



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's Hydro Program
DATE: November 21, 2008

SUBJECT: **Summary of Water Year 2008 Weather**

At the request of the TMT, this memo summarizes monthly weather events that impacted basin flows and fish migrations in Water Year 2008 (October 2007 - September 2008). WY 2008 had much variability in precipitation and temperature patterns but more moderate (Figures 1 and 2).

Autumn started with a wet blast then cut back in November. A major triple storm punched the Pacific Northwest on December 2nd - 4th, with 39 station records being broken. Western Oregon and Washington received as much precipitation as the February 1996 floods. The Oregon Coast Range had up to 10-inches in 12-hours on Dec. 3rd. Widespread major flooding and mudslides followed. Temperatures were near normal (-0.6 to +1) with basin departures of -4.6 to +6.2 °F.

Winter started warm but an Arctic blast and snow hit in mid-January. "La Nina" re-emerged. Mountain snow-pack accumulations were very strong, even though valley weather was near normal. Temperatures were near normal (-2.2 to +1.2) with basin departures of -10 to +7.9 °F.

Spring dried out in the valley but the mountain snow continued into June. Snowfall in the Oregon Coast Range on April 20 set a new record for late season snow. Spring stayed cool, especially in April. A heat spike occurred on May 16-17 with temperatures in the mid 90s. Temperatures stayed above normal (-4.1 to +0.8) with basin departures of -10.8 to +4.1 °F.

Summer was very moderate. Record-breaking daily high temperatures hit August 14th-19th (101 to 109 °F) and mid-September (85 to 91 °F). Temperatures stayed slightly above normal (+0.5 to +1.6) with basin departures of -3.8 to +7.5 °F. The rain returned by September 20th.

Cumulative precipitation totals for Water Year 2008 for Columbia at The Dalles ended at 95%. The driest basins of the Columbia (Figure 3) were Central Washington (69%), Snake River Plain (74%), & Owyhee/Malheur (80%). The wettest basins were Hood / Lower Deschutes, Umatilla / John Day (109%), Clark Fork (107%), and Upper Snake (103%).

For the 2008-2009 climate forecasts, go to the Oregon-AMS website (under "Meetings"):

