



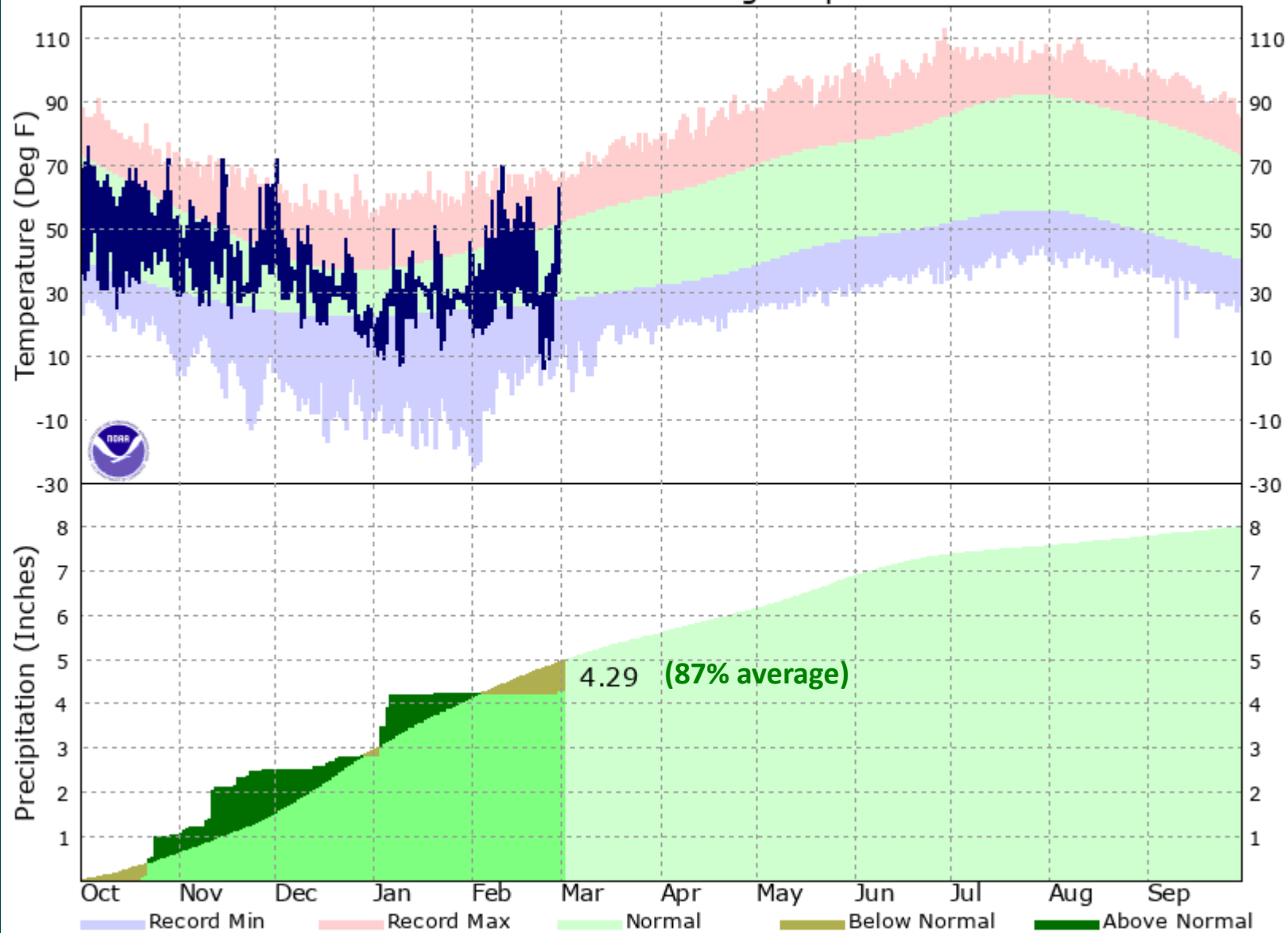
— BUREAU OF —
RECLAMATION

