

# APR-2021 Water Supply Forecast

Forecast Station	Forecast Code	Forecast Period	1981-2010	Adopted Forecast		MLR		PCA		LTF = late runoff equation		NRCS		RFC	
			Average (KAF)	(KAF)	% Avg	(KAF)	% Avg	(KAF)	% Avg	(KAF)	% Avg	(KAF)	% Avg	(KAF)	% Avg
<b>----- IDAHO -----</b>															
Anderson	ANDI	Apr-Jul	477	311	65%	364	76%	311	65%			319	67%	299	63%
Boise	LUC	Apr-Jul	1261	1000	79%	1053	83%	954	76%			996	79%	844	67%
Cascade	CSCI	Apr-Jul	484	407	84%	420	87%	394	81%			387	80%	361	75%
Deadwood	DEDI	Apr-Jul	123	98	80%	99	80%	97	78%			98	80%	89	72%
Horseshoe Bend	HRSI	Apr-Jul	1485	1269	85%	1305	88%	1232	83%			1203	81%	1120	75%
Mann Creek	MAN	Apr-Jun	17	16	89%	19	107%	12	70%						
Island Park	ISLI	Apr-Jul	216	175	81%	152	70%	197	91%					209	97%
Teton	TEAI	Apr-Jul	373	310	83%	279	75%	279	75%			328	88%	340	91%
Jackson Lake	JCK	Apr-Jul	765	612	80%	612	80%	618	81%			620	81%	564	74%
Heise	HEII	Apr-Jul	3236	2600	80%	2579	80%	2733	84%			2622	81%	2462	76%
Little Wood	WODI	Apr-Jul	77	32	41%	31	40%	16	21%			32	41%	27	34%
Ririe_New	RIR	Apr-Jun	63	43	69%	54	86%	45	71%			38	61%	18	28%
<b>----- MONTANA -----</b>															
Hungry Horse	HGH	Apr-Jul	1871	1780	95%	1781	95%	1774	95%			1702	91%	1661	89%
Hungry Horse MS	HGH	May-Sep	1693	1626	96%			1592	94%						
<b>----- OREGON -----</b>															
Baker	PODO	Apr-Jul	59	52	88%	51	86%	52	88%			55	94%	44	75%
Unity	UNY	Apr-Jul	33	28	83%	29	88%	26	78%			30	90%	17	52%
McKay	MCK	Apr-Jun	26	30	112%	40	150%	19	72%			32	122%	16	59%
Malheur nr Drewsey	MADO	Apr-Jun	68	36	53%	50	74%	36	52%					30	44%
Warm Springs	WARO	Apr-Jun	68	49	72%	122	181%	39	58%	49	73%	39	58%	35	52%
N.F. Malheur	MABO	Apr-Jun	51	37	73%	39	77%	37	73%						
Beulah	BEUO	Apr-Jun	52	40	76%	72	138%	39	74%	40	76%	36	69%	28	54%
Bully Creek	BUL	Apr-Jun	9	5	57%	25	285%	2	21%	5	52%			2	21%
Wildhorse	WLDN	Apr-Jun	24	13	55%	21	89%	13	53%			11	46%	5	22%
Owyhee nr Rome	ROMO	Apr-Jun	333	100	30%	282	85%	100	30%			140	42%		
Owyhee	OWY	Apr-Jun	353	107	30%	262	74%	107	30%			163	46%	100	28%
Ochoco	OCH	Apr-Jun	22	16	72%	37	165%	16	70%			16	72%	3	14%
Prineville	PRV	Apr-Aug	102	70	69%	180	177%	70	69%			64	63%	49	48%
<b>----- WASHINGTON -----</b>															
Kachess	KAC	Apr-Jul	104	127	121%	133	127%	131	126%			127	122%	123	118%
Cle Elum	CLE	Apr-Jul	384	457	119%	447	119%	467	122%			454	118%	455	118%
Keechelus	KEE	Apr-Jul	116	142	122%	143	124%	145	125%			141	122%	133	115%
Yakima at Cle Elum	YUMW	Apr-Jul	767	885	115%	788	103%	895	117%						
Bumping	BUM	Apr-Jul	114	130	114%	129	113%	114	100%			127	111%	127	111%
Rimrock	RIM	Apr-Jul	187	206	110%	201	107%	192	103%			206	110%	216	115%
Natural nr Naches	NACW	Apr-Jul	715	790	110%	821	115%	665	93%			815	114%	828	116%
Yakima nr Parker	PARW	Apr-Jul	1686	1999	119%	2006	119%	1931	115%			2006	119%	2057	122%

