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Canadian and United States managers met today to receive a report on the status of the Early Stuart sockeye run from Commission Staff. On July 10, Staff provided an update that indicated that the run would reach 1,100,000 fish compared to the DFO pre-season forecast of 1,044,000. This interim estimate allowed managers from the two countries to plan their respective management approaches. Today, Commission Staff presented further analyses of the Early Stuart sockeye abundance that indicated that the total run should reach 1,200,000 fish. This increase in the run size estimate was due to the unusual pattern of daily abundance seen in this year's Early Stuart run. Run-size estimation models generally assume a normally distributed (bell-shaped) arrival curve of abundance. The 1997 run appears to be bi-modal, an arrival pattern that has confounded the run-size estimation process. The first peak arrived in Canadian Area 20 (Juan de Fuca Strait) on July 4 and the second peak on July 14. Catches and escapements at Mission now total 825,000 Early Stuart sockeye. Strong daily abundances are expected to enter the Fraser River for the next several days.

Early Summer sockeye stocks have begun to appear in Canadian Area 20 and Area 12 (Johnstone Strait) test fisheries. Proportions remain low (10-15%) but are expected to increase over the next week along with the first arrivals of Summer run sockeye, particularly Quesnel, Late Stuart and Chilko stocks.

Johnstone Strait migration (diversion rate) of Early Stuart sockeye has been above normal levels. Test fishing catch data indicates that approximately 50% of the run has migrated via this route compared to the normal of about 15-20%. DFO's forecast of the 1997 sockeye diversion rate (all stocks) is 78%. At this level, the 1997 diversion rate would be the second highest on record, exceeded only by the estimated 80% diversion rate in 1983. In that year, a strong ENSO (El Nino-Southern Oscillation) event brought very warm water to the coasts of Oregon, Washington, British Columbia and Southeast Alaska. Sea surface temperatures this year are currently higher than observed in 1983 to the same date.

High snowpacks in the Fraser River watershed led to high river discharge in June. Recent (July 5-12) heavy rainfall events throughout the watershed have led to mud slides and washouts in the interior areas of B.C. and now have caused the Fraser River discharge to increase dramatically to record levels for the time of year. High turbidity accompanies this high discharge. Both factors have been shown to cause stress in sockeye during their migration upstream.

Early Stuart sockeye typically face the highest water of any Fraser sockeye as they migrate into the river before other major stocks. Early Hudson's Bay Company records from Fort St. James (1820-1900) and information from more recent years (1955-1982) show instances of migrational losses due to the combined influences of high discharge, temperature and turbidity. Conditions of record high discharge combined with extreme turbidity now existing in the Fraser River will cause delays to migration of the Early Stuart run and may result in significant enroute mortality. The extent of such losses cannot be predicted with accuracy.