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To: David Clugston
From: Chris Peery, Lowell Stuehrenberg
RE: Behavior in the forebay of Bonneville Dam – 2002

Per your request, we made a preliminary summary of the behavior of spring and summer chinook salmon in the forebay of Bonneville Dam this past year. All values are for first passages of fish only.

Of 496 salmon that exited the Washington-shore ladder, 494 moved up the Washington shore, of which 6 moved back down to the dam after passing 0.2 km upstream and 2 fish moved into the spill channel before moving upstream.

Of 379 salmon that exited the Bradford ladder, 202 moved upstream with no downstream movement or being in the spill channel, of which 55 moved to the Oregon shore first. Ten fish moved downstream in the first powerhouse channel before moving upstream, of which 4 crossed to the Oregon shore. A total of 167 salmon moved in or crossed in front of the spill channel, of which 4 had moved to the Oregon shore prior to moving to the spill channel. Of these 167 fish, 105 entered the spill channel (2 of 105 were on the Oregon shore first).

A total of 109 salmon were released off the end of the floating navlock wall, of which 85 salmon moved directly upstream (10 of 85 crossed to Bradford island side before moving upstream), 5 fish moved downstream to PH1 then upstream (4 of 5 moved to Bradford Island first), and 19 fish moved into or crossed in front of the spill channel (18 of 19 were recorded on the south shore of Bradford Island first). Of the 19 EFG fish that moved into or crossed in front of the spill channel, 12 were in the channel at the spillway monitors (11 of the 12 were recorded on the south shore Bradford Island).

A total of 107 salmon were released off the north side of the navlock wall near PH1, of which 77 fish moved upstream without moving to PH1 (19 of 77 were on Oregon shore before leaving the channel), 10 fish moved downstream in the first powerhouse channel before moving upstream, but none moved to Bradford Island, 20 fish moved into or crossed the spill channel (17 of 20 had moved to the south shore of Bradford Island first). Of the 20 NFG fish that moved into or crossed in front of the spill channel, 8 were in the channel at the spillway monitors. One additional fish crossed to the monitor on the south shore of Cascade Island and then moved downstream to a spillway monitor.

A total of 100 salmon were released on the Oregon shore, 78 of which moved upstream without moving downstream (12 of 78 moved to Bradford Island first), 10 fish moved downstream before leaving the PH1 channel, none moved to Bradford Island, and 12 fish moved into or crossed the spill channel (10 of 12 were on the Bradford south shore

first). All 12 of these fish that moved into or crossed the spillway channel, were at the spillway monitors in the spill channel.