

Official Water Supply Forecasts for January through July are computed on the 3rd workday of the month. Flood Risk Management (FRM) is computed at standard intervals and posted at: www.nwd.usace.army.mil/Missions/Water/Columbia/FloodControl

The **APRIL** Water Supply Forecast sets BiOp actions as highlighted in the table below:

Forecast Point	Forecast period	Forecast	BiOp Actions to be Determined
Hungry Horse	April – August Provided by Reclamation	January, February, March	Sets min. flows at Hungry Horse and Columbia Falls
		January, February, March	Sets VARQ FRM targets
	May – September Provided by Reclamation	April	Sets VARQ FRM targets and VARQ refill flows
		May	Sets VARQ refill flows Sets end of September draft target
		June	Sets VARQ refill flows
The Dalles	April – September Provided by NWRFC	March	Sets CRWMP adjustments at Grand Coulee
		April	Sets spring flow objective at McNary Dam
	April – August Provided by NWRFC	July	Sets end of August draft limit at Grand Coulee
Lower Granite	April – July Provided by NWRFC	April	Sets spring flow objective at Lower Granite
		June	Sets summer flow objective at Lower Granite
Libby	April – August Provided by Corps Seattle District	December	Sets end of December FRM draft requirement
		January, February, March	Sets VARQ FRM requirement
		April	Sets VARQ FRM requirement and VARQ refill flows
		May	Sets Libby min. sturgeon flow volume and min. bull trout flows for after sturgeon pulse through Sep; Sets VARQ FRM targets and VARQ refill flows; Sets end of September draft target
		June	VARQ refill flows
Dworshak	April – July Provided by NWRFC	January, February, March	Manage for reservoir FRM, VDL, and Flood Control Refill Curve (FCRC)
		April, May, June	Manage for reservoir FRM and FCRC

Source: 2025 Water Management Plan, page 16 - <https://pweb.crohms.org/tmt/documents/wmp/2025/>

3-Apr-2025

Hungry Horse Dam – Official Water Supply Forecast APRIL 2025

Below are the volumes for the April 2025 final forecast for Hungry Horse:

- Apr-Jul: 1,680 kaf (85%)
- Apr-Aug: 1,738 kaf (85%)
- May-Jul: 1,324 kaf (80%)
- May-Sep: 1,424 kaf (80%)

The minimum flows downstream of Hungry Horse based on the March Final Apr-Aug Volume forecast are as follows:

- Columbia Falls: 3,410 cfs
- Hungry Horse: 750 cfs

The forecasted end of April forebay elevation at Hungry Horse is 3,528 ft.

Chris Runyan

U.S. Bureau of Reclamation | Columbia-Pacific Northwest Interior - Region 9
Water Management | Operations Group
Boise, ID 83706



