

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

Dec. 31 Project Conditions								
Elevation, ft (MSL)	2432.3	1409.2	2410.9	1860.4	3536.4	1283.4	2068.1	1513.0
Draft, kaf	4277.6	4134.4	2002.6	534.3	533.3	529.1	124.1	1318.8
Usable Stor. less Draft, kaf	7775.7	2965.6	2976.9	864.2	2447.7	4656.2	851.2	696.9

To Meet Jan. 31 Flood Control Requirements								
Elevation Change , ft	-	-	-	-21.0	-	-	-	-
Draft Change , kaf	-	-	-	322.7	-	-	-	-

1-Jan Water Supply Forecast									
Project >>	MCDB	ARDB	LIB	DCDB	HGH	GCL	BRN	DWR	TDA
Apr-Jul, kaf	-	-	-	-	-	-	3300	2174	-
Apr-Jul %-Normal 2	-	-	-	-	-	-	52.3%	81.0%	-
Apr-Jul Change , kaf 1	-	-	-	-	-	-	-	-	-
Apr-Aug, kaf	11162	22641	5682	2030	-	54000	-	-	76700
Apr-Aug %-Normal 2	96.3%	100.0%	89.7%	99.4%	-	89.6%	-	-	82.4%
Apr-Aug Change , kaf 1	-	-	-	-	-	-	-	-	-
May-Sep, kaf	-	-	-	-	1654	-	-	-	-
May-Sep %-Normal 2	-	-	-	-	90.2%	-	-	-	-
May-Sep Change , kaf 1	-	-	-	-	-	-	-	-	-

System Flood Control Requirements, Drafts									
Project >>	MCDB	ARDB	LIB VarQ	DCDB	HGH VarQ	GCL	BRN	DWR Sys	DWR Loc
Jan. 31, kaf	1439	1510	1546	857	309	0	0	818	825
Feb. 28, kaf	2386	2237	1255	1215	362	0	83	839	847
Mar. 15, kaf	-	-	1110	1270	-	-	-	-	-
Mar. 31, kaf	3433	3041	1110	1270	421	537	52	722	654
Apr. 15, kaf	3433	3041	1110	1270	448	537	31	717	481
Apr. 30, kaf	3433	3041	1110	1270	477	835	13	717	-

System Flood Control Requirements, Elevations									
Jan. 31, ft	-	1432.1	2423.0	1839.3	3546.6	1290.0	2077.0	1550.1	1549.6
Feb. 28, ft	-	1426.0	2430.3	1812.5	3544.3	1290.0	2071.1	1548.6	1548.1
Mar. 15, ft	-	-	2433.8	1807.7	-	-	-	-	-
Mar. 31, ft	-	1419.1	2433.8	1807.7	3541.6	1283.3	2073.4	1556.7	1561.3
Apr. 15, ft	-	1419.1	2433.8	1807.7	3540.3	1283.3	2074.8	1557.1	1572.5
Apr. 30, ft	-	1419.1	2433.8	1807.7	3539.0	1279.4	2076.1	1557.1	-

Flood Control Summary at The Dalles, Oregon			
Apr-Aug, kaf	76700		
Apr-Aug %-Normal	82.4%	Upstream Storage Adjustment, kaf, Chart #2 (3) =	18779
Apr-Aug Change , kaf (1)	-	Initial Controlled Flow, ICF, kcfs, Chart #1 (3) =	284.3
May-Aug, kaf	65021	Estimated Unregulated Peak Discharge, kcfs, Chart #1-A (3) =	460

- 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 Ken Soderlind, 503-808-3950, Maler Annamalai, 503-808-3994, or Bill Proctor, 503-808-3952.

Summary of Columbia River Flood Control, 1-Jan

WY 2009

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	13-14	-	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	1118	1124	0	0	1124	1528.0	0	1290.0	2745	0	0	0	2077.0	0	1290.0	
Feb. 28	0	2745	2745	1444	1417	27	27	1417	1504.9	27	1289.7	2717	288	288	0	2077.0	315	1286.1	
Mar. 31	537	3372	2835	1837	1470	367	367	1470	1500.4	904	1278.5	2467	268	268	0	2077.0	1172	1274.9	
Apr. 15	1117	2672	1555	2016	1394	622	622	1394	1506.8	1739	1267.1	933	227	227	0	2077.0	1966	1263.9	
Apr. 30 b	2293	2293	0	1544	-	0	0	1544	1493.7	2293	1259.1	0	0	0	508	2033.8	2293	1259.1	

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 Ken Soderlind, 503-808-3950; or Patti Low, 503-808-3958.