COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION
729 N.E. Oregon, Suite 200, Portland, Oregon 97232 Telephone (503) 238-0667
Fax (503) 235-4228
www.critfc.org

TO: Technical Management Team (TMT)
FROM: Kyle Dittmer, *Hydrologist-Meteorologist*, CRITFC Hydro Program
DATE: November 2nd, 2005

SUBJECT: **Summary of Water Year 2005 Weather**

At the request of the TMT, this memo summarizes monthly weather events that impacted basin flows and fish migrations during Water Year 2005 (October 2004 - September 2005). WY 2005 was noted for extreme variability in precipitation and temperature patterns (Figures 1 and 2).

Autumn started wet then turned dry with above normal temperatures. October set new high records in the 81 to 88 ^{O}F range. December set the highest average basin departure for WY 2005. Such warmth hindered initial snow pack development.

Winter stayed very dry and warm. Mid-winter record highs ranged 60-65 ^{O}F. March set many new daily high temperature records in the 70 to 75 ^{O}F range. The extended dry spell ended in late March. Snow-packs suffered until then.

Spring was extreme. A "near normal" April quickly transitioned into a very warm, very wet May, especially in the Snake basin. One station reported a +17 ^{O}F departure in May. June was very wet across the basin. May produced new high records in the 80 to 95 ^{O}F range across the basin. Many stations set new daily precipitation records throughout all of spring.

Summer was also extreme. A dry summer was in-store for migrating salmon. A few record-breaking daily high temperatures were set in July and August. Strong storms broke the dry-spell on September 30th with 1-4 inch daily totals basin-wide and set new daily precipitation records.

Cumulative precipitation totals for Water Year 2005 for Columbia at The Dalles ended at 90%. The driest basins (Figure 3) were Southeast Washington (66%), Hood / Lower Deschutes (70%), and East slopes of the Washington Cascades (71%). The wettest basins were the Owyhee (117%), Snake River Plain (114%), and Flathead / Columbia above Castlegar (103%).

