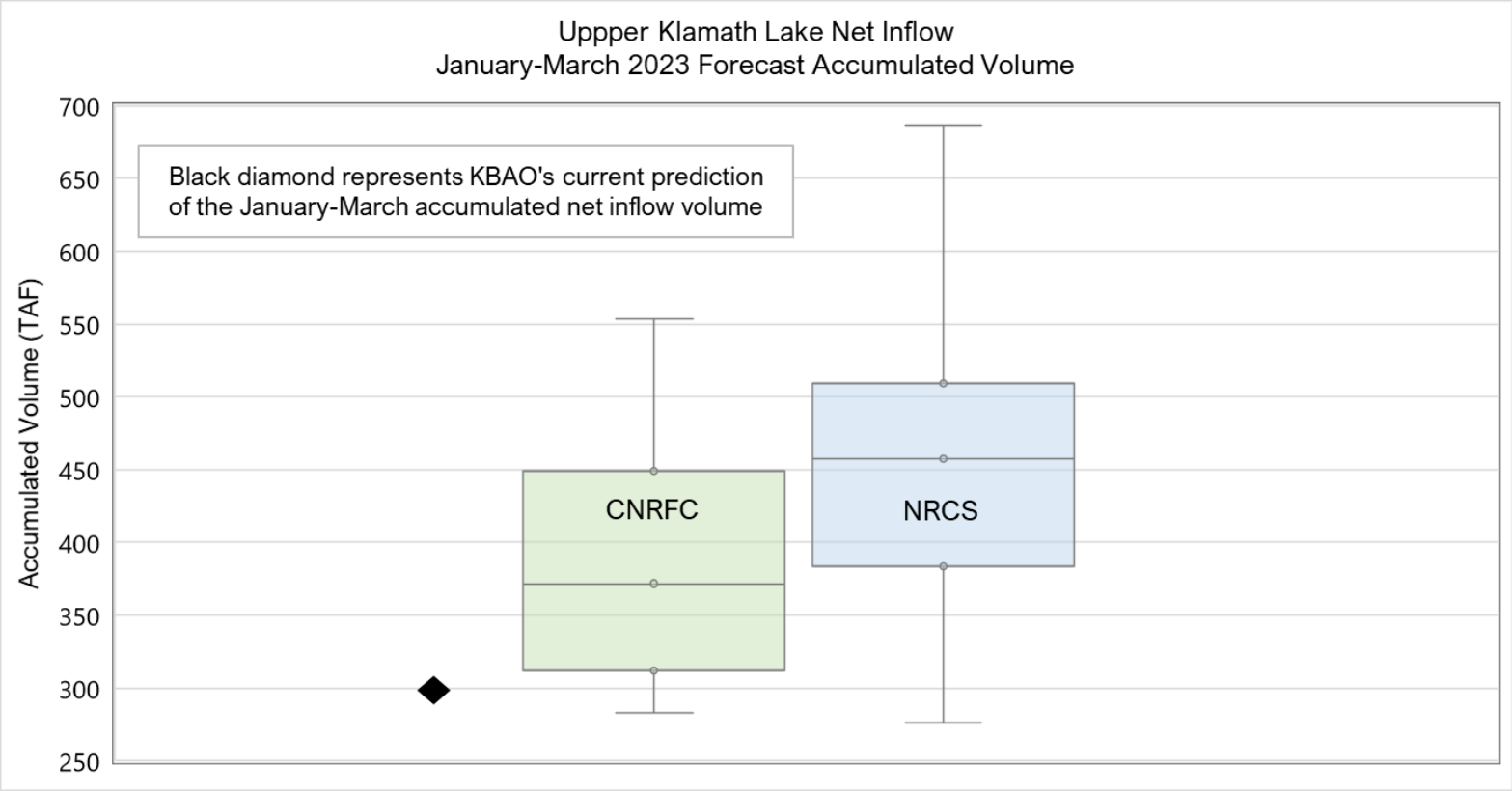
CNRFC Klamath River Basin Water Supply Forecast
Last Three Water Years – March-September







January 2023 Accumulated Net Inflow Forecast CNRFC & NRCS



Temporary Operation Procedures

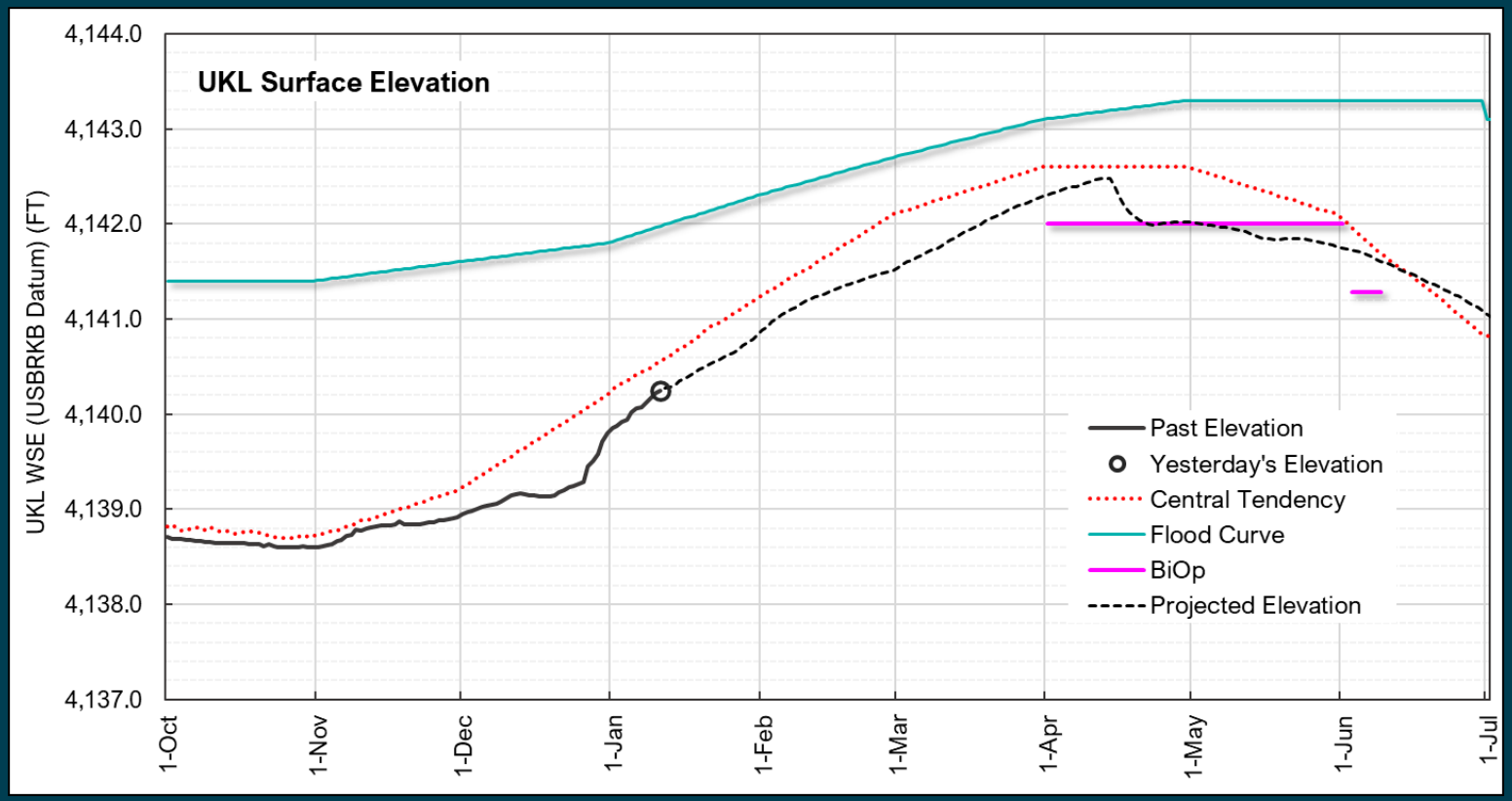
Reclamation Assessment

- For the purpose of the TOP at this time, Reclamation plans to balance risk between the ESA requirements by planning for a net inflow to UKL of approximately 300 TAF between Jan 1 and Apr 1.
- With Reclamation's anticipated inflow
  - UKL is forecast to be at or above target of 4142.4 +/- 0.10 ft on Apr 1
  - Reductions to minimum flows are not recommended unless the effects of current hydrology and future forecasts fall below current expectations.

Reduction Start Date	13-Jan		10-Feb	
Percent IGD Reduction	Average Daily IGD Release (CFS)	Volumetric Gain to UKL by Apr 1 (TAF)	Average Daily IGD Release (CFS)	Volumetric Gain to UKL by Apr 1 (TAF)
10%	885	13.3	881	9.6
15%	841	19.9	834	14.4
20%	796	26.6	787	19.2
25%	751	33.2	740	24.0
30%	706	39.8	693	28.8
35%	662	46.5	646	33.6
40%	617	53.1	593	39.0

Data based on 75% POE scenario which includes CNRFC 75% POE forecast UKL inflow volumes

UKL Water Surface Elevation – TOP

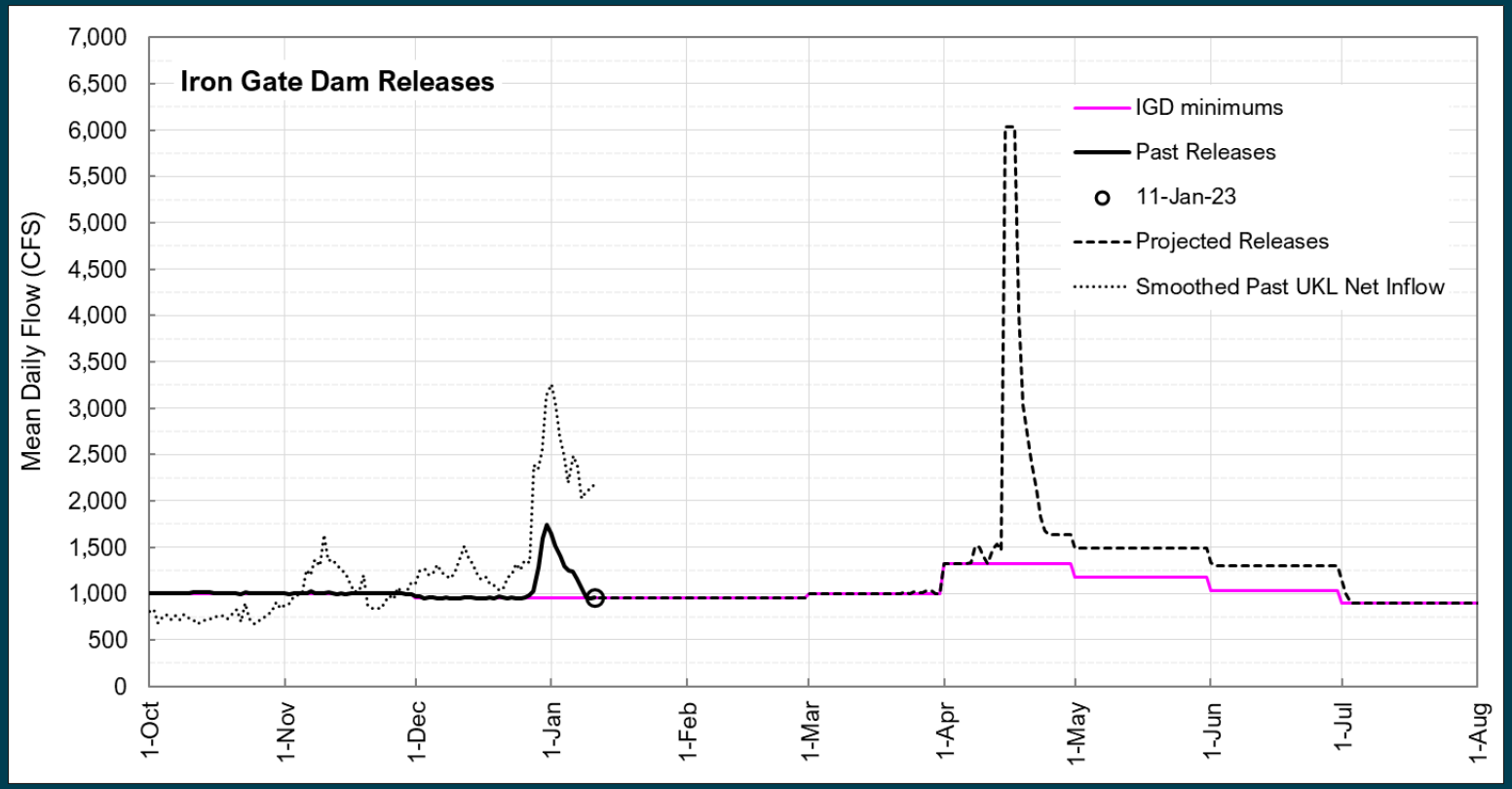


Projections, including WY2023 target elevations and surface elevation trajectories, are provisional and subject to revision based on future water supply forecasts, hydrologic conditions, and operational decisions

WY2023 observed UKL water surface elevation data are provisional

Current elevation trajectory reflects **no action taken** as simulated Apr 1 elevation intersects TOP goal of 4142.40 +/-0.10 FT

UKL Water Surface Elevation – TOP



Projections, including WY2023 target elevations and surface elevation trajectories, are provisional and subject to revision based on future water supply forecasts, hydrologic conditions, and operational decisions

WY2023 observed IGD release data are provisional

Proposed Schedule

Jan 13 (Fri) Finalization of TOP

Jan 20 – Mar 31 (Fri) Weekly FASTA to discuss TOP (as needed)

Technical Input Requests

Reclamation is seeking input on the following technical topics:

- The stated objective of reaching 4,142.4 feet in Upper Klamath Lake by April 1, as a means of balancing risks to all ESA species
- The assessment of what the likely conditions on April 1 will be, based on available information
- The timing and magnitude of reductions to minimum flows that would minimize risks to salmon, as it relates to attaining 4,142.4 in Upper Klamath Lake by April 1

Technical Input Requests

- Please submit comments, to Courtney Mathews, cmathews@usbr.gov

- Updates and materials can be found at www.usbr.gov/mp/kbao

Supplemental Information

Reduction Start Date		13-Jan			10-Feb		
Probability of Exceedance (POE)	Apr 1 UKL WSE (FT)	Average Daily IGD Reduction (CFS)	Average Daily IGD Release (CFS)	IGD Percent Reduction (%)	Average Daily IGD Reduction (CFS)	Average Daily IGD Release (CFS)	IGD Percent Reduction (%)
10%	>= 4142.4	NR	…	…	NR	…	…
25%	>= 4142.4	NR	…	…	NR	…	…
50%	>= 4142.4	NR	…	…	NR	…	…
75%	>= 4142.4	NR	…	…	NR	…	…
90%	**4142.14**	**157**	**818**	**16**	**212**	**763**	**22**

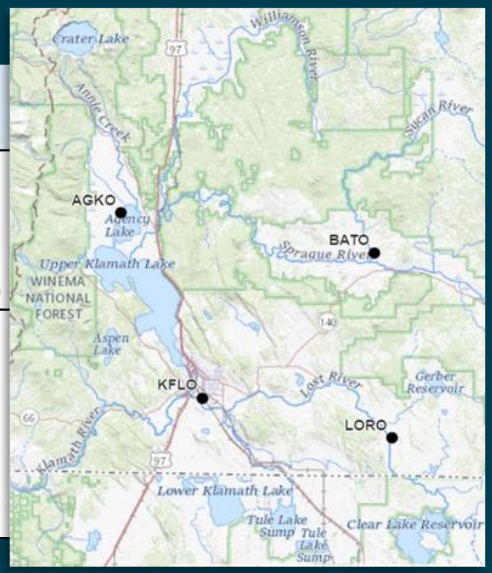
"NR" = No reduction

Jan 11 issuance CRNFC KLAO3 monthly probability forecast inflow volumes applied

Klamath Basin AgriMet – USBR Water Year (WY) 2023

Klamath Basin AgriMet Stations - Water Year-to-date Precipitation (through below date)
Wednesday, January 11, 2023

Station (POR)	WY2023 Total PREC (in.)	POR Median PREC (in.)	Percent POR Median	CBTT	PCODE	SDI	ELEV (ft.)
Lorella (2002-2021)	4.45	4.30	103%	LORO	PU	200586	4159
Beatty (2005-2021)	4.59	4.01	114%	BATO	PU	200522	4319
Agency (2001-2021)	8.16	6.78	120%	AGKO	PU	200542	4149
KFalls (1999-2021)	5.93	4.49	132%	KFLO	PU	200553	4099



https://www.usbr.gov/lc/region/g4000/riverops/_HdbDataViewer.html?query=svr=kbohdb&sdi=200586%2C200522%2C200542%2C200553&tstp=DY&t1=2021-10-01T00:00&t2=2022-03-01T00:00&table=R&mrid=0&format=json

NRCS Upper Klamath Basin Snow/Precipitation Report WY2023

Upper Klamath Basin SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites

Provisional data, subject to revision

Data based on the first reading of the day (typically 00:00) for Thursday, January 12, 2023

Basin Site Name	Elev (ft)	Snow Water Equivalent			Water Year-to-Date Precipitation		
		Current (in)	Median (in)	Pct of Median	Current (in)	Median (in)	Pct of Median
KLAMATH							
Fish Lk.	4660	4.2	6.0	70	18.8	18.8	100
Chemult Alternate	4850	9.7	5.4	180	12.9	11.3	114
Gerber Reservoir	4890	2.2	1.2(22)	183	7.4	6.0(22)	123
Taylor Butte	5030	6.8	4.0	170	10.0	8.4	119
Crowder Flat	5170	4.4	2.0(21)	220	7.8	5.6(21)	139
Billie Creek Divide	5280	12.4	10.4	119	23.3	23.9	97
Diamond Lake	5280	5.5	8.2	67	19.5	21.8	89
Sun Pass	5400	14.9	9.6(14)	155	19.0	18.4(14)	103
Sevenmile Marsh	5700	17.7	14.0	126	28.9	28.8	100
Quartz Mountain	5720	3.9	1.1(27)	355	9.2	6.1(17)	151
Silver Creek	5740	8.6	5.6	154	11.7	11.2	104
Strawberry	5770	6.8	3.0	227	10.4	8.6	121
Cold Springs Camp	5940	13.2	13.6	97	17.3	25.9	67
Fourmile Lake	5970	14.0	13.8	101	23.7	25.8	92
Annie Springs	6010	24.6	19.2(20)	128	29.5	30.3(20)	97
Crazyman Flat	6180	12.9	9.0(19)	143	13.6	13.4(19)	101
Swan Lake Mtn	6830	19.0	10.5(13)	181	20.8	16.4(13)	127
Summer Rim	7080	7.7	8.0	96	9.4	9.9	95
Basin Index (%)				**130**			**101**

-M = Missing data.
* = Analysis may not provide a valid measure of conditions.
N/A = Not available.

Footnotes for median and average:
(##) = If less than 30 years are available, this value specifies the number of years used for the median and average calculations. Sites with less than 10 years available do not have medians or averages.