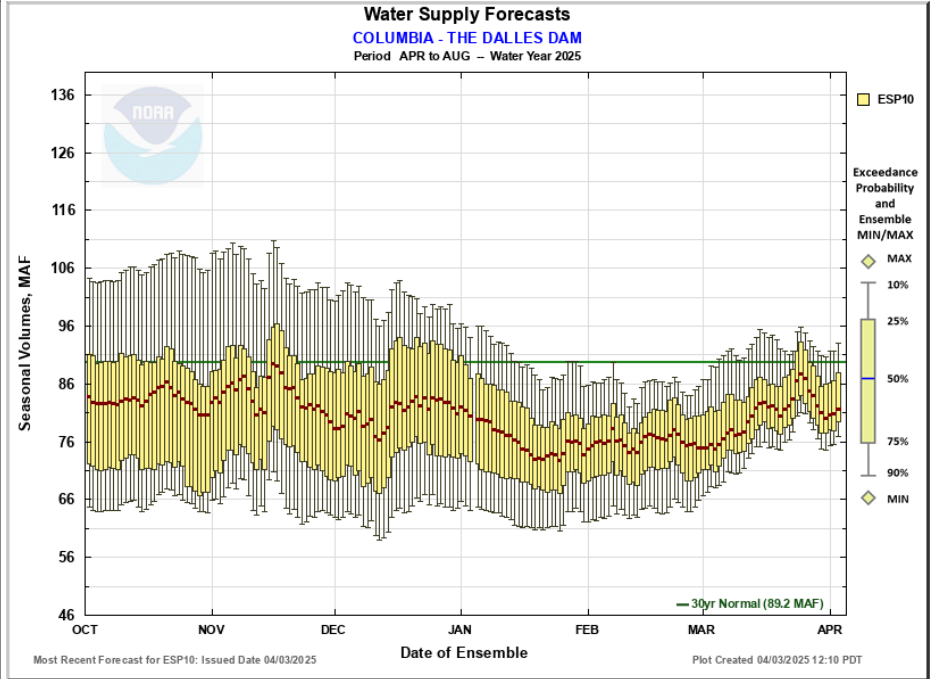
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COLUMBIA - THE DALLES DAM (TDAO3) Forecasts for Water Year 2025					
Official Water Supply					
ESP with 10 Days QPF Ensemble: 2025-04-03 Issued: 2025-04-03					
Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	81279	86465	92	97486	94166
APR-JUL	69025	74620	91	84906	81933
APR-AUG	76340	81191	91	92642	89196
JAN-SEP	100520	105706	91	116727	115946
JAN-JUL	88266	93861	90	104147	103714
OCT-SEP	114595	119781	91	130802	132314
Experimental Water Supply					
HEFS with 15 days EQPF Ensemble: 2025-04-03 Issued: 2025-04-03					
APR-SEP	81951	87632	93	95994	94166
APR-JUL	70349	76191	93	83675	81933
APR-AUG	77385	82833	93	91109	89196
JAN-SEP	101192	106873	92	115235	115946
JAN-JUL	89590	95432	92	102916	103714
OCT-SEP	115267	120948	91	129310	132314
Reference					
ESP with 0 Days QPF Ensemble: 2025-04-03 Issued: 2025-04-03					
APR-SEP	81143	88117	94	96553	94166
APR-JUL	70489	76504	93	83781	81933
APR-AUG	76792	83110	93	91685	89196
JAN-SEP	100384	107358	93	115795	115946
JAN-JUL	89731	95745	92	103022	103714
OCT-SEP	114459	121433	92	129869	132314

Move the mouse over the desired "Forecast Period" to display a graph.



Most Recent Forecast for ESP10: Issued Date 04/03/2025 Plot Created 04/03/2025 12:10 PDT

Max Scale
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Overlay

ESP10 HEFS ESP0

Data Files

CSV (ESP10 / APR-AUG)

Forecast Ensemble



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SNAKE - LOWER GRANITE DAM (LGDW1) Forecasts for Water Year 2025

Official Water Supply

ESP with 10 Days QPF Ensemble: 2025-04-03 Issued: 2025-04-03

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	20732	22252	100	26901	22232
APR-JUL	18216	19552	98	23914	19946
APR-AUG	19485	20887	99	25489	21121
JAN-SEP	27853	29372	99	34022	29736
JAN-JUL	25337	26673	97	31034	27450
OCT-SEP	31431	32951	96	37601	34287

