

# **RECORD OF MANAGEMENT STRATEGIES (RMS)**

## **SALMON**

Near Final Draft for Internal Review



**2009**

**Fraser River  
Sockeye and Pink**



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## POST-SEASON REPORT FOR 2009 CANADIAN TREATY LIMIT FISHERIES –

Jan 13, 2010

**EXECUTIVE SUMMARY****1 FRASER RIVER SOCKEYE****1.1 OBJECTIVES AND OVERVIEW**

The 2009 sockeye run-size forecast at the 50% probability level of abundance was approximately 10.5 million. A majority of the total return (~82%) was expected to be Summer-run sockeye. Pre-season planning indicated harvest opportunities would be available for all fishery sectors if the pre-season run size forecasts materialized.

Pre-season planning incorporated provisions to meet escapement objectives and meet conservation objectives for stocks of concern while considering international and domestic objectives. Although there was significant effort put into developing a pre-season plan for anticipated fisheries there was no bilaterally agreed upon pre-season plan in 2009. Pre-season modelling indicated that achieving each country's share would be difficult considering pre-season model inputs (aggregate run sizes, timing overlaps and diversion rate) as well as escapement and conservation objectives. It was decided that more discussion was needed to occur bilaterally in order to agree on a final plan prior to the initiation of fisheries. Although there was no bilaterally agreed to plan, pre-season planning models included the following assumptions and guiding principles in no particular order:

- In March 1985, the United States and Canada agreed to co-operate in the management, research and enhancement of Pacific salmon stocks of mutual concern by ratifying the Pacific Salmon Treaty (PST). The U.S. share of the annual Fraser River sockeye salmon total allowable catch (TAC), harvested in the waters of Washington State was set at 16.5% as per the PST Annex IV Chapter IV agreement. There were no catch overages of Fraser River sockeye from previous years to address in 2009.
- For computing TAC by stock management groupings, the Aboriginal Fishery Exemption (AFE), shall be allocated to management groups as follows: The Early Stuart sockeye exemption shall be up to 20% of the Fraser River AFE, and the remaining balance of the latter exemption shall be based on the average proportional distribution for the most recent three cycles and modified annually as required to address concerns for Fraser River sockeye stocks and other species and as otherwise agreed by the Fraser River Panel.
- To the extent practicable, the Fraser River Panel (FRP) shall manage the United States fishery to spread the United States harvest proportionately to the TACs across all Fraser River sockeye stock management groupings (Early Stuart, Early Summer, Mid-Summer, and Late Run).

- For 2009 pre-season planning purposes, the FRP agreed to use the 75% probability level of abundance forecast for Early Stuart sockeye and the 50% probability level of abundance forecasts for the other run timings groups;
- That although the capability to assess in-season run size and migration timing would be good for Summer-run and Late-run sockeye, an in-season run size estimate for Cultus Lake sockeye would not be possible due to low abundance relative to co-migrating sockeye stocks. As a result the harvest impacts on Cultus Lake sockeye would be assessed using other Late-run stocks (excluding Birkenhead and Harrison) as a proxy;
- Birkenhead sockeye do not endure the same migratory conditions as other Late-run sockeye and will therefore be managed to the same ER as the Summer-run with no MA;
- Canada's escapement plan implements escapement requirements that vary with run size for the Early Stuart, Early Summer, and Summer run aggregates, while a 20% minimum exploitation rate limit for Late-run and Cultus sockeye would be implemented; and
- Under 2009 harvest rules for Late-run sockeye, the Total Allowable Catch (TAC) would be incidentally accessed while harvesting other sockeye run timing groups that had surplus returns (e.g. Summer-run TAC).

In past years, Fraser River sockeye spawning targets were based upon a Rebuilding Strategy which was developed in 1987. Due to some shortcomings in this approach, in 2005 the Department adopted a new escapement strategy for Fraser River sockeye known as the Fraser River Sockeye Spawning Initiative (FRSSI). This annual escapement strategy seeks a balance between long-term objectives and short-term practical considerations, and combines technical analyses with qualitative judgment. The annual exploitation rate targets are adjusted based on expected run sizes and environmental conditions. This escapement strategy has been modified as a result of a series of yearly consultation workshops beginning in the spring of 2006 which continued through 2009. The Department is continuing to seek feedback on this approach and plans are in the works to review model changes and updates via the Pacific Advice Review Committee process (PSARC) as soon as May 2010.

Late-run sockeye have historically delayed in the Strait of Georgia for 4-8 weeks prior to entering the Fraser River. Beginning in 1996, this behaviour has changed to one where there has been a shorter delay and occasionally immediate river entry. Concerns for Late-run early entry and the associated elevated rates of en-route and pre-spawn mortality continue. Management objectives and actions implemented in 2009 placed priority on conserving Fraser River Late-run sockeye (which include Cultus Lake sockeye) by permitting a low exploitation rate (20%) on Late-run stocks while providing anticipated opportunities to harvest expected surplus Summer-run sockeye.

Conservation concerns for other sockeye stocks and species may impact sockeye fisheries in 2009. The following are a list of relevant conservation concerns where specific action may be taken in fisheries to meet conservation objectives: Early Stuart sockeye, Cultus Lake sockeye, Late-run sockeye, Nimpkish sockeye, Sakinaw Lake sockeye, Interior Fraser River coho and Interior Fraser River Steelhead.

## **1.2 PRE-SEASON ASSESSMENT**

In addition to Canada's escapement plan, estimates of run size, diversion rate, run timing and assumptions about in-season environmental conditions are key inputs required to seed the pre-season Harvest Planning Model prior to observing in-season information. The main objective of the model is to identify potential fishing opportunities while attempting to meet conservation, international and domestic objectives.

### **Run Size Forecasts Used For Planning**

Fraser sockeye forecasts are uncertain. Sockeye forecast tables express this uncertainty by providing probability distributions of the forecast ranging between the 10% probability level of abundance and the 90% probability level of abundance. Forecast uncertainty for sockeye has been compounded in recent years due to low and variable observations of marine survival (smolt-to-adult) relative to average. Chilko smolt-to-adult survival rates are used as a proxy for marine survival in Fraser sockeye. This measurement includes a freshwater downstream migration component encompassing the movement of smolts downstream from a counting fence at Chilko Lake to the mouth of the Fraser River. In the 2008 return (2004 brood year) marine survival was estimated to be ~1.8% which is the lowest observation since 1952. Trends in average marine survival are the following: 1948-2008 ~9%, 1990-2008 ~6%. The smolt-to-adult survival in which would be required to produce the 2009 pre-season forecast for Chilko was well below the historical average and below the recent average (~5%).

As outlined in the Pacific Salmon Treaty (PST), the mid-point of the forecast provided by Canada will be used for management purposes unless the Panel adopts a more precautionary or optimistic forecast until in-season updates of run size are available. In 2009, as recommended by the Department of Fisheries Oceans (DFO) science staff, the FRP elected to adopt the 75% probability level of abundance for the Early Stuart run timing group and the 50% probability level for the other aggregates and stocks for planning purposes. The 2009 75% probability forecast for Early Stuart and the 50% probability forecasts for the other three management aggregates including Birkenhead were as follows: Early Stuart 165,000; Early Summer 739,000; Summer-run 8,677,000; and Late-run 907,000, of which 334,000 were Birkenhead type, for a total of 10,488,000 Fraser sockeye. Comparing forecasted stocks with the historic cycle line run sizes averages (1980-2005), the Early Stuart forecast was 32% of average, Early Summers (excluding miscellaneous stocks) 140% of average, Summers 78% of average, Lates (excluding Birkenhead and miscellaneous stocks) 102% of average, and Birkenhead 65%

of average. Overall, the 2009 forecasted stocks were 77% of the cycle line average (excluding miscellaneous stocks).

### **Diversion Rate**

The pre-season forecast of the proportion of Fraser sockeye diverting through Johnstone Strait was 32%. The estimate is based on the relationship between the average daily sea surface temperature measured at the Kains Island (Quatsino) lighthouse in May and June and the estimated post-season northern diversion for 1977-2008. The median water temperature at Kains Island for May & June 2009 was 11.0°C, which is very close to the time series median (11.3°C).

### **Timing Forecasts**

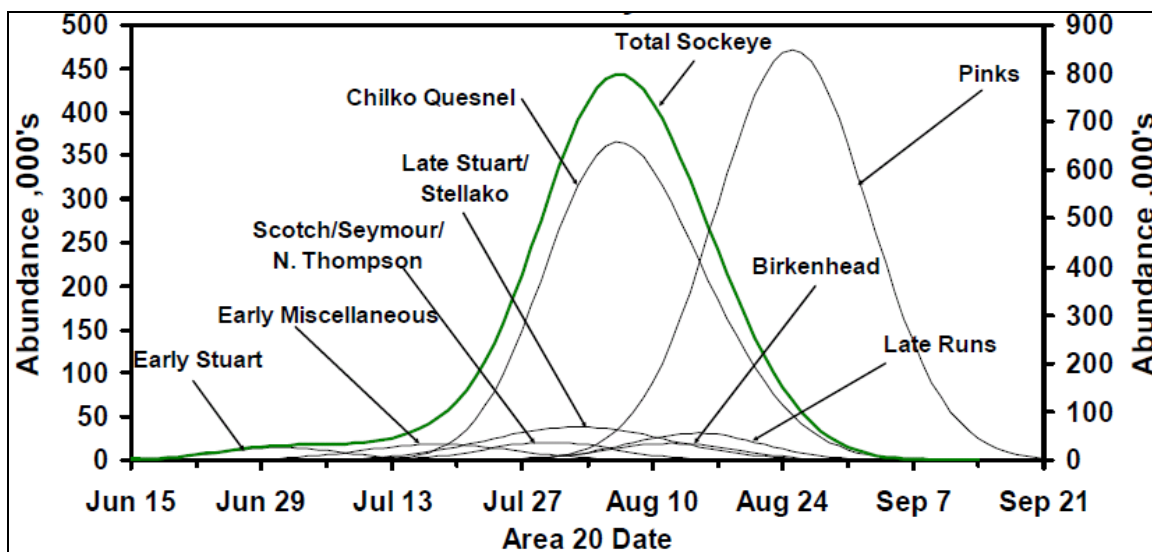
The forecast of the 50% date (peak timing) for Early Stuart and Chilko sockeye arriving to the Fraser River (A20) is July 2<sup>nd</sup> and August 3<sup>rd</sup> respectively. Forecasting methods use a linear multiple regression model with two predictor variables: 1) Gulf of Alaska eastward current speed (OSCURS) in May, and 2) Gulf of Alaska mean sea surface temperature (SST) in the previous November and December (2008). The primary predictor of timing is the May OSCURS sea current index. The following are the pre-season estimates of timing in Area 20.

**Table 1-1: Timing Estimates Used for Pre-Season Planning in Area 20**

	<b>2009 Area 20 Timing</b>
<b>Early Stuart</b>	July 2
<b>Early Summers</b>	July 26
<b>Summer-run</b>	August 5
<b>Birkenhead</b>	August 5
<b>True Lates</b>	August 11

The following figure graphically illustrates the relative run size forecasts and run timing overlaps expected in 2009.

**Figure 1-1: Relative Run Size Forecasts and Run Timing Overlaps Expected in 2009**



### Environmental Conditions and Management Adjustments

Management Adjustments (MAs) are the addition of fish above the spawning escapement targets for the purpose of increasing the likelihood of achieving the spawning escapement targets. The general concept is that extra fish are allowed to escape upriver of Mission to account for anticipated differences between in-season versus post-season estimates of catch plus spawning escapement which may be due to a number of factors, including (but not limited to): critically high temperatures and/or discharge in the Fraser River, bias in estimates at Mission hydroacoustics and/or spawning ground escapement estimates, unreported catch, escapes from fishing gear, natural mortality, and/or predation. While all of these factors are included in the difference between estimates, the inputs used to estimate MAs are temperature and discharge for Early Stuarts, Early Summer and Summer-run sockeye and the 50% migration timing at Mission for Late-run sockeye.

For the Early Stuart, Early Summer and Summer-runs, MA estimates can be updated in-season as river conditions become known for management purposes. The pre-season MA expressed as a percentage of the spawning escapement goal and the number of sockeye this represents for 2009 pre-season run sizes are outlined below.

**Table 1-2: MA Estimates used for Pre-Season Planning in 2009**

	Pre-season Run Size	MA (%)	MA
<b>Early Stuarts</b>	165,000	59%	92,000
<b>Early Summers</b>	739,000	42%	123,000
<b>Summers</b>	8,677,000	7%	243,000
<b>Birkenhead Type</b>	334,000	0%	0
<b>True Lates (excl. Bi)</b>	573,000	604%	2,535,000

## 2009 Escapement Plan

The *Fraser River Sockeye Spawning Initiative* has been a multi-year collaborative planning process to develop a long-term escapement strategy. The annual escapement strategy seeks a balance between long-term objectives and short-term practical considerations, and combines technical analyses with qualitative judgment. A plan is developed every year and is vetted through consultative processes prior to the fishing season. In general the annual exploitation rate targets are adjusted based on expected run size and environmental conditions. The table below outlines the final pre-season escapement plan for 2009.

**Table 1-3: 2009 Fraser River Sockeye Escapement Plan – Pre-Season Run Estimates**  
**2009 Fraser River sockeye escapement plan using pre-season run size estimates (in thousands of fish).**

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guideline	Total Allowable Mortality at Run Size	Escapement Target at Run Size	Management Adjustment (a)		Exploitation Rate after MA
Early Stuart	165	- 156 390	156 390	0% 0 - 60% 60%	5%	156	59%	92	0%
Early Summer	739	- 200 500	200 500	0% 0 - 60% 60%	60%	296	42%	123	43%
Summer	8,677	- 520 1,300	520 1,300	0% 0 - 60% 60%	60%	3,471	7%	243	57%
Birkenhead and Birkenhead-type Lates (b)	334			0% 0 - 60% 60%	60%	134			60%
true-Late (excl. Birk. Type)	573	- 420 1,049	420 1,049	20% 20 - 60% 60%	27%	420	604%	2535	20 - 60%
Cultus									20%
Sockeye Totals	10,488					4,476		2,993	
	<i>Est. Return</i>								

## 1.3 IN-SEASON ASSESSMENT

The main challenges facing the FRP in 2009 was the extremely low levels of returning sockeye from all stock groups, with the exception of Harrison River sockeye, compared to pre-season expectations. Also determining the peak of the Early Summer and Summer-runs was difficult due to a protracted multimodal migration in Early Summers and a very flat migration in the Summer-run return. Additional challenges were the delay of Late-run sockeye in the Gulf of Georgia co-migrating with a very large pink return. In

addition to the much lower than expected returns of sockeye, near record high temperatures in the Fraser River during the Early Summer and Summer-run migration heightened the concern of not meeting escapement objectives for some stock groups.

### Migration and Timing

Determining the peak of the run is important. Timing is informative to models used to estimate run size and is also key to in-season estimates of MA. The following graphs illustrate the protracted multimodal migration for Early Summer-run sockeye and the small flat migration of Summer-runs which made it difficult to estimate the peak of the runs in-season.

Figure 1-2: 2009 Early Summer Sockeye Migration Graph

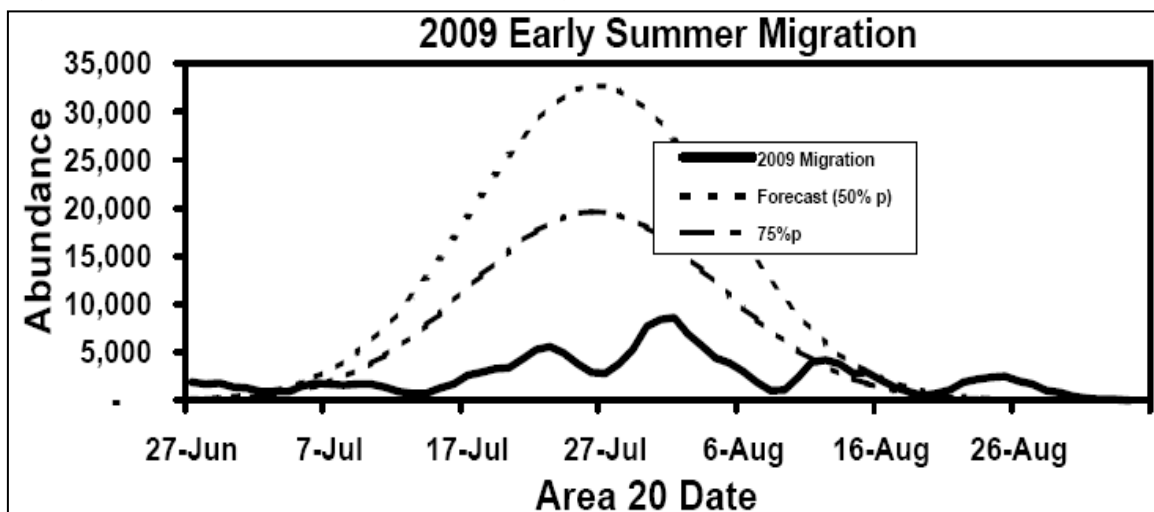
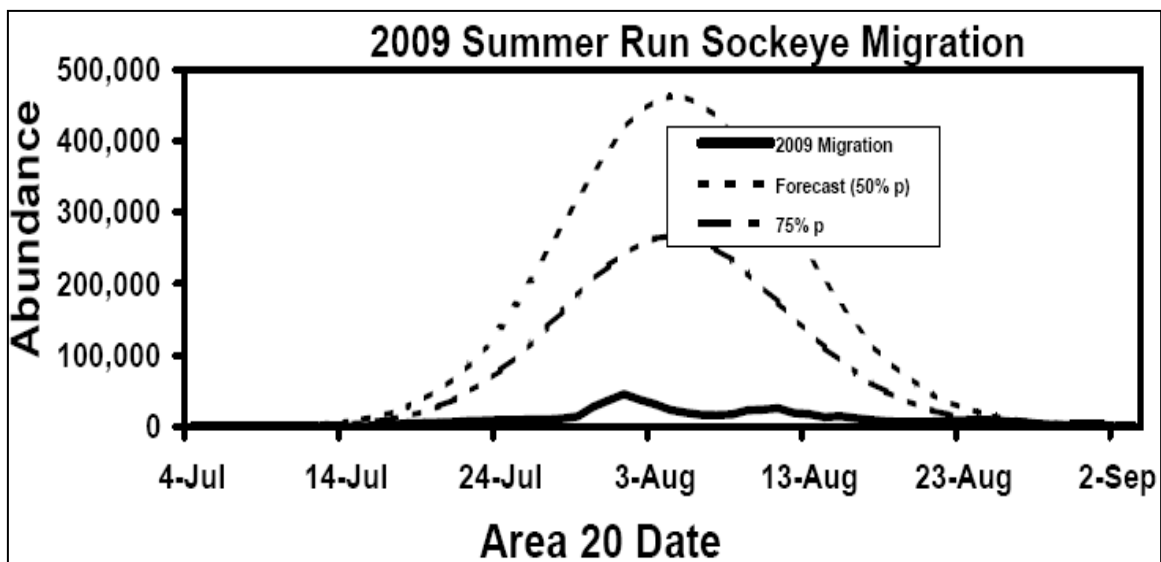


Figure 1-3: 2009 Summer Run Sockeye Migration Graph



As in-season information was made available, it appeared that some runs were either very late or not materializing. In 2005 (the 2009 brood year) the timing was very late and returns that appeared to be very weak relative to expectations early in the season materialized much later on. However, in 2009 there were no indications that the runs were late. The age composition and the expected vs. observed relative stock contributions in test fishery samples were consistent with a weak return, not a late return. The table below illustrates expected age contributions compared to in-season observations. It was fairly clear that the 4<sub>2</sub> component of the return was much lower than expected, and due to the poor return of sockeye in 2008, it was highly unlikely that the low percentage of 4 year olds was due to a higher than expected return of 5 year olds.

**Table 1-4: Expected vs. Observed Age Contributions**

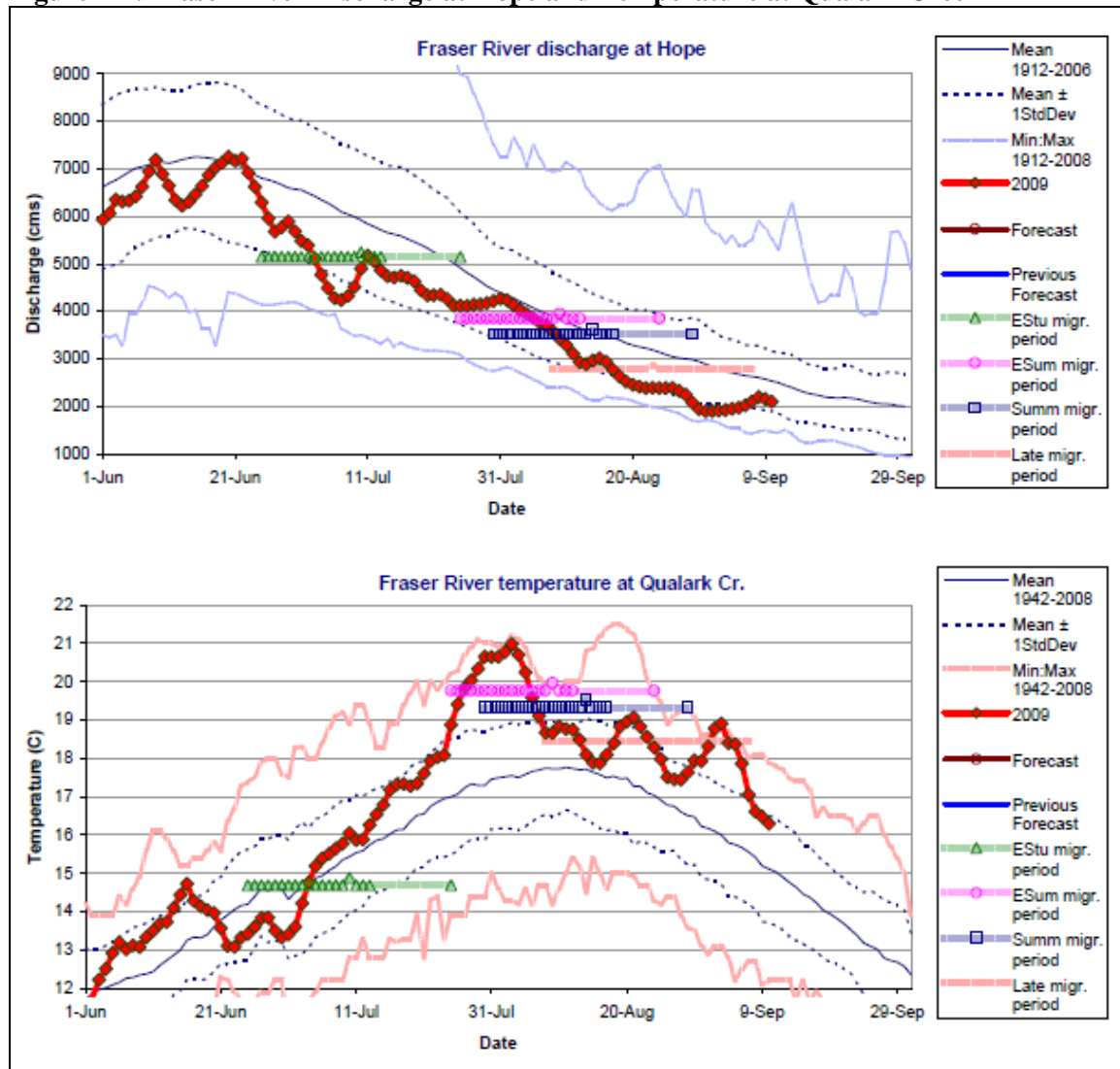
	<b>Expected</b>	<b>Observed In-season <sup>a</sup></b>
<b>Early Stuart</b>	99%	93%
<b>Early Summers</b>	75%	43%
<b>Summers</b>	97%	81%
<b>Birkenhead</b>	67%	36%
<b>Lates</b>	79%	49%
<b>Total</b>	<b>94%</b>	<b>63%</b>

<sup>a</sup> Samples collected in gillnet test fisheries may underestimate 4<sub>2</sub> contributions due to gear selectivity. Also the observed samples are not weighted for passage.

### **Fraser River Environmental Conditions and MA**

In 2009 the Fraser River water temperature was above average for most of the sockeye migration while discharge was lower than average. Temperatures were extreme and near historical maximum observations for significant portions of the Early Summer and Summer-run migration. High water temperatures can cause serious adverse effects on resident and migratory fish, including: increased energy expenditure; reduced swimming performance; increased susceptibility to disease; reduced reproductive success; and mortality. The figures below illustrate observed Fraser River temperatures at Qualark Creek and discharge at Hope as well as the corresponding estimated stock aggregate migration periods.



**Figure 1-4: Fraser River Discharge at Hope and Temperature at Qualark Creek**

Management Adjustment models use both environmental conditions as well as adjustments to run timing as inputs. The in-season MA for Summer-run sockeye was very sensitive to changes in timing due to the addition or removal of observed data (used to inform the MA models) in the period of extreme high temperature. If the Summer run timing shifted later by one day, one extreme temperature day on the front end was replaced by a moderate temperature day on the back end and vice versa (See above). In addition, due to the small flat migration observed, the run size and the migration peak of Summer run was highly uncertain in-season. This resulted in MA estimates that were uncertain and sensitive to change in-season.

### Late-run Delay

Prior to 1995 a three to six week delay in Late-run migration into the Fraser River was a regular occurrence. Since 1995 Late-run sockeye have been observed entering the Fraser

River with little or no delay in most years resulting in large difference between estimates in most years and was associated with elevated levels of pre-spawn mortality in some of the earlier years. In 2009, it was apparent there may be some delay in Late-run migration as escapement projections for Late-run sockeye generated from approach area test fisheries were not being observed at Mission while other stock groups using similar projection methods were being observed at Mission. To confirm the presence of a delay a non-retention Gulf of Georgia troll test fishery was implemented. The in-season estimate of delaying True Late-run sockeye was 100,000. This unexpected pattern of marine delay may result in increased en-route survival of Late-run sockeye in 2009.

## Run Size

As the season progressed the FRP considered technical advice provided by the Pacific Salmon Commission and Fraser River Panel Technical Committee members and bilaterally adopted run sizes that reflected in-season assessment information. The following table highlights a timeline of run size changes that were adopted by the FRP. Changes in run size are bolded.

**Table 1-5: Timeline of Run Size Changes Adopted by FRP in 2009**

	Pre-season	Jul-17	Jul-24	Jul-28	Aug-11	Aug-18	Aug-25	Aug-28
<b>E. Stuart</b>	165,000	<b>110,000</b>	<b>85,000</b>	85,000	85,000	85,000	85,000	85,000
<b>E. Summer</b>	739,000	739,000	<b>264,000</b>	<b>150,000</b>	<b>175,000</b>	175,000	175,000	175,000
<b>Summer</b>	8,677,000	8,677,000	8,677,000	8,677,000	<b>600,000</b>	<b>700,000</b>	<b>650,000</b>	650,000
<b>Birkenhead</b>	334,000	334,000	334,000	334,000	334,000	<b>100,000</b>	<b>60,000</b>	60,000
<b>Harrison</b>	69,000	69,000	69,000	69,000	69,000	<b>200,000</b>	200,000	200,000
<b>L. Lates</b>	573,000	573,000	573,000	573,000	573,000	<b>450,000</b>	450,000	<b>400,000</b>

It should be noted that the significant decreases in in-season run sizes eliminated any Total Allowable Catch (TAC) that was identified pre-season for most groups with the exception of a small amount of TAC available for a short period of time between August 21<sup>st</sup> and August 25<sup>th</sup> for Summer-run sockeye. During this time an estimated 52,800 Summer-run sockeye TAC was identified as a result of a change to the Summer-run proportional Management Adjustment (pMA) from .32 to .21. There was a great deal of uncertainty with the Summer-run run size, timing and the MA at this time and as more information became available in the coming days the run size was downgraded from 700,000 to 650,000 and the pMA increased to .28 from .21 which eliminated the Summer-run TAC on August 25<sup>th</sup>.

The final 2009 in-season estimates of run size were much lower than the pre-season forecasts for the management aggregates and Birkenhead. All aggregates were well below the 90% probability abundance forecast with the exception of the Late-run (excluding Birkenhead) which was estimated to be higher than the 75% probability abundance forecast. This can mostly be attributed to the good return of Harrison River sockeye which was estimated to have returned above the 25% probability abundance forecast. Preliminary results from the 2009 Harrison return indicate that the 3 year old age class (2007 ocean entry year) is strong relative to expectations and the 4 year old age class returned poorly relative to expectations. Harrison River sockeye are unique in that

they have a different life history (they are immediate migrants and do not reside in a freshwater lake for 1 year or more) relative to other Fraser sockeye stocks.

**Table 1-6: Pre-Season Forecasts vs. Final In-Season Estimates**

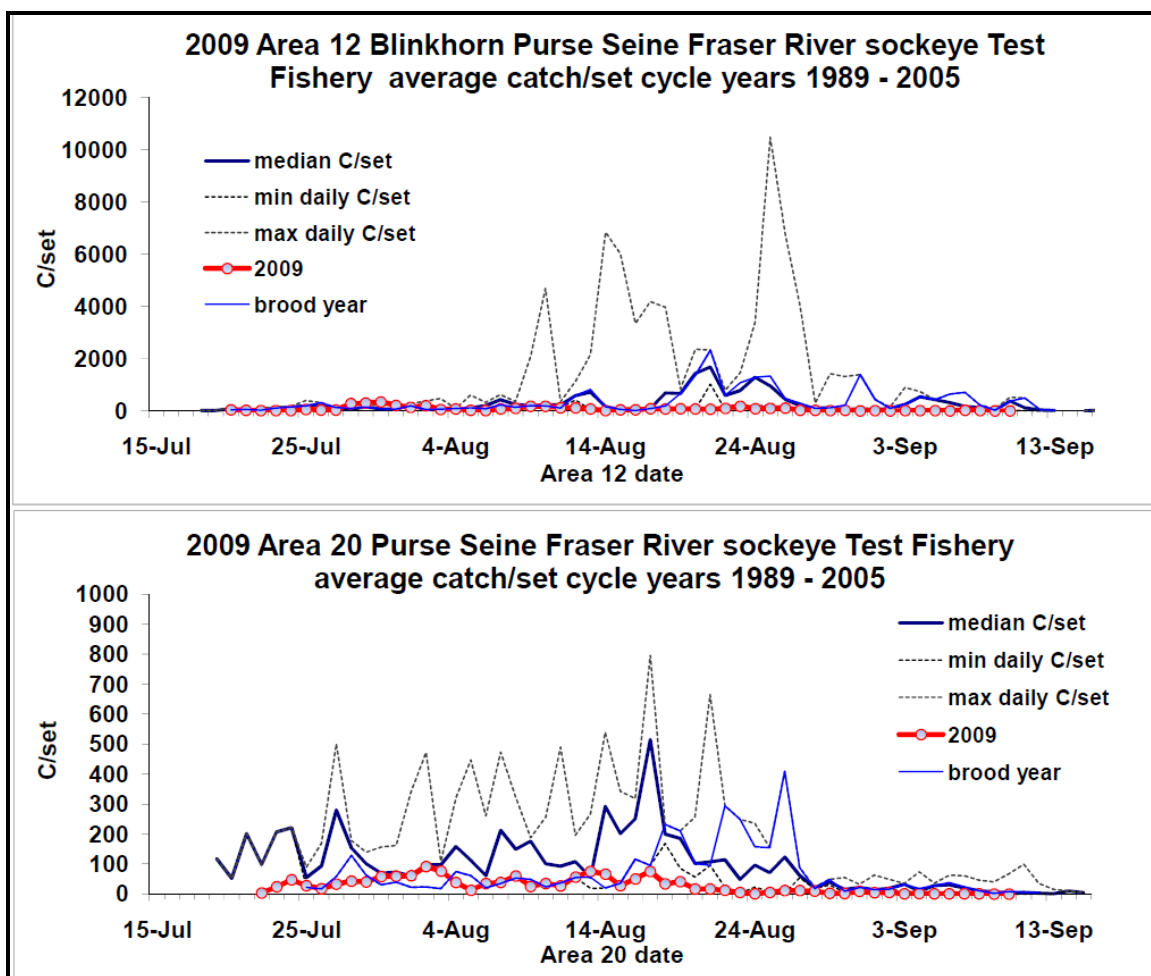
Run	Pre-Season Forecast			Final In-Season Estimate (Sep 23)
	50% Probability	75% Probability	90% Probability	
Early Stuart	255,000	165,000	107,000	85,000
Early Summer	739,000	443,000	264,000	175,000
Summer	8,677,000	4,914,000	2,858,000	650,000
Birkenhead	334,000	194,000	130,000	60,000
Harrison	69,000	46,000	33,000	200,000
L.Late*	504,000	277,000	164,000	200,000
<b>Total</b>	<b>10,578,000</b>	<b>6,039,000</b>	<b>3,556,000</b>	<b>1,370,000</b>

\*Excluding Birkenhead (which includes Big Silver, Cogburn, Poole, Samson, Railroad, Green R., Douglas) and Harrison

### **Diversion Rate**

The diversion rate of sockeye through Johnstone Strait was higher than forecast and was estimated to be ~44% in 2009. Diversion rate can have significant impacts on harvest opportunities of marine fisheries. The figure below describes 2009 test-fishery CPUE compared to historical CPUE in both approach areas over time.

**Figure 1-5: Test Fishery Average Catches in Area 12 and Area 20**



#### 1.4 FISHERIES

There were no directed sockeye openings for commercial or recreational fisheries in Canada or the United States in 2009. In Canada, a significant proportion of Fraser sockeye were captured as by-catch in FSC fisheries directed at other species. As well, there were limited FSC fisheries directed on Fraser sockeye, during a short period of time. A small number of sockeye were retained in US Treaty Indian ceremonial and subsistence (C&S) fisheries.

The table below outlines final in-season estimates of Fraser River sockeye catch in Canada and the US. Not included in the table is by-catch mortality associated with releases of sockeye in FSC, commercial and recreational fisheries directed at other species.

**Table 1-7: Final In-Season Estimates of Fraser River Sockeye Catch in Canada & US**

<b>Total Fraser Sockeye Caught *</b>	<b>107,080</b>
Test fisheries (incl. Albion and Qualark)	34,033
<b>Canadian Catch</b>	<b>68,850</b>
Canadian First Nation FSC fisheries- Marine	9,920
Canadian First Nation FSC fisheries- Fraser	58,930
Canadian commercial fisheries (includes commercial selective & FN economic)	0
Canadian recreational fisheries	0
<b>United States Catch</b>	<b>4,200</b>
U.S. non-Treaty Indian fisheries	0
U.S. Treaty Indian ceremonial fisheries	4,200

\* Catch as of November 4<sup>th</sup>, 2009.

### Total Allowable Catch

Pre-season TAC for sockeye was calculated using pre-season information such as pre-season run size forecasts and escapement goals. International sharing also took into account the Fraser River Aboriginal Fisheries Exemption (AFE), anticipated test fish catch as well as expected Management Adjustments (MA) for the run timing groups. Fisheries would not likely be initiated until in-season assessments provided updates to the pre-season information used to determine the TAC for each country. It should be noted that the TAC available for Late-run would not be accessed directly. In 2009 the Late-run TAC would be caught incidentally when fisheries were to be directed at other run timing groups that would have available TAC, such as the Summer-run. Unfortunately, in-season information indicated that there was no TAC available for the other run timing groups early on in the migration so the Late-run TAC could not be accessed. The following table describes changes to the anticipated TAC as in-season information was made available as well as the final in-season catch by aggregate.

**Table 1-8: Final In-season Estimates of Fraser River Sockeye Catch in Canada and US**

	<b>Pre-season TAC</b>	<b>Final In-season TAC</b>	<b>Final In-season Catch</b>
<b>Early Stuart</b>	10,000	0	8,590
<b>Early Summer</b>	316,800	0	18,840
<b>Summer-run</b>	5,155,600	0	59,340

<b>Birkenhead</b>	198,500	10,500*	3,970
<b>Late Lates</b>	112,600	74,000*	16,370
<b>Total</b>	<b>5,793,500</b>	<b>84,500*</b>	<b>107,100</b>

\* note: BK & LL TAC are identified for the purpose of pursuing fisheries on more abundant Summer run stocks, and not for fisheries targeted on BK or LL

The following table outlines the final in-season TAC and catch for each country as of September 23, 2009. Note the table does not include release mortalities associated with fisheries directed at other species.

**Table 1-9: Final In-Season TAC and Catch as of September 23, 2009**

	<b>Early Stuart</b>	<b>Early Summer</b>	<b>Summer- run</b>	<b>Birken- head</b>	<b>Late Lates</b>	<b>Total</b>
<b>Test Fisheries <sup>a</sup></b>	<b>1,940</b>	<b>5,520</b>	<b>15,760</b>	<b>1,580</b>	<b>7,340</b>	<b>32,140</b>
<b>US Catch</b>						
Commercial	0	0	0	0	0	0
C&S	0	480	2,080	660	990	4,210
<b>US Total</b>	<b>0</b>	<b>480</b>	<b>2,080</b>	<b>660</b>	<b>990</b>	<b>4,210</b>
<b>US TAC</b>	0	0	0	0	0	0
<b>CDN Catch</b>						
Commercial	0	0	0	0	0	0
Recreational	0	0	0	0	0	0
Other <sup>b</sup>	60	260	1,260	60	260	1,900
FSC	6,590	12,580	40,230	1,670	7,780	68,850
<b>CDN Total</b>	<b>6,650</b>	<b>12,840</b>	<b>41,490</b>	<b>1,730</b>	<b>8,040</b>	<b>70,750</b>
<b>CDN TAC <sup>c</sup></b>	0	0	0	10,500	74,000	84,500

<sup>a</sup> Panel approved test fisheries

<sup>b</sup> Other catch is sockeye captured in multi-species non-Panel approved test fisheries (Albion and Qualark)

<sup>c</sup> BK & LL TAC are identified for the purpose of pursuing fisheries on more abundant Summer run stocks, and not for fisheries targeted on BK or LL

### Fraser Sockeye Exploitation Rates

Due to the low return of Fraser sockeye in 2009, considerable efforts were made in-season to reduce fishing impacts on migrating sockeye while providing some opportunity for First Nations to harvest other salmon species, and in some cases, sockeye for FSC or

C&S purposes. Although the return of sockeye was unexpectedly low, a considerable proportion of the total sockeye return migrated to terminal spawning areas. The in-season estimate of exploitation rate was the lowest recorded in the recent historical record (1952-2009) for Fraser sockeye and is estimated to be ~8% in 2009.

The table below outlines potential exploitation rates based on 2009 TAM rules and pre-season and in-season information as well as the actual observed preliminary post-season estimate of exploitation rates by aggregate and in some cases stock.

**Table 1-10: Potential Exploitation Rates**

	pre-season *	in-season TAM+MA **	prelim. post-season
E. Stuart	0%	0%	10%
E. Summer	43%	0%	11%
Summer	57%	0%	9%
Birkenhead ***	60%	20%	7%
Late Lates ***	20%	20%	4%
Cultus ***	20%	20%	< 3%

\* Pre-season allowable exploitation rates are based on the 2009 Total Allowable Mortality (TAM) rules developed in the FRSSI process

\*\* In-season allowable exploitation rates are based on the final in-season run size, MA and the 2009 TAM rules

\*\*\* Birkenhead, Late Lates and Cultus exploitation rates for the purpose of catching available Early Summers and Summer-run sockeye- not for targeting fisheries on Late-run groups

## 1.5 POST-SEASON

### Sockeye Migration and Escapement Estimates

Fraser River water temperatures were extreme for much of the Early Summer and Summer-run migration while Fraser River discharge was below the historical mean for most of the sockeye migration. Fraser River temperatures exceeded levels that are thought to have impacts on fish health and migration (>18.0 C) and approached levels that are thought to be lethal to sockeye (~ 21.0 C) for a short time period at the end of July. Conditions on the spawning grounds were reported as good with the exception of some low water conditions observed in the South Thompson and Quesnel watersheds. Low water levels were reported to be restricting or limiting access to the spawning grounds in some cases; however, there were no reports of any significant delay to any of the major tributaries that experienced low water conditions in 2009. Other reports from stock assessment staff indicated that fish health on the spawning grounds was good and

there were no reports of significant pre-spawn mortality observed in any systems in 2009. The table below outlines preliminary escapement information to date relative to the escapement goals at the final in-season run sizes. A summary of preliminary spawning ground assessments for Summer-run, Birkenhead and Late-run sockeye will be available in January, 2010.

**Table 1-11: Preliminary Escapement Information to Date**

<b>Management Group</b>	<b>Escapement Goal at final in-season run size</b>	<b>Potential Spawning Escapement Target <sup>a</sup></b>	<b>Projected Escapement <sup>b</sup></b>	<b>Preliminary Spawning Escapement <sup>c</sup></b>	<b>Pre-Spawn Mortality (PSM) <sup>c</sup></b>
<b>Early Stuart</b>	85,000	76,410	55,370	45,327	5.0%
<b>Early Summer</b>	175,000	156,160	97,600	103,716	4.6%
<b>Summer-run</b>	520,000	590,660	461,450	<b>482,819</b>	<b>0.7%</b>
<b>Birkenhead <sup>d</sup></b>	48,000	56,030	56,030	—	—
<b>Late-run</b>	320,000	383,630	<sup>e</sup>	—	—
<b>Total</b>	<b>1,148,000</b>	<b>1,262,890</b>	—	—	—

<sup>a</sup> Potential spawning escapement = total run size minus catch-to-date.

<sup>b</sup> Projected Escapements = (run size- catch)\*(1-projected DBE)

<sup>c</sup> As of December 1<sup>st</sup> 2009

<sup>d</sup> Includes other Birkenhead type stocks

<sup>e</sup> pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

### **Payback**

The U.S. share shall be adjusted annually for harvest overages and underages in accordance with annual guidance provided by the Commission.



## 2 SOUTHERN BC MAINLAND PINKS AND FRASER RIVER PINK

### 2.1 FRASER RIVER PINK

The 2009 50% probability forecast and escapement goal for Fraser pink salmon was 17,535,000 and 6,000,000, respectively. The final in-season run size estimate for Fraser River pink salmon was 19,500,000 which is near the 25% probability level of abundance forecast.

The U.S. share of the annual Fraser River pink salmon TAC, harvested in the waters of Washington State is set at 25.7% as per the PST Annex IV Chapter IV agreement.

In 2009 there were concerns expressed by Canada and the US around sockeye by-catch in directed pink fisheries as there was no TAC available for sockeye when pink fisheries were anticipated. The Parties were unable to come to agreement on a single method for determining when Pink directed fisheries could begin. As such, the Parties both stated their rule for starting Pink fisheries and the PSC assessed their fishing plans against each Party's stated rules. The US proposed a 5% stock composition rule, that is, that their fisheries could begin when the abundance of Fraser sockeye in the area where the Pink fisheries would occur was below 5%. Canada proposed a 1% mortality rule in order to implement directed pink fisheries, that is sockeye stock composition and sockeye by-catch release mortality rates were assessed to ensure overall mortality was <1% . The rule was calculated by gear type and area and can be described by the following:

$$\text{Release Mortality}_{\text{gear}} \times \text{Sockeye/Pink Ratio}_{\text{area}} < 1\% \text{ Mortality}_{\text{sockeye, gear, area}}$$

The sockeye/pink ratio can be defined as sockeye/sockeye+pink and was generally determined by taking the most recent three day average of the ratio by area observed in test fisheries. The following outlines the sockeye release mortality by gear type used in 2009.

**Table 2-1: Sockeye Release Mortality by Gear Type Used in 2009**

Seine	25%
Troll	10%
Gillnet	60%
Reefnet	.5%
Beach Seine	5%

For the Parties to work towards achieving their share of pink salmon in directed pink fisheries, all commercial fishers were required to release all sockeye with the least possible harm. The exception was the US Treaty Indian Fisheries where harvesters were allowed to keep sockeye by-catch for C&S purposes. Due to these special circumstances, this fishery required timely reporting of catch in order to confirm sockeye impacts were at expected low levels.

Although the shares by both parties were not achieved, effort and catch was high in comparison to recent years due to the lack of sockeye opportunities, new directed pink opportunities, a high abundance Fraser pinks, and an unusually high abundance of non-Fraser pinks in 2009. However, concerns for by-catch, market conditions and a low diversion rate through the northern entry in late August reduced additional harvest opportunities. The table below outlines preliminary Fraser pink catch estimates in Canada and the United States in 2009.

**Table 2-2: Preliminary Fraser Pink Catch Estimates in Canada and US in 2009**

<b>Total Fraser Pink Caught *</b>	<b>4,302,150</b>
Test fisheries (incl. Albion and Qualark)	19,440
<b>Canadian Catch</b>	<b>1,556,480</b>
Canadian commercial fisheries (includes commercial selective & FN economic and demonstration fisheries)	1,442,840
Canadian First Nation FSC fisheries	11,860
Canadian recreational fisheries	101,780
<b>United States Catch</b>	<b>2,726,230</b>

\* Fraser pink catch as of January 5<sup>th</sup>, 2010.

The final estimate of escapement in recent years is calculated as the final run size minus catch (spawning ground estimates for pink salmon have not been undertaken since 2001). The net escapement for the 2009 return was 15,225,000 pink salmon. The next odd year pink run forecast will be based on a fry estimate assessment program that will be conducted in the spring of 2010.

Agreed June 18, 2009

**2009 Fraser River Panel Management Plan****Principles and Constraints**

1. Fisheries and Oceans Canada (DFO) have provided the Panel with run-size forecasts for Fraser River sockeye and pink salmon. There is a 50% probability that the Fraser sockeye salmon return will reach or exceed 10,578,000 fish. There is a 50% probability the Fraser pink salmon return will reach or exceed 17,535,000 fish. For pre-season planning purposes, the Panel used the 50% probability (p) levels of abundance for each species with the exception of Early Stuart sockeye for which the 75% probability level of abundance (165,000 fish) was used. The resulting total sockeye return used for pre-season planning was 10,488,000 fish.
2. The Panel's first priority for 2009 is to achieve conservation objectives for all stocks, including Late-run sockeye<sup>1</sup> objectives as indicated in the document, "Guidelines for Pre-season Fraser Sockeye Fishing Plans to Address Late-Run Concerns".
3. The Panel has adopted a management approach for Late-run sockeye that presumes that similar to recent years, Late-run sockeye will enter the Fraser River early and a significant proportion will not survive to spawn.
4. TAC and international shares will be calculated according to the February 15, 2008 Commission Guidance and the 2005 revised Annex IV, Chapter 4, of the Pacific Salmon Treaty, which limits the United States harvest (in Washington State) to 16.5% of the total allowable catch (TAC) of Fraser River sockeye salmon. Based upon the pre-season levels of abundance used for the purposes of computing TAC by stock management grouping in 2009, the Panel agreed that the Fraser River Aboriginal Exemptions were as follows: Early Stuart sockeye, 10,000 fish; Early Summer sockeye, 30,600 fish; Summer-run sockeye, 342,600 fish; Birkenhead sockeye, 5,800 fish; and Late-run sockeye, 11,000 fish. There is no available harvest of Early Stuart sockeye at the 75% p level forecast of abundance. However, management plans including window closures are designed to protect 90% of the Early Stuart migration. With respect to Fraser River pink salmon, under the terms of Annex IV, Chapter 4, of the Pacific Salmon Treaty, the United States share of the TAC is 25.7%, while the Canadian share is 74.3%. As per Fraser Panel agreement, there are no catch overages of Fraser River sockeye or pink salmon for the 2009 season resulting from prior years.
5. For planning fisheries, the Panel has adopted 75% probability level forecast for Early Stuart (165,000 fish), and the 50% probability level forecasts for Early Summer-run (739,000 fish), Summer-run (8,677,000 fish), Birkenhead<sup>2</sup> (334,000), Late-run sockeye (573,000) and for Fraser River pink salmon (17,535,000 fish). When sufficient information is available in-season, the Panel will update run size estimates of Fraser River sockeye and pink salmon, as appropriate.

**Regulations**

- i) If the abundance of Early Summer-run sockeye salmon is tracking at approximately the 50% probability level (739,000 fish) and the abundance of Summer-run sockeye salmon is tracking at approximately the 50% probability level (8,677,000 fish) and the runs arrive at or near normal dates, low impact fisheries in Panel Waters would be expected to commence the week of July 19 - 25. If the return abundances of Early Summer-run and Summer-run sockeye vary from the 50% probability level forecast, this could change the start dates, and duration of fisheries.
- ii) Fisheries directed at Fraser River pink salmon will be managed in accordance with the Late-run sockeye guidelines.
- iii) The Parties' conservation concerns for other species and stocks will be taken into account throughout the 2009 management season.

<sup>1</sup> Late-run here refers to the Late-run timing group, excluding Birkenhead and a few minor miscellaneous sockeye stocks.

<sup>2</sup> Birkenhead includes Big Silver and other miscellaneous stocks.

Agreed June 18, 2009

## GUIDELINES FOR PRE-SEASON FRASER SOCKEYE FISHING PLANS TO ADDRESS LATE RUN<sup>1</sup>

### CONCERNS

The 2009 cycle is the second off-line cycle for Adams River sockeye, and "true" Late-run sockeye have historically experienced small returns on this cycle line relative to Summer-run sockeye, with the Weaver Creek stock group the predominant Late-run stock. Due to the extremely late arrival of all sockeye stocks in 2005, most Late-run stocks were less severely impacted by early upstream migration in the brood year (2005) relative to recent years. In addition, there was an unexpectedly large return of Harrison sockeye in 2005. As a consequence, the total forecast for Late-run sockeye in 2009 (573,000 fish at the 50% p level) is approximately 23% larger than the average for the cycle (1980 – 2005). However, the potential continuation of high in-river mortality rate experienced by several Late-run stocks in recent years continues to be a serious conservation concern and there is a special concern for critically depressed Cultus sockeye for which recovery efforts have been implemented by Canada to ensure this stock's long-term viability. A co-ordinated approach to management will be developed that reflects both Parties sharing the burden of conservation for Late-run sockeye.

### **ASSUMPTIONS AND ELEMENTS OF THE PLAN**

1. For fisheries planning purposes, we applied a precautionary approach and assumed that Late-run sockeye will continue their post-1995 early upstream migration behaviour. Given pre-season assumptions about marine timing and recent delay behaviour, the median upstream migration date for Late-run sockeye in 2009 is expected to occur during the 3<sup>rd</sup> week of August. Given this timing and based on the 50p forecast level of abundance (573,000 fish), the exploitation rate limit is 20%.
2. The pre-season fishing plan assumes a 6 day separation in the 50% marine migration timing date (through Juan de Fuca Strait; Area 20) between Summer-run (August 5) and Late-run sockeye (August 11).
3. Estimates of abundance, migration timing, etc., for Summer-run and Late-run sockeye will be provided in-season and PSC staff will advise the Panel if changes to pre-season assumptions are warranted. However, for Late-run sockeye, upstream timing would have to be substantially later (e.g. mid-September) and return abundance substantially larger (greater than 1 million) than expected for the combination of the spawning escapement plan and the agreed management adjustment to result in allowable exploitation rates greater than 20%. Furthermore, the timeliness of Late-run updates will depend on the pattern of migration and updates may not be available during the period of active in-season Panel Area management. Thus, given the above circumstances, is it unlikely that the allowable exploitation rate for Late-run sockeye would increase above 20%.
4. Staff will not be able to provide in-season stock-specific assessments for Cultus sockeye due to their very low forecast abundance (5,000 fish at the 50% p level) relative to much more abundant co-migrating stocks. Consequently, assessments of Cultus sockeye harvest impacts will rely on the use of other, more abundant Late-run stocks as indicators of their relative contribution to catches.
5. To help ensure that Late-run conservation objectives are achieved, fisheries directed at Summer-run sockeye will be constrained by limits on Late-run sockeye harvest impacts. Late-run sockeye catches will be estimated primarily with DNA stock identification methods.

<sup>1</sup> Late-run here refers to the Late-run timing group, excluding Birkenhead and a few minor miscellaneous sockeye stocks.

**From the 2009 Integrated Fisheries Management Plan – Salmon Southern B.C.****Conservation Objectives**

**Conservation of Pacific salmon is the primary objective and will take precedence in managing the resource.**

The Department manages fisheries with the objective of ensuring that stocks are returning at sustainable levels. When returns decline below sustainable levels, management actions are taken which may include reducing the impact of fisheries on specific stocks, strategic enhancement and habitat restoration.

Stocks that are expected to return at below target levels will require specific management actions designed to protect and rebuild them to sustainable levels. The objective of implementing specific conservation measures is to reduce the impact of harvest and increase the level of escapement to the stock of concern. With regards to chinook, measures to protect LGS and WCVI chinook are outlined in 4.1.1 and 4.1.5 for 2009. The Department has also begun to draft a discussion document that will outline a multi-year strategy to address a range of chinook conservation fishery management concerns in the Pacific Region. Additional measures may be required as part of a comprehensive plan to recover chinook stocks of concern in future years and commencing in 2010.

**Interior Fraser River Coho**

**The objective for Interior Fraser River coho (including Thompson River coho) is to limit the Canadian exploitation rate to 3% (not including terminal harvest on systems experiencing strong escapements).**

Conservation measures with the objective of reducing harvest related impacts to Interior Fraser coho were first implemented in 1998. Since then, the conservation objective has been clarified to limit the exploitation rate to 3% or less.

Returns in 2009 are the brood of 2006, when an estimated index of 7700 fish returned to the Interior Fraser River, the lowest return on record. Escapement returns in 2008, well below the interim critical benchmark, indicate that poor marine survivals continue to be an ongoing concern and coupled with freshwater habitat impacts (water supply) will continue to limit recovery and further the requirement for actions to limit exploitation.

During May through September, when Interior Fraser coho are encountered in southern B.C. waters, management actions will range from non-retention to time and area closures. The following areas and fisheries are affected:

- West Coast Vancouver Island (WCVI) troll and recreational fisheries in offshore areas from late May until mid-September.

- Commercial net and recreational fisheries in the Straits of Juan de Fuca (Area 19 and 20) from June until early October.
- Commercial, recreational and First Nations fisheries in Johnstone and Queen Charlotte Straits from early June until late August.
- Commercial, recreational and First Nations fisheries in the Strait of Georgia from June until early October, and
- Commercial, recreational and First Nations fisheries in the Fraser River from early September until mid-October.

## **Cultus Lake Sockeye and Late Run**

**The objective for Cultus Lake sockeye is to limit the exploitation rate to 20 percent.**

Cultus Lake sockeye is a component of the Late Run Fraser River sockeye aggregate which is typically harvested in southern B.C. waters in August and September. Concerns for the entire Late Run aggregate have been acute in recent years (since 1996) due to a trend of abnormal early migration and associated high levels of pre-spawn and en-route mortality.

The returns of sockeye salmon to Cultus Lake have been particularly low relative to historic averages. To work toward rebuilding of this population, late run fishery management actions have been implemented to ensure low to moderate fishery exploitation levels on this stock. Enhancement measures have included fry and smolt releases as well as a captive brood program. Freshwater measures in the past have included predator control (removal of approximately 16,000 adult northern pikeminnow in 2007), removal of Eurasian watermilfoil and contaminant studies. Studies in 2007 and 2008 are designed to estimate the abundance and behaviour of the pikeminnow population as well as the efficacy of the predator control program.

All Canadian fisheries that could harvest Cultus Lake sockeye will be impacted by the need to limit exploitation on this stock. This includes:

- Closures in all fisheries with the possibility of impacting Cultus or Late Run fish when harvest limits for this stock group have been reached.
- Restrictions to First Nations fisheries in Queen Charlotte and Johnstone Straits, Strait of Georgia, Strait of Juan de Fuca, west coast of Vancouver Island and the lower Fraser River downstream of the Vedder River. However, where surpluses are identified, first priority will be accorded to First Nations for opportunities to harvest fish for FSC purposes.
- Restrictions to recreational salmon fisheries in southern B.C. This will include sockeye non-retention in specific locations when Cultus Lake sockeye are present and allowable harvest limits have been reached.
- Closures to commercial salmon fisheries in southern B.C. when Late Run sockeye are present, or expected to be present in the area as it will not likely be possible to identify Cultus Lake sockeye in-season in 2009 due to relative low abundances of Cultus Lake sockeye compared to other co-migrating sockeye stocks. These

closures will come into effect when allowable harvest limits for this stock group have been reached. Fisheries directed at other stocks or species of salmon will be subject to late run/Cultus constraints.

Within the Fraser River upstream of the Fraser/Vedder confluence, recreational and First Nations fisheries for Late Run Fraser River sockeye will be constrained under conditions of early river migration timing or adverse migration conditions which can be expected to result in a high level of enroute mortality.

Work is underway to promote rebuilding of the Cultus Lake population. Smolt assessment including, the application of special tags to track both smolt and adult migration patterns, will be undertaken. Predator control measures will be continued and studies to increase the understanding of threats to freshwater habitats will be done. In addition, the Department will continue with enhancement activities including the captive brood program where a small segment of the population is held until maturity and a variety of release strategies are implemented including fed fry and smolts. Release targets for the enhancement program are 50,000 smolts into Sweltzer Creek, and 150,000 par and over 500,000 fed fry into Cultus Lake itself.

For harvest constraints on the late run sockeye stock group aggregate refer to Section 5.4 Fraser River sockeye decision guidelines.

## **Sakinaw Lake Sockeye**

**The objective for Sakinaw Lake sockeye is to stop their decline and re-establish a self-sustaining, naturally spawning population.**

This objective will not be achieved until spawner abundance relative to previous brood years increases for at least 3 out of 4 consecutive years and there are no fewer than 500 natural spawners annually.

To achieve this objective quickly, a captive brood stock program designed to maintain genetic integrity and minimise inbreeding was initiated in 2001. Achieving this objective also meant that mortality, including fishing mortality, needed to be minimised, as much as practicable.

Sakinaw Lake is located in the Strait of Georgia near Sechelt, B.C. Migration timing data on Sakinaw Lake sockeye are extremely limited. Some data suggests Sakinaw Lake sockeye have a prolonged migration period commencing in Johnstone Strait in late May to July and arriving at the entrance to Sakinaw Lake in upper Strait of Georgia in July and August. Given this historical timing pattern, Sakinaw Lake sockeye are vulnerable to harvest directed at Fraser River sockeye stocks in July extending into mid August.

As with Cultus Lake sockeye harvest related measures to ensure protection for this stock are to continue.

Most fisheries that have potential to intercept Sakinaw Lake sockeye will continue to be delayed prior to the last week of July to ensure a significant portion of the return has passed through major fisheries in Johnstone Strait. The plan will provide for:

- Restrictions in First Nations FSC fisheries prior to the last week of July.
- Recreational fisheries in Queen Charlotte Strait, Johnstone Strait, and upper Strait of Georgia will be closed to sockeye retention prior to the last week of July. The waters near the mouth of Sakinaw Creek in Area 16 will be closed to fishing all season as well as sockeye non-retention restrictions in Area 16 until early to mid August when sockeye retention opportunities are expected to be available in Sabine Channel.
- Commercial fisheries in Queen Charlotte Strait and Johnstone Strait will be closed prior to the last week of July, and upper Strait of Georgia (including Sabine Channel) until early to mid August.

Recovery planning efforts to ensure rebuilding of this stock will continue to be supported. In addition to harvest related measures, there will be continued improvements made to the habitat (debris removal from spawning areas), investigations into the impacts of predation (seals, otters and lamprey), and enhancement work. Eggs are incubated in nearby hatchery facilities and the resulting fry are returned to the lake. The captive brood program will continue as a form of insurance to reduce the possibility of extirpation. There have been no returns of sockeye spawners in 2007 and 2008 and none are expected in 2009.



# Fraser River Sockeye Decision Guidelines

## Background

Fraser River sockeye are managed on the basis of the four management groups (Early Stuart, Early Summer, Summer, and Late Run). In recent years Birkenhead sockeye have been separated from the remaining Late Run stocks as their timing is more similar to the timing of Summer run stocks. Spawning escapement targets and harvest rules are developed annually for each stock timing aggregate as well as for Birkenhead sockeye.

The Fraser River Sockeye Spawning Initiative/WSP process was initiated in 2006 and has been continued for the identification of 2009 escapement strategy options.

## General Constraints

Though TAC is identified on various stock groupings in most years, certain conservation and management constraints can affect harvesting opportunities. These constraints are expanded upon below.