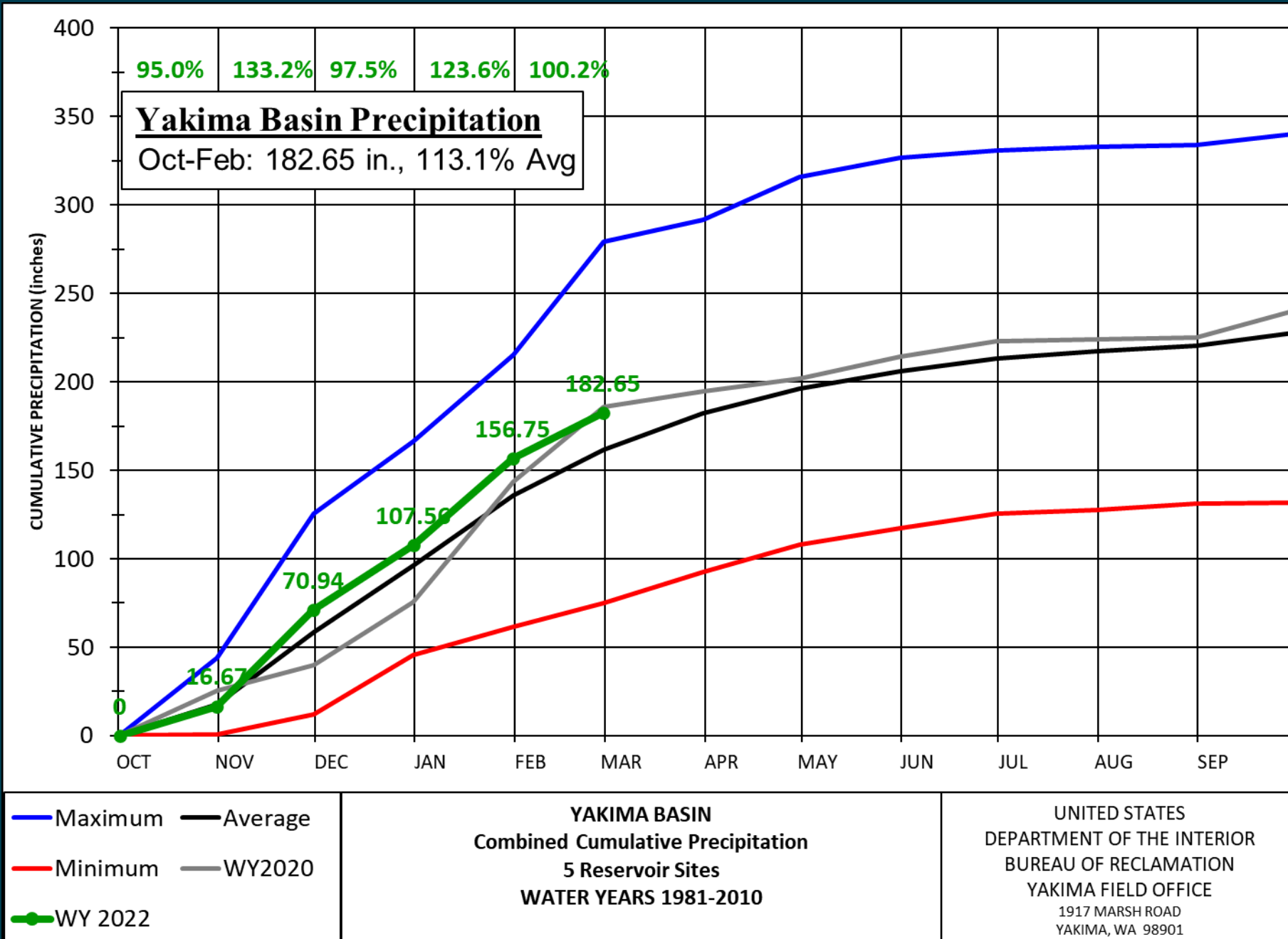
Yakima Water Supply Presentation, YBLP version

