

CORPS OF ENGINEERS, NORTH PACIFIC DIVISION
REPORT FOR MAY 2000 CRWMG MEETING

Libby.

Lake Koocanusa was at elevation 2337.01' on March 31. Libby outflows averaged 4.0 kcfs in April. The actual end of April elevation was 2366.06. Libby inflow in April was 11 kcfs, 137% of normal. Inflows October – April were 149% of normal. Precipitation in the Kootenai Division in April was 2.19 inches, 135% of normal for the month. Precipitation for the October – April time frame was 117% of normal. The project is on minimum flow (4 kcfs) and is expecting to remain here until sturgeon augmentation flows are requested in May or June. The May final volume forecast is 6964 kaf, 109.2% of normal for April - August.

Albeni Falls.

The Corps planned on operating the project 2053' – 2054' through April and start refill in May. High inflows in April filled the project to 2055.65' by the end of the month. Average monthly outflow in April was 32.4 kcfs. April unregulated inflow was 43.4 kcfs, 124% of average. This was a dramatic increase from March which was 13.4 kcfs, 79% of average. Plans are to fill the project to about 2060' by Memorial Day.

Dworshak.

The reservoir began April at elevation 1522.2 feet. Dworshak outflows averaged 14.45 kcfs in April. The project was augmenting Lower Granite flows for most of the month, and outflows were maintained to provide 110% total dissolved gas between 4 – 30 April. 110% tdg was the maximum outflow from the project as EPA and the State of Idaho issued a gas waiver to go to 120% but put a lot of restrictions on the gas waiver that could not be met. The inflow to Dworshak in April was 16 kcfs, 144% of average. The end of month elevation was 1529.26 feet. Precipitation in April in the Clearwater Division was 1.8 inches, 70% of normal. The April final volume forecast is 2665 kaf, 98.3% of normal for April - July. The project reduced to minimum flow (1.5 kcfs) on 12 May after discussion at TMT to put a priority on refill.

Lower Snake Projects.

Lower Granite April unregulated inflow was 92.7 kcfs, 117% of average. Lower Granite outflows ranged between 55 and 115 kcfs during the month of April and averaged 90.2 kcfs. All Lower Snake projects went to minimum pool operations (MOP) between 5 and 10 April. They are all operating in their lowest foot operation to attempt to increase the velocity in the river to facilitate juvenile fish passage downstream. All projects started night time spill for fish passage between 4 and 10 April. Ice Harbor also started day time spill on 4 April.

Willamette Basin Projects.

APRIL

Inflows for the month of April ran about 92 percent of average across the basin. The first half of April was dry while the second half was much wetter. Additionally, flow objectives of 18.5 kcfs for fish migration by the National Marine Fisheries Service have required drafting of Lookout Point, Blue River, Cougar and Green Peter reservoirs thereby delaying or possibly not filling these reservoirs. As of 31 April, Lookout Point, Blue River, Cougar, and Green Peter were approximately 8, 49, 2, and 22 percent below project rule curves. Fern Ridge reservoir was about 10 percent below the rule curve. The rest of the projects should fill on schedule. Detroit project will be the first project to fill. The flow objective at Salem is 15 kcfs for the month of May. Flows at Salem averaged 19.2 kcfs for the month of April.

Libby.

Lake Koocanusa was at elevation 2355.06' on April 30. Libby outflows averaged 4.0 kcfs in May. The actual end of May elevation was 2397.07'. Libby inflow in May was 23 kcfs, 84% of normal. Inflows October – May were 119% of normal. Precipitation in the Kootenai Division in May was 1.76 inches, 86% of normal for the month. Precipitation for the October – May time frame was 113% of normal. The project was on minimum flow (4 kcfs) for the entire month of May. USFWS requested a sturgeon pulse start in June. They planned on fertilizing eggs from 3 sturgeon at the Bonners Ferry Hatchery on May 29 and putting the fry in the river on June 12. Flows were increased starting on June 6 and were slowly increased. 25,000 cfs was reached the morning of June 12. USFWS originally requested flows remain at this level for 19 days but later revised their request to 17 days. The project is scheduled to start decreasing flows the morning of 29 June. Flows will continue to be decreased until 3 July when 8,000 cfs is reached. Current plan is to maintain this flow through the month of July. The June final volume forecast was 6962 kaf, 109.2% of normal for April - August.

Albeni Falls

Albeni Falls was at 2059.05' on 31 May reached it's summer operating range of 2062' – 2062.5' on 15 June. Average monthly outflow in May was 42.4 kcfs. May unregulated inflow was 66.3 kcfs, 88% of average. Actual outflows reached a peak of 52 kcfs on 18 – 19 June.

Dworshak.

