Supplemental CDFG Report on Upper Sacramento Late Fall Chinook Fishery

At its February 2009 meeting, the STT reviewed new angler harvest data provided by CDFG from the 2008 Late Fall Chinook fishery in the Upper Sacramento River basin. This fishery was authorized by the California Fish and Game Commission in 2008 with the intent that it could be prosecuted on the Late Fall run without impact to Sacramento Fall Chinook (SFC).

By applying the best published information available on stock composition to the estimated total number of fish harvested in this fishery, the STT made a preliminary determination that 650 SFC had been taken incidentally in the Late Fall fishery between November 1 and December 31, 2008. Therefore, these incidentally harvested fish would have accounted for approximately 1 percent of the total SFC escapement of 66,300 fish in 2008.

During the March 2009 PFMC meeting, the STT was asked to estimate the SFC harvest if the Late Fall fishery in the Upper Sacramento River occurred again in 2009. An estimate of 1,200 fish was determined by applying the 1 percent harvest rate to the total 2009 escapement estimate of 122,196 fish. Since any harvest on the SFC stock beyond 196 fish in 2009 will put it below the escapement goal for the third year in a row, the STT was asked to work with CDFG personnel to determine if modified provisions for this fishery might be proposed to minimize the incidental SFC harvest.

On March 25, 2009, members of the STT met with CDFG to review all available recent and historical data regarding the Late Fall run and fishery in the Upper Sacramento River. A key outcome of the meeting was that all participants agreed that if the Late Fall fishery in 2009 were to begin after November 15 and occur only between Knights Landing and Red Bluff Diversion Dam, the harvest of SFC would be negligible and zero impacts would be charged to the fishery for 2009.

One difficulty facing both the STT and CDFG in estimating impacts of the 2008 Late Fall fishery on SFC is that a determination of run composition of fish harvested in the fishery cannot be finalized until the in-river and hatchery escapement surveys for the Late Fall run are completed at the end of April 2009. Once available, the survey data will be used to “back into” an estimate of potential SFC impacts. Examination of tag data from fish taken in the 2008 Late Fall fishery alone cannot be used to directly estimate the number of SFC taken because Coleman National Fish Hatchery (Coleman) did not mark the SFC produced for the 2002-2005 brood years with coded wire tags. These brood years would have included the dominant age classes of fish expected to be taken in the Late Fall fishery (ages three and four). However, since Coleman did mark 100% of the Late Fall production fish for these years, and also marked SFC for brood years 2006 and beyond, there is some information about the run composition of the 2008 Late Fall fishery available at this time.

CDFG personnel examined 226 of the estimated 1,732 Chinook harvested in the fishery as part of the 2008 Late Fall fishery angler survey. None of the 226 fish were positively identified as SFC. However, since no SFC were marked from Coleman during the brood years most likely to return in 2008, this did not come as a surprise. Of the 147 coded wire tags that were recovered and read from the sampled fish, 146 were in fact Late Fall run fish from Coleman, which corresponds to a minimum 65% of the harvest. So while the complete run composition determination and resulting estimate of the number of SFC taken in the fishery is not yet available, based on the information from the angler survey available today, the meeting participants agreed that the STT’s estimated harvest of 650 SFC in this fishery was an overestimate.

After the full assessment of the Late Fall run is completed later this spring, CDFG will provide the STT with a revised and more precise estimate of 2008 fishery impacts, which will be generated utilizing more temporally-refined and location-specific harvest and return information.