## Pre-season Planning

Prior to each fishing season, decisions are made about spawning escapement targets, harvest rates, management priorities and identification of conservation constraints. These decisions are made based on pre-season forecasts of run size, timing, stock composition, other technical information and input from various consultative processes. Potential fishing opportunities are identified based on these pre-season guidelines.

**Run Size Forecast:** Table 9 contains the 2009 forecast for all management groups.

Pre-season forecasts of run size at various probability levels are developed for major sockeye stocks within the four management groups (Early Stuart, Early Summer, Summer and Late). The 75% probability forecast indicates that the actual number of returning sockeye salmon has a 75% chance of being at forecast level or larger, while the 50% forecast is the mid-range forecast (i.e., there is an equal chance the return may be greater than or less than forecast). Forecasting methodology is found on the PSARC website at: [www.pac.dfo-mpo.gc.ca/sci/psarc/](http://www.pac.dfo-mpo.gc.ca/sci/psarc/). The 2009 forecast assumes that marine survival will be similar to the historical average. The 50% probability forecast will be used for fishery planning purposes for Early Summers, Summers and Late run sockeye. For Early Stuart sockeye planning will be based upon the 75p forecast until in-season information indicates otherwise. This approach is more precautionary and is based upon declining productivity observed for this management group in recent years. However given the recent trend in runs returning less than the 50% probability forecast level, work

is ongoing to assess potential qualitative indicators of marine survival which would then be considered in planning fisheries.

**Table 9. Pre-season forecasts for 2009 by stock/timing group and probability.**

Sockeye stock/timing group	CU's (Table 2)	Forecast Model <sup>b</sup>	Probability of Achieving Specified Run Sizes <sup>a</sup>						
			Mean Run Size <sup>c</sup>		0.1	0.25	0.5	0.75	0.9
			all cycles	2009 cycle					
Early Stuart <sup>d</sup>	1,2	Pooled	335,000	797,000	645,000	426,000	255,000	165,000	107,000
Early Summer			-	-	2,284,000	1,338,000	739,000	443,000	264,000
(total excluding miscellaneous)			(501,000)	(316,000)	(1,234,000)	(749,000)	(443,000)	(272,000)	(177,000)
Bowron	3	Ricker (eff)-pi	23,000	13,000	25,000	16,000	10,000	6,000	4,000
Fennell	4	Ricker (eff)	28,000	17,000	101,000	60,000	34,000	21,000	12,000
Gates	5	Ricker (eff)-cyc	65,000	52,000	224,000	127,000	74,000	44,000	30,000
Nadina	6,7	Ricker (eff)-peak	81,000	78,000	181,000	118,000	73,000	43,000	28,000
Pitt	8	Power (eff)	61,000	79,000	270,000	189,000	124,000	86,000	58,000
Raft	4	Power (eff)	32,000	31,000	209,000	131,000	78,000	49,000	32,000
Scotch	9	RS1 (naïve)	64,000	20,000	170,000	77,000	32,000	13,000	6,000
Seymour	9	Ricker (eff)-cyc	147,000	26,000	54,000	31,000	18,000	10,000	7,000
Misc <sup>e</sup>	9	R/S	-	-	22,000	12,000	6,000	4,000	2,000
Misc <sup>f</sup>	4,10	R/S	-	-	47,000	27,000	13,000	8,000	4,000
Misc <sup>g</sup>	11	R/S	-	-	25,000	14,000	7,000	4,000	2,000
Misc <sup>h</sup>	12	R/S	-	-	156,000	88,000	44,000	25,000	13,000
Misc <sup>i</sup>	4	R/S	-	-	800,000	448,000	226,000	130,000	66,000
Summer			5,677,000	11,111,000	31,813,000	16,071,000	8,677,000	4,914,000	2,858,000
Chilko	13,14	Power (smolt)	1,760,000	1,396,000	9,466,000	6,136,000	4,175,000	2,870,000	1,857,000
Late Stuart	15,16	R1C (naïve)	834,000	2,300,000	3,538,000	1,469,000	553,000	208,000	86,000
Quesnel <sup>j</sup>	17,18,19	Pooled	2,556,000	7,082,000	18,037,000	7,936,000	3,575,000	1,575,000	724,000
Stellako	19,20,21	Larkin (eff)	527,000	333,000	772,000	530,000	374,000	261,000	191,000
Late			-	-	2,875,000	1,616,000	907,000	517,000	327,000
(total excluding miscellaneous)			(3,242,000)	(946,000)	(2,665,000)	(1,482,000)	(843,000)	(485,000)	(310,000)
Cultus	22	Power (Smolt)-Jack	19,000	3,000	16,000	10,000	5,000	3,000	1,000
Harrison	23	Ricker (eff)-PDO	47,000	NA	373,000	160,000	69,000	46,000	33,000
Late Shuswap	24	Ricker (eff)-cyc	2,204,000	78,000	407,000	171,000	70,000	26,000	10,000
Portage	25	Ricker (eff)	58,000	74,000	259,000	140,000	66,000	31,000	16,000
Weaver	26	Larkin (eff)	432,000	332,000	906,000	546,000	336,000	200,000	126,000
Birkenhead	27	Power (eff)	482,000	459,000	704,000	455,000	297,000	179,000	124,000
Misc. Shuswap <sup>k</sup>	24,28,29	R/S	-	-	91,000	56,000	27,000	17,000	11,000
Misc. non-Shuswap <sup>k</sup>	30,31	R/S	-	-	119,000	78,000	37,000	15,000	6,000
TOTAL			-	-	37,617,000	19,451,000	10,578,000	6,039,000	3,556,000
(TOTAL excluding miscellaneous)			(9,755,000)	(13,170,000)	(36,357,000)	(18,728,000)	(10,218,000)	(5,836,000)	(3,452,000)
Pink Salmon	32		12,067,000	-	32,939,000	24,858,000	17,535,000	12,490,000	9,343,000

a. probability that the actual run size will exceed the specified projection.

b. see Cass et al. (2006) and DFO (2007) for model descriptions.

c. sockeye: 1980-2005 (excluding miscellaneous stocks); pink: 1961-2005.

d. Early Stuart is pooled Power and RS2 model (average weighted from retro analysis)

e. unforecasted misc. Early Summer stocks (Early Shuswap stocks: S. Thompson); return timing most similar to Scotch/Seymour).

f. unforecasted misc. Early Summer stocks (N. Thomson tributaries; return timing most similar to Fennell/Bowron/Nadina).

g. Nahatlach River & Lake

h. Chilliwack Lake and Dolly Varden Creek; return timing most similar to Early Stuart.

i. North Thompson River.

j. Quesnel is a pooled Larkin and Power model (average weighted from retro analysis performance during dominant yr)

k. unforecasted miscellaneous Late Run stocks; true lates made up a very small component (~800 at 50% prob. level)

Model definitions: pi (Pine Island SST covariate); cyc (cycle line data only); peak (Fraser R. peak discharge covariate); PDO (Pacific Decadal Oscillation (PDO) covariate); RS1 (product of R/S from last generation & eff fem spawners in brood year); R1C (rec from last last generation); R/S (used for stocks with no recruit data: product of R/S for run timing group and eff fem spawners).

**2009 Escapement Strategy and Harvest Rate Calculations:** The Fraser River Sockeye Spawning Initiative (FRSSI) was undertaken to develop escapement strategies for Fraser River sockeye. Early in 2009, a multi-sector group comprised of First Nations, recreational, commercial and environmental participants participated in a meeting to assist in the evaluation of the 2008 escapement strategy and to identify potential improvements for 2009.

FRSSI uses a simulation model to evaluate different management objectives and assumptions about stock dynamics in a consistent framework. The FRSSI model was developed to improve our understanding of the complex interaction between the population dynamics of individual stocks and escapement strategies that, due to practical constraints on in-season management, are applied to groups of stocks. The model currently includes 19 stocks (i.e. production units delineated based on spawning site and timing), grouped into 4 timing aggregates for management purposes. Each model scenario applies a specified escapement strategy to a timing aggregate 48 years into the future, starting with recent years, and tracks the performance of each individual stock within the aggregate.

The stocks within each timing group are modelled individually, based on the historical relationship between spawning escapement (i.e. number of adults in the brood year) and recruitment (i.e. number of 4 and the lower Fraser River downstream of the most consistent data available, but does not capture the dynamics of each individual life stage (e.g. egg-to-fry survival, juvenile migration)).

Refer to report number 2855 by Pestal et al. (2008) on the following website for more information about the FRSSI process:

[http://www.dfo-mpo.gc.ca/libraries-bibliotheques/manu\\_e.htm](http://www.dfo-mpo.gc.ca/libraries-bibliotheques/manu_e.htm)

**Table 10a. Fraser River sockeye escapement plan options for 2009 at the 50% probability forecast.**

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guidelines	Total Allowable Mortality at Run Size	Escapement Target at Run Size	Management Adjustment (a)		Exploitation Rate after MA
Early Stuart		-	156	0%					
	255	156	390	0 - 60%	39%	156	59%	92	3%
		390		60%					
Early Summer		-	200	0%					
		200	500	0 - 60%					
	739	500		60%	60%	296	42%	123	43%
Summer		-	520	0%					
		520	1,300	0 - 60%					
	8,677	1,300		60%	60%	3,471	7%	243	57%
Birkenhead and Birkenhead-type Lates (b)	334			0% 0 - 60% 60%	60%	134			60%
true-Late (excl. Birk. Type)	573	- 420 1,049	420 1,049	20% 20 - 60% 60%	27%	420	604%	2535	20%
Cultus	5								20%
Sockeye Totals	10,578					4,476		2,993	
	<i>Est. Return</i>								

a) Management adjustments (MAs) are added to the escapement targets to correct for the actual differences between Mission and upstream abundance estimates over all years. This approach makes no prior assumption about environmental conditions because we don't yet know whether conditions will be favourable or unfavourable in 2008. We expect that the MAs will be revised to take into account an environmental conditions during the inseason management period.

b) Birkenhead type Lates include returns in the miscellaneous non-Shuswap component of the forecast returning to natal spawning areas in the Harrison-Lillooet systems (excluding Harrison and Weaver).

**Table 10b. Fraser River sockeye escapement plan options for 2009 at the 75% probability forecast.**

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guidelines	Total Allowable Mortality at Run Size	Escapement Target at Run Size	Management Adjustment (a)		Exploitation Rate after MA
Early Stuart	165	-	156	0%	5%	156	59%	92	0%
		156	390	0 - 60%					
		390		60%					
Early Summer	443	-	195	0%	56%	195	40%	79	38%
		195	489	0 - 60%					
		489		60%					
Summer	4,914	-	520	0%	60%	1,966	7%	138	57%
		520	1,300	0 - 60%					
		1,300		60%					
Birkenhead and Birkenhead-type Lates (b)	194			0% 0 - 60% 60%	60%	78			60%
true-Late (excl. Birk. Type)	323	- 422 1,056	422 1,056	20% 20 - 60% 60%	20%	258	604%	1561	20%
Cultus	3								20%
Sockeye Totals	6,039					2,653		1,869	
	<i>Est. Return</i>								

a) Management adjustments (MAs) are added to the escapement targets to correct for the actual differences between Mission and upstream abundance estimates over all years. This approach makes no prior assumption about environmental conditions because we don't yet know whether conditions will be favourable or unfavourable in 2008. We expect that the MAs will be revised to take into account an environmental conditions during the inseason management period.

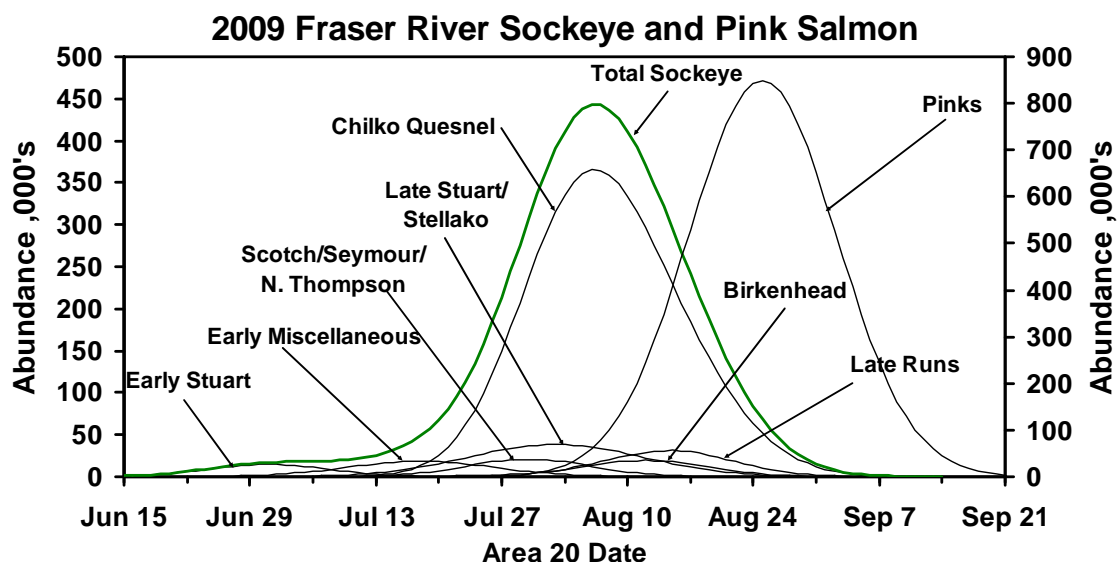
b) Birkenhead type Lates include returns in the miscellaneous non-Shuswap component of the forecast returning to natal spawning areas in the Harrison-Lillooet systems (excluding Harrison and Weaver).

**Run Timing:** Fishing plan options are evaluated for a range of possible run sizes and return timing. In 2009, pre-season fishing plans will be developed at both the 50% and 75% probability levels. In-season run-size estimates form the basis for management once these estimates are available. Figure 1 depicts the preliminary run timing for the 2009 cycle and forecast abundance (based on the 50% probability level) for the four Fraser River sockeye aggregates.

**Management Adjustments:** Management adjustments are added to the escapement goal when necessary to account for discrepancies between Mission hydro-acoustic measurements and in-river catch and spawning escapement estimates and en-route mortalities (i.e. more fish are needed to pass by Mission than spawning ground

requirements in order to account for measurement errors and en-route losses). Setting appropriate management adjustments is a major component of pre-season and in-season decision-making by the FRP. Management Adjustment Models consider observed biases as well as impacts from in-river water discharge, water temperature and timing of river entry to assist in this determination. Management adjustments are adopted by the FRP and have been applied to all four run timing groups. Regardless of the causes, management adjustments to all management groups may be made in-season to increase the probability that spawning targets will be met.

**Figure 1. Expected run timing of Fraser River sockeye in Area 20.**



Note that Figure 1 depicts the abundance and run timing of fish in Area 20 or Strait of Juan de Fuca. Recent anomalies in the Late Run timing are associated with timing of entry to the Fraser River, and are therefore not reflected in Figure 1.

## In-season Decisions

**Run Size Estimation and TAC calculations:** Pre-season forecasts of run size at various probability levels different than the 50% probability level may be used to guide development of pre-season harvest plans. In-season run size estimates based on information from test fishing operations, catches during commercial fishery openings and assessment fisheries, and hydro-acoustic estimates of abundance at the PSC hydro-acoustic facility at Mission, B.C. will be provided by the PSC staff to the FRP for consideration. In 2009, the primary Mission acoustic estimate will be derived from a combination of a shore based split beam system and from a single and split beam system located on a boat that transects the river slightly downstream from the shore based system.

The FRP will meet regularly from late June to mid-September to review information as it becomes available over the course of the sockeye and pink migration. Run size estimates will be regularly updated through the FRP process. In-season run size estimates are then used to set spawning escapement objectives, gross escapement objectives, calculate available TAC, and determine opportunities for fishery openings. The TAC will also be affected by the ability of harvesters to access this TAC as well as a number of factors, including in-river migration conditions and conservation requirements for other co-migrating stocks or species.

Information on in-season run size estimates and management actions, such as openings and closures, as well as other important information for commercial, recreational and First Nations fisheries are posted on the Internet regularly throughout the fishing season by the Department and the PSC at: [www.psc.org/NewsRel/Index.htm](http://www.psc.org/NewsRel/Index.htm) (PSC) and at DFO, fishery specific notices can be found at:

Aboriginal: [http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search\\_options&lang=en&id=aboriginal](http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=aboriginal)

Commercial: [http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search\\_options&lang=en&id=commercial](http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial)

Aboriginal: [http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search\\_options&lang=en&id=recreational](http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=recreational)

## Early Stuart Management

Early Stuart has experienced poor returns in recent years, partly due to high en-route mortality as they migrate up the Fraser River. The 2009 50p forecast of 255,000 is much larger than last year's run size in the 2008 "off-cycle" year, but amounts to only about one third of the average for this "dominant" cycle line. The forecast ranges from 165,000 (75p) to 426,000 (25p). However, the forecast model has a tendency in recent years to over-estimate true returns given the lower productivity of this stock. The 75% probability level of 165,000 more closely tracks the actual returns in recent years. This would indicate adoption of a more precautionary approach is warranted. Consequently for 2009 Early Stuart sockeye management plans will be based upon the 75p forecast of 165,000 until an in-season run size is adopted by the FRP.

The long-term escapement strategy, as adopted in 2007, is to reduce total allowable mortality at run sizes below 270,000, with minimal allowable mortality at run sizes below 108,000. Extensive consultation was undertaken with First Nations and parties with an interest in the management of Fraser River sockeye. Advice received from First Nations indicated a strong interest in providing for increased escapement levels for Early Stuart sockeye in 2009 (dominant cycle year) in order to reduce harvest and enhance rebuilding. For this reason the escapement strategy for Early Stuart sockeye will be managed to a Total Allowable Mortality strategy that reduces from a maximum level of 60% at 390,000 to a no fishing point at 156,000 (Table 10(a) and (b)). This approach will be reviewed during the post-season.

In recent years, window closures and other fishing restrictions have been necessary in commercial, recreational and First Nations fisheries to allow escapement objectives to be

met. At the adopted escapement strategy and the 75p forecast run size there will be no fisheries targeting Early Stuart sockeye and only a very small harvest available at the 50p forecast level (about 7,000). In order to protect Early Stuart sockeye, management will need to focus on restricting all fisheries.

Consequently, Early Stuart sockeye will be managed to avoid directed fisheries on 90% of the run using a closure window. For pre-season planning purposes window closures, based on run timing, are proposed for all fisheries (excluding test fisheries) and may be altered in-season as more information regarding timing and run strength are made available. During the window closures, fishing for sockeye is not to be permitted except for limited First Nation ceremonial licences for unplanned events (such as funerals). Test fisheries are limited during Early Stuart migration and are shaped to avoid most of the run. Below is a preliminary summary of window closure dates and may change as more information regarding run size and timing are available in-season. A more detailed listing of open times for the Fraser River watershed is available online at:

<http://www.pac.dfo-mpo.gc.ca/fraser/river/firstnations.htm>

### **Proposed closures dates for Early Stuart sockeye in 2009.**

<b>Area</b>	<b>Closure Start (date, time)</b>	<b>Closure End (date, time)</b>
Area 127, 11, 12, 13, 20 and 29	15-Jun	16-Jul
Steveston-Port Mann Br	23-Jun	16-Jul
Port Mann Br-Sawmill Cr	23-Jun	16-Jul
Sawmill Cr - Deadman Cr	28-Jun 18:00	21-Jul 18:00
Deadman Cr - Quesnel R	5-Jul 18:00	26-Jul 18:00
Quesnel R - Narver Cr	5-Jul 18:00	26-Jul 18:00
Narver Cr - Prince George	12-Jul 18:00	2-Aug 18:00
Prince George-Stuart R	12-Jul 18:00	2-Aug 18:00

In the event in-season assessment indicates that the Early Stuart sockeye are returning in enough abundance to indicate there is a substantive harvestable surplus these proposed window closure dates would be adjusted.

### **Late Run Management:**

Late Run sockeye have been entering the Fraser River much earlier than historically and have experienced very high levels of en-route and/or pre-spawn mortality since the mid 1990s. While a range of studies have been undertaken to attempt to understand the cause and impact of this phenomenon, no causal factors have been identified. Planning for 2009 will consider the pattern of migration and resulting mortalities to address the risk of early entry occurring in 2009 and the associated impacts will be incorporated into the plan. The Cultus Lake stock will continue to be a factor in planning fisheries for 2009.



## Management Adjustments

Management adjustments are estimated pre-season for all run timing groups by the FRP. They may also be modified in-season by the FRP based on indications of adverse migration conditions in the Fraser River reported in weekly Environmental Watch reports and models used to predict the impact of current Fraser River conditions on the mortality of migrating fish. For further information see: [www-sci.pac.dfo-mpo.gc.ca/fwh/](http://www-sci.pac.dfo-mpo.gc.ca/fwh/).

## Issues

Determining the migration pattern and run size of Cultus Lake sockeye will be difficult in 2009 due to the expectation of low abundance in relation to other Late and Summer run stocks. Consequently, Cultus Lake exploitation rates will be estimated in-season based on the available information for other late run stocks excluding the earlier timed Birkenhead and Harrison fish. Harsh in-river environmental conditions or early entry of Late runs into the Fraser River may result in management actions in order to ensure target spawning goals are met. With restrictions to protect co-migrating Cultus Lake sockeye, some Summer Run and Late run stocks may arrive at the spawning grounds in numbers well in excess of spawning requirements. In addition to harvest restrictions, other recovery actions are underway for Cultus Lake sockeye. Increased numbers of smolts from the hatchery releases, and an experimental predator control program conducted by Area E fish harvesters should increase the probability of the stock recovering over the next few generations. The Department will continue to work with all harvesters in order to have orderly and manageable fisheries conducted.

## Prospects for 2009

General outlooks for the four stock aggregates, as well as stocks of special concern are outlined in Table 11.

**Table 11. General fisheries outlook for 2009 Fraser sockeye**

Stock/MU	Outlook	Comments
Early Stuart	Any targeted fisheries will need to be carefully planned and paced in order to ensure escapement targets are met. A precautionary approach to fishery planning will be implemented.	The median (50% probability level) return forecast for Early Stuart is 254,000 sockeye. The 2009 cycle is the dominant cycle for Early Stuart. The 2005 brood year escapement (99,000 adults) was 40% below the previous generation (2001) of 170,000 adults, was the lowest on the cycle for the past four decades, and was 55% below the recent cycle average (1981-2001). The 75% probability level of 165,000 was closer to the recently observed returns for this model. Early Stuart sockeye management plans will be based upon the 75p forecast of 165,000 until an in-season run size is adopted by the FRP.

Early Summer —	There will be opportunities for directed fisheries. However, fishery planning may need to consider options to reduce impact on some weak co-migrating Early Summer stocks.	The total 50p forecast for the stocks is 443,000 which is 140% of the mean cycle-year average of 316,000 (not including miscellaneous Early Summer stocks). The forecast return at the 75% probability level is 272,000 sockeye. Including miscellaneous stocks the 50p and 75p forecast is 739,000 and 443,000, respectively. While the forecast is above the cycle-year average there are concerns for some stocks returning to the South Thompson and upper Fraser.
Summer	Directed fisheries expected, but will be constrained by concerns for ensuring Early Summer targets and conservation concerns for Cultus and Sakinaw are met	The Summer run consists of four main stocks Chilko, Late Stuart, Stellako and Quesnel. The 2009 cycle is the dominant cycle for Late Stuart and Quesnel. Escapement in the 2005 brood year was 1.3 million effective female spawners for these four stocks which is below the cycle year average for these stocks of 1.6 million (1980-2005). The 50% probability forecast of 8.677 million is 78% of the mean cycle-year return of 11.1 million. The 75% probability forecast is 4.9 million.
Late Run	About average, but concerns for high enroute mortality continues (directed fisheries unlikely)	The 2005 brood year is an off cycle for the highly cyclic Late Shuswap stock. Total Late run escapement in 2005 was 280,000 effective female spawners for these stocks which is above the cycle average of 100,000 (1980-2005). The spawning escapement for Harrison, in particular, has been well above documented escapements in the 2005 (200,000 effective females) and 2006 (90,000 effective females) brood years. The 50% probability forecast of 843,000 (excluding the miscellaneous stocks) is 89% of the average cycle year return of 946,000. This is the lowest of the off-cycle years, dominated by a Weaver forecast of 336,000 (50p).

Special Concern Cultus Lake	– Conservation concern	The stock continues to be very depressed and requires continued protection. Returns and escapement have substantially declined since the 1960s. The median (50% probability level) return forecast for Cultus is 5,000 sockeye. Escapement has been trending downward and the brood year escapement (2005) of 112 adult spawners was 75% below both the previous generation (2001) of 500 adults and the recent cycle average (1981-2001). On-going recovery actions (e.g. predator removal and hatchery enhancement) for this COSEWIC listed species ('endangered') are expected to continue in 2009.
Special Concern - Strait of Georgia Sakinaw	Conservation concern	The stock is extremely depressed, requiring continued protection. A return of up to 100 fish is expected this year.

## Fraser River Pink Decision Guidelines

The forecast return for Fraser River pink salmon at the various probability levels is shown below.

	Forecast Model	Mean Run Size	Probability Level				
			0.1	0.25	0.5	0.75	0.9
Pink	Fry-salinity	12,067,000	32,939,000	24,858,000	17,535,000	12,490,000	9,343,000

The 2009 escapement strategy for Fraser pink salmon continues to be based on an interim escapement goal of 6 million Fraser River pink salmon (plus an additional 30% of the run at run sizes above 20 million) with an exploitation rate cap of 70%. Escapement targets and exploitation rates are outlined in the escapement plan in Table 12.

**Table 12. Fraser River Pink Salmon Escapement Plan for 2009. Run size forecasts showing 50 percent probability levels. Numbers are in thousands of fish.**

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guidelines	Total Allowable Mortality at Run Size	Escapement Target at Run Size
Fraser Pink	17,535,000	-	7,059	0% - 15%	66%	6,000,000
		7,059	17,143	15% - 65%		
		17,143		65% - 70%		

Preseason fishing plans are developed based on the 50 percent probability level forecast. In-season run size estimates form the basis for management once these estimates are available. At each of the forecast run sizes there will likely be TAC available for fisheries to be directed on Fraser pink salmon. However, it is expected that conservation constraints for stocks of concern such as Late run and Cultus sockeye, Interior Fraser coho and Interior Fraser steelhead will likely constrain the ability to harvest the identified TAC.

**DRAFT AGENDA  
PACIFIC SALMON COMMISSION  
FRASER RIVER PANEL  
February 9-13, 2009  
Starting Tuesday, February 10 at 9:30am  
Embassy Suites, Portland, OR**

**January 23, 2009**

1. Agenda.
  
2. 2009 Pre-season planning
  - a. Forecasts of Washington sockeye salmon returns
  - b. Conservation needs for other stocks and species
  - c. Draft sampling plan request letters and approval
  - d. Progress report on development of 2009 Escapement plan
  - e. Follow-up on Late-run sockeye policy options
  - f. Draft inputs for Pre-season planning model
  
3. Test fishing issues
  - a. Draft test fishery start and end dates for Panel approved test fisheries in 2009
  - b. Plans for potential additional test or assessment fisheries in 2009
  - c. Review of US area 5 test fishery
  - d. Draft test fishing policy document
  
4. Retrospective evaluation of Bayesian run size models used in 2008
  
5. Progress report on renewal of Annex IV Chapter 4 discussions
  - a. Further instructions for Staff/FRPTC related to changes in Mgt. Groups
  
6. Discussion of future changes to Pre-season planning model
  
7. Feedback on expanded list of participants in Panel calls in 2008 and plans for 2009
  
8. Other Business
  - a. Update on Status of minutes and Annual reports
  - b. April and June meeting logistics

WDFW  
Panel  
Staff  
DFO/Panel  
Staff/Panel  
Staff

Staff/Panel  
Staff/DFO  
Staff/Panel  
Staff/Panel

C. Michielsens

Panel

Staff/Panel

DFO

Staff  
Staff/Panel

Feb 4, 2009

**DRAFT AGENDA  
PACIFIC SALMON COMMISSION  
FRASER RIVER PANEL TECHNICAL COMMITTEE  
Monday Feb 9, 2009 8:30am  
Embassy Suites, Portland, OR**

1. Agenda.
2. 2009 Pre-season planning
  - a. Forecasts of Washington sockeye salmon returns WDFW
  - b. Draft sampling plan request letters and approval Staff
  - c. Progress report on development of 2009 Escapement plan DFO
  - d. Follow-up on Late-run sockeye policy options and treatment of Harrison Staff/FRPTC
  - e. Draft inputs for Pre-season planning model Staff/FRPTC
3. Test Fishing related issues Staff/FRPTC
  - a. Draft test fishery start and end dates for Panel approved test fisheries in 2009
  - b. Review of US area 5 test fishery
4. Retrospective evaluation of Bayesian run size models used in 2008 Staff/FRPTC
5. Discussion of FRPTC needs for changes to Pre-season planning model for 2009 and longer term plans for model revisions Staff/FRPTC
6. Further discussion of variation in timing amongst stock groups, next steps and potential implications for assessments. Staff/FRPTC
7. Other Business
  - a. March, April, May and June meeting logistics Staff/FRPTC

Minutes of the Meeting of the  
Fraser River Panel of the Pacific Salmon Commission

Held at the Embassy Suites Hotel  
Portland, Oregon.  
February 10-12, 2009

PRESENT: PANEL MEMBERS

CANADA

Mr. B. Rosenberger (Chair)  
Mr. M. Griswold  
Chief K. Malloway  
Mr. J. Murray  
Mr. C. Ashton  
Mr. B. Assu  
Mr. T. Bird  
Mr. R. Brahniuk  
Mr. L. Rombough  
Mr. P. Sakich  
Mr. M. Shepert

UNITED STATES

Ms. L. Loomis (Vice-Chair)  
Mr. K. Adicks  
Mr. R. Kehoe  
Mr. T. Tynan  
Mr. R. Charles  
Mr. J. Giard

TECHNICAL COMMITTEE MEMBERS

Ms. A-M. Huang (Co-Chair)  
Mr. R. Goruk  
Mr. J. Scroggie  
Mr. M. Staley

Mr. G. Graves (Co-Chair)  
Ms. P. Busby  
Dr. P. McHugh

STAFF

Mr. J. Cave  
Mr. K. Forrest  
Mr. J. Gable  
Mr. I. Guthrie

Mr. M. Lapointe  
Mr. S. Latham  
Dr. C. Michielsens  
Mr. B. White

ADVISORS AND GUESTS

Mr. S. Bass, Makah Tribe  
Ms. K. Benner, DFO  
Mr. A. Chapman, Lummi Nation  
Ms. S. Grant, DFO  
Mr. D. Harsila, U.S., NT Gillnet  
Mr. R. Kinley, Lummi Nation  
Mr. G. MacWilliams, Nooksack Tribe  
Mr. J. McCulloch, Northern Panel

Ms. B. Pechter, DFO  
Mr. T. Protheroe, Northern Panel  
Mr. P. Ryall, DFO  
Ms. A. Seiders, NWIFC  
Mr. R. Svec, Makah Tribe  
Mr. T. Whitehouse, DFO  
Mr. K. Wilson, MCC  
Mr. J. Young, MCC

The meeting was called to order at 9:40 a.m., February 10, 2009.

The Panel welcomed Mr. Chris Ashton who has replaced Mr. Larry Wick as the purse seiner representative on the Canadian side of the Fraser River Panel.

1. Agenda

The draft agenda was approved (Attachment 1).

2. 2009 Pre-season Planning

a. Forecasts of Washington Sockeye Salmon Returns

Dr. McHugh presented the forecast run sizes for Washington sockeye in 2009 (Attachment 2). The forecast run size for Lake Washington sockeye of 19,300 is the lowest on record. The forecast of 3,100 Baker Lake sockeye is in the low-range of recent forecasts. A strong return is forecast for the Columbia River sockeye (183,800 fish) with most of the production attributed to the Okanagan Basin (164,900 fish). The methodology supporting the forecasts was briefly reviewed. Mr. Lapointe asked if there was a conservation concern for Lake Washington sockeye since some of them would be harvested in the Area 20 gillnet test fishery that would be targeting Early Stuart sockeye. The projected catch of Lake Washington sockeye in this test fishery is approximately 300 fish. Mr. Graves replied that the U.S. would still like this test fishery to proceed so that data could be collected for in-season management.

b. Conservation Needs for Other Stocks and Species

Mr. Tynan stated that U.S. conservation concerns this season for potential incidental harvest impacts in Fraser Panel fishing areas include listed Puget Sound Chinook salmon, in particular the South Fork Nooksack and South Fork Stillaguamish Chinook salmon populations. Hood Canal summer chum salmon also remain a conservation concern. Additionally, the U.S. is concerned about the effects of vessel interactions with ESA-listed southern resident killer whales. Proposed rules presenting various alternatives for addressing potential adverse vessel interaction effects on killer whales have been drafted by NMFS and are in the process of being distributed for public review and comment. The goal is to determine whether acceptable measures can be implemented to reduce the risk of adverse effects on killer whales resulting from vessel interactions, particularly in those areas frequented by the whales during the summer months around the San Juan Islands.

Mr. Rosenberger stated that Canadian conservation concerns this season include: Cultus, Sakinaw and Nimpkish sockeye; Thompson coho and steelhead; Chilcotin steelhead; early-timed Fraser Chinook as well as lower Strait of Georgia and west coast Vancouver Island Chinook.

c. Draft Sampling Plan Request Letters and Approval

Mr. Lapointe distributed the draft Canadian and U.S. letters in which the PSC requests collection of sockeye and pink salmon samples for the 2009 season (Attachment 3). He noted that it would be preferable to have these draft letters finalized at this meeting and signed by the Chair of the PSC, Mr. Paul Sprout.

Mr. Adicks asked what the plans were for pink salmon baseline samples in Washington this year. Mr. White replied that they include the Green, Puyallup, Skagit, some Hood Canal stocks as well as others. He noted that a request for the pink salmon baseline samples would be sent to the U.S. soon. Mr. Rosenberger asked about the status of Canadian pink salmon baseline collections this season and Mr.



White replied that he would be forwarding a request for baseline samples to Mr. Pieter Van Will in the near future. Mr. White also noted that the current goal of the pink baselining efforts is to add stocks not currently in the baseline and to increase the samples sizes of large stocks that have already been sampled so that a more accurate profile of their genetic characteristics can be constructed.

Chief Malloway said that LGL consulting needs to provide further information to First Nations bands on the Fraser River regarding the sockeye radio-tagging program. He noted that many First Nations members are not aware of the program and do not know what to do with a radio-tagged sockeye if they catch one. Mr. Rosenberger commented that efforts would be made to try and improve communication regarding the radio-tagging program between LGL, First Nations bands on the Fraser and DFO.

d. Progress Report on Development of 2009 Escapement Plan

Ms. Huang provided an example of how TAMs (total allowable mortality) are calculated based on escapement goals and run sizes (Attachment 4). The escapement goals for Fraser River sockeye at the 50% and 75% probability level forecasts were also reviewed (Attachment 5). The pMAs (proportional management adjustments) will change between now and the in-season management period. The preliminary True Late-run exploitation rate limit in 2009 is 20%. Mr. Tynan asked what the next steps were in completing the escapement plan and Mr. Rosenberger said that the escapement plan would be included in the draft IFMP in mid-March and it would likely be finalized by mid-April.

e. Follow-up on Late-run Sockeye Policy Options

Mr. Lapointe gave a presentation regarding the treatment of Harrison sockeye in the Late-run harvest policy this season (Attachment 6). The treatment of Harrison sockeye relates to: (1) Status – large increases in three recent years despite earlier upstream migration; and (2) they have had large, negative DBEs (losses) in most years since 1996 that roughly track the DBEs of the non-Harrison Late-run sockeye. Larger return years for Harrison sockeye have tended to migrate upstream later. Harrison sockeye DBEs track non-Harrison Late-run DBEs better than they do Summer-run DBEs. The abundance of Harrison appears to have a larger impact on the DBEs than upstream timing. However, abundance and upstream timing are confounded, considering that in larger spawner abundance years, the sockeye have tended to migrate upstream later than in low return years. Further analyses need to be conducted on the impact of assessment errors on the relationships. The temperature-based DBE model explains more of the variation in the DBEs than does the model based on timing. However, temperature and timing are confounded because early upstream migration exposes the run to warmer river temperatures.

It may not be currently possible to generate a specific escapement plan for Harrison sockeye. Two options are: (1) include Harrison sockeye in the overall Late-run harvest impacts; or (2) exclude Harrison from the Late-run harvest impacts and manage them passively. If Harrison sockeye are included in the Late-run harvest impacts it will likely result in greater restrictions on mixed-stock harvest but lower exploitation rates on the non-Harrison Late-run sockeye. Excluding Harrison sockeye would likely result in higher exploitation rates on Harrison and other Late-run sockeye.

Chief Malloway asked where Harrison sockeye spawn and Mr. Lapointe replied that they spawn downstream of Morris Slough. Chief Malloway noted that possibly Harrison sockeye have done better in recent years than other Late-run sockeye because they thermoregulate themselves in colder portions of Harrison Lake. Mr. Lapointe commented that Harrison sockeye may have survived better in the lake than in the river in 2004 because they sought out cooler waters beneath the thermocline.

Mr. Rosenberger asked if there were any items from the FRPTC meeting that should be discussed now and Mr. Graves said that there had been a request for Staff to examine the relationship between Early

Summer-run and Harrison DBEs. Mr. Rosenberger asked what the timeline was for deciding on the treatment of Harrison sockeye in the Late-run harvest policy and Mr. Lapointe said that it should be resolved by the pre-season Panel planning meeting in April.

The meeting recessed at 10:45 a.m.

The meeting reconvened at 1:40 p.m.

Mr. Lapointe advised that there was not a significant relationship between Harrison and Early Summer-run sockeye DBEs (Attachment 7).

f. Draft Inputs for Pre-season Planning Model

Mr. Lapointe reviewed a presentation entitled “2009 Pre-season Planning Model Inputs” (Attachment 8), which included by run-timing group: preliminary 2009 management adjustment factors; Fraser River aboriginal exemptions; and projected marine timing through Area 20. Snow pack levels in the upper Fraser River watershed are currently near normal while those in lower portions of the watershed are generally below normal. Marine conditions are currently cool and may contribute to the expected earlier than average marine timing of Fraser River sockeye this season.

For pre-season planning, the current projected peak marine area abundance timing through Area 20 by run-timing group are: Early Stuart – June 28; Early Summer-run – July 21; Summer-run – August 4; and True Late-run – August 11. These marine timing dates are three days earlier than the median of the 2006 cycle line, excluding Late-timed years (1989, 1993, 1997, and 2006). Quesnel sockeye are forecast to contribute approximately 41% of the Summer-run sockeye production this season, which is lower than the cycle year average and would tend to suggest earlier timing for Summer-run sockeye. If very early marine-timing of Fraser sockeye is expected in 2009, it will be necessary to consider the implications of higher pre-spawning mortality rates. Based on observations from recent years, Late-run sockeye are not expected to delay in the Strait of Georgia prior to entering the Fraser River. Test fishing catches of Fraser sockeye in 2009 are expected to total approximately 60,000 fish. The peak marine area abundance timing of Fraser pink salmon has been earlier than average for the past three return years. For pre-season planning, a peak marine timing date of August 25 through Area 20, which is about four days earlier than the long-term average, should be used.

Mr. Shepert said that it would be useful to plan fisheries accordingly if high pre-spawning mortality rates are expected due to very early migration timing. Mr. Lapointe noted that it may be possible to manage fisheries according to different goals, such as the number of effective female spawners. Mr. Whitehouse commented that Dr. Tony Farrell is conducting research on the impacts of early-entry sockeye behavior on pre-spawning behavior.

3. Test Fishing Issues

a. Draft Test Fishery Start and End Dates for Panel Approved Test Fisheries in 2009

Mr. Lapointe reviewed the proposed test fishing schedule for 2009 (Attachment 9). The test fishing schedules could change depending on salmon abundance, management requirements and funding. The test fishing schedule extends for a longer period this season since adult Fraser pinks are returning and there will be a need to assess their migration. If the marine timing of Fraser sockeye is early this season then it would be preferable to advance the start date of test fisheries, however, it would not be possible to extend the test fishing period longer since there are a “fixed” number of days of test fishing that can be funded. Mr. Rosenberger asked what the minimum number of test fishing days would be if there were budget reductions. Mr. Lapointe replied that in the past when this question has arisen, Staff’s approach

has been to provide the Panel with a description of the impacts on fisheries management of not conducting specific test fisheries. There may be some carry-over funds from the test fishing program last year that can be used to help fund test fisheries in 2009. One vessel would be used in the Area 20 gillnet test fishery, except for the peak of the migration when two vessels would be employed.

b. Plans for Potential Additional Test or Assessment Fisheries in 2009

Mr. Brahniuk said that Area D and Gordon Group assessment fisheries are being considered.

c. Review of U.S. Area 5 Test Fishery

Mr. Cave gave a presentation entitled “Review of the Area 5 Gillnet Test Fishery” (Attachment 10). In 2003, PSC Staff noted that there was a need to improve information on the migration of sockeye salmon on the U.S. side of Juan de Fuca Strait. Since 2003 there have been several low abundance years, which resulted in reduced fishing, including in Area 4B, 5, 6C. In 2005, Staff expressed concern with the lack of assessment capabilities on the U.S. side of the Strait. Staff requested an Area 5 test fishery, which started on July 26 and was conducted for five days. In 2006, the Panel approved a test fishery in Area 5 that would be reviewed in 2009 after four years of annual operation (starting in 2005). The purpose of the test fishery was to monitor the migration of sockeye on the U.S. side of Juan de Fuca Strait and to try to use the data to help estimate the overall abundance of sockeye migrating through Juan de Fuca Strait. The test fishery was operated daily after most Early Stuart sockeye had migrated through the area and prior to the start of any commercial fisheries in Areas 4B, 5, 6C.

Analysis of data collected from the test fishery as well as associated data indicated that: (1) there was a significant relationship between sockeye abundance and Area 5 test fishing CPUE as well as for abundance through Area 20 and CPUE. There was not a significant relationship between Area 20 and Area 5 CPUE and wind direction at Tattosh. There was a stronger relationship ( $R^2 = 0.41$ ) between the estimated average proportion of sockeye on the U.S. side of Juan de Fuca Strait and the 3-day average ebb tide. By applying a third covariate to this latter correlation (Area 5 CPUE; “Day”, which is a surrogate value for a stock-specific or environmental variable; and ebb current), the significance of the relationship was increased ( $R^2 = 0.64$ ). Oceanographic variables may have some utility for helping to improve estimation of the abundance. Data collected from the Area 5 test fishery have been limited by few observations in some years. However, the data are likely informative in the short term; particularly when the sockeye migration increases on the U.S. side of Juan de Fuca Strait.

d. Draft Test Fishing Policy Document

Discussion of the draft test fishing policy document was deferred to a future Panel meeting.

The meeting recessed at 2:45 p.m. February 10.

The meeting reconvened at 11:15 a.m., February 11.

5. Progress Report on Renewal of Annex IV Chapter 4 Discussions

a. Further Instructions For Staff/FRPTC Related to Changes in Management Groups

Mr. Latham gave a presentation on the marine timing of Fraser sockeye stocks and management groupings (Attachment 11). Estimates of the marine timing of Fraser sockeye stocks using recent DNA analyses and scale pattern analyses over a broad time period were reviewed and indicated substantial variability in the marine timing of many stocks. Some of the factors contributing to how well a stock’s timing is resolved include: (1) high genetic distinction from other stocks; (2) high proportions of stocks in

large samples; (3) and good estimates of abundance (e.g., need good temporal estimates to define run profiles). A dendrogram was reviewed that graphically showed the genetic distinctiveness and relationship of several Fraser sockeye stocks. The accuracy of resolving specific stocks is impacted by factors such as their genetic distinctiveness, sample sizes, marine timing distribution, and abundance. Abundance and accuracy profiles over the in-season management period were reviewed for several stocks.

The groupings of stocks are considered to be an “imperfect human construct” to facilitate fisheries management. In the past, stocks were often grouped to a greater degree in response to more difficult management/stock identification problems. There is now greater capability to resolve sockeye stocks. There have also been substantial changes in the abundance of Harrison and North Thompson sockeye stocks. The utility of DNA to resolve stocks is also impacted by sample sizes, historical data, and information on abundance. The value of the increased stock resolution is furthered by improvements in sampling and analysis, judicious stock groupings, and by applying stock specific information. The next steps in marine timing assessments include: obtaining re-calibrated marine and river genotypes; comparing against the standardized baseline assembled from 2001 to 2008; smoothing via the Huston & Schwarz method; presenting summaries from alternative grouping schemes; and general re-evaluations.

Mr. Lapointe reviewed frameworks for examining the rationales and implications for considering changes to the current Fraser sockeye management groups. The rationales include: (1) migration timing, behavior, geographic distribution; (2) assessment (stock identification) capability which comprises genetic distinctiveness of stocks, relative abundance, and impact on the accuracy of assessments for management groups; (3) productivity (similar harvest rates, accounted for in escapement policy development through benchmarks); and (4) differences between estimates. The implications include: (1) stock specific outcomes (escapements) for management (through pre-season model); (2) spawning escapement policy (TAM rules through benchmarks); (3) total TAC and proportional sharing (access to TAC); and (4) in-season abundance assessments (changes to historical data, cumulative passage, priors for Bayes model). This list of implications is incomplete and more feedback from the Panel is requested. Harrison and North Thompson sockeye could be examined with these frameworks.

Mr. Shepert noted that the Panel should agree on the principles behind the framework that is used to decide changes to the management groupings. The principles should reflect the priorities identified in the Treaty and Annex, with conservation being a high priority. There was brief discussion of the rationales for deciding appropriate management groupings for the stocks and the Panel decided to discuss the issue again later.

The meeting recessed at 12:05 p.m., February 11.

The meeting reconvened at 1:20 p.m. February 12.

#### 4. Retrospective Evaluation of Bayesian Run Size Models Used in 2008

The Panel decided to defer this agenda item until a future Panel meeting.

#### 6. Discussion of Future Changes to Pre-season Planning Model

Mr. Lapointe said that a proposal for making changes to the pre-season fishery planning model had been submitted to the Southern Endowment Fund, however, given the current status of the SEF, it is unlikely that there would be funding this year. The four main areas of improvement that are desired in a new planning model include: (1) more efficient design; (2) increased compatibility to model evolving fisheries such as ITQ and FSC fisheries; (3) capability to use output from the model as input for other

fishery models; and (4) increased accessibility for individuals inside and outside of the FRP to use the model, including possibly providing the model for use over the internet.

Researchers at SFU conducting work on fishery models will be consulted. At the Panel meeting in May of 2008 several individuals were identified to provide advice on the planning model: Mr. Ryall, Ms. Loomis, Mr. Morley, Mr. Adicks, and Mr. Murray. The Panel needs to provide an update on who they would like included in this group. Mr. Graves asked whether there was any ongoing work on the model and Mr. Lapointe noted that Mr. Staley was conducting some coordination meetings and that it might be possible to begin modeling some ITQ fisheries. Mr. Staley said that a proposal had been submitted to the Fraser Watershed Salmon Program regarding coordination of the modeling with several different users. He should know about the status of the funding within the next fiscal year.

#### 7. Feedback on Expanded List of Participants in Panel Calls in 2008 and Plans for 2009

Mr. Staley reported that extra “muted” telephone lines were provided to marine approach area and Fraser River First Nations band members so that they could listen to the in-season 2008 Panel teleconference meetings if they chose. Attendance by First Nations members listening in on the Panel meetings was highest early in the season and then declined considerably. They generally found the calls informative and interesting. The program was budgeted to cost \$5,000, however, only \$1,200 was spent. The program was also good in that it made the management process more transparent to First Nations band members. Mr. Lapointe asked if the program would be conducted in 2009 and Mr. Staley said that it would depend on whether funding was available from the First Nations Caucus Program.

#### 8. Other Business

##### a. Update on Status of Minutes and Annual Reports

Mr. White reported that all of the final 2008 FRP minutes have now been signed by Panel Chairs and the minutes from the January Panel meeting have been drafted and distributed for review. Mr. Guthrie said that the status of the FRP Annual Reports was: 2005 – sent out for review and he would like to finalize it at the next Panel meeting; 2006 – has been distributed for review; 2007 – is in the draft stage and should be sent out for review within two months; and 2008 – in preparation.

##### b. April and June Meeting Logistics

Mr. Lapointe said that the next meeting would be April 27, 28 (FRPTC) and 29, 30 (FRP) in Washington possibly at the Suquamish Hotel. He noted that if the rates were acceptable, it should be reserved as soon as possible. The following meetings would occur in B.C. on June 15, 16 (FRPTC) and 17, 18 (Panel) in either Penticton or on Quadra Island. The Panel requested that options for the meetings at both of these options be explored.

#### 2. 2009 Pre-season Planning

##### c. Draft Sampling Plan Request Letters and Approval (Cont'd)

The Panel approved the draft sampling request letters.

##### e. Follow-up on Late-run Sockeye Policy Options (Cont'd)

Mr. Graves requested that the Staff conduct modeling with Harrison both included and then excluded from the True Late-run sockeye group. The results would be presented at the April Panel

meeting. Mr. Lapointe clarified that Staff would conduct the modeling with Harrison included and then excluded from the preliminary 20% True Late-run sockeye exploitation rate. The standard suite of outputs from the model would be examined such as escapements, DBEs, and catches. Mr. Cave asked if there would be a separate DBE for Harrison sockeye and Mr. Lapointe said that technical advice would be needed on this. Mr. Shepert noted that consultations with First Nations would be needed if changes to the escapement plan were being considered.

f. Draft Inputs for Pre-season Planning Model (Cont'd)

The Panel approved the draft inputs for the pre-season planning model.

3. Test Fishing Issues

a. Draft Test Fishery Start and End Dates for Panel Approved Test Fisheries in 2009 (Cont'd)

Mr. Brahniuk said that further discussion was needed on the test fishing schedule for 2009 since there were issues that linked it to the draft test fishing policy document, which hasn't been finalized. There are also budget discussions that could impact decisions. The option of an Area D test fishery is also being discussed. Mr. Tynan stated that the U.S. had no changes to the proposed test fishing schedule. Mr. Ryall said that Canada needs more time to review budget issues and is also uncertain whether it is necessary to have three purse seiners fishing in Johnstone Strait until September 15. Mr. Lapointe replied that these test fisheries were necessary to assess the migration of pink salmon through Johnstone Strait. If their marine timing is early then it may not be necessary to test fish until mid-September. The PSC would like to be advised regarding the status of funding as soon as possible so that test fishers can be given sufficient notice. Mr. Lapointe noted to the Panel that the start dates of the test fisheries were unlikely to change; however, the end dates of the test fisheries were more subject to change.

Mr. Ryall said that there was going to be a meeting today with Area D representatives to discuss a 10-vessel test fishery that would fish for 38 hours with no extension. DFO may provide administrative support to this test fishery. Canada requested that this fishery would be treated the same as any other test fishery.

5. Progress Report on Renewal of Annex IV Chapter 4 Discussions

b. Further Instructions For Staff/FRPTC Related to Changes in Management Groups (Cont'd)

The Panel agreed to provide advice regarding any proposed changes to the sockeye management groupings prior to the April Panel meeting. Mr. Adicks noted that the rationales and implications for reviewing the management groupings look acceptable to the U.S., however, further review will be conducted.

5. Progress Report on Renewal of Annex IV Chapter 4 Discussions

Mr. Brahniuk stated that discussions were continuing in small-group meetings for proposed revisions to the Fraser Panel Annex and they would be occurring in Vancouver on March 26, 27 and in Bellingham on May 4, 5.

The meeting adjourned at 1:55 p.m., February 12, 2009.

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Barry Rosenberger, Chair

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Lorraine Loomis, Vice-Chair

**DRAFT AGENDA  
PACIFIC SALMON COMMISSION  
FRASER RIVER PANEL**

**April 29-30, 2009**

**Starting Wednesday April 29, 2009 9:00 am  
Clearwater/Suquamish Hotel, Suquamish, WA**

**April 20, 2009**

1. Agenda.
2. Review of 2009 preseason planning model inputs
 

a. Revised Early Stuart Forecast	Staff/DFO
b. Abundances, escapement targets, management adjustments, Aboriginal exemptions, harvestable surpluses, timing	DFO
c. Current snow pack & river flow outlook	Staff
d. Ocean conditions in 2009 and potential impacts on return timing	
e. Timeline for pre-season forecasts of timing and diversion rate	DFO
3. Baseline model results
 

a. Full harvest of Summer run scenario	Staff
b. Achieving Early-Summer and Late run objectives scenario	
c. Review of tradeoffs between Early Summer, Summer and Late run objectives	
4. Discussion of model run results/Policy guidance for PSC and FRPTC
 

a. Example guidelines for allowable by-catch of non target stocks	Panel
b. Early Stuart forecast to use for planning purposes	Staff
c. Late run objective	
5. Recommendations for post-season estimate of 2008 total return revisited
 

	Staff/FRPTC
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6. Retrospective evaluation of Bayesian run size models used in 2008
 

	C. Michielsens
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7. Example applications of management group framework, Harrison and North Thomson
 

	Staff
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8. Outstanding test fishing issues
 

a. Review of Area D assessment fishery	Staff/Panel
b. Review of Mission drift and set net test fishery	DFO/Staff
c. Update of progress toward securing funding for test fisheries given Larocque	Staff
d. Approval of Panel's Test fishing policy document	DFO
e. Finalization of test fishery start and end dates	Panel
9. Progress report on renewal of Annex IV Chapter 4 discussions
 

	Panel
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10. Other Business
 

a. Status of Annual reports	Staff
b. Outstanding minutes	Staff
c. Draft Regulatory control letters	Staff/Panel
d. June meeting logistics	Staff/Panel
e. Summer Richmond meeting schedule	Staff/Panel
f. Post-season meeting dates and location	Staff/Panel



**DRAFT AGENDA**  
**PACIFIC SALMON COMMISSION**  
**FRASER RIVER PANEL Technical Committee**  
**April 27-28, 2009**  
**Starting Monday April 27, 2009 8:30 am**  
**Clearwater/Suquamish Hotel, Suquamish, WA**

**April 24, 2009**

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|----------------------------------------------------------------------------------------------------------|----------------|
| 1. Agenda                                                                                                |                |
| 2. Review of 2009 preseason planning model inputs                                                        | Staff          |
| a. Revised Early Stuart forecast                                                                         |                |
| b. Abundances, escapement targets, management adjustments, aboriginal exemptions, harvestable surpluses, |                |
| c. Current snow pack & river flow outlook                                                                |                |
| d. Ocean conditions in 2009 and potential impact on return timing                                        |                |
| 3. Baseline model results                                                                                | Staff          |
| a. Full harvest of Summer run scenario                                                                   |                |
| b. Achieving Early-Summer and Late run objectives scenario                                               |                |
| c. Review of tradeoffs between Early Summer, Summer and Late run objectives                              |                |
| 4. Alternative metrics that could be used to establish allowable by catch limits                         | FRPTC/Staff    |
| 5. Recommendations for post-season estimate of 2008 total return revisited                               | Staff/FRPTC    |
| 6. Bayesian Run size models                                                                              |                |
| a. Retrospective evaluation of Bayesian run size models used in 2008                                     | C. Michielsens |
| b. Bayesian version of Pink salmon run size model                                                        | J. Cave        |
| 7. Example applications of management group framework, Harrison and North Thomson                        | Staff          |
| 8. Test fishery items                                                                                    |                |
| a. Review of Area D assessment fishery                                                                   | Staff/FRPTC    |
| b. Review of Mission set and drift net test fishery                                                      | Staff/FRPTC    |
| 9. Other Business                                                                                        |                |

Minutes of the Meeting of the  
Fraser River Panel of the Pacific Salmon Commission

Held at the Suquamish Clearwater Casino Resort  
Suquamish, Washington  
April 29, 30, 2009

PRESENT: PANEL MEMBERS

CANADA

Mr. B. Rosenberger (Chair)  
Mr. C. Ashton  
Mr. M. Griswold  
Chief K. Malloway  
Mr. R. Morley  
Mr. J. Murray  
Mr. T. Bird  
Mr. R. Brahniuk  
Mr. L. Rombough  
Mr. P. Sakich  
Mr. M. Shepert

UNITED STATES

Ms. L. Loomis (Vice-Chair)  
Mr. K. Adicks  
Mr. R. Kehoe  
Mr. T. Tynan  
Mr. D., Cantillon  
Mr. R. Charles  
Mr. J. Giard

TECHNICAL COMMITTEE MEMBERS

Ms. A-M. Huang (Co-Chair)  
Ms. S. Grant  
Ms. B. Pechter  
Mr. J. Scroggie  
Mr. M. Staley

Mr. G. Graves (Co-Chair)

STAFF

Mr. D. Kowal, Executive Secretary  
Mr. J. Cave  
Mr. I. Guthrie  
Mr. M. Lapointe

Mr. S. Latham  
Dr. C. Michielsens  
Mr. B. White

ADVISORS AND GUESTS

Mr. S. Bass, Makah Tribe  
Mr. A. Chapman, Lummi Nation  
Mr. R. Hepfer, Lower Elwha Klallam Tribe  
Mr. T. Hillaire, Lummi Nation  
Mr. E. Hillaire, Lummi Nation  
Mr. N. Lampsakis, PNPTC  
Mr. M. Hayes, Suquamish Tribe

Mr. G. MacWilliams, Nooksack Tribe  
Ms. D. McHugh, DFO  
Mr. S. Moore, Gillnetter  
Ms. A. Seiders, NWIFC  
Mr. G. Smith, Lummi Nation  
Mr. R. Svec, Makah Tribe  
Mr. K. Wilson, MCC

The meeting was called to order at 9:10 a.m., April 29, 2009.

1. Agenda

The draft agenda was approved (Attachment 1).

2. Review of 2009 Pre-season Planning Model Inputs

a. Revised Early Stuart Forecast

Ms. Grant reviewed the Early Stuart sockeye run size forecast for 2009 (Attachment 2). The Early Stuart sockeye fry estimate for 2006 decreased from 67,000,000 to 32,000,000 fry. Typically these data would have been used to help forecast the return of adult Early Stuart sockeye in 2009; however they were not used due to data inconsistencies. Retrospective analyses were conducted using the top three ranking models. The actual returns of adult Early Stuart sockeye have generally been close to the 75% probability level forecasts of abundance since 1999. It is recommended that the 75% probability level forecast of 165,000 fish be used for fisheries planning purposes in 2009. Additional analyses will be conducted and it is intended that the 50% probability level forecast of adult Early Stuart sockeye abundance will be used for fisheries planning in 2010.

Mr. Graves asked when the first update of Early Stuart sockeye abundance would be expected in 2009. Mr. Lapointe replied that it would likely be provided by the end of the first week of July unless Early Stuart sockeye marine timing is later than expected. Updates on how the abundance of Early Stuart sockeye are tracking relative to forecast will be provided prior to the first run size updates.

- b. Abundances, Escapement Targets, Management Adjustments(MAs), Aboriginal Exemptions, Harvestable Surpluses, Timing
- c. Current Snow Pack and River Flow Outlook
- d. Ocean Conditions in 2009 and Potential Impacts on Return Timing

Agenda items 2. b. c. and d. were all discussed in the presentation by Mr. Lapointe entitled, "2009 Pre-Season Planning Model Inputs" (Attachment 3). "Base-case" modeling assumptions with Early Stuart sockeye at the 50% and 75% probability level forecast of abundance were provided and included a review by stock-group of the total allowable mortalities, spawning escapement targets, MAs, expected test fishing catches, FRA exemptions, and expected Area 20 peak timing. Modeling was based on an assumed 20% exploitation rate on True Late-run sockeye as well as median historical DBEs using 2004 and 2005 year cycle data. Additionally, median marine Fraser sockeye timing for the 2005 cycle was used and these may be updated as marine timing forecasts are provided this season. Earlier than average marine timing of Fraser River pinks is expected this season since they have exhibited early marine timing the past three consecutive return years.

Fraser River snowpack levels are relatively unchanged from the March update. It is forecast that current snow conditions will result in a lower than normal peak flow in late May or early June. Management adjustments will be affected by weather conditions in the spring and summer. Present marine temperatures are cool and are similar to 2008. When marine temperatures are cool, juvenile salmon are generally distributed further south and their marine timing is early, and when water temperatures are warmer than average, the sockeye distribute further north into the Gulf of Alaska and typically exhibit later marine timing. A map was reviewed that showed the locations where marine water temperature and current data are collected, which are used in the Fraser sockeye and pink salmon marine timing forecasts. Forecasts that rely on sea surface temperatures alone generally result in a poor prediction

of marine timing. The NOAA Climate Prediction Center is forecasting that a transition in ocean conditions is occurring from La Niña conditions to ENSO-neutral conditions.

