Columbia River System Flood Risk Management Requirements
Report #6 for Water Year 2025
Issue Date: 8 May 2025

A. Purpose of Flood Risk Management Requirements. These requirements provide maximum end-of-month reservoir elevations and/or outflows for flood risk management projects in the Columbia River Basin. These requirements are for use by U.S. Army Corps of Engineers, Bureau of Reclamation, Idaho Power, Energy Keepers, BC Hydro, Grant PUD, Chelan PUD, Douglas Co. PUD, and Bonneville Power Administration for operations planning and include all formally approved deviations to date. Any deviation from the flood risk management requirements herein will require approval from the Chief, Columbia Basin Water Management Division (CBWM) per the Northwestern Division's (NWD) Deviation Policy (NWDR 1110-2-6, 09 Sept 2023). Requirements are in accordance with the Columbia River Treaty and project-specific water control manuals, with variations as described below. These system flood risk management requirements will be revised and re-issued as new information becomes available.

B. List of Approved Flood Deviations from Water Control Manuals.
Deviation at Albeni Falls for ramping rates, summer pool exceedance, spill and TDG and delayed refill

C. Flood Risk Management Requirements.
These requirements have been prepared using the most recent seasonal volume forecasts. The April-August volume forecast at The Dalles Dam based on the official May 2025 forecast is 75,639 kaf. All other forecasts can be found in Table 2 or at:
http://www.nwd-wc.usace.army.mil/report/colsum/

Table 1 shows the flood risk management elevations, draft and flow limits for the evacuation, holding and refill periods.

D. System Flood Risk Management Refill Requirement Discussion.
On 29 April, Columbia Basin Water Management declared that the initiation of system refill would begin on 04 May 2025. Note that each reservoir may begin refill on the prescribed date as shown in Table 1. During the refill season, end-of-month reservoir elevation targets and control flow, if any, may change in response to the shape and timing of the runoff. The 31 May FRM requirements may be updated as needed throughout the month.

E. Individual Project Flood Risk Management Requirements Discussion.
Dworshak is filling based on their latest FCRC calculations.

Table 1. Flood Risk Management Requirements

Project	31 Jan	28 Feb	31 Mar	15 Apr	30 Apr[3]	Date Refill Starts	31 May[3]	30 Jun[3]	31 Jul[3]
MCDB+ARDB (kaf) [1]	1632	1798	2729	3600	3294	May 2	1270.6	0	0
ARDB (kaf) [1]	1632	1798	2729	3600	3294	May 2	1270.6	0	0
ARDB (ft)	1431	1429.7	1421.8	1414.1	1414.1	May 2	1434	1444.0	1444.0
DCDB (kaf)[1]	-	-	-	-	-	-	-	-	-
LIB (ft) [4]	2411.5	2423.1	2420.4	2420.1	2420.2	May 1[5]	-	2459.0	2459.0
LIB (kcfs)	n/a	n/a	n/a	-	-	-	7.0	tbd	tbd
HGH (ft)	3546.3	3551.2	3552.7	3551.9	3552.3	May 1	-	3560.0	3560.0
HGH (kcfs)	n/a	n/a	n/a	-	-	-	5.5	tbd	tbd
SKQ (ft)	n/a	n/a	n/a	2886	2887	-	2890[7]	2893	2893
ALF (ft) [2]	2060.0	2060.0	2056.0	n/a	2056.0	-	2063.5	2063.5	2063.5
GCL (ft)	1290.0	1290.0	1282.9	1274.5	1265.2	May 3	1282	1289.0	1290.0
BRN (ft)	2077.0	2044.5	2053.3	2047.5	2049.9	May 3	2075.1	2077.0	2077.0
DWR (ft)[8]	1550.1	1546.2	1557.8	1560.3	1564.2	Apr 21	1593.7	1600.0	1600.0
WEL (kaf)	0	0	0	0	-[6]	-	0[6]	0[6]	0[6]
RRH (kaf)	0	0	0	0	-[6]	-	0[6]	0[6]	0[6]
WAN+PRD (kaf)	0	0	0	0	-[6]	-	0[6]	0[6]	0[6]
JDA (kaf)	0	0	0	0	-[6]	-	0[6]	0[6]	0[6]

Notes:

1. MCDB and DCDB do not have system Flood Risk Management requirements unless an Article IV(3) call is active.
2. Albeni Falls flood risk management elevations are based on readings at the Hope gage.
3. Flood risk management requirements for May, June and July are based on estimated normal runoff shape. Under certain circumstances, the Refill Guide Curve (also known as Flood Control Refill Curve) procedure may be used to determine when refill is to begin at each project where applicable and affect the 30 Apr elevations.
4. Per the Libby Dam WCM, Rule 1 of the VarQ operating procedures, releases will be limited to the hydraulic capacity of the powerhouse to the best extent possible.
5. Per the Libby Water Control Manual, when the official Libby Water Supply Forecast released at the start of April is less than 6.9 MAF, refill is initiated on May 1.
6. If FRM space is required at John Day or the middle Columbia projects, Northwestern Division will coordinate the exact timing for drawdown and refill with project operators in real-time. It is anticipated that all requested space would be made available prior to the start of system refill.
7. SKQ May FRM is for Memorial Day (May 26), not 31 May per MOU.
8. DWR is refilling on its Flood Control Refill Curve.

Table 2. Water Supply Forecasts (Kaf)

Project	Forecast Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Current month Forecast % of Normal	Residual Runoff[3]
MCDB[1]	Apr-Aug	10686	9596	9614	9929	9659			87%	93%
ARDB[1]	Apr-Aug	21797	19071	19113	19492	18991			86%	91%
DCDB[1]	Apr-Aug	1915	1729	1741	1815	1763			86%	89%
LIB	Apr-Aug	5871	4728	5004	5023	4944			81%	87%
HGH	May-Sep	1675	1409	1388	1424	1552			87%	91%
SKQ[2]	Apr-Jul	5076	4521	4396	5444	5345			87%	77%
ALF[2]	Apr-Jul	9829	9323	9246	11268	10767			87%	75%
GCL[2]	Apr-Aug	50979	47103	46836	52841	49721			85%	83%
BRN[2]	Apr-Jul	5032	6000	5681	5755	4547			89%	60%
DWR[2]	Apr-Jul	2154	2214	2194	1878	1916			77%	62%
TDA[2]	Apr-Aug	79356	75228	75123	81191	75639			85%	77%

Notes:
1. Official water supply forecasts for MCDB, ARDB, and DCDB are provided by BC Hydro on the official forecast days for 2025.
2. Official water supply forecasts for SKQ, ALF, BRN, TDA, DWR, and GCL are the ESP 10-day-QPF median values as published by the NWRFC on the official forecast days for 2025.
3. Residual runoff calculated using RFC runoff data from May 7, 2025.

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