

**COLUMBIA RIVER WATER MANAGEMENT GROUP
MEETING NO. 497**

1. ATTENDANCE

The following met at 9:30 a.m., on Tuesday, November 10, 1998, in the Custom House, Portland, OR.

Members or Alternates Present

Peter Brooks, Corps of Engineers, Chair
Nancy Stephan, Bonneville Power Admin
Lori Postlethwait, US Bureau of Reclamation
Tom Fero, National Weather Service-RFC
Roger Ross, Corps of Engineers

Others Present

Dušica Jevremović, Fish Passage Center
Dana Reedy, NW Power Pool
Tim Heizenrader, PacifiCorp
Cathy Hlebechuk, Corps of Engineers, NWD-RCC
George Fong, Corps of Engineers, Portland Dist

Members Not Present or Represented

Ed Hubbard, U.S. Geological Survey
National Marine Fisheries Svc
Doug McChesney, Washington Dept of Ecology
Dan Moore, Natural Resources Conservation Svc
Jack Gakstatter, U.S. Environ'l Protection Agy
Bruce McCammon, U.S. Forest Service
Walter Boyle, Federal Energy Regulatory Comm
Marvin Yoshinaka, U.S. Fish and Wildlife Service
Bill Brooks, Bureau of Land Management
B Ondrechen, Idaho Dpt Water Resources & Cons
Barry Norris, Oregon Dept of Water Resources
Mike Turnipseed, Nevada State Engineer
Gordon Fassett, Wyoming State Engineer
Jack Stults, Montana Dept of Natural Res & Cons

2. WEATHER SUMMARY

October weather was slightly cooler than normal with generally below normal precipitation as reported by Tom Fero (Enc 1). Rainfall ranged from a low of 34% of normal in Central Washington to 144% in the Okanogan. Nine of the 30 sub-basins had rainfall in the normal range (80-120%), one was above normal, and 20 were below normal.

Monthly precipitation for October averaged 76% of normal for the Columbia Basin above Grand Coulee, 66% of normal for the Snake Basin above Ice Harbor, and 68% for the basin above The Dalles. In other key basins it was 89% (Kootenai), 81% (Clearwater), and 99% (Willamette).

3. STREAMFLOW

The USGS report shows that streamflows throughout the Columbia Basin generally increased but still remained near or below normal (Enc 2). The largest increases from the previous month were on the Wilson and Skykomish rivers even though their average monthly flows remained below normal.

Adjusted mean monthly streamflow for October for the Columbia River at The Dalles was 66,600 cfs and for the Willamette River at Salem the adjusted flows was 5,280 cfs.

4. SURFACE WATER SUPPLY INDEX

Oregon SWSI on 1 November indicated normal or better supply of water available in 13 of the 14 water supply areas (Enc 3). The North Coast region was the lowest with -1.6, indicating a lower-than-normal, but not seriously, water supply.

5. RESERVOIR OPERATION

Reclamation projects have generally drafted many to less than half their capacity, while the carryover

to next year appears to be excellent, according to Lori Postlethwait (Enc 4). **Jackson Lake** has been drafted 68% of its capacity, **Cascade** is at 24%, **Prineville** is at 57%, and the **Boise system (Arrowrock, Anderson Ranch , and Lucky Peak)** is at 53%,

Active content available on October 31 at **Franklin D. Roosevelt Lake** (behind **Grand Coulee Dam**) was 4,624,810 af--89% of capacity. Active content of **Hungry Horse** was 2,329,580 af--78% of capacity.

Cathy Hlebechuk summarized the operation of the Corps' projects (Enc 5). **Libby** outflow was set to reach the target elevation of 2411 ft (the Upper Rule Curve) by the end of December. **Albeni Falls** is drafting slowly to reach 2055 ft by November 15. **Dworshak** outflows are currently 1.3 kcfs (minimum flow) and are expected to remain at this level through December. **Lower Granite** inflow was 24.1 kcfs, 91% of normal. **Lower Monumental** and **Little Goose** are now operating in their normal operating pool levels to submerge fish ladder entrances at **Little Goose** and **Lower Granite** in order to facilitate adult passage. Flip lip construction at **Ice Harbor** is expected to be completed in November. All **Willamette projects** were drafting for flood control and are expected to reach minimum pool by November 15.

