

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)	2419.0	1421.8	2410.2	1843.8	3536.1	1282.2	2064.6	1526.7
Draft, kaf	5494.4	2731.8	2029.5	791.2	539.3	622.3	168.9	1140.9
Usable Stor. less Draft, kaf	6558.9	4368.2	2950.0	607.4	2441.7	4563.0	806.5	874.8

To Meet Feb. 28 Flood Control Requirements								
Elevation Change , ft	-	-	-17.5	-27.8	-11.0	-	-20.1	-29.9
Draft Change , kaf	-	-	583.0	381.8	229.0	-	231.1	369.3

1-Feb Water Supply Forecast									
Project >>	MCDB	ARDB	LIB	DCDB	HGH	GCL	BRN	DWR	TDA
Apr-Jul, kaf	-	-	-	-	-	-	6280	3142	-
Apr-Jul %-Normal 2	-	-	-	-	-	-	99.5%	117.1%	-
Apr-Jul Change , kaf 1	-	-	-	-	-	-	-950	-198	-
Apr-Aug, kaf	11222	22662	6656	1942	-	61400	-	-	92500
Apr-Aug %-Normal 2	96.8%	100.1%	105.0%	95.1%	-	101.8%	-	-	99.4%
Apr-Aug Change , kaf 1	672	1649	1046	96	-	4900	-	-	1900
May-Sep, kaf	-	-	-	-	2139	-	-	-	-
May-Sep %-Normal 2	-	-	-	-	116.6%	-	-	-	-
May-Sep Change , kaf 1	-	-	-	-	196	-	-	-	-

System Flood Control Requirements, Drafts									
Project >>	MCDB	ARDB	LIB VarQ	DCDB	HGH VarQ	GCL	BRN	DWR Sys	DWR Loc
Jan. 31, kaf	1662	1703	1488	776	415	0	0	1148	1148
Feb. 28, kaf	2810	2603	2612	1173	768	0	400	1510	1459
Mar. 15, kaf	-	-	2734	1212	-	-	-	-	-
Mar. 31, kaf	4080	3600	2734	1212	1041	1683	488	1933	1523
Apr. 15, kaf	4080	3600	2734	1212	1172	2896	538	2012	1454
Apr. 30, kaf	4080	3600	2734	1212	1212	3798	575	1587	-

System Flood Control Requirements, Elevations									
Jan. 31, ft	-	1430.5	2424.5	1844.8	3541.8	1290.0	2077.0	1526.2	1526.2
Feb. 28, ft	-	1422.9	2392.7	1816.0	3525.1	1290.0	2044.5	1496.8	1501.4
Mar. 15, ft	-	-	2388.6	1812.8	-	-	-	-	-
Mar. 31, ft	-	1414.1	2388.6	1812.8	3511.2	1267.9	2035.9	1454.1	1495.6
Apr. 15, ft	-	1414.1	2388.6	1812.8	3504.1	1250.0	2030.7	1445.4	1501.8
Apr. 30, ft	-	1414.1	2388.6	1812.8	3501.8	1235.1	2026.8	1489.8	-

Flood Control Summary at The Dalles, Oregon			
Apr-Aug, kaf	92500		
Apr-Aug %-Normal	99.4%	Upstream Storage Adjustment, kaf, Chart #2 (3) =	24602
Apr-Aug Change , kaf (1)	1900	Initial Controlled Flow, ICF, kcfs, Chart #1 (3) =	341.1
May-Aug, kaf	78415	Estimated Unregulated Peak Discharge, kcfs, Chart #1-A (3) =	573

- 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 Bill Proctor, 503-808-3952.

Summary of Columbia River Flood Control, 1-Feb

WY 2011

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)	
<i>Notes</i>	-	a	2-1	-	-	4-5	Min 3,6	4-7	-	1+7	-	2-10	-	Min 12,13	-	-	10+14	-	
<i>Units</i>	kaf	kaf	kaf	kaf	kaf	kaf	kaf	kaf	ft	kaf	ft	kaf	ft	kaf	kaf	ft	kaf	ft	
Jan. 31	0	2745	2745	1148	1148	0	0	1148	1526.2	0	1290.0	2745	0	0	0	2077.0	0	1290.0	
Feb. 28	0	2745	2745	1510	1459	52	52	1459	1501.4	52	1289.4	2693	0	0	400	2044.5	52	1289.4	
Mar. 31	1683	3198	1515	1933	1523	409	409	1523	1495.6	2092	1262.0	1106	0	0	488	2035.9	2092	1262.0	
Apr. 15	2896	3375	479	2012	1454	558	479	1533	1494.8	3375	1242.3	0	0	0	538	2030.7	3375	1242.3	
Apr. 30 b	3798	3798	0	1587	-	0	0	1587	1489.8	3798	1235.1	0	0	0	575	2026.8	3798	1235.1	

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 Bill Proctor, 503-808-3952.