**2021 Flow Augmentation - Prospects - April 20, 2021**

<b>System and Source</b>	<b>Volume (ac-ft)</b>	<b>Notes:</b>
<b>Upper Snake System</b>		
Palisades Powerhead	55,943	157,000 acre-feet of space. 154,225 acre-feet carryover after evaporation in 2020. Use Palisades Powerhead to meet balance necessary to reach 427 kaf after all other sources have been used.
Sho-Ban Tribes Pilot Rental	-	After further discussions with the Tribe's consultant, the pilot program will be delayed one year to allow for more time for development of the program.
Rainbow Chart Rental	100,000	Final Amount Based on Rainbow Chart (Effective Nov 1st carryover of 2,005 kaf (which includes 20 kaf added to actual 11/1 contents to account for water rented to the supplemental pool for power during 2020) and April 1-Sept 30 forecast of 3,040 kaf = 80% of average).
Additional WD01 rentals	-	Assuming no additional rental from WD01.
Reclamation Uncontracted Space (Jackson, Palisades, and American Falls)	22,000	22,895 acre-feet of space (JCK (3,923 acre-feet), PAL (10,022 acre-feet), AMF (8,950 acre-feet)). Per the April 6, 2021 Water District 1 Weekly Report: "The reservoir system is expected to fill, or nearly fill". Based on this, along with high carryover and forecasted runoff, it appears the system will fill on paper, but if dry conditions occur this spring it is possible the system may not completely fill on paper. For now, assume 22,000 acre-feet is allocated (assumes full allocation minus some evaporation - does not anticipate any reductions due to a miss for flood control operations). If dry conditions continue, this water may not be available and instead an equivalent amount of Palisades Powerhead would be used.
Black Canyon exchange w/ Payette	-	No request has been received from the Idaho Water Resource Board to implement the Black Canyon Exchange in 2021.
<b>Total Upper Snake System</b>	<b>177,943</b>	<b>Releases are projected to occur in the early May through early June time period, depending on hydrologic conditions</b>
<b>Natural Flows</b>		
Idaho	60,000	
Skyline	17,649	
<b>Total Natural</b>	<b>77,649</b>	
<b>Payette System</b>		
Reclamation Uncontracted Space (Cascade and Deadwood)	95,608	95,608 acre-feet of space (CSC (69,600 acre-feet), DED (26,008 acre-feet = 25,400 acre-feet USBR + 608 acre-feet Sisk Water). Appears Payette system will fill on paper. Assume full allocation.
WD65 rentals	40,000	Estimated based on phone conversation with WD65 Watermaster Ron Shurtleff on 4/6/2021. The anticipated amount of rental has decreased due to dry conditions. This will continue to be refined as the season progresses and could increase if wet conditions appear.
Black Canyon exchange w/ Upper Snake	-	No request has been received from the Idaho Water Resource Board to implement the Black Canyon Exchange in 2021.
<b>Total Payette System</b>	<b>135,608</b>	<b>Releases are projected to occur in the June through August time period, depending on hydrologic conditions</b>
<b>Boise System</b>		
Reclamation Uncontracted Space (Lucky Peak)	-	40,932 acre-feet of space. In a phone conversation with Rex Barrie on 4/19, Rex remains hopeful that the Lucky Peak last to fill space will receive some allocation this year. However, with dry conditions, it is looking like that won't happen. If Lucky Peak last-to-fill space does not receive fill this season, Reclamation's uncontracted space in Lucky Peak used for flow augmentation in prior years will not receive any fill. If wet conditions materialize, storage could become available from this space, reducing the need for Powerhead to be used. For now, assume last to fill does not receive any new fill this season.
Anderson Ranch Powerhead	35,800	36,956 acre-feet of space. 36,362 acre-feet carryover after evaporation in 2020. Assume space does not completely refill and carryover is reduced an additional 1.5% for evaporation. Full amount of available Anderson Powerhead be needed to reach 427 kaf.
WD63 rentals	-	Per phone conversation with WD63 Watermaster Rex Barrie on 4/6/2021, if the last-to-fill space does not fill, little to no rental will be available. With dry conditions, assuming no rental will be available but wet conditions could result in the last-to-fill space filling and this water becoming available, reducing the need for Powerhead to be used.
<b>Total Boise System</b>	<b>35,800</b>	<b>Releases are projected to occur in the mid May through early June time period, depending on hydrologic conditions</b>
<b>Total Estimated 2021 Flow Augmentation Volume</b>	<b>427,000</b>	