Yakima Basin, Washington

Mar 9, 2022, WY 2022

KYKM - Oct 2021 Through Sep 2022



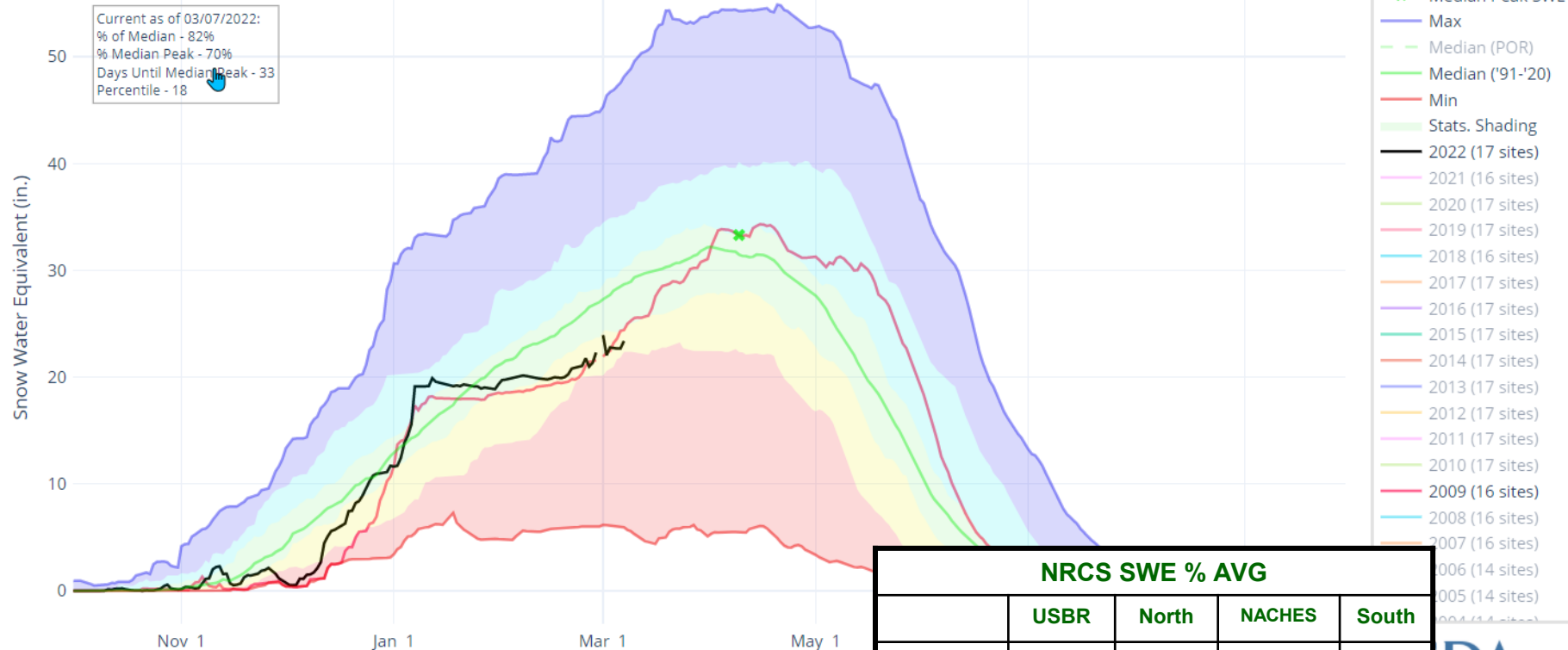


SNOW WATER EQUIVALENT IN YAKIMA

Reset Range