The MONTH-TO-DATE PRECIPITATION Percent of Median (or Average) represents the total precipitation (beginning on the 1st day of the current month) found at selected SNOTEL sites in or near the basin compared to the Median (or Average) value for those sites on this day.

The WATER YEAR-TO-DATE-PRECIPITATION represents total precipitation since October 1st, expressed in inches.

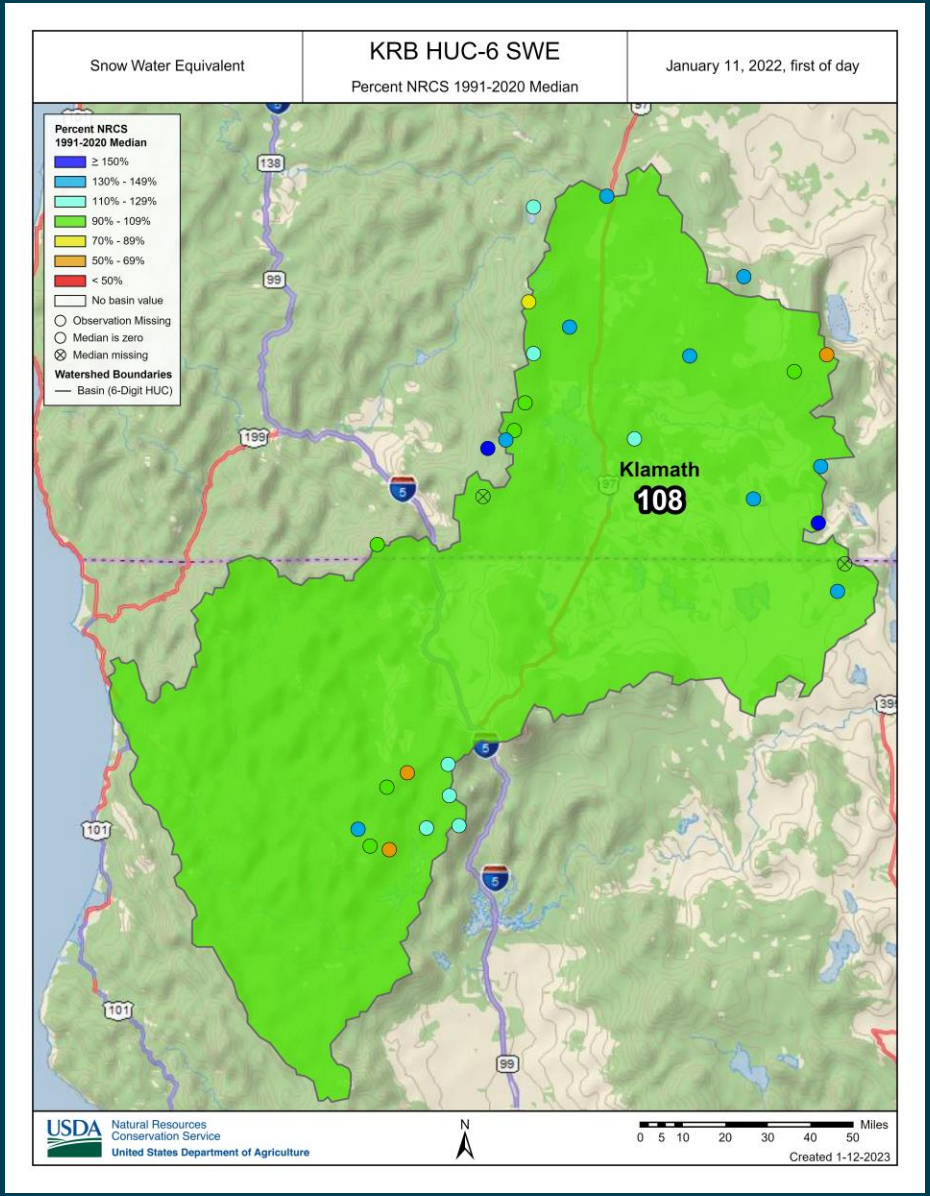
Contact your state water supply staff for assistance.

Medians and averages are calculated for the period 1991-2020.

Provisional data, subject to revision.

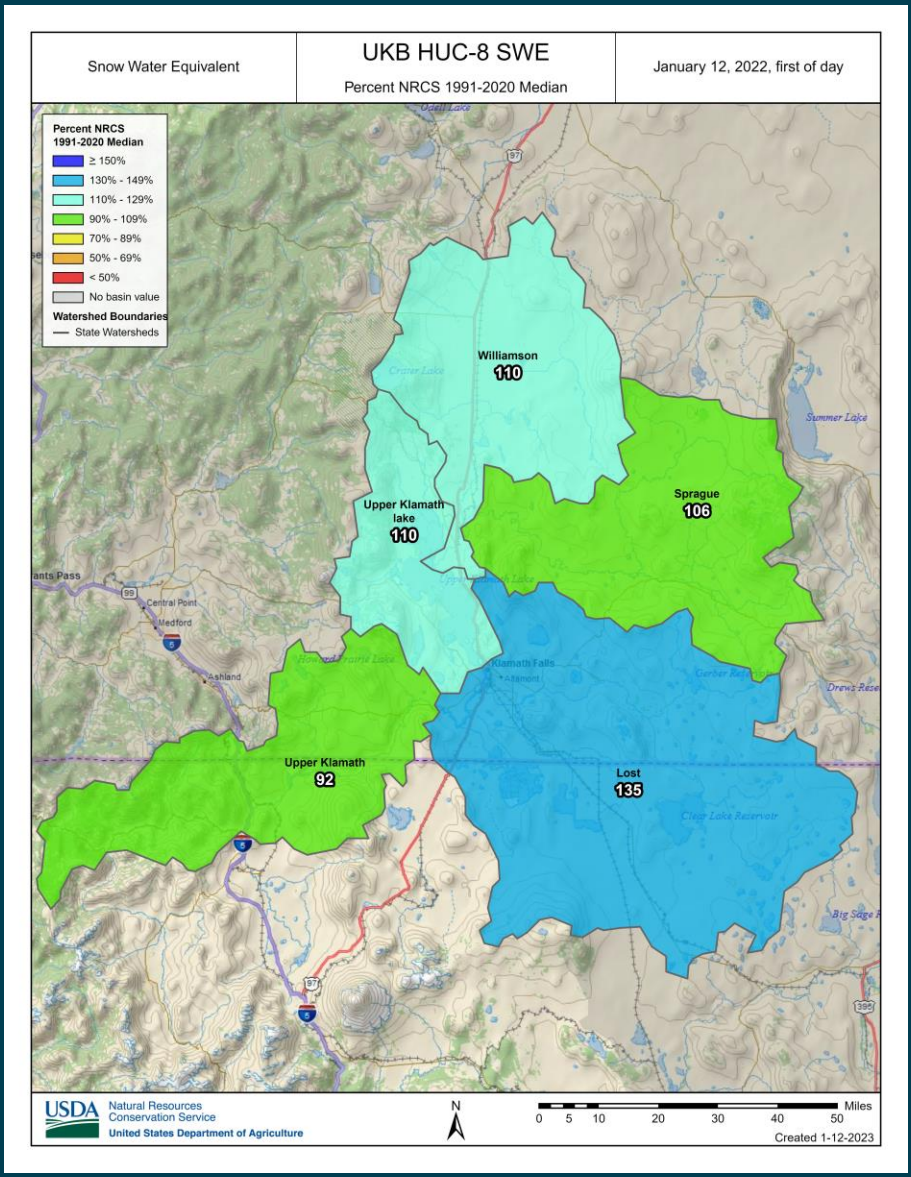
https://wcc.sc.egov.usda.gov/reports/SelectUpdateReport.html

NRCS Klamath River Basin (KRB) HUC-6 Snow Water Equivalent (SWE) WY2023



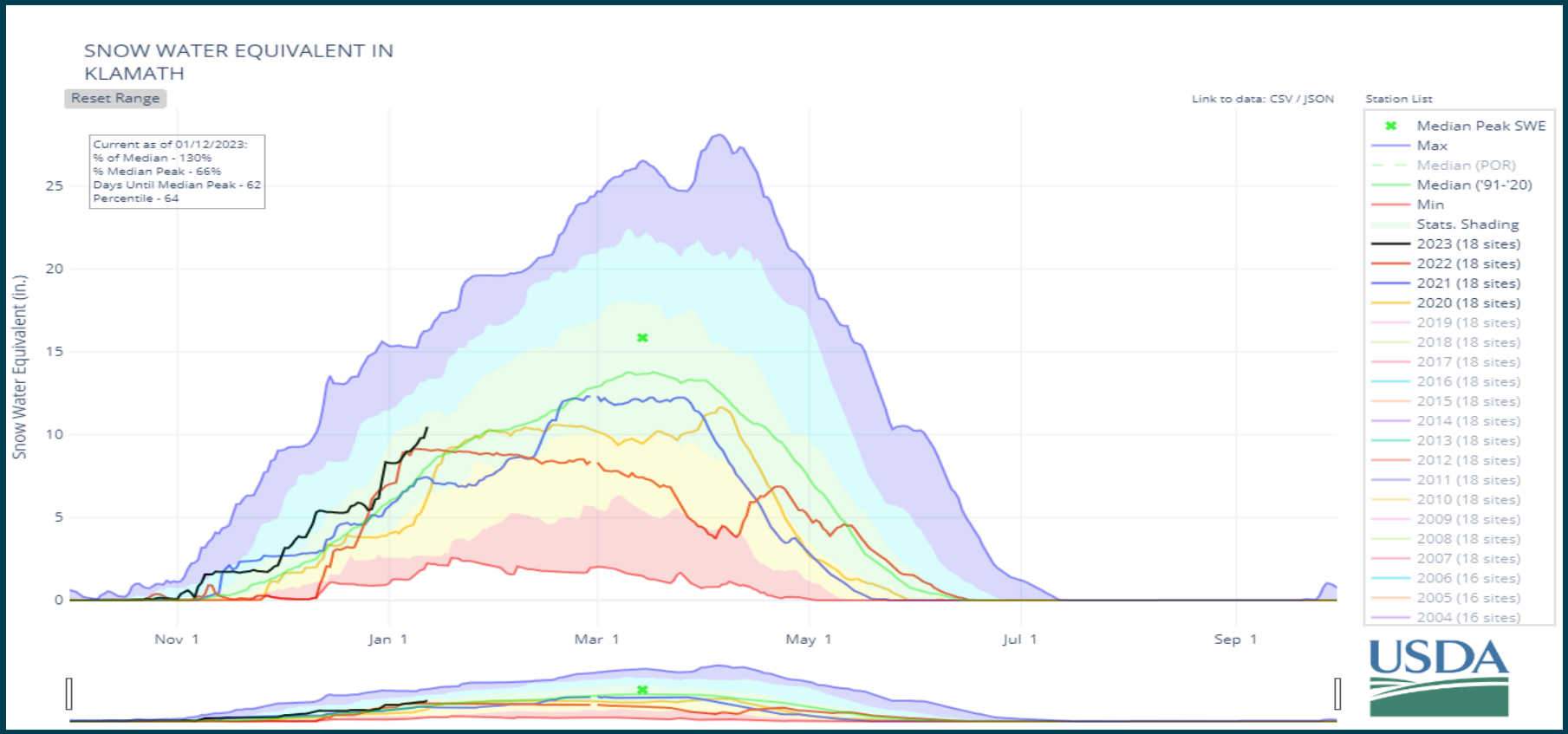
https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/imap

NRCS Upper Klamath Basin (UKB) HUC-8 Snow Water Equivalent (SWE) WY2023



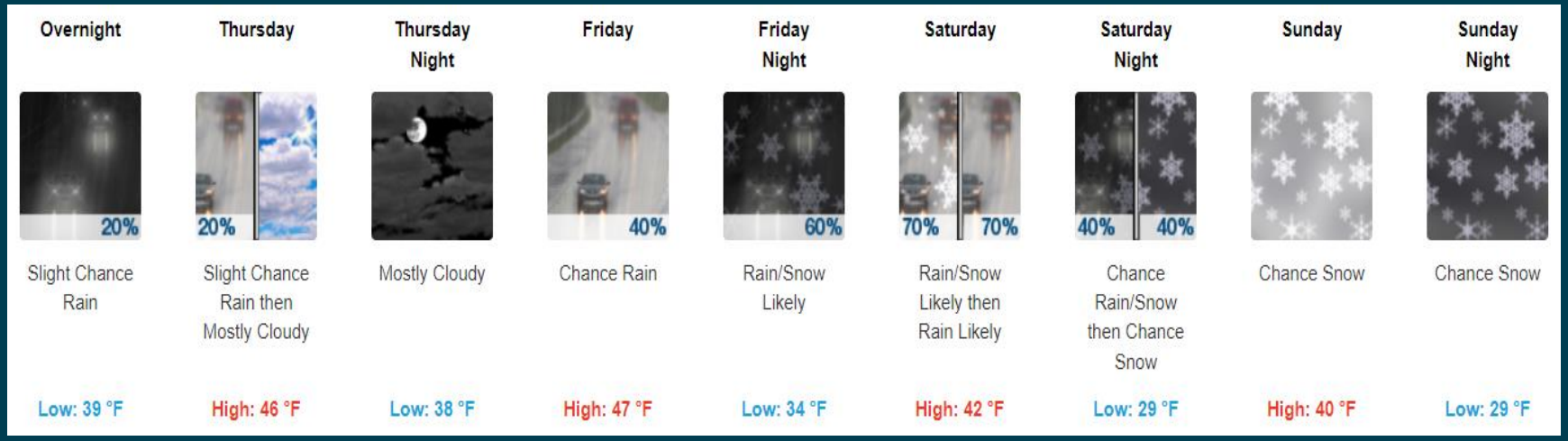
https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/imap

NRCS Upper Klamath Basin Snow Water Equivalent (SWE) WY2023- NRCSWY2023 & Last 3 Water Years



https://www.nrcs.usda.gov/Internet/WCIS/AWS_PLOTS/basinCharts/POR/WTEQ/assocHUC6/180102_Klamath.html

Klamath Falls Weather Forecast - NWS
12 January 2022



https://forecast.weather.gov/MapClick.php?lat=42.2292&lon=-121.7842#.YbtneahKjIU

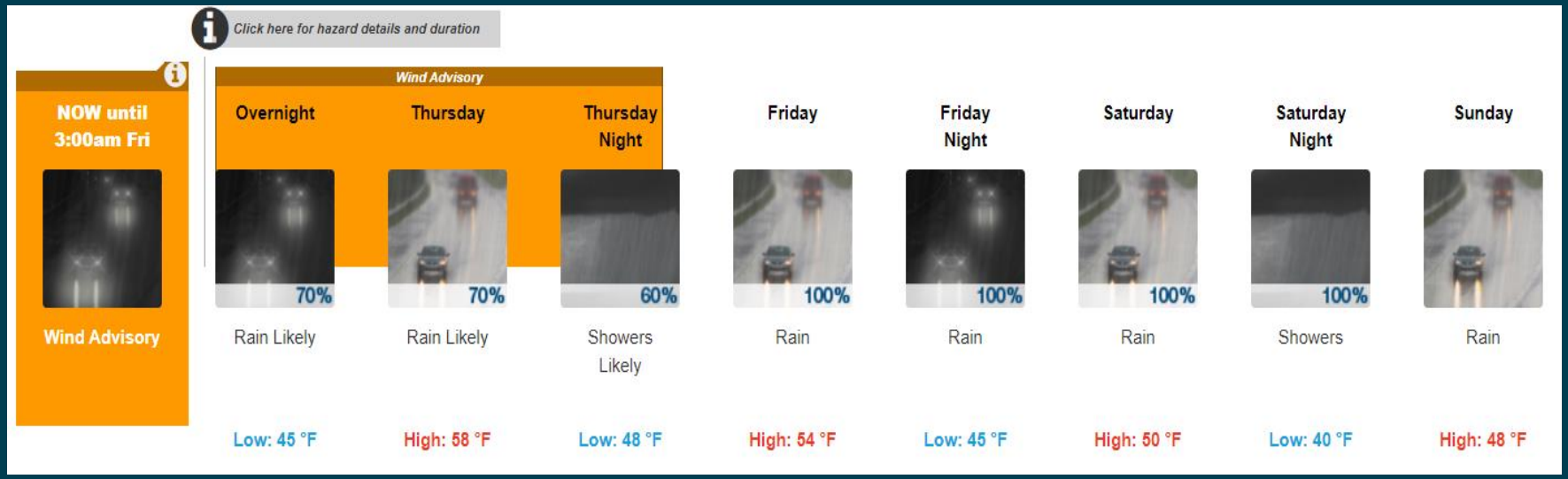
Klamath Falls Weather Forecast - NWS
12 January 2022

Detailed Forecast

Overnight	A 20 percent chance of rain. Snow level 6600 feet. Cloudy, with a steady temperature around 39. Southeast wind around 18 mph, with gusts as high as 28 mph.
Thursday	A 20 percent chance of rain before 10am. Snow level 7200 feet. Mostly cloudy, with a high near 46. South southeast wind around 20 mph, with gusts as high as 30 mph.
Thursday Night	Mostly cloudy, with a low around 38. Southeast wind around 18 mph, with gusts as high as 28 mph.
Friday	A 40 percent chance of rain after 10am. Snow level 5600 feet. Mostly cloudy, with a high near 47. South southeast wind 13 to 16 mph, with gusts as high as 24 mph.
Friday Night	A chance of rain before 10pm, then snow likely, possibly mixed with rain. Snow level 5100 feet. Mostly cloudy, with a low around 34. South southeast wind 10 to 13 mph, with gusts as high as 20 mph. Chance of precipitation is 60%. Little or no snow accumulation expected.
Saturday	Rain and snow likely, becoming all rain after 10am. Snow level 5000 feet. Mostly cloudy, with a high near 42. Chance of precipitation is 70%. Little or no snow accumulation expected.
Saturday Night	A chance of rain and snow before 10pm, then a chance of snow. Mostly cloudy, with a low around 29. Chance of precipitation is 40%. New snow accumulation of less than a half inch possible.
Sunday	A chance of snow. Mostly cloudy, with a high near 40.
Sunday Night	A chance of snow. Mostly cloudy, with a low around 29.
M.L.King Day	A chance of snow. Mostly cloudy, with a high near 41.
Monday Night	A chance of snow. Mostly cloudy, with a low around 27.
Tuesday	A chance of snow. Partly sunny, with a high near 39.
Tuesday Night	Snow likely. Mostly cloudy, with a low around 27.
Wednesday	Snow likely. Mostly cloudy, with a high near 40.