Experimental Water Supply

HEFS with 15 days EQPF Ensemble: 2025-04-03 Issued: 2025-04-03

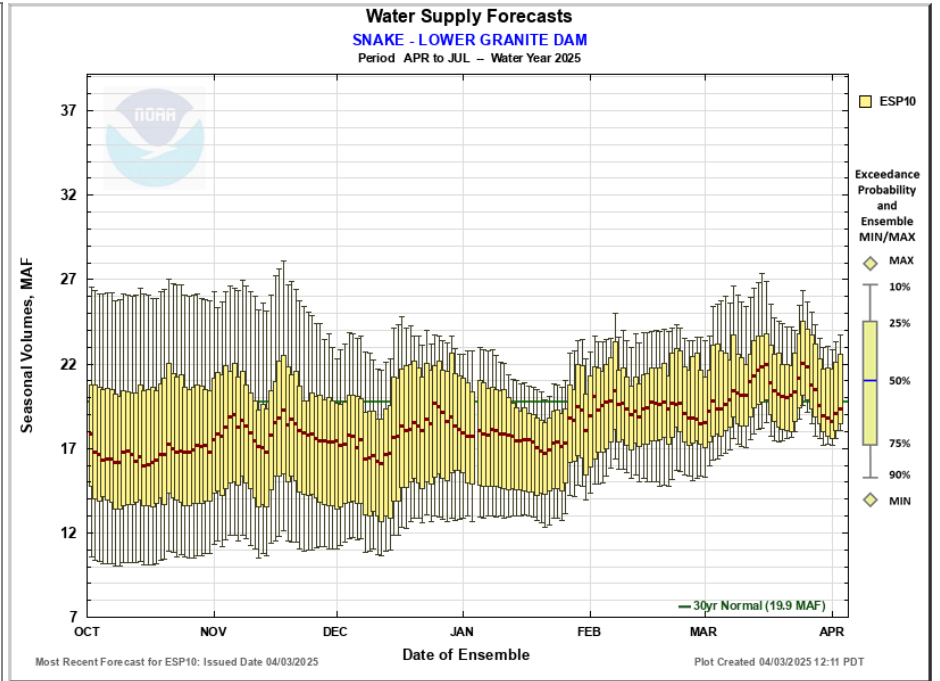
APR-SEP	20589	22869	103	27355	22232
APR-JUL	18124	20327	102	24607	19946
APR-AUG	19387	21625	102	26044	21121
JAN-SEP	27709	29990	101	34475	29736
JAN-JUL	25245	27447	100	31728	27450
OCT-SEP	31288	33568	98	38054	34287

Reference

ESP with 0 Days QPF Ensemble: 2025-04-03 Issued: 2025-04-03

APR-SEP	20958	23619	106	27807	22232
APR-JUL	18378	20776	104	24940	19946
APR-AUG	19745	22239	105	26436	21121
JAN-SEP	28079	30740	103	34927	29736
JAN-JUL	25499	27897	102	32060	27450
OCT-SEP	31658	34318	100	38506	34287

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Most Recent Forecast for ESP10: Issued Date 04/03/2025 Plot Created 04/03/2025 12:11 PDT

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ESP10 HEFS ESP0

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Forecast Ensemble



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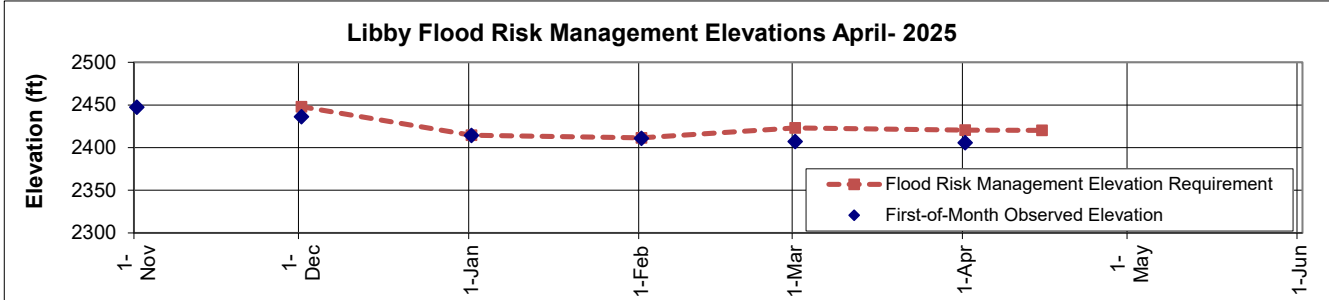
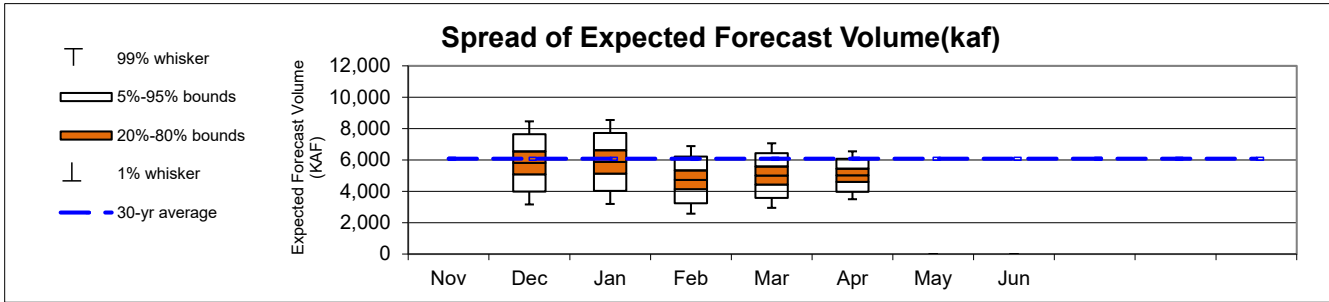
Libby : April Runoff Forecast & Flood Risk Management Calculation