Mr. Brahniuk asked what marine timing was currently being assumed for Fraser pinks in fishery modeling. Mr. White replied that a date of August 25 was being used, which is consistent with the earlier than average marine timing of Fraser pinks that has been observed over the past three return years.

e. Timeline for Pre-season Forecasts of Timing and Diversion Rate

Mr. Lapointe reviewed the 2009 Chilko marine timing forecast that had just been released by DFO (Attachment 4). The forecast of the 50% date for Chilko sockeye in Area 20 is August 3, which is one day early earlier than the historical median timing of August 4. The Chilko marine timing forecast has tended to predict a peak return to Area 20 that is 2 to 2.5 days earlier than the timing date that has actually occurred. The present Chilko marine timing that is being used in the fishery model is August 4 and Mr. Lapointe recommended that this date be retained for fishery planning. The FRPTC agreed with this recommendation. The Chilko marine timing forecast can also be used to project the approximate marine timing of some other Fraser stock-groups in 2009.

b. Abundances, Escapement Targets, Management Adjustments (MAs), Aboriginal Exemptions, Harvestable Surpluses, Timing Cont'd

The Fraser River sockeye escapement targets at the 50% and 75% probability level forecasts of abundance were reviewed (Attachment 5). Ms. Huang noted that at the 50% and 75% p levels, option 5 for Early Stuart sockeye would result in an escapement target of 200,000 fish and a 0% exploitation rate after the MA was applied. Mr. Rosenberger stated that since this was a dominant-cycle return year for Early Stuart sockeye, there was strong interest in achieving the escapement target. Upper Fraser River First Nations are recommending that option 5 be chosen since they would like to see the Early Stuart stock re-build. Mr. Kehoe asked how realistic it was to expect that an escapement target of 200,000 Early Stuart sockeye may be achieved. Mr. Rosenberger replied that the long-term average escapement for Early Stuart sockeye on this cycle line was approximately 225,000 fish; however there has been a downward trend in Early Stuart sockeye escapements in more recent years. Research is being conducted by Dr. David Levy to examine options for increasing the production of Early Stuart sockeye, including the possible application of lake fertilization techniques.

Mr. Kehoe asked what Canada's response would be if the return of Early Stuart sockeye was higher than expected. Mr. Rosenberger answered that First Nations fishers prefer limited or no fishing on Early Stuart sockeye this season. Mr. Lapointe noted that at the 75% probability level forecast the Aboriginal Fisheries Exemption would likely be 0% under options 3, 4, and 5. Ms. Loomis asked whether any upper Fraser River First Nations catch of Early Stuart sockeye was expected. Mr. Rosenberger said that upper FN fishers are proposing no catch of Early Stuart sockeye this season, as long as FN fishers downstream of Lillooet also agree to catch none of these fish. He added that Canada would attempt to protect 90% of the Early Stuart sockeye run, with the possible harvest of 5% on the leading and trailing edges of the run. Mr. Shepert stated that there is a First Nations meeting on May 20 and 21 to address these issues and that approximately 75% of the First Nations bands had already agreed on the proposed management strategy while the remaining 25% generally do not attend these fisheries meetings. Mr. Rosenberger added that a "moving window of closure" would be used to help protect Early Stuart sockeye and Mr. Lapointe noted that it was therefore important to provide regular in-season migration updates. Mr. Rosenberger said that there would be escapement plan consultation meetings on May 6 and 7 and that the Minister of Fisheries would likely approve an escapement plan by May 15. The FRSSI (Fraser River Sockeye Spawning Initiative) will be reviewed in the fall and winter.

e. Timeline for Pre-season Forecasts of Timing and Diversion Rate Cont'd

Mr. Lapointe said that in addition to the Chilko marine timing forecast, which has just been provided, the marine timing forecast for Early Stuart sockeye should be available in the first week of June. Diversion rate forecasts for Fraser River sockeye through Johnstone Strait should be available during the first weeks of June and July based on marine data from May and May and June combined, respectively. Mr. White noted that the marine timing and diversion rate forecasts for Fraser pinks were provided on August 25 in 2005 and 2007 and rely on marine water temperature and current speed indices. Mr. Lapointe reported that researchers are conducting work to improve the accuracy of diversion rate and marine timing forecasts and that hopefully some of their findings can be applied starting in 2010.

3. Baseline Model Results

- a. Full Harvest of Summer-run Scenario
- b. Achieving Early Summer and Late-run Objectives Scenario
- c. Review of Tradeoffs Between Early Summer, Summer and Late-run Objectives

Five fishery model run comparisons for the 2009 season were reviewed by Mr. Lapointe based on different forecast run size levels, different diversion rates, and the historical median MAs (Attachment 6). The model runs allowed comparison of the following: percent of Early Summer and Summer-run escapement target achieved; U.S and Canadian TAC; U.S. and Canadian catch; total catch; and Early Summer-run, Summer-run and Late-run exploitation rates. Additional fishery model runs can be added as desired by the Panel, however requests should be made prior to the June Panel meeting. These fishery model runs help to identify the approximate period when fisheries in U.S. and Canadian Panel waters might be expected to commence in 2009. Mr. Shepert expressed his concern that the diversion rate might be low this season. Mr. Lapointe replied that a model run with a 10% Johnstone Strait diversion rate could be conducted, however, based on present marine conditions it is unlikely that the diversion rate would be that low this season. If the diversion rate was only 10%, it is unlikely that Canada could catch all of their TAC.

Mr. Brahniuk noted that Canada would like to explore transferring some of the catch in Johnstone Strait to Area 20 although due to interior Fraser coho constraints it may not be possible to access the Fraser sockeye effectively in Area 20. Mr. Brahniuk asked whether the U.S. also has other species fisheries constraints and Mr. Tynan said that the U.S. has constraints due to Chinook salmon. Mr. Lapointe said that it would also be possible to project en route losses in the summary tables along with the expected number of sockeye that could reach the spawning grounds. Mr. Morley requested that the expected number of effective Early Summer-run, Summer-run, and Late-run sockeye spawners be included in the model-run summary tables for presentation at the next Panel meeting.

Mr. Lapointe said that the model runs were conducted with the intent of maximizing Summer-run sockeye catch while giving equal priority to meeting Early Summer-run and Late-run conservation goals. Model runs could be conducted that focused on achieving lower catches but with high priority given to achieving escapement goals. Mr. Rosenberger asked if the model runs were directed at achieving the 20% exploitation rate limit for Late-run sockeye and 100% of the escapement goal for Early Summer-run sockeye and Mr. Lapointe confirmed that they were. Mr. Giard requested a model run based on the scenario where Early Summer-run and Late-run sockeye objectives are met, but altered to maximize U.S. catch.

Mr. Lapointe noted that the results of the model runs are more sensitive to changes in diversion rate assumptions than they are to differences in sockeye marine timing assumptions. Ms. Loomis added that the topic of proportional sharing will be discussed at the small-group Panel meeting next week.

The meeting recessed at 10:45 a.m.

The meeting reconvened at 11:10 a.m.

8. Outstanding Test Fishing Issues

a. Review of Area D Assessment Fishery

Mr. Lapointe provided a review of the Area D Assessment Fishery (Attachment 7). This 10-boat gillnet assessment fishery began in 2002 and is intended to provide an assessment of Early Summer-run sockeye abundance. The assessment fishery was designed to be conducted once per year near the peak of the Early Summer-run sockeye migration. The commencement date of the fishery is agreed to by PSC and DFO Staff and is conducted prior to the start of the commercial fishery. The assessment fishery was not conducted in 2007 and 2008 because there was no available TAC. Data from 2005 were excluded because the assessment fishery occurred long before the peak of Early Summer-run passage. Analysis of the assessment fishery involved examination of two options: (1) relating Early Summer-run abundance to catch per effort in 10-boat assessment fishery only; and (2) relating Early Summer-run abundance to catch per effort in the commercial fishery and then using data from the 10-boat assessment fishery to predict catch per effort in the commercial fishery.

The analyses indicate that thus far, there is insufficient predictive power to result in recommendations from PSC Staff to change in-season run sizes. The predictive power of the 10-boat and the commercial fishery has decreased relative to past evaluations, which is due to data from 2006 when catch per effort was low relative to the abundance. It is possible that the 2006 assessment fishery was timed earlier relative to the peak than previous years. Additional data are required to determine if this 10-boat assessment fishery can provide a robust tool for abundance estimation. PSC Staff recommend that the Area D Gillnet Association and DFO conduct this assessment fishery as in past years to increase the time series of the data. Treatment of the catch from the assessment fishery with respect to TAC is a policy issue for Panel discussion. Small scale commercial ventures such as this assessment fishery may represent the only option for developing improved marine area assessments as a result of factors such as the Larocque court case. The challenge is crafting assessment fisheries so that they occur on a regular basis across the range of abundances to provide data needed for technical assessments.

Mr. Tynan asked what the basis was for the location and number of boats for this assessment fishery. Mr. Rombough replied that in 2002, the Area D gillnet association decided that a catch goal of 9,000 sockeye was required to help meet the needs for financing their organization. It was projected that 10 gillnet vessels would be required to catch this number of sockeye during the assessment fishery and this number has ended up being fairly accurate. Under the Larocque decision, this assessment fishery cannot be conducted unless it becomes a PSC test fishery and is deducted from the TAC. If it was conducted as a test fishery, it would likely pay for itself and surplus funds could be contributed to the PSC's test fishing revolving fund. The assessment fishery has occurred in the same 8 to 10 mile stretch of water since it started for a duration of 38 hours. It is a good location for gillnetting sockeye and the 10 vessels are positioned adjacent to a beach and spaced approximately 0.75 miles apart from each other.

Mr. Tynan asked what the catches of sockeye were per year in the assessment fishery and Mr. Lapointe replied that they were: 2002 - 3,127 fish; 2003 - 8,267 fish; 2004 - 6,503 fish; and 2006 - 9,169 fish. The proportion of Early Summer-run sockeye in these catches has ranged from 12% to 58%

annually. Mr. Tynan asked if there were Canadian First Nations concerns for catches of Early Summer-run sockeye in this assessment fishery. Mr. Rosenberger replied that First Nations are examining all fisheries where Early Summer-run sockeye may be caught including test and assessment fisheries. The PSC recommends test and assessment fisheries that they feel are needed for management and Canada is concerned that they meet management and conservation objectives. All test fisheries need to be examined in relation to agreed policies for conducting them.

Mr. Bird noted that PSC Staff have recommended continuing the Area D assessment fishery and asked whether consideration was being given to using less boats but conducting it for additional days. Mr. Lapointe replied that it might be preferable to conduct the assessment fishery on either side of the peak Early Summer-run sockeye migration with fewer boats, possibly five. Mr. Lapointe noted that there is a wide variety of perspectives regarding the value of test fisheries and how they should be conducted. In response to a comment from Mr. Morley, Mr. Lapointe clarified that it was important that the Area D assessment fishery be conducted in all years, regardless of abundance levels.

Mr. Rombough said that there were concerns by some Area D fishers of test fishing catches when there is already very low TAC. Additionally, there was concern that the assessment fishery would not be economically viable at low abundance levels. It is possible that as few as two gillnet vessels could be employed in the Area D assessment fishery and still provide informative levels of catch. It may be desirable to add another gillnet vessel to the Round Island gillnet test fishery for a 10-day period to help with more seaward assessments. Mr. Brahniuk said that the main reasons that the Area D assessment fishery was not conducted in 2007 and 2008 were: low sockeye abundance years, economics, the catch would be deducted off the Area D TAC, and FSC targets would also not have been met.

Mr. Rosenberger commented that review of the other test fisheries was also required. Mr. Lapointe replied that reviews of the test fisheries have been conducted in the past. Additionally, the value of the test fisheries is observed on a daily basis during the in-season management period as the data are used for important applications such as migration and run size assessments. It would be preferable to continue the Round Island gillnet test fishery since the data are useful for diversion rate assessments and for comparison to catch profiles observed at Mission. The Round Island test fishery data also help speed up in-season management decisions since it is based quite seaward. Mr. Brahniuk suggested scheduling a gillnet vessel from the Round Island test fishery to operate near Naka Creek this season. Mr. Lapointe noted that there may be considerable variability in the catches.

The meeting recessed at 12:05 p.m.

The meeting reconvened at 1:10 p.m.

#### b. Review of Mission Drift and Set Net Test Fishery

Mr. Cave reviewed a presentation entitled, "2007 Mission Species Composition Drift Gillnet and Set Net Test Fishery" (Attachment 8). Mr. Cave stated that species composition and projected spawning escapement estimates of Fraser River sockeye and pink salmon during odd years have been hindered by: (1) earlier upstream timing and larger overall escapements of pink salmon together with later timing of Quesnel sockeye which has resulted in significant overlap between mid-August and early September; (2) different vulnerabilities of these species to the gillnet test fisheries designed to access sockeye; and (3) increased harbour seal predation interfering with lower Fraser River gillnet test fisheries. The spawning escapement estimation program for Fraser pinks was discontinued by DFO after the 2001 season and therefore it is not possible to fully assess the extent of the species composition estimation problem. Hydroacoustic methods continue to be examined for estimating the escapement of Fraser pinks but there are still concerns regarding inherent negative bias in the estimates.

The delay of Fraser pinks in the Gulf of Georgia declined from an average of approximately two weeks from the 1987 to 1993 period to only a few days from 1999 to 2003. The delay was estimated to be about 10 days in 2005 and 2007. It is projected that there will be substantial overlap in the migration of Fraser pink and sockeye salmon past Mission in 2009. Consideration should be given to employing alternate test fishing sites and gear in the Fraser River to provide improved estimates of species composition.

In 2007, a test fishery was initiated from September 4-15 near the Mission hydroacoustic site to obtain more precise daily estimates of species composition. The test fishery involved using two drift gillnets and one set net located approximately 1.5 km upstream from the Mission hydroacoustic site. Of the 1,195 salmon caught by the drift and set nets, 1,099 were pink salmon. Estimates of pink salmon passage from September 4-15 were very similar between the Whonnock species composition test fishery and the Mission drift/set net test fishery. The Mission drift/set net test fishery is scheduled to operate on Mondays, Wednesdays, and Fridays from approximately August 10 to early September in 2009 to provide a species composition estimate.

Mr. Tynan asked why a 5.25 inch mesh size was used for the drift gillnets. Mr. Cave and Mr. Murray noted that this mesh size was effective for catching pinks of both sexes. Chief Malloway recommended using a 5 inch monofilament net that stretches since it is effective for catching female pinks, which are smaller. Mr. Cave said that he would discuss options for different gear with the Mission drift fisher. Mr. Rosenberger noted that the abundance of pink salmon spawning in the Quesnel area had increased considerably in recent cycles.

b. Update of Progress Towards Securing Funding for Test Fisheries Given Larocque

Mr. Rosenberger said that there should be sufficient funds to operate the PSC test fisheries in 2009. The Mission drift and set net test fishery and the Area 12 gillnet assessment fishery would likely be “cash-managed” by DFO. Mr. Lapointe noted that the Mission test fishery has a budget of approximately \$10,000. Mr. Murray asked why the escapement enumeration program for Fraser pinks had not been conducted since 2001 and Mr. Rosenberger responded that it had not been conducted largely due to budget constraints. DFO plans to continue the Fraser pink fry estimation program in 2010 since these data are important for forecasting the adult return of Fraser pinks in 2011.

c. Approval of Panel’s Test Fishing Policy Document

Mr. Cantillon said that the U.S. will have a few suggested edits for this draft document; however, they are not intended to change the meaning of the document. Further discussion of this agenda item was deferred until later.

d. Finalization of Test Fishery Start and End Dates

Mr. Lapointe noted that there had been minor modifications to some of the proposed test fishery start and end dates (Attachment 9). Agreement on the proposed test fishery schedule could be deferred until the small-group Fraser River Panel meeting next week.

Mr. Merle Hayes, the fishery manager with the Suquamish Tribe, gave the group a formal welcome to Suquamish Tribal lands.

The meeting recessed at 2:05 p.m. April 29.

The meeting reconvened at 8:05 a.m., April 30.



#### 4. Discussion of Model Run Results/Policy Guidance for PSC and FRPTC

##### a. Example Guidelines for Allowable By-Catch of Non-Target Stocks

Mr. Lapointe gave a presentation on possible guidelines for allowable by-catches of non-target stocks (Attachment 10). Additionally a document was distributed entitled “Guidelines for Implementing Permissible Limits for By-Catch of Non-Target Stocks and Species in Fisheries Directed at Fraser River Sockeye and Pink Salmon Stocks” (Attachment 11).

Much of pre-season planning involves structuring fisheries to balance harvest benefits and escapement constraints. In-season events rarely unfold as projected in pre-season planning and therefore it is difficult for the Panel to judge the consistency of some in-season fishing proposals that were not part of the pre-season plan.

The extremely low sockeye return in 2007 along with a lack of by-catch guidelines for sockeye stock groupings resulted in PSC Staff being unable to provide a complete technical evaluation of a U.S. pink salmon-directed fishery proposal. Canada agreed to approve the U.S. pink fishery in 2007 as long as the U.S. agreed to pay-back any sockeye that had been caught as by-catch. In 2008, the Panel decided to develop agreed criteria pre-season that defined allowable by-catch limits. PSC Staff and the FRPTC have been directed to examine the by-catch criteria in more detail. The general principles in the draft document include: consistent application of criteria across all harvesters, though more stringent domestic guidelines take precedence; criteria tied to clearly defined conservation goals; management decisions should consider biological, social and economic consequences; management decisions would be based on specific objectives and priorities and be open and transparent; management decisions should be based on quantifiable measures of biological benefit (or the reduction of risk); and measures should be easily calculated and applied in-season.

Examples of guidelines were provided, including: the stock proportion threshold (e.g. < 10%); limit fraction of the run exposed to harvest; and cut-off dates. Examination of these simple criteria resulted in very restricted fishing windows and more complicated criteria will need to be examined (e.g. possibly linking fraction of runs exposed to exploitation rates). Mr. Lapointe said that additional work was required in developing these guidelines.

Chief Malloway said that it was important that different fishing groups should not be allowed to threaten or eliminate the fishing opportunities of other groups by threatening to fish illegally. Mr. Rosenberger commented that adoption of agreed fishing guidelines pre-season would help to prevent in-season conflicts among user groups. Mr. Shepert expressed his concern that guidelines be developed to ensure the protection of Early Summer-run sockeye stocks.

Mr. Morley noted that none of the work that has been presented examined economic implications of different guidelines. It is a difficult undertaking since it involves putting values on factors such as foregone catches and escapements. It may not be possible to develop these guidelines within the FRPTC. Mr. Kehoe agreed with Mr. Morley and said that further factors may need to be examined. Mr. Lapointe said that the presentation was an attempt to provide information that was familiar to the Panel and that some of the difficulty can be attributed to the stock or run-timing groups that specific stocks are aggregated into. Chief Malloway expressed concern that including broad criteria such as economic and social factors in the general principles for the guidelines was similar to “notwithstanding” clauses in other government agreements. He cited the example of the Atlantic Cod, where this was applied and now these fish are at extremely low abundance levels. Mr. Shepert suggested possibly including legal consequences under the general principles for the guidelines. Mr. Rosenberger said that more work was required in

developing these guidelines and Mr. Lapointe requested that the Panel provide additional input in crafting these guidelines.

5. Recommendations for Post-season Estimates of 2008 Total Return Revisited

Mr. Lapointe gave a presentation entitled “Recommendations for Estimates to use for 2008 Post-Season Total Return” (Attachment 12). The number of Fraser sockeye that were estimated upstream on the spawning grounds in 2008, was 361,000 fish lower than were estimated to have passed Mission. The largest discrepancies in estimates occurred among the Early Summer-run and Late-run components. There was very poor spawning success throughout the watershed (65% versus > 90% on average historically). It is uncertain whether the discrepancies represent en route losses or stock assessment errors.

Discrepancies in the estimates for Early Summer-run and Summer-run sockeye were larger than would have been observed based on river migration conditions. Early Summer-run sockeye abundance estimates at Mission were supported by data from the Qualark hydroacoustic site. There was generally good correspondence between data collected at Mission and Qualark Creek, although fewer sockeye were estimated at Qualark later in the season. It was suspected that overestimation of sockeye at Mission may have occurred due to a high proportion of chinook jacks migrating past this site; however subsequent assessments did not indicate strong evidence of bias in species composition estimates at the Mission site. Staff recommended the following estimates be used for post-season total run size calculations: Early Stuart – upstream numbers; Early Summer-run – Mission; Summer-run, Chilko/Horsefly/Mitchell – Mission, Stellako/Late Stuart – upstream numbers; Late-run – Mission. The rationales for choosing the upstream numbers versus the upstream spawning ground numbers in each case were also provided. It would be desirable to have an independent estimate of en route losses in 2008, e.g. from a tagging program, however such an estimate is not available.

Chief Malloway asked how Chilliwack escapement estimation was conducted since the river spans both sides of the Canada/U.S. border. Ms. Grant replied that approval is obtained from the U.S. to conduct aerial surveys of the river on the U.S. side. Conditions allow a good visual survey to be conducted of Dolly Varden Creek; however, it is difficult to conduct surveys of Chilliwack Lake.

Mr. Giard said that studies are required to determine the effect of nets in the Fraser River on migrating sockeye. The findings of such studies might help in developing ways of reducing DBEs that frequently occur. Mr. Lapointe noted that DFO hydroacoustic Staff have collected data that provides insight into the distributional impact on sockeye of nets in the river. There could be studies to compare losses in various reaches of the river with and without nets. In high water temperature years or when there is early migration, larger incremental impacts might be expected. Mr. Giard said that it might be useful to try and move the sockeye up the river in migrational blocks. Mr. Rosenberger noted that comparisons could be made between years with different levels of fishing effort.

Mr. Rosenberger asked whether the FRPTC had agreed on the Staff’s recommendations for the post-season total sockeye returns and Mr. Lapointe and Mr. Graves confirmed that they had approved them. Mr. Shepert asked whether there had been studies done on Nass and Skeena sockeye that had encountered nets. Mr. Rosenberger said that he wasn’t aware of any such studies, although data collected from fish wheels on the Nass River may be worth examining. Chief Malloway noted that there was virtually no fishing directed at Early Stuart sockeye in 2008 and little effort directed at Early Summer-run sockeye in the Fraser River. Lower Fraser River First Nations fisheries are often only open approximately three days per week while upper Fraser First Nations generally have limitations due to poor access to the river in many areas as well as using small dipnets.

Mr. Lapointe clarified that use of the post-season 2008 estimates of the Fraser sockeye runs was necessary for assessments of the productivity of the stocks. Additionally, there will be documentation in the production data bases regarding the data sources and assumptions. Mr. Rosenberger commented that Mr. Dave Patterson (DFO) will be examining pre-spawning mortality of Fraser sockeye. The Panel approved Staff's recommendations for the 2008 post-season total return of Fraser sockeye by run timing-group.

6. Retrospective Evaluation of Bayesian Run Size Models Used in 2008

Dr. Michielsens gave a presentation entitled "Retrospective Analyses of In-season Stock Assessment Models Used in 2008" (Attachment 13). The following were reviewed: cumulative normal model that is used for in-season assessments, using Early Stuart sockeye as an example; Bayesian version of the cumulative normal model; comparison of the models using post-season data; comparison of the models using in-season test fishery and hydro-acoustics data; retrospective analyses; and structure of the model for 2009.

The Bayesian version of the model increases the probability of being correct, in part because it uses additional information to generate estimates. The error in run size estimates is smaller when using the Bayesian version of the cumulative normal model. Before the peak of the run, the cumulative normal model is unable to produce reliable estimates of run size. In the example provided, prior to the peak of the Early Stuart run, the Bayesian run size estimates are too large because the historical pre-season forecasts of Early Stuart sockeye tended to overestimate the true returns. After this bias is gone at the peak of the run, the Bayesian model out-performs the cumulative normal model. The example provided for Early Stuart sockeye was relatively simple compared to Early Summer-run and Summer-run sockeye where additional complexities need to be included such as diversion rate, efficiency lines by approach and gear, and harvest impacts. Additional complexities in the analyses of Late-run sockeye result from marine test fishing data not being replaced with Mission hydro-acoustic data.

Mr. Shepert commented that this presentation was helpful and could enable more precise capability to manage fisheries. However, there is still large bias and there would be additional complexities in cases where the migration was bimodal. Mr. Shepert asked whether a risk model could be overlaid onto the Bayesian model. Dr. Michielsens responded that it would necessary to know the uncertainty in the estimates, however it would be possible to include risk in the next Bayesian model presentation. Mr. Rombough asked if it was possible to include in the Bayesian model factors that impact changes in the test fishing catch levels such as tide. Dr. Michielsens replied that it would be possible to include such data in the analyses.

The meeting recessed at 9:55 a.m.

The meeting reconvened at 10:20 a.m.

7. Example Applications of Management Group Framework, Harrison and North Thompson

Mr. Latham provided a brief summary of an exercise that he gave the Panel and the FRPTC at the February meeting where they were asked to assign stocks into stock groups on the basis of timing profiles. The average number of stock-groups that individuals created was four. In general, Panel members identified fewer stock-groups than FRPTC members.

Mr. Lapointe gave a presentation on the Fraser sockeye management group framework using the North Thompson and Harrison stocks as an example (Attachment 14). The rationales for considering changes to the current Fraser sockeye management groups include: (1) migration timing, behavior, geographic distribution; (2) assessment capability (stock ID); (3) productivity (recruits/spawner); and (4)

differences between estimates. The implications of the possible changes include stock specific outcomes (escapements), spawning escapement policy, total TAC and proportional sharing, and in-season abundance assessments.

Consideration of whether Raft/North Thompson sockeye should remain in the Early Summer-run group or be moved to the Summer-run group was based on: (1) how accurately they are assigned to each management group; and (2) whether moving them to a different group impacts the classification of other stocks to the management groups. Assessments were reviewed and it was concluded that Raft/North Thompson sockeye were consistent with the Summer-run sockeye run timing-group in terms of migration timing, assessment capability and productivity. However, in regards to DBEs, the results were mixed.

Consideration of whether Harrison sockeye should remain with True Late-run sockeye or be moved to the Summer-run or Birkenhead groups was based on the same two criteria noted above for Raft/North Thompson sockeye. Assessments were reviewed and it was concluded that Harrison sockeye were consistent with the Summer-run sockeye run timing-group in terms of migration timing, assessment capability and productivity. However, they were not consistent in regards to DBEs since Harrison sockeye were more similar to True Late-run sockeye than Summer-run sockeye.

In response to comments about Fraser sockeye exploitation rates, Mr. Lapointe noted that exploitation rates on Fraser sockeye are much lower than they have been historically and management is more responsive to in-season assessments of abundance. Mr. Morley advised conducting retrospective analyses to estimate the impacts on catches and escapement of moving sockeye stocks from one management group to another. Mr. Lapointe agreed that it would be useful to examine these implications. Mr. Shepert was pleased that examination of the Fraser sockeye management groups was being conducted since it may help to make better in-season management decisions.

The Panel agreed to re-examine this topic after DFO had conducted additional work on their escapement policy this fall. Mr. Lapointe requested that the Panel provide additional feedback on the management groupings.

9. Progress Report on Renewal of Annex IV Chapter 4 Discussions

Mr. Rosenberger stated that nine issues were being examined in the Annex discussions. Good progress is being made in the discussions and there is another meeting on May 4 in Bellingham. Mr. Lapointe noted that there had been two meetings since February. Encouraging progress has been made and it is unknown whether additional meetings will be required.

10. Other Business

a. Status of Annual Reports

Mr. Guthrie reported the status of the Fraser River Panel Annual reports was as follows: 2005 – close to completion and then will be printed; 2006 – draft was sent out for review in December and hope to have feedback by June; 2007 – draft was sent out for review last month; and 2008 – draft being prepared.

b. Outstanding Minutes

Mr. White said that comments have been received on the draft January and February 2009 minutes from the U.S., while Canada has not provided comments on these draft minutes yet.

c. Draft Regulatory Control Letters

Mr. Lapointe reported that Mr. White had sent draft Panel regulatory control letters out for review by Canada and the United States. Comments on the draft letters should be provided to Mr. White prior to the June Panel meetings.

d. June Meeting Logistics

Mr. Lapointe noted that the next Panel and FRPTC meetings would occur from June 15-18. The FRPTC should be prepared to meet at 8:30 a.m. on June 15 and the Panel will begin to meet on June 17.

e. Summer Richmond Meeting Schedule

Mr. Lapointe reported that in-person meetings of the Panel were scheduled to occur in Richmond on July 24, 31, and August 7, 14, and 21.

f. Post-season Meeting Dates and Location

The Panel agreed to consider Chilko or Quesnel as possible sites for the post-season meeting. Mr. Shepert suggested that if Chilko was chosen, consideration should be given to chartering a bus to take people into Chilko Lodge from Williams Lake. It was agreed that the weeks of September 14-18, and 21-25 would be considered for the meeting. Mr. Shepert suggested that Stellako be considered as the post-season meeting site in the future.

4. Discussion of Model Run Results/Policy Guidance for PSC and FRPTC

b. Early Stuart Forecast to Use for Planning Purposes

Ms. Loomis stated that the U.S. would accept the proposed redistribution of the Aboriginal fishery exemption; however, if the Early Stuart run size was larger, then some of the exemption would be apportioned back into the Early Stuart. The U.S. requested that Canada provide a projection of the Early Stuart sockeye incidental catches in Chinook and Early Summer-run sockeye directed fisheries. These estimates would be part of the AF exemption with Early Stuart at the 75% p level of abundance, i.e., Early Stuart sockeye catches would not be zero as noted in the AF exemption with Early Stuart sockeye at the 75% p level of abundance. Mr. Rosenberger said that Canada would provide the estimates that were requested by the U.S. and increase the AF exemption for Early Stuart sockeye if the run size increased. The U.S. accepted the 75% p level forecast for Early Stuart sockeye for planning purposes given the above understanding.

c. Late-run Objective

Mr. Rosenberger stated that Canada had not concluded discussions regarding the harvest rate objective for Late-run sockeye in 2009. Ms. Loomis noted that the U.S. would be discussing this item and provide comments to Canada at the small-group Panel meeting next week.

2. Review of 2009 Pre-season Planning Model Inputs

b. Abundances, Escapement Targets, Management Adjustments, Aboriginal Exemptions, Harvestable Surpluses, Timing Cont'd

The U.S. had no comment currently regarding option 5 of the escapement plan for Early Stuart sockeye, however they agreed to provide feedback at the small-group Panel meeting next week.

8. Outstanding Test Fishing Issues

d. Approval of Panel's Test Fishing Policy Document

Mr. Cantillon said that there were two or three revisions to the draft test fishing policy document since some of the draft wording was not consistent with the Treaty. Item 13 in this policy document needs to be more definitive regarding what is meant by "in-season" versus "post-season". There will be a final check on this draft document at the small-group Panel meeting next week.

e. Finalization of Test Fishery Start and End Dates Cont'd

Ms. Loomis noted that after the Panel meeting yesterday; it was not clear whether Canada had a proposal for the Area D fishery. If Canada does have a proposal, the U.S. would like to review it. Mr. Rosenberger said that Canada has concerns relating to potential impacts on coho of conducting the Mission test fishery. Twenty-five coho were caught in it in 2007 and there are upper and lower Fraser River conservation concerns for coho. The timing of the coho encounters will be examined to determine if adjustments in the duration of the Mission test fishery could be used to reduce coho encounters. PSC Staff said that the fishing period could be reduced in September to reduce potential coho harvest impacts since the key data collection period would be in August and early September. Canada agreed to discuss this issue further at the small-group Panel meeting next week.

Mr. Rosenberger said that both the Area 5 test fishery and the Area D assessment fishery have some degree of validity. Mr. Brahniuk stated that Canada would like to have a limited test fishery in Area D, however the number of vessels required, number of days and potential Early Summer-run harvest impacts need to be examined. Canada requested that PSC Staff conduct assessments to determine the appropriate number of vessels required in Area D to ensure consistent CPUE data. PSC Staff agreed to conduct this analysis. Canada requested that PSC Staff work with DFO Staff in re-designing the Area D assessment fishery using fewer boats but possibly operating more days.

The Panel agreed to discuss the above test fishing issues in further detail at the small-group Panel meeting next week, with the goal of approving the plan.

The meeting adjourned at 11:55 a.m., April 30.

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Barry Rosenberger, Chair

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Lorraine Loomis, Vice-Chair

**DRAFT AGENDA**  
**PACIFIC SALMON COMMISSION**  
**FRASER RIVER PANEL**  
**June 17-18, 2009**  
**Starting Wednesday June 17, 2009 8:30 am**  
**Penticton Lakeside Hotel, Penticton, BC**

**June 9, 2009**

1. Agenda.
2. Updates to fishery model inputs
  - a. Timing and Diversion rate forecasts DFO
  - b. Revised timing assumptions for pre-season planning Staff
  - c. Updated predictions of environmental conditions and Management adjustments Staff/DFO
  - d. A report on 2008 pre-spawn mortality and potential tools that might be used to predict pre-spawning mortality DFO
  - e. Projected by-catch of Early Stuart sockeye in Chinook and Early Summer-run Sockeye directed fisheries and implications for AFE. DFO
3. Review of model results to achieve agreed objectives Staff
  - a. Baseline model results and alternative scenarios
4. Outstanding policy decisions Panel
  - a. Pre-season Management adjustments- Early Stuart, Early Summer and Summer run
  - b. Early Stuart pre-season forecast and escapement option
  - c. Late-run exploitation rate
5. Finalization of 2009 Preseason Planning Documents Panel
  - a. Guidelines to Address Late run concerns
  - b. Principles and constraints
  - c. Regulatory Control letters
  - d. Signing of Letter of Transmittal for Regulatory Control
6. Test fishing items Panel
  - a. Finalization of test fishing policy document
  - b. Test fishing start and end dates
7. Evaluating risk and uncertainty when managing Fraser river sockeye C. Michielsens
8. Update on Pink DNA program for 2009 Staff
9. Update on Canada's plans for individual transferrable quota (ITQ) fisheries in 2009 R. Brahniuk
10. Overview of Fraser Salmon Legacy project K. English
11. Update of discussions concerning drift net interference at Mission acoustic site DFO/Staff
12. Brief review of experiments using electric current to deter seal predation and plans for 2009 Staff
13. Other Business
  - a. Post-season meeting dates and location Panel
  - b. Summer field trips? Panel
    - i. United States' area 5 fishery
    - ii. United States' reefnet sites
    - iii. Canadian mid-upper Fraser river fishing sites
  - c. Status of minutes and Annual reports Staff/Panel
  - d. Next meeting.

**DRAFT AGENDA**  
**PACIFIC SALMON COMMISSION**  
**FRASER RIVER PANEL TECHNICAL COMMITTEE**  
**June 15-16, 2009**  
**Starting Monday June 15, 2009 8:30 am**  
**Penticton Lakeside Hotel, Penticton, BC**

**June 11, 2009**

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| <ol style="list-style-type: none"> <li>1. Updates to fishery model inputs               <ol style="list-style-type: none"> <li>a. Timing and Diversion rate forecasts</li> <li>b. Correlations among stocks in marine timing and implications baseline timing assumptions</li> <li>c. Updated predictions of environmental conditions and Management adjustments</li> <li>d. A report on 2008 pre-spawn mortality and potential tools that might be used to predict pre-spawning mortality</li> </ol> </li> <li>2. Review of model results to achieve agreed objectives               <ol style="list-style-type: none"> <li>a. Baseline model results and alternative scenarios</li> </ol> </li> <li>3. Review of 2009 Preseason Planning Documents               <ol style="list-style-type: none"> <li>a. Guidelines to Address Late run concerns</li> <li>b. Principles and constraints</li> <li>c. Regulatory Control letters</li> <li>d. Test fishing start and end dates</li> </ol> </li> <li>4. Update on Canada's plans for individual transferrable quota (ITQ) fisheries in 2009</li> <li>5. Evaluating risk and uncertainty when managing Fraser river sockeye</li> <li>6. Other Business               <ol style="list-style-type: none"> <li>a. Next meeting.</li> </ol> </li> </ol> | <p>DFO<br/>Staff<br/>Staff/DFO<br/>DFO</p> <p>Staff</p> <p>Panel</p> <p>DFO</p> <p>C. Michielsens</p> |
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Minutes of the Meeting of the  
Fraser River Panel of the Pacific Salmon Commission

Held at the Penticton Lakeside Resort

Penticton, B.C.

June 17, 18, 2009

PRESENT: PANEL MEMBERS

CANADA

Mr. B. Rosenberger (Chair)  
Mr. C. Ashton  
Mr. M. Griswold  
Chief K. Malloway  
Mr. R. Morley  
Mr. J. Murray  
Mr. B. Assu  
Mr. T. Bird  
Mr. R. Brahniuk  
Mr. L. Rombough  
Mr. M. Shepert

UNITED STATES

Ms. L. Loomis (Vice-Chair)  
Mr. K. Adicks  
Mr. R. Kehoe  
Mr. T. Tynan  
Mr. D. Cantillon  
Mr. R. Charles  
Mr. J. Giard

TECHNICAL COMMITTEE MEMBERS

Ms. A-M. Huang (Co-Chair)  
Ms. S. Grant  
Ms. B. Pechter  
Mr. J. Scroggie  
Mr. M. Staley

Mr. G. Graves (Co-Chair)  
Ms. P. Busby

STAFF

Mr. D. Kowal, Executive Secretary  
Mr. J. Cave  
Mr. I. Guthrie  
Mr. K. Forrest

Mr. M. Lapointe  
Mr. S. Latham  
Dr. C. Michielsens  
Mr. B. White

ADVISORS AND GUESTS

Mr. S. Bass, Makah Tribe  
Ms. A. Goruk, DFO  
Mr. R. Harder, PNPTC  
Mr. L. Jantz, DFO  
Mr. L. Kearey, DFO  
Mr. N. Lampsakis, PNPTC

Mr. C. McConnell, DFO  
Ms. D. McHugh, DFO  
Mr. D. Patterson, DFO  
Ms. A. Seiders, NWIFC  
Ms. D. Trager, DFO

The meeting was called to order at 8:40 a.m., June 17, 2009.

Chief Jonathon Kruger from the Penticton Indian Band welcomed the meeting participants. He noted the importance of the work being done by several agencies and the need to make good decisions so that sockeye populations can be restored.

1. Agenda

The draft agenda was approved (Attachment 1) with some revision to the order that items will be covered.

2. Updates to Fishery Model Inputs

a. Timing and Diversion Rate Forecasts

Ms. Huang reported that the 2009 pre-season forecast of the proportion of Fraser sockeye diverting through Johnstone Strait is 28% (Attachment 2). The average May water temperature in the area used for forecasting (Kains Island) is much cooler than average and there is high uncertainty in the predictive power of the model during periods of cooler marine temperatures. The model will be updated to include data collected in June and a revised diversion rate forecast will be provided to the Panel. Mr. Lapointe noted that there is usually only a small difference in the forecast when data from June is included in the model. Mr. Rosenberger said that there was some warming of marine temperatures occurring, which may impact the diversion rate forecast that includes the data collected in June.

b. Revised Timing Assumptions for Pre-season Planning

Mr. Lapointe reviewed a presentation entitled “Revised Timing Assumptions for 2009 Pre-season Planning” (Attachment 3). For each of the Fraser sockeye management groups, the following modeling assumptions were reviewed: forecast level; total allowable mortality; spawning escapement target; management adjustment; test fishing catch; Fraser River Aboriginal Exemption; and Area 20 peak timing. Fraser sockeye marine timing projections based on different data sets were reviewed. Marine timing correlations between Chilko sockeye and Early Stuart sockeye ( $R^2=0.617$ ) and Early Summer-run sockeye ( $R^2=0.511$ ) were reviewed. The following Area 20 marine timing assumptions were recommended for use in the pre-season fishery planning model: Early Stuart – July 2; Early Summer-run – July 26; Summer-run – August 5; Birkenhead – August 11; and True Late-run sockeye – August 11. For fishery planning the number of days difference in peak marine timing between the marine timing groups is more important than the actual peak marine dates.

ENSO-neutral marine conditions presently exist in the equatorial Pacific Ocean. Equatorial sea surface temperatures are warmer than average over much of the Pacific Ocean. Conditions exist that may cause a shift from ENSO-neutral conditions to El Niño conditions between June and August of 2009. Water temperatures in the North Pacific are presently below average although they are not as cool as in 2008.

Ms. Loomis asked about the potential of El Niño conditions occurring this season. Mr. Lapointe said that it was unlikely that there would be sufficient time for El Niño conditions to impact Fraser sockeye migration behavior in marine areas this season since the projected shift toward El Niño conditions is occurring in waters much further south. Mr. Griswold asked what impact Harrison sockeye have on the marine timing assumption for Late-run sockeye and Mr. Lapointe replied that it shifts the marine timing assumption for Late-run sockeye one day earlier.

Mr. Kehoe asked why the forecast marine timing of Chilko sockeye was being used to project the marine timing of other run timing groups rather than using historical average timing assumptions. Mr. Lapointe said that the data set for historical average timing during cold marine-temperature years was limited to only four years and only one of those years is recent. A much longer data set is available for projecting the marine timing of other run timing groups based on the forecast timing of Chilko sockeye.

Mr. Morley noted that the correlations between the marine timing of Chilko sockeye and some of the other run timing groups were not very high and there appeared to be considerable variability. Mr. Lapointe said that a retrospective analysis and sensitivity analysis could be conducted to compare the accuracy of projecting marine timing using Chilko sockeye timing versus using historical average marine timing. Alternative marine timing forecast assumptions for Chilko sockeye could be explored to determine the impact on marine timing projections for the other run timing groups. Mr. Lapointe reiterated that the key factor is the number of days difference in the marine timing assumptions for each of the run timing groups. Additionally, Staff will be responding to in-season data and fishing opportunities will not likely be affected by the assumptions. It is important at this meeting to identify the projected start date for Panel Area fisheries. Additional fishery model runs can be conducted since there is likely at least one month before Panel Area fisheries might commence. Mr. Tynan wondered why the Panel was questioning the marine timing assumptions to this degree when the issue had not been brought up by the Fraser River Panel Technical Committee. Mr. Lapointe noted that Staff was open to new suggestions regarding marine timing assumptions from the Panel.

#### c. Updated Predictions of Environmental Conditions and Management Adjustments

Mr. Patterson reviewed a presentation entitled “2009 Pre-season Fraser River Environmental Forecasts” (Attachment 4). The snowpack in the upper Fraser River watershed is approximately 130% of average while in the mid and lower portions of the watershed it is approximately 70%-80% of normal. The projected discharge of the Fraser River from June 1 to September 30 is 88% of the historic average. Present long-range forecasts project that Early Stuart, Early Summer-run and Summer-run sockeye will encounter lower than average Fraser River discharge this season while average water temperatures will be slightly above normal. In-season Fraser River discharge and temperature forecasts will be provided by the River Temperature Model (RTM) at the Institute of Ocean Sciences (IOS).

Mr. Guthrie gave a presentation entitled “2009 Management Adjustments for Early Stuart, Early Summer and Summer Sockeye” (Attachment 5). Management adjustments are the addition of fish to escapement targets to increase the likelihood of achieving spawning escapement targets. The MA models depend on differences between potential spawning escapement (estimates from Mission minus catch above Mission) and spawning ground escapement estimates. The differences include en route and fishing-induced mortality as well as estimation errors in: Mission estimates, First Nations and recreational catches, spawning escapement and stock identification. Pre-spawning mortality is not included in the MA estimates.

The MA models predict: pMAs – the proportional increase to spawning escapement targets to help ensure that targets are achieved; and %DBEs – the percentage difference between estimates of potential spawning escapement and spawning escapement. The models rely on historical relationships between DBEs and river discharge and temperature. DBEs tend to increase when river discharge or temperature are high. In 2009, Bayesian statistical methods will be used with the MA models since they provide a more comprehensive view of uncertainty in the estimates. The first MA estimates are based on nine or more days of observed data and ten or less days of forecasted data from the Environmental Watch Program. They are provided about three days after the 50% migration date for the run timing groups past Area 20 and three days before the 50% migration dates at Mission. The projected dates that the first in-season MA estimates will be provided are: Early Stuart – July 5; Early Summer-run – July 29; and

Summer-run – August 8. Staff recommends adoption of the MAs when technical assessments indicate that changes are warranted. The Panel can adopt (if either party accepts) or not adopt (if both parties reject) the recommended MAs, or by bilateral agreement, choose a different MA. The recommended pre-season pMAs, MAs, and %DBEs are as follows: Early Stuart, 0.46, 72,000 fish, -32%; Early Summer-run (including Pitt), 0.40, 118,000 fish, -29%; and Summer-run, 0.00, 0 fish, and 0%. Mr. Lapointe stated that the MAs in the “2009 Base Case Assumptions” (Attachment 6) were updated with these estimates.

d. A Report on 2008 Pre-Spawn Mortality and Potential Tools That Might Be Used To Predict Pre-Spawning Mortality

Mr. Patterson reviewed a presentation entitled “Environmental Watch: PSM and Management June, 2009” (Attachment 7). The recommended strategy for dealing with pre-spawning mortality (PSM) is as follows: 1. Problem – clearly define; 2. Objectives – relate to the problem; 3. Communication Plan – for the advice; 4. Biological Research – biologically based description (e.g. model) of the problem; and 5. Predictive Models – supported by the biological research to match the problem, objectives, and communication plan. It is the Panel’s responsibility to provide advice on the first three steps outlined above.

The problem is that every year a variable percentage of spawners does not successfully spawn. Several factors should be considered including: achievement of escapement objectives; impacts on future recruitment; short vs. long-term productivity effects; and, the level of PSM with which managers should be concerned. The objectives need to be identified, e.g. spawners, effective spawners, effective females, or egg deposition. PSM is included in stock-recruitment data bases, however a strategy should be developed that responds to increases in frequency and severity of PSM. The communication plan should outline the timing of advice, and qualitative vs. quantitative advice. Some of the causes of pre-spawning mortality of Fraser sockeye were reviewed, such as: “ich” (*Ichthyophthirius multifiliis*), *Parvicapsula* gill/kidney, bacterial gill problems and early entry into freshwater (likely the causative factor for mortalities associated with the first three, which are consequences of stress associated with early entry). The long-term average PSM by run timing group averages approximately 10%. The inter-annual variability in PSM is high with incidence of high PSM tending to occur in groups of consecutive years. In recent years, except for 2008, PSM has in general, been fairly low.

There are numerous potential predictor variables for PSM, e.g. physical: North Pacific SST, coastal SST, PDO, river entry date, river discharge, river temperatures, river suspended sediments, median date of spawning, spawning ground temperatures; biological: POH length, body energy status, historic pattern, precedent, harvest pressure, disease profile, and fish density. Early entry of Early Summer-run and Summer-run sockeye into the Fraser River increases the likelihood of PSM exceeding 15%.

Mr. Tynan asked whether the relationship between peak spawning dates and PSM has been examined. Mr. Patterson said that a more important factor was likely the freshwater residency period and that there is less variability in the peak spawning dates than there is in the freshwater residency periods. Mr. Morley asked how fishery managers responded in the past to PSM. Mr. Patterson said that they took mitigative actions on the spawning grounds such as installing a cold water release in McKinley Creek. Mr. Cave added that they didn’t have computers back then so they likely focused on just trying to meet escapement needs. Mr. Lapointe noted that they didn’t have a predictive model many years ago and therefore just attempted to mitigate the impacts of pre-spawning mortality.

Mr. Brahniuk asked whether incorporation of PSM estimates in MA models would result in a double accounting for losses. Mr. Lapointe replied that it would not result in double-counting of PSM; however it would be necessary to make adjustments to the stock/recruitment databases. Mr. Rosenberger

noted that it was important for the Panel to provide advice to Mr. Patterson in the future regarding the “problem, objectives, and communication plan” that was discussed at the beginning of the presentation. Mr. Lapointe said that it was important to document how pre-spawning mortality was being accounted; for example, the run size forecast in 2012 will be based on the estimates of effective females rather than just the number of spawners.

The meeting adjourned at 10:35 a.m.

The meeting reconvened at 10:55 a.m.

e. Projected By-Catch of Early Stuart Sockeye in Chinook and Early Summer-run Sockeye Directed Fisheries and Implications for AFE

Ms. Huang reported that an estimated catch of 5,000 Early Stuart sockeye had been used in the fishery planning model based on historic average catches. There is usually some by-catch of Early Stuart sockeye in the in-river First Nations Chinook fisheries. Additionally, there is often a small, directed terminal catch of Early Stuart sockeye and there may be some small catch of Early Stuart sockeye in commercial fisheries. Mr. Rosenberger noted that option 4 of the escapement plan for Early Stuart sockeye has not yet received final approval.

3. Review of Model Results to Achieve Agreed Objectives

a. Baseline Model Results and Alternative Scenarios

Five fishery model run comparisons for the 2009 season were reviewed by Mr. Lapointe based on different forecast run size levels, different diversion rates and marine timing, and Bayes MA estimates (Attachment 8). The model runs allowed comparison of: DBEs, TACs, total catches, exploitation rates, and potential escapement of True Late-run sockeye. Mr. Cave noted that further work needs to be done on the fishery modeling including modifications to Canada’s proposed ITQ fisheries. Mr. Rombough commented that some early indications of sockeye returns this season are positive and Mr. Lapointe said that a fishery model run with the stocks at the 25% probability level forecast could be conducted if desired by the Panel.

9. Update on Canada’s Plans for Individual Transferable Quota (ITQ) Fisheries in 2009

Ms. Pechter reviewed a presentation entitled “2009 Fraser River Sockeye and Pink ITQ Demonstration Fishery Overview” (Attachment 9). The objectives of the ITQ demonstration fishery are to: improve management control and conservation performance; promote the use of defined shares to improve manageability and industry viability; and increase the ability of harvesters to work cooperatively to harvest available surpluses and to take on greater responsibility for control and monitoring of their fishery. Each Area B and H licence holder will be assigned equal ITQs based on available TAC during sockeye and pink directed fisheries. The pink ITQ fishery will be a directed, separate fishery from the sockeye fishery. Quota will be transferable in whole or in part within each licence area and between licence areas. Participants will have to report their catch daily via phone-ins or e-log and have their entire catch validated.

There are a total of 169 Area B licences and 89 Area H licences; of which DFO holds 19 Area B licences and 11 Area H licences. The Area B and H sockeye fisheries will open after a commercial TAC is identified while the Area H fishery will remain open on a continuous basis. There will be a maximum of 120 boat days in the Area 20 fishery to prevent overexploitation of coho. The Area 20 ITQ fishery will stop if there is no further TAC or if the coho effort limit is reached. There will be further discussion regarding conditions under which the pink ITQ fishery will be opened.

Mr. Lapointe noted that further information for fishery modeling was required regarding the expected pattern of catches over the weeks. The expected harvest of Late-run sockeye also needs to be examined. Several U.S. Panel members indicated that the Panel needs accurate projections of sockeye catches in the Area 20 fishery since the U.S. is concerned about their fisheries being “shadowed” by large catches in Area 20 fisheries. Mr. Morley noted that he expects that there will actually be fewer vessels and fewer sockeye caught in the Area 20 ITQ fishery this season. The structure of the fishery should also enable better planning for U.S. fisheries.

Mr. Kowal asked how interior Fraser coho harvest constraints would be assessed in-season. Mr. Brahniuk replied that the constraints were based on fishing effort from historic coded wire tag data. The maximum harvest rate on interior Fraser coho this season has been set at 3%; with the Area 20 fishery capped at 0.5% harvest rate. Mr. Adicks asked if this means that the number of boat days will be a fixed cap, regardless of the actual levels of coho by-catch observed in-season. Mr. Brahniuk said that interpretation was correct.

Mr. Graves said that there is nothing to prevent transfer of quota from the Johnstone Strait Area B fishery to the Area 20 fishery. Mr. Morley noted that the Area 20 seines will generally just fish for a couple of days and then deliver their catch. Mr. Rosenberger pointed out that the composition of sockeye stocks would likely change over the course of fishing weeks and that near the end of the season there would be concerns over Late-run sockeye catches increasing and the potential of reductions in run size estimates. Efforts are being made to optimize the catch and its value. Mr. Giard reiterated U.S. concerns over having their fisheries being shadowed, which he noted has happened many times in the past. Mr. Morley commented that if the sockeye runs come back at close to forecast run sizes, there will be many sockeye available to the U.S. to harvest. Ms. Loomis stated that the U.S. is not opposed to what Canada is planning for the Area B ITQ fishery, however, the U.S. has a very small window of opportunity during which they may be able to access their TAC and do not want to be “corked”.

The meeting recessed at 11:55 a.m.

The meeting reconvened at 1:15 p.m.

#### 7. Evaluating Risk and Uncertainty When Managing Fraser River Sockeye

Dr. Michielsens reviewed a presentation entitled “Evaluating Risk and Uncertainty When Managing Fraser River Sockeye” (Attachments 10). Two of the important in-season management decisions are deciding on official run sizes and deciding on fishery openings and catches. Bayesian statistics can be used to: increase the chance of being correct; quantify uncertainty in the estimates; quantify the chance of events occurring; and quantify the risk associated with management decisions. An example of this Bayesian application was provided for Early Summer-run sockeye including: the risk that the official run size does not reflect the true run size; the risk that spawning escapement target (SET) will not be met; and the risk that the fishermen will forego available catches.

Important considerations regarding decisions on official run sizes include: whether in-season data are sufficient to estimate the run size; whether the estimated run size differs from the official run size; and whether the official run size should be kept the same or updated. An important consideration regarding decisions on fishery openings and catches is how much of the TAC can be caught without risking the SET of target and non-target stocks.

Mr. Tynan asked whether the assessments outlined by Dr. Michielsens would be provided on an in-season basis. Mr. Lapointe replied that they would not be initially; but if the Panel decides that they would like to have specific assessments conducted, then Staff would provide such assessments. The Panel

will make the decision as to appropriate risk tolerance regarding fishery management decisions. Considerable work still needs to be done on the analyses described by Dr. Michielsens. Staff are trying to provide the Panel with additional tools to better achieve fisheries management objectives and the Panel can decide which tools they would like to implement. Mr. Rosenberger asked whether there would be any changes to the in-season data presentations by Staff. Mr. Lapointe replied that during updates on run sizes, assessments of risk may be included. Other risk assessments such as achieving SETs can be requested by the Panel. In-season data presentations would generally include the traditional models and the Bayesian models.

#### 4. Outstanding Policy Decisions

##### a. Pre-season Management Adjustments – Early Stuart, Early Summer-run, and Summer-run

Mr. Lapointe stated that Staff's recommended MAs (pMA) for pre-season planning are: Early Stuart (0.46), Early Summer-run (0.40) and Summer-run (0). The Panel needs to decide whether or not to approve these MA estimates.

##### b. Early Stuart Pre-season Forecast and Escapement Option

Mr. Lapointe said that escapement option number four based on an Early Stuart run size at the 75% probability level run size forecast was being used for pre-season planning (Attachment 11).

##### c. Late-run Exploitation Rate

Mr. Lapointe noted that an exploitation rate limit of 20% on Late-run sockeye was being used for pre-season planning. It required Panel approval, however, to be officially adopted in the fishery planning model.

#### 5. Finalization of 2009 Pre-season Planning Documents

##### a. Guidelines to Address Late-run Concerns

Mr. Lapointe requested input from Canada and the U.S. on this document (Attachment 12) so that it can be finalized.

##### b. Principles and Constraints

Mr. Lapointe requested input from Canada and the U.S. on this document (Attachment 13) so that it can be finalized.

##### c. Regulatory Control Letters

Mr. Lapointe reported that both sides have approved the draft FRP regulatory control letters (Attachment 14).

##### d. Signing of Letters of Transmittal

Mr. Lapointe stated that the Panel Chairs would be signing this document after a fishing plan has been agreed to.

6. Test Fishing Items

a. Finalization of Test Fishing Policy Document

Mr. Lapointe said that input on legal considerations have been included in the draft test fishing policy document (Attachment 15). The document needs final approval by the Panel.

b. Test Fishing Start and End Dates

Mr. Lapointe noted that gillnet test fishing (Attachment 16) has been scheduled at Naka Creek for four days and that the projected catch is approximately 800 sockeye of which an estimated half would be from each of the Early Summer-run and Summer-run sockeye runs. The start date for the Whonnock gillnet test fishery has been moved two days earlier to June 22.

The meeting recessed at 2:10 p.m.

The meeting reconvened at 2:55 p.m.

3. Review of Model Results to Achieve Agreed Objectives Cont'd

Mr. Lapointe distributed revised fishery model runs (Attachment 17).

The meeting recessed at 3:05 p.m., June 17

The meeting reconvened at 9:00 a.m., June 18

2. Updates to Fishery Model Inputs Cont'd

Mr. Lapointe reported that he had just received notification that an updated Early Stuart timing forecast had been sent to him of July 4 through Area 20. If the Panel adopted this timing forecast, it would change the MA for Early Stuart sockeye. The Panel could also change the MA for Early Stuart sockeye at the first in-season meeting. The Panel agreed to this option.

4. Outstanding Policy Decisions Cont'd

The Panel approved the following for use in the fishery planning model: the MAs recommended by Staff; option number four of the escapement plan for Early Stuart sockeye at the 75% probability forecast level; and an exploitation rate limit on True Late-run sockeye of 20%.

5. Finalization of 2009 Pre-season Planning Documents Cont'd

The Panel approved (with revisions) the documents "Guidelines to Address Late-run Concerns" and "Principles and Constraints," and the Panel Chairs initialed these documents. For fishery planning, the Panel approved an assumed six day separation in the peak marine timing of Summer-run (August 5) and Late-run (August 11) through Area 20. Mr. Rosenberger advised the Panel that he would forward an update on the status of the maximum exploitation rate on Late-run sockeye and the escapement plan for Early Stuart sockeye after they are approved by the Minister of Fisheries and Oceans. The Panel agreed to the following Fraser River Aboriginal Exemptions: Early Stuart – 10,000 fish; Early Summer-run – 30,600 fish; Summer-run – 342,600 fish; Birkenhead – 5,800 fish; and True Late-run sockeye – 11,000 fish. Mr. Rosenberger noted that fishing closures will be implemented in Canada to protect 90% of the Early Stuart sockeye run from harvest. Additionally, the Panel accepted a planned start date for low



impact Panel Area fisheries of the week of July 19-25 pending in-season updates regarding the abundance of the Early Summer-run and Summer-run sockeye returns.

The Panel noted that a final fishery planning model run had not yet been completed. They agreed to meet again prior to the start of the season so that consensus could be reached on a final pre-season fishery model run. Ms. Loomis noted that the U.S. requires further clarity from Canada regarding the rules and conduct of the Area B ITQ fishery.

The Panel agreed to meet by telephone conference on July 2 and July 10. The Panel also agreed to meet in the U.S.; likely in Bellingham. There would be a meeting of those responsible for fishery planning on July 6 and the Panel would meet, beginning at 9:00 a.m. on July 7. Mr. Lapointe noted that an update on the status of the Early Stuart sockeye migration could also be provided at the meeting on July 7.

6. Test Fishing Items Cont'd

The Panel approved the test fishing policy document and the proposed test fishing start and end dates in 2009.

13. Other Business

a. Post-season Meeting Dates and Location

Mr. Lapointe reported that the option of conducting the post-season meeting at Chilko is not available. The Panel approved having the post-season meeting in Williams Lake on September 23, with a tour of the Horsefly River sockeye spawning grounds on September 22 (Attachment 18). Approximately 15 Panel and FRPTC members expressed interest in flying from Vancouver to Williams Lake.

d. Next Meeting

The Panel agreed that the next meeting would be held by telephone conference on July 2.

b. Summer Field Trips

The Panel discussed possible field tours of various fishing sites including: U.S. - Area 5 gillnet fishery, reefnet fishery, purse seine fishery; Canada – First Nations dipnet fishery on the mid Fraser River, Area 20 purse seine fishery.

c. Status of Minutes and Annual Reports

Mr. White reported that Canada has just completed review of the draft January, February and April FRP minutes, while the U.S. has completed review of the January and February minutes. Comments from the countries on these draft minutes will be reviewed and revised draft minutes will be distributed soon.

Mr. Guthrie provided the following update on the FRP Annual Reports: 2005 – will be printed soon; 2006 and 2007 – draft reports have been distributed, no comments have been received back yet; and 2008 – report is being compiled. Mr. Lapointe noted that the goal in the future is to distribute draft reports for review by January from the previous season.

