The Fraser River Panel met three times during the current week to assess the run status of Fraser River sockeye stocks, including the status of the Late-run sockeye migration, which is the Fraser River sockeye run of highest management priority this season because of serious conservation concerns. The Panel approved the following updates on run size estimates at a meeting on August 25: 880,000 Early Summer-run sockeye and 6,200,000 Summer-run sockeye. Based primarily on the continued high abundance of Fraser sockeye migrating through Johnstone Strait, the Panel approved further upgrades in run sizes at a meeting on August 27: 6,700,000 Summer-run sockeye and 6,500,000 Late-run sockeye (excluding Birkenhead sockeye). Current run size estimates indicate that the Early Stuart and Summer-run sockeye are lower than the 50% probability level forecasts, while the Early Summer-run and Late-run timing-groups are both higher than forecasted. The present estimate of the total run of Fraser River sockeye this year (14,383,000 fish) is slightly higher than the 50% probability forecast level of total abundance (13,366,000 fish). The current estimated catch of Fraser River sockeye by United States fishers has reached 450,000 fish, and Canadian fishers have harvested an estimated 3,212,000 fish to date.

The diversion rate of Fraser River sockeye through Johnstone Strait has maintained at approximately 90% over the past several days. Estimated daily escapements past Mission have now averaged over 200,000 sockeye per day since early August and the migration of sockeye past Hells Gate continues to be strong.

The present accounting-based estimate of the run-size of Early Summer-run sockeye is 894,000 fish. This return is approximately midway between the 50% and 25% probability level forecasts of abundance (678,000 fish and 1,059,000 fish respectively). The gross escapement of Early Summer-run sockeye into the Fraser River now totals 646,000 fish.

The current run size estimate of Summer-run sockeye is 6,700,000 sockeye, which is between the 50% and 75% probability forecast levels of abundance (9,006,000 fish and 5,204,000 fish, respectively). Recent DNA analyses of sockeye collected from the Area 12 purse seine test fishery have shown increasing proportions of Summer-run sockeye from the Mitchell River, which are later-timed than most Summer-run fish. The proportion of other Summer-run stocks is declining in marine areas. The gross escapement of Summer-run sockeye into the Fraser River now totals 4,324,000 fish.

Estimating the run size of Late-run sockeye has been difficult this season because of the unusual migratory pattern of these fish (i.e., very early appearance in marine waters and multiple “peaks” in their arrival abundance through the marine approach areas). The current estimate of the run-size of Late-run sockeye (excluding Birkenhead sockeye) is 6,500,000 fish, which is over twice the expected return size of these fish (3,157,000 sockeye at the 50% probability level forecast). It is probable that the later-migrating, Late-run sockeye currently transiting the marine approach areas and delaying in the southern Strait of Georgia will contribute a substantial proportion of the effective spawning population of these fish. The unexpectedly large return of Late-run sockeye this season may partially compensate for the high mortality expected on Late-run sockeye that migrate into the Fraser River in August and early September. Thus far, approximately 1,325,000 Late-run sockeye (excluding Birkenhead) have migrated into the Fraser River, which is over one month earlier than when they have historically migrated into the river. In 1999, when a similar proportion of the return of Late-run sockeye had migrated into the Fraser River by this time, an estimated 65% were lost to en route and pre-spawning mortality. Based on current estimates of Late-run return size and catches to date, if a similar mortality rate occurs on Late-run sockeye this year, the spawning escapement goal for Late-run sockeye stocks would not be achieved. Conservation concerns for Late-run sockeye based on the probability of high mortality prior to spawning are the basis for the Fraser River Panel’s establishment of a maximum 15% exploitation rate on Late-run sockeye this season.

Over the past week, water temperatures in many tributaries of the Fraser River increased above normal for this time of year. The temperature in the Fraser River (at Qualark Creek) is currently

approximately 19.3°C, which is about 2°C warmer than a week ago. Although water temperatures in this range are not optimal for sockeye migration, it is projected that water temperatures will decline over the next several days. River discharge measured at Hope is currently 2,400 cms, which is about 600 cms lower than average for this date.

Escapement assessments of several Early Summer-run sockeye stocks are ongoing. The enumeration of Late-run, Cultus Lake sockeye at the Sweltzer Creek fence now totals 625 fish. There have been recent observations of sockeye in the Birkenhead River.

The Pacific Salmon Commission provides daily test fishing catches of sockeye salmon and fishery regulations on its recorded message at (604) 666-8200. These and other data are available on the Internet at: http://www.psc.org/testfish/ United States fishing schedules during the season are available for Treaty Indian fisheries through the Northwest Indian Fisheries Commission at 1-800-562-6142. Non-Indian fishing schedules are available through the National Marine Fisheries Service's Hotline in Seattle at 1-888-858-9319. Canadian fishing regulations will be announced on the Fisheries and Oceans Canada recorded message at (604) 666-2828.

All Panel regulated commercial fisheries remain closed. The next Fraser Panel meeting will be on Friday, September 6, 2002.

2002 Fraser River Panel Sockeye Review

Week of: Aug. 25 - Aug. 31, 2002 Date: August 30, 2002

	Area	Gear	Weekly Catch	%Fraser	Fraser Sockeye Weekly	Fraser Sockeye Cumul.
			Commercial Catch			
Canada						
A & C	Areas 1-10	Net				0
F	Areas 1-10	Troll				0
G	Areas 123-127,11-12	Troll				123,500
B	Areas 11-16	PS				456,500
D	Areas 11-16	GN				233,200
H	Areas 12-16	Troll				87,000
H	Areas 18-29	Troll				15,500
B	Area 20	PS				224,500
E	Area 29	GN				934,700
Canadian Selective						72,600
	Canadian Total					2,147,500
United States						
Alaska		Net&Troll				0
Washington						
	T.I. Areas 4B/5/6C	Net				43,600
	T.I. Areas 6/7/7A	Net				254,600
	N.I. Areas 7/7A	Net				136,300
	Washington Total					434,500
	U.S. Total					434,500
			Non-commercial Catch			
PSC Test						126,000
Other Test						11,200
Fraser River Aboriginal						707,500
Areas 12-124 Aboriginal						263,200
Recreational						94,100
Charter						3,800
U.S. TI Ceremonial						15,400
	Non-comm. Total					1,221,200
			Catch and Escapement			
Catch Accounted-to-date						3,803,200
Potential Net Escapement (Mission esc. less Aboriginal & sport catch above Mission)						5,591,100
	Total Accounted-to-date					9,394,300

Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target	Mission Esc.	FN Below Mission	Total Esc.	% Complete
EStu	Early Stuart	61,100	60,900	0	60,900	100%
ESum	Early Summer	389,300	619,200	27,200	646,400	166%
Summ	Quesnel/Chilko	2,965,000	3,539,800	146,300	4,323,800	146%
	L.Stu./Stel.		612,200	25,500		
Late	Birkenhead	5,534,900	89,600	1,500	1,361,400	25%
	Adams/L.Shuswap		1,093,300	31,600		
	Weav/L.Misc.		142,500	2,900		