

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)	2445.6	1395.2	2409.8	1839.1	3540.1	1275.2	2059.6	1546.5
Draft, kaf	2958.0	5563.3	2043.2	860.5	453.9	1150.9	230.4	868.9
Usable Stor. less Draft, kaf	9095.4	1536.7	2936.3	538.0	2527.1	4034.4	744.9	1146.8

Draft Required to meet Feb. 28/29 Flood Risk Management								
Elevation Reduction, ft	-	-	-	26.6	4.6	-	7.8	-
Storage Reduction, kaf	-	-	-	354.5	99.2	-	90.2	-

1-Feb Water Supply Forecast									
Project >>	MCDB	ARDB	LIB	DCDB	HGH	GCL	BRN	DWR	TDA
Apr-Jul, kaf	-	-	-	-	-	-	4665	1922	-
Apr-Jul %-Normal 2	-	-	-	-	-	-	85%	79%	-
Apr-Jul Change , kaf 1	-	-	-	-	-	-	-166	-214	-
Apr-Aug, kaf	11679	23338	5523	2061	-	55845	-	-	83108
Apr-Aug %-Normal 2	106%	106%	94%	103%	-	98%	-	-	95%
Apr-Aug Change , kaf 1	-79	-357	-774	-87	-	-694	-	-	-4216
May-Sep, kaf	-	-	-	-	1927	-	-	-	-
May-Sep %-Normal 2	-	-	-	-	114%	-	-	-	-
May-Sep Change , kaf 1	-	-	-	-	-50	-	-	-	-

System Draft Requirements									
Project >>	MCDB	ARDB	LIB VarQ	DCDB	HGH VarQ	GCL	BRN	DWR Sys	DWR Loc
Jan. 31, kaf	1662	1703	2037	857	428	0	0	801	811
Feb. 28/29, kaf	2810	2603	1032	1215	553	0	321	657	674
Mar. 15, kaf	-	-	-	1270	-	-	-	-	-
Mar. 31, kaf	4080	3600	839	1270	712	582	329	480	456
Apr. 15, kaf	-	-	-	-	789	1757	306	412	274
Apr. 30, kaf	4080	3600	839	1270	866	2926	290	412	-

System Elevation Requirements									
Jan. 31, ft	-	1430.5	2410.0	1839.3	3541.3	1290.0	2077.0	1551.3	1550.6
Feb. 28/29, ft	-	1422.9	2435.7	1812.5	3535.5	1290.0	2051.8	1561.1	1560.0
Mar. 15, ft	-	-	-	1807.7	-	-	-	-	-
Mar. 31, ft	-	1414.1	2440.2	1807.7	3527.8	1282.7	2051.1	1572.6	1574.1
Apr. 15, ft	-	-	-	-	3524.1	1266.8	2053.1	1576.8	1584.9
Apr. 30, ft	-	1414.1	2440.2	1807.7	3520.2	1249.5	2054.5	1576.8	-

Flood Risk Management Summary at The Dalles, Oregon			
Apr-Aug, kaf	83108		
Apr-Aug %-Normal	94.9%	Upstream Storage Adjustment, kaf, Chart #2 (3) =	20182
Apr-Aug Change , kaf (1)	-4216	Initial Controlled Flow, ICF, kcfs, Chart #1 (3) =	311
May-Aug, kaf	69998	Estimated Unregulated Peak Discharge, kcfs, Chart #1-A (3) =	506

- Notes:**
- 1** Change in official forecast from the previous month.
 - 2** All %-Normal values are based on 30-year (1981-2010) Runoff Volume averages 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.

Maximum Flood Risk Storage Shift from DWR to GCL												Maximum Flood Risk Storage 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	kaf	kaf	kaf	ft	kaf	ft	
Jan. 31	0	2745	2745	801	811	0	0	811	1550.6	0	1290.0	2745	0	0	0	2077.0	0	1290.0	
Feb. 28/29	0	2745	2745	657	674	0	0	674	1560.0	0	1290.0	2745	40	40	281	2055.3	40	1289.5	
Mar. 31	582	3190	2608	480	456	23	23	456	1574.1	606	1282.4	2585	40	40	289	2054.6	646	1281.9	
Apr. 15	1757	2268	511	412	274	138	138	274	1584.9	1895	1264.9	372	20	20	286	2054.9	1915	1264.6	
Apr. 30 b	2926	2926	0	412	-	0	0	412	1576.8	2926	1249.5	0	0	0	290	2054.5	2926	1249.5	

Notes: Under certain conditions the required flood risk draft at DWR and BRN may be shifted to GCL prior to 30-April. The shifted rule curve shown above represents the maximum allowable flood risk storage shift(s) for the current water year based on the current month's flood risk management 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 risk storage 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 risk management draft requirements at the end of Apr.
- b** No shift is allowed, all projects to be back to their non-shifted flood risk draft requirement by 30-April.

Questions? Contact Kasi Rodgers, 503-808-3950, Jason Ward, 503-808-3952 or Daniela Todesco, 503-808-3757.

Peter F. Brooks, P.E., D.WRE
Ch., Hydrologic Engineering and Power Branch