The meeting recessed at 9:55 a.m.

The meeting reconvened at 10:15 a.m.

8. Update on Pink DNA Program for 2009

Mr. White gave a presentation entitled “Update on Pink DNA Program for 2009” (Attachment 19). Under the Pacific Salmon Treaty the Fraser River Panel is required to account for catches of Fraser pinks wherever they are harvested and manage fisheries focusing on Fraser pinks within the FRP Area of management jurisdiction. Objectives of the Panel include achieving escapement goals for Fraser pinks as well as meeting international and domestic catch allocation goals and ensuring conservation concerns for other stocks and species are taken into account when planning directed Fraser pink fisheries. The genetic stock identification program (GSI) for Fraser pinks provides: stock composition estimates for catch allocation; data for helping to assess the marine migratory timing and pattern of Fraser pinks; and data used in run size forecasting and in-season run size estimates of Fraser pinks. The development of the PSC’s pink GSI programs for Fraser pinks since 1985 was reviewed.

During the 2007 in-season management period, microsatellite DNA techniques were used for the first time to provide stock composition estimates from pink salmon catches. In general, Fraser pink stock contributions to fisheries in Johnstone Strait and Juan de Fuca Strait increased from approximately 40% in early August to approximately 80% by early September. Pink salmon stocks in the pink DNA baseline were reviewed. Results of simulation analyses to assess the approximate accuracy of the DNA techniques for identifying Fraser pinks in mixed stock fisheries were provided. Odd-year southern pink salmon stocks have substantially lower levels of genetic distance than exhibited among Fraser sockeye stocks. This is related to the higher levels of pink salmon straying from their natal spawning grounds. Preliminary simulation analyses suggest that the overall capability of identifying specific pink salmon stocks in mixtures is low. However, some pink salmon stocks are considerably more genetically distinct within their stock-group and relative to stocks from other stock-groups. The planned in-season pink DNA program for 2009 was reviewed as well as future steps in developing the pink DNA program.

Mr. Tynan asked whether some of the apparent bias indicated in the simulation analyses involving Canada South Coast (non-Fraser) pinks was due to stocks not presently in the baseline. Mr. White replied that this was not likely and it was likely more a result of the generally low genetic distance among pink salmon stocks from different stock groups. Mr. Rosenberger asked what the plans were for further developments of the baseline this fall. Mr. White said that requests for pink salmon baseline collections from U.S. stocks had been sent to Mr. Adicks and, in Canada, the request had been sent to Mr. Pieter Van Will of DFO.

10. Overview of Fraser Salmon Legacy Project

Mr. English gave a presentation entitled “Fraser Salmon Legacy Project” (Attachment 20). The Legacy Project is proposed to address the following Fraser salmon issues: (a) “missing sockeye”; (b) changes in Late-run sockeye behavior; (c) perceived loss of confidence by some in fisheries management agencies, a perspective partly fostered by unforeseen impacts of climate change on salmon; and (d) inadequate delivery on harvest sharing agreements with First Nations. The project would involve five inter-dependent components: fish wheels for live capture and tagging of salmon; radio tagging for direct tracking of fish; re-establishment of the Qualark hydro-acoustic program including a gillnet test fishery at the site; in-river catch monitoring and radio-tag recovery; and up-river monitoring of radio-tagged fishes.

If the Legacy Project is successfully implemented, it should result in: improved accuracy of in-season assessment information; comprehensive monitoring of all sources of mortality; improved ability to assess the impacts of climate change; improved public accountability and confidence; and improved sustainability. The budget and potential sources of funds were reviewed. The proposal for 2009 involves:

applying radio tags to Summer-run sockeye and spring-run Chinook; operating fish-wheels; assisting at the Qualark enumeration site; designing a lower Fraser River catch monitoring and tag recovery system; providing a full network of shore-based radio-tag receivers; and providing a report at the end of the project.

Mr. Tynan asked why one of the maps included in the presentation by Mr. English showed the presence of radio-tagged Quesnel sockeye in the Stuart system. Mr. English noted that there was an error in the map, and that the studies in fact did not demonstrate any straying of Quesnel-origin sockeye into the Stuart River watershed. Chief Malloway expressed concern that there is a perception that First Nations fishers are the cause of the “missing sockeye”, even though the Sto:lo First Nations fisheries are heavily monitored. Mr. English said that sometimes “missing sockeye” means that more sockeye appear on the spawning grounds than were estimated at Mission. The intent of the Legacy Project is not to blame anyone regarding the issues that were outlined but rather to improve assessment methods and fisheries management tools. Mr. Shepert noted that it was important for the First Nations contribution to fisheries projects on the Fraser River to be recognized and acknowledged.

11. Update of Discussions Concerning Drift Net Interference at the Mission Acoustic Site

Mr. Lapointe said that there has been an issue in previous years where Sumass First Nations fishers have interfered with the Mission hydro-acoustic program by fishing through the site. PSC Staff have discussed this issue with individuals from the Sumass First Nations band in the past and now DFO is taking the lead in these discussions. Ms. Trager reported that DFO is continuing discussions with the Sumass First Nation, including sending letters outlining the importance of the Mission hydroacoustic program for fisheries management and requesting that their fishers avoid fishing within the hydroacoustic site. There is no agreement yet with the Sumass First Nation on this issue, however DFO is trying to ensure that there is no further interference at the site.

12. Brief Review of Experiments Using Electric Current to Deter Seal Predation and Plans for 2009

Mr. Forrest gave a presentation entitled “Evaluation of an Electric Gradient to Deter Seal Predation on Salmon Caught in Gillnet Test Fisheries” (Attachment 21). The number of seals observed at the Cottonwood gillnet test fishing site has increased greatly since the early 1990s. Experiments using an electric array designed by Smith-Root Inc. at the Vancouver Aquarium in 2007 indicated that seals avoided the electric gradient. A study in 2007 in the Courtenay River also indicated that with a sufficient electrical pulse width, the seals showed a strong avoidance response. Tests with an “electric gillnet” at Cottonwood in 2007 showed much higher catches of Fraser sockeye and pink salmon in comparison to a non-electric section of the gillnet. A report on this study has been published in the North American Journal of Fisheries Management.

In 2009 a multi-panel test fishing gillnet integrated with 12 pulse generator modules designed by Smith-Root Inc. will be used at the Cottonwood site. It is hoped that this will reduce seal foraging of salmon caught in the Cottonwood gillnets and result in increased salmon landings and samples that are available for stock identification analyses.

5. Finalization of 2009 Pre-season Planning Documents Cont’d

Mr. Lapointe reported that the Panel Chairs have signed the Letter of Transmittal for Regulatory Control (Attachment 22) signifying agreement by the Pacific Salmon Commission and the Fraser River Panel on the proposed Fishing Regime for the 2009 Fraser River sockeye and pink salmon season within Panel Area waters. Dates when regulatory control of Panel Area waters will be required are identified in the Letter, as is the intent of the Panel to adopt Orders establishing open fishing periods based on a 2009

Management Plan. The Panel intends to finalize a fishery model run for fishery planning purposes at a future Panel meeting. This letter will accompany the regulatory control letters that will be signed by the Chair of the PSC, Mr. Paul Sprout.

13. Other Business Cont'd

Mr. Lapointe noted that the first news release of the FRP is scheduled for July 10. Staff will send a draft of this news release for review in early July.

The meeting adjourned at 11:25 a.m., June 18, 2009.

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Barry Rosenberger, Chair

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Lorraine Loomis, Vice-Chair

# Fraser River Sockeye and Pink

## Weekly Management Plan July 5 - 11/09

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### For Period of:

Sun. July 5<sup>th</sup> – Sat. July 11<sup>th</sup>, 2009

Week: 28

### Stock Aggregate Focus:

Early Stuart

### Management objectives for the current week:

- Assess run size for Early Stuart
- Assess run timing for Early Stuart

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## Fraser Sockeye Management Summary

### Salmon: Fraser River Sockeye Update – July 13 - Areas 11 to 29

The Fraser River Panel (Panel) of the Pacific Salmon Commission has developed management plans for 2009 Fraser River sockeye and pink salmon fisheries in Panel Area waters. Fisheries and Oceans Canada (DFO) provided forecasts of Fraser River sockeye and pink salmon abundance to the Panel, as well as a schedule for calculating sockeye spawning escapement targets at different run sizes. For planning fisheries, the Panel adopted the 75% probability level pre-season forecast for Early Stuart sockeye (165,000 fish), and the 50% probability level pre-season forecasts for Early Summer-run (739,000 fish), Summer-run (8,677,000 fish), Birkenhead (334,000 fish), True Late-run (573,000 fish) and for Fraser River pink salmon (17,535,000 fish).

The problem of early entry of Late-run sockeye stocks has continued every year since 1996 and it continues to adversely impact their survival and productivity, substantially reducing harvest opportunities on these stocks and on co-migrating Summer-run sockeye salmon. The in-river mortality rate of Late-run sockeye has varied substantially since 1996. However, the high in-river mortality rate experienced by several Late-run stocks continues to pose a serious conservation problem and there is a special concern for Cultus sockeye for which recovery efforts have been implemented by Canada to ensure this stock's long term viability. The Panel remains concerned about this phenomenon and the 2009 management plan was developed under the assumption that this abnormal upstream migratory behavior of Late-run sockeye will continue and that substantial in-river mortality will occur. Panel management objectives and actions implemented in 2009 will place a high priority on conserving Fraser River Late-run sockeye (which include Cultus Lake sockeye).

Commercial fisheries in Panel Areas this year will be directed at Summer-run sockeye, with fisheries openings concentrated in late July and early August to reduce effects on the weaker Early Stuart, Early Summer-run and Late-run sockeye stock groupings. Commercial fishery openings in Panel Area waters in 2009 will be based on abundance estimates and run timing of sockeye and pink salmon, and on their corresponding spawning escapement needs. Assuming that actual, in-season updated run sizes for Early Summer-run and Summer-run sockeye salmon are approximately at the 50% probability level forecast of abundance, and that the runs arrive at near normal dates, some low impact fisheries in Panel Areas would be expected to commence during the week of July 19 to 25. If the in-season estimated return abundances of Early Summer-run and Summer-run sockeye vary from the 50% probability level forecasts, the projected start dates and duration of fisheries may be adjusted. Conservation concerns for other species and stocks identified by Canada and the United States will be taken into account throughout the 2009 management season. Fisheries targeting Fraser River pink salmon will be constrained by conservation requirements approved by the Panel for Late-run sockeye stocks until late in the season, after the majority of Late-run sockeye have cleared marine waters.

The Panel met July 10th to examine biological and other assessment data on Fraser River sockeye salmon. In general, test fishing catches in marine and Fraser River assessment areas have continued to indicate a low migration of sockeye salmon thus far this season. Estimates of Fraser

River sockeye escapement past Mission and observations of sockeye passing Hells Gate similarly have also been low.

At the meeting July 10th, the Fraser River Panel approved a decrease in the run size estimate of Early Stuart sockeye from their 75% probability level forecast of abundance of 165,000 fish to 140,000 fish. The 50% migration timing of Early Stuart sockeye through Area 20 is estimated to be June 29, which is five days earlier than the pre-season forecast. The estimated escapement of Early Stuart sockeye past Mission through July 9 is approximately 91,000 fish.

The June 1 snow-pack update indicated that the upper Fraser River watershed was above normal, while levels in the mid and lower portions of the watershed were below normal. The warm weather in the Fraser River watershed through much of June has reduced the snow-pack. On July 9 the discharge of the Fraser River at Hope was approximately 4,600 cms, which is approximately 23% lower than average for this date. The temperature of the Fraser River at Qualark Creek on July 9 was 15.8 0C, which is 0.4 0C higher than average for this date. At the meeting today, after reviewing environmental and stock assessment information, the Panel approved a decrease in the management adjustment factor for Early Stuart sockeye from the pre-season estimate of 0.46 to 0.33. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye. Present long-range forecasts project that Early Stuart, Early Summer-run and Summer-run sockeye will encounter lower than average Fraser River discharge this season while water temperatures will be slightly above average.

Environmental data collected in the Fraser River watershed through DFO's Environmental Watch program, will be included in weekly in-season news releases from the Pacific Salmon Commission. Fraser River discharge levels and water temperatures will be monitored closely this summer to guide specific Panel management actions that may be required during the in-river sockeye migratory period to help achieve escapement goals.

There are no planned sockeye fisheries at this time.

Next Panel meeting is July 14th.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Jul 5	Mon Jul 6	Tues Jul 7	Wed Jul 8	Thurs Jul 9	Fri Jul 10	Sat Jul 11
First Nations – FSC Mid and Upper Fraser	Closed to sockeye retention						
First Nations – FSC Lower Fraser	Closed to sockeye retention						
First Nations – FSC Marine	Closed to sockeye retention						
Recreational - Upper Fraser River	Closed to sockeye retention						
Recreational - Lower Fraser River	Closed to sockeye retention						

Recreational Marine Areas	Closed to sockeye retention
Commercial Area D	Closed
Commercial Area E	Closed
Commercial Area B	Closed
Commercial Area H	Closed
U.S. Treaty Indian	Closed
U.S. Non-treaty Indian	Closed

## Fishery Notices Summary

### RECREATIONAL - Salmon

FN0483-Recreational - Salmon: Region 3 - Chinook-Bridge/Fraser River – Opportunity  
 FN0484-Recreational - Salmon: Region 3 - Chinook-Bridge/Fraser River-opportunity  
 FN0494-Salmon: Recreational Fishery - Johnstone Strait, Georgia Strait, WCVI Gear/Method/Bait  
 Restrictions - Areas 12, 13 , 14, 18, 22 and 23

### COMMERCIAL – Salmon

FN0479-Commercial - Salmon Troll - Area G - Chinook - Planning Information - Areas 23 to 27, 123 to 127

FN0485-Commercial - Salmon: Gill Net - Area C - Area 8 Chinook & Chum Fishery Opening  
 FN0491-Commercial - Salmon: Gill Net - Area C - Areas 3, 4, 5, & 6 – Opening  
 FN0492-Commercial - Salmon: Seine - Areas A , 3, 6 and 8  
 FN0493-Commercial - Salmon: Gill Net - Area C - Area 8 Chum Fishery Opening  
 FN0496-COMMERCIAL - Salmon: Gill net, Seine Area D and Seines Area B - Barkley Sound  
 Sockeye - Area 23  
 FN0501-COMMERCIAL - Salmon Seine Area A Seine Opening Area's 3, 6, & 8  
 FN0502-Commercial Salmon: Area C Gillnet Opening 3 & 4  
 FN0505-Salmon: Fraser River Sockeye Update - July 13 - Areas 11 to 29

### ABORIGINAL – Salmon

None



# Management Information

## 2009 Fraser River Sockeye In-season Status

### 2009 Fraser River Sockeye In-season Status

Week of: Jul. 5 - Jul. 11, 2009

Date: Jul. 10, 2009

	Sockeye					
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total
Run Size						
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000
In-season Estimate	165,000	739,000	8,677,000	334,000	573,000	10,488,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational						
"Outside" Catch	1,464	568	76	0	9	2,117
Gross Escapement						
FRA Catch Below Mission (incl. FSC & EO)	131	21	0	0	0	152
Escapement-to-date @ Mission	90,853	20,701	0	0	0	111,554
Potential Gross Escapement	90,984	20,722	0	0	0	111,706
Adjusted Gross Esc. Target *	165,000	490,080	4,218,900	149,100	507,300	5,530,380
Accounted-to-date						
Catch + Escapement to Mission	92,448	21,290	76	0	9	113,823
Potential Remaining To Come						
Potential En-route	72,552	717,710	8,676,924	334,000	572,991	10,374,177
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch						
Canadian Commercial (incl. selective)	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0
Marine Area Aboriginal	0	0	0	0	0	0
Test Fishing	1,464	568	76	0	9	2,117
Canadian Charter	0	0	0	0	0	0
Canadian Marine Recreational	0	0	0	0	0	0
U.S. TI Ceremonial	0	0	0	0	0	0
U.S. Recreational	0	0	0	0	0	0
Total	1,464	568	76	0	9	2,117
Fraser R. Aboriginal and Above-Mission Recreational Catch						
Canadian Fraser R. Recreational	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date						
Catch Below Mission (incl. FSC & EO)	131	21	0	0	0	152
Catch Above Mission (incl. FSC & EO)	33	2	0	0	0	35
Total	164	23	0	0	0	187
Total In-river Catch	164	23	0	0	0	187
Total Catch in All Areas						
Total	1,628	591	76	0	9	2,304
Timing and Diversion Assumptions						
Area 20 Timing	4-Jul	26-Jul	5-Aug	11-Aug	11-Aug	
Mission Timing	10-Jul	1-Aug	11-Aug		19-Aug	
JS Diversion Rate						28%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Sockeye TAC Calculations and Catch

### 2009 Fraser River Panel Sockeye Review Catch Summary

#### 2009 Fraser River Panel Sockeye Review

Week of: Jul. 5 - Jul. 11, 2009

Date: Jul. 10, 2009

Area		Gear	Fraser Sockeye
			Cumul.
<b>Commercial Catch</b>			
<u>Canada</u>			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127, 11-12	Troll		0
B Areas 11-16	PS		0
D Areas 11-13	GN		0
H Areas 12-16	Troll		0
H Areas 18-29	Troll		0
B Area 20	PS		0
E Area 29	GN		0
Canadian Selective			0
FRA Economic Opportunity			0
BC Interior FN Demo			0
Canadian Total			0
<u>United States</u>			
<u>Alaska</u>	Net&Troll		0
<u>Washington</u>			
T.I. Areas 4B/5/6C	Net		0
T.I. Areas 6/7/7A	Net		0
N.I. Areas 7/7A	Net		0
Washington Total			0
U.S. Total			0
<b>Non-commercial Catch</b>			
PSC Test			2,100
Other Test			0
Fraser River Aboriginal (FSC)			200
Areas 12-124 Aboriginal			0
Recreational			0
Charter			0
U.S. TI Ceremonial			0
Non-comm. Total			2,300
<b>Catch and Escapement</b>			
Catch Accounted-to-date			2,300
Potential Spawning Escapement (Mission esc. less Aboriginal & sport catch above Mission)			111,500
Total Accounted-to-date			113,800

<b>Gross Escapement (includes Pitt R. sockeye)</b>						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	165,000	90,900	100	91,000	55%
ESum	Early Summer	490,080	20,700	0	20,700	4%
Summ	Quesnel/Chilko	4,218,900	0	0	0	0%
	L. Stu./Stel.		0	0		
Late	Birkenhead	149,100	0	0	0	0%
	Adams/L. Shuswap	507,300	0	0	0	0%
	Weav/L. Misc.		0	0		
	Sub 1s		0	0		

## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

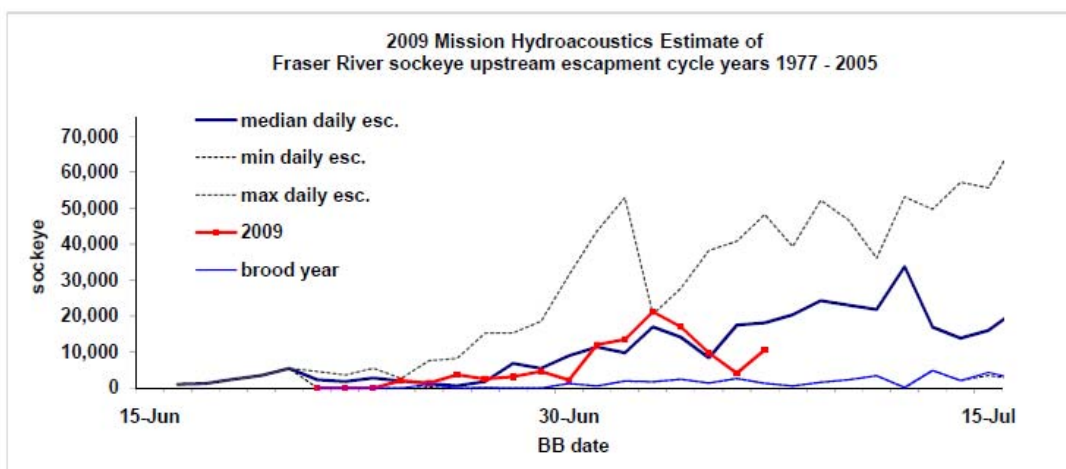
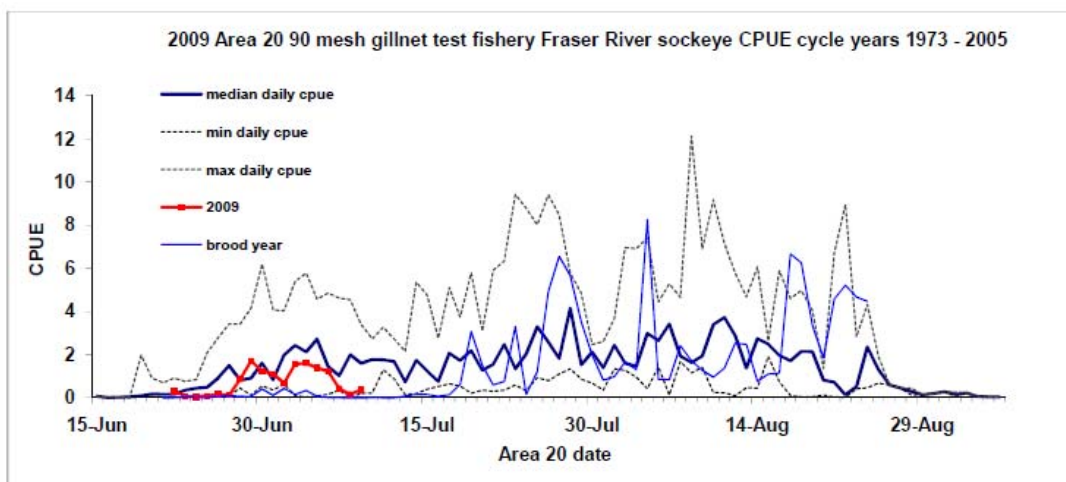
2009 Pacific Salmon Commission Sockeye Test Fishing Summary

	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul
Area 20 Gillnet	191	111	236	267	224	204	70	26	61
Area 20 Purse Seine									
Area 29 Gulf Troll									
29B Cottonwood Gillnet*						1	5	2	0
29D Whonnock Gillnet*	1	3	0	43	29	11	1	6	1
Area 12 Round Island GN									
Area 12 Purse Seine									
Area 13 Purse Seine									
Area 7 Reef Net Obs.									
Mission Escapement**	4600	2200	12000	13500	21200	17000	9800	4100	10600

\* Variable mesh Gillnet

\*\* Preliminary, subject to revision.

N.O. = No Observation.



## Detailed Test Fishing Data

Fraser River Sockeye Weekly Management Plan July 5th – 11th, 2009

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FisheryName	TripDate	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 20 - San Juan Sockeye Gillnet	04/07/2009	2	4	305.85	267	0	2
	05/07/2009	2	4	298.05	224	0	7
	06/07/2009	2	4	307.05	204	0	14
	07/07/2009	2	4	304.5	70	0	2
	08/07/2009	2	4	312.15	26	0	6
	09/07/2009	2	4	302.55	61	0	32
	10/07/2009	2	4	307.05	73	0	7
	11/07/2009	2	4	322.5	131	0	12
	12/07/2009	2	4	309.6	46	0	4
	06/07/2009	1	2	7.14	1	0	0
	07/07/2009	1	2	5.94	5	0	0
	08/07/2009	1	2	6.96	2	0	0
Area 29 - Cottonwood Sockeye Gillnet	09/07/2009	1	2	6.48	0	0	0
	10/07/2009	1	2	7.14	12	0	0
	11/07/2009	1	2	7.08	8	0	0
	12/07/2009	1	2	7.26	5	0	0
	04/07/2009	1	2	11.4625	43	0	0
	05/07/2009	1	2	11.1125	29	0	0
Area 29 - Whonnock Sockeye Gillnet	06/07/2009	1	2	10.9375	11	0	0
	07/07/2009	1	2	10.15	1	0	0
	08/07/2009	1	2	9.975	6	0	0
	09/07/2009	1	4	20.0375	1	0	0
	10/07/2009	1	2	9.8	0	0	0
	11/07/2009	1	2	9.8875	0	0	0
	12/07/2009	1	2	9.975	0	0	0

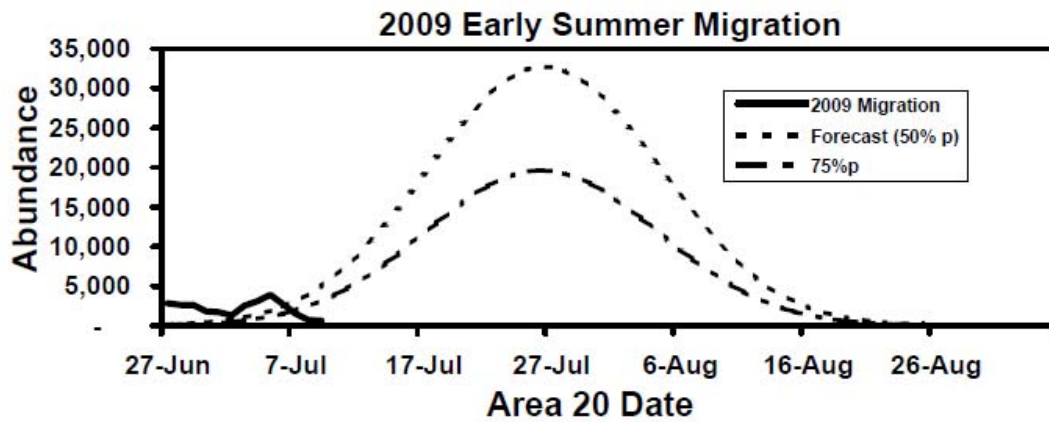
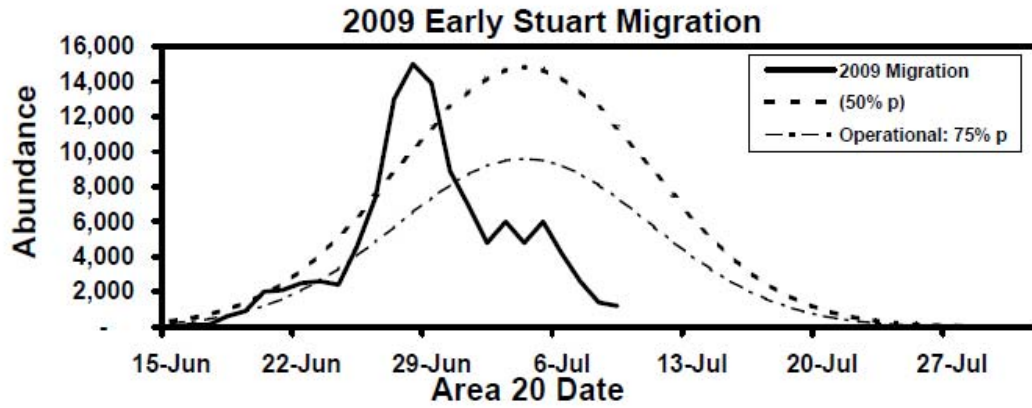
## DNA Analysis

## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna Area1/101	jun.18-26	10	0%	AW 100%;
dna A20gntf	jul.5	100	93%	ES 54%;EM 38%;ET 1%;CQ 1%;LS 6%;AW 0%;
dna A20gntf	jul.7	70	92%	ES 60%;EM 28%;ET 1%;CQ 1%;LS 6%;Ha 4%;
dna ABgntf	jul.4,5	73	100%	:S 86%;EM 14%;ET 0%;CQ 0%;LS 0%;AW 0%;Ha 0%
dna AB,BB tf	jul.6-8	16	100%	ES 81%;EM 19%;
<u>E.Stuart</u>	<u>Early Summer</u>		<u>Summer</u>	<u>Late</u>
ES=EStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pl,Owk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## Migration Graphs



## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...					
Mission Date	Escapement Total	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson
Mission Total:	111,700	91,000	20,700	-	-
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)					
Mission Date	Projected Escapement	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson
10-Jul	11,200	6,900	4,100	100	100
11-Jul	9,600	5,500	3,900	100	100
12-Jul	8,200	5,100	3,000	100	-
13-Jul	2,700	1,800	900	-	-
14-Jul	1,000	700	300	-	-
15-Jul	2,400	1,600	800	-	-
Projected Gross Escapement <sup>1</sup>					
10-Jul					
15-Jul	35,100	21,600	13,000	300	200
Projected Total	146,800	112,600	33,700	300	200
		Early Stuart 112,600		Early Summers 34,200	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted					
Analysis fixed at this time: 7/10/2009 9:30					





## Environmental Conditions

### Fraser Conditions & MA Report for July 10, 2009

#### Fraser River Discharge at Hope

Discharge levels are tracking well below the historical average. The discharge was about 4600 m<sup>3</sup>/s yesterday and forecast to decrease to about 4100 m<sup>3</sup>/s by July 18.

	date	m <sup>3</sup> /s
Last obs.	9-Jul	4,600
Forecast	18-Jul	4,143

#### Fraser River Temperature at Qualark

Temperatures have continued to increase but not as fast as forecast earlier in the week. The temperature yesterday was 15.8C and is forecast to increase to 16.8C by July 18, which would be tracking slightly above the long-term average.

	date	C
Last obs.	9-Jul	15.8
Forecast	18-Jul	16.8

#### MA Estimate for Early Stuart

The pre-season MA forecasts were pMA=0.46, DBE=-32% and MA=72,000. At the forecast Area 20 timing of **July 4** (Hells Gate date of July 15), the estimates for Early Stuart sockeye are a **pMA=0.03**, **DBE=-3%** and **MA=4,700 fish**.

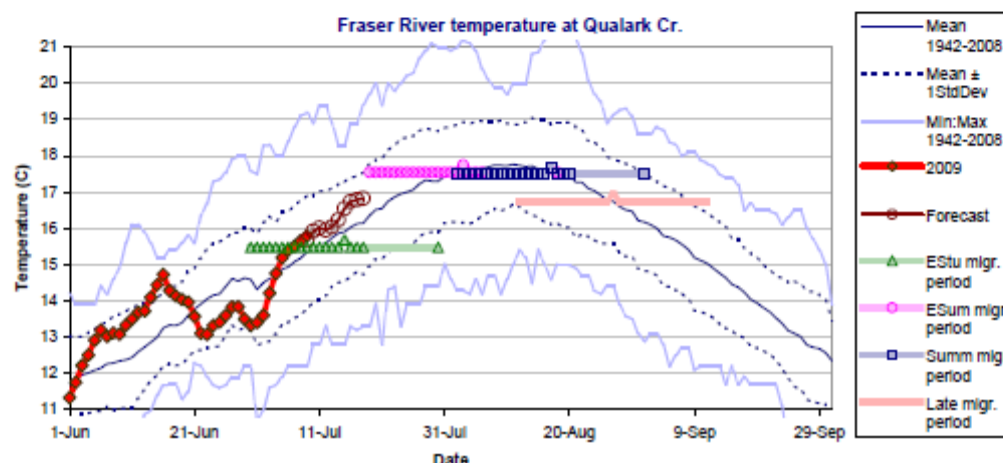
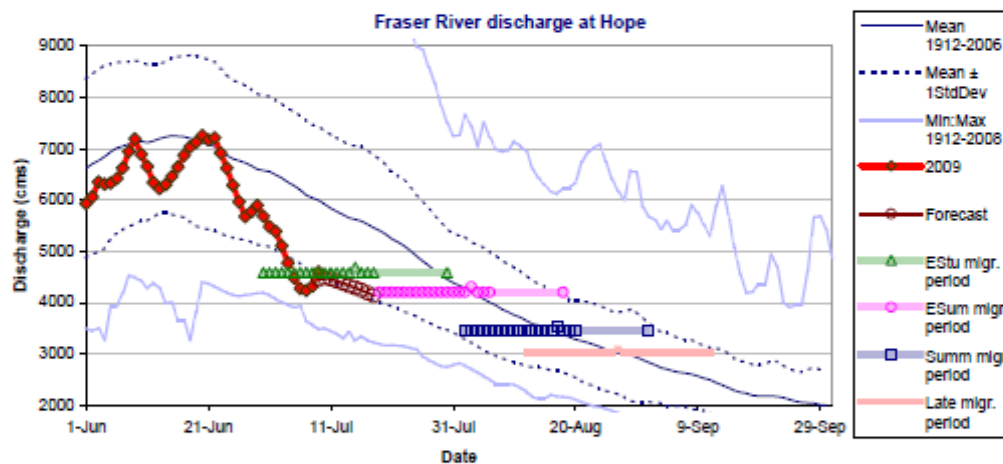
HG Date	15-Jul	pMA	0.04
#days	19	%DBE	-4%
Disch.	4,598	MA	6,200
Temp.	15.5		

However, there are indications the run is earlier than forecast. Hence:

With an Area 20 timing estimate of **June 30** (Hells Gate date of July 11), the estimates for Early Stuart sockeye are a **pMA=0.23**, **DBE=-19%** and **MA=35,900 fish**.

With an Area 20 timing estimate of **July 1** (Hells Gate date of July 12), the estimates for Early Stuart sockeye are a **pMA=0.16**, **DBE=-14%** and **MA=25,000 fish**.

With an Area 20 timing estimate of **July 2** (Hells Gate date of July 13), the estimates for Early Stuart sockeye are a **pMA=0.11**, **DBE=-10%** and **MA=17,200 fish**.





# Fishery Recommendations

## *Fraser River Panel Meetings: Summaries and Discussions*

### Fraser River Panel (call) Summary Notes July 10th, 2009

#### FRP Bilateral

- Test Fishing
  - A20 GN
    - Start date: Jun 22
    - SK catch starting Jun 30: 219, 191, 111, 236, 267, 224, 204, 70, 26, 61
    - Notes: Poor fishing conditions in the last couple of days (poor tides, phosphorescent algae, no wind). Also there is normally a bit of a lull between the E-Stuart and E-Summer migrations.
    - Notes: The expansion line has declined to ~11,000 over the last 3 days, but still using the 15,000 avg. expansion line for run size estimates.
    - Fish were in the 5.5 to 6.1 pound range and in good condition
  - Cottonwood
    - Start date: Jul 6- Catch to Date: SK-8, CN-1
    - SK catch starting Jul 6: 1, 5, 2
    - Notes: Seals quite active, the electrified fence not functioning as intended. A call has been made to the contractor to repair it.
  - Whonnock
    - Start date: Jun 22
    - SK catch starting Jun 30: 13, 1, 3, 0, 43, 29, 11, 1, 6, 1
    - Notes: Seals active on Jul 3
- Stock ID
  - DNA
    - Area 101- Recreational samples n=10
      - 0% Fr
    - Whonnock date: Jul 4, 5 n = 73
      - 100% Fr
      - 86.6% E Stuart
      - 13.4% ESum
    - Whonnock and Cottonwood date: Jul 6,8 n = 16
      - 100% Fr
      - 81% E Stuart
      - 19% ESum
    - A20GN date: Jul 5 n=100
      - 93% Fr
      - 54% E Stuart
      - 39% ESum
      - 7% Sum
    - A20GN data: Jul 7 n=70

- 92% Fr
  - 60% E Stuart
  - 29% ESum
  - 7% Sum
  - 4% Lates
  - Notes: A little Lake Washington out there.
- Notes: Had to combine the Whonnock and Cottonwood samples to get sufficient sample size.
- Still in the transition between E Stuarts and ESumm
- Expected proportions on July 7<sup>th</sup> A20
  - 68% EStu
  - 26% EMisc
  - 3% ET
  - 3% Chilko
  - 1% Harrison
- Age Composition
  - A20 date: Jul 7
    - 58% 4 yr
    - 37% 5 yr
    - 5% 3<sub>1</sub> – Some Harrison SK
    - Notes: Small daily abundance means that stocks that make up a small proportion of the population may be overrepresented.
  - Of the E. Stuart aged, n=275
    - 94% 4 yrs
    - expected: 99% 4 yrs
- Mission
  - Split beam operational dates: June 25
  - revised Mission numbers (Obs #s starting Jul 1): 4600, 2200, 12000, 13500, 21200, 17000, 9800, 4100, 10600
  - Total past Mission to date:
    - EStu: 90,853
    - ESumm: 20,701
- EStu Run Size – Using an expansion line of 15,000
  - 114k accounted to date
    - 92.4k catch + esc
    - 21.6k projected en-route
  - Cum. Passage (deterministic)
    - 144k 01-Jul
  - Cum. Normal (deterministic)
    - 131k 30-Jun 25d spread
  - Bayes Cum. Normal (includes priors for exp. line & spread)
    - 126k 29-Jun 22d spread
    - 132k 29-Jun 26d spread (used avg spread)
      - 80% pred interval: 91k – 175k
      - 84% probability run less than 165k
      - 71% probability run less than 150k
      - 60% probability run less than 140k
  - ***E-Stuart Run size recommendation of 140k, with Jun 29 A20 timing***

- ***Recommendation Accepted by Canada and US.***

- Environmental Conditions
  - Discharge at Hope
    - 4600 cms 9-Jul
    - forecast: 4100 cms by July 18
    - notes: discharge tracking well below the historical average
  - Temp at Qualark
    - 15.8 C 9-Jul
    - forecast: 16.8 by July 18
    - notes: temperatures continue to increase, by July 18 may be slightly above average
- MA for E.Stuart
  - Pre-season
    - pMA=0.46
    - DBE=-32%
    - MA=72,000
  - ***At A20 timing of Jun 29 (at accepted recommendation for timing and runsize = 140,000)***
    - ***pMa=0.33***
    - ***DBE=-25%***
    - ***MA=46,000***
      - ***Recommendation accepted by Canada and US***
  - At A20 timing of Jun 30:
    - pMA=0.23
    - DBE=-19%
  - At A20 timing of Jul 1:
    - pMA=0.16
    - DBE=-14%
  - At A20 timing of Jul 2:
    - pMA=0.11
    - DBE=-10%
  - Notes: The MA increases as the timing moves back because of the declining trend in the discharge and EStu are more affected by discharge than temperature.
- Discussions regarding the presentation of probabilistic data:
  - Presentation of the run-size conditional probability graph
  - Presentation of how it could be used to evaluate proposed fisheries
    - Caucuses to discuss and decide whether and how they would use cumulative posterior graphs.
- The draft news release is out and ready for comment.
- Ocean condition update- El Nino is expected to return, but not until the fall, and is expected to be mild to moderate.
- Fishery Recommendations:
  - US-None
  - CDN-None
- Next Meeting
  - Tue July 14<sup>th</sup>, 11:30 am

# Detailed Fishing Openings

## Open Times for the Mid & Upper Fraser River First Nations Fisheries

### 2009 Open Times for the Mid & Upper Fraser River First Nations Fisheries - Week 28

Updated: Jul 03, 2009

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
July 12 week 28	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net, Dip net, Angling with Rod and Reel
July 12 week 28	Chinook only (non-retention sockeye)	Stl'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 6 05:00	Sunday July 12 22:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 12 week 28	Chinook only (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net, Dip net, Fishwheel (Fraser only)
July 12 week 28	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net (all), Dip net (all but T'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en)
July 12 week 28	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
July 12 week 28	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All

TBA = To Be Announced

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band  
 NSTC = Northern Shuswap Tribal Council

TNG = Tsil'quot'In' Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band  
 TLA = T'azt'en Nation

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 05	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 03	12:00 Sunday Jul 05	Chinook	drift net
Jul 05	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 03	12:00 Sunday Jul 05	Chinook	drift net
Jul 05	IN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 01	18:00 Sunday Jul 05	Chinook	set net, dip net, rod and reel
Jul 05	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 01	18:00 Sunday Jul 05	Chinook	set net, dip net, rod and reel
Jul 05	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Sunday Jul 05	19:00 Sunday Jul 05	Chinook	drift net
Jul 05	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 05	19:00 Sunday Jul 05	Chinook	drift net
Jul 05	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Sunday Jul 05	21:00 Sunday Jul 05	Chinook	dip net
Jul 12	Kwikwilem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 04	06:00 Monday Jul 06	Chinook	drift net
Jul 12	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Monday Jul 06	21:00 Monday Jul 06	Chinook	dip net
Jul 12	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Tuesday Jul 07	21:00 Tuesday Jul 07	Chinook	dip net
Jul 12	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Wednesday Jul 08	21:00 Wednesday Jul 08	Chinook	dip net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	13.6 day s	06:00 Friday Jun 26	21:00 Thursday Jul 09	Chinook	dip net
Jul 12	Seabird Island First Nation	Agassiz to Sawmill Creek	12.6 day s	06:00 Saturday Jun 27	21:00 Thursday Jul 09	Chinook	dip net
Jul 12	Shxw'owhamel First Nation	Yale Creek to Sawmill Creek	12.6 day s	06:00 Saturday Jun 27	21:00 Thursday Jul 09	Chinook	dip net
Jul 12	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Thursday Jul 09	21:00 Thursday Jul 09	Chinook	dip net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Friday Jul 10	19:00 Friday Jul 10	Chinook	drift net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Friday Jul 10	21:00 Friday Jul 10	Chinook	dip net
Jul 12	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net
Jul 12	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Saturday Jul 11	21:00 Saturday Jul 11	Chinook	dip net
Jul 12	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 10	12:00 Sunday Jul 12	Chinook	drift net
Jul 12	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 10	12:00 Sunday Jul 12	Chinook	drift net
Jul 12	IN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 08	18:00 Sunday Jul 12	Chinook	set net, dip net, rod and reel
Jul 12	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 08	18:00 Sunday Jul 12	Chinook	set net, dip net, rod and reel

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 12	Musqueam First Nation	Below Port Mann Bridge	34 hrs	12:00 Tuesday Jul 07	22:00 Wednesday Jul 08	Chinook	drift net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report

### Recreational

See appendices

### First Nations

#### Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009											18 Sep 2009 13:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill	
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands	
GEAR	All	All	All	All	All	All	All	All	All	All	All	
Week Ending											Total	Cumulative
Jun-14	0	0	0	0		0	0	0	0	0	0	0
Jun-21	0	0		0		0	0	0	0	0	0	0
Jun-28	1	1		4		5	10	0	0	0	19	21
Jul-05	4	9	0	137		3	18	0	0	0	158	171
Jul-12	9	3	0	19		0	9		2	0	30	234

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
3-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
7-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
5-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
Total	15	1	0	0	0	16	16

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
7-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
5-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	closed	closed	N/A	0	0
Total	0	0	0	0	0	0	0

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
5-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
3-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
7-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
5-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7

N/M = No Monitoring Conducted

## Marine

No catch to report



# Fraser River Sockeye and Pink Weekly Management Plan July 12 - 18/09

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## For Period of:

Sun. July 12<sup>th</sup> – Sat. July 18<sup>th</sup>, 2009

Week: 29

## Stock Aggregate Focus:

Early Stuart; Early Summers

## Management objectives for the current week:

- Assess run size for Early Stuart
- Assess run timing for Early Stuart
- Assess Early Stuart management adjustment
- Assess run timing for Early Summers
- Assess run size for Early Summers

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## Fraser Sockeye Management Summary

### FN0516-Commercial & Recreational - Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

The Fraser River Panel met Tuesday, July 14 to receive an update on the migration of the Fraser River sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of sockeye in Johnstone Strait and Juan de Fuca Strait as well in the Fraser River indicate low migration of Fraser River sockeye over the past several days. At the meeting today, the run size estimate of 140,000 Early Stuart sockeye was unchanged; however, present assessments suggest that the return could be lower and will be updated at the Friday, July 17 Fraser River Panel meeting. The migration of Early Summer-run sockeye through marine assessment areas has also been somewhat lower than expected to-date but is very early in the migration period.

Migration conditions for sockeye entering the Fraser River are presently satisfactory. On July 13 the Fraser River discharge at Hope was approximately 4,850 cms, which is approximately 15% lower than normal, while the water temperature at Qualark Creek was 16.2 0C, which is 0.5 0C higher than average for this date.

All recreational and commercial fisheries remain closed to fishing for Fraser River sockeye at the present time.

First Nations fisheries targeting Fraser River sockeye are planned once current Early Stuart sockeye window closures to protect 90% of the migration in various areas.

Next Panel meeting is July 17th.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### FN0531-Salmon: Fraser River Sockeye Update - July 17 - Areas 11 to 29

The Fraser River Panel met Friday, July 17 to receive an update on the migration of the Fraser River Sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of Sockeye in Johnstone Strait and Juan de Fuca Strait as well in the Fraser River indicate low migration of Fraser River Sockeye over the past several days. At the meeting today, the run size estimate of Early Stuart Sockeye was decreased from 140,000 to 110,000 Sockeye and the estimated 50% migration timing of Early Stuart Sockeye through Area 20 was revised to June 28 (six days earlier than forecast). The marine migration of Early Stuart Sockeye is nearly complete. The migration of Early Summer-run Sockeye through marine assessment areas has also been lower than expected to-date but is still early in the migration period. The estimated escapement of Early Summer-run Sockeye past Mission through July 16 is approximately 28,000 fish.

Migration conditions for Sockeye entering the Fraser River are presently satisfactory. On July 16 the Fraser River discharge at Hope was approximately 4,700 cms, which is approximately 15% lower than normal, while the water temperature at Qualark Creek was 17.2 0C, which is 1.20C higher than average for this date. Fraser River water temperatures are forecast to reach approximately 19 0C over the next ten days. The Panel approved an increase in the management adjustment factor for Early Stuart Sockeye from 0.33 to 0.49.

All recreational and commercial fisheries remain closed to fishing for Fraser River Sockeye at the present time. First Nations fisheries targeting Fraser River Sockeye are now permitted in the marine areas and are planned in the Fraser River once current Early Stuart Sockeye window closures to protect 90% of the migration in various areas have passed. Some First Nations fisheries will commence at reduced levels in the lower Fraser River this weekend.

Next Panel meeting is July 21st.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Jul 12	Mon Jul 13	Tues Jul 14	Wed Jul 15	Thurs Jul 16	Fri Jul 17	Sat Jul 18
First Nations – FSC Mid and Upper Fraser	Chinook closed to sockeye retention except CSTC and Bonaparte open for sockeye and chinook from July 12 18:00 to Sunday July 19 18:00						
First Nations – FSC Lower Fraser	Open to sockeye during weekend Fri, Sat and Sun – 17 <sup>th</sup> – 19 <sup>th</sup>						
First Nations – FSC Marine	Open to sockeye						
Recreational - Upper Fraser River	Closed to sockeye retention						
Recreational - Lower Fraser River	Closed to sockeye retention						
Recreational Marine Areas	Closed to sockeye retention						
Commercial Area D	Closed						
Commercial Area E	Closed						
Commercial Area B	Closed						
Commercial Area H	Closed						
U.S. Treaty Indian	Closed						
U.S. Non-treaty Indian	Closed						

## Fishery Notices Summary

### RECREATIONAL - Salmon

FN0510-RECREATIONAL - SALMON: Region 3 - Retention of Chinook Salmon in Thompson River

FN0512-Recreational - Salmon: Somass Sockeye Recreational Fin Fish Closure - Area 23-1

FN0515-Recreational - Somass Recreational Fin Fish Closure - Area 23-1 (Amendment to FN0512 - All Fin Fish)

FN0516-Commercial & Recreational - Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

FN0523-Recreational Fisher - Salmon: Angling Closure in portion of Cowichan River - Region 1

FN0524-Recreational Fishery - Salmon: Type of gear or bait change in Cowichan River - Region 1

FN0531-Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

### COMMERCIAL – Salmon

FN0506-Commercial - Salmon: Seine and Troll - Area B and H - 2009 Fraser River Sockeye and Pink ITQ Demonstration Fishery

FN0507-Commercial - Salmon: Seine and Troll - Registration of Packers for the Area B and H Fraser River sockeye and pink fisheries

FN0508-Commercial - Salmon: Seine Area A Opening - Areas 3, 6 & 8 - July 13 2009

FN0509-Commercial - Salmon: Gill Net - Area C Opening - Areas 3, 4, 6 & 8

FN0511-Commercial - Salmon: Area F Troll - Dixon Entrance Sockeye By-Catch retention areas – Closing

FN0513-Commercial - Salmon: Area A Seine - Area 3 Opening - July 16

FN0516-Commercial & Recreational - Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

FN0518-COMMERCIAL - Salmon: Gill Net - Licensing: Salmon Area E - 2009 Licence Issuance - Areas 16 to 22, 28, 29 and 121.

FN0520-COMMERCIAL - Salmon Gill Net nd Seine Area A Seine, Area C Gill Net - 3,6,8

FN0522-COMMERCIAL - Salmon Troll: Area F Troll - Areas 1, 2, 101, 102, 104 and 142-2 directed Coho and Pink by-catch retention areas.

FN0525-COMMERCIAL: Salmon - Area A Seine - Areas 3 & 6 Opening

FN0526-COMMERCIAL - Salmon: Area C Gillnet - Areas 3, 4, & 6

FN0527-COMMERCIAL - Salmon: Seine - Area A - Chum & Pink Fishery - Area 8

FN0528-Commercial - Salmon Gill Net - Area C - Area 8 Chum Fishery

FN0530-COMMERCIAL - Salmon: Gill net, Seine - Salmon: Barkley Sound Sockeye - Area 23

FN0531-Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

### ABORIGINAL – Salmon

FN0516-Commercial & Recreational - Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

FN0531-Salmon: Fraser River Sockeye Update - July 14 - Areas 11 to 29

# Management Information

## 2009 Fraser River Sockeye In-season Status

### 2009 Fraser River Sockeye In-season Status

Week of: Jul. 12 - Jul. 18, 2009

Date: Jul. 17, 2009

Week of: Jul. 12 - Jul. 16, 2005	Date: Jul. 17, 2005						
	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	140,000	739,000	8,677,000	334,000	573,000	10,463,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,640	910	190	0	160	2,900	100
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	157	26	2	0	1	186	0
Escapement-to-date @ Mission	100,000	27,580	40	0	1,830	129,450	0
Potential Gross Escapement	100,157	27,606	42	0	1,831	129,636	0
Adjusted Gross Esc. Target *	140,000	490,080	4,218,900	149,100	507,300	5,505,380	0
Accounted-to-date							
Catch + Escapement to Mission	101,797	28,516	232	0	1,991	132,536	100
Potential Remaining To Come							
Potential En-route	38,203	710,484	8,676,768	334,000	571,009	10,330,464	17,534,900
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	0	0	0	0	0	0	0
Test Fishing	1,610	900	190	0	160	2,860	100
Canadian Charter	31	6	0	0	0	37	0
Canadian Marine Recreational	0	0	0	0	0	0	0
U.S. TI Ceremonial	0	0	0	0	0	0	0
U.S. Recreational	0	0	0	0	0	0	0
Total	1,640	910	190	0	160	2,900	100
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	157	26	2	0	1	186	0
Catch Above Mission (incl. FSC & EO)	266	55	4	0	0	325	0
Total	423	81	6	0	1	511	0
Total In-river Catch	423	81	6	0	1	511	0
Total Catch in All Areas							
Total	2,063	991	196	0	161	3,411	100
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	26-Jul	5-Aug	11-Aug	11-Aug		25-Aug
Mission Timing	5-Jul	1-Aug	11-Aug		19-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Sockeye TAC Calculations and Catch

### 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Jul. 12 - Jul. 18, 2009

Date: Jul. 17, 2009

	Fraser Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	Total
<b>RUN STATUS, ESCAPEMENT NEEDS &amp; AVAILABLE SURPLUS</b>							
In-season Run Size Estimate	110,000	739,000	8,677,000	334,000	573,000	10,433,000	17,535,000
Adult Spawning Escapement Target (SET)	110,000	295,600	3,470,800	133,600	458,400	4,468,400	6,000,000
Management Adjustment (MA)	53,900	118,080	0	0	n/a	171,980	0
Proportional MA (pMA)	0.49	0.3995	0.00	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	110,000	413,680	3,470,800	133,600	458,400	4,586,480	6,000,000
Test Fishing (TF)	2,400	8,000	50,400	1,500	2,400	64,700	30,000
Surplus above Adjusted SET & Test fishing	0	317,320	5,155,800	198,900	112,200	5,784,220	11,505,000
<b>DEDUCTIONS &amp; TAC FOR INTERNATIONAL SHARING</b>							
Aboriginal Fishery Exemption (AFE)	10,000	30,600	342,600	5,800	11,000	400,000	0
Available Aboriginal Fishery Exemption	0	30,600	342,600	5,800	11,000	390,000	0
Total Deductions (Adj. SET + TF + Available AF)	112,400	452,280	3,863,800	140,900	471,800	5,041,180	6,030,000
Available TAC for International Sharing	0	286,720	4,813,200	193,100	101,200	5,394,220	11,505,000
<b>UNITED STATES (Washington) TAC</b>							
U.S. Share **	16.5%	0	47,310	794,180	31,860	16,700	890,050
U.S. Payback **	0.0%	0	0	0	0	0	0
Total		0	47,310	794,180	31,860	16,700	890,050
Treaty Indian Share **	67.7%	0	32,030	537,660	21,570	11,310	602,570
Non-Indian Share	32.3%	0	15,280	256,520	10,290	5,390	287,480
<b>CANADA TAC</b>							
Canadian Allocation	83.5%	0	239,410	4,019,020	161,240	84,500	4,504,170
Available Aboriginal Fishery Exemption (AFE)		0	30,600	342,600	5,800	11,000	390,000
Total Canadian Share		0	270,010	4,361,620	167,040	95,500	4,894,170
Marine Area Aboriginal		0	18,600	219,000	8,400	14,000	1,261,100
Fraser River Aboriginal		0	66,400	630,400	11,000	41,200	3,633,000
First Nations Allocations (including AFE)		0	85,000	849,400	19,400	55,200	1,009,000
Planned Recreational Shares		0	11,000	144,100	5,500	9,400	170,000
Purse Seine B	47.5%	0	82,650	1,599,860	67,520	14,680	1,764,710
Gillnet D	21.5%	0	37,410	724,150	30,560	6,640	798,760
Gillnet E	25.0%	0	43,500	842,030	35,540	7,730	928,790
Troll H	6.0%	0	10,440	202,090	8,530	1,850	222,910
Commercial Allocations	100.0%	0	174,010	3,368,120	142,140	30,900	3,715,170
<b>CATCH-TO-DATE</b>							
Test	1,610	900	190	0	160	2,860	100
Treaty Indian (Wash.)	0	0	0	0	0	0	0
Non-Indian (Wash.)	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Marine Area Aboriginal	0	0	0	0	0	0	0
Fraser River Aboriginal	420	80	10	0	0	510	0
Recreational	0	0	0	0	0	0	0
Commercial	30	10	0	0	0	40	0
Canada	450	90	10	0	0	550	0
Total Catch in All Fisheries	2,060	990	200	0	160	3,410	100
Exploitation Rate (catch-to-date / run size)	2%	0%	0%	0%	0%	0%	0%
<b>CATCH REMAINING (BALANCE)</b>							
Washington	0	47,310	794,180	31,860	16,700	890,050	2,956,790
Canada	-450	269,920	4,361,610	167,040	95,500	4,893,620	8,548,210
Balance Remaining [ below share / -above share]	-450	317,230	5,155,790	198,900	112,200	5,783,670	11,505,000
<b>ESCAPEMENT RELATIVE TO TARGETS</b>							
Potential Spawning Escapement (PSE) ***	107,940	738,010	8,676,800	334,000	572,840	10,429,590	17,534,900
Predicted Difference Between Estimates (%DBE)	-33%	-29%	0%	0%	****		0%
PSE with predicted DBE removed	72,440	527,350	8,676,800	334,000	****		17,534,900
Spawning Escapement Target (SET)	110,000	295,600	3,470,800	133,600	458,400	4,468,400	6,000,000
Potential deviation from SET [ <target / >target ]	-37,560	231,750	5,206,000	200,400	****		11,534,900

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

PSC [Status]TAC 12:17 PM 7/17/2009 1/1



## 2009 Fraser River Panel Sockeye Review Catch Summary

### 2009 Fraser River Panel Sockeye Review

Week of: Jul. 12 - Jul. 18, 2009

Date: Jul. 17, 2009

Week 01: Oct. 12 - Oct. 16, 2009

Date: Oct. 17, 2009

Fraser Sockeye

Area	Gear	Cumul.
Commercial Catch		
Canada		
A & C Areas 1-10	Net	0
F Areas 1-10	Troll	0
G Areas 123-127, 11-12	Troll	0
B Areas 11-16	PS	0
D Areas 11-13	GN	0
H Areas 12-16	Troll	0
H Areas 18-29	Troll	0
B Area 20	PS	0
E Area 29	GN	0
Canadian Selective		0
FRA Economic Opportunity		0
BC Interior FN Demo		0
Canadian Total		0
United States		
Alaska	Net&Troll	0
Washington		
T.I. Areas 4B/5/6C	Net	0
T.I. Areas 6/7/7A	Net	0
N.I. Areas 7/7A	Net	0
Washington Total		0
U.S. Total		0
Non-commercial Catch		
PSC Test		2,760
Other Test		110
Fraser River Aboriginal (FSC)		510
Areas 12-124 Aboriginal		0
Recreational		0
Charter		37
U.S. TI Ceremonial		0
Non-comm. Total		3,420
Catch and Escapement		
Catch Accounted-to-date		3,420
Potential Spawning Escapement (Mission esc. less Aboriginal & sport catch above Mission)		129,120
Total Accounted-to-date		132,540

### Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	140,000	100,000	200	100,200	72%
ESum	Early Summer	490,080	27,600	0	27,600	6%
Summ	Quesnel/Chilko	4,218,900	0	0	0	0%
	L.Stu./Stel.		0	0		
Late	Birkenhead	149,100	0	0	0	0%
	Adams/L.Shuswap	507,300	0	0	1,800	0%
	Weav/L.Misc.		0	0		
	Sub 1s		1,800	0		



## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

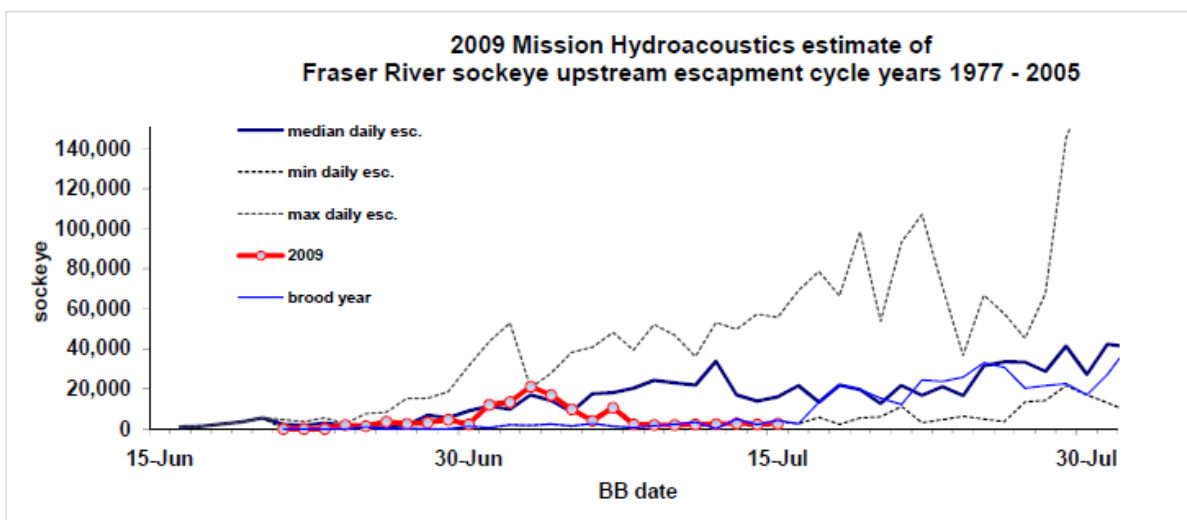
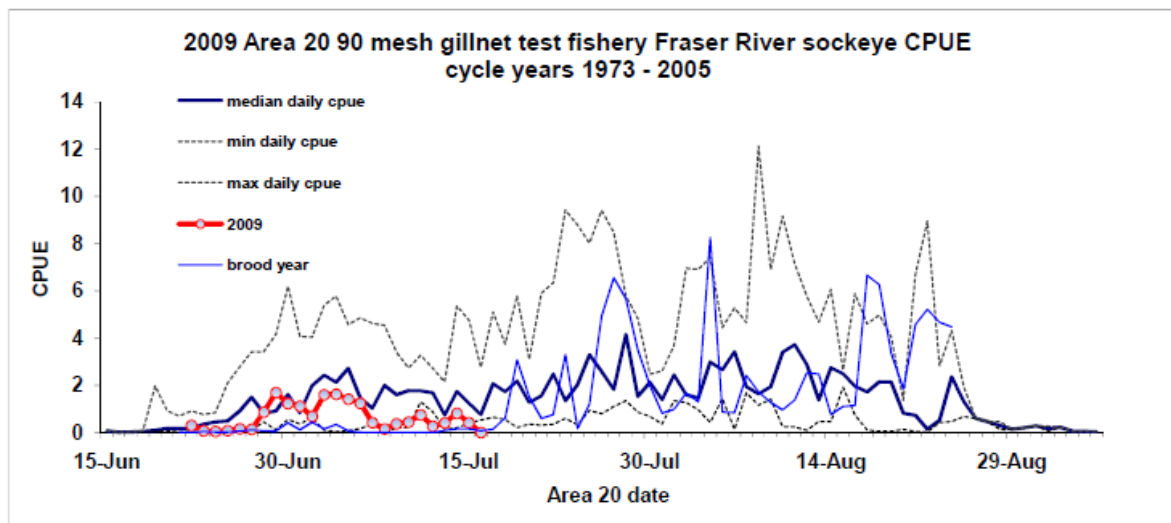
2009 Pacific Salmon Commission Sockeye Test Fishing Summary

	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul
Area 20 Gillnet	26	61	73	131	46	68	117	49	0
US Area 5 Gillnet								34	76
Area 20 Purse Seine									
29B Cottonwood Gillnet*	2	0	12	8	5	2	0	0	3
29D Whonnock Gillnet*	6	1	0	0	0	0	0	0	0
Area 12 Round Island GN					5	16	17	7	32
Area 12 Naka Cr. Gillnet									
Area 12 Purse Seine									
Area 13 Purse Seine									
Area 7 Reef Net Obs.									
Mission Escapement**	10600	2200	1900	2000	2200	2400	2800	2200	2600

\* Variable mesh Gillnet

\*\* Preliminary, subject to revision.