https://forecast.weather.gov/MapClick.php?lat=42.2292&lon=-121.7842#.YbtneahKjIU

Orleans Weather Forecast - NWS
12 January 2022



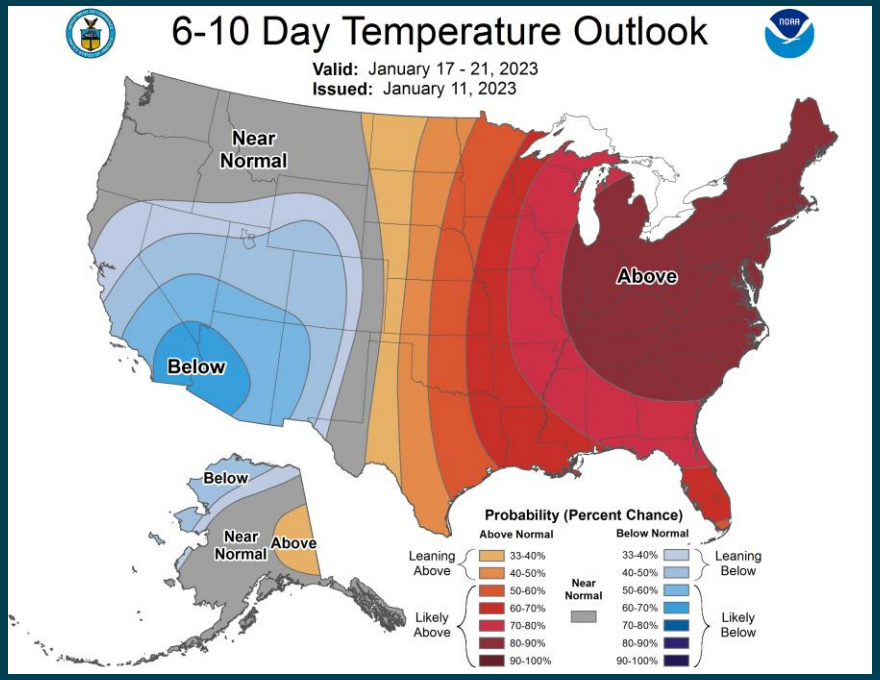
https://forecast.weather.gov/MapClick.php?lat=41.3026&lon=-123.538#.Ybtn56hKjIU

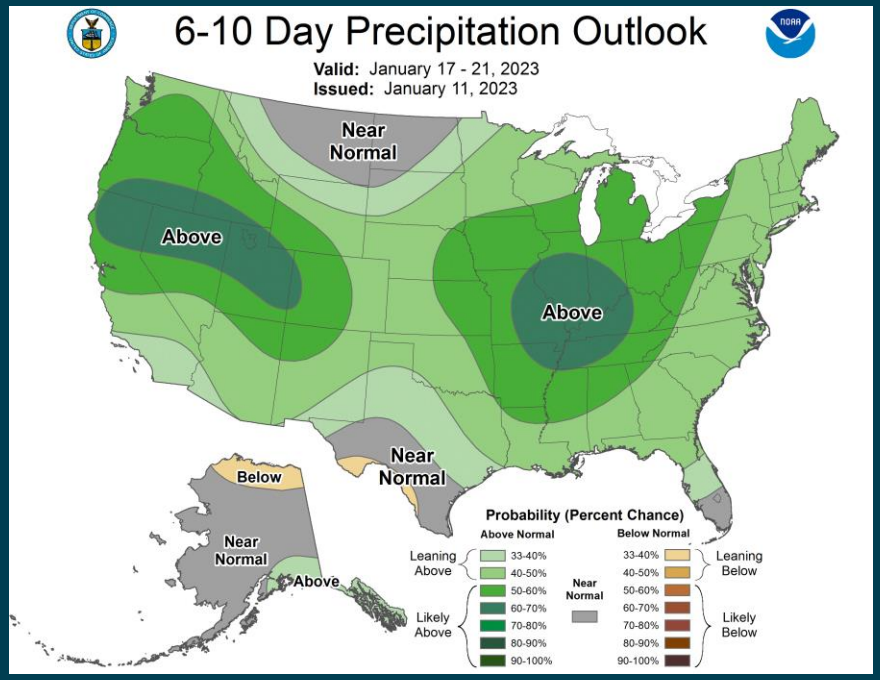
Orleans Weather Forecast - NWS
12 January 2022

Detailed Forecast	
Overnight	Rain likely. Cloudy, with a low around 45. East wind around 6 mph. Chance of precipitation is 70%.
Thursday	Rain likely, mainly before 10am. Cloudy, with a high near 58. East northeast wind around 6 mph. Chance of precipitation is 70%. New precipitation amounts of less than a tenth of an inch possible.
Thursday Night	A chance of showers and thunderstorms, then rain likely after 10pm. Cloudy, with a low around 48. North northeast wind 5 to 7 mph becoming calm in the evening. Chance of precipitation is 60%. New precipitation amounts between a tenth and quarter of an inch, except higher amounts possible in thunderstorms.
Friday	Rain. High near 54. South southeast wind around 6 mph. Chance of precipitation is 100%. New precipitation amounts between a half and three quarters of an inch possible.
Friday Night	Rain. Low around 45. South southeast wind around 6 mph. Chance of precipitation is 100%. New precipitation amounts between a quarter and half of an inch possible.
Saturday	Rain. High near 50. South southeast wind around 9 mph. Chance of precipitation is 100%. New precipitation amounts between a half and three quarters of an inch possible.
Saturday Night	Rain before 10pm, then showers and possibly a thunderstorm after 10pm. Low around 40. Chance of precipitation is 100%. New rainfall amounts between a half and three quarters of an inch possible.
Sunday	Rain. Cloudy, with a high near 48.
Sunday Night	Rain. Cloudy, with a low around 38.
M.L.King Day	Rain likely. Cloudy, with a high near 48.
Monday Night	Rain likely. Mostly cloudy, with a low around 38.
Tuesday	Rain. Cloudy, with a high near 49.
Tuesday Night	Rain. Cloudy, with a low around 39.
Wednesday	Rain. Cloudy, with a high near 49.