WY 2025

Runoff Forecast	April	1991-2020 Average	1991 - 2020 Percent of Average	1929-2020 Average	1929 - 2020 Percent of Average
Most Probable Runoff Volume: Apr-Aug (kaf)	5023	6080	83%	6259	80%
Most Probable Runoff Volume: Apr-Jul (kaf)	4601	5570	83%	5708	81%
Most Probable Runoff Volume: May-Jul (kaf)	4142	5014	83%	5183	80%

Forecast/Reservoir Data	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Apr-Aug Runoff Forecast (kaf)		5812	5871	4728	5004	5023		
First-of-Month Elev (ft)	2447.5	2436.1	2414.4	2410.9	2407.0	2405.8		

Seasonal FRM Requirements	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr		
Flood Risk Management Space (kaf)	500	1867	1983	1541	1647	1656		
Flood Risk Management Elevation (ft)	2448.0	2414.6	2411.5	2423.1	2420.4	2420.2		



Notes:

- The given forecast is the official Corps of Engineers forecast for Libby. If you have any questions please contact Leon Basdekas (208) 353-2564, Andrew McCall (206) 715-2793, or David Doll (206) 741-3538.
- If a prior month's forecast as published in this document is different than what was originally published in the issue month, then the earlier forecast has been adjusted to reflect updated values for precipitation or streamflow.

Libby : April Runoff Forecast & Flood Risk Management Calculation
Apr-Aug Runoff Forecast Calculation:

Variable	Month(s)	Units	Observed Value A	Percent of Average (1991-2020)	Regression Coefficient B	Marginal Runoff (KAF) =A*B
SOI	ΣJun:Jul					
Eureka RS, MT	ΣOct:Mar Prcp	inches	5.26	84%	68.52	360.4
West Glacier, MT	ΣOct:Mar Prcp	inches	16.09	90%	29.47	474.2
Cranbrook A, BC	ΣOct:Mar Prcp	millimeters	111.40	64%	2.99	333.1
Fernie, BC	ΣOct:Mar Prcp	millimeters	677.42	99%	0.71	481.0
Hawkins Lake, MT	1-Apr SWE	inches	21.70	85%	22.43	486.7
Stahl Peak, MT	1-Apr SWE	inches	32.50	91%	19.70	640.3
East Creek, BC	1-Apr SWE	millimeters	680.00	77%	0.73	496.4
Moyie Mountain, BC	1-Apr SWE	millimeters	357.60	80%	1.21	432.7
Sunshine Village, AB	1-Apr SWE	millimeters	418.00	74%	1.43	597.7
Akamina Pass, AB	1-Apr SWE	millimeters	377.22	80%	0.72	271.6
South Racehorse Creek, AB	1-Apr SWE	millimeters	280.00	67%	1.35	378.0
Intercept			1		70.54	70.5
April Forecast	April - August	kaf				5022.6