<http://www.ametsoc.org/chapters/oregon/index.html>

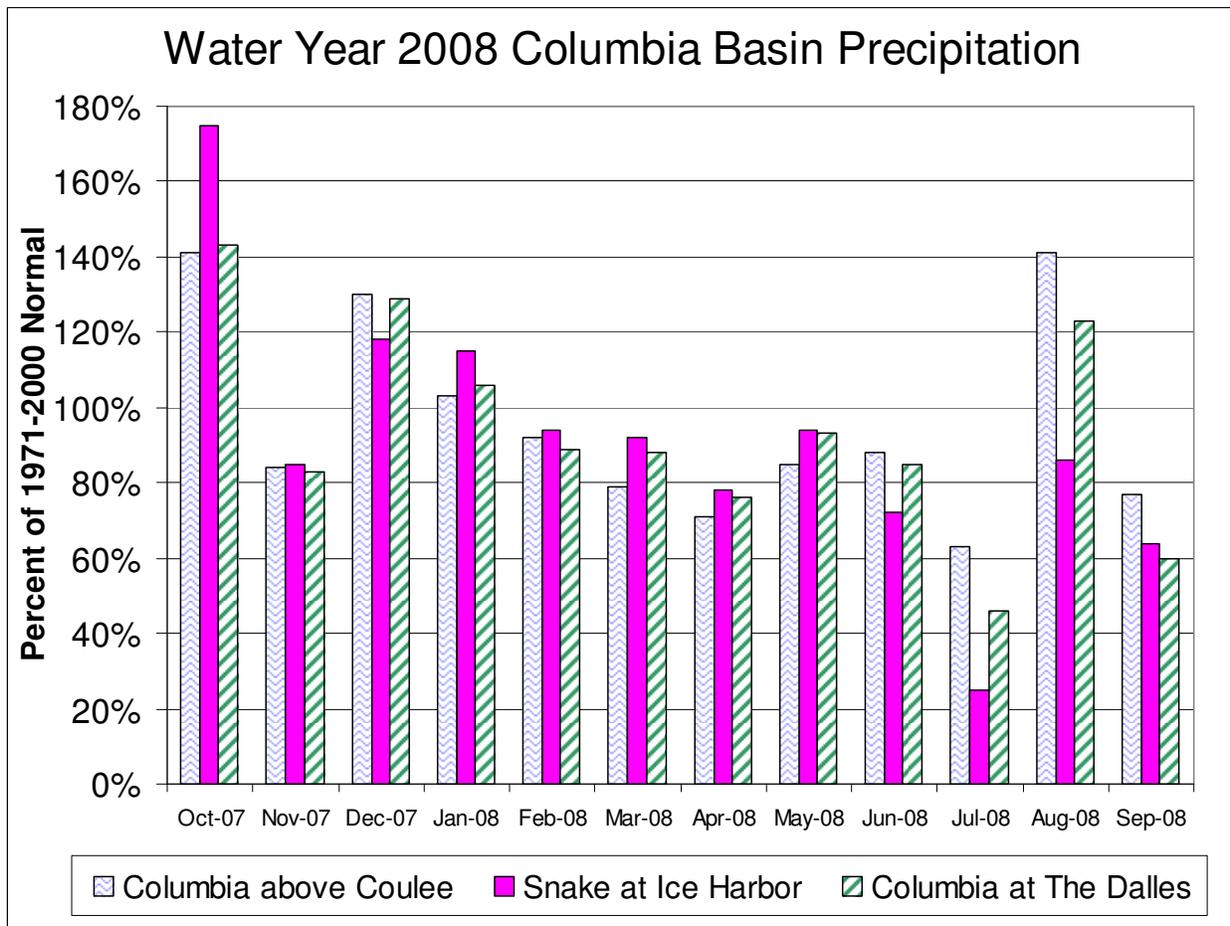


Figure 1. Water Year 2008 Division Precipitation Summary (NOAA-NWS data).