N.O. = No Observation.



**Detailed Test Fishing Data**

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Naka Creek Sockeye Gillnet	17/07/2009	1	4	93.4	91	0	18
	18/07/2009	1	4	93.7	168	0	25
Area 12 - Round Island Sockeye Gillnet	12/07/2009	1	3	84	5	0	1
	13/07/2009	1	3	80.3	16	0	0
	14/07/2009	1	3	79.7	17	0	1
	15/07/2009	1	3	85.2	7	0	0
	16/07/2009	1	3	81.6	30	0	31
	17/07/2009	1	3	84.8	25	0	12
	18/07/2009	1	3	89	21	0	12
Area 20 - San Juan Sockeye Gillnet	12/07/2009	2	4	309.6	46	0	4
	13/07/2009	2	4	310.8	68	0	33
	14/07/2009	2	4	279	117	0	16
	15/07/2009	2	2	225.45	49	0	5
	16/07/2009	2	2	301.8	56	0	7
	17/07/2009	2	4	130.35	78	0	11
	18/07/2009	2	4	253.5	271	0	9
Area 29 - Cottonwood Sockeye Gillnet	12/07/2009	1	2	7.26	5	0	0
	13/07/2009	1	2	7.2	2	0	0
	14/07/2009	1	2	6.6	0	0	0
	15/07/2009	1	2	6.72	0	0	0
	16/07/2009	1	2	6.78	3	0	0
	17/07/2009	1	2	6.84	2	0	0
	18/07/2009	1	2	7.02	7	0	0
Area 29 - Whonnock Sockeye Gillnet	12/07/2009	1	2	9.975	0	0	0
	13/07/2009	1	2	9.975	0	0	0
	14/07/2009	1	2	9.8875	0	0	0
	15/07/2009	1	2	10.063	0	0	0
	16/07/2009	1	2	10.063	0	0	0
	17/07/2009	1	2	10.238	1	0	0
	18/07/2009	1	2	10.588	3	0	0
U.S. Area 5 - U.S. Juan de Fuca Sockeye	15/07/2009	1	2	136.84	34	0	156
	16/07/2009	1	2	151.8	78	0	22
	17/07/2009	1	2	148.28	83	0	43
	18/07/2009	1	1	54.56	6	0	4
U.S. Area 7 - Area 7 U.S. Reef Net Payfis	16/07/2009	1	0	0			
	17/07/2009	0	0	0			
	18/07/2009	0	0	0			

## DNA Analysis

## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A20gntf	jul.14	96	97%	S 14%;EM 39%;ET 3%;CQ 9%;LS 10%;Bi 1%;Ha 24%
dna Hope	jul.14	40	100%	ES 78%;EM 22%;ET 0%;CQ 0%;LS 0%;AW 0%;
<u>E.Stuart</u>	<u>Early Summer</u>		<u>Summer</u>	<u>Late</u>
ES=EStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

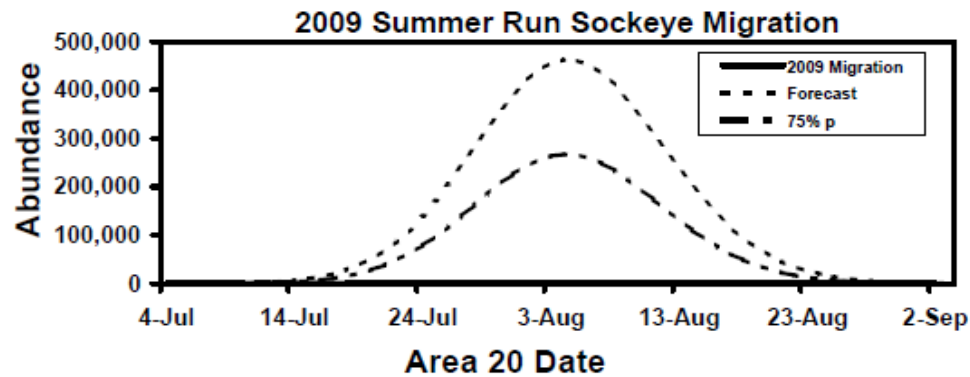
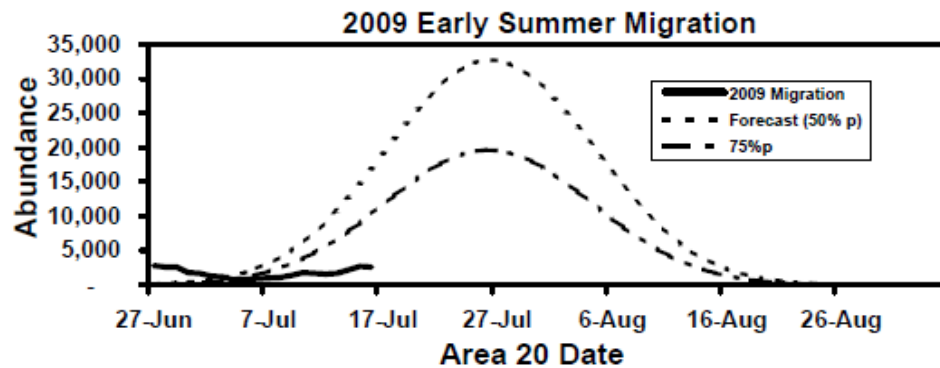
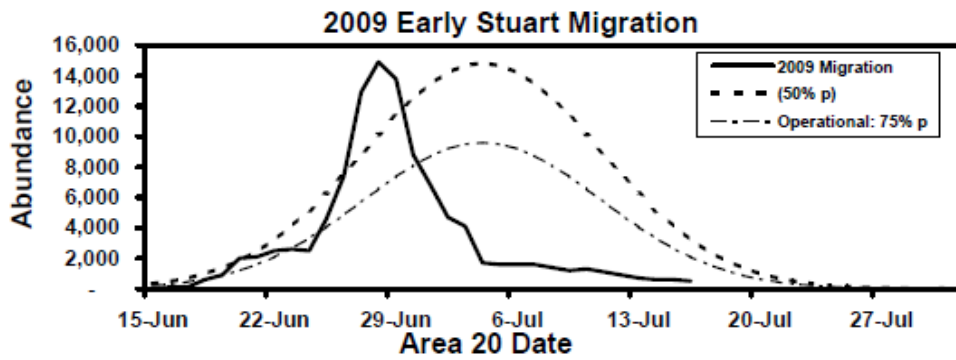
## Comparisons for fishing decisions

1) Comparisons for fishing decisions, based on information available on Friday July 17 as compared with information from Pre-season Planning Model

Model Run	SID July 12 Area 20				Abundance through Area 20:			Abundance through Mission:		
	E. Stuart	E.Summers	Summers	All Lates	E. Stuart	E.Summers	Summers	E. Stuart	E.Summers	Summers
<u>Pre-Season Planning Runs</u>					(Modeled thru Jul 16)			(Modeled thru Jul 16)		
	3%	62%	33%	2%	119,340	99,524	44,663	114,377	27,577	3,487
			(July 14 model)							
<u>Actual</u>	E. Stuart	E.Summers	Summers	All Lates	E. Stuart	E.Summers	Summers	E. Stuart	E.Summers	Summers
	14%	42%	19%	25%	105,653	38,445	6,313	101,653	28,220	113
	(Actual: A 20 July 14)				(Actual: July 16)			(Actual: July 16)		

7/17/2009 10:01

## Migration Graphs



## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...								
Mission Date	Escapement Total	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Quesnel	Chilko
Mission Total:	129,600	100,200	27,100	-	500	-	-	-
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)								
Mission Date	Projected Escapement	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
17-Jul	4,800	1,600	2,400	100	100	400	100	100
18-Jul	1,800	500	800	-	-	300	100	100
19-Jul	2,600	600	1,200	100	-	400	200	100
20-Jul	5,300	800	2,700	200	-	800	500	300
21-Jul	4,100	400	2,300	100	-	700	400	200
22-Jul	4,700	500	2,600	200	-	800	400	200
Projected Gross Escapement <sup>1</sup>								
17-Jul								
22-Jul	23,300	4,400	12,000	700	100	3,400	1,700	1,000
Projected Total	152,900	104,600	39,100	700	600	3,400	1,700	1,000
		Early Stuart 104,600	Early Summers 40,400			Summer Runs 6,100		
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted								
Analysis fixed at this time: 7/17/2009 10:12								

### Escapement Summary

#### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009	COTTONWOOD T.F.		AB DATE	AB T.F.		MISSION	BEST Est.	CUMM.	Hells Gate	
BB DATE	CATCH	CPUE	(BB+1)	CATCH	CPUE	Splitbeam	(incl. Pitt)	TOTAL	(AB+4)	DAILY EST.
	1277	155.82		1998	159.66	1,270,126	1,303,200			129,130
12-Jul	5	0.67	13-Jul vmn	0	0.00	4,500	4,900	93,100	17-Jul	90
13-Jul	2	0.29	14-Jul vmn	0	0.00	2,900	3,300	96,400	18-Jul	190
14-Jul	0	0.00	15-Jul vmn	0	0.00	3,700	4,400	100,800	19-Jul	50
15-Jul	0	0.00	16-Jul vmn	0	0.00	3,200	4,000	104,800	20-Jul	40
16-Jul	3	0.44	17-Jul vmn	1	0.10	2,600	3,000	107,800	21-Jul	10
17-Jul	2	0.29	18-Jul vmn	3	0.28	800	800	108,600	22-Jul	10
18-Jul	7	0.99	19-Jul vmn	2	0.18	600	700	109,300	23-Jul	40

## Mission Escapement by Stock

Mission Escapement				Mission Escapement																

## Environmental Conditions

### Fraser Conditions & MA Report for July 17, 2009

#### Fraser River Discharge at Hope

Discharge levels have closely followed Monday's forecast. Yesterday's discharge was about 4700 m<sup>3</sup>/s, while the forecast is for a decline to 4300 m<sup>3</sup>/s by July 25.

	date	m <sup>3</sup> /s
Last obs.	16-Jul	4,730
Forecast	25-Jul	4,312

#### Fraser River Temperature at Qualark

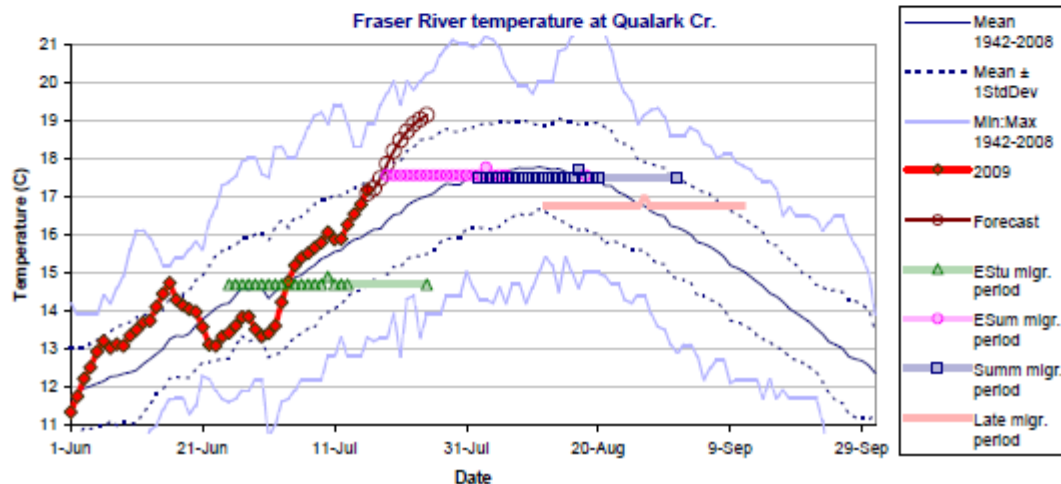
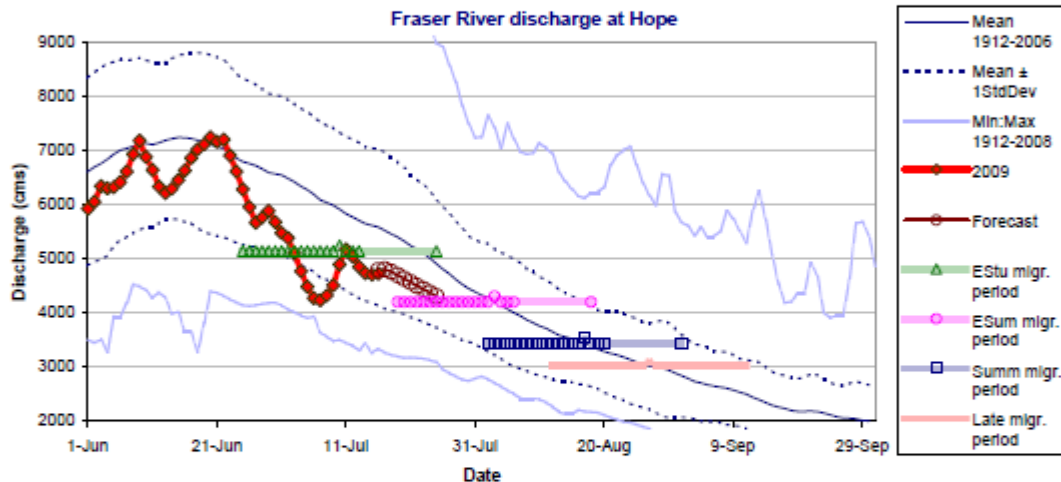
Temperatures have closely followed Monday's forecast. Temperatures are forecast to increase from yesterday's 17.2°C to 19.1°C by July 25, due to continued hot dry weather in the Province. If these high temperatures materialize, they may impact the last half of the Early Stuart migration.

	date	C
Last obs.	16-Jul	17.2
Forecast	25-Jul	19.1

#### MA Estimate for Early Stuart

No change from Tuesday's estimate: pMA=0.38, DBE=-27% and MA=53200 fish, assuming July 29 timing in Area 20.

HG Date	10-Jul	pMA	0.38
#days	19	%DBE	-27%
Disch.	5,150	MA	53,200
Temp.	14.7		



## Fishery Recommendations

### Fraser River Panel Meetings: Summaries and Discussions

Fraser River Panel (call) - Summary Notes-July 14**FRP Bilateral**

- Test Fishing
  - A20 GN
    - SK catch starting Jul 11: 131, 46 (9 CO), 68 (4 CO)
    - Notes: Continues to be a lull in sockeye migration as there continues to be low catches in test fisheries. The lull is not abnormal (if it goes on much longer it will be of concern). There should be an increase in catches soon if ESum and Sum show up as expected.
    - Notes: Fishing conditions have NOT been poor. The test fishery in recent days is occurring on at least a portion of the flood tide. The fish have been full of krill and there has been some reports from the recreational fishery of some SK being caught at Swiftsure Bank.
    - Notes: PSC staff suggests using a 6000 expansion line as Mission Hydroacoustics is picking up less fish than expected from A20 test fishing observations.
  - A12 GN
    - SK catch starting Jul 12: 5 (5 CO), 16 (7 CO)
    - Notes: One boat for 3 sets on Jul 12. Not unusual to see low catches as it is still early timing wise.
  - Cottonwood
    - SK catch starting Jul 11: 8, 5, 2
    - Notes: Electric fence hasn't been working that well and still requires some tweaking.
    - Notes: This test fishery is doing a little better than Whonnock but the sample sizes are still very low.
  - Whonnock
    - SK catch starting Jun 11: 0,0,0
    - Notes: River plagued by seals. Low catches in river test fisheries indicate that there is not a lot of SK around.
  - Hells Gate
    - Recent counts equate to ~100 SK a day. Poor counting conditions make it difficult to line up with Mission counts. Fish have been observed getting through the area with no migration issues evident.
- Age Composition
  - A 20 Jul 12
    - 46% 4<sub>2</sub>, 42% 5<sub>2</sub>, 12% sub-1s, 2% 4<sub>1</sub> and 10% 3<sub>1</sub>, n= 41
    - Notes: These results are reflective of model abundance and 4<sub>2</sub> composition should increase into the 90% range.
  - BB Jul 14
    - 89% 4<sub>2</sub>, 6% 5<sub>2</sub>, 5% 4<sub>1</sub>, n= 25
- Stock ID
  - DNA
    - Area 20 GN Jul 10, n= 73
      - 93% Fr
      - 32% EStu
      - 47% EM
      - 4% ET



- 17% Ha
  - 10% of total sample was LkWA → indicates how low the abundance is b/c LkWA numbers are very low
- Area 20 GN Jul 12, n = 46
  - 90% Fr
  - 27% EStu
  - 41% EM
  - 3% ET
  - 5% CQ
  - 14% LS
  - 11% Ha
- compare above to the expected A20 stock comp on 11-Jul:
  - 18% EStu
  - 54% EMisc
  - 10% EThom
  - 15% Ch/Q
  - 3% LStu/St
  - 1% Har
    - seems to confirm low abundance of fish
- BB GN Jul 8-12, n= 25
  - 100% Fr
  - 75% EStu
  - 14% EM
  - 7% LS
  - 4% Ha
- AB GN Jul 8, n= 6
  - 100% Fr
  - 80% EStu
  - 17% CQ
  - 4% LS
- Notes: Still a little Lake WA in non Fraser component. WA should be in last 5% of run so Lake WA % should decrease in samples.
- Notes: Stock composition confirming low volume of SK in assessment areas. Good news with respect to not observing a transition from EStu to Summ in stock id which would indicate a potential poor return of ESum.
- Mission
  - Total past Mission to date ~ 126,000
    - EStu: 99,400
    - ESum: 24,100
    - Summ: 2,000
    - Late: 700 (Harrison)
  - Note: issue with Mission being able to estimate passage at these low abundances
    - debris midstream is affecting the daily passage split beam estimates
    - for the past 3 days, PSC has been using the single beam estimate
    - don't expect this to be an issue once fish show up
- Run Size Assessments
  - Early Stuart

- Using an expansion line of 15,000 (long term average)
- 107k accounted to date
  - 101k in catch and esc
  - 6k projected en-route
- Cum. Passage (deterministic)
  - 114k Jun 29 A20
- Cum. Normal (deterministic)
  - 107k Jun 29 14 day spread (very narrow)
- Bayes Cum. Normal (includes priors for exp. line & spread)
  - 111k Jun 28 20 day spread
    - 86% probability run is less than 140k
    - 75% probability run is less than 125k
    - 52% probability run is less than 120k
  - 112k if use a 26 day spread (i.e. sample only from the prior dist'n of spread – model does not update estimate of spread)
- Notes: Pretty clear that run will not reach 140k. There are a few sources of uncertainty within the assessments: species composition, Mission counts (debris) and the expansion line. Fish seaward is only a small addition to the run. PSC staff thinks an estimate of 120k is reasonable, then step it down further if required. Due to the uncertainty and the fact that the current run size has no effect on fisheries staff may not change the run size at this point → are moving into accounting mode. Timing is most likely June 28<sup>th</sup> or earlier.
- Early Summer
  - Too early to provide an estimate of ESum at this point. Stock composition tracking a bit behind.
    - 25k in catch and esc
    - 9k projected en-route.
    - 34k accounted through Jul 13
  - Model runs show 55k as an estimate at this point. In summary tracking behind but not out of reach.
- Environmental Conditions
  - Discharge at Hope
    - 4850 cms 13-Jul
    - forecast: 4400 cms by July 22
    - notes: discharge tracking below the historical average
  - Temp at Qualark
    - 16.2 C 13-Jul
    - forecast: 18.8 by July 22
    - Notes: Temperatures forecast to increase rapidly over the next few days. Below average flows coupled with warm air temperatures are not providing conditions to allow the river to cool.
- MA for EStu
  - A20 timing of Jun 29:
    - pMA=0.38
    - DBE= -27%
    - Notes: Slight increase in the MA from what the Panel adopted recently. No management implications therefore, no recommendation from PSC staff to adopt the new MA.

- if PSC had to recommend a run size & pMA for today (unless there is a need to update run size, PSC recommends that we update run & MA on Friday):
  - 120k EStu
  - pMA = 0.38
  - CDN → don't need an update for today, can wait for Friday
- Run Strength of other CA stock groups
  - Nass: Run is slightly smaller than expected pre-season (483k vs. 500k).
  - Skeena: Coming in poor relative to expectations (650k-800k vs. ~2 million pre-season forecast). Still time to turn things around but currently looking at non-retention fisheries. Bulk of Skeena forecast was 5 year olds & Skeena five year olds are coming in much less than forecast. PSC concerned about the four year olds and not so much the five year olds for the Fraser.
  - Barkley: Run size is above pre-season and coming in around 450k, timing is earlier
  - Strong showing of Coho in a number of areas
  - Some reports of warmer water moving in which adds to the possibility of a higher diversion rate.
- Fishery Recommendations:
  - US-None
  - CDN-None
- Next Meeting
  - Fri July 17<sup>th</sup>, 11:00 am

#### Fraser River Panel (call) Summary Notes-July 17

##### **FRP Bilateral**

- Test Fishing
  - A20 GN
    - SK catch starting Jul 15:, 49, 37(1 boat)
    - Notes: The boats were only able to get in one set each on the 16<sup>th</sup> due to catching roughly 3,000 dogfish each. One caught 37 SK and one caught roughly the same, but was still picking his net at the time of the meeting
    - Notes: Some upwelling has brought in some krill, herring, and coho, so the dogfish & coho have come in to feed.
  - A12 GN Round Island
    - Start date: Jul 12
    - SK catch starting Jul 14: 17, 7, 32
  - A12 GN Naka Cr.
    - Start date: Jul 16
    - SK catch starting Jul 16: 36 (first set)
  - US Area 5
    - Start date: Jul 15
    - SK catch starting Jul 15: 34, 76
    - Notes: PK catch starting Jul 15: 170, 25 CO catch: 5, 2
    - Note: Not as many dogfish as A20
  - Cottonwood
    - SK catch starting Jul 15: 0, 3
    - Notes: Seals still a problem, seeing low abundances
  - Whonnock
    - SK catch starting Jun 15: 0,0

- Notes: Seals active, 2 CN caught on Jul 16th

- Mission
  - Daily passage from 14-Jul: 2800, 2200, 2600
    - numbers over the last week have been revised a bit – were using the single beam to deal with debris, but have switched over to using left bank only & assuming the left bank accounts for 60% of total SK passage
  - Expected lull in river abundances for at least the next 6 days based on marine test fisheries.
  - Total past Mission to date: 129,120
    - EStu: 100,200
    - ESumm: 27,600
    - Late: 1,800
  - Species comp: using 50/50 SK vs. CN
    - At the low numbers being observed, the species ratio used now will not have much affect on the overall SK run size estimate
- Hells Gate
  - Viewing conditions fair to poor
  - SK counts starting Jul 14: 100, 250, 180
  - Not seeing a lot of migration, fish are getting through though
- Qualark
  - DIDSON also showing low daily abundance
  - Test fishing starting soon for species composition & stock ID
- Biosampling
  - Age Composition
    - A20 date: Jul 13 n=60
      - 42% 4<sub>2</sub>
      - 33% 5<sub>2</sub>
      - 22% 3<sub>1</sub>
      - 1 fish 5<sub>3</sub> – probably Chilko or Nahatlatch (low productivity lakes)
      - 1 fish 6<sub>3</sub>
    - A20 date: Jul 14 n=96
      - 34% 4<sub>2</sub>
      - 39% 5<sub>2</sub>
      - 26% sub-ones (25% of which are 3-1s – Harrison)
    - Notes: A20 age comps on the Jul 13<sup>th</sup> and 14<sup>th</sup> were similar and interesting
    - A UBC crew operating near Yale at American Creek samples:
      - 78% 4 yr
      - 22% 5 yr
  - DNA
    - A20GN date: Jul 14 n=96
 

• 97% Fr	Expected %
• 13% E Stuart	3%
• 39% EMisc	49%
• 2.5% EThompson	13%
• 9% Chilko/Quesnel	28%
• 10% Late Stuart/ Stellako	6%
• 1% Birk	2%
• 24% Harrison	
• Non Fraser were Barkley SK	

- UBS crew at American Creek: Jul 14 n=40
    - 78% E Stuart (4 yr olds)
    - 22% E Misc (5 yr olds)
      - Mostly Nadina, maybe one Bowron
  - Notes:
    - low expansion lines are suggested by age composition/stock ID – i.e., with large % of Har in samples, high expansion would indicate many more Har than expected
    - Not seeing the % of Summer runs we would expect, so ESum & Sum may both be late.
- Assessments
  - 106k accounted to date
    - 102k catch + esc
    - 4400 projected en-route
  - ***E-Stuart Run size recommendation of 110k, with Jun 28 A20 timing***
    - ***Recommendation Accepted by Canada and US.***
  - Notes: ESumm. Low relative to expectations, they are 4 to 5 days late if they are going to come in at forecast
- Environmental Conditions
  - Discharge at Hope
    - 4700 cms 16-Jul
    - forecast: 4300 cms by July 25<sup>th</sup>
    - notes: Discharge slightly below the historical average.
  - Temp at Qualark
    - 17.2 C 15-Jul
    - forecast: 19.1 C by July 25
    - notes: At the forecasted temperature, the MA for EStu will increase. The high forecasted temperatures could affect the last half of the EStu migration.
- MA for E.Stuart
  - ***At A20 timing of Jun 28 (at accepted recommendation for timing and runsize = 110,000)***
    - ***pMa=0.49***
    - ***DBE= -33%***
    - ***MA=54,000 (at 110k EStu run size)***
      - ***Recommendation accepted by Canada and US***
- Comparisons for fishing decisions table
  - Marine Areas
    - Early Summers and Summers are tracking 4-5 days late
  - Mission
    - Early Summers at pre-season expectations, but we expect them to fall behind over the next week, given lack of abundance in marine TF.
  - We were expecting early timing for all groups, but in past years, about 20% of the time when the E Stuarts are early, the E Summers and Summers have been late.
  - There is no detected oceanographic reason for a delay
- Fishery Recommendations:
  - US-None
    - were originally scheduled to start 4B/5 fishery this weekend, but due to low abundances, will delay
  - CDN-None

- FN FSC fisheries will be open this weekend for half of the originally planned time
- Samples will be collected
- Next Meeting
  - Tue July 21<sup>st</sup>, 11:30 am
- Test fishing Scheduling
  - The Johnstone Strait SN test boats are scheduled to start on Monday.
  - It takes 2 days to get the seines in Area 20 in position after a decision has been made, it takes 1 day to get the Johnstone Strait seines in position.
    - *Canada proposed*
    - *US agreed*
- Area 20SN test fish scheduling
  - They will delay until at least Wed Jul 22<sup>nd</sup>.
    - Decision will be made on Sunday, with a conference call to be held if there is an increase in the catches in the currently operating test boats. If there is no increase in the catch, the next contact will be Tue.
      - *US agreed*
      - *Canada agreed*

## Detailed Fishing Openings

### Open Times for the Mid & Upper Fraser River First Nations Fisheries

**2009 Open Times for the Mid & Upper Fraser River First Nations Fisheries - Week 29 - Amendment #2**

Updated: Jul 18, 2009

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net, Angling with Rod and Reel
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Friday 17 2009 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES All catch MUST be reported</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 13 05:00	Sunday July 19 22:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	T'i't'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Highbur Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net (all but T'la'zen) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 19 week 29	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net
July 19 week 29	Sockeye/ Chinook	Bonaparte	Thompson R. watershed upstream of Bonaparte (specific locations)	7	Sunday July 12 18:00	Sunday July 19 18:00	Gear listed in communal licence. (Weirs, gill nets, dip nets, spears, gaffs, harpoon and angling with hook and line)
July 19 week 29	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	TBA	TBA	TBA	All
July 19 week 29	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All

TBA = To Be Announced

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band

TNG = Tsil'quot'In. Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 12	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Jul 12	19:00 Sunday Jul 12	Chinook	drift net
Jul 12	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 12	19:00 Sunday Jul 12	Chinook	drift net
Jul 12	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Sunday Jul 12	21:00 Sunday Jul 12	Chinook	dip net
Jul 19	Kwikwiltlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 11	06:00 Monday Jul 13	Chinook	drift net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Monday Jul 13	21:00 Monday Jul 13	Chinook	dip net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Tuesday Jul 14	21:00 Tuesday Jul 14	Chinook	dip net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Wednesday Jul 15	21:00 Wednesday Jul 15	Chinook	dip net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Thursday Jul 16	21:00 Thursday Jul 16	Chinook	dip net
Jul 19	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Friday Jul 17	21:00 Friday Jul 17	Sockeye	set net, dip net
Jul 19	Yale First Nation	Hope to Sawmill Creek	16 hrs	06:00 Friday Jul 17	21:59 Friday Jul 17	Sockeye	set net, dip net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
Jul 19	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
Jul 19	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
Jul 19	Musqueam First Nation	Below Port Mann Bridge	9 hrs	11:00 Saturday Jul 18	20:00 Saturday Jul 18	Chinook, Sockeye	set net, drift net
Jul 19	Tsawwassen First Nation	Below Port Mann Bridge	9 hrs	11:00 Saturday Jul 18	20:00 Saturday Jul 18	Chinook, Sockeye	set net, drift net
Jul 19	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Saturday Jul 18	21:00 Saturday Jul 18	Sockeye	set net, dip net
Jul 19	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Saturday Jul 18	21:00 Saturday Jul 18	Sockeye	set net, dip net



Jul 19	Kwikwiltlem First Nation	Patullo Bridge to Douglas I.	24 hrs	06:00 Saturday Jul 18	06:00 Sunday Jul 19	Chinook	drift net
Jul 19	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
Jul 19	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
Jul 19	Squamish Nation	Howe Sound (28-2 to 28-4)	3 day s	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	drift net
Jul 19	Squamish Nation	Squamish River	3 day s	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	set net
Jul 19	DN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
Jul 19	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
Jul 19	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
Jul 19	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	fish wheel
Jul 19	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 19	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Wednesday Jul 15	08:00 Wednesday Jul 15	Chinook	drift net
Jul 19	Squiala First Nation	Emory Creek to Sawmill Creek	12 hrs	07:00 Wednesday Jul 15	19:00 Wednesday Jul 15	Chinook	drift net
Jul 19	Musqueam First Nation	Below Port Mann Bridge	7 hrs	15:00 Wednesday Jul 15	22:00 Wednesday Jul 15	Chinook	drift net
Jul 19	Squiala First Nation	Emory Creek to Sawmill Creek	12 hrs	07:00 Thursday Jul 16	19:00 Thursday Jul 16	Chinook	drift net
Jul 19	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Friday Jul 17	18:00 Friday Jul 17	Chinook	drift net
Jul 19	Musqueam First Nation	Below Port Mann Bridge	24 hrs	14:00 Saturday Jul 18	14:00 Sunday Jul 19	Chinook	drift net

## Economic Opportunity Opening Times

none

# Preliminary In-season Catch Numbers

## Commercial

No commercial catch to report

## Recreational

See appendices

## First Nations

## Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009											18 Sep 2009 13:43		
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Jul-05	4	9	0	137		3	18	0	0	0	158	171	192
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5

N/M = No Monitoring Conducted

## Marine

### 2009 Marine First Nations Fraser River Sockeye Catch Estimates

Total Catch Estimate : 3,755 sockeye

Allocation: 260,000

Update Date: Jul 29, 2009

Update time: 13:45

Date	A 12/13Johnstone Strait				Area 20/WCVI			Str of Georgia/Area 29			Marine FN in-river catch			Total Marine Areas			
	Coord		Indep		Total	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total
	Area 12	Area 13	Area 12	Area 13													
04-Jul			40		40			0			0				0	40	40
05-Jul					0			0			0				0	0	0
06-Jul			2		2			0			0				0	2	2
07-Jul					0			0			0				0	0	0
08-Jul					0			0			0				0	0	0
09-Jul					0			0			0				0	0	0
10-Jul					0			0			0				0	0	0
11-Jul					0			0			0				0	0	0
12-Jul					0			0			0				0	0	0
13-Jul					0			0			0				0	0	0
14-Jul			325		325		5	5			0				0	330	330
15-Jul					0			0			0				0	0	0
16-Jul					0			0			0				0	0	0
17-Jul			219		219			0			0				0	219	219
18-Jul			50	27	77			0			0				0	77	77

# Fraser River Sockeye and Pink

## Weekly Management Plan July 19 - 25/09

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### For Period of:

Sun. July 19<sup>th</sup> – Sat. July 25<sup>th</sup>, 2009

Week: 30

### Stock Aggregate Focus:

Early Stuart; Early Summers; Summers

### Management objectives for the current week:

- Assess run size for Early Stuart
- Assess run timing for Early Stuart
- Assess Early Stuart management adjustment
- Assess run timing for Early Summers
- Assess run size for Early Summers
- Assess in-river migration conditions
- Assess run timing for Summers

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## Fraser Sockeye Management Summary

The Fraser River Panel met Friday, July 24 to receive an update on the migration of the Fraser River Sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of Sockeye in Johnstone Strait, Juan de Fuca Strait and the Fraser River indicate continued low migration of Fraser River Sockeye. At the meeting today, the run size estimate of Early Stuart Sockeye was further decreased from 110,000 to 85,000 Sockeye (which is below the 90% probability forecast level of 107,000) and the estimated 50% migration timing of Early Stuart Sockeye through Area 20 was revised to June 29 (five days earlier than forecast). The marine migration of Early Stuart Sockeye is nearly complete. The Panel approved a decrease in the management adjustment factor for Early Stuart Sockeye from 0.49 to 0.38, due to the change in migration timing.

The migration of Early Summer-run Sockeye through marine assessment areas has also been much lower than expected to-date. The Panel adopted a run size recommendation equivalent to the 90% probability forecast of 264,000 fish, for fisheries planning purposes. The estimated escapement of Early Summer-run Sockeye past Mission through July 23 is approximately 33,000 fish.

Summer-run Sockeye have been entering the marine assessment areas over the past couple of weeks and have also been well below expectations. They presently comprise approximately 55% of the total Sockeye stock in marine areas. An update on the in-season run size is not expected to be available until early August after their peak migration through Area 20. The estimated escapement of Summer-run Sockeye past Mission through July 23 is approximately 5,000 fish. Migration conditions for Sockeye entering the Fraser River are presently satisfactory. On July 23 the Fraser River discharge at Hope was approximately 4,300 cms, which is approximately 15% lower than normal, while the water temperature at Qualark Creek was 18 °C, which is 1.10°C higher than average for this date. Fraser River water temperatures are forecast to reach approximately 21 °C by August 1st. Water temperatures exceeding 20 °C may cause high enroute mortality of Fraser River Sockeye.

All recreational and commercial fisheries remain closed to fishing for Fraser River Sockeye at the present time. DFO is meeting with First Nations groups to plan very limited fisheries.

Next Panel meeting is July 28th.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Jul 19	Mon Jul 20	Tues Jul 21	Wed Jul 22	Thurs Jul 23	Fri Jul 24	Sat Jul 25
First Nations – FSC Mid and Upper Fraser	Chinook (non-retention of sockeye) except CSTC/TLA and Shuswap FN Bands – open to sockeye and chinook July 19 18:00 to July 25 18:00						
First Nations – FSC Lower Fraser	Open to sockeye from July 19 to July 25						
First Nations – FSC Marine	Open to sockeye from July 19 to July 25						

Recreational - Upper Fraser River	Closed
Recreational - Lower Fraser River	Closed
Recreational Marine Areas	Closed
Commercial Area D	Closed
Commercial Area E	Closed
Commercial Area B	Closed
Commercial Area H	Closed
U.S. Treaty Indian	Closed
U.S. Non-treaty Indian	Closed

## Fishery Notices Summary

### RECREATIONAL - Salmon

FN0538-Recreational - Salmon: Region 2 - Non-Tidal - Salmon opportunities on the Squamish River and all tributaries

FN0549-Salmon: Fraser River Sockeye Update - July 24 - South Coast (Areas 11-29)

FN0551-RECREATIONAL - SALMON: Region 2 Chilliwack River

FN0552-RECREATIONAL - Salmon Area 28: Upper Howe Sound- Pink Daily Limit - Area 28

### COMMERCIAL – Salmon

FN0534-COMMERCIAL - Salmon: Gill net - Area C Gill Net - Area 3 Opening

FN0535-Commercial - Salmon: Seine - Area A Seine - Areas 3 & 6 Opening - July 21

FN0537-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3 & 6 Opening - July 24

FN0539-COMMERCIAL - Salmon Troll - Area F Troll - Chinook ITQ Demonstration Fishery :Open Area Extended - Subarea 142-2

FN0540-COMMERCIAL - Salmon Gillnet - Salmon: Area C Gillnet - Area 6 Opening: 3, 4, & 6

FN0541-Commercial - Salmon Gill Net - Area C - Area 7 & 8 Chum Fishery

FN0543- COMMERCIAL - Salmon: Gillnet - Area D - Sockeye gill net, Alberni Inlet - Area 23

FN0544-COMMERCIAL: Seine Salmon: Area B - Seines Somass Sockeye - Area 23

FN0546-Commercial: Salmon: Gillnet - Area C - Area 4 – Update

FN0547-COMMERCIAL: Seine - Area A Seine - Areas 3 & 6 Opening

FN0548-Commercial Salmon - Seine - Area A - Area 8 Chum & Pink Fishery

FN0549-Salmon: Fraser River Sockeye Update - July 24 - South Coast (Areas 11-29)

### ABORIGINAL – Salmon

FN0549-Salmon: Fraser River Sockeye Update - July 24 - South Coast (Areas 11-29)

FN0550-Aboriginal: Sockeye non-retention in First Nations Food, Social and Ceremonial Fisheries in most Southern B.C. Marine Water - Areas 11 to 21, 24 to 29, 111, 121 and 123 to 127.



# Management Information

## 2009 Fraser River Sockeye In-season Status

### 2009 Fraser River Sockeye In-season Status

Week of: Jul. 19 - Jul. 25, 2009

Date: Jul. 24, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	110,000	739,000	8,677,000	334,000	573,000	10,433,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,840	2,270	2,180	20	530	6,840	500
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	224	174	80	4	61	543	0
Escapement-to-date @ Mission	81,420	33,060	4,900	30	4,370	123,780	0
Potential Gross Escapement	81,644	33,234	4,980	34	4,431	124,323	0
Adjusted Gross Esc. Target *	110,000	490,080	4,218,900	149,100	507,300	5,475,380	0
Accounted-to-date							
Catch + Escapement to Mission	83,484	35,504	7,160	54	4,961	131,163	500
Potential Remaining To Come							
Potential En-route	26,516	703,496	8,669,840	333,946	568,039	10,301,837	17,534,500
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	33	217	213	0	47	510	0
Test Fishing	1,770	2,030	1,960	20	480	6,260	500
Canadian Charter (Albion & Qualark TF)	40	18	9	0	4	71	0
Canadian Marine Recreational	0	0	0	0	0	0	0
U.S. TI Ceremonial	0	0	0	0	0	0	0
U.S. Recreational	0	0	0	0	0	0	0
Total	1,840	2,270	2,180	20	530	6,840	500
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	224	174	80	4	61	543	0
Catch Above Mission (incl. FSC & EO)	2,662	1,997	442	12	234	5,347	0
Total	2,886	2,171	522	16	295	5,890	0
Total In-river Catch	2,886	2,171	522	16	295	5,890	0
Total Catch in All Areas							
Total	4,726	4,441	2,702	36	825	12,730	500
Timing and Diversion Assumptions							
Area 20 Timing	28-Jun	26-Jul	5-Aug	11-Aug	11-Aug		25-Aug
Mission Timing	4-Jul	1-Aug	11-Aug		19-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Sockeye TAC Calculations and Catch

TAC

### 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Jul. 19 - Jul. 25, 2009

Date: Jul. 24, 2009

	Fraser Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken-head	Late	Total	Total
<b>RUN STATUS, ESCAPEMENT NEEDS &amp; AVAILABLE SURPLUS</b>							
In-season Run Size Estimate	85,000	264,000	8,677,000	334,000	573,000	9,933,000	17,535,000
Adult Spawning Escapement Target (SET)	85,000	178,980	3,470,800	133,600	458,400	4,326,780	6,000,000
Management Adjustment (MA)	32,300	67,040	0	0	n/a	99,340	0
Proportional MA (pMA)	0.38	0.3745	0.00	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	85,000	246,020	3,470,800	133,600	458,400	4,393,820	6,000,000
Test Fishing (TF)	2,400	8,000	50,400	1,500	2,400	64,700	10,000
Surplus above Adjusted SET & Test fishing	0	9,980	5,155,800	198,900	112,200	5,476,880	11,525,000
<b>DEDUCTIONS &amp; TAC FOR INTERNATIONAL SHARING</b>							
Aboriginal Fishery Exemption (AFE)	10,000	30,600	342,600	5,800	11,000	400,000	0
Available Aboriginal Fishery Exemption	0	9,980	342,600	5,800	11,000	369,380	0
Total Deductions (Adj. SET + TF + Available AFE)	87,400	264,000	3,863,800	140,900	471,800	4,827,900	6,010,000
Available TAC for International Sharing	0	0	4,813,200	193,100	101,200	5,107,500	11,525,000
<b>UNITED STATES (Washington) TAC</b>							
U.S. Share **	16.5%	0	0	794,180	31,860	16,700	25.7% 2,961,930
U.S. Payback **	0.0%	0	0	0	0	0	0
Total		0	0	794,180	31,860	16,700	2,961,930
Treaty Indian Share **	67.7%	0	0	537,660	21,570	11,310	50.0% 1,480,965
Non-Indian Share	32.3%	0	0	256,520	10,290	5,390	50.0% 1,480,965
<b>CANADA TAC</b>							
Canadian Allocation	83.5%	0	0	4,019,020	161,240	84,500	74.3% 8,563,070
Available Aboriginal Fishery Exemption (AFE)	0	9,980	342,600	5,800	11,000	369,380	0
Total Canadian Share		0	9,980	4,361,620	167,040	95,500	8,563,070
Marine Area Aboriginal	0	18,600	219,000	8,400	14,000	1,194,100	0
Fraser River Aboriginal	0	66,400	630,400	11,000	41,200	3,440,000	0
First Nations Allocations (including AFE)	0	85,000	849,400	19,400	55,200	1,009,000	0
Planned Recreational Shares	0	11,000	144,100	5,500	9,400	170,000	0
Purse Seine B	47.5%	0	-40,860	1,599,860	67,520	14,680	70.0% 5,994,150
Gillnet D	21.5%	0	-18,490	724,150	30,560	6,640	4.0% 342,520
Gillnet E	25.0%	0	-21,510	842,030	35,540	7,730	6.5% 556,600
Troll H	6.0%	0	-5,160	202,090	8,530	1,850	13.0% 1,113,200
Commercial Allocations	100.0%	0	-86,020	3,368,120	142,140	30,900	100.0% 8,563,070
<b>CATCH-TO-DATE</b>							
Test	1,770	2,030	1,960	20	480	6,260	500
Treaty Indian (Wash.)	0	0	0	0	0	0	0
Non-Indian (Wash.)	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Marine Area Aboriginal	30	220	210	0	50	510	0
Fraser River Aboriginal	2,890	2,170	520	20	300	5,900	0
Recreational	0	0	0	0	0	0	0
Commercial	40	20	10	0	0	70	0
Canada	2,960	2,410	740	20	350	6,480	0
Total Catch in All Fisheries	4,730	4,440	2,700	40	830	12,740	500
Exploitation Rate (catch-to-date / run size)	6%	2%	0%	0%	0%	0%	0%
<b>CATCH REMAINING (BALANCE)</b>							
Washington	0	0	794,180	31,860	16,700	842,740	2,961,930
Canada	-2,960	7,570	4,360,880	167,020	95,150	4,627,660	8,563,070
Balance Remaining [ below share / -above share]	-2,960	7,570	5,155,060	198,880	111,850	5,470,400	11,525,000
<b>ESCAPEMENT RELATIVE TO TARGETS</b>							
Potential Spawning Escapement (PSE) ***	80,270	259,560	8,674,300	333,960	572,170	9,920,260	17,534,500
Predicted Difference Between Estimates (%DBE)	-28%	-27%	0%	0%	****		0%
PSE with predicted DBE removed	58,170	188,830	8,674,300	333,960	****		17,534,500
Spawning Escapement Target (SET)	85,000	178,980	3,470,800	133,600	458,400	4,326,780	6,000,000
Potential deviation from SET [ <target / >target ]	-26,830	9,850	5,203,500	200,360	****		11,534,500

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

## 2009 Fraser River Panel Sockeye Review Catch Summary

### 2009 Fraser River Panel Sockeye Review

Week of: Jul. 19 - Jul. 25, 2009

Date: Jul. 24, 2009

Area		Gear	Fraser Sockeye	Cumul.
<b>Commercial Catch</b>				
<u>Canada</u>				
A & C Areas 1-10		Net		0
F Areas 1-10		Troll		0
G Areas 123-127, 11-12		Troll		0
B Areas 11-16		PS		0
D Areas 11-13		GN		0
H Areas 12-16		Troll		0
H Areas 18-29		Troll		0
B Area 20		PS		0
E Area 29		GN		0
Canadian Selective				0
FRA Economic Opportunity				0
BC Interior FN Demo				0
Canadian Total				0
<u>United States</u>				
<u>Alaska</u>		Net&Troll		0
<u>Washington</u>				
T.I. Areas 4B/5/6C		Net		0
T.I. Areas 6/7/7A		Net		0
N.I. Areas 7/7A		Net		0
Washington Total				0
U.S. Total				0
<b>Non-commercial Catch</b>				
PSC Test				4,480
Other Test				1,790
Fraser River Aboriginal (FSC)				5,890
Areas 12-124 Aboriginal				510
Recreational				0
Charter				71
U.S. TI Ceremonial				0
Non-comm. Total				12,740
<b>Catch and Escapement</b>				
Catch Accounted-to-date				12,740
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)				118,430
Total Accounted-to-date				131,170

#### Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	110,000	81,400	200	81,600	74%
ESum	Early Summer	490,080	33,100	200	33,300	7%
Summ	Quesnel/Chilko	4,218,900	1,100	0	5,000	0%
	L.Stu./Stel.		3,800	100		
Late	Birkenhead	149,100	0	0	0	0%
	Adams/L.Shuswap	507,300	100	0	4,500	1%
	Weav/L.Misc.		100	0		
	Sub 1s		4,200	100		

## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

#### 2009 Pacific Salmon Commision Sockeye Test Fishing Summary

	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul
Area 20 Gillnet	49	56	78	271	198	252	141	66	282
US Area 5 Gillnet	34	78	84	6 <sup>a</sup>	9 <sup>a</sup>	18	DNF	64	44
Area 20 Purse Seine								16	143
29B Cottonwood Gillnet*	0	3	2	7	1	9	9	3	6
29D Whonnock Gillnet*	0	0	1	3	2	6	16	15	20
Area 12 Round Island GN	7	30	25	21	31	21	59	35	20
Area 12 Naka Cr. Gillnet			91	168	285	177	195	152	DNF
Area 12 Purse Seine						284	118	73	94
Area 13 Purse Seine									
Area 7 Reef Net Obs.						175	611	202	338
Hells Gate Daily Estimate	250	180	90	190	50	40	10	10	40
Mission Escapement**	3700	3200	2600	800	600	1300	1500	4100	5500

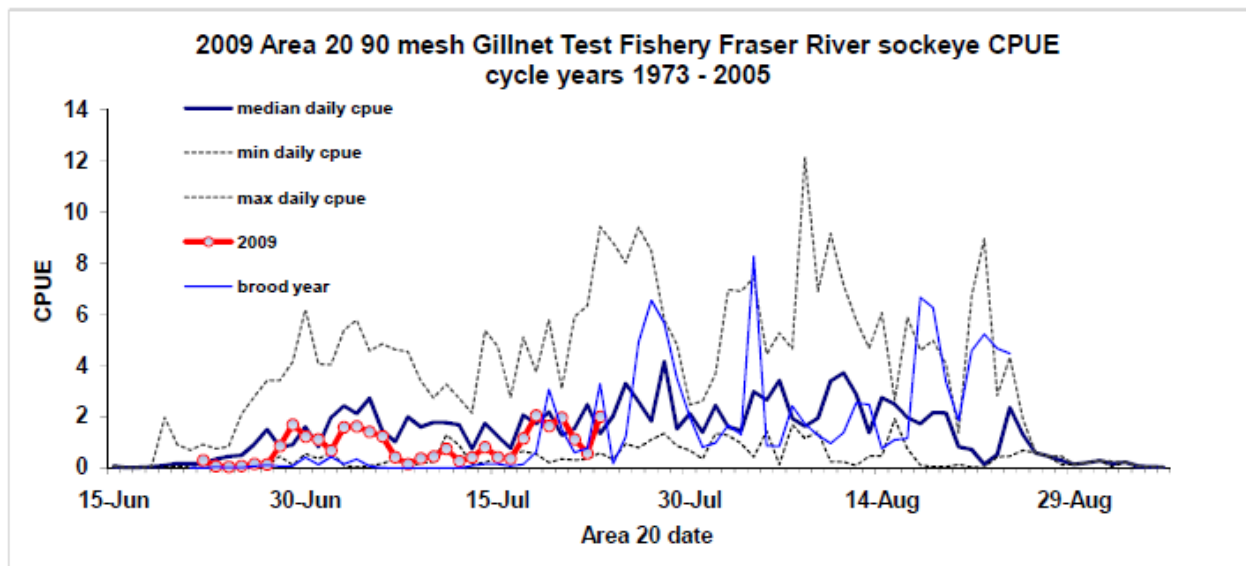
\* Variable mesh Gillnet

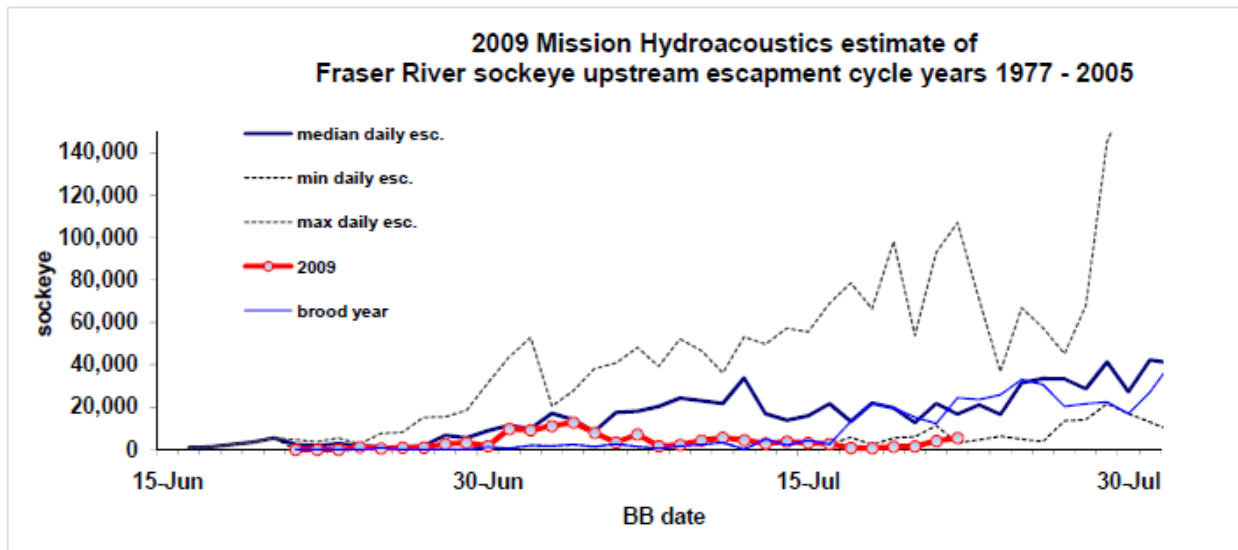
\*\* Preliminary, subject to revision.

N.O. = No Observation.

<sup>a</sup> mechanical problems 1 set only

DNF = did not fish





**Detailed Test Fishing Data**

Fishery Name	Trip Date	Vessel		Set Count	Effort	Sockeye	Sockeye	Pink Caught
		Count	Count			Adult Caught	Jack Caught	
Area 12 - Blinkhorn Sockeye Seine	20/07/2009	1	6	6	6	284	2	355
	21/07/2009	1	6	6	6	118	3	287
	22/07/2009	1	6	6	6	73	1	407
	23/07/2009	1	6	6	6	94	6	1381
	24/07/2009	1	5	5	5	64	0	912
	25/07/2009	1	6	6	6	360	4	578
Area 12 - Naka Creek Sockeye Gillnet	19/07/2009	1	4	103.2	103.2	285	0	72
	20/07/2009	1	3	64.7	64.7	177	0	42
	21/07/2009	1	4	92.8	92.8	195	0	164
	22/07/2009	1	5	90.4	90.4	152	0	77
	23/07/2009	0	0	0	0			
	24/07/2009	0	0	0	0			
	25/07/2009	1	4	100	100	57	0	14
	19/07/2009	1	3	83.9	83.9	31	0	75
Area 12 - Round Island Sockeye Gillnet	20/07/2009	1	3	88.5	88.5	21	0	25
	21/07/2009	1	3	88.2	88.2	59	0	28
	22/07/2009	1	3	91.2	91.2	35	0	15
	23/07/2009	1	3	83.9	83.9	20	0	37
	24/07/2009	1	3	77.2	77.2	9	0	6
	25/07/2009	1	3	81.1	81.1	22	0	12
	19/07/2009	2	4	233.7	233.7	198	0	23
Area 20 - San Juan Sockeye Gillnet	20/07/2009	2	4	247.2	247.2	252	0	19
	21/07/2009	2	4	244.35	244.35	141	0	3
	22/07/2009	2	4	225.3	225.3	66	0	8
	23/07/2009	2	4	272.7	272.7	282	0	21
	24/07/2009	2	4	298.05	298.05	361	0	39
	25/07/2009	2	4	285	285	139	0	40
	22/07/2009	1	5	5	5	16	1	7
Area 20 - San Juan Sockeye Seine	23/07/2009	1	6	6	6	143	3	85
	24/07/2009	1	6	6	6	285	6	125
	25/07/2009	1	6	6	6	164	1	144
	19/07/2009	1	2	6.96	6.96	1	0	0
Area 29 - Cottonwood Sockeye Gillnet	20/07/2009	1	2	7.08	7.08	9	0	0
	21/07/2009	1	2	6.96	6.96	9	0	0
	22/07/2009	1	2	6.78	6.78	3	0	0
	23/07/2009	1	2	6.84	6.84	6	0	0
	24/07/2009	1	2	6.72	6.72	9	0	0
	25/07/2009	1	2	6.84	6.84	6	0	0
	19/07/2009	1	2	10.938	10.938	2	0	0
Area 29 - Whonnock Sockeye Gillnet	20/07/2009	1	2	0	0	6	0	0
	21/07/2009	1	2	11.463	11.463	16	0	0
	22/07/2009	1	2	11.375	11.375	15	0	0
	23/07/2009	1	2	11.113	11.113	20	0	0
	24/07/2009	1	2	10.588	10.588	6	0	0
	25/07/2009	1	2	10.5	10.5	4	0	0
	19/07/2009	1	1	69.3	69.3	9	0	4
U.S. Area 5 - U.S. Juan de Fuca Sockeye Gillnet	20/07/2009	1	2	147.62	147.62	18	0	25
	21/07/2009	0	0	0	0			
	22/07/2009	1	2	135.96	135.96	63	0	86
	23/07/2009	1	2	198.44	198.44	42	0	72
	24/07/2009	1	2	144.1	144.1	88	0	162
	25/07/2009	1	2	112.42	112.42	68	0	53
	19/07/2009	0	0	0	0			
U.S. Area 7 - Area 7 U.S. Reef Net	20/07/2009	0	0	0	0			
	21/07/2009	0	0	0	0			
	22/07/2009	0	0	0	0			
	23/07/2009	0	0	0	0			
	24/07/2009	0	0	0	0			
	25/07/2009	0	0	0	0			
	20/07/2009	0	25	1470	1470	175	0	9
U.S. Area 7 - Area 7 U.S. Sockeye Reef	21/07/2009	0	25	1440	1440	611	0	10
	22/07/2009	0	23	1320	1320	202	0	8
	23/07/2009	0	22	1320	1320	338	0	109
	24/07/2009	0	0	0	0			
	25/07/2009	0	19	1140	1140	51	0	3



## DNA Analysis

## Racial Analysis

N/A

## Comparisons for fishing decisions

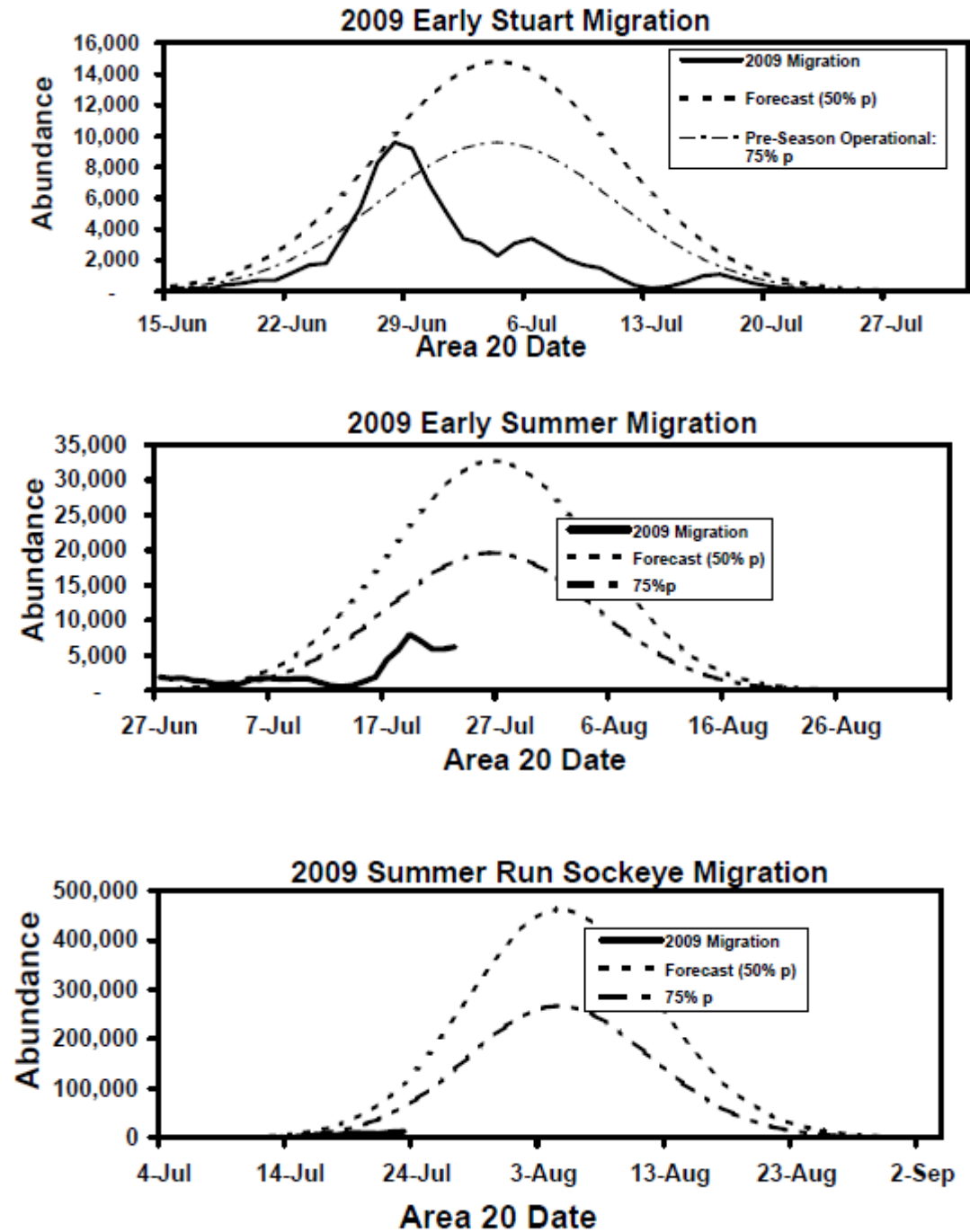
1) Comparisons for fishing decisions, based on information available on Friday July 24 as compared with information from Pre-season Planning Model

Model Run	SID Area 20				Reconstructed Abundance:					
	E. Stuart	E. Summers	Summers	All Lates	E. Stuart	E. Summers	Summers	Reconstructed Abundance through Mission:		
<u>Pre-Season Planning Run</u>	0%	28%	70%	2%	(Modeled thru Jul 23)			(Modeled thru Jul 23)		
			(July 21 model)		119,959	275,985	451,869	119,563	118,621	65,033
<u>Actual</u>	E. Stuart	E. Summers	Summers	All Lates	E. Stuart	E. Summers	Summers	E. Stuart	E. Summers	Summers
	1%	35%	49%	14%	85,143	76,295	69,630	83,267	34,359	5,330
	(Actual: A 20 July 21)				(Actual: July 23)			(Actual: July 23)		

Includes the C-Bayes revisions.