https://forecast.weather.gov/MapClick.php?lat=41.3026&lon=-123.538#.Ybtn56hKjIU

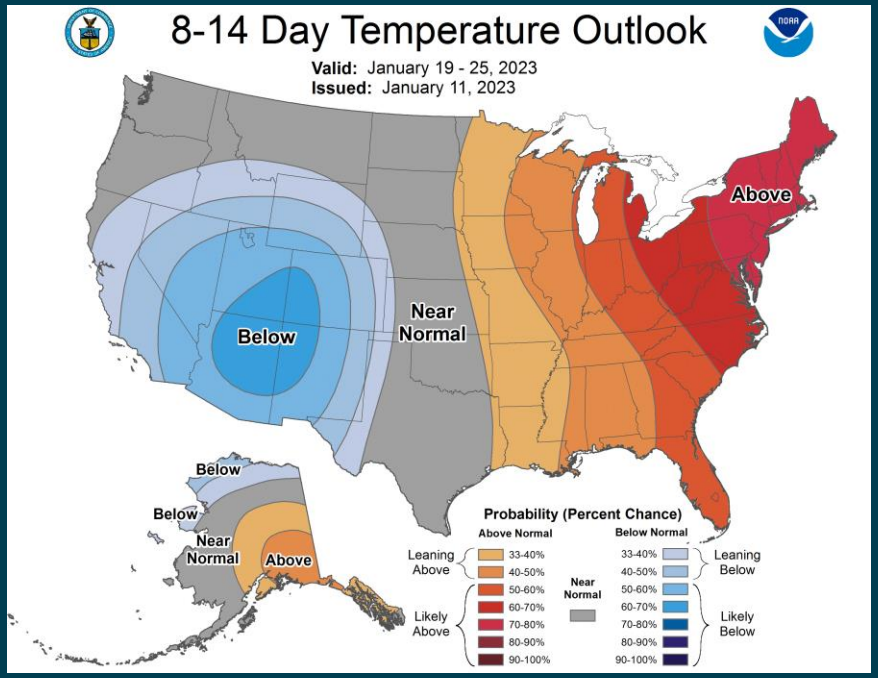
6-10 Day Weather Outlook

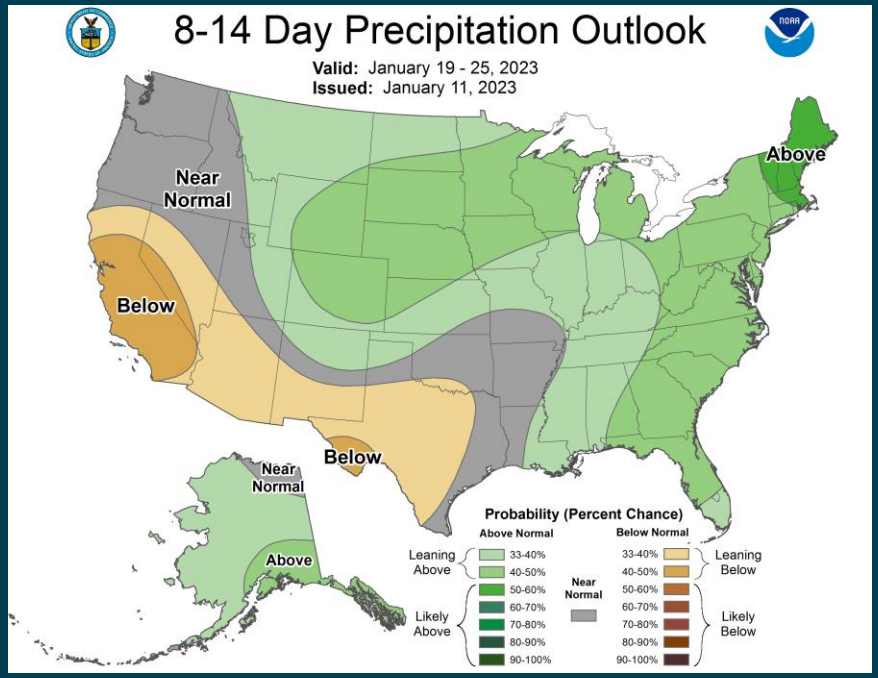




https://www.cpc.ncep.noaa.gov/products/predictions/610day/

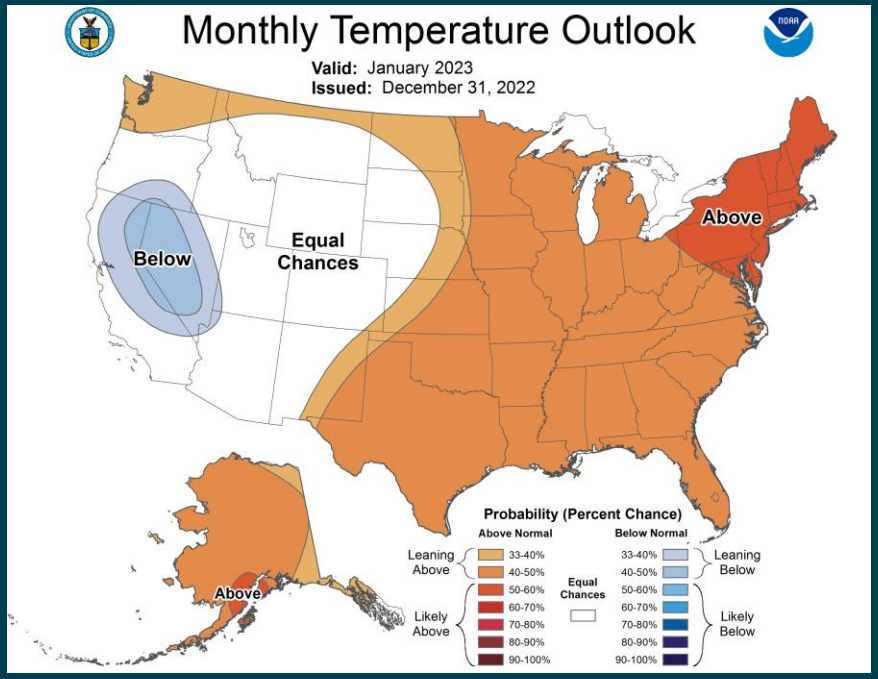
8-14 Day Weather Outlook

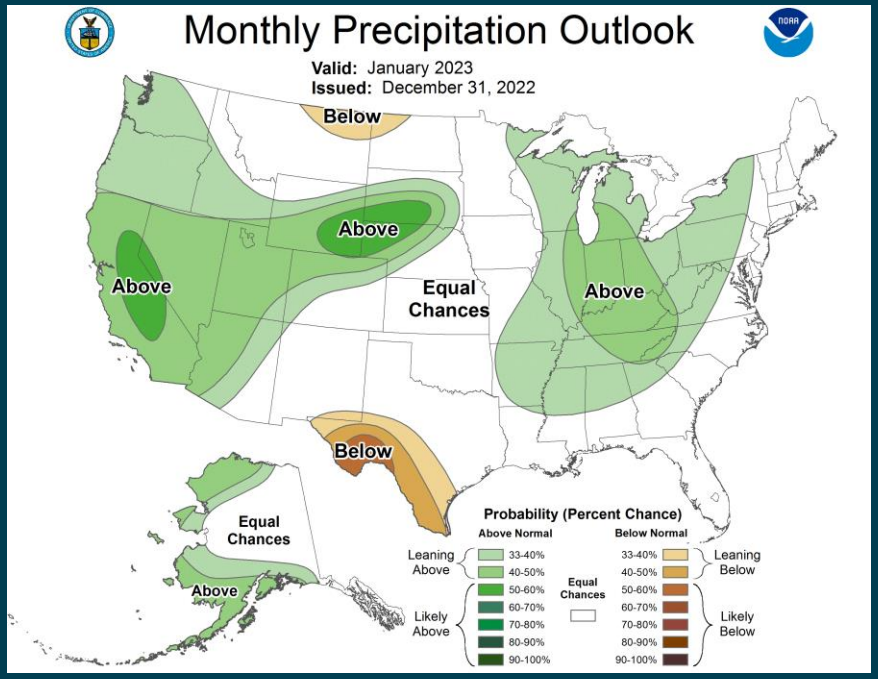




https://www.cpc.ncep.noaa.gov/products/predictions/814day/

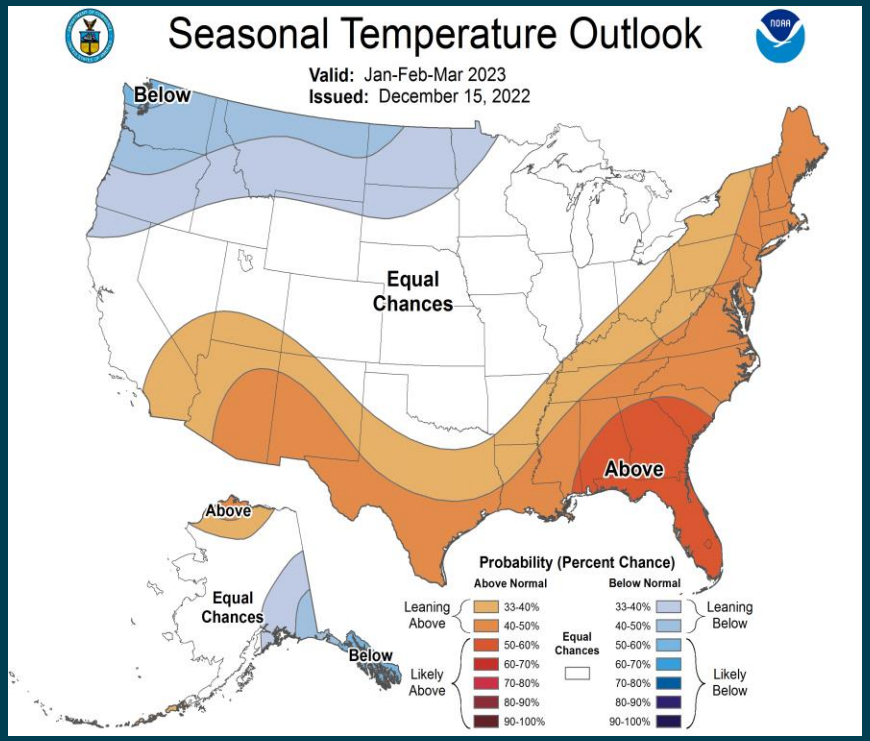
January Weather Outlook

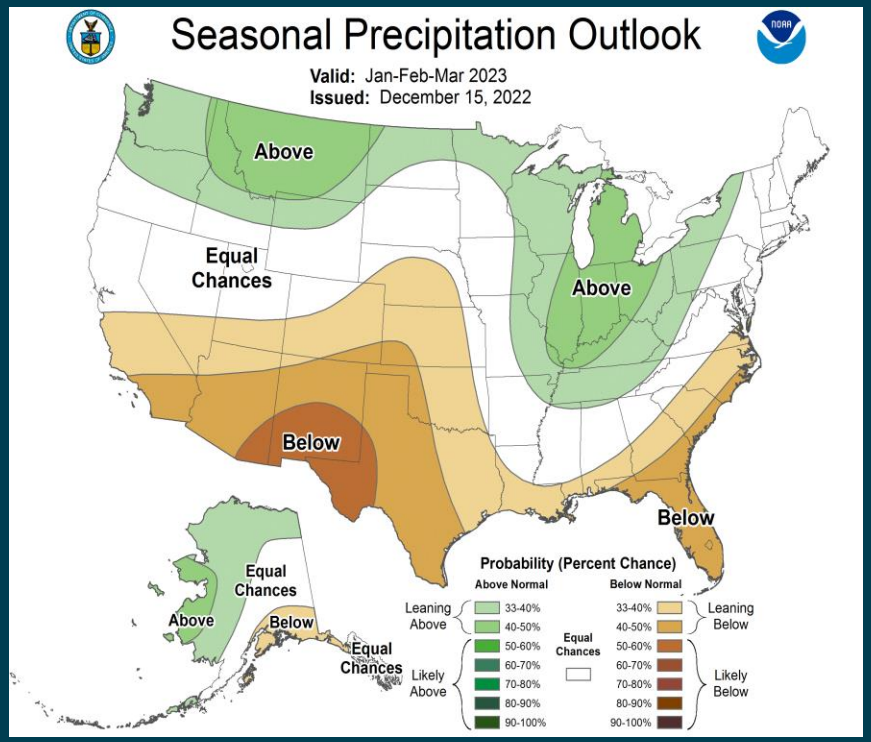




https://www.cpc.ncep.noaa.gov/products/predictions/30day/

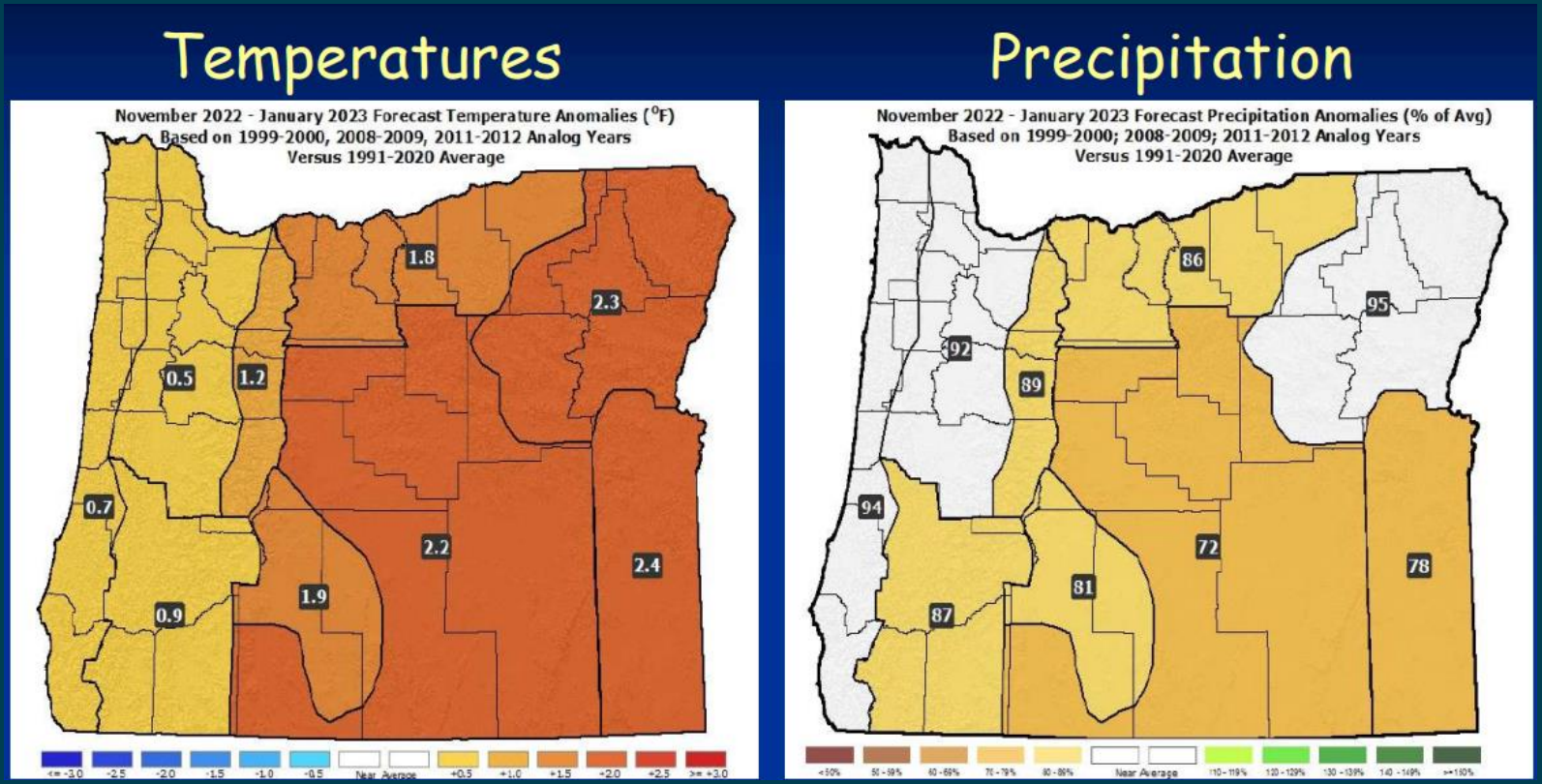
January-March Weather Outlook





https://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

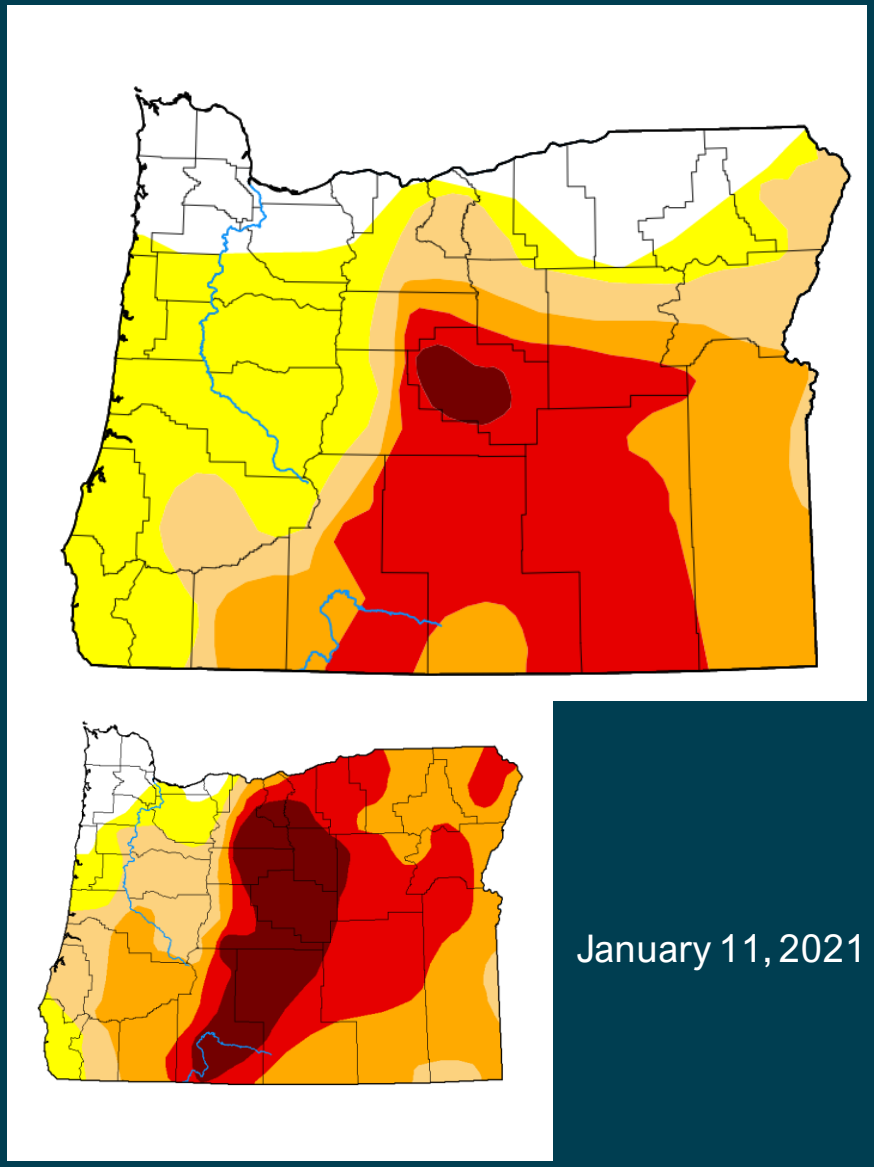
Seasonal Climate Forecast - ODA
Nov. 2022 – Jan. 2023



- Significant weather "swings" are likely during the 3-month period with heightened chances for extreme weather events, in any direction.
- Primary analogs (above) favor above-average temperatures and below average precipitation, but 1956-57 & 1971-72 analogs are much colder.

https://www.oregon.gov/oda/programs/NaturalResources/Pages/Weather.aspx

United States Drought Monitor - Oregon



January 11, 2021

Map released: Thurs. January 12, 2023

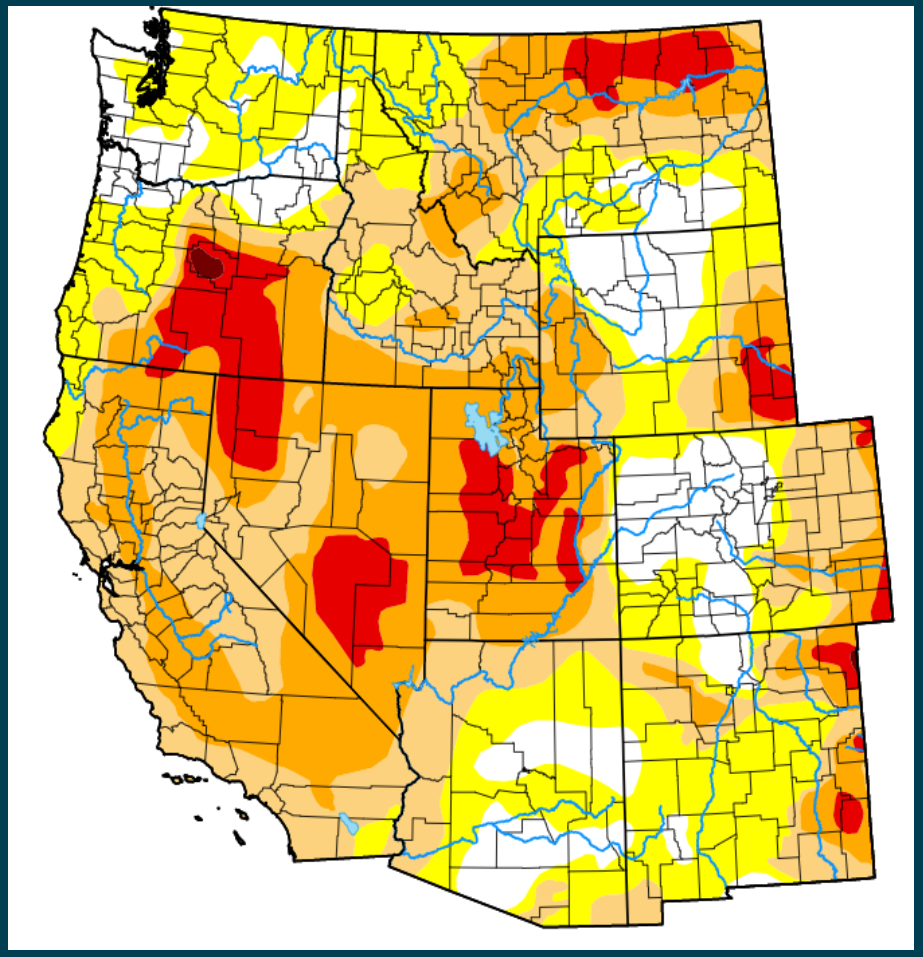
Data valid: January 10, 2023 at 7 a.m. EST

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

United States Drought Monitor – West Region



Map released: Thurs. January 12, 2023

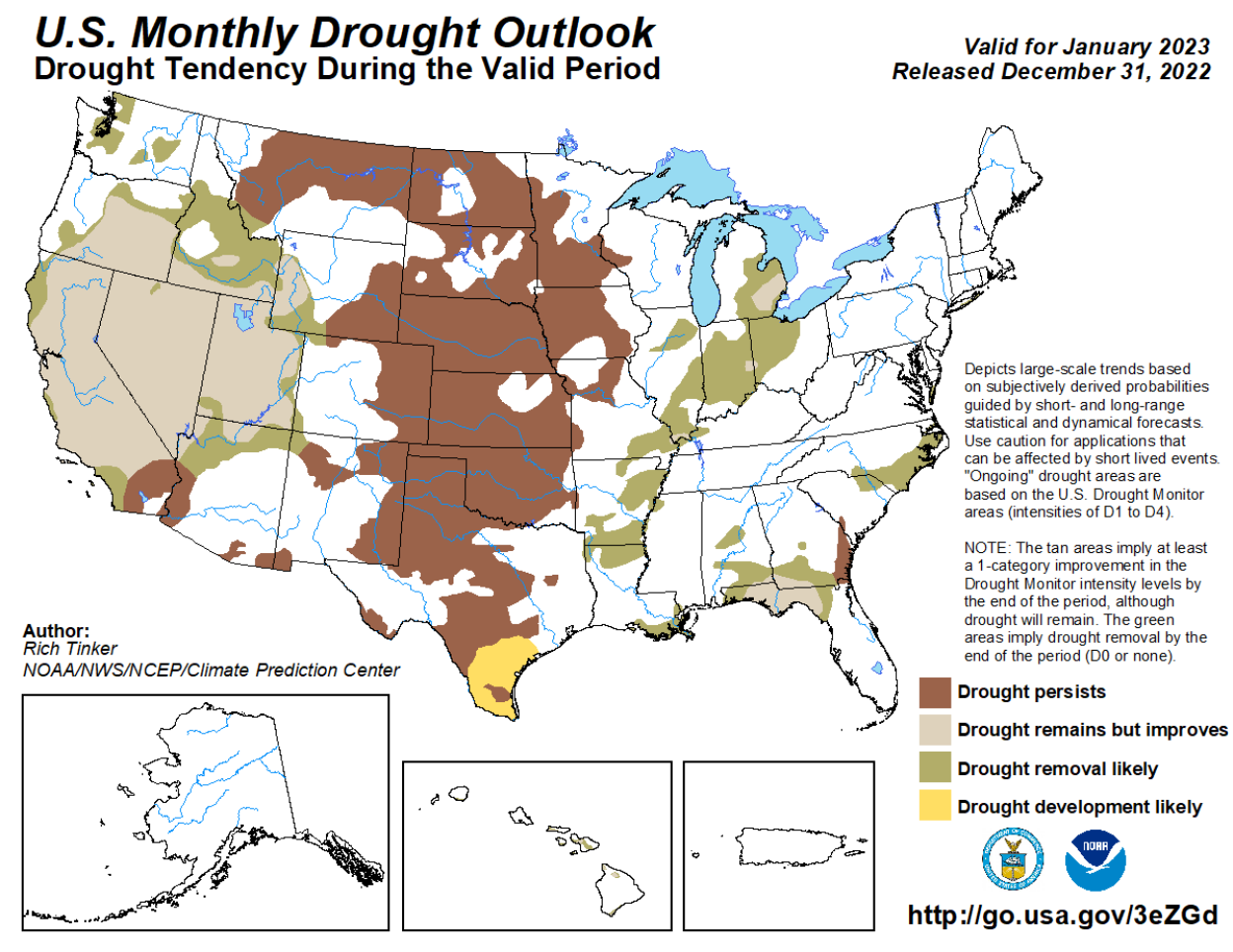
Data valid: January 10, 2023 at 7 a.m. EST

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

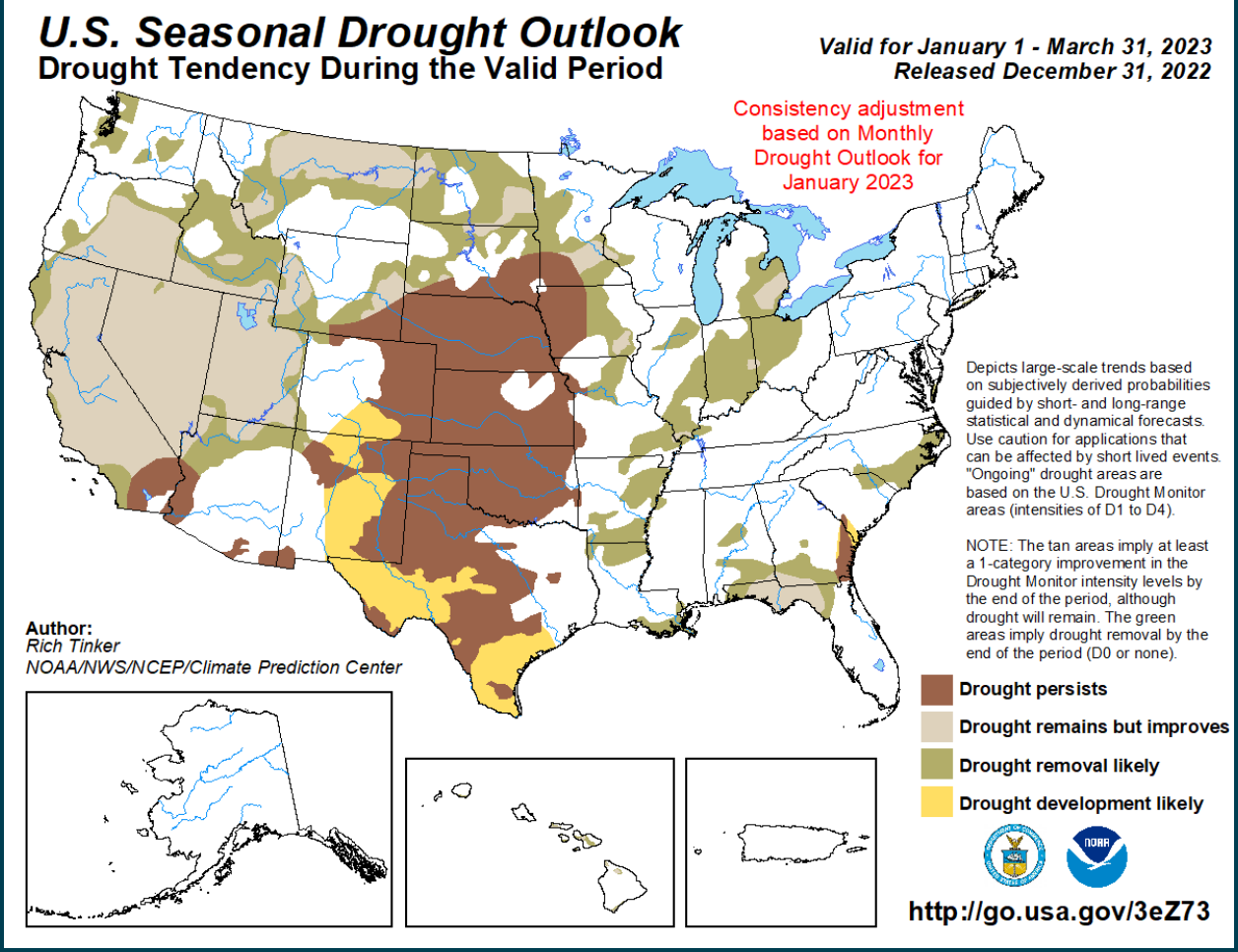
U.S. Monthly Drought Outlook - January 2023



Next Seasonal Outlook issuance date: **January 31, 2022, at 3:00pm EDT**

https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

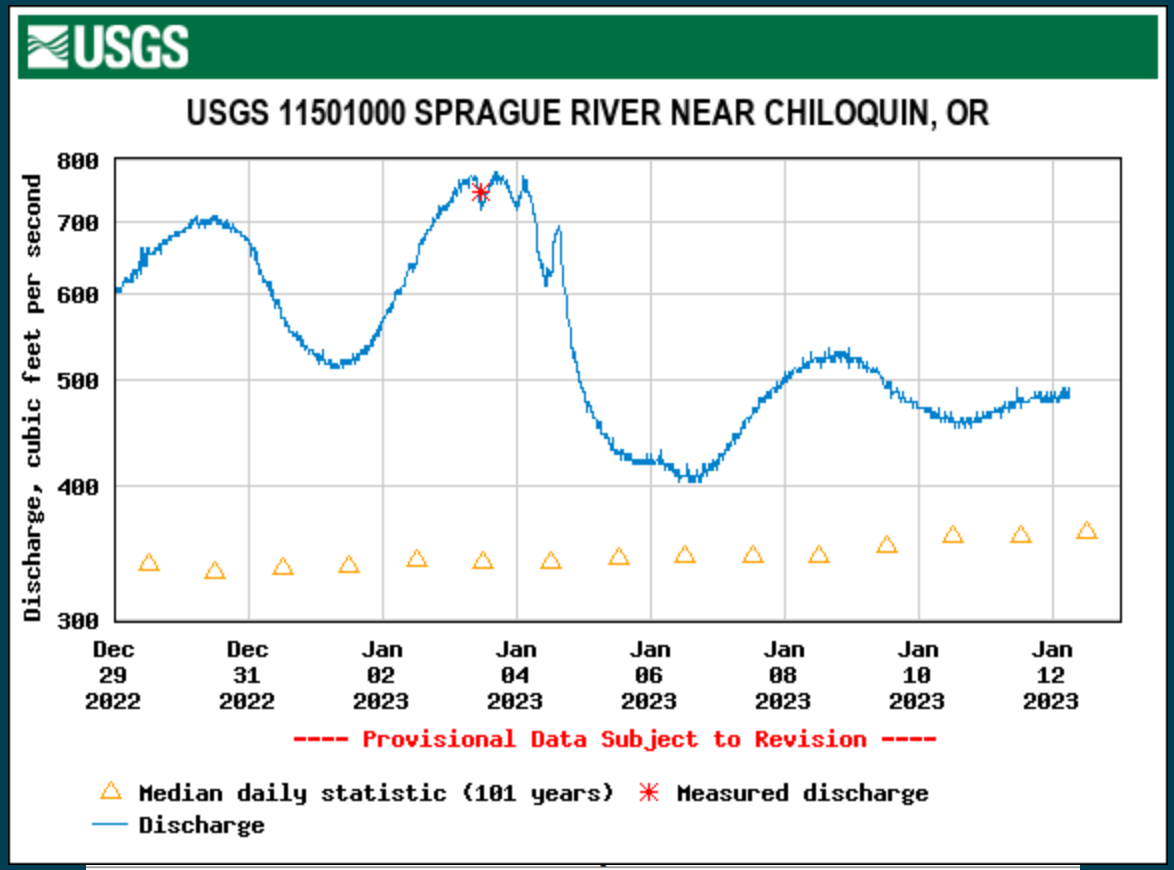
U.S. Seasonal Drought Outlook
January 1 – March 31, 2023



