MEMORANDUM

APC SV

TO: RICK RAYMONDI, SEAN VINCENT

FROM: LIZ CRESTO LC

SUBJECT: SNAKE RIVER NEAR MURPHY 1980 -2010

DATE: 3/28/2011

This memo is in response to the request for staff memorandum regarding water right application 35-8359 in the name of John B. Kugler and Diane K. Kugler. As part of the request, the Director specifically asked for a compilation of flow data since 1980 at the Snake River near Murphy gage.

The Snake River near Murphy gage has been monitored since 1912. The gage is currently maintained and operated by Idaho Power. Idaho Power has operated the gage since 2001. Prior to 2001 the gage was operated by the USGS. The accuracy of the gage records is considered "good," which means that 95% of the daily discharges are within 10% of true.

The hydrograph below summarizes the historical data from the near Murphy gage for the period 1980 – 2010 and allows for comparison of the observed flows to the minimum flows stipulated by the Swan Falls Agreement. The yellow line represents the minimum average daily flow rate for each day of the year. The light blue, purple, and green lines identify the 25, 50, and 75 percent exceedance values, respectively. Finally, the blue shaded area represents the Swan Falls minimum streamflow at Murphy. The Swan Falls minimum flow is 3,900 cfs from April 1 through October 31 and 5,600 cfs from November 1 through March 31. Flows on the Snake River near Murphy have approached the Swan Falls minimum streamflow several times but there has been only one day since 1980 when the average daily flow was less than the minimum (December 14th, 1987), and that single occurrence can be attributed to the operation of C.J. Strike Reservoir. IDWR continually monitors the flows at Murphy to evaluate whether the Swan Falls minimum streamflow is being met.