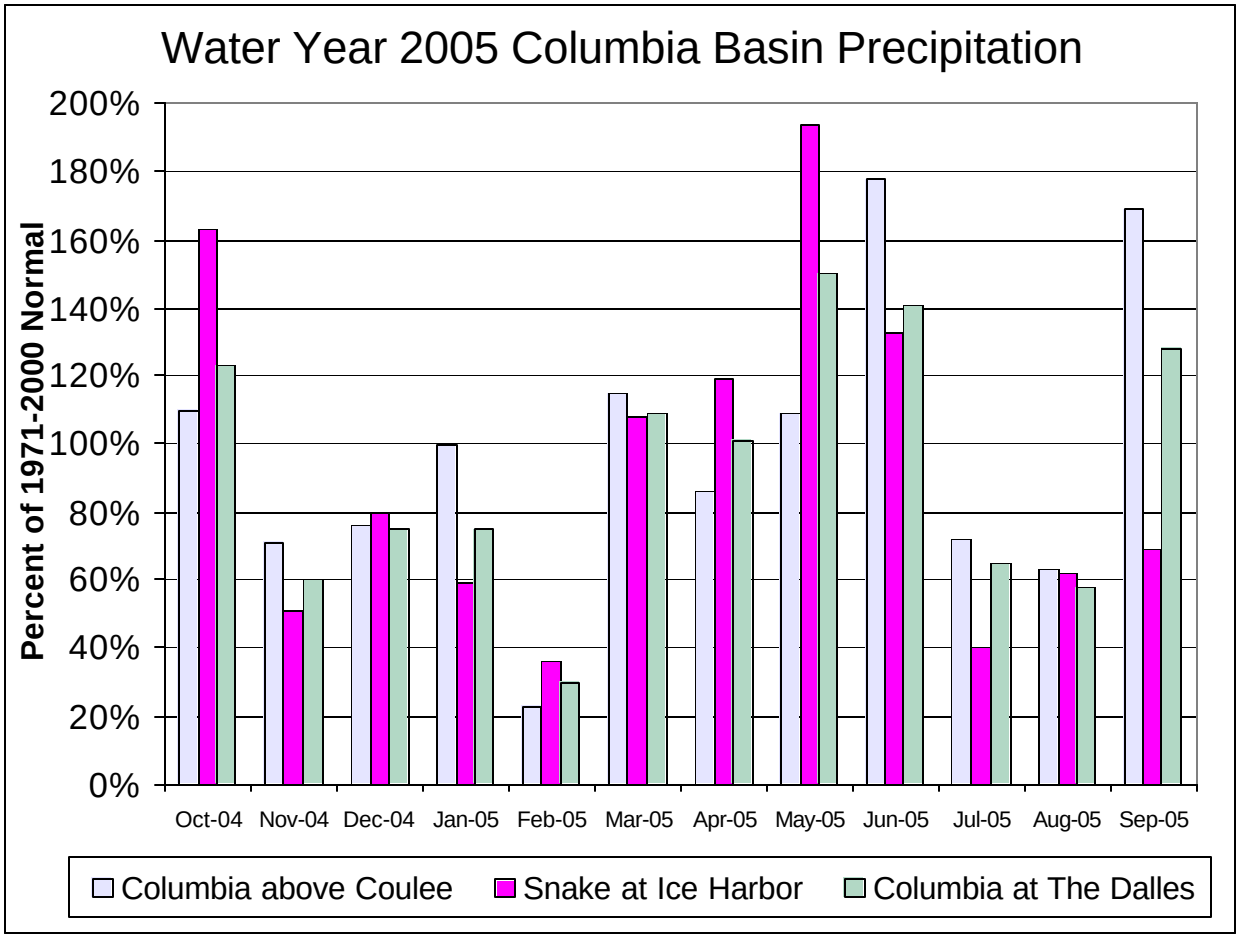

Figure 1. Water Year 2005 Division Precipitation Summary (NOAA-NWS-Portland data).