Next Seasonal Outlook issuance date: **January 19, 2023, at 8:30am EDT**

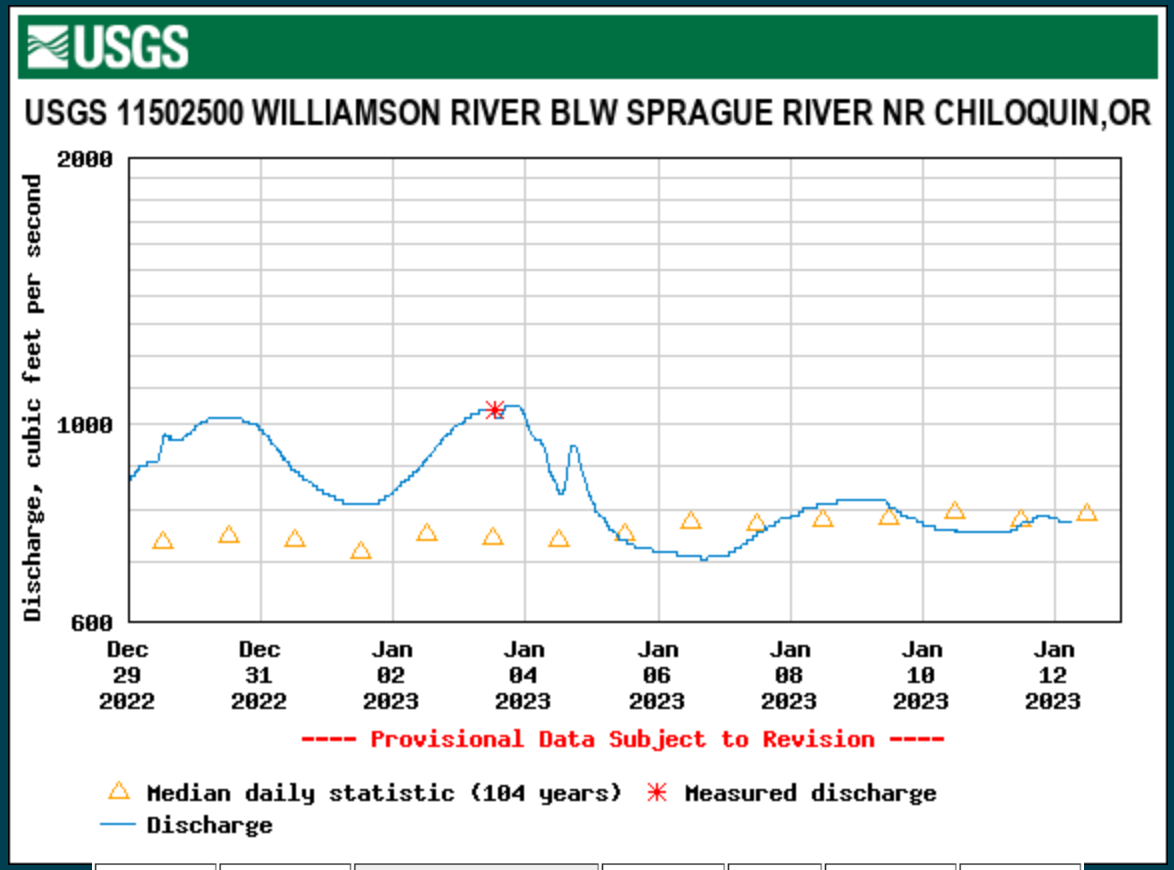
https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

Sprague River - USGS 11501000



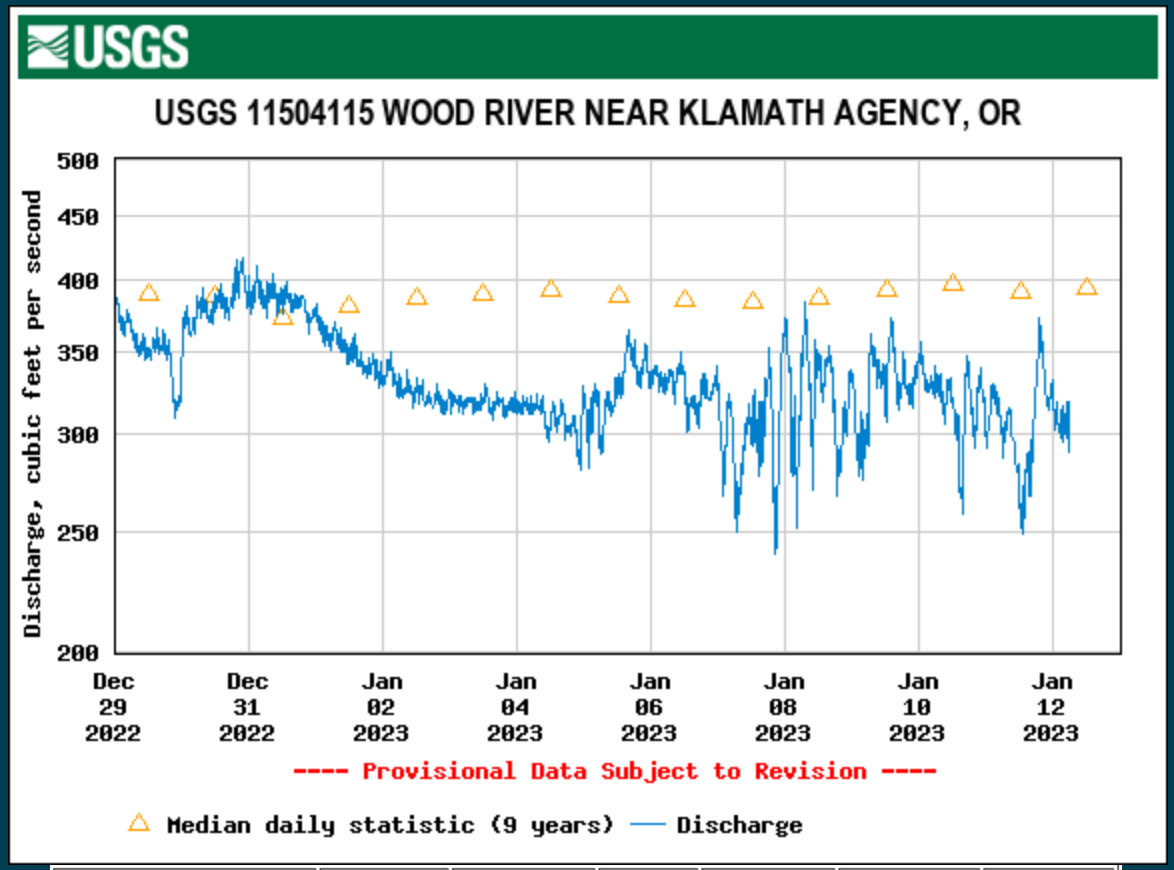
Min (1937)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1997)
160	295	363	462	476	482	2420

Williamson River - USGS 11502500



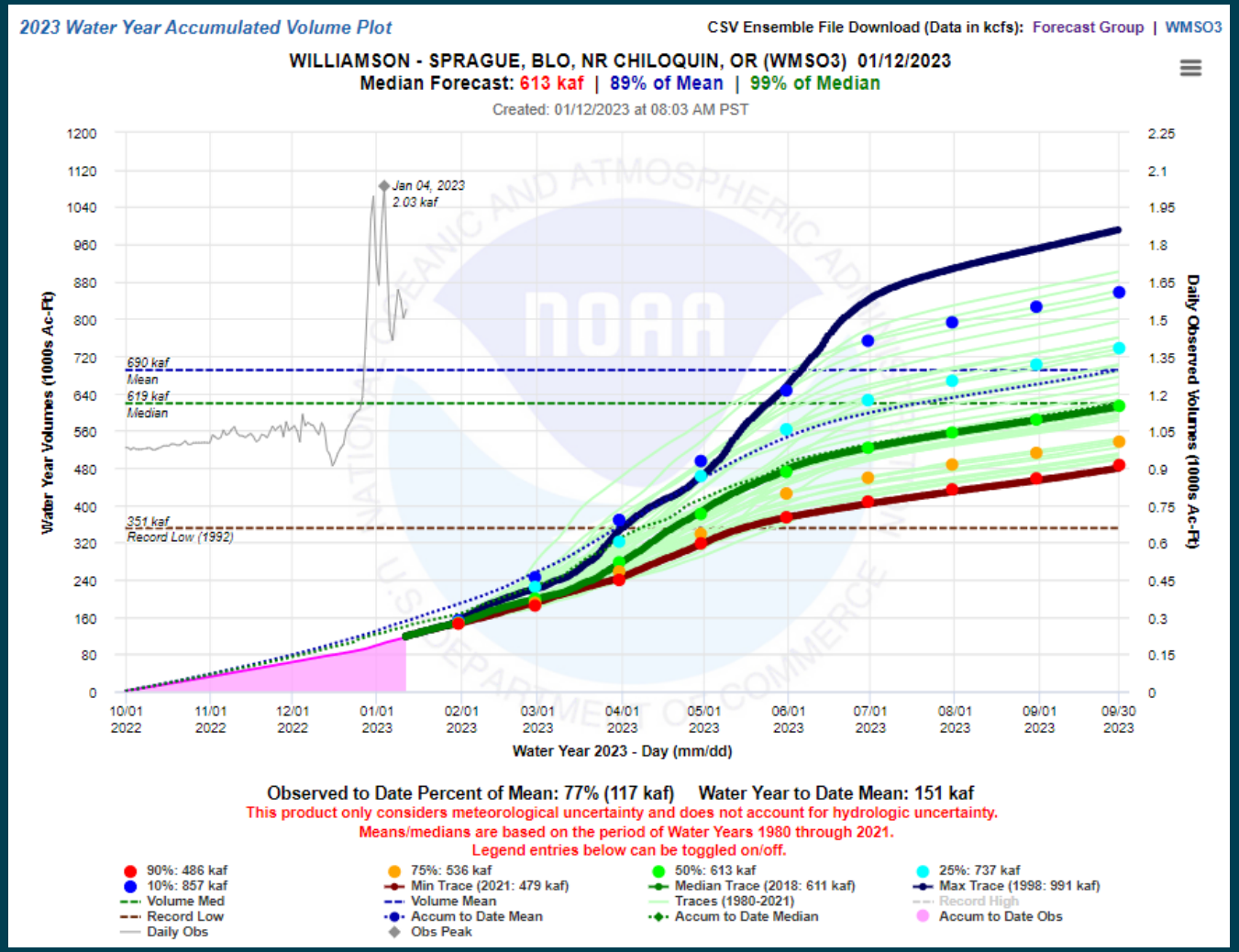
Min (1937)	25th percen-tile	Most Recent Instantaneous Value Jan 12	Median	Mean	75th percen-tile	Max (1997)
492	627	777	795	901	993	3230

Wood River – USGS 11504115



Most Recent Instantaneous Value Jan 12	Min (2022)	25th percen-tile	Mean	Median	75th percen-tile	Max (2018)
292	335	346	388	394	405	491

Williamson River Forecast – CNRFC
WY2023



UKL Cumulative Net Inflow
WY2023 & Period-of-Record (POR)-to-Date

WY	Cumulative UKL Net Inflow (TAF)
2014	229.88
2021	234.15
1991	238.31
1992	246.84
1995	251.00
2019	258.79
2022	259.68
2020	261.80
2023	**262.63**
1994	272.95
1993	276.49
2003	280.45
2016	280.65
2012	281.41
2010	284.52
2018	288.95
2004	290.43
2005	291.84
1990	304.40
1981	319.15
2001	319.81

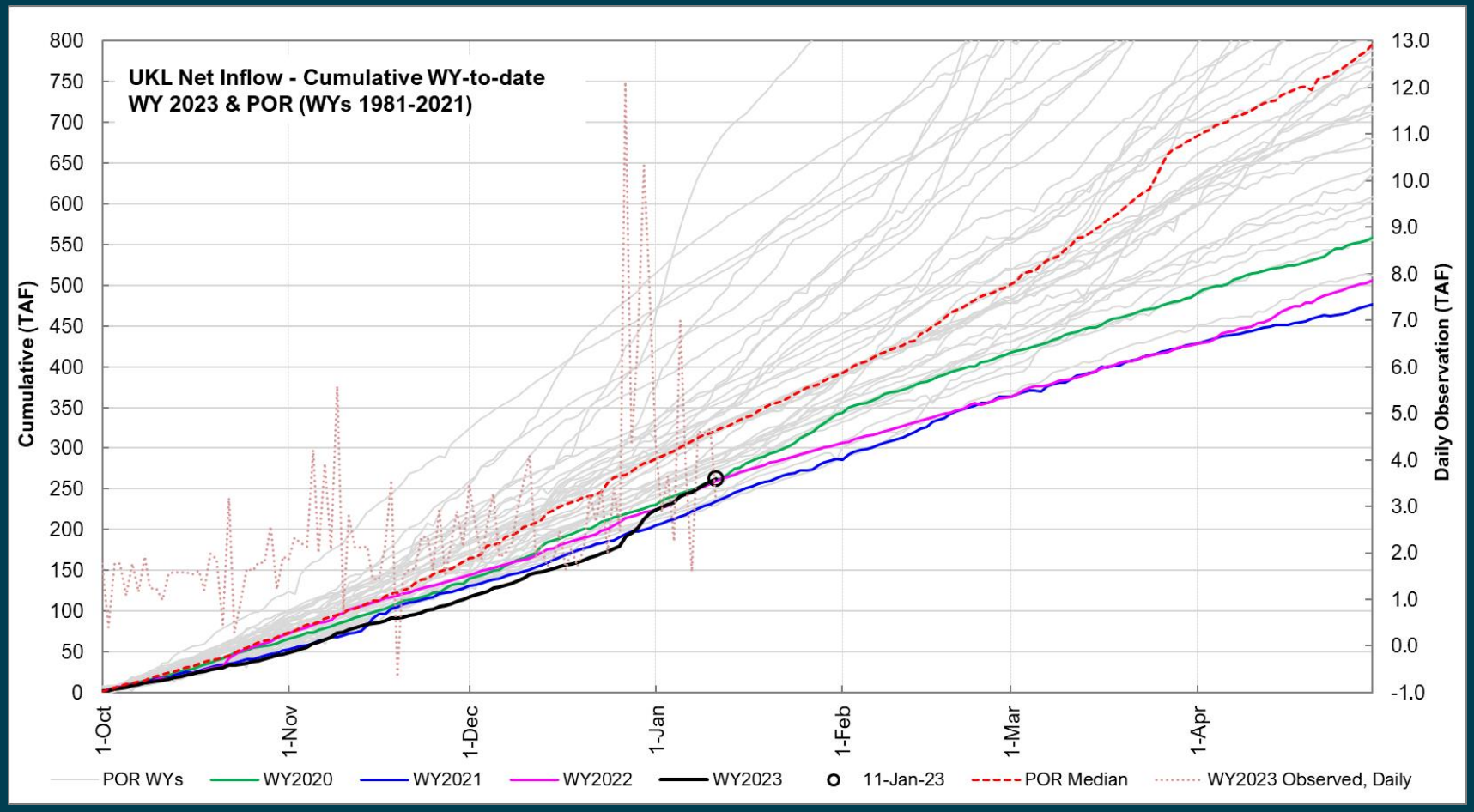
% of POR median = 82%
% of POR average = 77%

WY	Cumulative UKL Net Inflow (TAF)
2008	320.43
2015	321.81
1989	325.32
2013	326.39
2009	327.50
2011	338.88
2017	340.34
1998	341.22
1988	343.00
2007	353.70
2002	359.88
1987	372.12
1986	374.79
2000	377.44
1996	399.44
1983	427.81
1999	459.20
2006	483.56
1985	512.55
1982	521.88
1984	572.98
1997	673.35

POR median

WY2022/2023 data are provisional and subject to revision

UKL Cumulative Net Inflow
WY2023 and POR-to-date



WY2022/2023 data are provisional and subject to revision

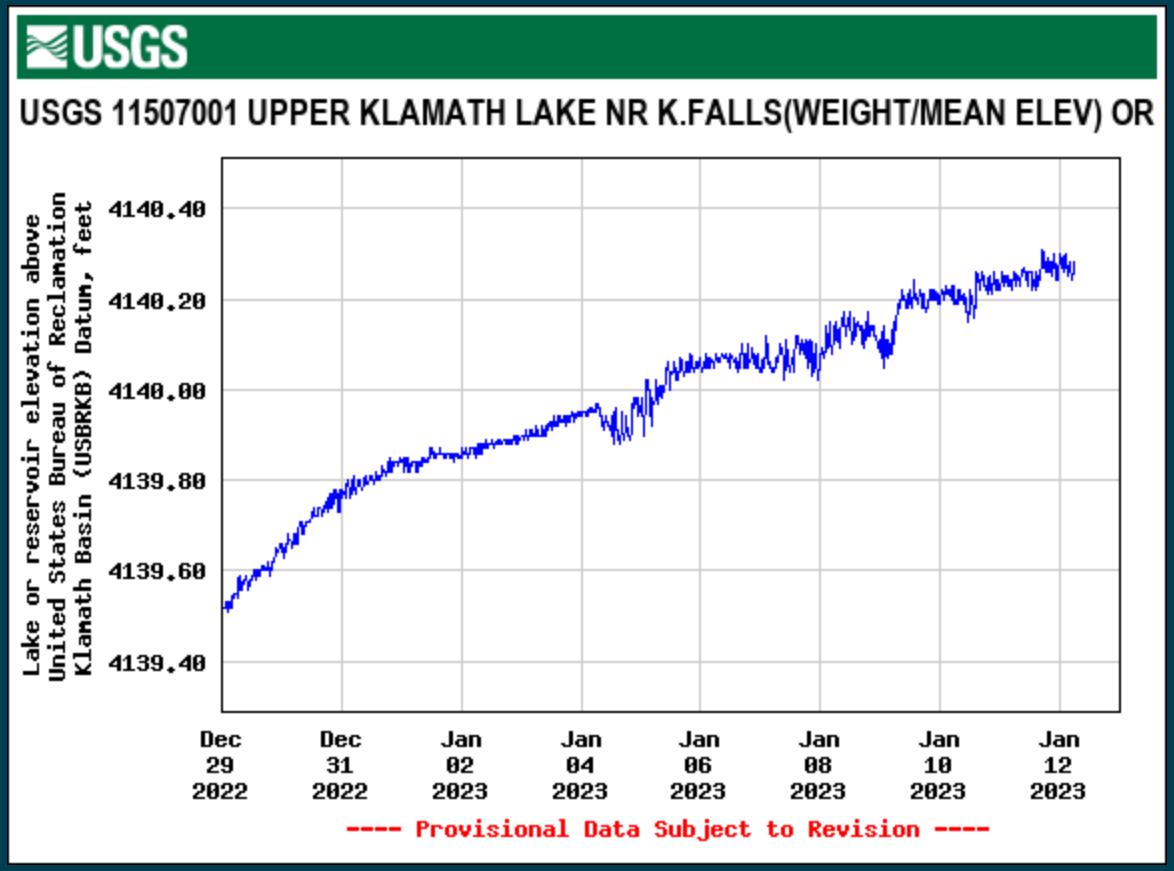
Observed UKL Net Inflow
January 05 – January 11

