

Columbia River System Flood Risk Management Requirements
Report #1 for Water Year 2025
Issue Date: 10 Jan 2025

A. Purpose of Flood Risk Management Requirements. These requirements provide maximum end-of-month reservoir elevations and/or minimum 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 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). Requirements are in accordance with the Columbia River Treaty AIP 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.

C. Flood Risk Management Requirements

These requirements have been prepared using the most recent official seasonal volume forecasts. The April-August volume forecast at The Dalles Dam based on the January 2025 official forecast is 79,356 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. The Initial Controlled Flow (ICF) based on the January forecast is 297 kcfs.

D. System Flood Risk Management Refill Requirement Discussion.

The Flood Risk Management Requirements shown in Table 1 are based on the official January seasonal runoff volume forecasts. During the refill season, end-of-month reservoir elevation targets and control flow may change in response to the shape and timing of the runoff.

E. Individual Project Flood Risk Management Requirements Discussion.

No specific individual requirements at this time.

Table 1. Flood Risk Management Requirements

Project	31 Jan	28 Feb	31 Mar	15 Apr	30 Apr ³	Date Refill Started	31 May ³	30 Jun ³	31 Jul ³
MCDB+ARDB (kaf) ¹	1632	2180	3485	3485	3485	-	1708	0	0
ARDB (kaf) ¹	1632	2180	3485	3485	3485	-	1708	0	0
DCDB (kaf) ¹	-	-	-	-	-	-	-	-	-
LIB (ft) ⁴	2411.5	2408.2	2403.8	2403.2	2402.5		2441.6	2459.0	2459.0
LIB (kcfs)	n/a	n/a	n/a	n/a	n/a	-	n/a	n/a	n/a
HGH (ft)	3546.3	3543.6	3540.6	3539.1	3537.6		3555.3	3560.0	3560.0
HGH (kcfs)	n/a	n/a	n/a	n/a	n/a	-	n/a	n/a	n/a
SKQ (ft)	n/a	n/a	n/a	n/a	n/a	-	-	-	-
ALF (ft) ²	2060.0	2060.0	2056.0	n/a	2056.0	-	-	-	-
GCL (ft)	1290.0	1288.0	1280.7	1275.9	1271.7		1281.3	1290.0	1290.0
BRN (ft) ⁷	2077.0	2065.1	2066.5	2067.5	2061.6		2074.7	2077.0	2077.0
DWR (ft) ⁷	1550.1	1549.0	1562.3	1573.5	1558.7		1587.3	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. A shift in FRM storage is in place for 28 February, 31 March, and 15 April targets per the 2025 Water Management Plan to Grand Coulee.

Table 2. Water Supply Forecasts (Kaf)

Project	Forecast Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Current month Forecast % of Normal
MCDB ¹	Apr-Aug	10686							96%
ARDB ¹	Apr-Aug	21797							98%
DCDB ¹	Apr-Aug	1915							94%
LIB	Apr-Aug	5871							97%
HGH	May-Sep	1675							95%
SKQ ²	Apr-Jul	5076							83%
ALF ²	Apr-Jul	9829							79%
GCL ²	Apr-Aug	50979							88%
BRN ²	Apr-Jul	5032							98%
DWR ²	Apr-Jul	2154							87%
TDA ²	Apr-Aug	79356							89%

Notes:

1. Official water supply forecasts for MCDB, ARDB, and DCDB are provided by BC Hydro on official forecast days.
2. Official water supply forecasts for SKQ, ALF, GCL, BRN, DWR and TDA are the ESP 10-day-QPF median values published by the NWRFC on the official forecast days for 2025.

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