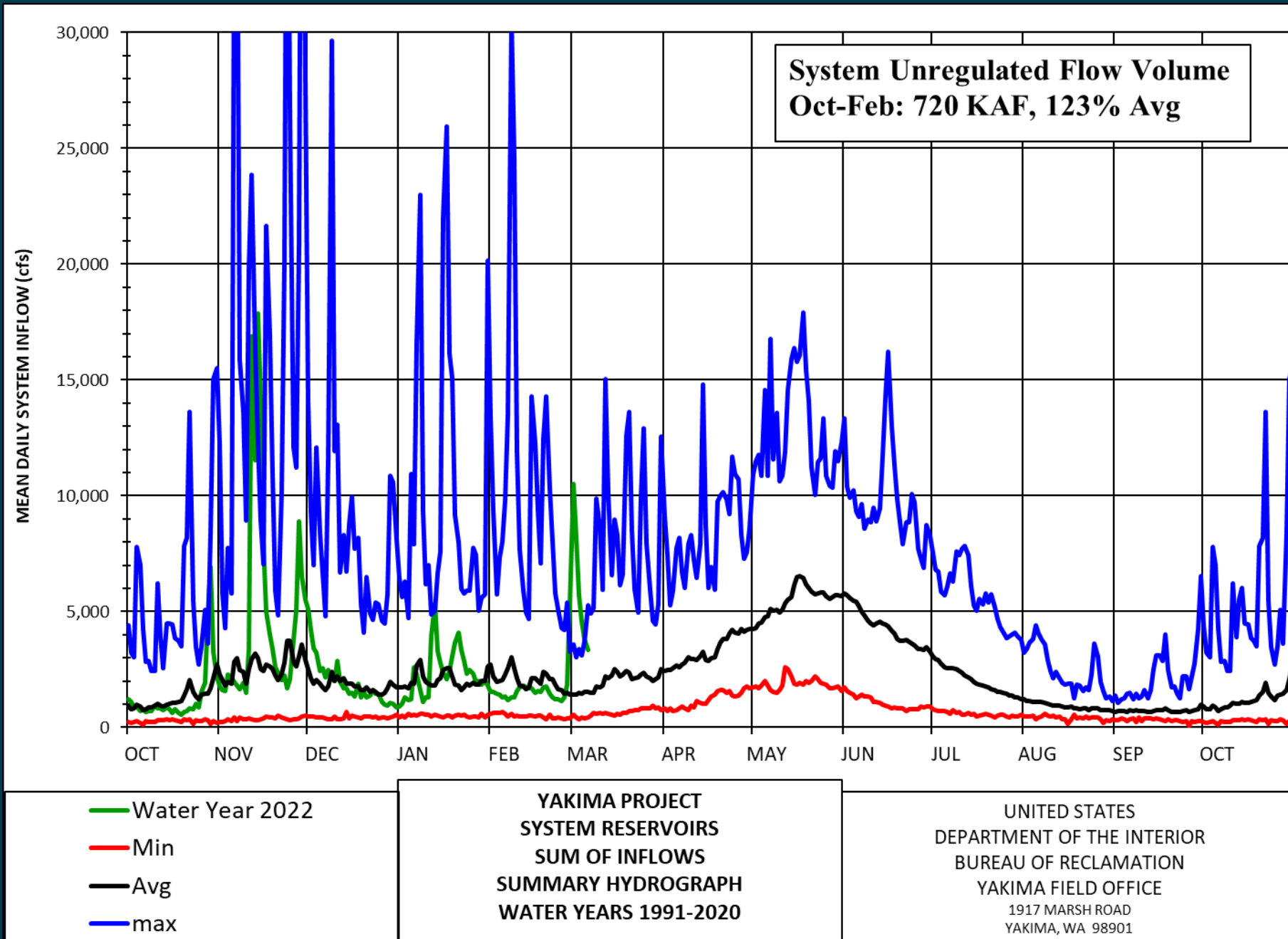
Link to data: CSV / JSON

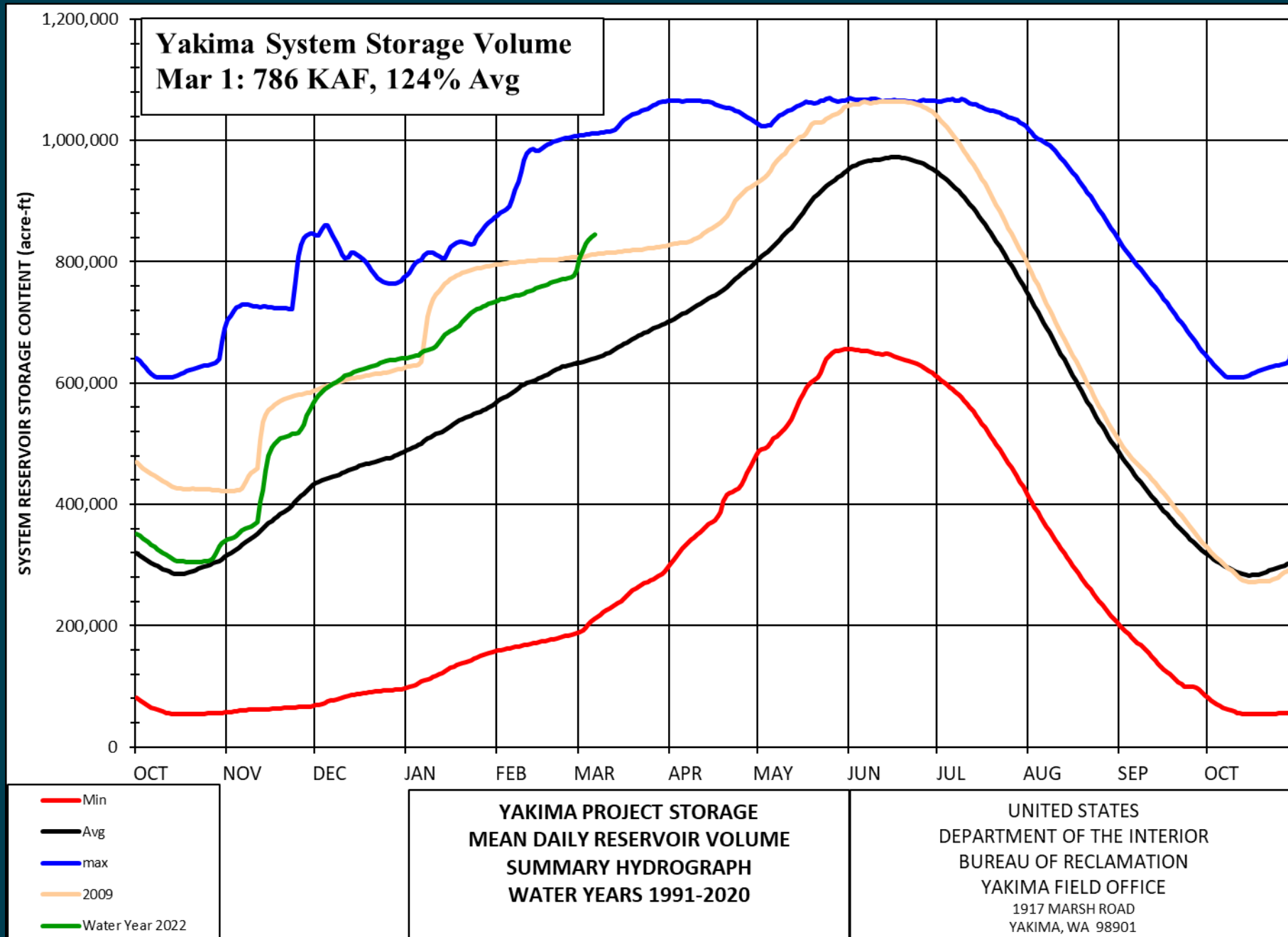
Station List



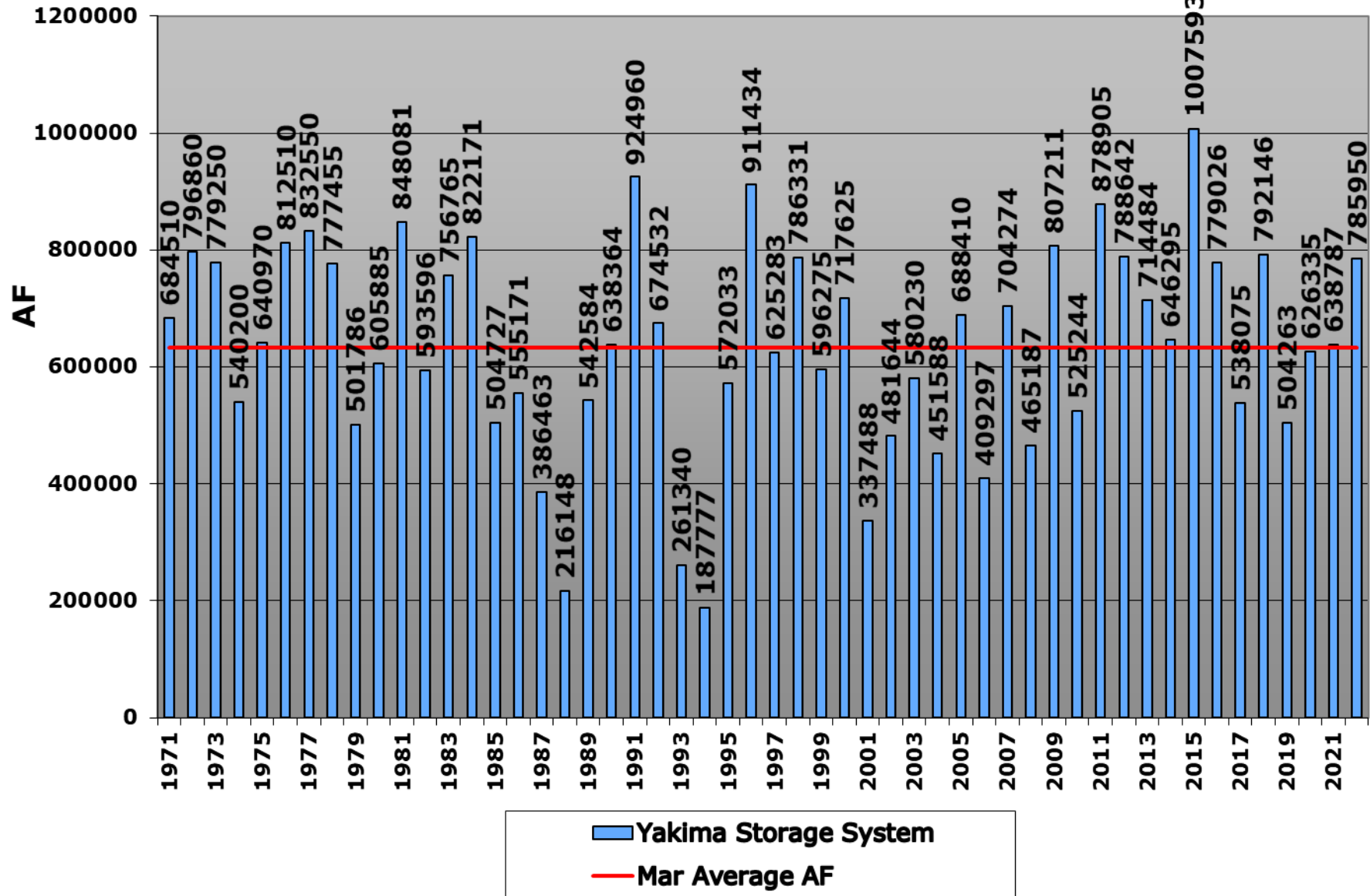
NRCS SWE % AVG				
	USBR	North	NACHES	South
1-NOV	0	0	0	0
1-DEC	4.6	7	26	14
1-JAN	96	87	91	91
1-FEB	98	92	95	83
1-MAR	94	93	90	60
1-APR				
1-MAY				
1-JUN				
1-JUL				