Data used in Libby Water Supply Forecast

Precipitation Data	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eureka RS, MT (inch)	0.60	1.25	1.01	0.41	1.30	0.69		
West Glacier, MT (inch)	0.98	4.49	3.01	0.67	2.56	4.38		
Cranbrook A, BC (mm)	8.50	44.40	19.70	7.00	15.90	15.90		
Fernie, BC (mm)	151.89	187.20	112.52	20.57	82.30	122.94		
Snow Water Equiv	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Hawkins Lake, MT (inch)				12.8	18.1	21.7		
Stahl Peak, MT (inch)			19.7	21.3	26.3	32.5		
East Creek, BC (mm)				420.4	506.6	680.0		
Moyie Mountain, BC (mm)			192.0	206.4	310.9	357.6		
Sunshine Village, AB (mm)			211.0	236.0	288.0	418.0		
Akamina Pass, AB (mm)				208.5	278.0	377.2		
South Racehorse Creek, AB (mm)				142.0	213.0	280.0		
Streamflow	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby Inflow Volume (kaf)			139.8	129.4	204.7			
Reservoir Elevation	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Libby FOM Elev (feet)	2447.5	2436.1	2414.4	2410.9	2407.0	2405.8		

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 Approving Official
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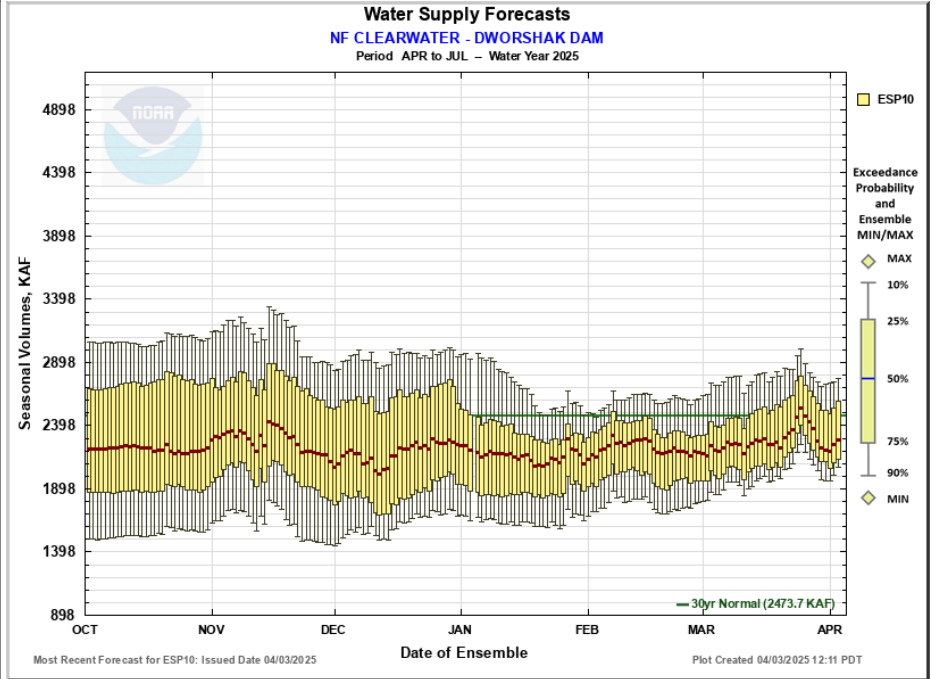
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NF CLEARWATER - DWORSHAK DAM (DWR11) Forecasts for Water Year 2025					
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Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
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APR-SEP	2185	2413	92	2911	2620
APR-JUL	2067	2281	92	2769	2474
JAN-SEP	3045	3273	92	3772	3543
JAN-JUL	2927	3141	92	3629	3397
OCT-SEP	3386	3614	90	4112	3998
Experimental Water Supply					
HEFS with 15 days EQPF Ensemble: 2025-04-03 Issued: 2025-04-03					
APR-SEP	2158	2453	94	2929	2620
APR-JUL	2041	2329	94	2758	2474
JAN-SEP	3018	3313	94	3789	3543
JAN-JUL	2901	3189	94	3618	3397
OCT-SEP	3359	3654	91	4130	3998
Reference					
ESP with 0 Days QPF Ensemble: 2025-04-03 Issued: 2025-04-03					
APR-SEP	2177	2475	94	2977	2620
APR-JUL	2056	2340	95	2828	2474
JAN-SEP	3037	3335	94	3837	3543
JAN-JUL	2916	3201	94	3688	3397
OCT-SEP	3378	3675	92	4177	3998

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