Date	Observed UKL Net Inflow (CFS)	Observed Percentile**
1/05/2022	3523	92%
1/06/2022	1963	57%
1/07/2022	810	Min
1/08/2023	2326	82%
1/09/2023	2302	76%
1/10/2023	2356	78%
1/11/2023	1594	27%
Average	**2125***	

*Above date range: 69th POR percentile (31% exceedance) daily average = 2135 CFS
**POR: WYs 1981-2021

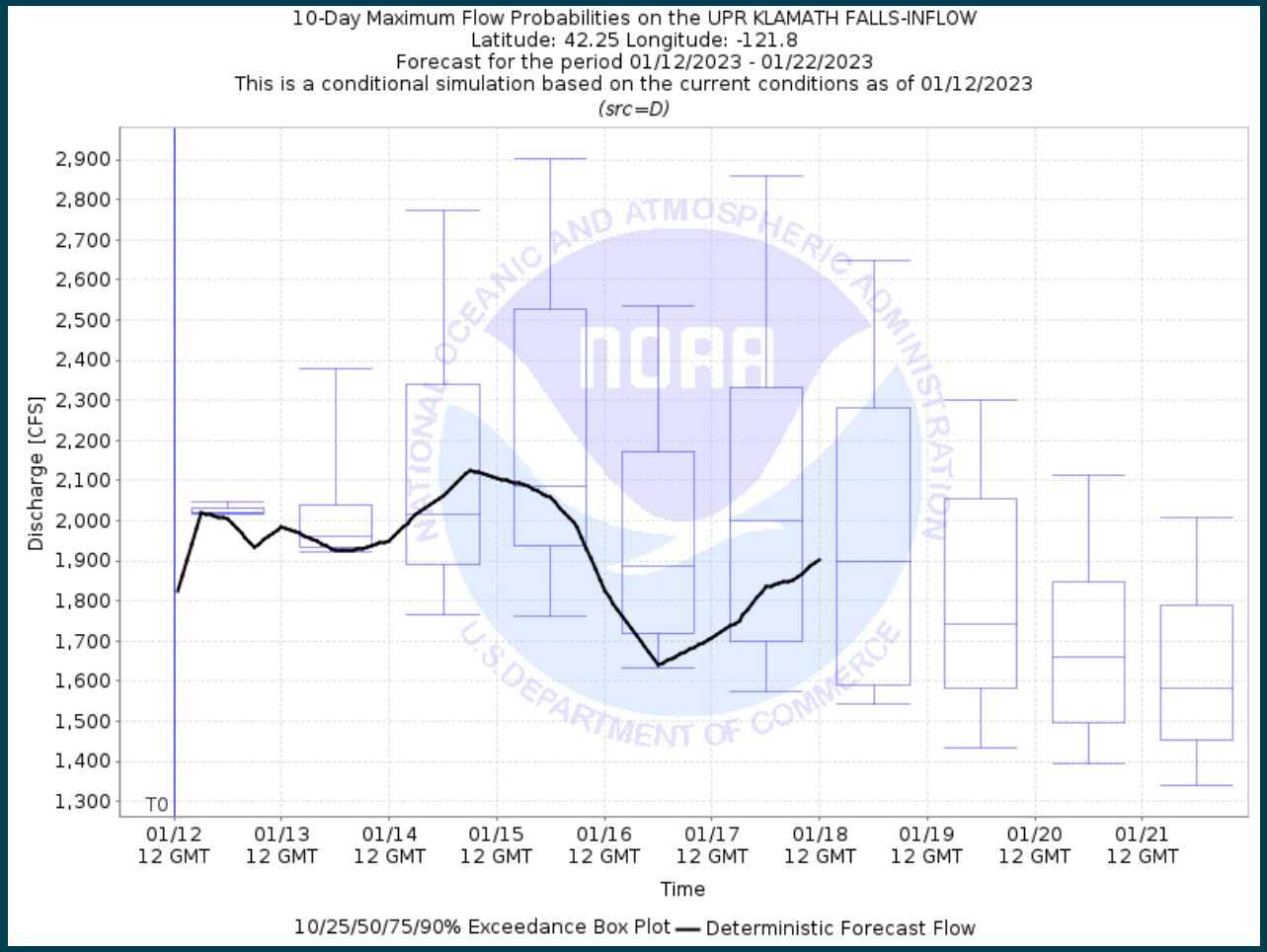
Data are provisional and subject to revision

UKL Water Surface Elevation
December 29 – Present Day

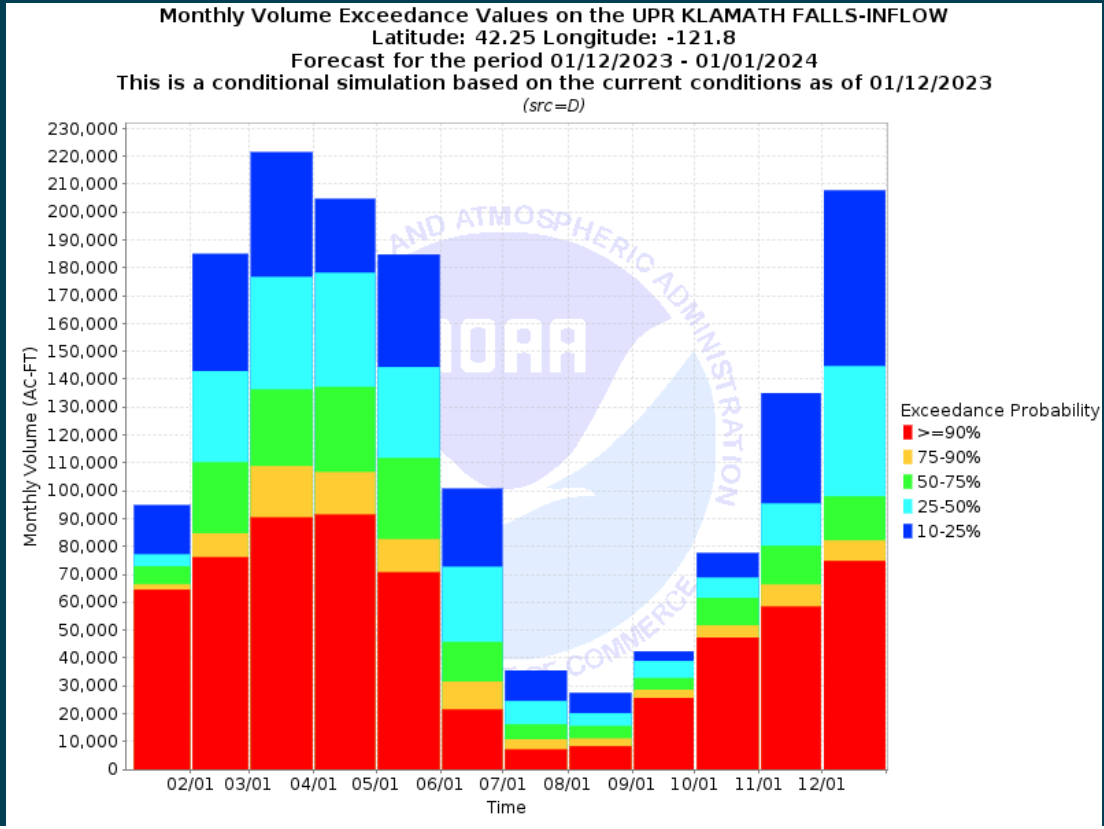


DATE	ELEVATION (FT)
12/29/2022	4139.58
12/30/2022	4139.71
12/31/2022	4139.8
1/01/2022	4139.85
1/02/2022	4139.88
1/03/2022	4139.92
1/04/2022	4139.94
1/05/2022	4140.02
1/06/2022	4140.06
1/07/2022	4140.07
1/08/2023	4140.12
1/09/2023	4140.17
1/10/2023	4140.22
1/11/2023	4140.25

Upper Klamath Lake (UKL) Net Inflow Forecast – CNRFC 10-Day



Upper Klamath Lake (UKL) Net Inflow Forecast – CNRFC WY2023



Monthly Streamflow Volume (1000s of Acre-Feet) Data Updated: Jan 12 2023 at 8:01 AM PST												
Prob	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
10%	147.1	184.9	221.4	204.6	184.7	100.6	35.5	27.4	42.3	77.6	135.0	207.7
25%	129.4	142.9	176.6	178.1	144.4	72.6	24.5	20.1	38.9	68.7	95.3	144.6
50%	125.3	110.1	136.3	137.1	111.7	45.7	16.1	15.5	32.6	61.5	80.2	98.0
75%	118.7	84.7	108.8	106.5	82.4	31.5	10.8	10.9	28.6	51.6	66.2	82.1
90%	116.9	76.0	90.3	91.3	70.6	21.4	7.0	8.3	25.6	47.3	58.3	74.7
Mean	136.3	136.1	171.9	152.0	124.5	62.0	22.8	25.3	46.5	72.9	97.6	124.9
%Mean	91.9	80.9	79.3	90.2	89.7	73.7	70.6	61.3	70.1	84.4	82.2	78.5

NRCS Jan 1 Klamath River Basin (KRB) Water Supply Forecast (WSF)

USDA NRCS National Water & Climate Center
 * - DATA CURRENT AS OF: January 05, 2023 09:41:05 AM
   - Based on January 01, 2023 forecast values

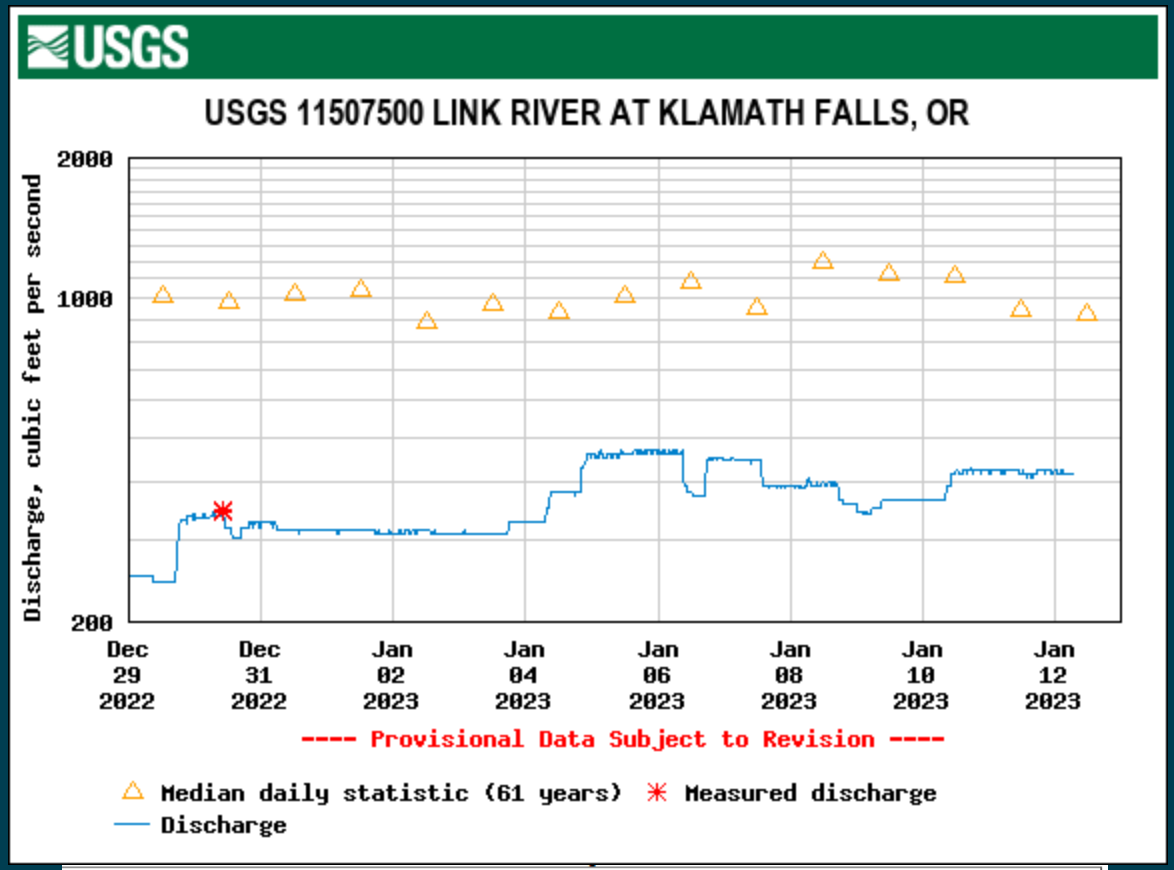
KLAMATH RIVER BASIN

Forecast Point	period	50% (KAF)	% of med	max (KAF)	30% (KAF)	70% (KAF)	min (KAF)	30-yr med
Gerber Reservoir Inflow (2)	JAN-JUN	60	182	86	71	50	35	33
Sprague R nr Chiloquin	JAN-SEP	370	142	585	450	295	200	260
	MAR-SEP	280	130	465	350	215	140	215
Williamson R bl Sprague R nr Chiloquin	JAN-SEP	570	121	780	655	480	355	470
	MAR-SEP	435	121	620	510	360	250	360
Upper Klamath Lake Inflow (2)	JAN-SEP	900	119	1410	1050	765	505	755
	MAR-SEP	615	118	1030	735	505	305	520

Max (10%), 30%, 50%, 70% and Min (90%) chance that actual volume will exceed forecast.
Medians are for the 1991-2020 period.
All volumes are in thousands of acre-feet.

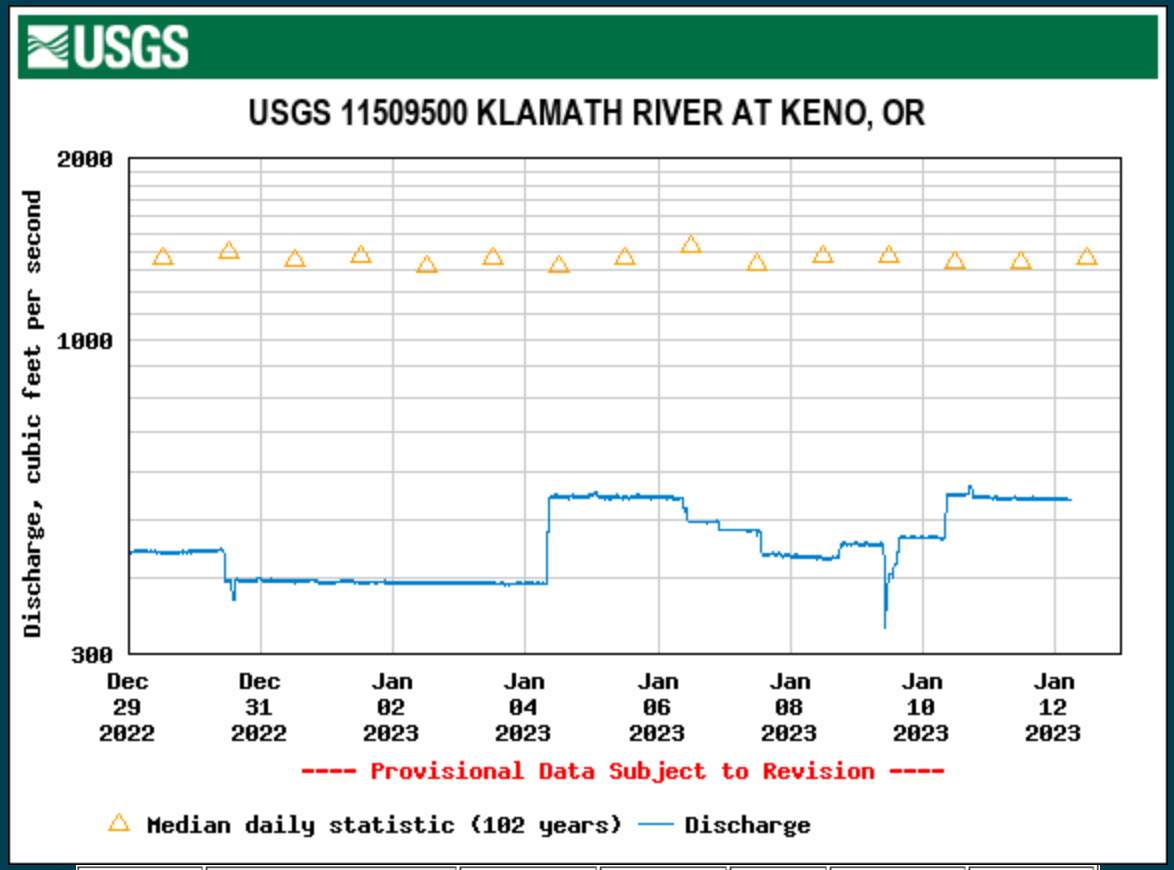
footnotes:
1) Max and Min are 5% and 95% chance that actual volume will exceed forecast
2) streamflow is adjusted for upstream storage