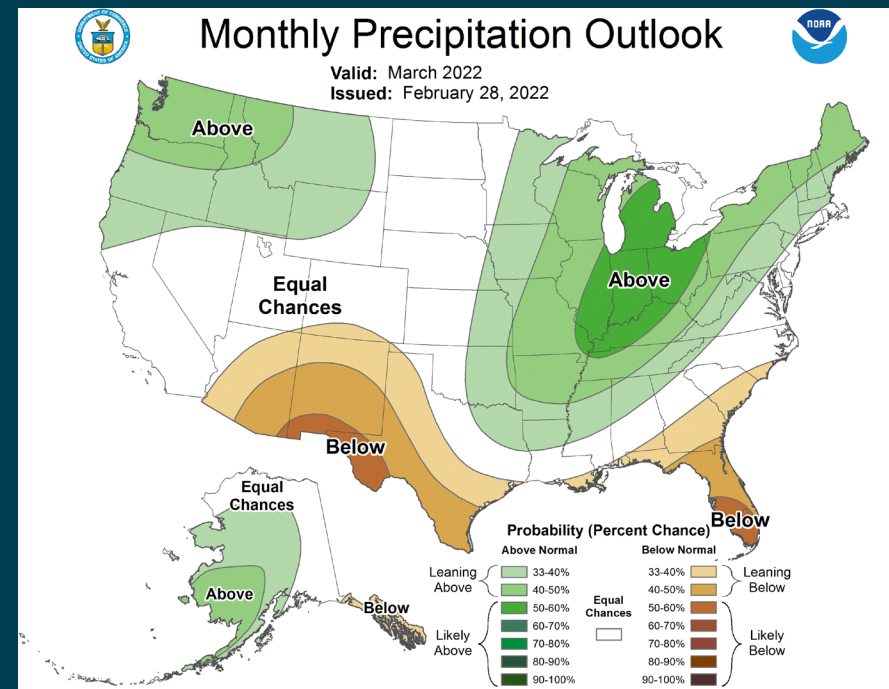
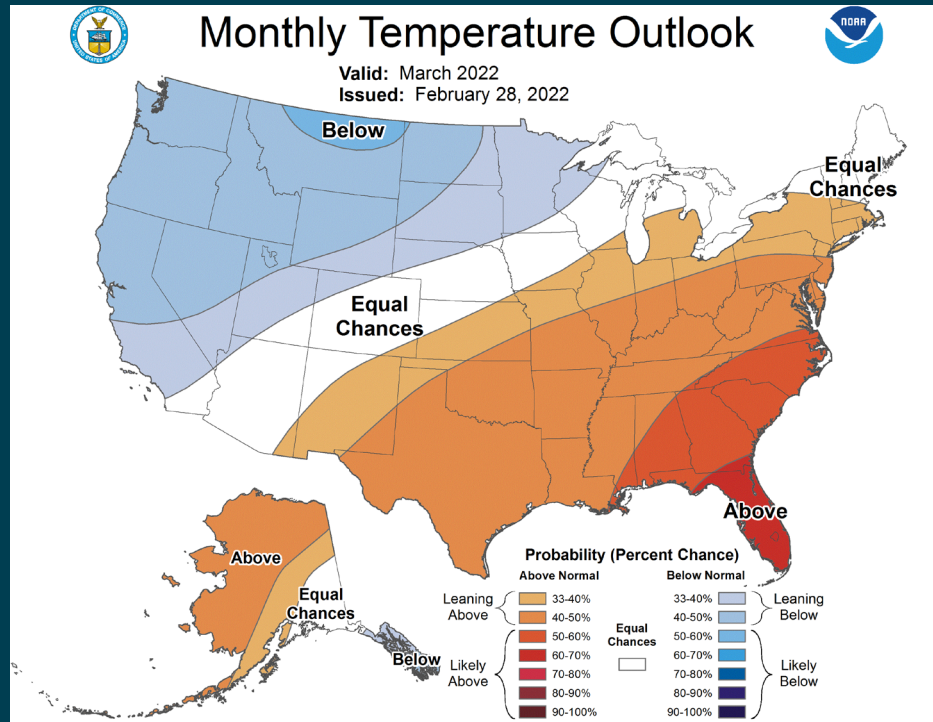