6. POWER OPERATIONS

No report.

7. OTHER

With the website publishing of the Annual Report (Blue Book) a better document outline was developed (Enc 6) with the document divided into several FTP files that are linked so that a reader can download portions of the report without accessing the entire document. There will be static files which contain project data, general operating criteria, and maps. The dynamic files will contain anything that changes from year to year: weather, streamflow, reservoir operations, projects benefits such as power generation, recreation, flood damages prevented, etc, and the charts that describe the annual operation of the projects.

Following a lengthy discussion of the pros and cons of various Group meeting schedules it was agreed that the meeting schedule would be reduced to January, April, July, and October, with other meeting scheduled on an as-needed basis. These needs might include unusually heavy precipitation and anticipated runoff or drought conditions, etc.

In discussions of updating the hydrologic normal, BPA was asked to examine the PNCA and other agreements that use these values to help determine when they should be done, the required period of updating, and who would do and pay for the work.

8. NEXT MEETINGS

The next meetings are tentatively scheduled for 9:30 a.m., in the Customs House, Room 118, on January 12.

Roger L. Ross
Secretary

Enclosures

1. Weather Summary <http://www.nwrfc.noaa.gov/cgi-bin/mjresources.pl>
http://www.nwrfc.noaa.gov/web_res/ppm.afs
2. Streamflow Summary
3. SWSI <http://crystal.or.nrcs.usda.gov/snows-surveys> click on **DATA**, then **SWSI**
4. USBR Project Summary <http://mac1.pn.usbr.gov/hydromet/yakstat.txt> Yakima project statistics
<http://mac1.pn.usbr.gov/hydromet/denver.txt> under **RESERVOIR STORAGE**
5. Corps Project Summary
6. BlueBook Organization

US GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
Oregon District
COMPARATIVE FLOW TABLE FOR OCTOBER 1998

Station	Monthly mean discharge		Change in discharge from previous month (percent)	Discharge near end of month	Date	WY to date Accumulated Runoff
	Cubic feet per second	Percent of average	Cubic feet per second	Oct Percent of Average		
John Day River at Service Creek, OR	465	127	+57	445	31	127
Wilson River nr Tillamook, OR	338	73	+390	194	31	73
Umpqua River nr Elkton, OR	1,830	101	+15	1,840	31	101
Columbia River at The Dalles, OR	66,600 (a)	78	-14	109,200	31	78
Willamette River at Salem, OR	5,280 (a)	77	+35	13,300	31	77
Chehalis River nr Grand Mound, WA	408	46	+36	306	31	46
Skykomish River nr Gold Bar, WA	1,611	69	+247	861	31	69
Spokane River at Spokane, WA	1,435	93	+47	2,110	31	93
Snake River at Heise, ID	4,333(a)	108	-11	4,360	31	108
Snake River at Weiser, ID	15,001	96	+ 8	15,600	31	96
Salmon River at White Bird, ID	5,103	98	-5	4,840	31	98
Clearwater River at Spalding, ID	2,939(a)	75	-3	2,600	31	75
Clark Fork at St. Regis, MT	3,139	87	+5	2,970	31	87
MF Flathead River nr West Glacier, MT	445	46	-29	377	31	46

Percent of Average computed using 30-year base period, Water Years 1961-90

(a) adjusted for upstream storage

10/06/98

Enc 2

CORPS OF ENGINEERS, NORTH PACIFIC DIVISION
REPORT FOR NOVEMBER 1998 CRWMG MEETING

Libby.

The reservoir began October near elevation 2437.9 ft . The project is targeting 2411ft which is the Upper Rule Curve, by the end of December. Outflows were a flat 8 kcfs October 1 – 15 and were reduced to 6 kcfs for the rest of the month at the request of BPA. Flows were reduced at the rate of 10% per day by recommendation of U.S.F.W.S. bulltrout constituents. The end of October elevation was 2433.5 ft. Flows are expected to continue at 6cfs flat through November. When the weather gets cold, the project is expected to start peaking for power production. The October inflow was 4.07 kcfs, 73 % of average.

Albeni Falls.

Albeni Falls has been drafting for winter flood control since 8 September. Outflows averaged 17 kcfs in October. The end of October elevation was 2055.78 ft. The winter minimum elevation of 2055ft is targeted by 15 November. The unregulated inflow to Lake Pend Oreille was 5.2 kcfs, 53% of average in October.

