

## SUMMARY OF COLUMBIA RIVER FLOOD CONTROL DATA

1 APR 2001

|                       | MCDB                          | ARDB   | LIB     | DCDB   | HGH    | GCL                                                               | BRN      | DWR    | DWR    |
|-----------------------|-------------------------------|--------|---------|--------|--------|-------------------------------------------------------------------|----------|--------|--------|
| <b>PROJECT LIMITS</b> |                               |        |         |        |        |                                                                   |          |        |        |
| Maximum El. MSL       | 2475.0                        | 1444.0 | 2459.0  | 1892.0 | 3560.0 | 1290.0                                                            | 2077.0   | 1600.0 |        |
| Minimum El. MSL       | 2320.0                        | 1378.0 | 2287.0  | 1794.2 | 3336.0 | 1208.0                                                            | 1976.0   | 1445.0 |        |
| Usable stor.KAF       | 12053.3                       | 7100.0 | 4979.5  | 1398.6 | 2982.0 | 5185.5                                                            | 975.4    | 2015.8 |        |
| Usable stor.KSFD      | 6076.9                        | 3579.6 | 2510.5  | 705.0  | 1503.4 | 2614.4                                                            | 491.7    | 1016.4 |        |
| CURRENT, 31 MAR.      |                               |        |         |        |        |                                                                   |          |        |        |
| Elevation MSL         | 2357.6                        | 1390.2 | 2387.5  | 1795.0 | 3491.1 | 1222.7                                                            | 2073.8   | 1512.3 |        |
| Draft KAF             | 9969.3                        | 6040.9 | 27677.7 | 1392.6 | 1396.1 | 4474.5                                                            | 46.0     | 1328.0 |        |
| TO MEET 15 APR F.C.   |                               |        |         |        |        |                                                                   |          |        |        |
| Feet                  | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Kaf                   | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Ksfd                  | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Cfs over inflow       | 0                             | 0      | 0       | 0      | 0      | 0                                                                 | 0        | 0      |        |
| FROM 15 APR           |                               |        |         |        |        |                                                                   |          |        |        |
| TO MEET 30 APR F.C.   |                               |        |         |        |        |                                                                   |          |        |        |
| Feet                  | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Kaf                   | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Ksfd                  | 0.0                           | 0.0    | 0.0     | 0.0    | 0.0    | 0.0                                                               | 0.0      | 0.0    |        |
| Cfs over inflow       | 0                             | 0      | 0       | 0      | 0      | 0                                                                 | 0        | 0      |        |
| FORECASTS, KAF        |                               |        |         |        |        |                                                                   |          |        |        |
| Apr-Jul mp            | na                            | na     | na      | na     | na     | na                                                                | 1890     | 1473   |        |
| Apr-Jul %             | na                            | na     | na      | na     | na     | na                                                                | 32.6%    | 54.5%  |        |
| Apr-Jul change        | na                            | na     | na      | na     | na     | na                                                                | -500     | -255   |        |
| Apr-Aug mp            | 8787                          | 16990  | 3322    | 1607   | na     | 37000                                                             | na       | na     |        |
| Apr-Aug %             | 76.4%                         | 73.0%  | 52.1%   | 78.2%  | na     | 60.7%                                                             | na       | na     |        |
| Apr-Aug change        | 97                            | 349    | -44     | -12    | na     | 400                                                               | na       | na     |        |
| May-Sep mp            | na                            | na     | na      | na     | 1116   | na                                                                | na       | na     |        |
| May-Sep %             | na                            | na     | na      | na     | 58.4%  | na                                                                | na       | na     |        |
| May-Sep change        | na                            | na     | na      | na     | -58    | na                                                                | na       | na     |        |
| FLOOD CONTROL         |                               |        |         |        |        |                                                                   | LRC, /a. |        |        |
| Drafts, KAF           |                               |        |         |        |        |                                                                   |          |        |        |
| Apr 15                | 200                           | 1000   | 500     | 877    | 60     | 537                                                               | 0        | 50     | 32     |
| Apr 30                | 200                           | 1000   | 500     | 877    | 44     | 537                                                               | 0        | 50     | na     |
| Elevations MSL        |                               |        |         |        |        | /c.                                                               |          |        |        |
| Apr 15                | na                            | 1436.2 | 2448.0  | 1838.0 | 3557.5 | 1283.3                                                            | 2077.0   | 1597.4 | 1598.3 |
| Apr 30                | na                            | 1436.2 | 2448.0  | 1838.0 | 3558.2 | 1283.3                                                            | 2077.0   | 1597.4 | na     |
| FLOOD CONTROL, shifts |                               |        |         |        |        | shifted urc's                                                     |          |        |        |
| Drafts, KAF           |                               |        |         |        |        |                                                                   |          |        |        |
| Apr 15                | na                            | na     | na      | na     | na     | 555                                                               | 0        | 32     |        |
| Elevations MSL        |                               |        |         |        |        |                                                                   |          |        |        |
| Apr 15                | na                            | na     | na      | na     | na     | 1283.1                                                            | 2077.0   | 1598.3 |        |
| SHIFT POTENTIAL, KAF  | 1/                            | 2/     | 3/      | 4/     | 1/     | DWR SYS F.C. MINUS LOC F.C. ie<br>POTENTIAL STORAGE SHIFT TO GCL. |          |        |        |
| Apr 15                | 18                            | 555    | 555     | 4602   | 2/     | GCL F.C. PLUS 1/.                                                 |          |        |        |
| Apr 30                | NO SHIFT ALLOWED BY 30 APRIL. |        |         |        | 3/     | BRN F.C. PLUS 2/.                                                 |          |        |        |
|                       |                               |        |         |        | 4/     | MAXIMUM TOTAL THAT 2/ or 3/<br>CAN ADD UP TO.                     |          |        |        |

|                |               |       |            |     |                          |     |      |      |  |
|----------------|---------------|-------|------------|-----|--------------------------|-----|------|------|--|
| =====          | AT THE DALLES |       |            |     |                          |     |      |      |  |
| Apr-Aug mp     | 49600         | 53.2% | storage    |     | Peak to volume unreg,    |     | 248  | KCFS |  |
| Apr-Aug change | -2600         |       | correction |     | Initial controlled flow- |     |      |      |  |
| May-Aug mp     | 42501         |       | 21268      | KAF | (ICF)                    | 200 | KCFS |      |  |

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/a. LRC is DWORSHAK LOCAL RULE CURVE.

/b. Under certain conditions, the GCL, BRN and DWR rule curves may be "shifted".

The rule curves shown are the "maximum" allowable. All or part of the "max" volume may be "shifted". DWR has priority over BRN if all volume can't be shifted. "shifts" will be determined on a case by case basis, from year to year, and month to month.

/c. Flood control elevations for HUNGRY HORSE are based on VARQ flood control procedures.  
Reference letter dated 9 January, 2001 from The Bureau of Reclamation to the Corps of Engineers requesting implementation of VARQ flood control procedure beginning January 2001.