Link River Dam- USGS 11507500



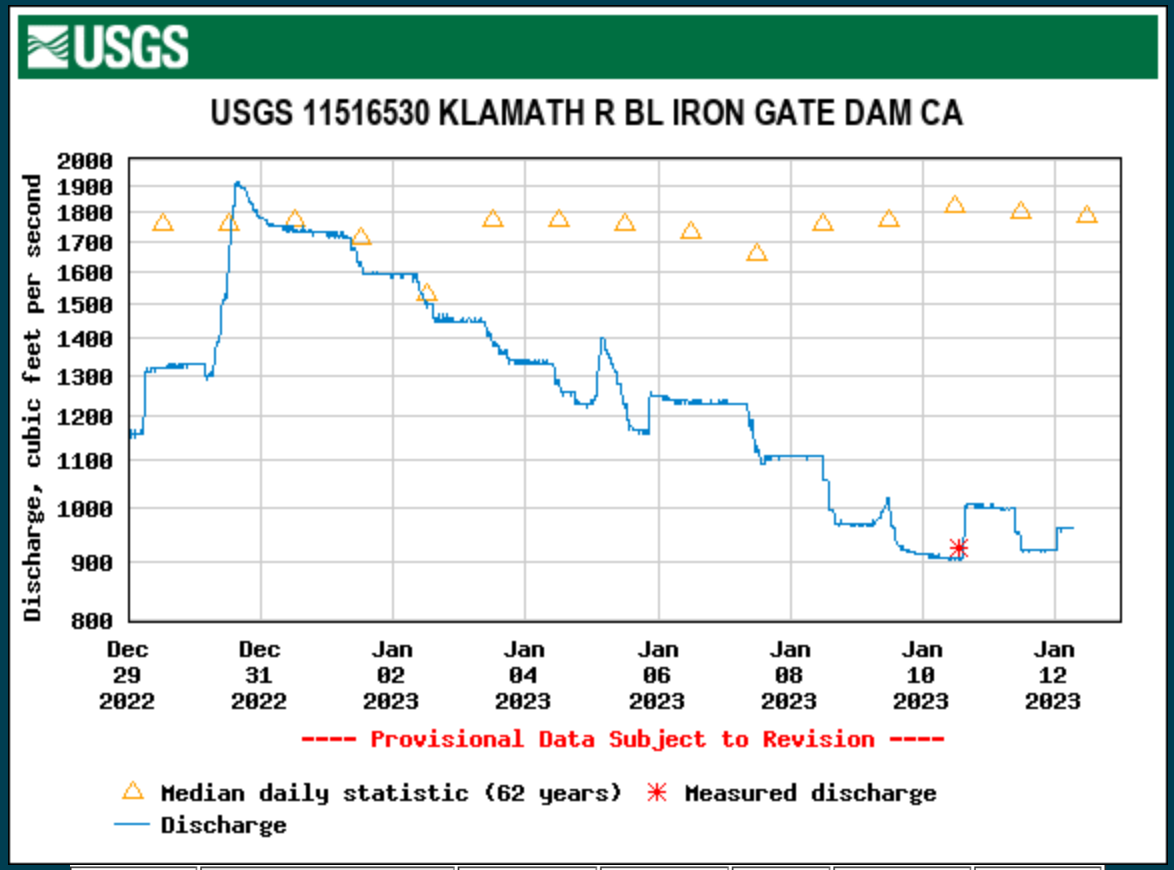
Min (1995)	Most Recent Instantaneous Value Jan 12	25th percen-tile	Median	Mean	75th percen-tile	Max (1997)
115	415	637	922	1380	2070	6890

Keno Dam – USGS 11509500



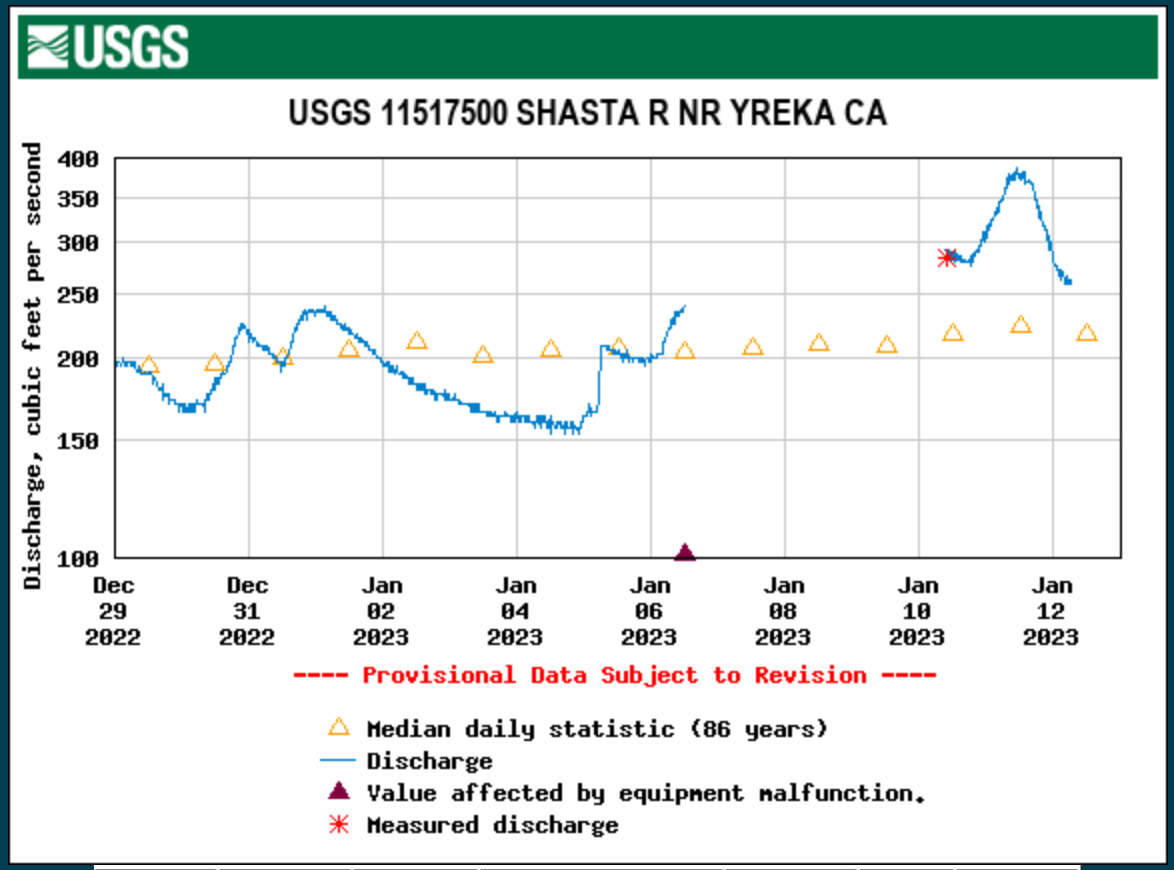
Min (1935)	Most Recent Instantaneous Value Jan 12	25th percen-tile	Median	Mean	75th percen-tile	Max (1997)
190	541	819	1370	1730	2360	8390

Iron Gate Dam – USGS 11516530



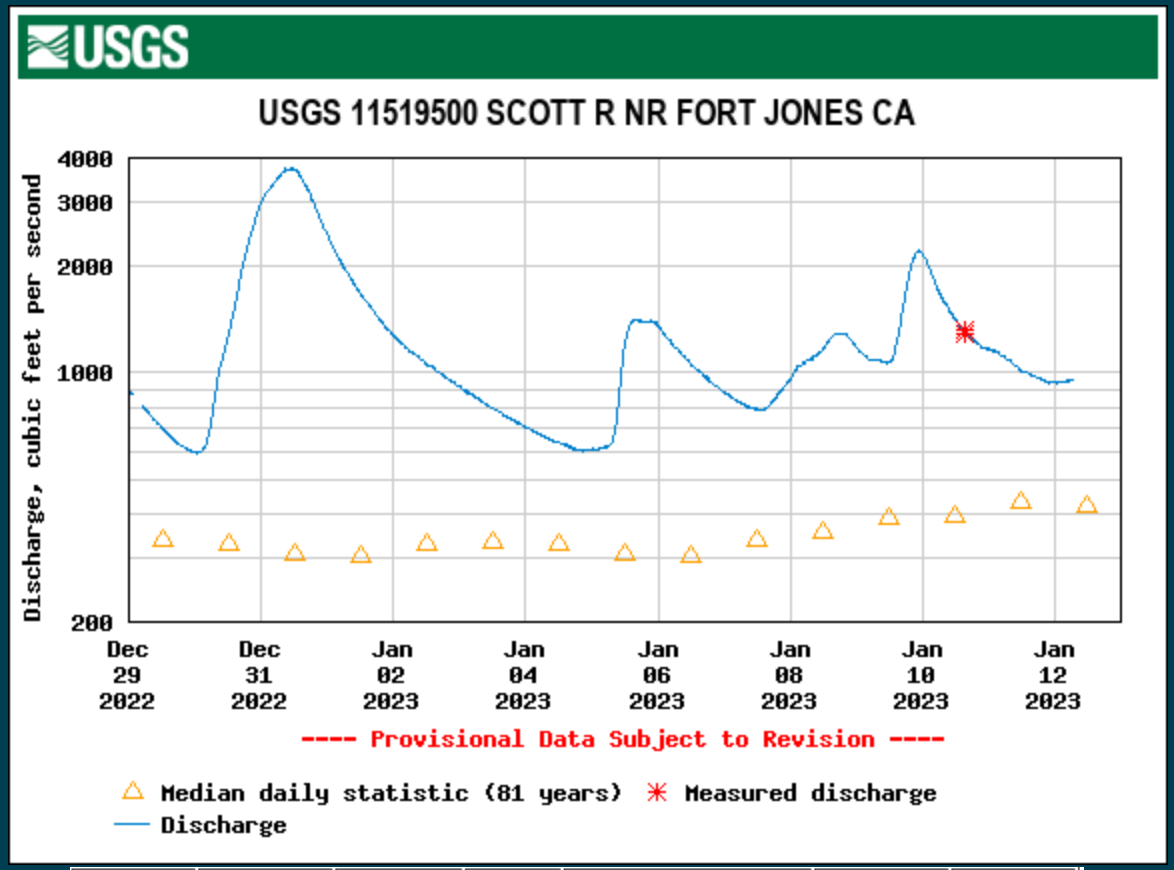
Min (1992)	Most Recent Instantaneous Value Jan 12	25th percen-tile	Median	Mean	75th percen-tile	Max (1965)
888	960	1260	1790	2280	3030	9710

Shasta River – USGS 11517500



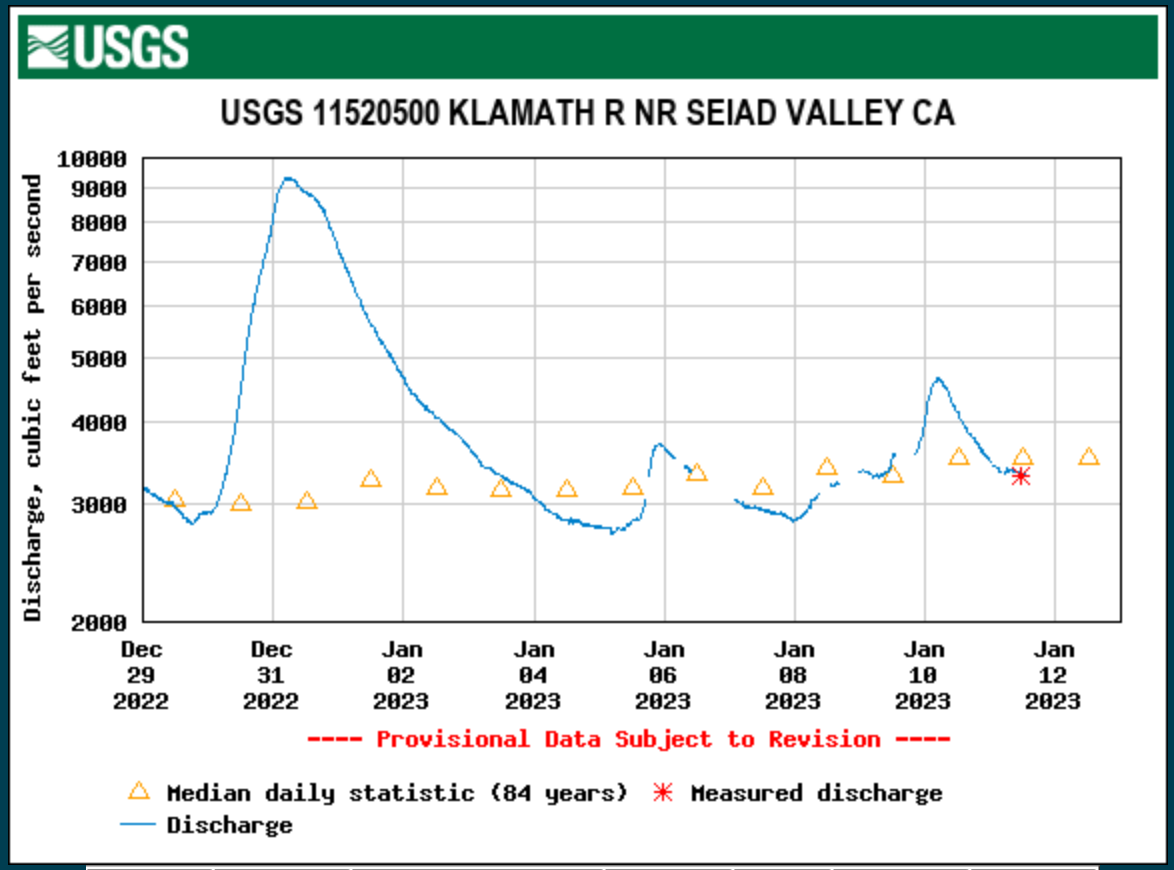
Min (1937)	25th percen-tile	Median	Most Recent Instantaneous Value Jan 12	75th percen-tile	Mean	Max (1965)
108	175	217	259	274	278	1300

Scott River – USGS 11519500



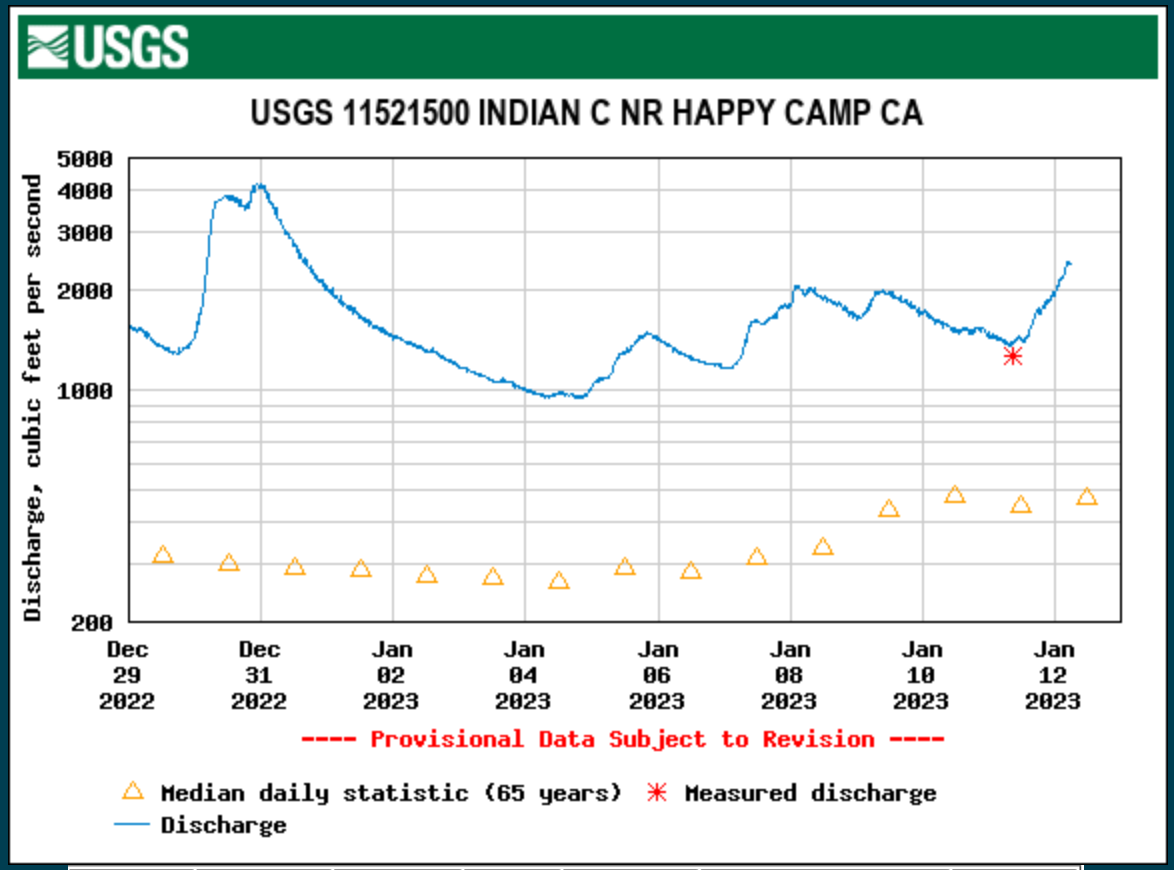
Min (2014)	25th percen-tile	Median	Mean	Most Recent Instantaneous Value Jan 12	75th percen-tile	Max (1980)
56.3	212	423	810	956	1020	5330

Klamath River – USGS 11520500



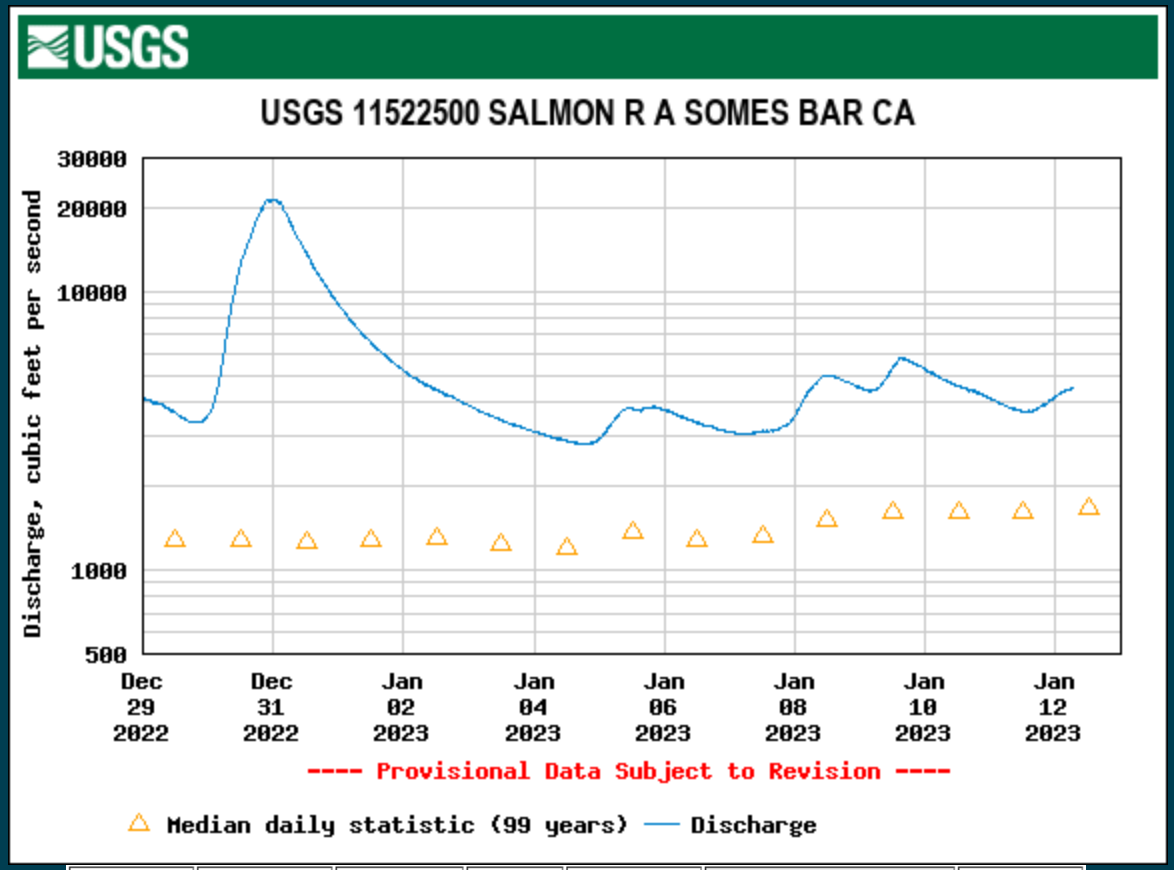
Min (1992)	25th percen-tile	Most Recent Instantaneous Value Jan 12	Median	Mean	75th percen-tile	Max (1965)
1390	2330	3310	3530	4540	5450	25000