The reservoir began May at elevation 1529.3 feet. Dworshak outflows were 15.1 kcfs on 1 May and were slowly reduced to 1.5 kcfs by 12 May to facilitate refill. The end of May elevation was 1577.3'. Flows remained at 1.5 kcfs through the entire month of May. The Dworshak National Hatchery made fish releases on 31 May and requested 52 – 53 degree water from the project starting 1 June. The project raised the selector gates on the water temperature control structure to accommodate this request. Outflows remained at about 1.5 kcfs through 13 June when the pool elevation reached 1594.4' (5.6' from full), Outflows were increased to 4.8 kcfs and were adjusted throughout the month in an attempt to full 30 June at the request of the Salmon Managers. The inflow to Dworshak in May was 15.9 kcfs, 94% of average. Precipitation in May in the Clearwater Division was 2.8 inches, 100% of normal. Precipitation for the period October – May was 24.71", 102% of normal.

Lower Snake Projects.

Lower Granite May unregulated inflow was 98.9 kcfs, 84% of average. Lower Granite outflows ranged between 62 and 99 kcfs during the month of May and averaged 84.2 kcfs. All Lower Snake projects started their minimum pool operations (MOP) between 5 and 10 April. They are all operating in their lowest foot operation to attempt to increase the velocity in the river to facilitate juvenile fish passage downstream. All projects started night time spill for fish passage between 4 and 10 April. Ice Harbor also started day time spill on 4 April.

Willamette Basin Projects.

MAY

Inflows for the month of May ran about 104 percent of average across the basin. The first second half of May were 112 and 97 percent of average respectively. Additionally, flow objectives were 6 and 15 kcfs for Albany and Salem. Monthly averages were 12.5 and 21.3 kcfs for Albany and Salem. Natural flows and normal project releases were sufficient to support flow objectives allowing most of the project to be full by the end of May with the exceptions of Blue River and Green Peter Reservoir. Foster reservoir was not

scheduled to be full until the end of May due to juvenile fish operations and safety concerns regarding floating debris.

JUNE

Inflows for the month of June ran about 94 percent of average across the basin. Additionally, flow objectives were 4.5 for Albany. The month average was 8.2 kcfs. Flow objectives for the first and second half of June for Salem were 12.5 and 8.5 kcfs. The averages were 17.4 and 13.8 kcfs respectively. Most projects were at or near full and passing inflow according to the project rule curves and multiple uses of the projects. The exception was Blue River which was about 17 feet from full and will most likely not fill this water year. Green Peter filled on 2 June due to a heavier than normal rain event.

CORPS OF ENGINEERS, NORTH PACIFIC DIVISION
REPORT FOR JULY 2000 CRWMG MEETING

Libby.

Lake Koocanusa was at elevation 2397.07' on May 31. Libby outflows averaged 17.4 kcfs in June. The actual end of June elevation was 2418.12'. Libby inflow in June was 29.8 kcfs, 75% of normal. Inflows October – June were 102% of normal. Precipitation in the Kootenai Division in June was 1.86 inches, 78% of normal for the month. Precipitation for the October – June time frame was 109% of normal. The project was on minimum flow (4 kcfs) through 5 June and then gradually increased to 25 kcfs by the morning of 12 June for the sturgeon pulse. Flows were increased starting on June 6 and 25,000 cfs was reached the morning of June 12. USFWS originally requested flows remain at this level for 19 days but later revised their request to 17 days. The project started decreasing flows the morning of 29 June and outflows of 8 kcfs were reached on 3 July. Current plan is to maintain this flow through the month of July. August outflows will be adjusted above 8 kcfs if needed to draft the reservoir to 2439' by the end of the month.

Albeni Falls

Albeni Falls has been operating in it's summer operating range of 2062' – 2062.5' since 15 June. Average monthly outflow in June were 23.1.4 kcfs and ranged between 27.8 and 53.2 kcfs. June unregulated inflow was 52.7 kcfs, 67% of average.

Dworshak.

The reservoir began June at elevation 1577.3 feet. Dworshak outflows averaged 3.8 kcfs during June. They were about 1.5 kcfs between 1 – 13 June and varied between 3.3 – 6.8 kcfs the rest of the month. The project reached a maximum elevation of 1598.7' on 22 June. The TMT could not reach agreement on Dworshak operation so it was elevated to the Implementation Team. The IT recommended releasing 47 degree water and full load starting 7 July, and then increasing discharge up to 110% gas if the Lower Granite temperature exceeded 68 degrees. Flows were increased above full load starting Saturday, 8 July. The inflow to Dworshak in June was 10.1 kcfs, 78% of average. Precipitation in June in the Clearwater Division was 1.4 inches, 56% of normal. Precipitation for the period October – June was 26.1", 98% of normal.

Lower Snake Projects.

Lower Granite June unregulated inflow was 69.5 kcfs, 59% of average. Lower Granite outflows ranged between 38.5 and 86 kcfs during the month of June and averaged 63.4 kcfs. All Lower Snake projects started their minimum pool operations (MOP) between 5 and 10 April. They are all operating in their lowest foot operation to attempt to increase the velocity in the river to facilitate juvenile fish passage downstream. All projects started night time spill for fish passage between 4 and 10 April. Ice Harbor also started day time spill on 4 April. Spill for fish passage stopped on 20 June at MCN, LWG, LGS and LMN.

Willamette Basin Projects.

MAY

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JUNE

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