7/24/2009 9:35

## Migration Graphs





## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...								
Mission Date	Escapement Total	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Quesnel	Chilko
Mission Total:	124,300	81,600	31,500	800	1,000	3,800	400	800
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)								
Mission Date	Projected Escapement	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
24-Jul	18,800	700	6,000	300	1,900	7,200	1,400	1,300
25-Jul	14,700	400	4,800	300	1,100	6,000	1,100	1,000
26-Jul	21,100	400	8,000	400	900	7,200	2,500	1,700
27-Jul	13,200	100	4,500	300	300	4,300	2,400	1,300
28-Jul	8,400	-	2,300	200	200	3,000	2,000	700
29-Jul	29,100	200	7,900	800	800	10,300	7,300	1,800
Projected Gross Escapement <sup>1</sup>								
24-Jul								
29-Jul	105,300	1,800	33,500	2,300	5,200	38,000	16,700	7,800
Projected Total								
	229,600	83,400	65,000	3,100	6,200	41,800	17,100	8,600
		Early Stuart 83,400		Early Summers 74,300			Summer Runs 67,500	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted								
Analysis fixed at this time: 7/24/2009 9:36								

## Escapement Summary

### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009	COTTONWOOD T.F.		AB DATE	AB T.F.	MISSION	BEST Est.	Hells Gate	
BB	CATCH	CPUE	CATCH	CPUE	Splitbeam	(Incl. Pitt)	CUMM.	DAILY EST.
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200	129,130
							TOTAL	(AB+4)
21-Jun			22-Jun reg	0	0.00		0	26-Jun
22-Jun			23-Jun reg	4	0.44		300	27-Jun
23-Jun			24-Jun vmn	0	0.00		0	28-Jun
24-Jun			25-Jun vmn	4	0.35	1,200	1,200	29-Jun
25-Jun			26-Jun vmn	2	0.19	500	500	30-Jun
26-Jun			27-Jun vmn	1	0.10	900	900	1-Jul
27-Jun			28-Jun vmn	1	0.09	1,000	1,000	2-Jul
28-Jun			29-Jun vmn	6	0.54	2,600	2,600	3-Jul
29-Jun			30-Jun vmn	13	1.03	3,200	3,200	4-Jul
30-Jun			01-Jul vmn	1	0.10	1,600	1,600	5-Jul
01-Jul			02-Jul vmn	3	0.30	9,700	9,700	6-Jul
02-Jul			03-Jul vmn	0	0.00	9,200	9,200	7-Jul
03-Jul			04-Jul vmn	43	3.63	11,100	11,200	8-Jul
04-Jul			05-Jul vmn	29	2.60	12,800	12,900	9-Jul
05-Jul			06-Jul vmn	11	0.99	7,900	7,900	10-Jul
06-Jul	1	0.14	07-Jul vmn	1	0.10	3,400	3,400	11-Jul
07-Jul	5	0.77	08-Jul vmn	6	0.60	7,100	7,300	12-Jul
08-Jul	2	0.29	09-Jul vmn	1	0.05	1,600	1,700	13-Jul
09-Jul	0	0.00	10-Jul vmn	0	0.00	2,200	2,400	14-Jul
10-Jul	12	1.69	11-Jul vmn	0	0.00	4,400	5,000	15-Jul
11-Jul	8	1.13	12-Jul vmn	0	0.00	5,600	6,200	16-Jul
12-Jul	5	0.67	13-Jul vmn	0	0.00	4,500	4,900	17-Jul
13-Jul	2	0.29	14-Jul vmn	0	0.00	2,900	3,300	18-Jul
14-Jul	0	0.00	15-Jul vmn	0	0.00	3,700	4,400	19-Jul
15-Jul	0	0.00	16-Jul vmn	0	0.00	3,200	4,000	20-Jul
16-Jul	3	0.44	17-Jul vmn	1	0.10	2,600	3,000	21-Jul
17-Jul	2	0.29	18-Jul vmn	3	0.28	800	800	22-Jul
18-Jul	7	0.99	19-Jul vmn	2	0.18	600	700	23-Jul
19-Jul	1	0.14	20-Jul vmn	6	0.53	1,300	1,500	24-Jul
20-Jul	9	1.27	21-Jul vmn	16	1.39	1,500	1,800	25-Jul
21-Jul	9	1.29	22-Jul vmn	15	1.32	4,100	4,800	26-Jul
22-Jul	3	0.44	23-Jul vmn	20	1.79	5,500	6,300	27-Jul
23-Jul	6	0.88	24-Jul vmn	6	0.56	10,500	11,900	28-Jul
24-Jul	14	2.11	25-Jul vmn	4	0.39	8,800	9,900	29-Jul
25-Jul	6	0.88	26-Jul vmn	9	0.83	7,900	8,900	30-Jul

## Mission Escapement by Stock

Totals 1,267,026 32,528 1,299,554 82,462 14,259 58,797 18,218 32,528 62,189 252,366 0 101,342 100,198 140,017 21,801 66,342 51,459 72,995 0

### Mission Escapement

Mission		Total	Mission Escapement															
Date	Escape	Pitt Esq	Escape	ESu	Chilwk	BMsc	Sa/Sr/Ad	Pitt	Nlthm	Chilko	SEChilko	Hly/Mtkin	Mch/Tribs	LSu	Sel	Birk	AdLSPrWbr	Cu/Msc
19-Jul-09	600	66	666	119	25	148	13	66	0	31	0	20	1	72	13	11	13	0 0
20-Jul-09	1,300	238	1,538	258	55	321	27	238	0	68	0	43	2	155	28	24	29	0 0
21-Jul-09	1,500	257	1,757	389	107	258	92	257	51	72	0	14	0	166	222	0	0	0 0
22-Jul-09	4,100	654	4,754	1,063	294	705	250	654	140	197	0	38	0	453	608	0	0	0 0
23-Jul-09	5,500	813	6,313	155	0	837	248	813	16	299	0	89	87	2,354	198	0	1	0 0
24-Jul-09	10,500	1,433	11,933	297	0	1,598	474	1,433	31	570	0	169	166	4,494	378	0	2	0 0
25-Jul-09	8,800	1,140	9,940	248	0	1,340	397	1,140	26	478	0	142	139	3,767	317	0	1	0 0

## Environmental Conditions

### Fraser Conditions & MA Report for July 24, 2009

#### Fraser River Discharge at Hope

The discharge was about 4300 m<sup>3</sup>/s yesterday and is forecasted to decline to 3800 m<sup>3</sup>/s by August 1.

	date	m <sup>3</sup> /s
Last obs.	23-Jul	4,340
Forecast	1-Aug	3,808

#### Fraser River Temperature at Qualark

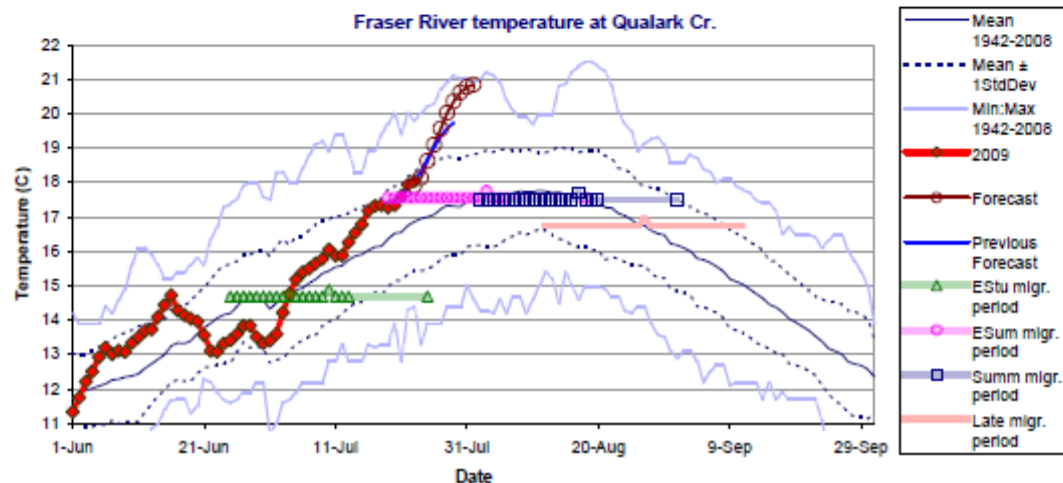
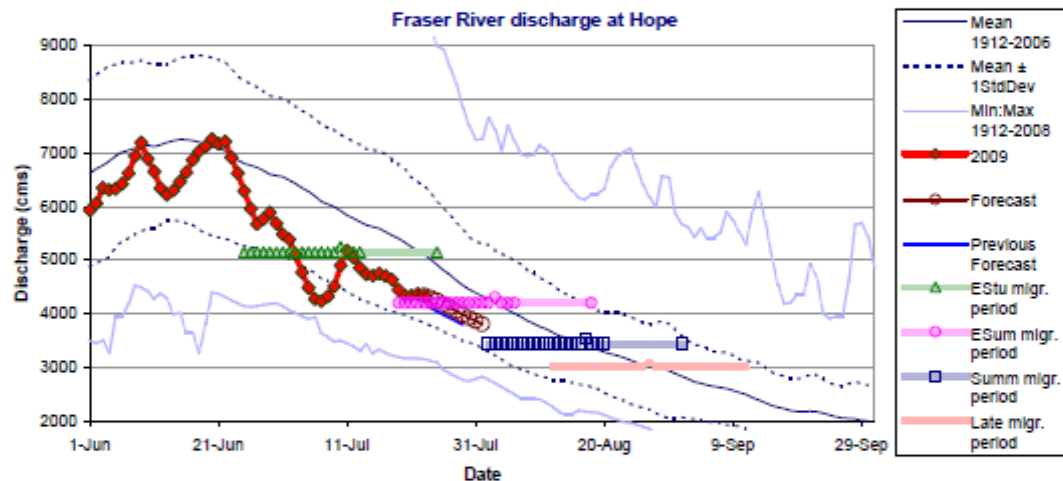
Yesterday's temperature was 18.0C, close to Monday's forecast. River temperatures are forecasted to increase to 20.8C by August 1. If these temperatures materialize they would be near previous record high temperatures for the date. Expectations of continued hot, dry and clear weather combined with lower than average flows are the drivers of this forecast.

	date	C
Last obs.	23-Jul	18.0
Forecast	1-Aug	20.8

#### MA Estimate for Early Stuart

With the Early Stuart Area 20 date of June 28 adopted July 17, the MA estimates were: pMA=0.49, DBE=-33% and MA=53,900 fish. If the date is June 29, however, the estimates are: pMA=.38, DBE=-27% and MA=41,800 fish. A lower run size would result in a lower MA, e.g., 32,300 fish at a run of 85,000.

HG Date	10-Jul	
#days	19	pMA 0.38
Disch.	5,150	%DBE -27%
Temp.	14.7	MA 41,800



# Fishery Recommendations

## *Fraser River Panel Meetings: Summaries and Discussions*

### Fraser River Panel (call) Summary Notes-July 21

#### **FRP Bilateral**

- Test Fishing
  - A20 GN
    - SK catch starting Jul 17: 78, 271, 198, 252
    - Notes: Pick up in A20 recently
  - A5 GN
    - SK catch starting Jul 17: 84, 6, 9, 18
    - Notes: Jul 18-19 1 set each day, 2 sets on Jul 20. Not a lot happening.
  - A12 GN Round Island
    - SK catch starting Jul 17: 25, 21, 31, 21
    - Notes: More SK observed at Naka Cr.
  - A12 GN Naka Cr.
    - SK catch starting Jul 17: 91, 168, 285, 177
    - Notes: Jul 17-19 4 sets, Jul 20 3 sets only.
  - A12 PS
    - SK catch Jul 20: 284
    - Notes: Total of 6 sets. Last set caught 216 SK.
  - A7 Reef net
    - SK observed on Jul 20: 88/28/59
    - Notes: Observed reasonable numbers of SK. Many more than observed than counted. Observed 15-20 jumpers outside gear.
  - Cottonwood
    - SK catch starting Jul 17: 2,7,1,9
    - Notes: Very few SK
  - Whonnock
    - SK catch starting Jul 17: 1,3,2,6
    - Notes: Very few SK
- Mission
  - There are some issues with d/s debris and positive bias which was raised at earlier meetings. However, staff have found that the problem extends further back in time than previously thought. To date there has been low abundance and catch, uncertainties in species composition and stock composition and d/s targets observed in mobile unit.
    - To counter the d/s targets staff have so far tried to: a) use the single beam unit, b) used the left bank unit only and bulk up passage to estimate the entire river and c) will be reviewing alternative methods to use split beam data with FRPTC later this week.
    - There will be a downward revision of run size for both the Early Stuarts and Early Summers. Could be in the magnitude of 50% for Early Stuart.
    - Potential revisions will be reviewed by the Technical Committee on Thursday. Recommendations will be presented to the FRP on Friday.

- Hells Gate
  - 100-200, 50, 40
  - Not seeing a lot of migration, fish are getting through though
- Biosampling
  - Age Composition
    - A20 date: Jul 18, n=101
      - 44% 4<sub>2</sub>
      - 43% 5<sub>2</sub>
      - 14% other (sub 1 mainly, some 4<sub>3</sub> and 5<sub>3</sub>)
    - Notes: Age composition is beginning to shift to a higher proportion of 4<sub>2</sub>. Weren't expecting many 5<sub>2</sub> in 2009 because of the low 4<sub>2</sub> return last year.
    - A12: Jul 16-17, n=54
      - 33% 4<sub>2</sub>
      - 64% 5<sub>2</sub>
      - 3% 3<sub>1</sub>
    - Notes: 5 year olds may not be elevated in this last A12 sample, as Nimpkish (non-Fraser) tend to have a higher 5yr old component. .
    - River: Jul 13-19, n=14
      - 50% 4<sub>2</sub>
      - 33% 5<sub>2</sub>
      - 17% 3<sub>1</sub>/4<sub>1</sub>
      - Notes: Had to pool to get a sample. Similar age comps are observed in A20 as in the river. Harrison is coming in.
  - DNA
    - A12 GN: Jul 16-17, n=54
      - 87% Fr
      - 7% ES
      - 31% EM
      - 7% ET
      - 20% C/Q
      - 29% LS/S
      - 6% AW
      - 1% Ha
      - Notes: Non-Fraser mostly Nimpkish. There is still a measurable fraction of Early Stuarts which is an indication of low abundance.
    - A20 GN: Jul 18, n=100
      - 96% Fr
      - 4% ES
      - 30% EM
      - 12% ET
      - 19% C/Q
      - 21% LS/S
      - 1% Bi
      - 13% Ha
      - Notes: Non-Fraser is Barkley
    - AB FW: Jul 14-18, n=98
      - 100% Fr

- 74% ES
  - 22% EM
  - 0% ET
  - 2% C/Q
  - 1% LS/S
  - 0% AW
  - 1% Ha
- Notes: The proportion of ES observed in the fishwheel sample is much higher than the GN samples.
- Assessments
  - 135k past Mission (will be revised on Friday after additional work on Mission targets)
    - ES 102k C & E
    - EM 29k C & E
    - ET .5k C & E
    - CQ .5k C & E
    - Ha 2.4k C & E
  - Early Stuart
    - ~105k by Jul 26
    - 102k C & E
    - 3k projected
  - Early Summer
    - ~65k by Jul 26
    - 32k C & E
    - 33k projected
  - Notes: Tracking a week late on ESum and Summ if we expect to reach forecast. Too early to run models for a run size estimate due to data limitations. Getting further behind. Expect a downgrade to ESum escapements, too, due to Mission counting issues for Friday's meeting.
- Environmental Conditions
  - Discharge at Hope
    - 4400 cms Jul 20
    - forecast: 3800 cms by Jul 29
    - Notes: Discharge dropped faster than anticipated from last Thursdays update.
  - Temp at Qualark
    - 17.3 C Jul 20
    - forecast: 19.7 C by July 29
    - Notes: Actual is almost a degree cooler than forecast as a result of cooler than expected weather. Continued forecast of warmer weather.
- MA
  - First in-season adjustment to pre-season MA for ESum would be Jul 28.
- Criteria for Fishing Decisions
  - SID
    - Not seeing Summ proportions expected based on pre-season assumptions. Unusual abundance of Ha for this time of year.
  - Abundance
    - Expect 25% ESum through at this point; only seeing 1/3 of expected.
    - Summ are down substantially from expected.
  - Mission

- Low abundance through Mission for both ESum and Summ.
- Not sure why these stocks are tracking so far behind. Expect some escapement due to the reconstructed abundance in the marine area as Mission is 6 days later.
- Fishery Recommendations:
  - CDN-None
    - FN FSC fisheries are planned at ½ of expected and further reductions may occur. Managers will have discussions with groups to discuss.
  - US- None
    - Anxious to get in the water. Would like to have a meeting on Thursday to re-assess stock composition and reconsider fisheries. If stock composition looks ok may consider starting up 4B/5/6C Thursday evening
- Next Meeting
  - No in-person on Friday. It will be a teleconference.
  - FRP call Thursday at 9:30 am
  - FRPTC call at 1:00 pm

### Fraser River Panel (call) Summary Notes-July 23

#### **FRP Bilateral**

- Test Fishing
  - A20 GN
    - SK catch starting Jul 20: 252, 141, 66
  - A20 PS
    - Start date: Jul 22
    - SK catch starting Jul 22: 16
    - Notes: Caught several tons of Hake
  - A12 GN Round Island
    - SK catch starting Jul 20: 21, 59, 35
  - A12 PS
    - Start date: Jul 20
    - SK catch starting Jul 20: 284, 118, 73
    - Notes: started out well, but dropping off
  - A12 GN Naka Cr.
    - SK catch starting Jul 20: 177, 195, 152
    - Notes: Not fishing today.
  - US Area 5
    - SK catch starting Jul 20: 18, DNF, 64
    - Notes: Seeing a lot of coho.
  - A7 Reef Net
    - Start Date: Jul 20
    - SK catch starting Jul 20: 175, 611, 202
    - Notes: most of the fish near Roche Harbour
  - PSC-The 15000 expansion line is in the ballpark, have been using 18000 the last 3 days.
  - Cottonwood
    - SK catch starting Jul 20: 9, 9, 3
  - Whonnock
    - SK catch starting Jun 22: 6, 16, 15
- Biosampling



- Age Composition

- A20: Jul 21 n=99
  - 97% Fraser River fish; non-Fraser fish were Barkley/Ozette
  - Of the Fraser River fish
    - 54% 4<sub>2</sub>
    - 32% 5<sub>2</sub>
    - 13% Sub<sub>1</sub>
- A12: July 20 n=100
  - 95% Fraser River fish; non-Fraser fish were Phillips River
  - Of the Fraser River fish
    - 55% 4<sub>2</sub>
    - 37% 5<sub>2</sub>
    - 7% Sub<sub>1</sub>

- DNA –

- A12, PS, July 20, n=100:
  - EStu 7%
  - ESum 24% (EMisc 16%, ET 8%)
  - Sum 63% (Chil/Ques 22%, LStu/Stel 41%)
  - Lates 7% (Adam/Weav 1%, Harr 6%)
- A12, GN, July 16/17, n=54
  - EStu 7%
  - ESum 38% (EMisc 31%, ET 7%)
  - Sum 49% (Chil/Ques 20%, LStu/Stel 29%)
  - Lates 7% (Adam/Weav 6%, Harr 1%)
- A20, GN, July 18, n=100
  - EStu 4%
  - ESum 42% (EMisc 30%, ET 12%)
  - Sum 40% (Chil/Ques 19%, LStu/Stel 21%)
  - Lates 14% (Birk 1%, Harr 13%)
- A20, GN, July 21, n=99
  - EStu 1%
  - ESum 35% (EMisc 32%, ET 3%)
  - Sum 50% (Chil/Ques 23%, LStu/Stel 27%)
  - Lates 14% (Birk 1%, Adam/Weav 3%, Harr 10%)

- Notes: Consistent with low abundances, stock ID switching over to Summers, if things are really late we shouldn't be seeing this yet. Age composition still showing low percentage of 4 year olds and a relatively high percentage of 5 year old fish. Based on last year's brood and return of ~1.4 mil, we shouldn't expect a lot of 5 year old fish (~5%). Very negative signal.

- Comparison with pre-season for fishing decisions

- Stock ID in Area 20 (July 21)

	Expected	Actual
▪ EStu	0%	2%
▪ ESum	28%	35%
▪ Sum	70%	48%



- Lates      2%                      14%
  - Reconstructed Abundance (Jul 23)
    - EStu   119,944                      84,059
    - ESum   245,464                      65,579
    - Sum     339,873                      49,250
  - Reconstructed Abundance through Mission (Jul 23)
    - EStu   119,340                      81,479
    - ESum   99,524                      31,159
    - Sum     44,663                      3,050
  - note: long term timing of ESum is 25-Jul, but b/c of large N. Thompson component this year, pre-season timing has been shifted later by one day

- Assessments

- Early Stuart: 110k est run size
  - 82k catch + esc; revised number, this is a decrease of approx 23k which will impact run size
  - 28k projected en-route
- Early Summers:
  - Note: If run some models get later timing, but none are getting close to even the 75p forecast. If go with more normal timing, abundance is nowhere near a fishable run size. Need about 280k run size to get any commercial TAC, and need about 250K run size to get any harvestable surplus. Very negative sign, less than 75P unless things change shortly, currently very far behind.
  - Note: No recommendation until Friday Panel meeting, but the recommendation will be to decrease the run size.

- Fishery Recommendations:

- US-
  - Propose a 4B/5/6C fishery of 4-5 boats; start at 6 pm tonight going through until noon on Friday. Re-evaluate on Friday. Purpose would be to see if there are any fish going through.
  - Ceremonial: Lummi had a crab fishery and seeing signs of algae around Pt Roberts. Would like to put a couple of GN near Pt Roberts to take some samples, ~25 fish. Will also take water samples, plankton samples, Temp/Sal profiles to evaluate the situation.
- CDN-None
  - No planned fisheries. Current run sizes will be taken into consideration when planning any FN FSC fisheries.

- Evaluation of Fishery Recommendations:

- PSC: criteria to judge whether or not to support a US fishery includes stock ID, which is going in the right direction, and abundance, which currently is not large enough to produce any available TAC. It is a low impact fishery, 4-5 boats, but still there are risks that the catch may impact E.Sum stocks. Hard because we are so far behind and seeing very negative signals.
- CAN: same views as the PSC, no commercial TAC, therefore would be inconsistent to support a fishery. We should wait to get a better understanding of what is occurring and review in more detail tomorrow. Need a better understanding of percentage of ESum in the mix as well as timing and run size.

- PSC: US asked to submit a different proposal; suggest a holding pattern until tomorrow.

### Canadian Caucus

- Ken provided details as to what is planned for this weekend for Sto:lo First Nation:
  - 2 day sockeye set net (48h)
  - 1 day Chinook drift (12 h)
  - 1 day sockeye drift (12 h)
  - He stressed that he urged caution when planning fisheries for this weekend based on data, but still ended up with the above plan. This is about half the normal fishing time, usually 3 d/wk (72hr).
  - Last week's opening had 241 set nets and a few drifters. Concerned that Sto:lo interview indicated about 3000 sockeye caught, but DFO expanded catch to 6000 fish.
- Lots of concerns by upriver First Nations, especially after what was discussed today.

### Fraser Panel

- US - Will wait until tomorrow before planning any commercial fisheries.
- PSC – will not have any add'l stock ID info, but will have another day's worth of TF data and staff will have more time to evaluate run sizes w. FRPTC this afternoon.

- Next Meeting
  - 10 am Friday, conference call.

### Fraser River Panel (call) Summary Notes-July 24

### FRP Bilateral

- Test Fishing
  - A20 GN
    - SK catch starting Jul 21: 141, 66, 282
    - Notes: They are seeing quite a few coho
  - A20 PS
    - Start date: Jul 22
    - SK catch starting Jul 22: 16, 143
  - A12 GN Round Island
    - SK catch starting Jul 21: 59, 35, 20
  - A12 PS
    - Start date: Jul 20
    - SK catch starting Jul 20: 284, 118, 73, 94 (in 6 sets)
  - A12 GN Naka Cr.
    - Notes: Was down yesterday, but will be running tomorrow.
  - US Area 5
    - SK catch starting Jul 22: 64, 44
    - Notes: Seeing a lot of coho.
  - A7 Reef Net
    - Start Date: Jul 20
    - SK count Jul 23: 338
    - Notes: The three sites counted 70, 258, and 10 SK. The Open Bay site counted 258.

- Cottonwood
  - SK catch starting Jul 22: 3, 6
- Whonnock
  - SK catch starting Jun 22: 15, 20
  - Notes: Finally starting to catch a few fish in the in-river test fisheries.
- Biosampling
  - Age Composition
    - A20 date: Jul 22 n=60
      - 45% 4<sub>2</sub>
      - 35% 5<sub>2</sub>
      - 20% sub-1 (probably Harrison)
  - DNA - no new results available
- Comparison with pre-season for fishing decisions
  - Stock ID in Area 20 (July 21)
 

	Expected	Actual
▪ EStu	0%	1%
▪ ESu	28%	35%
▪ Su	70%	49%
▪ Lates	2%	14%
  - Reconstructed Abundance (Jul 23)
 

▪ EStu	119,959	85,143
▪ ESu	275,985	76,295
▪ Su	451,869	69,630
  - Reconstructed Abundance through Mission (Jul 23)
 

▪ EStu	119,563	83,267
▪ ESu	118,621	34,359
▪ Su	65,033	5,330
- Assessments
  - Notes: A small increase in test fishing catches yesterday has added about 30,000 (of which ~10k are ESum) to the estimated migration to date.
  - Note: We're currently at ¼ of where we should be on E. Summers if timing is normal, so a ballpark est. (¼ of forecast) = 185,000
  - Early Stuart: 85k accounted to date
    - 83k catch + esc
    - 2000 projected en-route
    - Note: Run appears to be complete
  - Early Summers: 76.5k accounted to date
    - 35.5k catch + esc
    - 401k projected en-route
    - Cum. Passage: 303k, A20 date: Jul 25 (i.e. historic timing)
    - Cum. Norm(deterministic): 169k, A20 date: Jul 27
    - Bayes Cum Norm (3 models to bracket the range)
      - Using pre-season timing: 167k, A20 date: Jul 26
      - Use the EStu regression timing and:
        - model updates timing estimate: 185k, A20 date: Jul29

- 80% range: 88k – 491k (large variation, but point estimates are quite low.
      - model doesn't update timing: 116k, A20 date: Jul 23
    - EMisc only (50p = 332k)
      - Bayes Cum Norm models: 75-93k
      - if the EMisc model est vs 50p relationship holds true (i.e. scale up the EMisc forecast to entire ESum): 182k
    - staff noted that 75p run size is unsupportable, given the modelled probability of 75p is very low
    - For a harvestable surplus, run size needed: 250k
    - For a TAC for international sharing , run size needed: 280k
    - No peak has been observed, so no updated timing estimate yet
  - The abnormal age structure does not support the conclusion that the E. Summers and Summers are simply late.
- Environmental Conditions
  - Discharge at Hope
    - 4300 cms 23-Jul
    - forecast: 3800 cms by 1-Aug
  - Temp at Qualark
    - 18.0c 23-Jul
    - forecast: 20.8c by 1-Aug
    - notes: if forecast of 20.8C is reached, would be near record high for this date.
- MA for E.Stuart
  - Fishery Recommendations:
    - US-None
      - Would like to discuss an opening again on Monday if test fishery catches continue to improve. Ceremonial fisheries may take place next week.
    - CDN-None
      - Planned FN FSC fisheries will be scaled back as much as possible
- Test Fishing
  - Naka Creek GN will re-start tomorrow
    - ***US agreed***
    - ***Canada agreed***
  - Neah Bay in Area 5 will be extended until Tue. (planned to end on Sat. mechanical problems reduced sampling by 3 days)
    - ***US agreed***
    - ***Canada agreed***
  - A13 PS will start Sunday
    - ***US agreed***
    - ***Canada agreed***
- Next Meeting
  - Small group meeting Mon. July 27<sup>th</sup>, 10 am at the Pacific Inn in White Rock, with a possible panel call on Mon.
  - Conference call Tue. July 28<sup>th</sup>, 11:30 am

# Detailed Fishing Openings

## Open Times for the Mid & Upper Fraser River First Nations Fisheries

2009 Open Times for the Mid & Upper Fraser River First Nations Fisheries - Week 30 - Amendment #1

Updated: Jul 18, 2009

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
July 25 week 30	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 25 week 30	TBA	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	TBA	TBA	TBA
July 25 week 30	Chinook only (non-retention sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All catch MUST be reported
July 25 week 30	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Gill net, Dip net, Angling with Rod and Reel
July 25 week 30	TBA	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	TBA	TBA	TBA
July 25 week 30	Chinook only (non-retention sockeye)	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 25 week 30	TBA	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	TBA	TBA	TBA
July 25 week 30	Chinook only (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	Chinook only (non-retention sockeye)	Ti't'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	Chinook only (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	Chinook only (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 25 week 30	TBA	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	TBA	TBA	TBA
July 25 week 30	Chinook only (non-retention sockeye)	Highbur Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 25 week 30	TBA	Highbur Band	Fraser R - Barney Creek to French Bar Creek	5	TBA	TBA	TBA
July 25 week 30	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 25 week 30	Chinook only (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook only (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, Fishwheel (Fraser only) (Gill net use prohibited)
July 25 week 30	Chinook	LTN	Bowron R - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook only (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net (all but Ti'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) (Gill net use prohibited)
July 25 week 30	Sockeye/ Chinook	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Gill net, Dip net
July 25 week 30	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 19 18:00	Sunday July 25 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
July 25 week 30	Chinook	Okanagan First Nations Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All

TBA = To Be Announced

NNTC = Nlaka'pamux Nation Tribal Council;  
NTA = Nicola Tribal Association  
LNIB = Lower Nicola Indian Band  
NSTC = Northern Shuswap Tribal Council

TNG = Tsilquot'In Nation Government  
CSTC = Carrier-Sekani Tribal Council  
LTN = Lheidli T'enneh Indian Band  
TLA = Ti'azt'en Nation

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 19	Kwikwilem First Nation	Pattullo Bridge to Douglas I.	24 hrs	06:00 Saturday Jul 18	06:00 Sunday Jul 19	Chinook	drift net
Jul 19	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
Jul 19	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
Jul 19	Squamish Nation	Howe Sound (28-2 to 28-4)	3 day s	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	drift net
Jul 19	Squamish Nation	Squamish River	3 day s	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	set net
Jul 19	IN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
Jul 19	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
Jul 19	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Cheam First Nation	Jone's Hill to Jespersen's	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Yale First Nation	Agassiz to Sawmill Creek	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
Jul 19	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R., Kanaka Cr/Derby R.ch to Mission	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
Jul 19	Matsqui First Nation	Kanaka Cr/Derby R.ch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	fish wheel
Jul 19	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R., Kanaka Cr/Derby R.ch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
Jul 19	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Sunday Jul 19	21:00 Sunday Jul 19	Sockeye	set net, dip net



Jul 19	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Sunday Jul 19	21:00 Sunday Jul 19	Sockeye	set net, dip net
Jul 26	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	24 hrs	06:00 Sunday Jul 19	06:00 Monday Jul 20	Chinook, Sockeye	set net, drift net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Monday Jul 20	21:00 Monday Jul 20	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Monday Jul 20	21:00 Monday Jul 20	Sockeye	set net, dip net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Tuesday Jul 21	21:00 Tuesday Jul 21	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Tuesday Jul 21	21:00 Tuesday Jul 21	Sockeye	set net, dip net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Wednesday Jul 22	21:00 Wednesday Jul 22	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Wednesday Jul 22	21:00 Wednesday Jul 22	Sockeye	set net, dip net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Thursday Jul 23	21:00 Thursday Jul 23	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Thursday Jul 23	21:00 Thursday Jul 23	Sockeye	set net, dip net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Friday Jul 24	21:00 Friday Jul 24	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Friday Jul 24	21:00 Friday Jul 24	Sockeye	set net, dip net
Jul 26	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net
Jul 26	Cheam First Nation	Jone's Hill to Jespersion's	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net
Jul 26	Yale First Nation	Agassiz to Sawmill Creek	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Saturday Jul 25	21:00 Saturday Jul 25	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Saturday Jul 25	21:00 Saturday Jul 25	Sockeye	set net, dip net
Jul 26	Musqueam First Nation	Below Port Mann Bridge	8 hrs	14:00 Saturday Jul 25	22:00 Saturday Jul 25	Sockeye	set net, drift net
Jul 26	Tsawwassen First Nation	Below Port Mann Bridge	8 hrs	14:00 Saturday Jul 25	22:00 Saturday Jul 25	Sockeye	set net, drift net
Jul 26	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	drift net
Jul 26	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	set net
Jul 26	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
Jul 26	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
Jul 26	IN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel
Jul 26	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 19	Musqueam First Nation	Below Port Mann Bridge	24 hrs	14:00 Saturday Jul 18	14:00 Sunday Jul 19	Chinook	drift net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report

### Recreational

See appendices

### First Nations

#### Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Jul-05	4	9	0	137		3	18	0	0	0	158	171	192
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012
Jul-26	370	201	5	114	61	476	966		2639	340	4596	5172	11184

### Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).

Fraser River Sockeye Weekly Management Plan July 19th – 25th, 2009

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Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3

N/M = No Monitoring Conducted

## Marine

### 2009 Marine First Nations Fraser River Sockeye Catch Estimates

Total Catch Estimate : 3,755 sockeye

Allocation: 260,000

Update Date: Jul 29, 2009

Update time: 13:45

Date	A 12/13 Johnstone Strait			Area 20/WCVI			Str of Georgia/Area 29			Marine FN in-river catch			Total Marine Areas		
	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total
	Area 12	Area 13	Area 12	Area 13											
04-Jul			40			0			0				0	40	40
05-Jul			0			0			0				0	0	0
06-Jul			2			0			0				0	2	2
07-Jul			0			0			0				0	0	0
08-Jul			0			0			0				0	0	0
09-Jul			0			0			0				0	0	0
10-Jul			0			0			0				0	0	0
11-Jul			0			0			0				0	0	0
12-Jul			0			0			0				0	0	0
13-Jul			0			0			0				0	0	0
14-Jul			325		5	5			0				0	330	330
15-Jul			0			0			0				0	0	0
16-Jul			0			0			0				0	0	0
17-Jul			219			0			0				0	219	219
18-Jul			50	27	77	0			0				0	77	77
19-Jul			350			0			0				0	350	350
20-Jul			25	350	375	0			0				0	375	375
21-Jul			190			0			0				0	190	190
22-Jul			60			0			0				0	60	60
23-Jul			1140	50	1190	0			0				0	1,190	1190
24-Jul			275	500	775	0			0				0	775	775
25-Jul			189			0			0				0	189	189
26-Jul			0			0			0				0	0	0

# Fraser River Sockeye and Pink

## Weekly Management Plan July 26 – Aug 1/09

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### For Period of:

Sun. July 26<sup>th</sup> – Sat. August 1st, 2009

Week: 31

### Stock Aggregate Focus:

Early Summers; Summers

### Management objectives for the current week:

- Assess run timing for Early Summers
- Assess run size for Early Summers
- Assess Early Summers Management Adjustment
- Assess run timing for Summers
- Assess run size for Summers
- Assess run size for Birkenhead
- Assess run size for True-Lates
- Assess migration conditions

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## Fraser Sockeye Management Summary

### FN0569-Salmon: Fraser River Sockeye Update - July 28 - Areas 11 to 29

The Fraser River Panel met July 28 to receive an update on the migration of the Fraser River sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of sockeye in Johnstone Strait and Juan de Fuca Strait as well in the Fraser River indicate continued low migration of Fraser River sockeye. The migration of Early Summer-run sockeye through marine assessment areas continues to be much lower than expected to-date. The Panel adopted a run size recommendation further down grading the Early Summer run from 264,000 fish to 150,000. The escapement of Early Summer-run sockeye past Mission through July 27 is approximately 45,000 fish.

Summer-run sockeye have been entering the marine assessment areas over the past couple of weeks and have also been well below expectations. It is too early to make an in-season run size estimate for Summers however they are tracking consistent with Early Summer stock group. The estimated escapement of Summer-run sockeye past Mission through July 27 is approximately 28,000 fish.

Migration conditions for sockeye entering the Fraser River are deteriorating. On July 27 the Fraser River discharge at Hope was approximately 4,100 cms, which is approximately 15%-20% lower than normal. Water temperatures are the larger issue. Temperatures at Qualark Creek were 19.8 0C on July 27th, which more than 20C higher than average for this date. Fraser River water temperatures are forecast to reach approximately 21.7 0C by August 5th, which would set all time record highs. Water temperatures exceeding 200 C may cause high enroute mortality of Fraser River sockeye.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time. First Nations sockeye fisheries have been curtailed and DFO is planning meetings with First Nations groups to review current information.

Next Panel meeting is July 31st.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### FN0583-Salmon: Fraser River Sockeye Update - July 31 - Areas 11 to 29

The Fraser River Panel met July 31 to receive an update on the migration of the Fraser River Sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of Sockeye from the marine approach areas indicate an increase in abundance relative to the previous week although abundance indicators are still far lower than pre-season expectations for this date. The diversion rate of Fraser Sockeye through Johnstone Strait is currently estimated to be approximately 28%. Assessments of Sockeye passage in the lower Fraser River have also increased in recent days although the abundance is tracking much lower than expected during pre-season planning.

Stock identification analyses confirm that Summer-run Sockeye are now dominating in the marine assessment areas, however the proportion of four year old Sockeye is still tracking below expectations. Recent DNA analyses indicate that the stock composition of Fraser Sockeye in the marine approach areas is approximately 15% Early Summer-run, 70% Summer-run, and 15% Late-run Sockeye. Due to the very low abundance of Fraser Sockeye thus far this season, there have been no directed commercial fisheries for Fraser River Sockeye. The estimated total non-commercial catch of Fraser Sockeye this

season is 36,000 fish, which have been harvested in test fisheries and First Nations FSC fisheries.

At the meeting on July 28 the Panel decreased the run size estimate for Early Summer-run Sockeye from 264,000 fish (90% probability level forecast) to 150,000 fish. This run size estimate was unchanged at the meeting today. The estimated 50% migration timing of Early Summer-run Sockeye through Area 20 is July 26, which is the date that was expected during pre-season planning. The estimated escapement of Early Summer-run Sockeye past Mission through July 30 is approximately 61,000 fish.

Similar to Early Stuart and Early Summer-run Sockeye, the return of Summer-run Sockeye through marine assessment areas has been much lower than expected to-date. Chilko and Quesnel Sockeye were forecast to comprise almost 90% of the Summer-run Sockeye abundance this season. DNA analyses suggest that they are contributing a lower proportion of the Summer-run return, which is another negative indicator regarding the overall abundance of Summer-run Sockeye this season. A run size estimate for Summer-run Sockeye should be available next week near their expected peak migration date through marine assessment areas. The estimated escapement of Summer-run Sockeye past Mission through July 30 is approximately 51,000 fish.

The expected 50% migration timing of Birkenhead and True Late-run Sockeye through Area 20 is August 11, and 12, respectively. DNA analyses indicate higher than expected proportions of Harrison Sockeye have migrated through the marine approach routes to-date. The estimated escapement of True Late-run Sockeye past Mission through July 30 is approximately 28,000 fish.

Migration conditions for Sockeye entering the Fraser River have become adverse over the past week due to the sustained period of hot, dry weather and low discharge levels. On July 30 the Fraser River discharge at Hope was approximately 4,200 cms, which is about 5% lower than normal, while the water temperature at Qualark Creek was 20.7 °C, which is 3.4 °C higher than average for this date. High water temperatures can cause serious adverse effects on resident and migratory fish, including: increased energy expenditure; reduced swimming performance; increased susceptibility to disease; reduced reproductive success; and mortality at very high temperature levels. Fraser River water temperatures are forecast to increase to 21.4 °C by August 8, which would be a record for that date if it occurs. Water temperatures exceeding 20.0 °C may cause high pre-spawning mortality of Fraser River Sockeye. Environmental conditions for salmon migration in the Fraser River will be monitored closely over the coming weeks.

At the meeting today, after reviewing environmental and stock assessment information, the Panel approved an increase in the management adjustment factor for Early Summer-run Sockeye from 0.40 to 0.51. Management adjustments are employed to help achieve spawning escapement targets for Fraser River Sockeye.

There are no directed recreational and commercial fisheries for Fraser River Sockeye at the present time. First Nations Sockeye fisheries have been curtailed and DFO is planning meetings with First Nations groups to review current information. The next scheduled Panel meeting is Tuesday August 4.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Jul 26	Mon Jul 27	Tues Jul 28	Wed Jul 29	Thurs Jul 30	Fri Aug 1	Sat Aug 2
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First Nations – FSC Mid and Upper Fraser	Open to chinook and sockeye from July 26 – Aug 2
First Nations – FSC Lower Fraser	Open to chinook and sockeye from July 26 to July 29
First Nations – FSC Marine	Non-retention of sockeye
Recreational - Upper Fraser River	Closed
Recreational - Lower Fraser River	Closed
Recreational Marine Areas	Closed
Commercial Area D	Closed
Commercial Area E	Closed
Commercial Area B	Closed
Commercial Area H	Closed
U.S. Treaty Indian	Closed
U.S. Non-treaty Indian	Closed

## Fishery Notices Summary

### RECREATIONAL - Salmon

FN0553-RECREATIONAL - SALMON: Region 2 Chilliwack River (Amendment to FN0551 - Fish size)

FN0569-Salmon: Fraser River Sockeye Update - July 28 - Areas 11 to 29

FN0570-RECREATIONAL - SALMON - WCVI Chinook Conservation Measures - Areas 21-27 and 121 – 127

FN0571-Recreational Fishery - Pink Salmon opportunities in lower Strait of Georgia - A portion of sub-areas 18-8 and 18-7 (Cowichan Bay and Satellite Channel)

FN0583-Salmon: Fraser River Sockeye Update - July 31 - Areas 11 to 29

### COMMERCIAL – Salmon

FN0555-COMMERCIAL - Salmon: Gill net - Area C - Area 6 - Opening July 27

FN0556-COMMERCIAL - Salmon: Seine - Somass Sockeye Commercial TAC Correction - Area 23

FN0558-COMMERCIAL - Salmon: Gill Net - Area C - Area 6 - Opening - July 28

FN0559-COMMERCIAL - Salmon: Seine - Area A - Area 8 Chum & Pink Fishery - Opening July 27

FN0560-Commercial - Salmon: Gill Net - Area C - Area 8 Chum Fishery - Opening July 27

FN0561-COMMERCIAL - Salmon: Gill Net - Area C - Area 6 - Opening - July 28 (Amendment: Opening Time)

FN0562-COMMERCIAL - Salmon: Seine - Area A - Area 6 - Opening July 30

FN0563-COMMERCIAL - Salmon: Troll - Area G - Chinook - Planning Information

FN0564-COMMERCIAL - Salmon: Gill Net - Area C - Area 4 – Update

FN0565-COMMERCIAL - Salmon: Seine - Area A - Area 6 – Update

FN0566-COMMERCIAL - Salmon: Gill net - Area C - Area 4 – Update

FN0567-COMMERCIAL - Salmon: Troll - Area F Troll - ITQ Demonstration Fisheries - DNA and Harvest Updates and Chinook Closure

FN0569-Salmon: Fraser River Sockeye Update - July 28 - Areas 11 to 29

FN0572-Commercial Salmon Troll - Area G -Chinook - August 8 Opening - 123 to 127

FN0573-Commercial -Salmon Gillnet- - 2009 Area E Fraser River Chinook Demonstration Pool Fishery - Area 29

FN0574-COMMERCIAL - Salmon: Area C Gillnet - Area 6 Opening

FN0575-COMMERCIAL - Salmon Seine - Area A Seine - Areas 3 & 6

FN0576-Salmon: Area C Gillnet - Area 6 Opening (Amendment to FN0573; Retention and prohibited species added)

FN0577-Commercial - Salmon Gillnet - Area C - Area 7 and 8 - Chum Fishery

FN0578-Salmon - Seine - Area A - Area 7 & 8 Chum & Pink Fishery

FN0580-Salmon: Area C Gillnet - Area 4 Update

FN0583-Salmon: Fraser River Sockeye Update - July 31 - Areas 11 to 29

#### ABORIGINAL – Salmon

FN0569-Salmon: Fraser River Sockeye Update - July 28 - Areas 11 to 29

FN0583-Salmon: Fraser River Sockeye Update - July 31 - Areas 11 to 29



# Management Information

## 2009 Fraser River Sockeye In-season Status

### 2009 Fraser River Sockeye In-season Status

Week of: Jul. 26 - Aug. 1, 2009

Date: Jul. 31, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken-head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	150,000	8,677,000	334,000	573,000	9,819,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,950	4,310	11,430	280	2,510	20,480	800
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	247	389	431	4	204	1,275	0
Escapement-to-date @ Mission	81,270	61,150	51,310	30	27,630	221,390	0
Potential Gross Escapement	81,517	61,539	51,741	34	27,834	222,665	0
Adjusted Gross Esc. Target *	85,000	216,400	4,218,900	149,100	507,300	5,176,700	0
Accounted-to-date							
Catch + Escapement to Mission	83,467	65,849	63,171	314	30,344	243,145	800
Potential Remaining To Come							
Potential En-route	1,533	84,151	8,613,829	333,686	542,656	9,575,855	17,534,200
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	152	947	2,117	42	223	3,481	100
Test Fishing	1,740	3,320	9,260	240	2,270	16,830	700
Canadian Charter (Albion & Qualark TF)	53	39	50	0	12	154	0
Canadian Marine Recreational	0	0	0	0	0	0	0
U.S. TI Ceremonial	0	0	0	0	0	0	0
U.S. Recreational	0	0	0	0	0	0	0
Total	1,950	4,310	11,430	280	2,510	20,480	800
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	247	389	431	4	204	1,275	0
Catch Above Mission (incl. FSC & EO)	5,794	4,655	2,948	11	373	13,781	0
Total	6,041	5,044	3,379	15	577	15,056	0
Total In-river Catch	6,041	5,044	3,379	15	577	15,056	0
Total Catch in All Areas							
Total	7,991	9,354	14,809	295	3,087	35,536	800
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	26-Jul	5-Aug	11-Aug	11-Aug		25-Aug
Mission Timing	5-Jul	1-Aug	11-Aug		19-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Sockeye TAC Calculations and Catch

### 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Jul. 26 - Aug. 1, 2009

Date: Jul. 28, 2009

	Fraser Sockeye						Fraser Pinks		
	Early Stuart	Early Summer	Summer	Birken-head	Late	Total	Total		
RUN STATUS, ESCAPEMENT NEEDS & AVAILABLE SURPLUS									
In-season Run Size Estimate	85,000	150,000	8,677,000	334,000	573,000	9,819,000	17,535,000		
Adult Spawning Escapement Target (SET)	85,000	150,000	3,470,800	133,600	458,400	4,297,800	6,000,000		
Management Adjustment (MA)	32,300	56,180	0	0	n/a	88,480	0		
Proportional MA (pMA)	0.38	0.3745	0.00	0.00	6.04		0.00		
Adjusted Spawning Escapement Target (SET) *	85,000	150,000	3,470,800	133,600	458,400	4,297,800	6,000,000		
Test Fishing (TF)	2,400	8,000	50,400	1,500	2,400	64,700	10,000		
Surplus above Adjusted SET & Test fishing	0	0	5,155,800	198,900	112,200	5,466,900	11,525,000		
DEDUCTIONS & TAC FOR INTERNATIONAL SHARING									
Aboriginal Fishery Exemption (AFE)	10,000	30,600	342,600	5,800	11,000	400,000	0		
Available Aboriginal Fishery Exemption	0	0	342,600	5,800	11,000	359,400	0		
Total Deductions (Adj. SET + TF + Available AI)	87,400	158,000	3,863,800	140,900	471,800	4,721,900	6,010,000		
Available TAC for International Sharing	0	0	4,813,200	193,100	101,200	5,107,500	11,525,000		
UNITED STATES (Washington) TAC									
U.S. Share **	16.5%	0	0	794,180	31,860	16,700	842,740	25.7%	2,961,930
U.S. Payback **	0.0%	0	0	0	0	0	0		
Total		0	0	794,180	31,860	16,700	842,740		2,961,930
Treaty Indian Share **	67.7%	0	0	537,660	21,570	11,310	570,540	50.0%	1,480,965
Non-Indian Share	32.3%	0	0	256,520	10,290	5,390	272,200	50.0%	1,480,965
CANADA TAC									
Canadian Allocation	83.5%	0	0	4,019,020	161,240	84,500	4,264,760	74.3%	8,563,070
Available Aboriginal Fishery Exemption (AFE)		0	0	342,600	5,800	11,000	359,400		0
Total Canadian Share		0	0	4,361,620	167,040	95,500	4,624,160		8,563,070
Marine Area Aboriginal		0	18,600	219,000	8,400	14,000	1,191,600		0
Fraser River Aboriginal		0	66,400	630,400	11,000	41,200	3,432,600		0
First Nations Allocations (including AFE)		0	85,000	849,400	19,400	55,200	1,009,000		0
Planned Recreational Shares		0	11,000	144,100	5,500	9,400	170,000		0
Purse Seine B	47.5%	0	-45,600	1,599,860	67,520	14,680	1,636,450	70.0%	5,994,150
Gillnet D	21.5%	0	-20,640	724,150	30,560	6,640	740,710	4.0%	342,520
Gillnet E	25.0%	0	-24,000	842,030	35,540	7,730	861,290	6.5%	556,600
Troll H	6.0%	0	-5,760	202,090	8,530	1,850	206,710	13.0%	1,113,200
Commercial Allocations	100.0%	0	-96,000	3,368,120	142,140	30,900	3,445,160	100.0%	8,563,070
CATCH-TO-DATE									
Test	1,750	2,530	3,270	110	1,000	8,660		600	
Treaty Indian (Wash.)	0	0	0	0	0	0	0	0	
Non-Indian (Wash.)	0	0	0	0	0	0	0	0	
Washington	0	0	0	0	0	0	0	0	
Marine Area Aboriginal	30	210	220	0	50	510		0	
Fraser River Aboriginal	3,570	3,330	2,520	20	520	9,960		0	
Recreational	0	0	0	0	0	0		0	
Commercial	40	20	20	0	10	90		0	
Canada	3,640	3,560	2,760	20	580	10,560		0	
Total Catch in All Fisheries	5,390	6,090	6,030	130	1,580	19,220		600	
Exploitation Rate (catch-to-date / run size)	6%	4%	0%	0%	0%	0%		0%	
CATCH REMAINING (BALANCE)									
Washington	0	0	794,180	31,860	16,700	842,740		2,961,930	
Canada	-3,640	-3,560	4,358,860	167,020	94,920	4,613,600		8,563,070	
Balance Remaining [ below share / -above share]	-3,640	-3,560	5,153,040	198,880	111,620	5,456,340		11,525,000	
ESCAPEMENT RELATIVE TO TARGETS									
Potential Spawning Escapement (PSE) ***	79,610	143,910	8,670,970	333,870	571,420	9,799,780		17,534,400	
Predicted Difference Between Estimates (%DBE)	-28%	-27%	0%	0%	****			0%	
PSE with predicted DBE removed	57,690	104,700	8,670,970	333,870	****			17,534,400	
Spawning Escapement Target (SET)	85,000	150,000	3,470,800	133,600	458,400	4,297,800		6,000,000	
Potential deviation from SET [ <target / >target]	-27,310	-45,300	5,200,170	200,270	****			11,534,400	

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

## 2009 Fraser River Panel Sockeye Review Catch Summary

### 2009 Fraser River Panel Sockeye Review

Week of: Jul. 26 - Aug. 1, 2009

Date: Jul. 31, 2009

		Fraser Sockeye
Area	Gear	Cumul.
<b>Commercial Catch</b>		
<u>Canada</u>		
A & C Areas 1-10	Net	0
F Areas 1-10	Troll	0
G Areas 123-127,11-12	Troll	0
B Areas 11-16	PS	0
D Areas 11-13	GN	0
H Areas 12-16	Troll	0
H Areas 18-29	Troll	0
B Area 20	PS	0
E Area 29	GN	0
Canadian Selective		0
FRA Economic Opportunity		0
BC Interior FN Demo		0
Canadian Total		0
<u>United States</u>		
<u>Alaska</u>	Net&Troll	0
<u>Washington</u>		
T.I. Areas 4B/5/6C	Net	0
T.I. Areas 6/7/7A	Net	0
N.I. Areas 7/7A	Net	0
Washington Total		0
U.S. Total		0
<b>Non-commercial Catch</b>		
PSC Test		8,040
Other Test		8,800
Fraser River Aboriginal (FSC)		15,060
Areas 12-124 Aboriginal		3,480
Recreational		0
Charter		154
U.S. TI Ceremonial		0
Non-comm. Total		35,530
<b>Catch and Escapement</b>		
Catch Accounted-to-date		35,530
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)		207,550
Total Accounted-to-date		243,080

#### Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
ESlu	Early Stuart	85,000	81,300	200	81,500	96%
ESum	Early Summer	216,400	61,100	400	61,500	28%
Summ	Quesnel/Chilko	4,218,900	10,600	100	51,800	1%
	L.Stu./Stel.		40,700	400		
Late	Birkenhead	149,100	0	0	0	0%
	Adams/L.Shuswap	507,300	100	0	27,800	5%
	Weav/L.Misc.		800	0		
	Sub 1s		26,700	200		

## ***Test Fishing Data***

### **Pacific Salmon Commission Test Fishing Summary**

**2009 Pacific Salmon Commission Sockeye Test Fishing Summary**

	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul
Area 20 Gillnet	66	282	361	139	198	208	254	414	190
US Area 5 Gillnet	63	42	88	68	46	22	25	29	6
Area 20 Purse Seine	16	143	285	164	105	198	257	240	293
29B Cottonwood Gillnet*	3	6	9	6	8	13	27	6	12
29D Whonnock Gillnet*	15	20	6	4	9	1	3	18	14
Area 12 Round Island GN	35	20	9	22	49	3	29	17	28
Area 12 Naka Cr. Gillnet	152	DNF	DNF	57	33	24	51	113	197
Area 12 Purse Seine	73	94	64	360	235	232	1664	1787	2063
Area 13 Purse Seine					121	100	118	271	81
Area 7 Reef Net Obs.	202	338	DNF	51	103	195	519	710	449
Hells Gate Daily Estimate	10	40	0	10	20	10	30	30	470
Mission Escapement**	4100	5500	10500	8800	7900	12500	15900	17900	15700

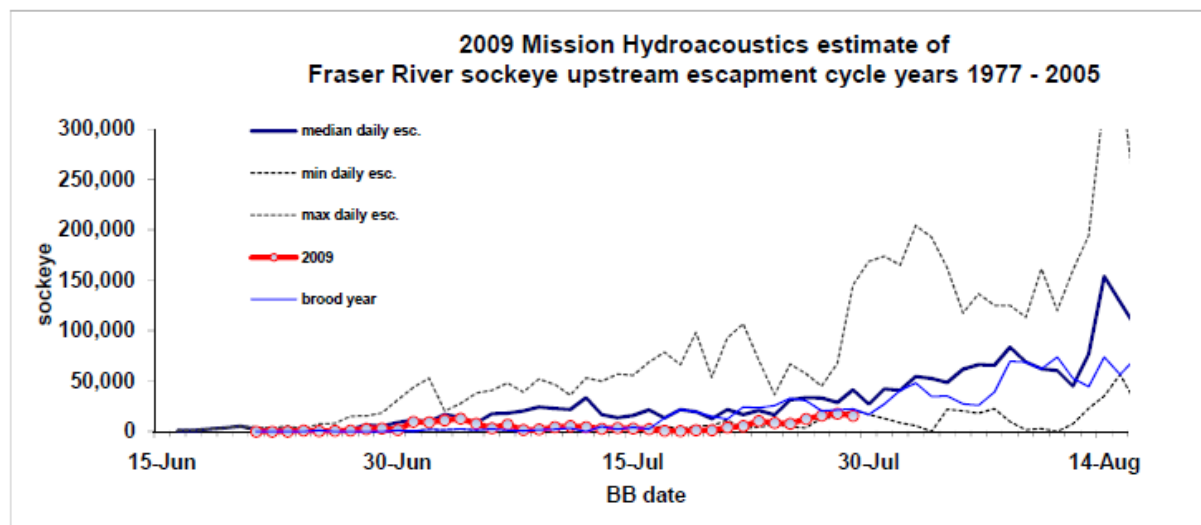
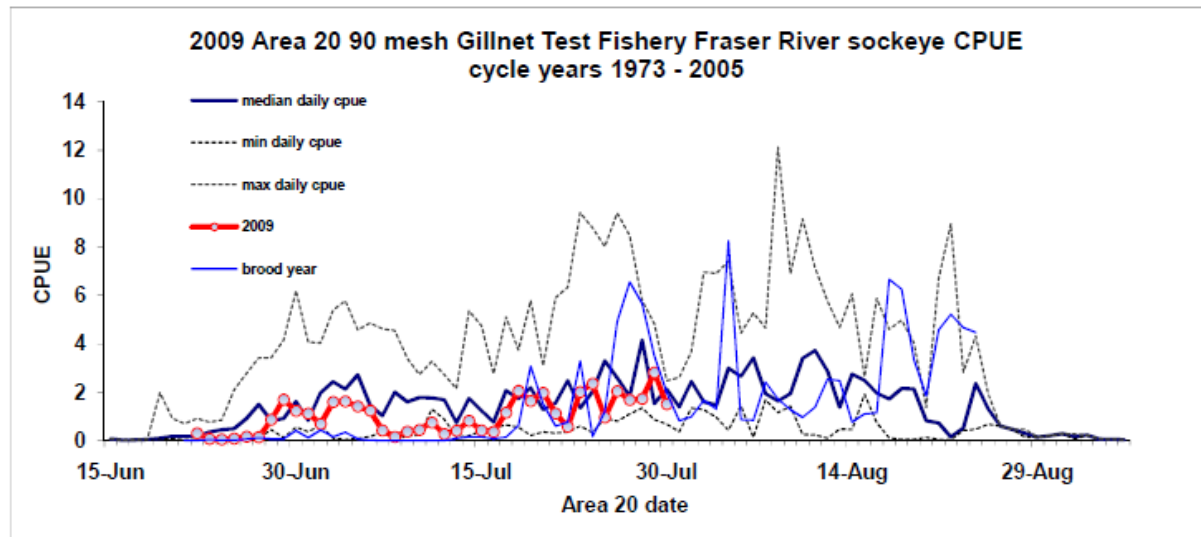
\* Variable mesh Gillnet

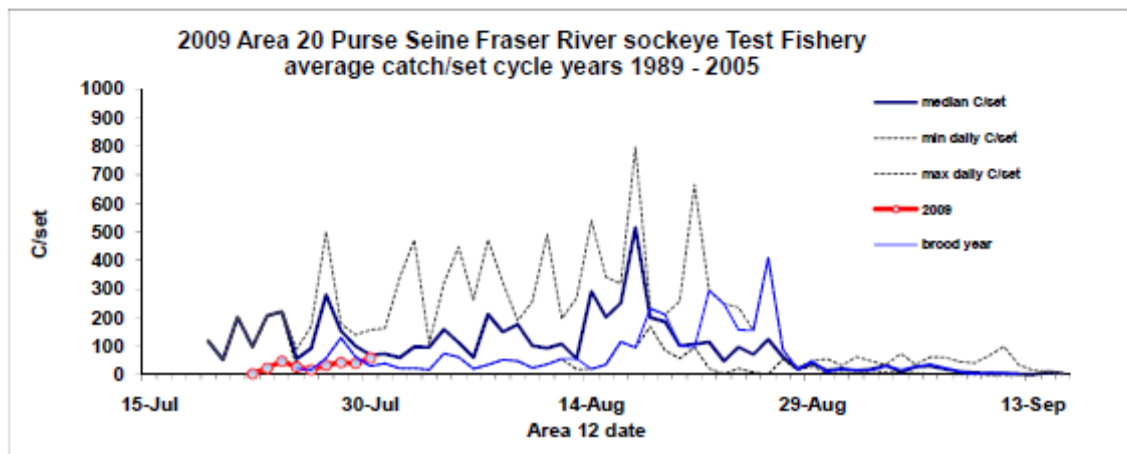
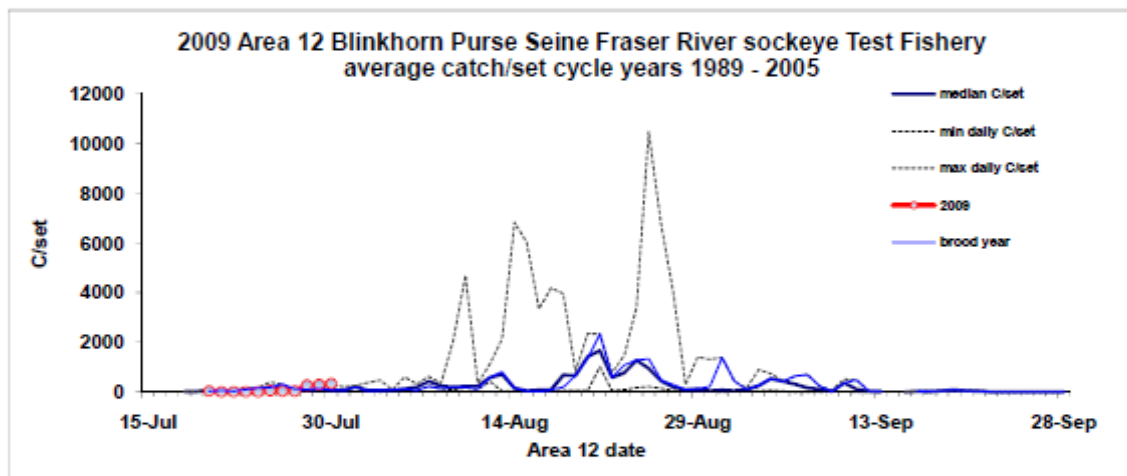
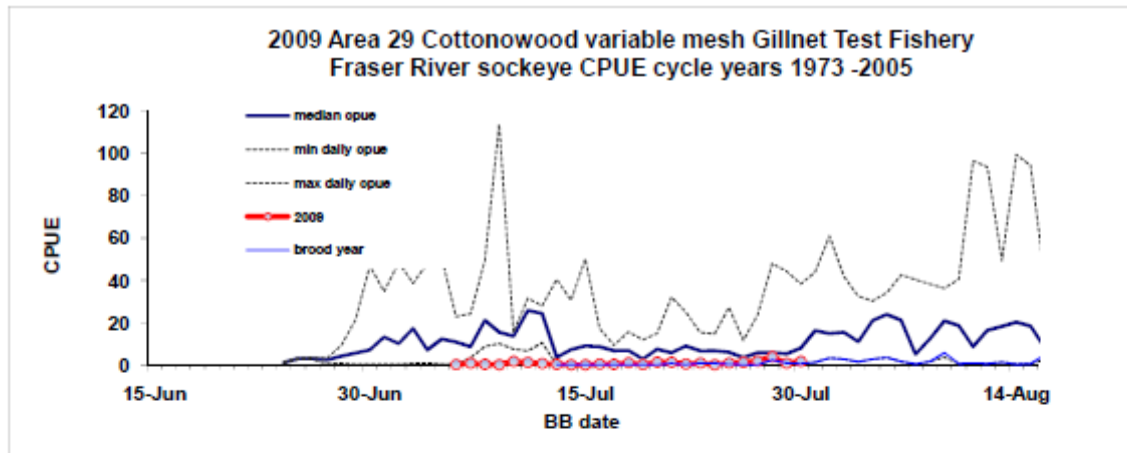
\*\* Preliminary, subject to revision.