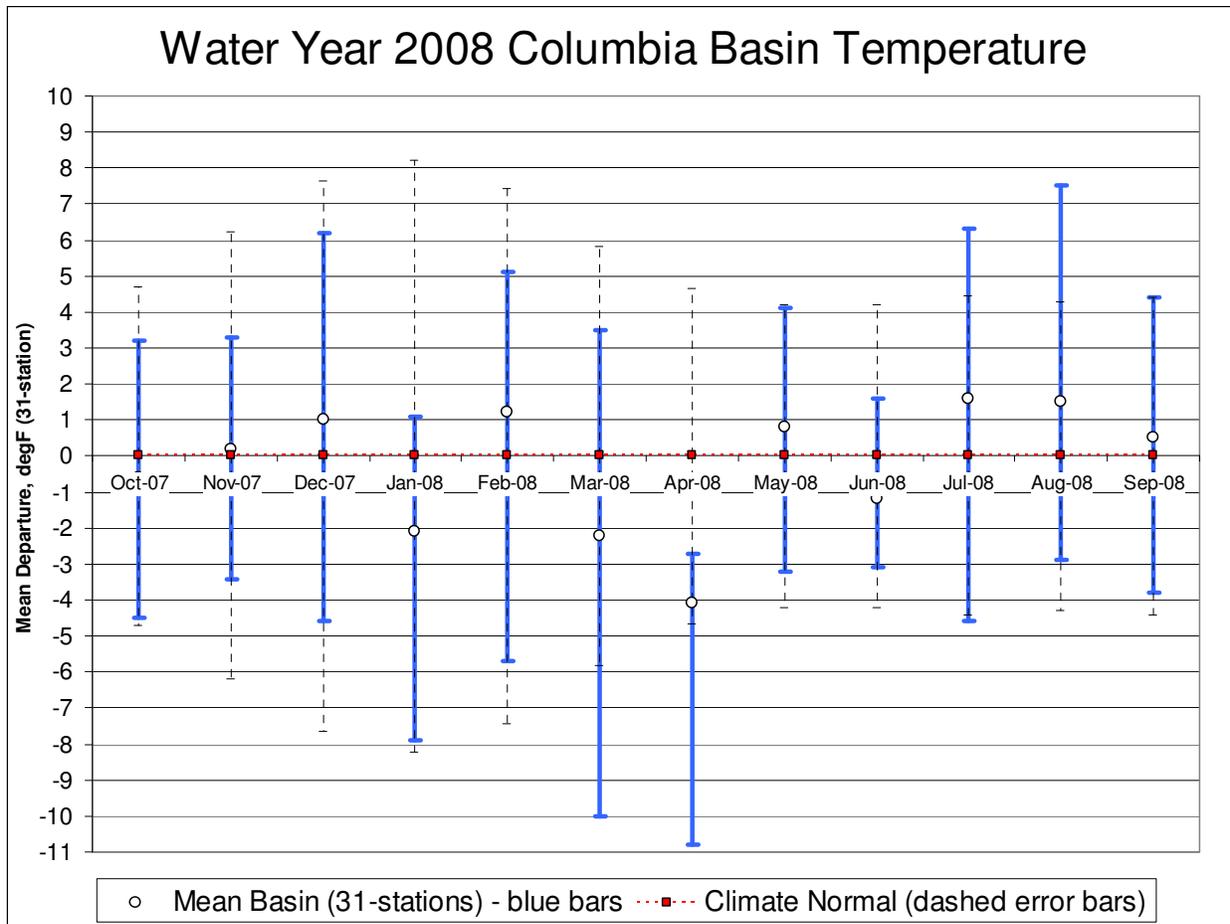


Figure 2. Water Year 2008 Temperature Departure Summary (NOAA-NWS data).

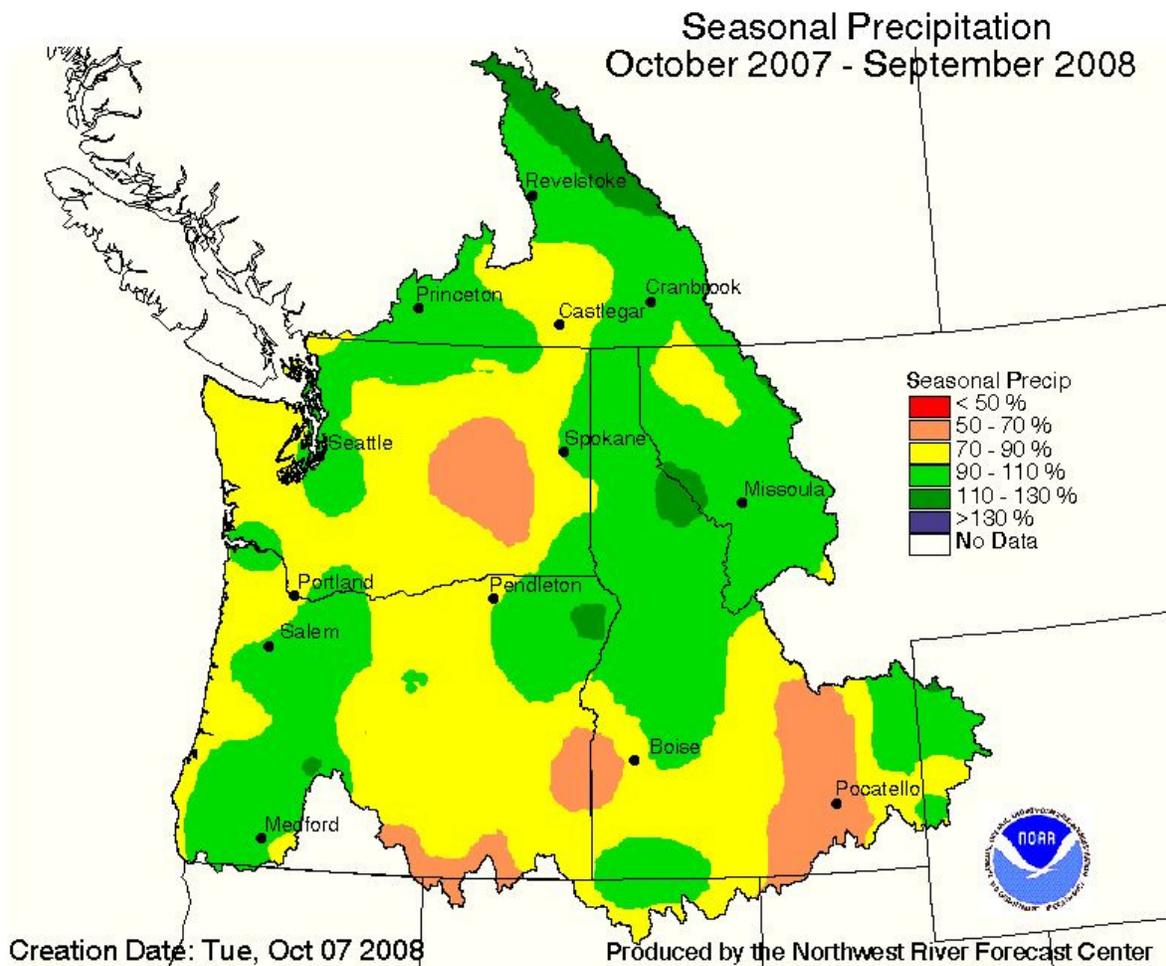


Figure 3. Water Year 2008 Columbia Basin Cumulative Seasonal Precipitation.