Dworshak.

Outflows have been 1.3 kcfs (minimum flow) since September 1 and are expected to remain at this level through December. The December 15 flood control elevation is 1558 ft. Inflow in October was 1.06 kcfs, 66% of average.

Lower Snake Projects.

Lower Granite October inflow was 24.1 kcfs, 91% of average. Lower Monumental and Little Goose are now operating in their normal operating pool levels to submerge fish ladder entrances at Little Goose and Lower Granite to facilitate adult passage. Flip lip construction work started again at Ice Harbor in September and is expected to be completed in late November. Goal is no spill and to maintain enough storage in reservoir to give the contractor at least 3 hours to vacate downstream work area before spilling.

Willamette Basin Projects.

All Willamette projects were drafted for flood control during October. Reservoir outflow rates remained steady during October due to relatively dry weather over the basin. Dorena and Cottage Grove dams both reached minimum conservation pool at the end of October and are currently passing inflow. Fern Ridge, Fall Creek, Blue River and Foster Dams are expected to reach minimum pool by Nov. 15. All the remaining projects are expected to reach minimum pool by the end of November with Green Peter reaching minimum pool at the end of December.

Revised Proposed Annual Report Water Year 1998 Organization

☒ Annual Reports (Blue Book)

☒ Static Data

- Charter
- Membership
- Basin Description
- Agreements
- General Operations
- Definitions
- Abbreviations
- Project Data (Pertinent Data)

☒ Dynamic Water Year Data

☒ 1999

☒ 1998

☒ Summary

☒ Weather and Hydrologic Events

- Weather
- Climate
- Snow
- Soil Moisture
- Streamflow
- Floods
- Runoff Volumes
 - Forecast
 - Verification

☒ Reservoir Operation

☒ Upper Columbia Projects

- | | | |
|--------------------------------|-------------------------------|---------------------|
| - Mica | - Revelstoke | - Keenleyside |
| - Libby | - Kootenai R at Bonners Ferry | - Duncan |
| - Kootenay Lake | - Columbia R at Birchbank | - Hungry Horse |
| - Flathead R at Columbia Falls | - Kerr Dam | - Albeni Falls |
| - Grand Coulee | - Chief Joseph | - Mid-Columbia PUDs |
| - Yakima | | |

☒ Snake Projects

- | | | |
|----------------------------|---------------|---------------------|
| - Jackson-Palisades | - Ririe | - American Falls |
| - Little Wood | - Owyhee | - Boise |
| - Malheur | - Payette | - Snake R at Weiser |
| - Powder | - Brownlee | - Dworshak |
| - Clearwater R at Spalding | - Lower Snake | |

- ☒ Lower Columbia Projects
 - Mill Creek - Willow Creek - McNary
 - Upper Deschutes - John Day - Bonneville
 - Cowlitz
- ☒ Willamette Projects
 - Hills Creek - Lookout Point-Dexter - Fall Creek
 - Cottage Grove - Dorena - Cougar
 - Blue River - Fern Ridge - Green Peter
 - Foster - Detroit-Big Cliff - Scoggins
- ☒ Puget Sound and Coastal Projects
 - Wynoochee - Mud Mountain - Howard A Hanson
 - Lk Washington Ship Canal - Ross - Baker
- ☒ Rogue and Oregon Coastal Projects
- ☒ Special Operations
- ☒ Benefits from Operation
 - ☒ Flood Damages Prevented
 - ☒ Power Generation
 - ☒ Irrigation
 - ☒ Navigation
 - ☒ Recreation
 - ☒ Water Quality
 - ☒ Fisheries
- ☒ Major Basin Studies
 - ☒ Columbia River Treaty
 - ☒ Pacific Northwest Coordination Agreement
 - ☒ System Operation Review
- ☒ Major Construction and Planning
 - ☒ Federal
 - ☒ Non-Federal
- ☒ Future Operations
 - ☒ General Guidelines
 - ☒ Rule Curves
- ☒ CRWVG Meetings
 - Travel
 - Sub Committees
- ☒ Charts
 - ☒ T and P Indices
 - ☒ Annual Project Hydrographs
 - ☒ Detailed Flood Regulation
 - ☒ Summary Hydrographs