N.O. = No Observation.

\* mechanical problems 1 set only

DNF = did not fish





## Detailed Test Fishing Data



Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	26/07/2009	1	6	6	235	9	1480
	27/07/2009	1	6	6	232	8	1812
	28/07/2009	1	6	6	1664	16	3661
	29/07/2009	1	6	6	1787	111	5610
	30/07/2009	1	6	6	2063	77	2890
	31/07/2009	1	6	6	1288	83	3977
	01/08/2009	1	6	6	821	10	3050
Area 12 - Naka Creek Sockeye Gillnet	26/07/2009	1	4	97.7	33	0	3
	27/07/2009	1	4	103.4	24	0	4
	28/07/2009	1	3	68	51	0	5
	29/07/2009	1	4	104.2	113	0	12
	30/07/2009	1	4	104.1	197	0	6
	31/07/2009	0	0	0			
	01/08/2009	0	0	0			
Area 12 - Round Island Sockeye Gillnet	26/07/2009	1	3	71.3	49	0	8
	27/07/2009	1	3	75	3	0	5
	28/07/2009	1	3	61	29	0	12
	29/07/2009	1	3	83.6	17	0	10
	30/07/2009	1	3	70.3	28	0	7
	31/07/2009	1	3	84.7	30	0	16
	01/08/2009	1	3	93.1	93	0	45
Area 13 - Area 13 Sockeye Seine	26/07/2009	1	6	6	121	0	86
	27/07/2009	1	6	6	100	0	273
	28/07/2009	1	6	6	118	0	420
	29/07/2009	1	6	6	271	4	653
	30/07/2009	1	6	6	81	0	71
	31/07/2009	1	6	6	3023	14	4459
	01/08/2009	1	6	6	2664	36	5226
Area 20 - San Juan Sockeye Gillnet	26/07/2009	2	4	188.55	198	0	56
	27/07/2009	2	4	241.65	208	0	73
	28/07/2009	2	4	285.75	254	0	85
	29/07/2009	2	4	285.3	414	0	47
	30/07/2009	2	4	246	190	0	42
	31/07/2009	2	4	264.75	264	0	42
	01/08/2009	2	4	240.15	225	0	15
Area 20 - San Juan Sockeye Seine	26/07/2009	1	6	6	105	2	217
	27/07/2009	1	6	6	198	4	660
	28/07/2009	1	6	6	257	2	1880
	29/07/2009	1	6	6	240	4	934
	30/07/2009	1	5	5	293	2	707
	31/07/2009	1	6	6	355	9	2710
	01/08/2009	1	6	6	364	12	1912
Area 29 - Cottonwood Sockeye Gillnet	26/07/2009	1	2	6.78	8	0	0
	27/07/2009	1	2	6.9	13	0	0
	28/07/2009	1	2	7.08	27	0	0
	29/07/2009	1	2	6.72	6	0	0

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	30/07/2009	1	2	6.9	12	0	0
	31/07/2009	1	2	6.78	7	0	0
	01/08/2009	1	2	7.08	28	0	0
Area 29 - Whonnock Sockeye Gillnet	26/07/2009	1	2	10.85	9	0	0
	27/07/2009	1	2	10.0625	1	0	0
	28/07/2009	1	2	9.975	3	0	0
	29/07/2009	1	2	10.85	18	0	0
	30/07/2009	1	2	10.4125	14	0	0
	31/07/2009	1	2	11.55	34	0	0
	01/08/2009	1	2	11.1125	21	0	0
U.S. Area 5 - U.S. Juan de Fuca Sockeye Gillnet	26/07/2009	1	2	131.56	46	0	37
	27/07/2009	1	2	123.64	22	0	59
	28/07/2009	1	2	103.84	27	0	44
	29/07/2009	1	2	106.26	30	0	22
	30/07/2009	1	2	100.76	44	0	34
	31/07/2009	0	0	0			
	01/08/2009	0	0	0			
U.S. Area 7 - Area 7 U.S. Reef Net Payfish	26/07/2009	0	0	0			
	27/07/2009	0	0	0			
	28/07/2009	1	0	0			
	29/07/2009	1	0	0			
	30/07/2009	0	0	0			
	31/07/2009	1	0	0			
	01/08/2009	0	0	0			
U.S. Area 7 - Area 7 U.S. Sockeye Reef Net	26/07/2009	0	22	1260	103	0	15
	27/07/2009	0	24	1440	195	0	30
	28/07/2009	0	28	1707	519	0	298
	29/07/2009	0	25	1440	710	0	622
	30/07/2009	0	26	1500	449	0	316
	31/07/2009	0	0	0			
	01/08/2009	0	26	1530	486	0	276



## DNA Analysis

## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A12psth	jul.29	99	99%	ES 0%;EM 7%;ET 0%;CQ 52%;LS 27%;BI 1%;AW 6%;Ha 6%;
dna A20psth	jul.29	100	98%	ES 0%;EM 7%;ET 5%;CQ 39%;LS 12%;BI 3%;AW 7%;Ha 27%;
dna BBgntf	jul27-29	46	100%	EM 29%;ET 4%;CQ 11%;LS 30%;Ha 26%;
dna ABgntf	jul27-29	22	100%	EM 9%;CQ 14%;LS 45%;AW 5%;Ha 27%;
<u>E. Stuart</u>	<u>Early Summer</u>		<u>Summer</u>	<u>Late</u>
ES=EStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pl,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

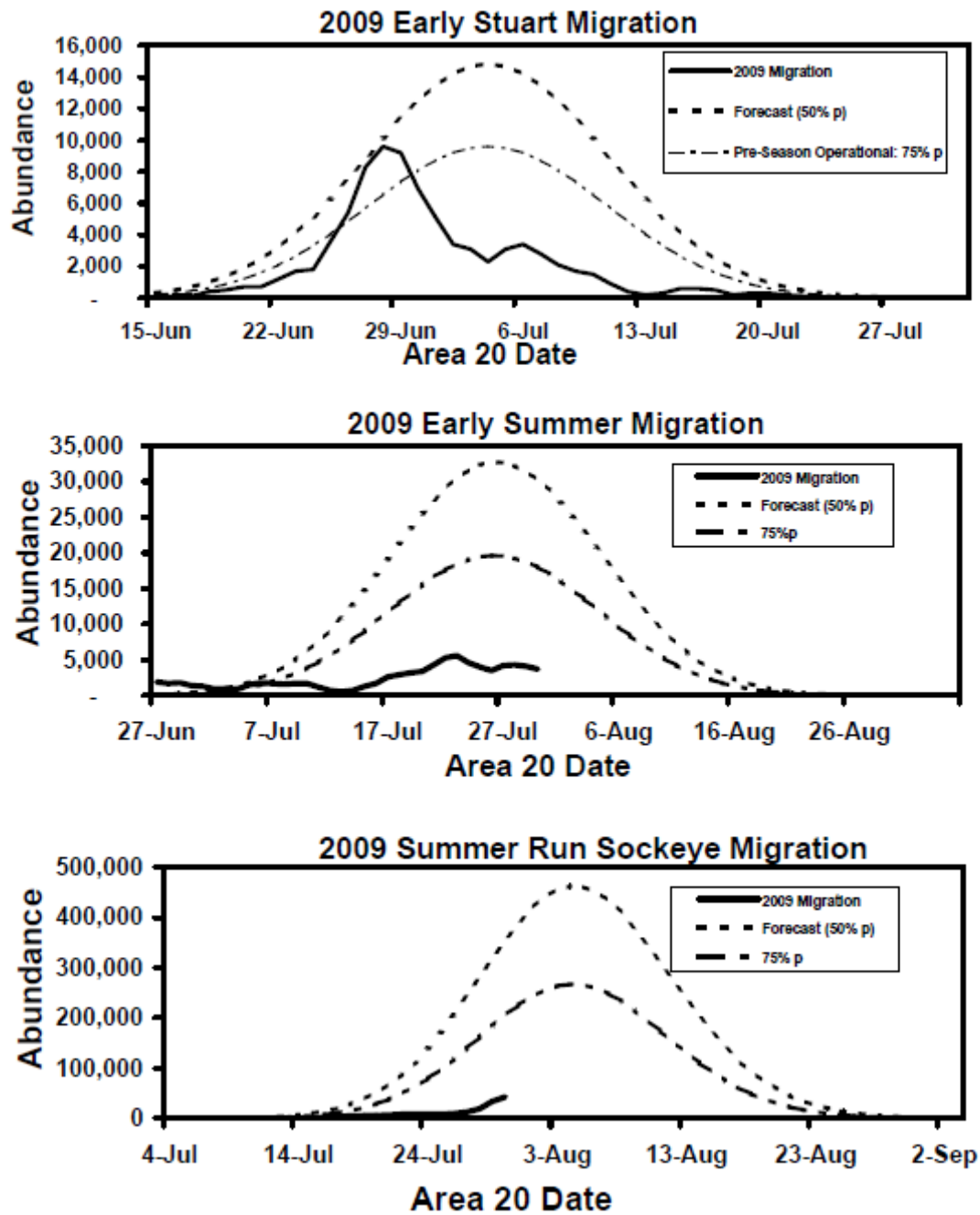
## Comparisons for fishing decisions

1) Comparisons for fishing decisions, based on information available on Friday July 31 as compared with information from Pre-season Planning Model

Model Run	E.Summers	Summers	All Lates	Decision Date	Abundance Through...	Reconstructed Abundance: E.Summers	Reconstructed Abundance: Summers	Reconstructed Abundance through Mission: E.Summers	Reconstructed Abundance through Mission: Summers
<u>Pre-Season Planning Runs</u>						(Modeled thru Jul 30)	(Modeled thru Jul 30)		
28-Jul	10%	88%	2%	2 weeks ago	16-Jul	99,524	44,663	27,577	3,487
				Last Friday	23-Jul	275,985	451,869	118,621	65,033
				Today	30-Jul	499,135	2,166,846	307,595	591,580
<u>Actual</u>	<u>E.Summers</u>	<u>Summers</u>	<u>All Lates</u>			<u>E.Summers</u>	<u>Summers</u>	<u>E.Summers</u>	<u>Summers</u>
	16%	58%	26%			87,036	186,242	64,372	55,453
	(Actual: A 20 July 28)					(Actual: July 30)		(Actual: July 30)	

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## Migration Graphs



## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...								
Mission Date	Escapement Total	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
Mission Total:	222,600	81,500	56,700	3,900	900	41,100	5,900	4,800
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)								
Mission Date	Projected Escapement	Early Stuart	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
31-Jul	9,200	-	1,400	100	900	5,000	900	900
1-Aug	12,600	-	2,200	300	1,500	6,300	1,200	1,100
2-Aug	14,800	-	1,900	400	1,200	7,100	2,500	1,700
3-Aug	20,600	-	2,500	800	1,300	8,500	4,800	2,700
4-Aug	32,200	-	2,000	900	1,200	14,900	9,700	3,500
5-Aug	57,200	-	1,600	500	700	28,800	20,500	5,100
Projected Gross Escapement <sup>1</sup>								
31-Jul								
5-Aug	146,600	0	11,600	3,000	6,800	70,600	39,600	15,000
Projected Total	369,200	81,500	68,300	6,900	7,700	111,700	45,500	19,800
		Early Stuart 81,500		Early Summers 82,900			Summer Runs 177,000	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted								
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## Escapement Summary

**2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY**

2009 COTTONWOOD T.F.			AB T.F.		MISSION		BEST Est.		Hells Gate	
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)	CUMM.	DAILY EST.	
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200	TOTAL	(AB+4)	129,130
21-Jun			22-Jun reg	0	0.00			0	26-Jun	
22-Jun			23-Jun reg	4	0.44		300	300	27-Jun	
23-Jun			24-Jun vmn	0	0.00		0	300	28-Jun	
24-Jun			25-Jun vmn	4	0.35	1,200	1,200	1,500	29-Jun	
25-Jun			26-Jun vmn	2	0.19	500	500	2,000	30-Jun	
26-Jun			27-Jun vmn	1	0.10	900	900	2,900	01-Jul	0
27-Jun			28-Jun vmn	1	0.09	1,000	1,000	3,900	02-Jul	20
28-Jun			29-Jun vmn	6	0.54	2,600	2,600	6,500	03-Jul	890
29-Jun			30-Jun vmn	13	1.03	3,200	3,200	9,700	04-Jul	1,260
30-Jun			01-Jul vmn	1	0.10	1,600	1,600	11,300	05-Jul	1,730
01-Jul			02-Jul vmn	3	0.30	9,700	9,700	21,000	06-Jul	220
02-Jul			03-Jul vmn	0	0.00	9,200	9,200	30,200	07-Jul	0
03-Jul			04-Jul vmn	43	3.63	11,100	11,200	41,400	08-Jul	1,830
04-Jul			05-Jul vmn	29	2.60	12,800	12,900	54,300	09-Jul	2,410
05-Jul			06-Jul vmn	11	0.99	7,900	7,900	62,200	10-Jul	440
06-Jul	1	0.14	07-Jul vmn	1	0.10	3,400	3,400	65,600	11-Jul	510
07-Jul	5	0.77	08-Jul vmn	6	0.60	7,100	7,300	72,900	12-Jul	490
08-Jul	2	0.29	09-Jul vmn	1	0.05	1,600	1,700	74,600	13-Jul	100
09-Jul	0	0.00	10-Jul vmn	0	0.00	2,200	2,400	77,000	14-Jul	100
10-Jul	12	1.69	11-Jul vmn	0	0.00	4,400	5,000	82,000	15-Jul	250
11-Jul	8	1.13	12-Jul vmn	0	0.00	5,600	6,200	88,200	16-Jul	180
12-Jul	5	0.67	13-Jul vmn	0	0.00	4,500	4,900	93,100	17-Jul	90
13-Jul	2	0.29	14-Jul vmn	0	0.00	2,900	3,300	96,400	18-Jul	190
14-Jul	0	0.00	15-Jul vmn	0	0.00	3,700	4,400	100,800	19-Jul	50
15-Jul	0	0.00	16-Jul vmn	0	0.00	3,200	4,000	104,800	20-Jul	40
16-Jul	3	0.44	17-Jul vmn	1	0.10	2,600	3,000	107,800	21-Jul	10
17-Jul	2	0.29	18-Jul vmn	3	0.28	800	800	108,600	22-Jul	10
18-Jul	7	0.99	19-Jul vmn	2	0.18	600	700	109,300	23-Jul	40
19-Jul	1	0.14	20-Jul vmn	6	0.53	1,300	1,500	110,800	24-Jul	0
20-Jul	9	1.27	21-Jul vmn	16	1.39	1,500	1,800	112,600	25-Jul	10
21-Jul	9	1.29	22-Jul vmn	15	1.32	4,100	4,800	117,400	26-Jul	20
22-Jul	3	0.44	23-Jul vmn	20	1.79	5,500	6,300	123,700	27-Jul	10
23-Jul	6	0.88	24-Jul vmn	6	0.56	10,500	11,900	135,600	28-Jul	30
24-Jul	14	2.11	25-Jul vmn	4	0.39	8,800	9,900	145,500	29-Jul	30
25-Jul	6	0.88	26-Jul vmn	9	0.83	7,900	8,900	154,400	30-Jul	470
26-Jul	8	1.18	27-Jul vmn	1	0.10	12,500	13,900	168,300	31-Jul	5,380
27-Jul	13	1.85	28-Jul vmn	3	0.30	15,900	17,400	185,700	01-Aug	5,450
28-Jul	27	3.78	29-Jul vmn	18	1.63	17,900	19,100	204,800	02-Aug	4,810
29-Jul	6	0.86	30-Jul vmn	14	1.33	15,700	16,700	221,500	03-Aug	1,840
30-Jul	12	1.71	31-Jul vmn	34	2.94	15,400	16,200	237,700	04-Aug	5,030
31-Jul	7	1.12	01-Aug vmn	21	1.89	12,200	12,800	250,500	05-Aug	1,650
01-Aug	28	3.96	02-Aug vmn	32	2.79	12,700	13,200	263,700	06-Aug	2,630

## Mission Escapement by Stock

Totals	1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,469	72,995	0	224,466
Mission Escapement				Mission Escapement																
Mission				ESu				Summ								Late				
Date	Escape	Pitt Escp	Escape	ESu	Chilwk	EMisc	Sa/Sa/UA	Pitt	NHron	Chilko	SEChilko	Hly/Mtkin	Mich/Trits	LSu	Sel	Birk	AdLSort	WearOut	Misc	Sub's
26-Jul-09	7,900	988	8,888	224	0	1,203	357	988	23	429	0	127	125	3,381	284	0	1	0	0	1,746
27-Jul-09	12,500	1,446	13,946	354	0	1,903	564	1,446	37	679	0	202	197	5,360	460	0	2	0	0	2,762
28-Jul-09	15,900	1,468	17,368	0	471	3,088	460	1,468	0	914	0	740	234	4,613	976	0	0	234	0	4,179
29-Jul-09	17,900	1,229	19,129	0	531	3,477	507	1,229	0	1,029	0	834	263	5,193	1,099	0	0	263	0	4,704
30-Jul-09	15,700	955	16,655	0	466	3,060	445	955	0	903	0	731	231	4,555	964	0	0	231	0	4,126
31-Jul-09	15,400	800	16,200	0	342	889	605	800	484	5,033	0	1,185	192	3,962	451	525	0	3	0	1,759
01-Aug-09	12,200	584	12,784	0	271	681	480	584	383	3,987	0	939	152	3,138	358	416	0	3	0	1,388

## Environmental Conditions

### Fraser Conditions & MA Report for July 31, 2009

#### Fraser River Discharge at Hope

The discharge was about 4200 m<sup>3</sup>/s yesterday and is forecasted to decline to 3700 m<sup>3</sup>/s by August 8.

	date	m <sup>3</sup> /s
Last obs.	30-Jul	4,225
Forecast	8-Aug	3,702

#### Fraser River Temperature at Qualark

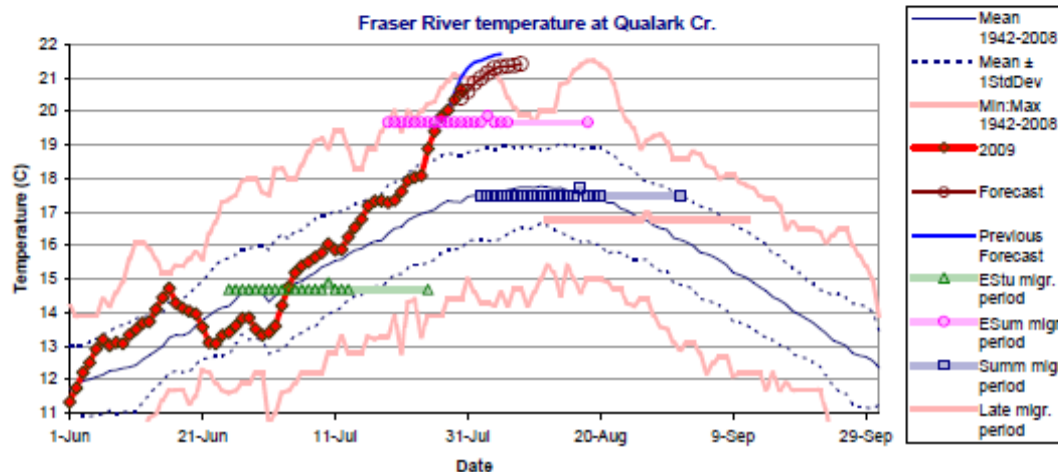
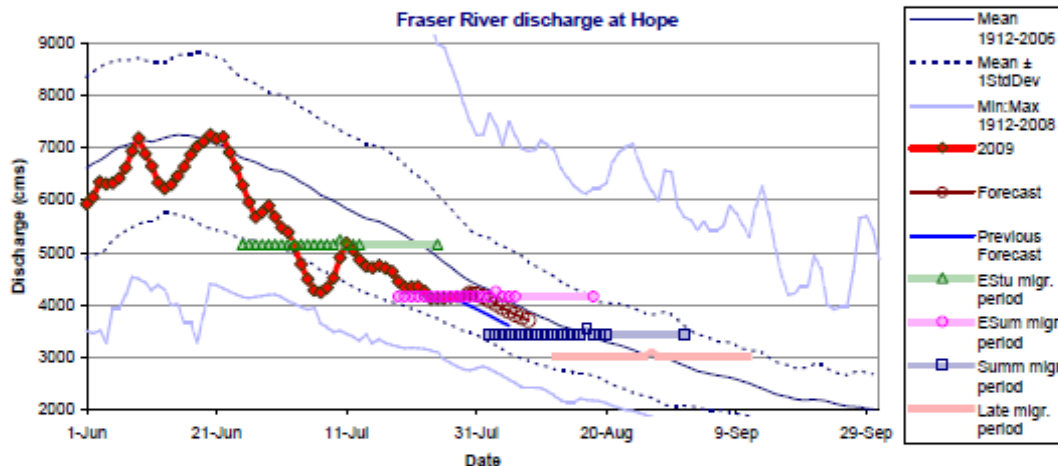
Yesterday's temperature was 20.7C, which is within half a degree of the previous records for the Jul.26-Aug.9 period set in 1998. River temperatures are projected to increase to 21.4C by August 8, and in so doing exceed the previous record high temperatures for the date in the latter half of the forecast.

	date	C
Last obs.	30-Jul	20.7
Forecast	8-Aug	21.4

#### MA Estimate for Early Summers

With the expected timing of July 26 in Area 20 (August 3 at Hells Gate), we have 19 days of observed and forecasted river conditions. With 19-day means of 4151 m<sup>3</sup>/s and 19.6C, the MA estimates are: pMA=0.5123, DBE=-34% and MA=76,800 fish. (For the non-Pitt portion of the Early Summer group the values are: pMA=0.66 and DBE=-40%).

HG Date	3-Aug	pMA	0.5123
#days	19	%DBE	-34%
Disch.	4,151	MA	76,800
Temp.	19.6		



## Fishery Recommendations

### Fraser River Panel Meetings: Summaries and Discussions

### Fraser River Panel (in-person)

# Summary Notes-July 31

## FRP Bi-Lateral

- Summary of our current situation
  - Dismal test fishing, but it's only July 31, so the season isn't over yet
- Test Fishing
  - A20 GN
    - SK catch starting Jul 27: 208, 254, 414, 190
    - Notes: Dropped off yesterday
  - A20 PS
    - SK catch starting Jul 28: 257, 240, 293
  - A12 PS
    - SK catch starting Jul 27: 232, 1664, 1787, 2063
    - Note: A sharp increase
  - Note: Marine areas have seen small but encouraging increases, but by themselves will not increase the run size estimate to the point where there will be TAC available.
- Lapointe - thinks the runs can't be as bad as currently estimated, because the ocean conditions when the 4 year olds went to sea were good, and if the current estimates are correct, then the survival rate from smolt to adult for Chilko SK would have to be lower than the lowest ever recorded, and the smolts went out at a relatively large size to good ocean conditions, so survival should be high.
- Fish Passage
  - Note: There has been an increase in observed migration past Mission over the last 3 days, continuing this morning.
  - Note: There has also been a jump in the Hells Gate daily count (470 on July 30) while viewing conditions have remained constant. Observed fish appear to be in good condition, a bit of colour.
- Biosampling
  - DNA
    - A12 PS date: Jul 29 n=99
      - 99% Fr
      - 7% EM
      - 0% ET
      - 52% Ch/Qu
      - 27% LS/St
      - 1% Bi
      - 6% Ha
      - Note: 79% of Fr stock composition is Summer run
    - A20 PS date: Jul 29 n=100
      - 98% Fr
      - 7% EM
      - 5% ET
      - 39% Ch/Qu
      - 12% LS/St
      - 3% Bi
      - 7% We/Ad
      - 27% Ha
  - Age Comp

- A12 PS date: Jul 29 n=99
    - 64% 4<sub>2</sub>
    - 26% 5<sub>2</sub>
    - 9% sub-1s
  - A20 PS date: Jul 29 n=100
    - 55% 4<sub>2</sub>
    - 17% 5<sub>2</sub>
    - 27% sub-1s
  - Note: The age 4 component is still much smaller than expected.
- Test Fishing
  - cc A13 today: 2491 SK, 4117 PK in 3 sets
  - cc A20 today: 1155 SK, 1035 PK in 2 sets
  - US: When will pink test fishing begin?
    - *It will be decided at the next meeting.*
  - US: The reefnet counts have been decent, are they lining up with the other test fisheries or are we missing some of the migration?
    - *We have not done direct comparisons, but we should soon get an indication soon as the fish move past Mission. So far the reconstructed GN expansion line is 15,000 which is pretty low for this time of year, so it is unlikely that we are underestimating the number moving through A20 since we have been using a number higher than 15,000 for our expansions.*
- Comparisons for fishing decisions (through Jul 30)
  - E Summer
    - Mission to date: expected 300k, observed 64k
    - Reconstructed to date: expected 500k, observed/projected 87k
    - Tracking 15 days late
  - Summer
    - Mission to date: expected 591k, observed 55k
    - Reconstructed to date: expected 2.17 million, observed 186k
    - Tracking 10 days late
  - Note: We'll need a rapid increase to hit the forecasted return.
- Review of why the age structure is a concern
  - Forecasted age 4 component
    - EStu 99%
    - ESu 75%
    - Su 97%
    - Late 79%
    - Total 94%
  - If the age 5 component is as forecast, the total run-size implied by various age 4 percentages:
    - 50% 4s = 1.3 million
    - 60% 4s = 1.6 million
    - 70% 4s = 2.178 million
    - 80% 4s = 3.268 million
  - Note: The age 5 return is unlikely to reach forecast, so the above numbers given the proportion of 4s may be too optimistic.
  - Less than 75% 4s has been observed in the past during very low returns



- In 2005 we observed a low proportion of 4s for a week or two (<50%) and still had a 6 million run, so a decent run is still possible, just a bit unlikely.
  - The survival rate implied by the low return currently estimated is below the normal range.
    - At 1% survival we should see 700k Chilko
      - A12:
        - Jul 29<sup>th</sup> 34% Ch
        - Jul 27<sup>th</sup> 26% Ch
        - Jul 24-25<sup>th</sup> 23% Ch
      - A20:
        - Jul 29<sup>th</sup> 26% Ch
        - Jul 28<sup>th</sup> 25% Ch
        - Jul 25<sup>th</sup> 10% Ch
        - Jul 21<sup>st</sup> 18% Ch
      - Note: About 1/4 of the samples are Chilko, and of the Chilko SK, about 84% are 4 year olds (lower than forecast but still decently high).
- Assessments
  - expansion lines
    - 17,000 for the GN test fisheries (lower than expected for this time of year, 15,000 is the measured expansion line)
    - 193 A12 PSn
    - 184 A13 PSn
    - 486 A20 PSn
      - all of the PSn exp lines are much lower than average
  - The Early Summers are showing a low, flat migration, Summers are showing a bit of an up-tick.
  - Comparing the current run to the run needed to generate a TAC for international sharing.
    - E Sum: 135k short of where we'd need to be.
    - Sum: Need about 1.24 million to generate an international TAC (depending on the MA used), about 130k short of where we'd need to be, but looks better than the E Sum run.
  - Early Summers:
    - 66k catch + esc
    - 21k projected en-route
    - 87k accounted to date
    - Cum. Passage:
      - 173k, A20 date: Jul 26
      - 145k, A20 date: Jul 24 (-2d)
      - 220k, A20 date: Jul28 (+2d)
    - Cum. Norm(deterministic): 138k, A20 date: Jul 26 (best est)
    - Bayes Cum Norm
      - 160k, A20 date: Jul 29 total ESum
      - EMisc only 100k, A20 date: Jul26
      - EThom only 60k, A20 date: Aug 8
      - ET Sc/Sey should be about 25% of ET, so ~15k
  - E-Summer run size currently at 150k, PSC recommended we stay at 150k until the timing estimates start to settle down.



- Summers:
  - 63k catch +\_esc
  - 125k projected en-route
  - 186k accounted to date
  - Cum. Passage:
    - 1.435 million, A20 date: Aug 5
    - 743k, A20 date: Aug 2 (-3d)
    - 2.5 million, A20 date: Aug 8 (+3d)
  - Bayes: very uncertain at this point
    - get a very wide range of estimates - 80% PI (500k to 18 million)
  - Note: Too early to update the Summer run-size estimate, should have something by next Friday.
- Harrison:
  - Bayes:
    - 132k, A20 date: Jul 31 (double the pre-season 50p forecast)
      - mostly 3<sub>1</sub>s
      - 80% PI (86k to 202k)
    - 57k reconstructed to date
  - *US: Can we use the Chilko jack returns as an indication of ocean conditions when the current 4 year olds went to sea?*
    - *generally don't see many jacks from Chilko (and over last 10 years or so, haven't seen many jacks anywhere)*
    - *in 2008, Chilko jack number is 720, BUT only 18 were actually counted (rest were expanded)*
  - *US: Can we use Harrison returns as an indication for other runs?*
    - *US requested a Harrison graph.*
    - *The Harrison SK have a different life-history than other Fraser SK runs, so they are not a good indicator or the other populations.*
- Environmental Conditions
  - Discharge at Hope
    - 4225 cms 30-Jul
    - forecast: 3702 cms by 8-Aug
  - Temp at Qualark
    - 20.7c 30-Jul
    - forecast: 21.4c by 8-Aug
- MA for E Summers
  - have 19 days of observed data, the uncertainty will be in the timing of ESum
  - ***At A20 timing of Jun 26 (at accepted recommendation for timing and runsize = 150,000)***
    - ***pMa=0.5123***
    - ***DBE= -34%***
    - ***MA=77,000 (at 150k E Su runsize)***
      - ***Recommendation accepted by Canada and US***
  - ***E Su (excl. Pitt)***
    - ***pMA=0.66***
    - ***DBE= -40%***
- MA for Summers
  - pMA for Summers may be in the range of 0.46 if they experience temperatures similar to E Summers (assumed a 20c 19-day average temperature)

- Upstream update
  - In the Nechako, there is an agreement with Alcan to release water to mitigate high temperatures, they are at full release since July 20<sup>th</sup> and will likely continue until Aug 30<sup>th</sup>.
    - Has caused some flooding in some areas.
    - Temperature in the Nechako has remained below 20c
    - McKinley Crk is at 23c, the lake is at very low levels and 24c
    - The Horsefly is 19c above the lake and 22c below, but any additional flows would leave no water in the lake later in the season.
  - Temperatures in creeks in the Interior are high and both juvenile and adult Chinook mortalities have been observed.

## FRP bilateral

- Fishery Recommendations:
  - US-None
    - Would like the PSC to keep track of the proportion of E Sum in the stock composition because it appears to be declining.
    - A ceremonial boat in A7 caught 800 SK and 500 PK in two sets, which is high for that area given the low test catches in A20.
  - CDN-None
  - The PSC would like some bi-lateral direction on the by-catch rules.
    - We have used 10-10 in the past, but not in a situation with no TAC on the weaker group ( $E_{Sum} < \frac{1}{2}$  of the run-size needed for any TAC)
    - if no rules by Monday, would need bilateral agreement for any fisheries to proceed, b/c staff would have nothing to evaluate plans against
    - The burden of proof for opening is currently high since there is no guarantee that there will be any TAC, even for Summers.
      - increase in test fishing catches can't be confirmed until ~1wk later when fish reach Mission.
      - The 90p Summer forecast (2 million) cannot be supported with the current information, but the in-season data is insufficient for a run-size update.
- Escapement Projection
  - The fish appear to be moving a bit slower than average, so it may be Wed. or Thurs. before they are observed at Mission
- *US: Have DNA samples been collected from the Reef Nets?*
  - *Yes, some was collected on Jul 29<sup>th</sup>*
- *US: Will more be collected?*
  - *Yes, occasional samples will be collected to compare with samples taken in A20.*
- The treatment of Harrison (in the Lates, vs. passively managed like Birkenhead) will soon become important.
- Next Meeting
  - Small group call Mon. Aug 3<sup>rd</sup>, 9 am, with a possible panel call on Mon.
  - Conference call Tue. Aug 4<sup>th</sup>, 11:30 am

## **Detailed Fishing Openings**

### **Open Times for the Mid & Upper Fraser River First Nations Fisheries**

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 2 week 31	Chinook	NNTC/NTA/LNE/ Nooten	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Chinook	NNTC/NTA/LNE/ Nooten	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	St'at'imc/ Xawil'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)
August 2 week 31	Chinook	St'at'imc/ Xawil'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 2 week 31	Sockeye/ Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	LTN	Bowron R - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Tlaz'en) Fish trap (Sak'uz) Beach Seine (Nadeh) Fence (Stellat'en) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 2 week 31	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

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August 2 week 31	Chinook	NNTC/ NTA/ LNIB/ Ncomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Chinook	NNTC/ NTA/ LNIB/ Ncomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	St'at'imw/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)
August 2 week 31	Chinook	St'at'imw/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 2 week 31	Chinook only (non-retention sockeye)	Ts'Kw'aylawxw	Ts'Kw'aylawxw traditional fishing area/	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Chinook only (non-retention sockeye)	Ti't'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Chinook only (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Sockeye/ Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	LTN	Bowron R - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Ti'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stella't'en) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 2 week 31	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

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August 2 week 31	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Chinook only (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Friday July 31 05:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	St'at'lmx/ Xad'ip	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)
August 2 week 31	Chinook	St'at'lmx/ Xad'ip	Fraser R - Texas Creek to Kelly Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 2 week 31	Chinook only (mortally wounded sockeye)	Ts'Kwaylaxw	Ts'Kwaylaxw traditional fishing area /	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Chinook only (mortally wounded sockeye)	Ti't'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Chinook only (mortally wounded sockeye)	Xad'ip	3 mile/ 6 mile/ 10 mile / Station Hill	5	Tuesday July 28 18:00	Sunday August 2 18:00	--- 8 inch mesh gill net (Chinook net) --- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	Sockeye/ Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River,	5	Sunday July 26 18:00	Friday July 31 18:00	Dip net
August 2 week 31	Chinook only (mortally wounded sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	2	Friday July 31 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	Chinook only (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Ti'az'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) (Gill net use prohibited)
August 2 week 31	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 2 week 31	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.



## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Jul 26	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	drift net
Jul 26	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	set net
Jul 26	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
Jul 26	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
Jul 26	DN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel
Jul 26	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel
Jul 26	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
Jul 26	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
Jul 26	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
Jul 26	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 26	19:00 Sunday Jul 26	Chinook	drift net
Jul 26	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 24	19:00 Sunday Jul 26	Sockeye	fish wheel
Jul 26	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Sunday Jul 26	21:00 Sunday Jul 26	Sockeye	set net, dip net
Jul 26	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Sunday Jul 26	21:00 Sunday Jul 26	Sockeye	set net, dip net
Aug 02	Kwkwitlen First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 25	06:00 Monday Jul 27	Chinook	drift net
Aug 02	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Monday Jul 27	21:00 Monday Jul 27	Sockeye	set net, dip net
Aug 02	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Monday Jul 27	21:00 Monday Jul 27	Sockeye	set net, dip net
Aug 02	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Tuesday Jul 28	21:00 Tuesday Jul 28	Sockeye	set net, dip net
Aug 02	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Tuesday Jul 28	21:00 Tuesday Jul 28	Sockeye	set net, dip net
Aug 02	Lower Fraser First Nations	Bristol Island to Sawmill Creek	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Sockeye	set net, dip net
Aug 02	Yale First Nation	Hope to Sawmill Creek	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Sockeye	set net, dip net
Aug 02	Musqueam First Nation	TFN / Musq. Crab Area	130 day s	00:01 Tuesday Mar 24	23:59 Friday Jul 31	Dungeness Crab, Graceful Rock Crab, Red Rock Crab	dip net, hand picking, trap, crab, net, ring
Aug 02	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
Aug 02	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
Aug 02	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
Aug 02	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 01	19:00 Saturday Aug 01	Chinook	drift net
Aug 02	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 01	21:00 Saturday Aug 01	Chinook	dip net

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 02	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Chinook	drift net
Aug 02	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Friday Jul 31	18:00 Friday Jul 31	Chinook	drift net
Aug 02	Seabird Island First Nation	Agassiz to Hope	8 hrs	12:00 Friday Jul 31	20:00 Friday Jul 31	Chinook	drift net
Aug 02	Skwah First Nation	Hope to Emory Creek	7 hrs	14:00 Friday Jul 31	21:00 Friday Jul 31	Chinook	dip net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report

### Recreational

See appendices

### First Nations

#### Lower Fraser

Fraser River Sockeye Weekly Management Plan July 26th – August 1, 2009

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First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Jun-28	1	1		4		5	10	0	0	0	19	21	21
Jul-05	4	9	0	137		3	18	0	0	0	158	171	192
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012
Jul-26	370	201	5	114	61	476	966		2639	340	4596	5172	11184
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8

## Marine

## 2009 Marine First Nations Fraser River Sockeye Catch Estimates

Total Catch Estimate : 3,755 sockeye

Allocation: 260,000

Update Date: Jul 29, 2009

Update time: 13:45

Date	A 12/13 Johnstone Strait				Area 20/WCVI			Str of Georgia/Area 29			Marine FN in-river catch			Total Marine Areas		
	Coord		Indep		Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total	Coord	Indep	Total
	Area 12	Area 13	Area 12	Area 13												
04-Jul			40				0			0				0	40	40
05-Jul							0			0				0	0	0
06-Jul			2				0			0				0	2	2
07-Jul							0			0				0	0	0
08-Jul							0			0				0	0	0
09-Jul							0			0				0	0	0
10-Jul							0			0				0	0	0
11-Jul							0			0				0	0	0
12-Jul							0			0				0	0	0
13-Jul							0			0				0	0	0
14-Jul			325			5	5			0				0	330	330
15-Jul							0			0				0	0	0
16-Jul							0			0				0	0	0
17-Jul			219				0			0				0	219	219
18-Jul			50	27			0			0				0	77	77
19-Jul				350			0			0				0	350	350
20-Jul			25	350			0			0				0	375	375
21-Jul			190				0			0				0	190	190
22-Jul				60			0			0				0	60	60
23-Jul			1140	50			0			0				0	1,190	1190
24-Jul			275	500			0			0				0	775	775
25-Jul				189			0			0				0	189	189
26-Jul							0			0				0	0	0
27-Jul							0			0				0	0	0
28-Jul							0			0				0	0	0
29-Jul							0			0				0	0	0
30-Jul							0			0				0	0	0
31-Jul							0			0				0	0	0
01-Aug							0			0				0	0	0
02-Aug							0			0				0	0	0

# Fraser River Sockeye and Pink

## Weekly Management Plan August 2 – Aug 8/09

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### For Period of:

Sun. August 2<sup>nd</sup> – Sat. August 8<sup>th</sup>, 2009

Week: 32

### Stock Aggregate Focus:

Early Summers; Summers; Birkenhead and True Lates

### Management objectives for the current week:

- Assess run timing for Early Summers
- Assess run size for Early Summers
- Assess run timing for Summers
- Assess run size for Summers
- Assess run size for Birkenhead
- Assess run size for True-Lates
- Monitor in-river migration conditions

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## Fraser Sockeye Management Summary

### FN0584-Salmon: Fraser River Sockeye Update - August 4 - Areas 11 to 29

The Fraser River Panel met August 4 to receive an update on the migration of the Fraser River sockeye runs and review the status of migration conditions in the Fraser River watershed.

Test fishing catches of sockeye from the marine approach areas indicated an increase in abundance through July 31/ Aug 1 but have decreased in recent days. Results are still far lower than pre-season expectations for this date. The diversion rate of Fraser sockeye through Johnstone Strait is currently estimated to be approximately 42%. Assessments of sockeye passage in the lower Fraser River continue in the 12-16,000 range per day. Abundance is tracking much lower than expected during pre-season planning.

Stock identification analyses confirm that Summer-run sockeye are now dominating in the marine assessment areas, however the proportion of four year old sockeye is still tracking below expectations. Recent DNA analyses indicate that the stock composition of Fraser sockeye in the marine approach areas is approximately 12-13% Early Summer-run, 63-69% Summer-run, and 14-28% Late-run sockeye. Due to the very low abundance of Fraser sockeye thus far this season, there have been no directed commercial fisheries for Fraser River sockeye. The estimated total non-commercial catch of Fraser sockeye this season is 36,000 fish, which have been harvested in test fisheries and First Nations FSC fisheries.

The run size estimate for Early Summer-run sockeye remains unchanged at 150,000 fish compared to the 90% probability level forecast 264,000 fish. The estimated 50% migration timing of Early Summer-run sockeye through Area 20 is July 26, which is the date that was expected during pre-season planning. The estimated escapement of Early Summer-run sockeye past Mission through August 3 is approximately 71,000 fish.

Similar to Early Stuart and Early Summer-run sockeye, the return of Summer-run sockeye through marine assessment areas has been much lower than expected to-date. Chilko and Quesnel sockeye were forecast to comprise almost 90% of the Summer-run sockeye abundance this season. DNA analyses suggest that they are contributing a lower proportion of the Summer-run return, which is another negative indicator regarding the overall abundance of Summer-run sockeye this season. A run size estimate for Summer-run sockeye should be available at the Friday Panel meeting. The estimated escapement of Summer-run sockeye past Mission through August 3 is approximately 91,000 fish.

The expected 50% migration timing of Birkenhead and True Late-run sockeye through Area 20 is August 11, and August 12, respectively. DNA analyses indicate higher than expected proportions of Harrison sockeye have migrated through the marine approach routes to-date. The estimated escapement of True Late-run sockeye past Mission through August 3 is approximately 34,000 fish, almost all of which are Harrison sockeye.

Migration conditions for sockeye entering the Fraser River continue to be adverse due to the sustained period of hot, dry weather. On August 3 the Fraser River discharge at Hope was approximately 4,100 cms, which is about average, while the water temperature at Qualark Creek was 21.0 °C, which is 3 °C higher than average for this date. High water temperatures can cause serious adverse effects on resident and migratory fish, including: increased energy expenditure; reduced swimming performance; increased susceptibility to disease; reduced reproductive success; and mortality at very high temperature levels. Fraser River water temperatures are forecast to decrease over the next few days with a frontal system passing through the area. Water temperatures exceeding 20.0 °C may cause high pre-spawning mortality of

Fraser River sockeye. Environmental conditions for salmon migration in the Fraser River will be monitored closely over the coming weeks.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time. First Nations sockeye fisheries have been curtailed and DFO is planning meetings with First Nations groups to review current information.

The next scheduled Panel meeting is Friday August 7.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### **FN0603-Salmon: Fraser River Sockeye Update - August 7 - South Coast Areas 11 to 29**

The Fraser River Panel met today August 7 to review the status of sockeye salmon abundance estimates, migration behavior and the migration conditions in the Fraser River. Based on pre-season forecasts, the maximum daily Fraser sockeye migration through the marine assessment areas was projected to be occurring now. However, test fishing catches over the past week indicate that the migration of sockeye through both the northern and southern approach routes to the Fraser River continues to track far below expectations. The return of four year old Fraser sockeye is still much lower than was expected this season. The current estimate of the diversion rate of Fraser sockeye through Johnstone Strait is projected to be approximately 50%. Fraser sockeye escapements past Mission have also been lower than expected over the past week. The estimated total non-commercial catch of Fraser sockeye this season is 37,000 fish, which have been harvested in test fisheries and First Nations FSC fisheries.

The run size estimate for Early Summer-run sockeye of 150,000 fish was unchanged at the meeting today. However, this estimate may change as they are exhibiting a protracted migration pattern through marine assessment areas. The estimated escapement of Early Summer-run sockeye past Mission through August 6 is approximately 95,000 fish.

Summer-run sockeye were expected to comprise more than 80% of the total adult return of Fraser River sockeye this season and provide most of the harvest opportunities. However, they are currently tracking substantially below forecast. Estimates of the run size of Summer-run sockeye are still highly uncertain because their peak migration timing through marine assessment areas is not yet known. Given the present assessment data and their expected marine timing, current estimates of Summer-run sockeye run size are considerably below their 90% probability level forecast of 2,858,000 fish and are less than those needed to provide harvestable surpluses. A more accurate assessment of their run size should be available next week. The estimated escapement of Summer-run sockeye past Mission through August 6 is approximately 173,000 fish.

The reason for the low return of Fraser sockeye to-date is presently unknown. The forecast of four year old sockeye returning this year assumed that juveniles produced in the brood year would experience historical average survival rates to the adult stage. However, the very low sockeye abundances being estimated from in-season assessments suggest that most Fraser sockeye stocks have experienced much poorer than average survival during their freshwater and/or marine life cycle stages. Further studies will be conducted to identify the likely cause(s) of the low returns of Fraser sockeye observed to-date this season.

It is still early in the marine migration of most Late-run sockeye stocks. However, Harrison sockeye exhibit earlier marine timing than other Late-run stocks, and assessments indicate that they are considerably more abundant than their 50% probability level forecast of 69,000 fish. Harrison sockeye have a different life

history than most other Fraser sockeye salmon, because they migrate to sea as fry, rather than rearing for two years as juveniles in a lake before migrating seaward. Assessments of Late-run sockeye abundance and marine timing will be provided over the next few weeks. DNA analyses indicate that some Late-run sockeye have already entered the Fraser River rather than delaying for three to six weeks in the Strait of Georgia before entering the Fraser River between mid-September and early October as was observed prior to 1995. The estimated escapement of True Late-run sockeye past Mission through August 6 is approximately 43,000 fish. The migration of pink salmon through the marine approach areas has been occurring since approximately mid July and increased substantially near the end of July. The expected peak migration of Fraser River pink salmon through Juan de Fuca Strait is late August. Assessments of their migratory timing, stock composition and abundance will be conducted over the next several weeks. Recent DNA analyses of pink salmon samples collected in Johnstone Strait and Juan de Fuca Strait test fisheries indicate that Fraser pinks currently comprise only a low proportion of the mixtures. Their contribution to marine area abundances of pink salmon is expected to increase over the next few weeks as they near their peak migration period. Any fisheries targeting Fraser River pink salmon will be constrained by conservation requirements for Late-run sockeye stocks. Pink salmon directed fisheries may occur later in the season, after the majority of Late-run sockeye have cleared marine waters.

Migration conditions for sockeye entering the Fraser River have been adverse for the past two weeks due to the sustained period of hot, dry weather and low discharge levels. On August 6 the Fraser River discharge at Hope was approximately 3,800 cms, which is about 6% lower than normal, while the water temperature at Qualark Creek was 19.6 0C, which is 1.9 0C higher than average for this date. Water temperatures in this range may cause increased pre-spawning mortality of Fraser River sockeye. Due to cooler weather in the Fraser River watershed, water temperatures are forecast to decrease to 19.2 0C by August 15. Environmental conditions for salmon migration in the Fraser River will be monitored closely over the coming weeks. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye and were unchanged at the meeting today.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time. First Nations sockeye fisheries have been curtailed and DFO is continuing planning meetings with First Nations groups to review current information.

The next scheduled Panel meeting is Tuesday August 11.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Aug 2	Mon Aug 3	Tues Aug 4	Wed Aug 5	Thurs Aug 6	Fri Aug 7	Sat Aug 8
First Nations – FSC Mid and Upper Fraser	Chinook and limited sockeye directed fisheries in terminal areas (dip nets)						
First Nations – FSC Lower Fraser	Chinook only (mortally wounded sockeye)						
First Nations – FSC Marine	Closed						
Recreational - Upper Fraser River	Closed						
Recreational - Lower Fraser River	Closed						



Recreational Marine Areas	Closed
Commercial Area D	Closed
Commercial Area E	Closed
Commercial Area B	Closed
Commercial Area H	Closed
U.S. Treaty Indian	Closed
U.S. Non-treaty Indian	Closed

## Fishery Notices Summary

### RECREATIONAL - Salmon

FN0584-Salmon: Fraser River Sockeye Update - August 4 - Areas 11 to 29

FN0597-RECREATIONAL - SALMON: Region 3 - Thompson River - Non-retention of Chinook Salmon

FN0603-Salmon: Fraser River Sockeye Update - August 7 - South Coast Areas 11 to 29

### COMMERCIAL – Salmon

FN0584-Salmon: Fraser River Sockeye Update - August 4 - Areas 11 to 29

FN0585-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3 & 6 Opening

FN0586-COMMERCIAL - Salmon: Gillnet - Area C – Update

FN0587-COMMERCIAL - Salmon: Seine - Area A - Areas 3 & 6 Opening (Amendment to FN0585 - Area 3 V.O.#)

FN0590-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3 & 6 - Closure August 5

FN0593-Commercial Salmon: Area C Gillnet - Areas 3, 4, & 6 Update

FN0594-COMMERCIAL - Salmon Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening

FN0595-Salmon Seine & Gill Net - Area A & C; 7 & 8 Chum Fishery

FN0596-Salmon Seine & Gill Net - Area A & C; 7 & 8 Chum Fishery (Amendment to include Salmon; Seine)

FN0599-Commercial Salmon Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening (Amendment to FN0594 with corrected V.O. numbers)

FN0603-Salmon: Fraser River Sockeye Update - August 7 - South Coast Areas 11 to 29

### ABORIGINAL – Salmon

FN0584-Salmon: Fraser River Sockeye Update - August 4 - Areas 11 to 29

FN0603-Salmon: Fraser River Sockeye Update - August 7 - South Coast Areas 11 to 29

# Management Information

## 2009 Fraser River Sockeye In-season Status

Status

### 2009 Fraser River Sockeye In-season Status

Week of: Aug. 2 - Aug. 8, 2009

Date: Aug. 7, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	150,000	8,677,000	334,000	573,000	9,819,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,830	4,350	10,930	470	3,030	20,610	700
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	247	470	702	17	248	1,684	0
Escapement-to-date @ Mission	81,280	94,920	172,690	6,270	42,710	397,870	0
Potential Gross Escapement	81,527	95,390	173,392	6,287	42,958	399,554	0
Adjusted Gross Esc. Target *	85,000	150,000	4,218,900	149,100	507,300	5,110,300	0
Accounted-to-date							
Catch + Escapement to Mission	83,357	99,740	184,322	6,757	45,988	420,164	700
Potential Remaining To Come							
Potential En-route	1,643	50,260	8,492,678	327,243	527,012	9,398,836	17,534,300
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	93	745	2,239	80	401	3,558	30
Test Fishing	1,680	3,520	8,490	380	2,590	16,660	670
Canadian Charter (Albion & Qualark TF)	54	84	202	6	35	381	0
Canadian Marine Recreational	0	0	0	0	0	0	0
U.S. TI Ceremonial	0	0	0	0	0	0	0
U.S. Recreational	0	0	0	0	0	0	0
Total	1,830	4,350	10,930	470	3,030	20,610	700
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	247	470	702	17	248	1,684	0
Catch Above Mission (incl. FSC & EO)	6,020	4,920	3,287	12	380	14,619	0
Total	6,267	5,390	3,989	29	628	16,303	0
Total In-river Catch	6,267	5,390	3,989	29	628	16,303	0
Total Catch in All Areas							
Total	8,097	9,740	14,919	499	3,658	36,913	700
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	26-Jul	5-Aug	11-Aug	11-Aug		25-Aug
Mission Timing	5-Jul	1-Aug	11-Aug		19-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Aug. 2 - Aug. 8, 2009

Date: Aug. 7, 2009

Area		Gear	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			0		
B Areas 11-16	PS			0		
D Areas 11-13	GN			0		
H Areas 12-16	Troll			0		
H Areas 18-29	Troll			0		
B Area 20	PS			0		
E Area 29	GN			0		
Canadian Selective				0		
FRA Economic Opportunity				0		
BC Interior FN Demo				0		
Canadian Total				0		
United States						
Alaska	Net&Troll			0		
Washington						
T.I. Areas 4B/5/6C	Net			0		
T.I. Areas 6/7/7A	Net			0		
N.I. Areas 7/7A	Net			0		
Washington Total				0		
U.S. Total				0		
Non-commercial Catch						
PSC Test				11,090		
Other Test				5,580		
Fraser River Aboriginal (FSC)				16,300		
Areas 12-124 Aboriginal				3,560		
Recreational				0		
Charter				382		
U.S. TI Ceremonial				0		
Non-comm. Total				36,910		
Catch and Escapement						
Catch Accounted-to-date				36,910		
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)				383,150		
Total Accounted-to-date				420,060		
Gross Escapement (includes Pitt R. sockeye)						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	81,300	200	81,500	96%
ESum	Early Summer	150,000	94,900	500	95,400	64%
Summ	Quesnel/Chilko	4,218,900	94,500	200	173,400	4%
	L.Stu./Stel.		78,200	500		
Late	Birkenhead	149,100	6,300	0	6,300	4%
	Adams/L.Shuswap	507,300	500	0	42,900	8%
	Weav/L.Misc.		800	0		
	Sub 1s		41,400	200		

## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

#### 2009 Pacific Salmon Commission Sockeye Test Fishing Summary

	29-Jul	30-Jul	31-Jul	1-Aug	2-Aug	3-Aug	4-Aug	5-Aug	6-Aug
Area 20 Gillnet	414	190	264	225	372	138	25	111	144
US Area 5 Gillnet	30	44							
Area 20 Purse Seine	240	293	355	364	548	458	231	76	208
29B Cottonwood Gillnet*	6	12	7	28	20	22	14	72	25
29D Whonnock Gillnet*	18	14	34	21	32	34	50	58	118
Area 12 Round Island GN	17	28	30	93	38	39	16	34	62
Area 12 Naka Cr. Gillnet	113	197							
Area 12 Purse Seine	1787	2063	1288	821	1013	346	430	153	114
Area 13 Purse Seine	271	81	3023	2664	667	848	810	802	1546
Area 7 Reef Net Obs.	710	449	DNF	486	1416	232	92	42	194
Hells Gate Daily Estimate	30	470	5380	5450	4810	1840	5030	1650	2630
Mission Escapement**	17900	15700	15400	12200	12700	16300	19400	28216	65378

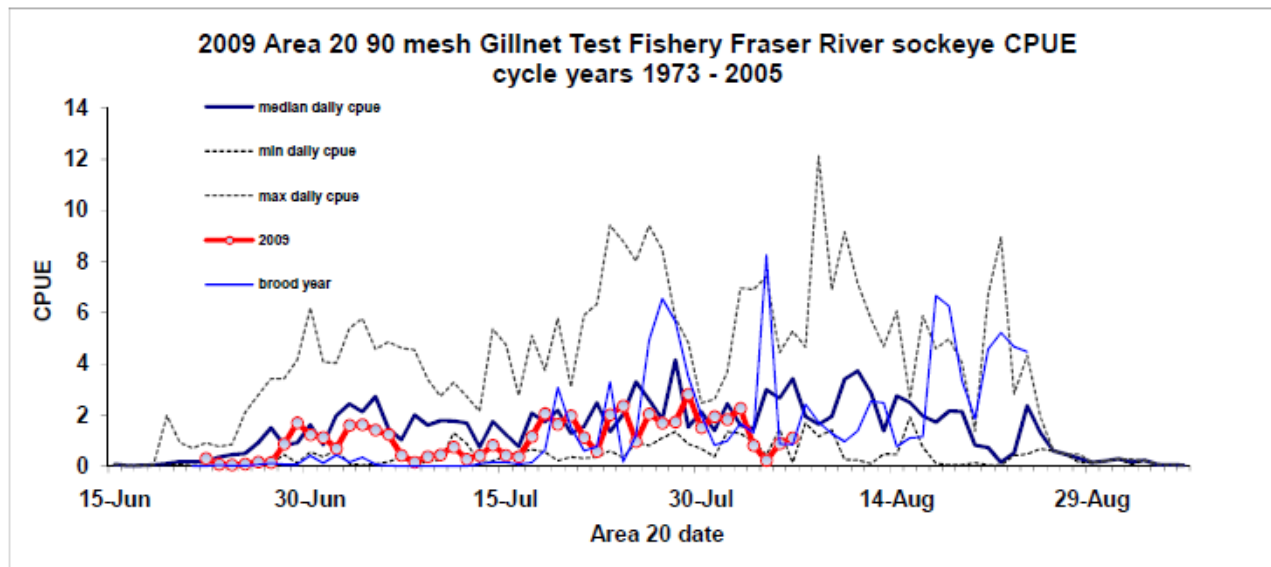
\* Variable mesh Gillnet

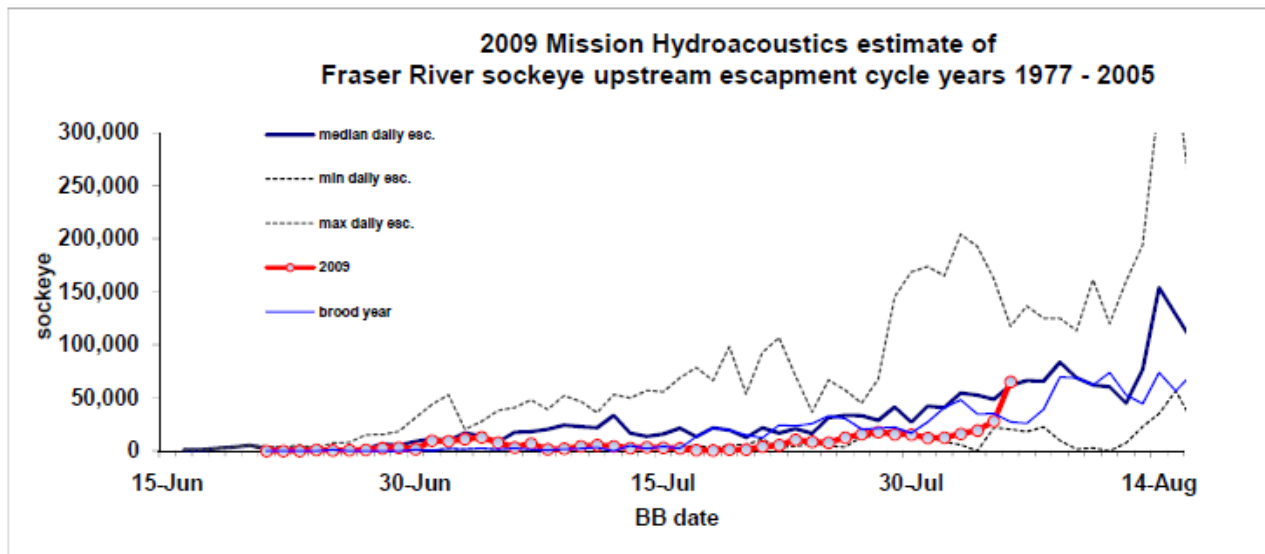
\*\* Preliminary, subject to revision.

