

Summary of Columbia River Flood Control, 1-Feb

WY 2012

Project >>	MCDB	ARDB	LIB	DCDB	HGH	GCL	BRN	DWR
Project Limits								
Maximum Elevation, ft	2475.0	1444.0	2459.0	1892.0	3560.0	1290.0	2077.0	1600.0
Minimum Elevation, ft	2320.0	1378.0	2287.0	1794.2	3336.0	1208.0	1976.0	1445.0
Usable Storage, kaf	12053.3	7100.0	4979.5	1398.6	2981.0	5185.3	975.3	2015.7
Usable Storage, ksfd	6076.9	3579.6	2510.5	705.1	1502.9	2614.3	491.7	1016.3

Jan. 31 Project Conditions								
Elevation, ft (MSL)	2415.1	1411.3	2410.3	1836.5	3536.4	1280.4	2069.6	1523.9
Draft, kaf	5827.9	3908.4	2025.5	897.9	533.1	760.5	104.4	1178.8
Usable Stor. less Draft, kaf	6225.4	3191.5	2954.0	500.7	2447.9	4424.8	870.9	836.9

To Meet Feb. 28 Flood Control Requirements								
Elevation Change , ft	-	-	-	-24.0	-	-	-20.1	-
Draft Change , kaf	-	-	-	317.1	-	-	242.1	-

1-Feb Water Supply Forecast									
Project >>	MCDB	ARDB	LIB	DCDB	HGH	GCL	BRN	DWR	TDA
Apr-Jul, kaf	-	-	-	-	-	-	4986	2504	-
Apr-Jul %-Normal 2	-	-	-	-	-	-	79.0%	93.3%	-
Apr-Jul Change , kaf 1	-	-	-	-	-	-	203	31	-
Apr-Aug, kaf	12214	24153	5713	2039	-	56788	-	-	84454
Apr-Aug %-Normal 2	105.4%	106.7%	90.1%	99.9%	-	94.2%	-	-	90.7%
Apr-Aug Change , kaf 1	473	1556	189	52	-	12279	-	-	7053
May-Sep, kaf	-	-	-	-	1781	-	-	-	-
May-Sep %-Normal 2	-	-	-	-	97.1%	-	-	-	-
May-Sep Change , kaf 1	-	-	-	-	90	-	-	-	-

System Flood Control Requirements, Drafts									
Project >>	MCDB	ARDB	LIB VarQ	DCDB	HGH VarQ	GCL	BRN	DWR Sys	DWR Loc
Jan. 31, kaf	1486	1551	1419	850	322	0	0	918	931
Feb. 28, kaf	2810	2603	1298	1215	451	0	347	1047	1059
Mar. 15, kaf	-	-	1161	1270	-	-	-	-	-
Mar. 31, kaf	4080	3600	1161	1270	557	537	388	1104	963
Apr. 15, kaf	4080	3600	1161	1270	607	1465	384	1205	827
Apr. 30, kaf	4080	3600	1161	1270	658	2643	379	1137	-

System Flood Control Requirements, Elevations									
Jan. 31, ft	-	1431.7	2426.2	1839.8	3546.0	1290.0	2077.0	1543.0	1542.1
Feb. 28, ft	-	1422.9	2429.2	1812.5	3540.2	1290.0	2049.5	1533.7	1532.9
Mar. 15, ft	-	-	2432.6	1807.7	-	-	-	-	-
Mar. 31, ft	-	1414.1	2432.6	1807.7	3535.3	1283.3	2045.6	1529.5	1539.8
Apr. 15, ft	-	1414.1	2432.6	1807.7	3532.9	1270.9	2046.0	1521.9	1549.5
Apr. 30, ft	-	1414.1	2432.6	1807.7	3530.5	1253.9	2046.5	1527.0	-