Yakima Basin Storage, Historical Comparison



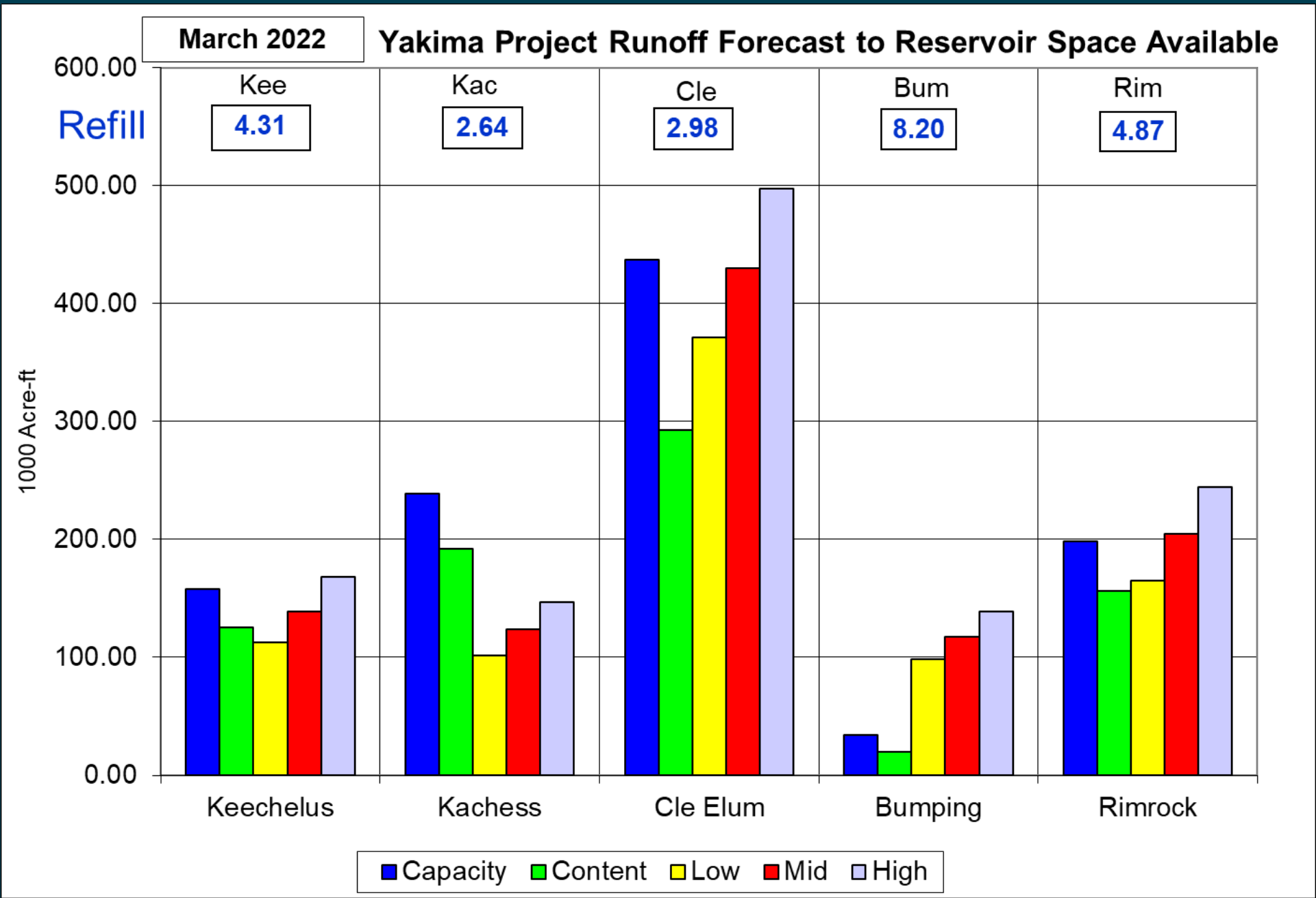
30-Day Forecast Issued: February 28, 2022