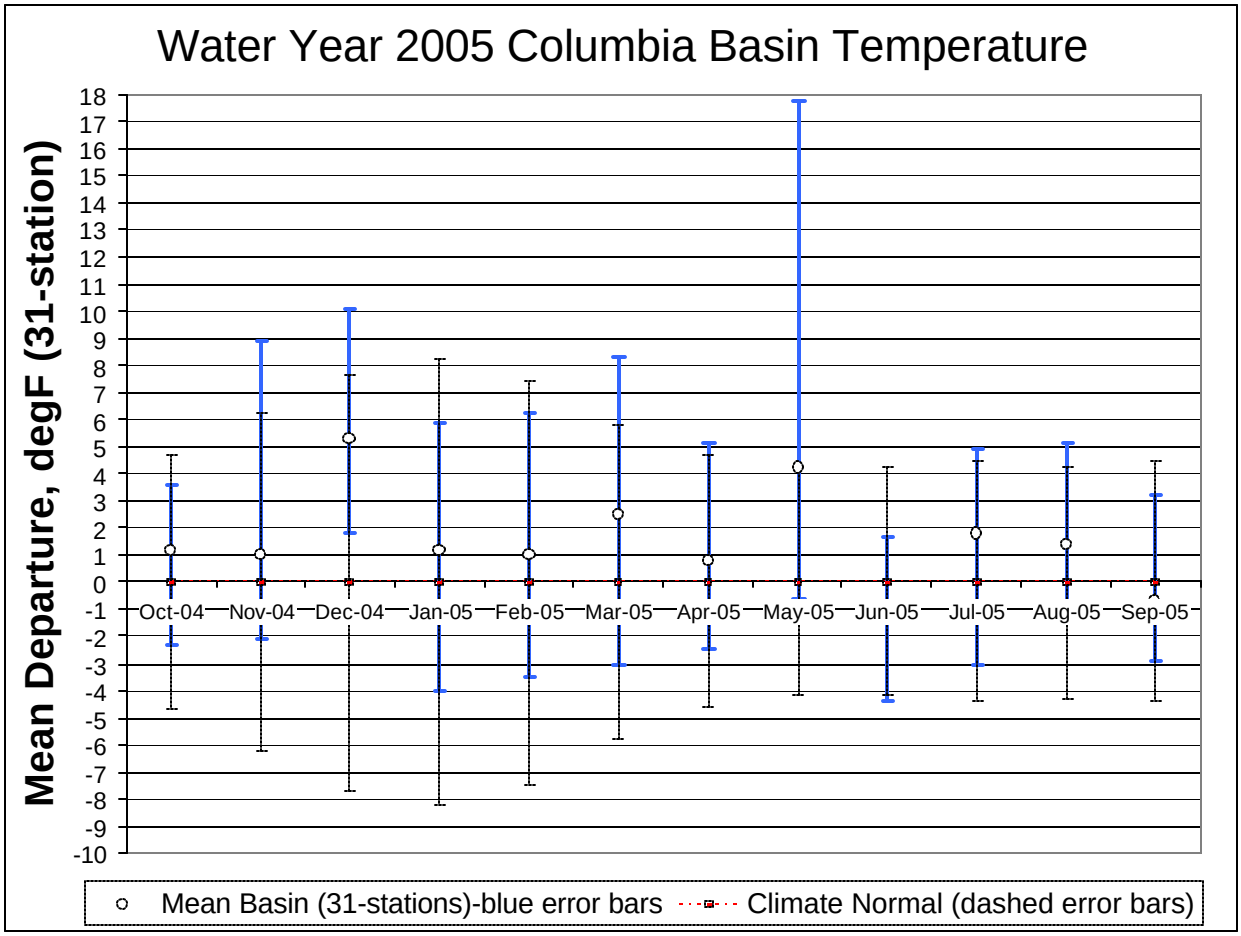

Figure 2. Water Year 2005 Temperature Departure Summary (NOAA-NWS-Portland data).

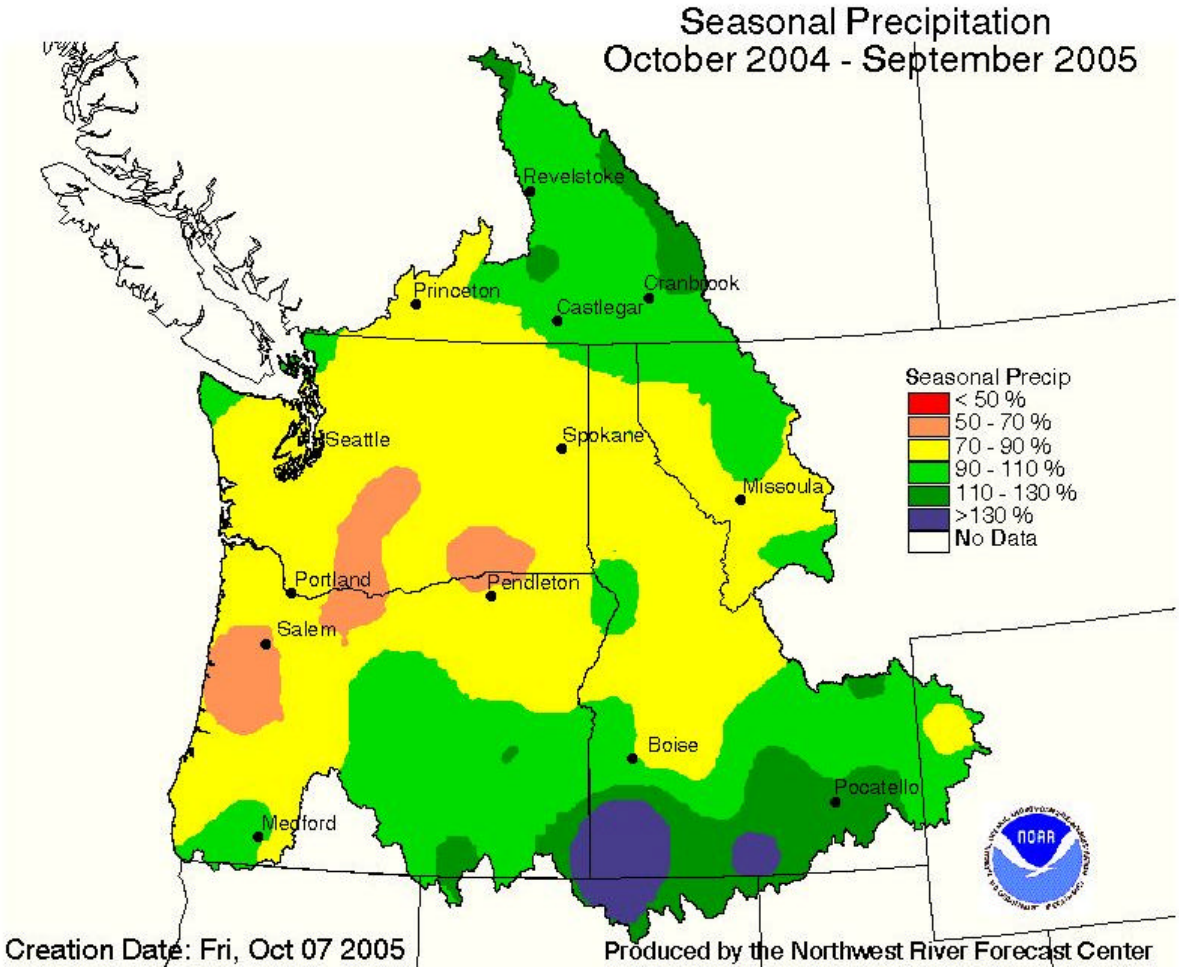

Figure 3. Water Year 2005 Columbia Basin Cumulative Seasonal Precipitation.