Flood Control Summary at The Dalles, Oregon			
Apr-Aug, kaf	84454		
Apr-Aug %-Normal	90.7%	Upstream Storage Adjustment, kaf, Chart #2 (3) =	22212
Apr-Aug Change , kaf (1)	7053	Initial Controlled Flow, ICF, kcfs, Chart #1 (3) =	307.9
May-Aug, kaf	71594	Estimated Unregulated Peak Discharge, kcfs, Chart #1-A (3) =	516

- Notes:**
- 1 Change in official forecast from the previous month.
 - 2 Normal Runoff Volumes based on 71-Year, 1929-1999, averages for MCDB, ARDB, LIB, DCDB, DWR as reported in the 2000 Level Modified Streamflow Report, 2004. Normal Runoff Volumes based on 30-Year, 1971-2000, averages for HGH, GCL, BRN, and TDA as determined by the Northwest River Forecast Center.
 - 3 See Charts 1 and 2 of Columbia River Treaty Flood Control Operating Plan, Corps of Engineers, Northwestern Division, Corps of Engineers.

Questions? Contact Maler Annamalai, 503-808-3994, or Kasi Rodgers, 503-808-3950.

Maximum Flood Control Shift from DWR to GCL												Maximum Flood Control Shift from BRN to GCL							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	GCL	GCL	GCL	DWR	DWR	DWR	DWR / GCL	DWR	DWR	GCL	GCL	GCL	BRN	BRN / GCL	BRN	BRN	GCL	GCL	
	Non-Shifted FC Draft	Maximum Draft Limit	Maximum Shift Potential	FC Draft		FC Shift		Shifted FC		Shifted FC		Maximum Shift Potential remaining	FC Shift		Shifted FC Draft		Shifted FC		
				System	Local	Potential	Allowable	Draft	Elevation	Draft (w/DWR Shift)	Elevation (w/DWR Shift)		Potential	Allowable FC Shift	Draft	Elevation	Draft (w/DWR+BRN Shift)	Elevation (w/DWR+BRN Shift)	
Notes	-	a	2-1	-	-	4-5	Min 3,6	4-7	-	1+7	-	2-10	-	Min 12,13	-	-	10+14	-	
Units	kaf	kaf	kaf	kaf	kaf	kaf	kaf	kaf	ft	kaf	ft	kaf	ft	kaf	kaf	ft	kaf	ft	
Jan. 31	0	2745	2745	918	931	0	0	931	1542.1	0	1290.0	2745	0	0	0	2077.0	0	1290.0	
Feb. 28	0	2745	2745	1047	1059	0	0	1059	1532.9	0	1290.0	2745	0	0	347	2049.5	0	1290.0	
Mar. 31	537	3164	2627	1104	963	141	141	963	1539.8	678	1281.5	2487	0	0	388	2045.6	678	1281.5	
Apr. 15	1465	2292	826	1205	827	378	378	827	1549.5	1844	1265.6	448	0	0	384	2046.0	1844	1265.6	
Apr. 30 b	2643	2643	0	1137	-	0	0	1137	1527.0	2643	1253.9	0	0	0	379	2046.5	2643	1253.9	

Notes: Under certain conditions the required flood control space at DWR and BRN may be shifted to GCL prior to 30-April. The shifted rule curve shown above represents the maximum allowable flood control shift(s) for the current water year based on the current month's flood control requirements for each project and evacuation limitations at GCL; however, the actual volume shifted to GCL on any date is ultimately determined by the Bureau of Reclamation. The shift of volume for DWR to GCL has priority over the shift of volume from BRN to GCL in cases when GCL cannot accept the total combined volume.

- a** The potential flood control shift to GCL is limited to the operation at GCL above elevation 1252.3 ft (2744 kaf draft) at the end of February and elevation 1225.0 ft (4355 kaf draft) at end of March and 15-Apr, and also limited by the GCL maximum draft rate limit. All projects are to be at their non-shifted flood control requirements at the end of Apr.
- b** No shift is allowed, all projects to be back to their non-shifted flood control requirement by 30-April.

Questions? Contact Maler Annamalai, 503-808-3994, or Kasi Rodgers, 503-808-3950.