Indian Creek – USGS 11521500



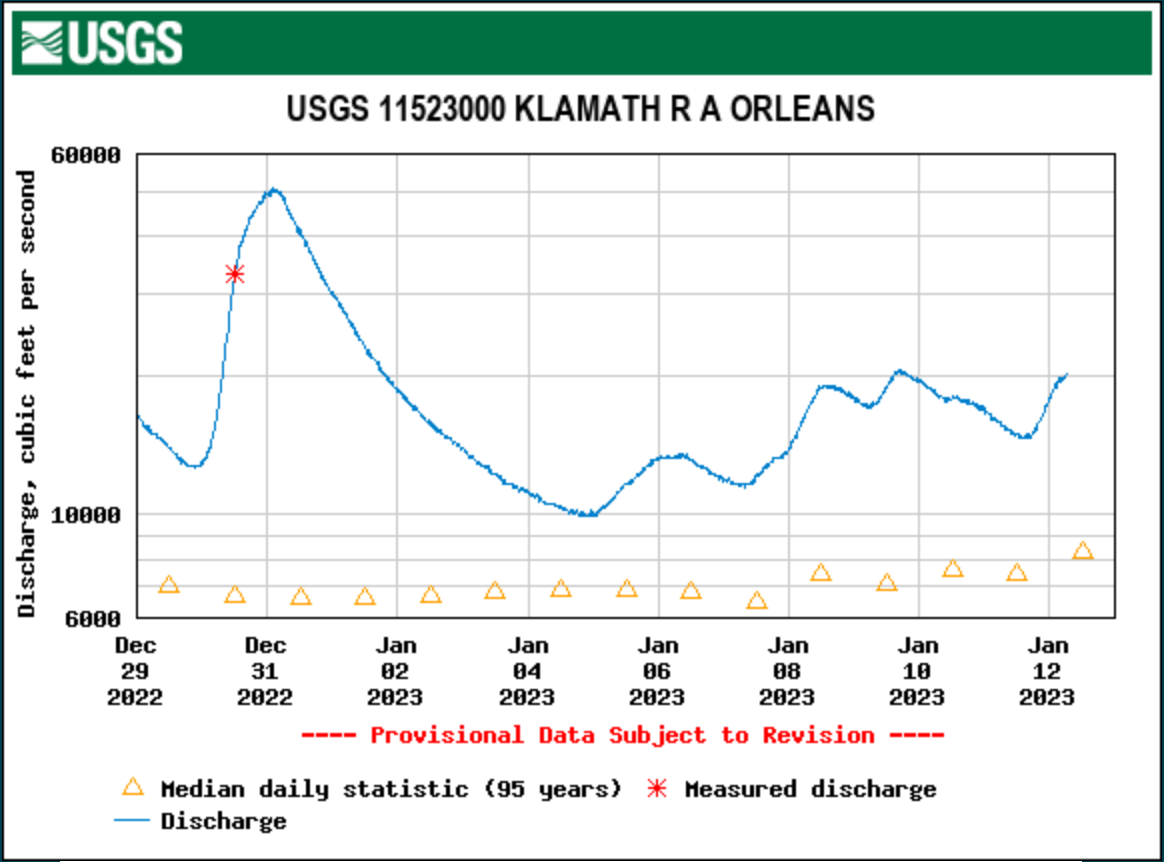
Min (1977)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1980)
53.0	224	469	786	875	2390	7600

Salmon River – USGS 11522500



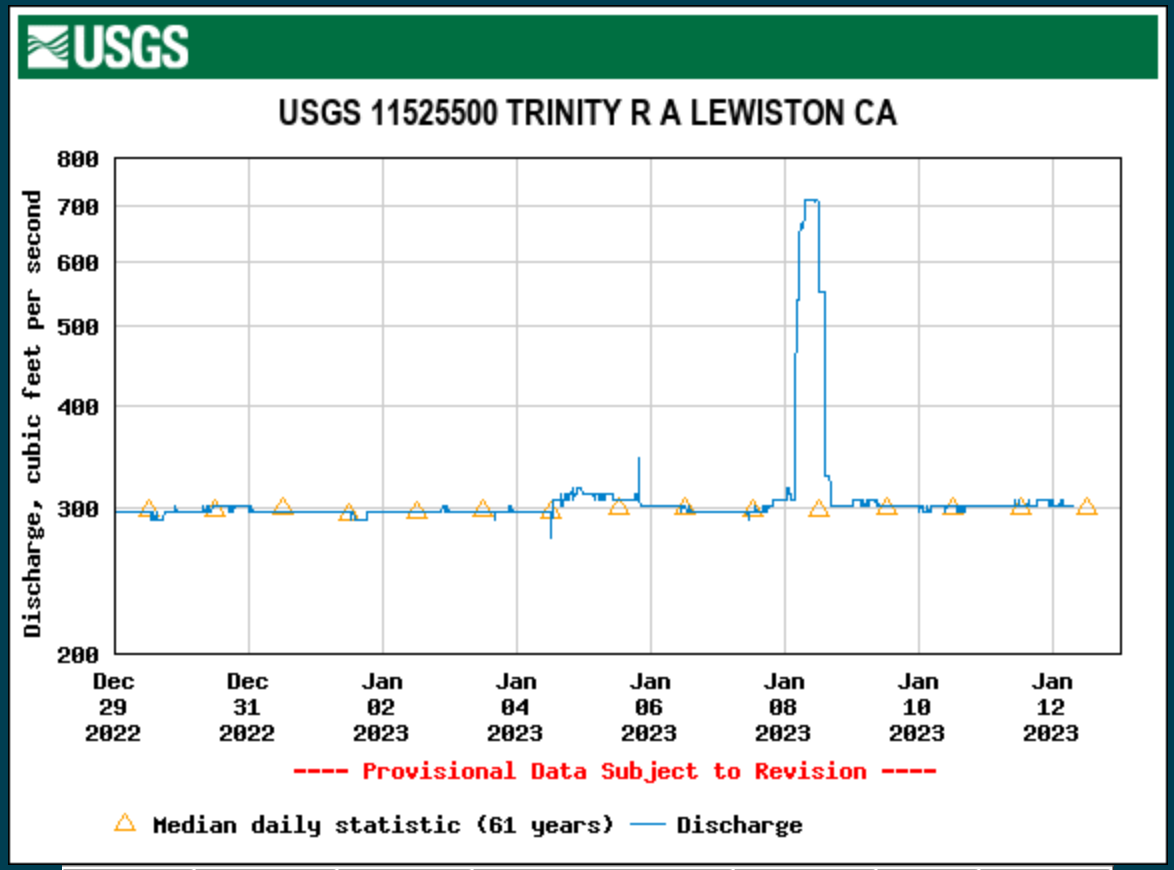
Min (1937)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1980)
190	902	1680	2600	3190	4510	18500

Klamath River – USGS 11523000



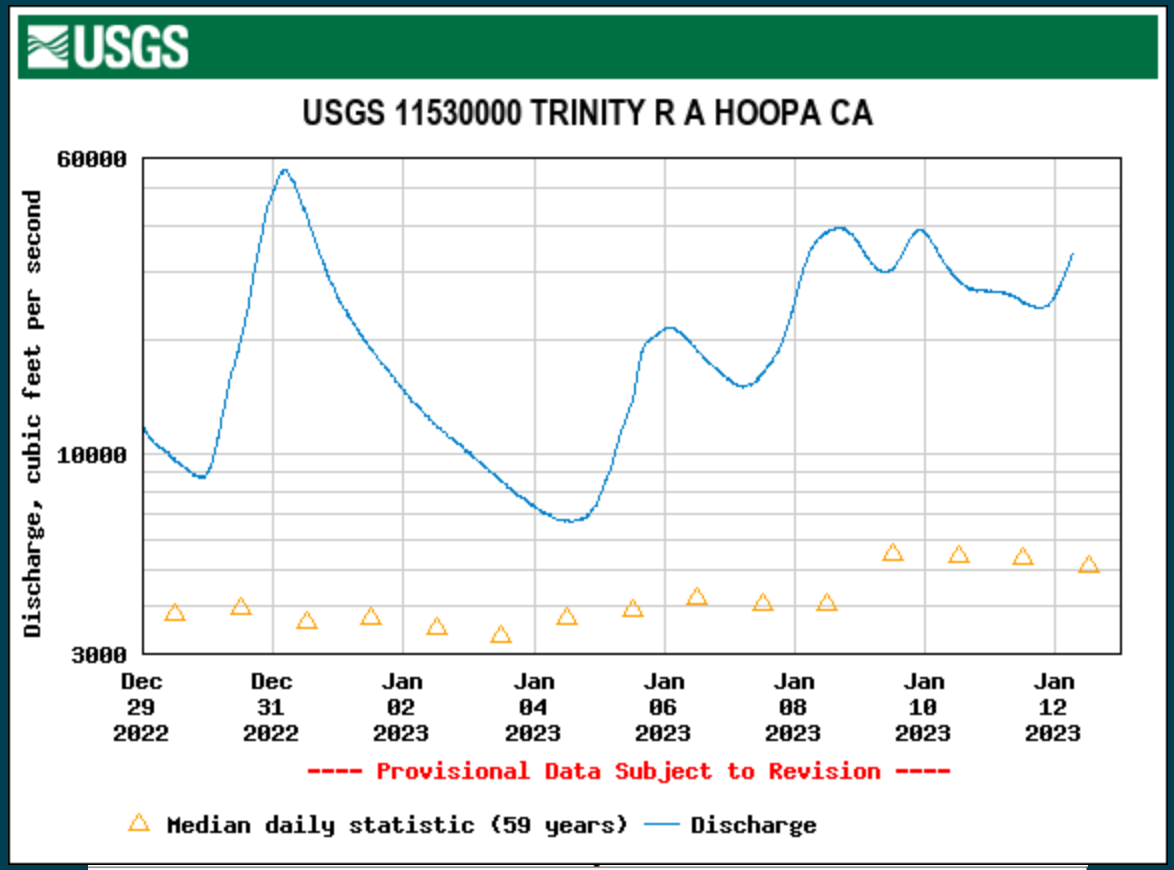
Min (1937)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1980)
2490	5000	8280	11800	13200	19900	68600

Trinity River at Lewiston – USGS 11525500



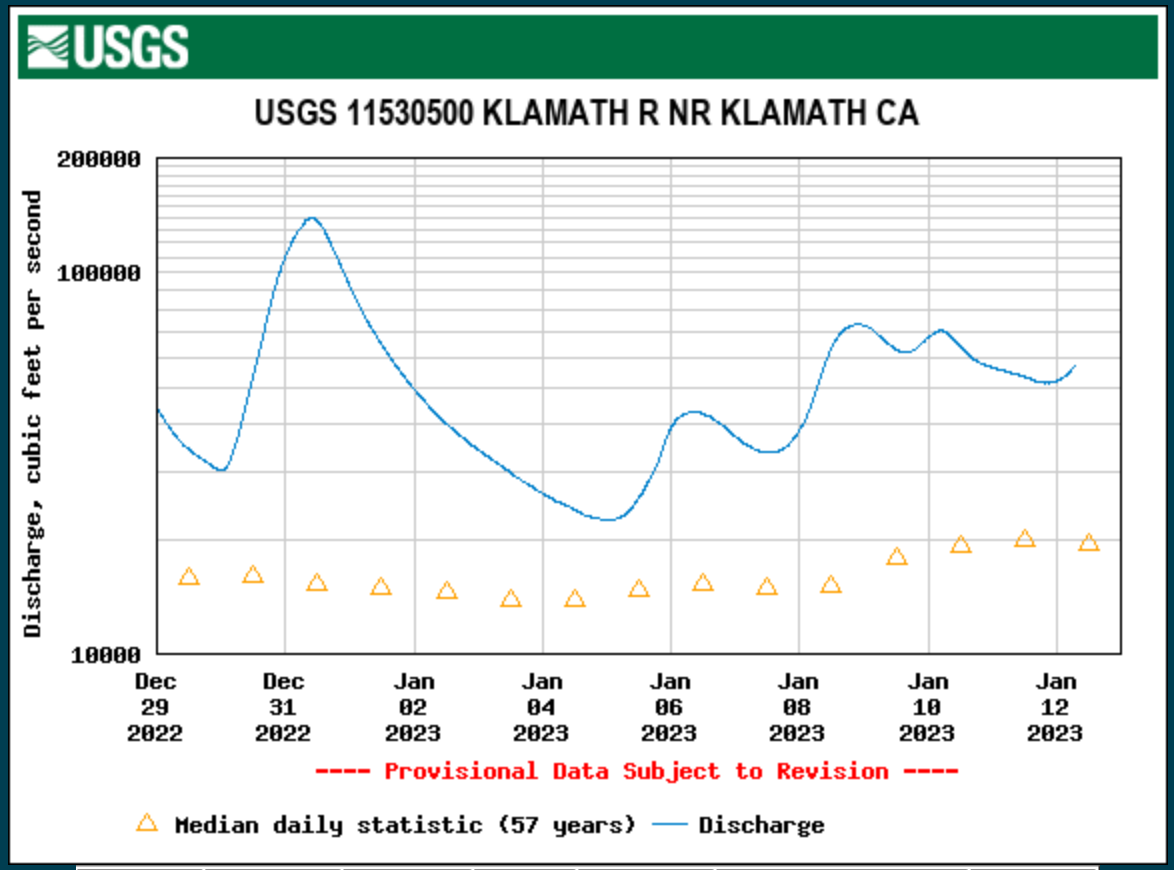
Min (1977)	25th percen-tile	Median	Most Recent Instantaneous Value Jan 12	75th percen-tile	Mean	Max (1997)
146	179	300	302	317	545	6320

Trinity River – USGS 11530000



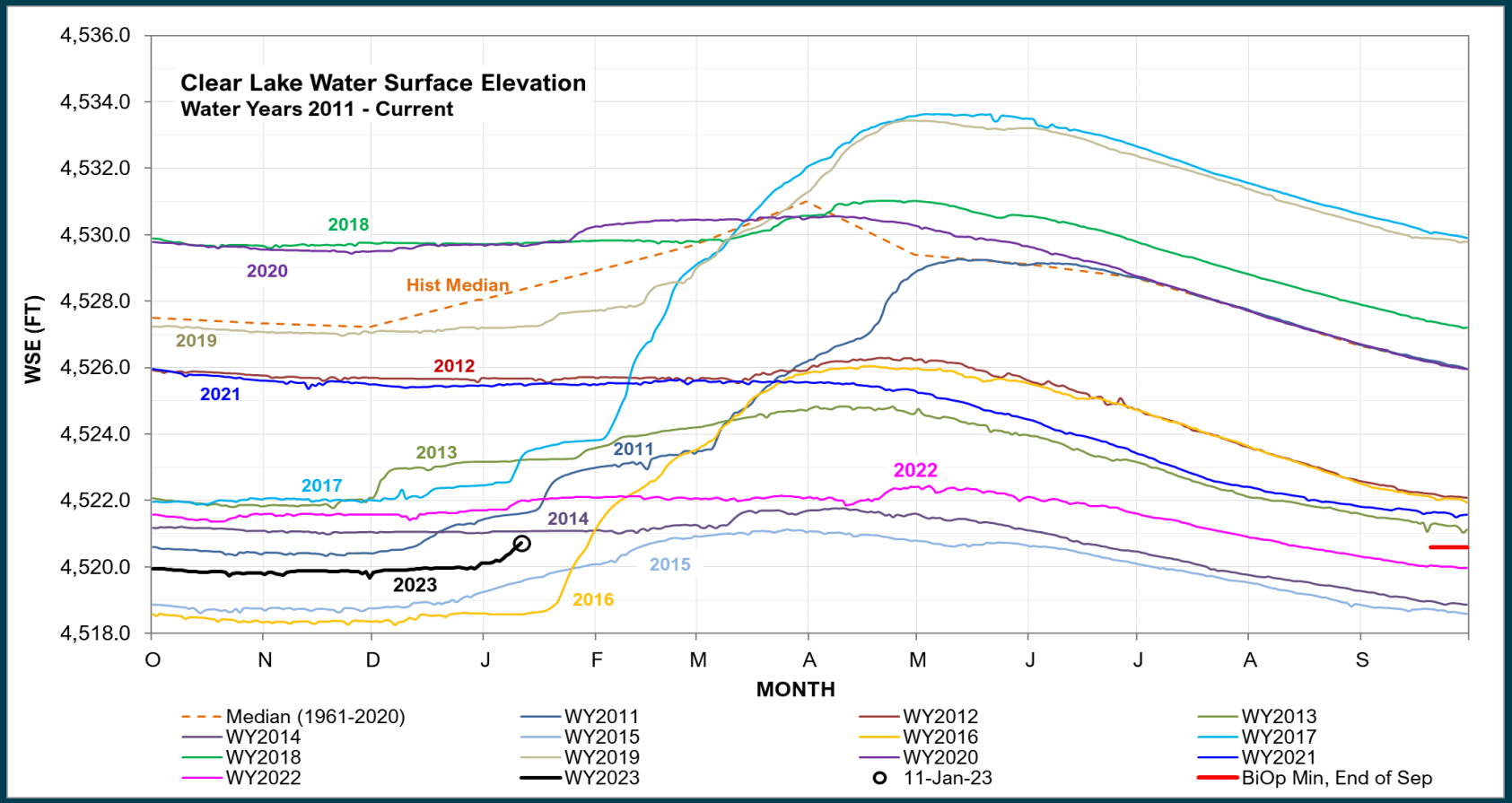
Min (1977)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1995)
801	2630	5090	8830	11500	33500	48700

Klamath River – USGS 11530500



Min (2014)	25th percen-tile	Median	Mean	75th percen-tile	Most Recent Instantaneous Value Jan 12	Max (1995)
5110	12200	19500	28500	33500	55800	129000

Clear Lake Reservoir – USBR



Gerber Reservoir – USBR