Yakima Subbasin forecasts

Yakima Basin Forecasts, Mar-Jul, AF						
Mar, 2022	Low	Adopted	High	Low	Adopted	High
Parw	1538757	1905981	2258709	78%	96%	114%
kee	112970	138980	167969	83%	103%	124%
kac	101829	123707	146898	83%	101%	120%
cle	370976	430158	497018	87%	100%	116%
bum	98051	117608	138855	77%	92%	109%
rim	165154	204990	243951	77%	96%	114%
Yumw	744990	887433	1045408	85%	101%	119%
Nacw	601432	757465	930240	75%	94%	116%
System	848980	1015443	1194692	83%	99%	116%





March's April 1, 2022 TWSA ESTIMATE

April 1 - September 30

Parameter*	+/-/=	Low	Adopted	High
Apr 1-Sep 30 Natural Flow at Parker est.	+	1213	1569	1900
Return Flow Estimate, est	+	350	350	350
April 1, Reservoir Content, est	+	896	900	880
TWSA	=	2460	2819	3130
SEP 30 EST RESERVOIR CONTENT	-	76	76	143
FLOW OVER SUNNYSIDE DAM	-	450	480	678
TWSA FOR IRRIGATION	=	1934	2263	2309
NONPRORATABLE ENTITLEMENT	-	1070	1070	1070
REMAINING TWSA	=	864	1193	1239
PRORATABLE ENTITLEMENT		1239	1239	1239
% RATIO= REMAINING TWSA/PRORATABLE ENTITLEMENT		70%	96%	100%
TITLE XII FLOW TARGET, cfs	April	300	400	500
Added flow available, cfs **		126	128	128
Non-storeable Portion of added flow, cfs		15	15	15
Storable portion of added flow, cfs		112	114	114

*Values are in 1,000 ac-ft unless otherwise specified.

** State & YRBWEP Trust, Acquisition, & Conservation additions to Title XII flow range from 126 to 128 cfs.



March's April 1, 2022 TWSA ESTIMATE

April 1 - September 30

Parameter	"+/-/="	Mar's 2021	Mar's 2022	Mar's 2020
Apr 1-Sep 30 Natural Flow at Parker est.	+	2231	1569	1845
Return Flow Estimate	+	350	350	350
April 1, Reservoir Content	+	732	900	660
TWSA	=	3313	2819	2855
SEP 30 EST RESERVOIR CONTENT*	-	380	76	76
FLOW OVER SUNNYSIDE DAM	-	624	480	532
TWSA FOR IRRIGATION	=	2309	2263	2246
NONPRORATABLE ENTITLEMENT	-	1070	1070	1070
REMAINING TWSA	=	1239	1193	1176
PRORATABLE ENTITLEMENT		1239	1239	1239
% RATIO= REMAINING TWSA/PRORATABLE ENTITLEMENT		100%	96%	95%
TITLE XII FLOW REQUIREMENTS, cfs	April	600	400	400
TOTAL FLOW AVAILABLE AT PARKER, cfs ***		728	528	525

*Values are in 1,000 ac-ft unless otherwise specified.

*** State & YRBWEP Trust, Acquisition, & Conservation additions to Title XII flow.



Yakima Basin Outmigration Flows

Table 2-14. Minimum volume of water (acre-feet) that will be available in April and May during years when water prorationing levels are equal to or greater than 70% to provide outmigration flows. Outmigration flows are measured at Tieton Dam (RIM), Cle Elum Dam (CLE), and Yakima River at Easton gage (EASW).

	Monthly Min. acre-feet for Outmigration Flows		
April TWSA (MAF)	< 2.36	2.36 - 3.13	> 3.13
May TWSA (MAF)	< 2.20	2.20 – 2.61	> 2.61
RIM	4,500	8,400	14,800
CLE	4,200	9,900	18,800
EASW	3,700	4,800	9,900

WY2022 Mar's Apr TWSA=2.819
MAF

Easton (EASW) can be met from unregulated local inflow below Kee and Kac.

Hydrologic Summary

- Precipitation has been fickle.
- Snow is below average.
- System storage, Mar 1, 786 KAF, 124% of average.
- All refill ratios are very good.
- Winter flows are set to the high BA range.
- Runoff forecasts are mostly in the 95% to 105% range.
- March runoff will be high, reducing snowpack.