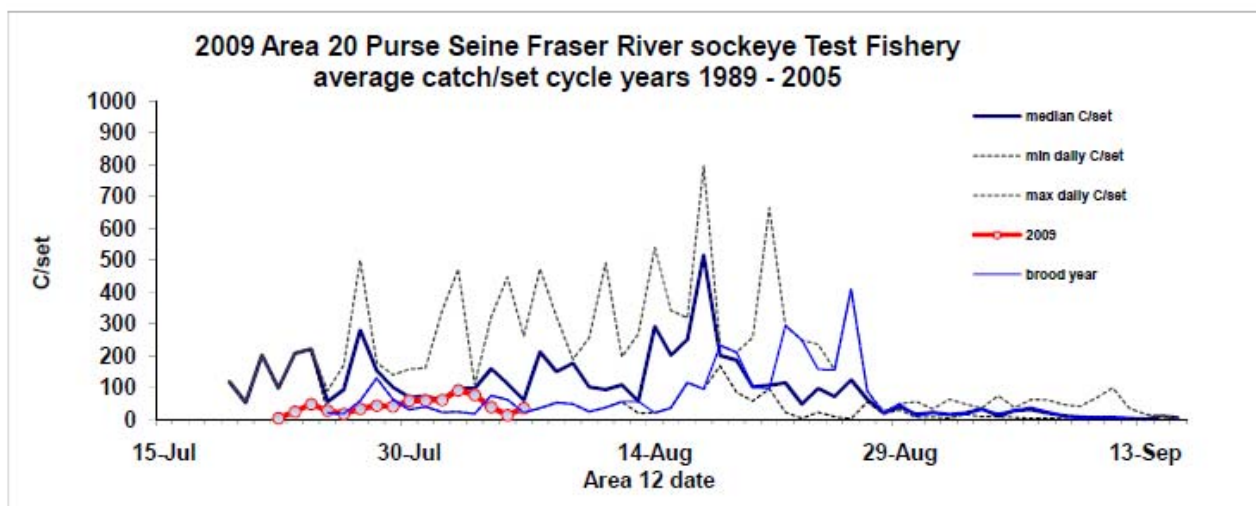
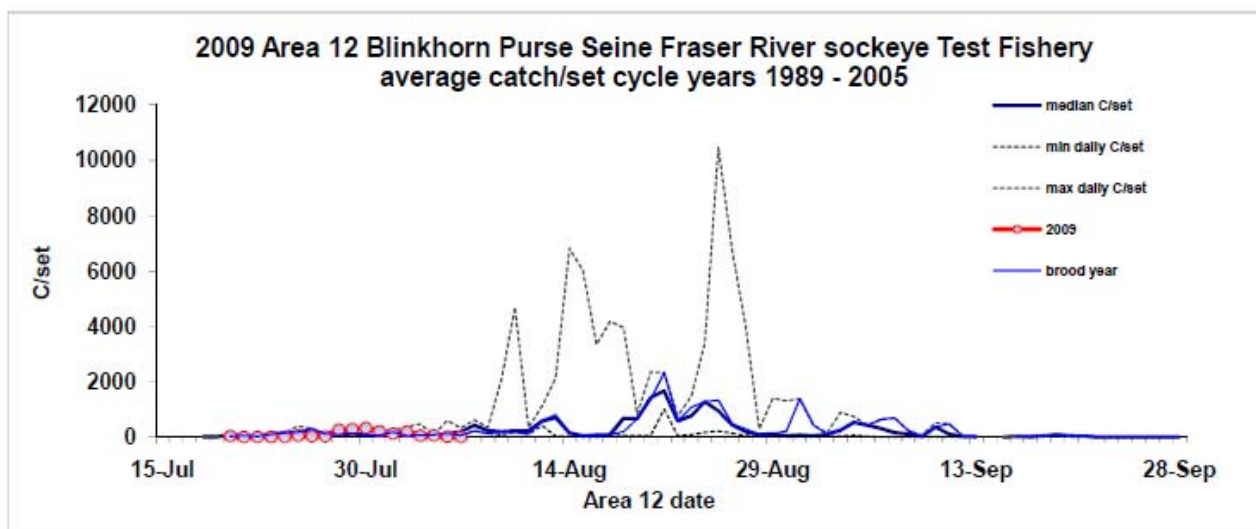
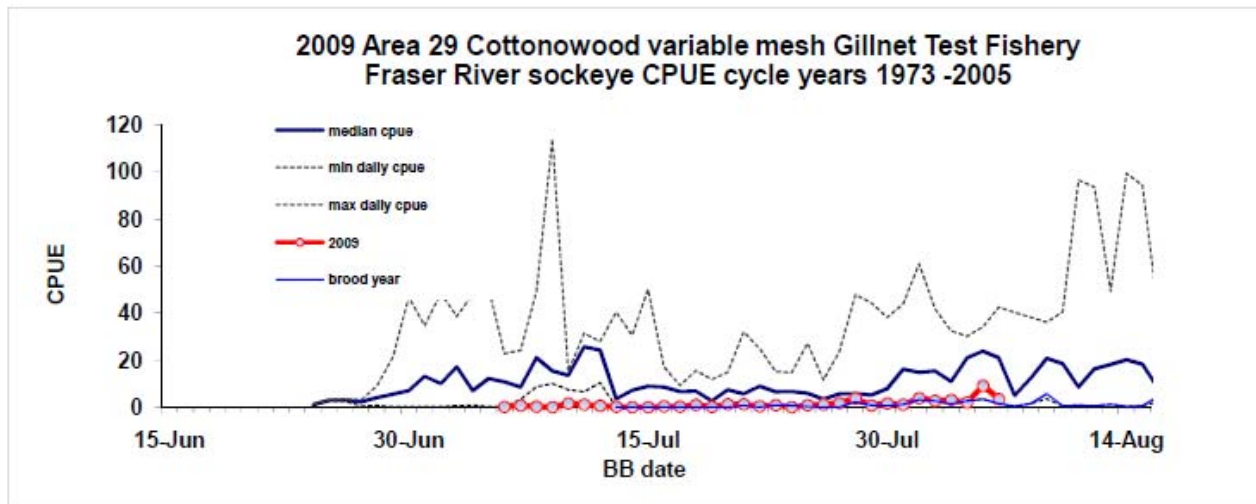
N.O. = No Observation.

\* mechanical problems 1 set only

DNF = did not fish









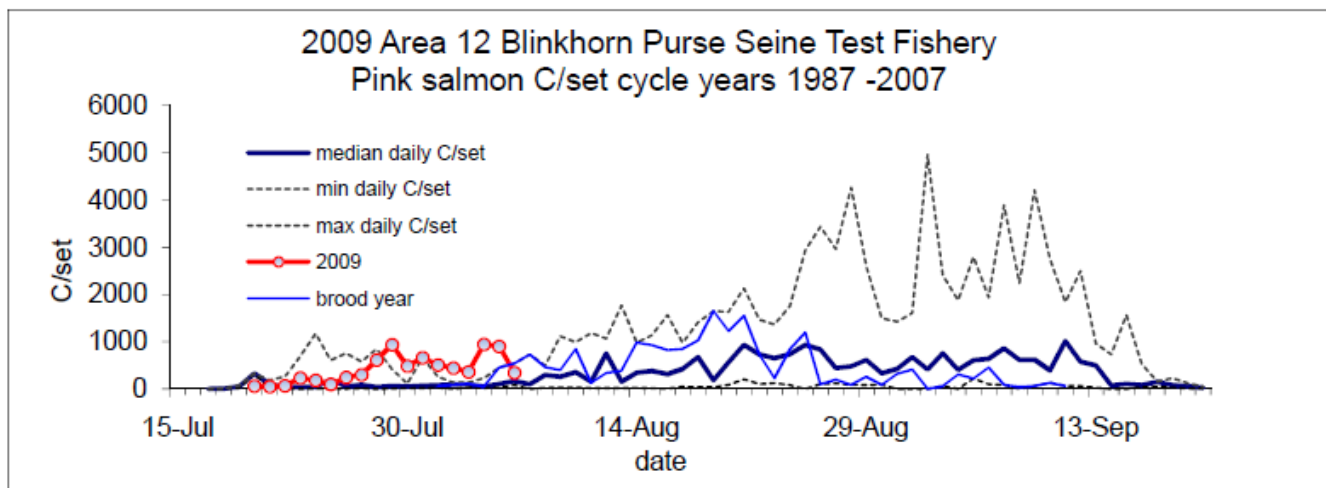
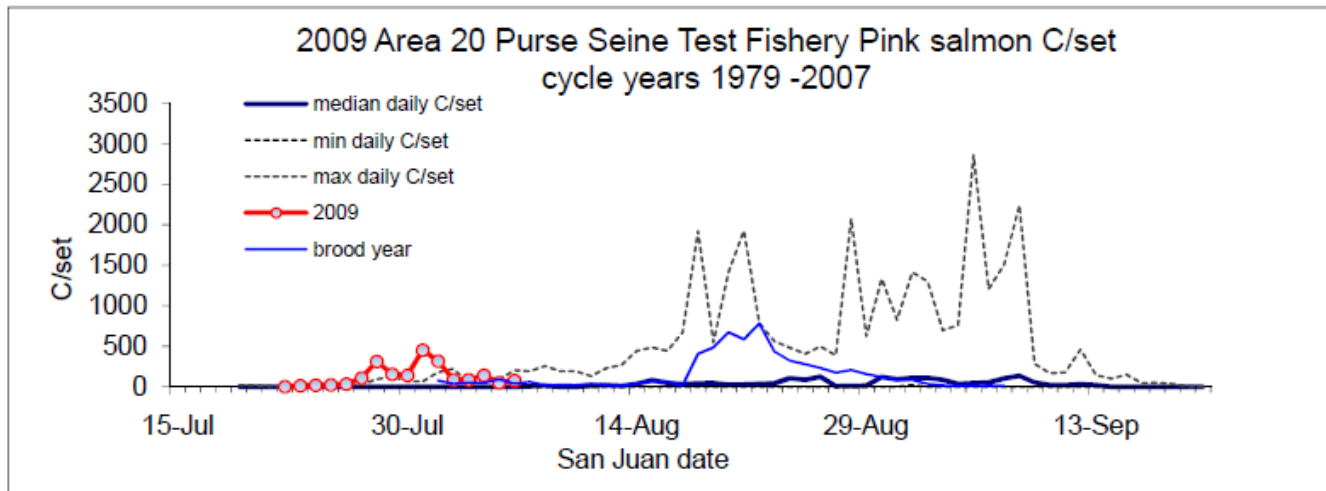
**Pacific Salmon Commission Pink Test Fishing Summary**

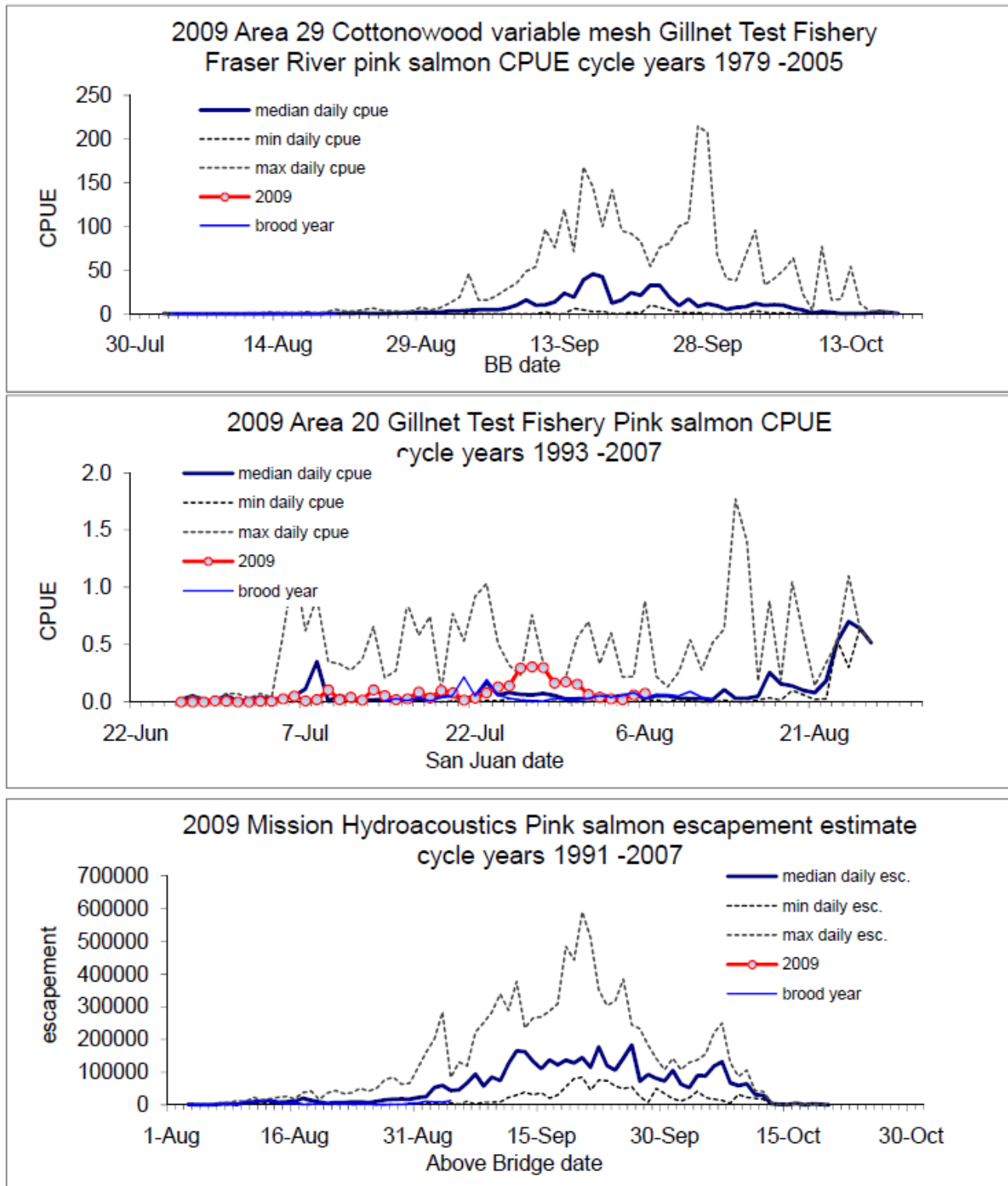
	Jul-31	Aug-01	Aug-02	Aug-03	Aug-04	Aug-05	Aug-06
Area 20 seine	2710	1912	526	524	851	314	456
Area 20 gillnet	42	15	13	8	4	15	18
Area 7 Reef net (observed)	DNF	276	629	117	38	29	87
Area 12 seine	3977	3050	2190	2170	5652	5415	2070
Area 13 seine	4459	5226	2518	1757	2716	2657	3853
Round Island Gillnet	16	45	30	18	11	11	65
Area 29B Cottonwood *	0	0	0	0	0	0	0
Area 29D Whonnock *	0	0	0	0	0	0	0
Mission Escapement **	0	0	0	0	0	0	0

\*\* preliminary - subject to revision.

\* Variable mesh gillnet.

DNF = did not fish







## Detailed Test Fishing Data

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	02/08/2009	1	5	5	1013	4	2190
	03/08/2009	1	6	6	346	4	2170
	04/08/2009	1	6	6	430	5	5652
	05/08/2009	1	6	6	153	47	5415
	06/08/2009	1	6	6	114	8	2070
	07/08/2009	1	6	6	443	61	3785
	08/08/2009	1	6	6	563	44	1745
Area 12 - Naka Creek Sockeye Gillnet	02/08/2009	0	0	0			
	03/08/2009	0	0	0			
	04/08/2009	0	0	0			
	05/08/2009	0	0	0			
	06/08/2009	0	0	0			
	07/08/2009	0	0	0			
	08/08/2009	0	0	0			
Area 12 - Round Island Sockeye Gillnet	02/08/2009	1	3	90.6	38	0	30
	03/08/2009	1	3	91.5	39	0	18
	04/08/2009	1	3	96.1	16	0	11
	05/08/2009	1	1	23.1	34	0	11
	06/08/2009	1	3	93.9	62	0	65
	07/08/2009	1	3	80.2	12	0	4
	08/08/2009	1	3	71.6	16	0	5
Area 13 - Area 13 Sockeye Seine	02/08/2009	1	5	5	667	21	2518
	03/08/2009	1	5	5	848	5	1757
	04/08/2009	1	6	6	810	16	2716
	05/08/2009	1	6	6	802	19	2657
	06/08/2009	1	6	6	1546	24	3853
	07/08/2009	1	6	6	378	5	955
	08/08/2009	1	4	4	78	1	125
Area 20 - San Juan Sockeye Gillnet	02/08/2009	2	4	319.05	372	0	13
	03/08/2009	2	4	331.05	138	0	8
	04/08/2009	2	4	222.75	25	0	4
	05/08/2009	2	4	246.6	111	0	15
	06/08/2009	2	4	251.7	144	0	19
	07/08/2009	2	4	219.15	132	0	9
	08/08/2009	2	4	219.75	8	0	1
Area 20 - San Juan Sockeye Seine	02/08/2009	1	6	6	548	11	526
	03/08/2009	1	6	6	458	13	524
	04/08/2009	1	6	6	231	7	851
	05/08/2009	1	6	6	76	2	314
	06/08/2009	1	6	6	208	6	456

2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon

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	07/08/2009	1	6	6	232	9	549
	08/08/2009	1	6	6	362	11	1013
Area 29 - Cottonwood Sockeye Gillnet							
	02/08/2009	1	2	7.14	20	0	0
	03/08/2009	1	2	7.02	22	0	0
	04/08/2009	1	2	6.96	14	0	0
	05/08/2009	1	2	7.8	72	0	0
	06/08/2009	1	2	7.26	25	0	0
	07/08/2009	1	2	7.44	38	1	1
	08/08/2009	1	2	7.56	37	0	0
Area 29 - Whonnock Sockeye Gillnet							
	02/08/2009	1	2	11.4625	32	0	0
	03/08/2009	1	2	11.8125	34	0	0
	04/08/2009	1	2	11.8125	50	0	0
	05/08/2009	1	2	12.95	58	0	0
	06/08/2009	1	2	13.65	118	0	0
	07/08/2009	1	2	12.6875	69	0	0
	08/08/2009	1	2	11.725	28	0	0
U.S. Area 5 - U.S. Juan de Fuca Sockeye Gillnet							
	02/08/2009	0	0	0			
	03/08/2009	0	0	0			
	04/08/2009	0	0	0			
	05/08/2009	0	0	0			
	06/08/2009	0	0	0			
	07/08/2009	0	0	0			
	08/08/2009	0	0	0			
U.S. Area 7 - Area 7 U.S. Reef Net Payfish							
	02/08/2009	0	0	0			
	03/08/2009	1	0	0			
	04/08/2009	0	0	0			
	05/08/2009	1	0	0			
	06/08/2009	1	0	0			
	07/08/2009	0	0	0			
	08/08/2009	0	0	0			
U.S. Area 7 - Area 7 U.S. Sockeye Reef Net							
	02/08/2009	0	26	1500	1416	0	629
	03/08/2009	0	24	1380	232	0	117
	04/08/2009	0	23	1350	92	0	38
	05/08/2009	0	22	1290	42	0	29
	06/08/2009	0	22	1260	194	0	87
	07/08/2009	0	0	0			
	08/08/2009	0	22	1260	10	0	0

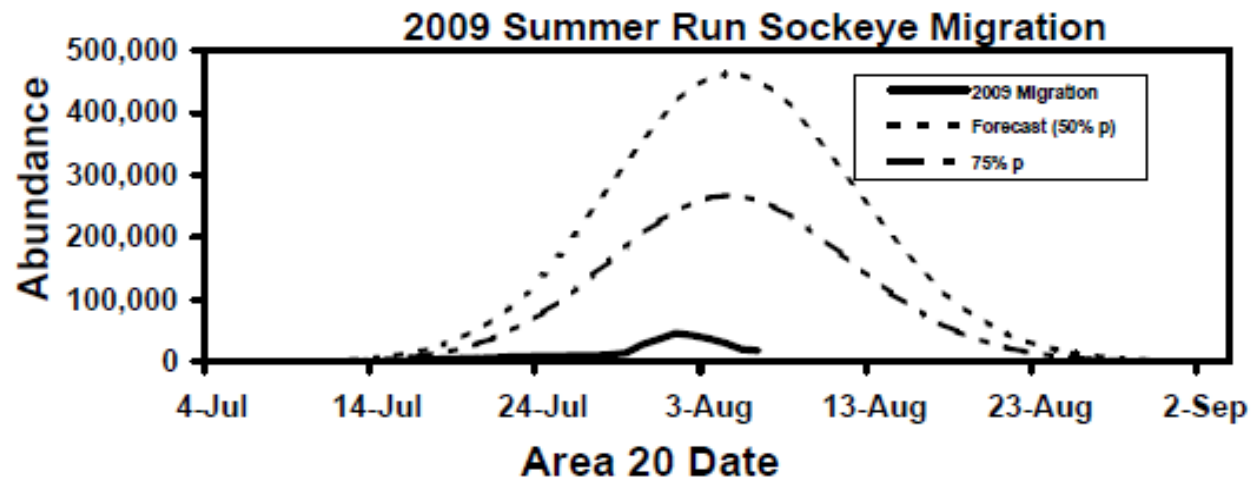
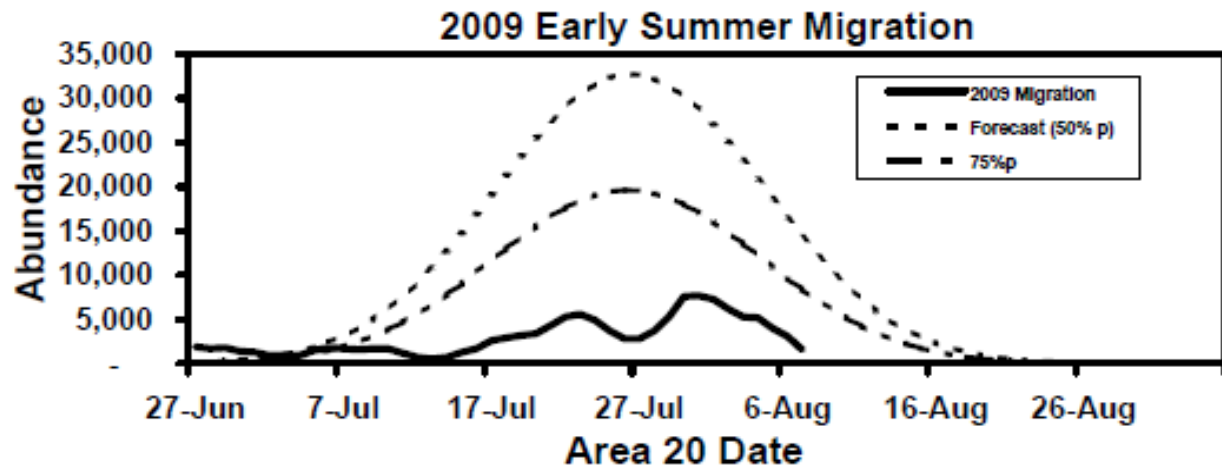
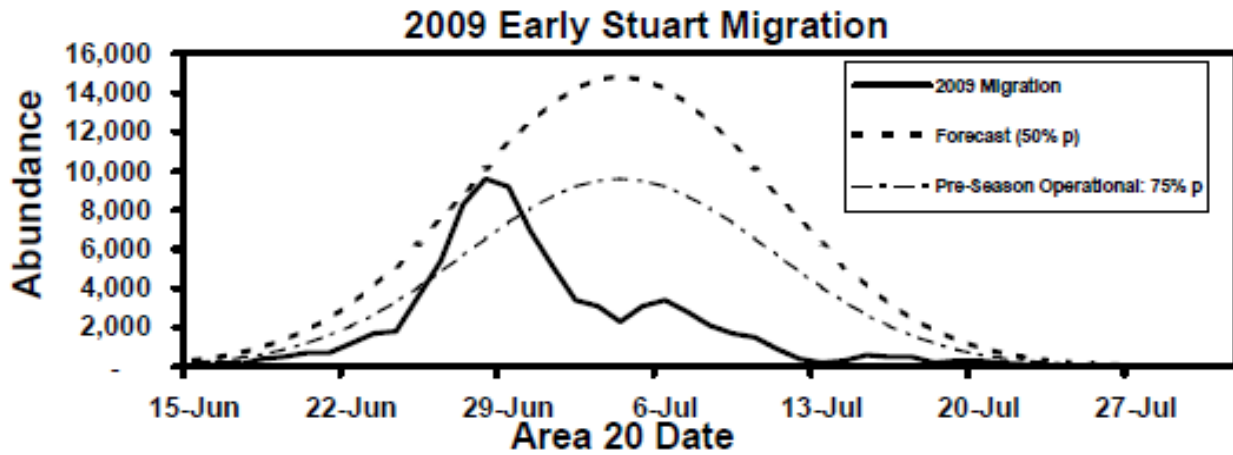
## DNA Analysis

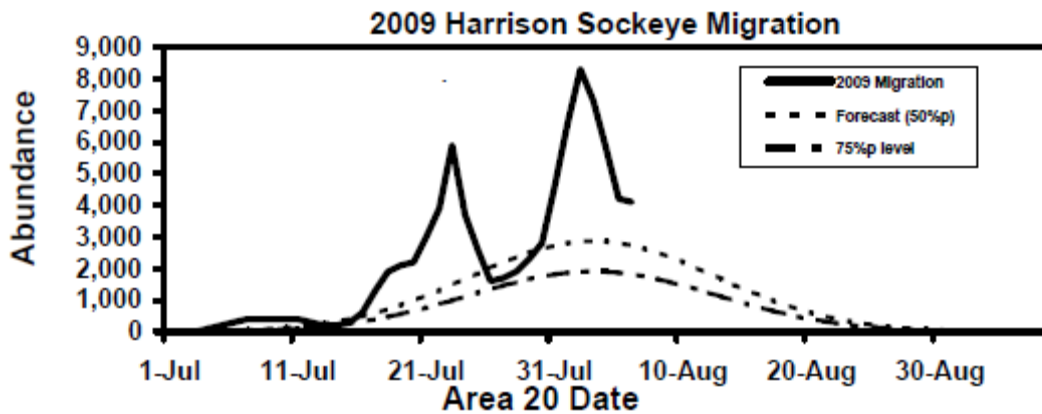
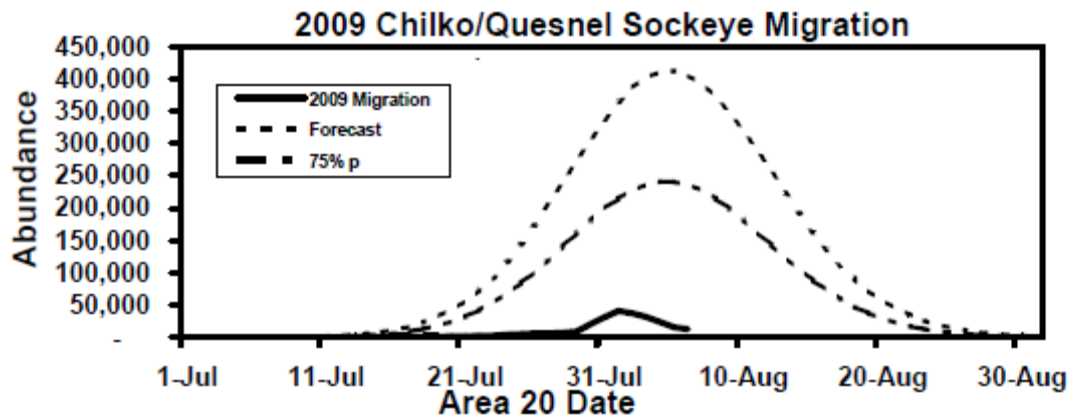
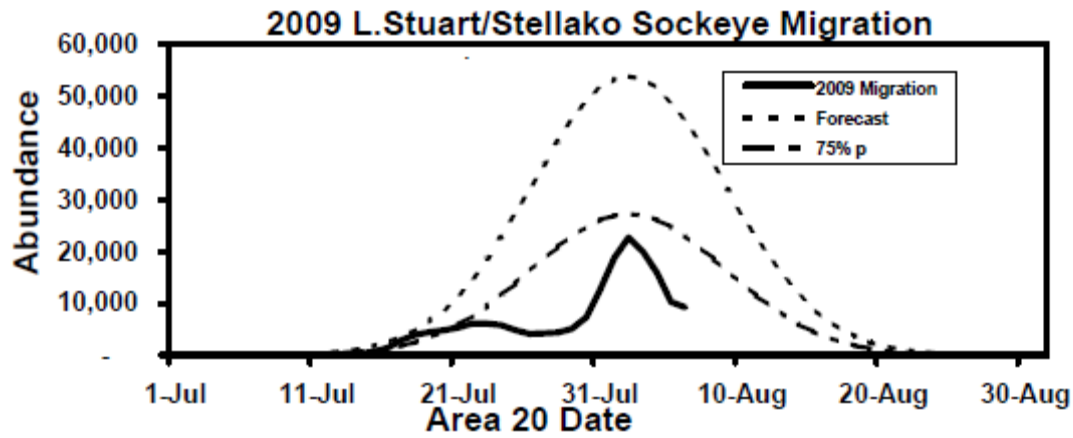
## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A12pstf	aug.3	100	99%	EM 11%;ET 8%;CQ 46%;LS 23%;Bi 2%;AW 7%;Ha 4%;
dna A20pstf	aug.5	73	99%	EM 4%;ET 1%;CQ 49%;LS 8%;AW 13%;Ha 25%;
dna A20gntf	aug4,5	100	97%	EM 5%;ET 8%;CQ 50%;LS 10%;Bi 10%;AW 8%;Ha 9%;
dna A20jack	jul28-aug3	47	94%	ES 0%;ET 3%;CQ 29%;LS 0%;AW 66%;Ha 2%;
dna A7mtf	aug1,2	100	99%	EM 4%;ET 4%;CQ 36%;LS 19%;Bi 6%;AW 4%;Ha 27%;
dna BBgntf	aug.5	50	99%	EM 12%;ET 3%;CQ 55%;LS 20%;AW 1%;Ha 9%;
dna ABgntf	aug.5	56	100%	EM 9%;ET 2%;CQ 68%;LS 15%;Bi 4%;Ha 2%;
<u>E.Stuart</u>	<u>Early Summer</u>		<u>Summer</u>	<u>Late</u>
ES=EStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## Migration Graphs





## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...							
Mission Date	Escapement Total	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
Mission Total:	399,600	81,300	9,100	5,000	78,600	67,100	27,700
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)							
Mission Date	Projected Escapement	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel
7-Aug	43,900	2,700	1,200	1,500	20,300	15,900	2,300
8-Aug	51,900	2,900	1,200	2,000	24,400	18,300	3,100
9-Aug	49,500	4,100	900	1,800	23,000	16,500	3,200
10-Aug	25,300	1,600	300	800	12,300	8,500	1,800
11-Aug	29,700	3,200	600	2,100	12,200	8,500	3,100
12-Aug	15,500	1,400	300	1,300	6,000	4,200	2,300
Projected Gross Escapement <sup>1</sup>							
7-Aug							
12-Aug	215,800	15,900	4,500	9,500	98,200	71,900	15,800
Projected Total	615,400	97,200	13,600	14,500	176,800	139,000	43,500
Early Summers 125,300					Summer Runs 359,300		
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted.							
Analysis fixed at this time: 8/7/2009 9:10							

## Escapement Summary

### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009 COTTONWOOD T.F.			AB T.F.			MISSION		BEST Est.	Hells Gate	
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)	CUMM	DAILY EST.	
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200	TOTAL	(AB+4)	129,130
25-Jul	6	0.88	26-Jul vm	9	0.83	7,900	8,900	154,400	30-Jul	470
26-Jul	8	1.18	27-Jul vm	1	0.10	12,500	13,900	168,300	31-Jul	5,380
27-Jul	13	1.85	28-Jul vm	3	0.30	15,900	17,400	185,700	01-Aug	5,460
28-Jul	27	3.78	29-Jul vm	18	1.63	17,900	19,100	204,800	02-Aug	4,810
29-Jul	6	0.86	30-Jul vm	14	1.33	15,700	16,700	221,500	03-Aug	1,840
30-Jul	12	1.71	31-Jul vm	34	2.94	15,400	16,200	237,700	04-Aug	5,030
31-Jul	7	1.12	01-Aug vm	21	1.89	12,200	12,800	250,500	05-Aug	1,660
01-Aug	28	3.96	02-Aug vm	32	2.79	12,700	13,200	263,700	06-Aug	2,630
02-Aug	20	2.78	03-Aug vm	34	2.88	16,300	17,000	280,700	07-Aug	1,240
03-Aug	22	3.15	04-Aug vm	50	4.24	19,400	20,200	300,900	08-Aug	2,040
04-Aug	14	2.00	05-Aug vm	58	4.47	28,200	29,300	330,200	09-Aug	7,580
05-Aug	72	9.23	06-Aug vm	118	8.85	65,378	67,600	397,800	10-Aug	4,880
06-Aug	25	3.46	07-Aug vm	69	5.33	55,960	57,700	455,500	11-Aug	1,700
07-Aug	38	5.11	08-Aug vm	28	2.31	62,499	64,200	519,700	12-Aug	1,420
08-Aug	37	4.89	09-Aug vm	23	2.10	42,912	44,000	563,700	13-Aug	4,020

## Pinks

### 2009 Fraser River Pink Salmon Escapement Summary

Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official. Estimates are preliminary and subject to revision post-season.

COTTONWOOD T.F.			VMN W.C.DRIFT			DB Tagging C/set	MISSION		CUMM.	HG (BB+7)	DAILY EST.
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.			
DATE	1,034	109	(BB+2)	2,430	185.42		4,290,882	4,290,882	TOTAL		884,100
02-Aug			04-Aug				0	0	0	09-Aug	0
03-Aug			05-Aug				0	0	0	10-Aug	0
04-Aug			06-Aug	0	0.00		0	0	0	11-Aug	0
05-Aug			07-Aug	0	0.00		1,000	1,000	1,000	12-Aug	0
06-Aug	0	0.00	08-Aug	0	0.00		2,000	2,000	3,000	13-Aug	0
07-Aug	1	0.14	09-Aug	0	0.00		5,000	5,000	8,000	14-Aug	10
08-Aug	0	0.00	10-Aug	1	0.09		7,000	7,000	15,000	15-Aug	10

## Mission Escapement by Stock

Totals:	1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,459	72,995	0
Mission Escapement				Mission Escapement															
Date	Mission		Total	ESum						Summ						Birk	Late		
	Escape	Pitt		ESum	Chilwk	EMisc	Se/Sc/UAAd	Pitt	NThom	Chilko	SEChilko	Hfly/Mckir/Mitch/Trib	LStu	Stel			AdLS/Pori/Wear/Cul	Misc	
02-Aug-09	12,700	550	13,250	0	282	709	499	550	399	4,150	0	977	158	3,267	372	433	0	3	0
03-Aug-09	16,300	686	16,986	0	362	909	641	686	512	5,327	0	1,255	203	4,193	478	556	0	4	0
04-Aug-09	19,400	798	20,198	1	229	2,651	671	798	757	5,104	0	2,360	495	3,808	202	1,172	32	0	0
05-Aug-09	28,200	1,061	29,261	1	333	3,854	976	1,061	1,100	7,419	0	3,430	720	5,535	294	1,703	47	0	0
06-Aug-09	65,378	2,231	67,609	0	0	6,202	1,301	2,231	384	30,025	0	7,079	3,710	11,418	0	1,432	350	0	0
07-Aug-09	55,960	1,769	57,729	367	0	1,440	1,447	1,769	2,580	19,679	0	5,671	2,729	9,059	1,816	1,436	1,354	479	0
08-Aug-09	62,499	1,731	64,230	410	0	1,608	1,616	1,731	2,881	21,979	0	6,334	3,048	10,118	2,028	1,604	1,513	534	0

## Environmental Conditions

### Fraser Conditions & MA Report for August 7, 2009

#### Fraser River Discharge at Hope

The discharge was about 3800 m<sup>3</sup>/s yesterday and is forecasted to decline to 3400 m<sup>3</sup>/s by August 15, closely following historical mean levels.

	date	m <sup>3</sup> /s
Last obs.	6-Aug	3,780
Forecast	15-Aug	3,380

#### Fraser River Temperature at Qualark

Yesterday's temperature was 19.6°C. Cooler weather in the Fraser watershed has resulted in cooler river temperatures and a forecast of 19.2°C by Aug. 15. While these temperatures would continue to exceed historical means, they would be 1-2°C cooler than previous record highs for the time period.

	date	C
Last obs.	6-Aug	19.6
Forecast	15-Aug	19.2

#### MA Estimate for Early Summers

With an expected timing of July 26 in Area 20 and mostly observed discharge and temperatures values, the 19-day means are 4088 m<sup>3</sup>/s and 19.6°C and the MA estimates are: pMA=0.52, DBE=-34% and MA=78,600 fish. These values are slightly lower than Tuesday's estimates (0.54) and very slightly higher than the currently adopted estimate of 0.51. (Today's estimates for the non-Pitt portion of the Early Summer group are: pMA=0.67 and DBE=-40%). **No recommendations at this time.**

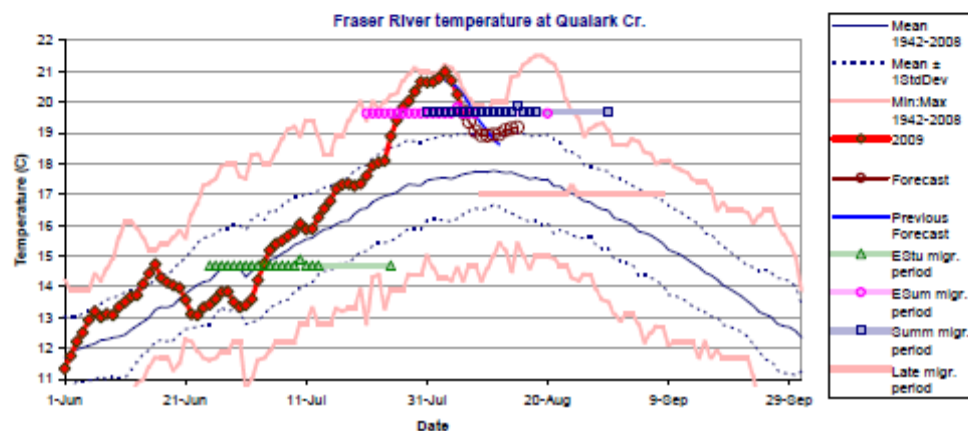
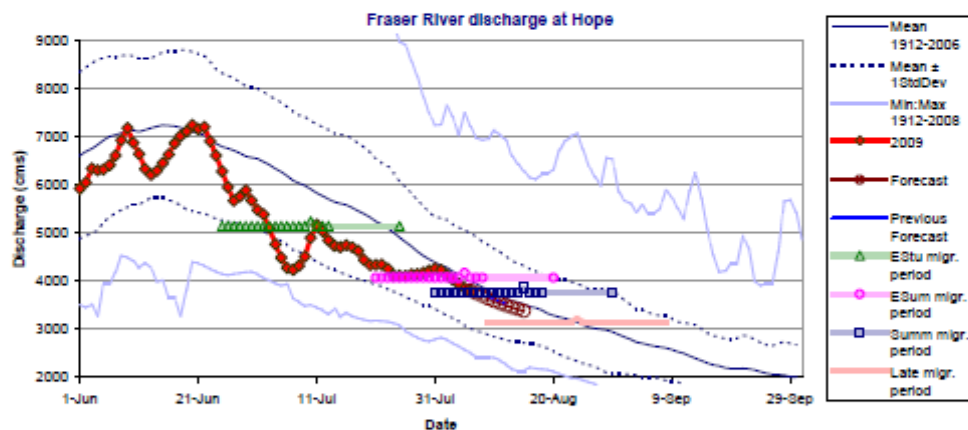
HG Date	5-Aug	pMA	0.5238
#days	19	%DBE	-34%
Disch.	4,088	MA	78,600
Temp.	19.6		

#### MA Estimate for Summers

**Hypothetical Scenario:** If we assume the first 16 days of observed (7 days) and forecasted (9 days) data represent a rough projection of the 19-day means, the MA estimates will likely be in the pMA=0.40-0.50 range (DBE=-30 to -32%) when we provide the 1st in-season estimate next Tuesday (assuming Aug. 5 Area 20 timing). **No recommendations at this time.**

HG Date	15-Aug	pMA	0.46
#days	16	%DBE	-32%
Disch.	3,763	MA	1,596,600
Temp.	19.7		

**Caveat:** Using an incomplete set of input data for the model adds substantial uncertainty to these estimates.





## Fishery Recommendations

### *Fraser River Panel Meetings: Summaries and Discussions*

## Fraser River Panel (call) Summary Notes-Aug 4

### FRP Bilateral

- Preamble
  - Lots of uncertainty especially with expansion lines; don't know for certain if the current ones are reasonable.
  - Main sources of uncertainty:
    - expansion lines - First really big catches that were observed in test-fisheries should hit the river tomorrow if they are travelling at a regular speed, if they are travelling slower they should reach the river by Thurs/Fri, and we can confirm expansion lines.
    - timing – especially for Summers. Need to see a few more days of marine TF.
  - MA - The management adjustment for the summer runs will be largely dependent on run timing and in-river water temperatures. Recent observed days T have been greater than forecast, and we don't have enough forecasted days of T & D to put into the MA model.
  - Overall don't know if poor run size or late timing, will have to wait and see, might just be a late 50% date.
  - Latest estimate of diversion rate: 42%.
  - Water temperatures off Tofino are reported to be warming, a ribbon of warm water along the shelf of cool water, warm water further offshore and pushing as far north as QCI; seeing a huge number of Humboldt squid off Tofino.
- Sockeye Test Fishing
  - A20 GN
    - SK catch starting Aug 1: 225, 372, 138, 127 (3 sets so far today)
    - Notes: peak in test-fishing catches appeared to be around Aug 2<sup>nd</sup>; there was a drop in catches yesterday. Migration in A20 ahead of the migration in A12/13, could be that the fish are hitting WCVI, around mid-island and going north into JST.
  - A5 GN
    - Notes: No fishing since July 31
  - A12 GN Round Island
    - SK catch starting Aug 1: 93, 38, 39
  - A12 PS
    - SK catch Aug 1: 821, 1013, 346, 194 (1 set so far today)
    - Notes: peak in test-fishing catches so far around July 30/31; was followed 1 day later in Area 13.
  - A13 PS
    - SK catch starting Aug 1: 2664, 667, 848, 116 (3 sets so far today)
  - A7 Reefnet
    - SK observed since Aug 1: 486, 1416, 232
    - Notes: saw some big numbers on the 2<sup>nd</sup> of August, big observations was primarily in Open Bay, but observations dropped again on the 3<sup>rd</sup>.

- Cottonwood
  - SK catch starting Aug 1: 28, 20, 22
- Whonnock
  - SK catch starting Aug 1: 21, 32, 34
- Pink Test Fishing
  - Should be seeing samples this week sometime, there will be a pink test-fishing report on Friday. Timing and diversion forecast expected sometime later in Aug. Should peak sometime around the 20-25<sup>th</sup> of August.
- Hells Gate
  - Since July 31: 5380, 5450, 4810, 1840
  - Notes: good flow, decent counting conditions. Note though that low flow of fish at both Mission and Qualark.
- Biosampling
  - Age Composition
    - A20 PS: Aug 2, n= 100
      - 59% 4<sub>2</sub>
      - 18% 5<sub>2</sub>
      - 22% other (sub 1, 4<sub>3</sub> and 5<sub>3</sub>)
      - Notes: Haven't seen a pick up in 4<sub>2</sub> age composition as a result of the high composition of Harrison sub-ones in samples
    - A12PS: Jul 31<sup>st</sup>, n=100
      - 78% 4<sub>2</sub>
      - 19% 5<sub>2</sub>
      - 4% Sub<sub>1</sub>
      - note: these are the highest 4yr old proportions we've seen so far this year
  - DNA
    - A20 GN: Aug 1, n=100
      - 97% Fr
      - 5% EM
      - 8% ET
      - 50% C/Q
      - 11% LS/S
      - 5% Bi
      - 4% AW
      - 17% Ha
    - A20 PS: Aug 2, n=100
      - 98% Fr
      - 4% EM
      - 5% ET
      - 49% C/Q
      - 14% LS/S
      - 0% Bi
      - 10% AW
      - 18% Ha
    - A12 PS: Jul 31, n=100
      - 98% Fr

- 12% EM
  - 5% ET
  - 47% C/Q
  - 22% LS/S
  - 4% Bi
  - 6% AW
  - 4% Ha
- Reefnet: Jul 29, n=100
  - 100% Fr
  - 5% EM
  - 13% ET
  - 29% C/Q
  - 31% LS/S
  - 2% Bi
  - 2% AW
  - 18% Ha
- BB: Jul 30-Aug 1, n=66
  - 16% EM
  - 4% ET
  - 47% C/Q
  - 23% LS/S
  - 2% Bi
  - 0% AW
  - 8% Ha
- AB: Jul 30-Aug 2, n=66
  - 4% EM
  - 10% ET
  - 33% C/Q
  - 33% LS/S
  - 5% Bi
  - 0% AW
  - 8% Ha
- Notes: In-river SID samples are consistent with marine SID samples
- Assessments
  - 280k past Mission
    - EStu 81.5k C & E
    - ESum 74.9k C & E
    - ET 34.1k C & E
    - CQ 56.9k C & E
    - Ha 33.2k C & E
  - Early Summer Aggregate
    - 150k run size by July 26
    - 75k C & E
    - 75k projected
    - Cum. Normal (Bayes) – w. exp. line uncertainty
      - 174k, A20 date: Aug 2 80% PI (107k-350k) – date based on below 2 sub-groups

- E Misc-92k, A20 date: Jul 24
  - Sc/Se/NT-82k, A20 date: Aug 11
- Cum. Passage-145k, A20 date: Jul 26
- Cum. Norm.(Bayes)
  - 111k total ESum,
  - E Misc. 79k
- Cum Norm (deterministic)
  - Emisc 92k 22-Jul
- Note: The measured GN expansion line is 13,800 based on what's arrived at Mission, but are currently using 17,000 for projections.
- Note: PSn expansion lines – approx 60-70% of projections are actually showing up at Mission
- Summers
  - For aggregate summer runs, models are still very sensitive to run timing. Depending on the timing (over 6 day period) ranges from 475k-1.6 million.
  - Split out LStu/Stel from C/Q. When do that LS/S not tracking as far behind, closer to 75P, assuming peak date is correct and projections are close to expected.
  - C/Q looking at later timing, so far very flat (low) migration. Need TF to increase soon for this group.
  - Still too early.
  - Cum. Passage
    - 882k, A20 date: Aug 5
    - 476k, A20 date: Aug 2 (-3d)
    - 1.6 million, A20 date: Aug 8 (+3d)
  - Cum. Norm (deterministic)
    - LS/St 800k, A20 date: Aug 9
  - Cum Norm (Bayes)
    - have changed the prior to have a median of the 90p forecast
      - for LSt/Stel
        - ~220k in catch + esc + proj (to 31-Jul)
        - if double (i.e. if 31-Jul is peak) then 400k LSt/Stl
        - 90p forecast = 277k
        - 540k, A20 date: Aug 5 80% PI (380k-760k)
      - for Ch/Q
        - have only just started to see some Ch/Q → hopefully, this means they're late
        - 700k 8-Aug 80% PI (440k-1.14M)
    - 540k LSt/St + 700k Ch/Q = 1.2M Summer est.
      - this is exactly what we need to start to generate some TAC
  - are 171k behind to get to a fishable run size for ESum
  - are 168k behind to get to a fishable run size for Sum
  - will be dependent on MA & expansion line info
- Harrison
  - C+E+projected en route=80k
  - Models currently predicting: anywhere from 125k-190k, depending on timing. Regardless, way bigger run than was forecast.
  - C.Normal (Bayes): 190k, A20 date: Aug 5 80% PI (150k-250k)

- if 31-Jul was the peak, then
    - $62k \times 2 = 124k$
  - no change for ESum recommended run size (currently 150k)
  - staff will have a minimum Summer run size for FRP for Friday
- Environmental Conditions
  - Discharge at Hope
    - Tracking close to average; 4065 cms Aug 3
    - forecast: 3542 cms by Aug 12
  - Temp at Qualark
    - 21.0 C Aug 3
    - forecast cooler air and river temperatures: 18.6 C by Aug 12
- MA
  - MA for ESum.
    - $pMA=.54$
    - $\%DBE=-35\%$
    - $MA=89.7k$
    - Excluding Pitt:  $pMA= .69$
  - MA for Summers (HYPOTHETICAL)
  - Using forecasted numbers and only 13 of needed 19 days, and assuming pre-season timing of 5-Aug
    - $pMA=.67$
    - $\%DBE=-40\%$
    - $MA=large$
  - Assuming the conditions on days 14 to 19 = conditions on day 13
    - $pMA=.37$
    - $DBE=-27\%$
    - Will have full 19 days ~next Tuesday, will have a much better handle on the pMA then.
- Fishery Recommendations:
  - CDN-None
    - FN FSC Chinook directed fisheries are planned at  $\frac{1}{2}$  of expected and further reductions may occur. Managers have discussions planned with groups to discuss further.
  - US- None
    - Anxious to get in the water. Would like to know if there is a chance there will be a meeting before Friday to re-assess situation.
- Other business
  - Staff need some direction on policy/rules with respect to fishing summers when very low E.Sum (no harvestable surplus).
  - Upstream escapements: should be on-line soon. No indication of PSM yet. Total live count ~13k (unexpanded) with fence counts on the Forfar and Gluske fences 2,655 and 1,320, respectively. No update this week for the Dust fence; counts as of July 31 is 776 sockeye. Environmental conditions are near normal and crews have observed the start of the peak of spawn for most creeks. All sockeye appear in good condition.
  - PSC proposes putting 2 Area G trollers out off WCVI as test-boats for 3 days to get an idea if fish are out there. Max of 100 fish/day (could sample without morts if we really need to). Area G opening on Aug 8<sup>th</sup>, would be ideal to get 2 boats out there ahead of the

opening. Need to do some paperwork with DFO and get approval/Sci Licence. Would give some qualitative info, nothing quantitative.

- Nass Pink: Near or above average, timing is still uncertain.
- Skeena Pink: decent run size, but still a bit early. Relatively small, 3.5-4 lb average.
- No pinks yet in test-fishery in river. Might start seeing pinks soon in Didson, in Whonnock test-fishery, Qualark and fish wheel.
- Sockeye still averaging around 6 lbs (5.8-5.9 from GN, and 5.7-5.8 from PS)
- Next Meeting
  - In-person on Friday in Richmond.
  - FRPTC call Thurs at 1:00 pm

## Fraser River Panel (in-person)

### Summary Notes-August 7

#### FRP Bi-Lateral

- Test Fishing
  - Notes: There's been a sharp drop-off in both approaches, so run-size estimates have declined, but Mission counted about 65,000 fish moving upstream yesterday (not as many as expected, given approach TF catches a few days ago) and there was a small bump in the A13 PS catch yesterday (~1,500 SK, A12 PS caught only 114 SK).
  - Aug 4:
    - A20 PS: 231 SK, 851 PK
    - A13 PS: 810 SK, 2716 PK
    - A12 PS: 430 SK, 5652 PK
    - A20 GN: 25 SK, 4 PK
    - Round Island GN: 16 SK, 11 PK
  - Aug 5:
    - A20 PS: 76 SK, 314 PK
    - A13 PS: 802 SK, 2657 PK
    - A12 PS: 153 SK, 5415 PK
    - A20 GN: 111 SK, 11 PK
    - Round Island GN: 34 SK, 31 PK
  - Aug 6:
    - A20 PS: 208 SK, 456 PK
    - A13 PS: 1546 SK, 3853 PK
    - A12 PS: 114 SK, 2070 PK
    - A20 GN: 144 SK, 18 PK
    - Round Island GN: 62 SK, 65 PK
  - Aug 7:
    - A13 PS: SK catch today in 2 sets: 58 SK, 163 PK
    - A20 GN: SK catch today in 1 set: 10 SK and 25 squid (about 25 lbs. each, going after the sockeye on deck)
  - Note: As SK catches have declined in A20, so have the PK catches. In A12, the PK catches are not dropping off. Maybe something is causing the fish to slow down.
- Biosampling
  - A12 PS date: Aug 3 n=100
    - Age Comp
      - 70% 4<sub>2</sub>

- 26% 5<sub>2</sub>
  - 3% sub-1
  - 1 fish was a 5<sub>3</sub> from Chilko
- Stock ID
  - 11% EM
  - 8% ET
  - 46% Ch/Qu
  - 23% LS/St
  - 2% Bi
  - 7% Ad/We
  - 4% Ha
  - Note: Still seeing a significant proportion of E Summers
- A20 PS date: Aug 5 n=73
  - Age Comp
    - 59% 4<sub>2</sub>
    - 10% 5<sub>2</sub>
    - 29% sub-1
    - one jack
  - Stock ID
    - 3% EM
    - 1% ET
    - 51% Ch/Qu
    - 9% LS/St
    - 12% We/Ad
    - 24% Ha
  - Note: This should be the same group of fish as the Aug 3 sample in A12.
  - Note: The age and stock comp in A20 is about a week ahead of the composition in A12 (less E Summer present)
- A20 jacks: Jul 28-Aug3 n=47
  - Stock ID
    - 94% Fr
    - 3% ET (mostly Sc/Sey)
    - 29% Ch/Qu
    - 66% Adams
  - Note: There are fairly large abundances of jacks, which may bode well for returns in 2010.
- Johnstone Strait PK: Aug 4
  - 14% Fr
  - 21% PS
  - 65% Can SC
- A20 PK: Aug 4
  - 15% Fr
  - 59% PS
  - 26% Can SC
- Assessments
  - E Summer
    - 100k catch and escapement to date

- 30k projected
- 130k total accounted to date
- Cum. Passage (using 99k to date at Mission)
  - 153k, A20 date: July 26
  - 172k, A20 date: July 28
  - 142k, A20 date: July 24
  - Note: A bit of creep in the estimates due to the continued observation of E Summers in test catches, so the estimate may reach 172k.
- Cum. Norm (Bayes)
  - 158k, A20 date: July 31 80% PI (134k-186k)
  - E Misc-106k, A20 date: Jul 27 80% PI (89k-125k)
  - Sco-Sey/NThomp-50k, A20 date: Aug 5
- Cum. Norm (Deterministic): 196k
  - E Misc-129k
  - Sc/Sy-22k
  - NThomp-45k
- Bayes: 200k, A20 date: Aug 3 80% PI (140k-284k)
  - E Misc-110k, A20 date: Jul 28 80% PI (87k-138k)
  - Sc/Sy/NThomp-90k, A20 date: Aug 11 80% PI (53k-146k)
- Note: The E Summer migration is so flat that it may be larger and later than currently estimated. Don't know how much longer this migration will continue
- ***Recommended: No change to E Summer run-size estimate=150k.***
- Summer
  - 184k catch and escapement to date
  - 186k projected
  - 370k accounted to date (1/2 of which is projected)
  - Cum. Passage (using 181k to date at Mission)
    - 822k, A20 date: Aug 5 (best est)
    - 362k, A20 date: Aug 1
    - 2 million, A20 date: Aug 10
  - Cum. Norm (Deterministic):
    - LS/St-321k, A20 date: Aug 5
      - 50p forecast: 927k
  - Bayes: 881k, A20 date: Aug 6 80% PI (720k-1.1 million)
    - Ch/Qu-588k, A20 date: Aug 7 80% PI (439k-790k)
    - LS/St-293k, A20 date: Aug 4 80% PI (225k-375k)
  - Note: Slowly approaching a harvestable surplus (i.e. enough for AFE)
- Comparison to the run-size needed to generate a TAC
  - E Summer: 159k short of producing an international TAC for sharing
    - 280k required for a harvestable surplus
    - 320k required for an international TAC
    - Note: Assuming the pMA = 0.51
  - Summer: 339k short of producing an international TAC for sharing
    - 880k required for a harvestable surplus
    - 1.14 million required for an international TAC
    - Note: Assuming the pMA = 0.45
- ***Recommended: No update to Summer run-size estimate.***
  - The historical average 50% date is Aug 7, so it's too early for a run-size update.



- Also, the marine survival rate implied by the current estimates of Chilko 4 yr olds is only a third of the lowest recorded marine survival for Chilko
  - 588k Ch/Qu: (70% Ch, 85% 4 yr olds) = 349k Chilko 4 yrs
  - divide by 77 million smolts = 0.45% marine survival (1.2% = lowest observed over past 50 yrs)
- If you assume the marine survival for all stocks were the lowest observed (1.2%) you would still see a 1.9 million Summer return.
- LSt/Stel – current est. ~300k
  - with ~60% 4yrs = 180k 4yr return for 2009 ← this is close to the 90p forecast of 4yr olds
- Rather than updating the Summer run-size, we'll describe the situation in the News Release
  - The Summer run, which should comprise 80% of the total return, is currently tracking well below the 90p forecast, and is currently below the numbers needed to generate any allowable harvest.
  - Because the peak has not yet occurred in marine areas, the estimated return is uncertain.
- Historically, 20% of the time when the E Summers are early, the Summers are late.
- The Harrison migration has been bimodal:
  - 120k estimate given by:
    - CumNorm(deterministic) A20 date: 2-Aug
    - Bayes, A20 date: Aug 3
  - Is counter-intuitive to increase part of the LL, and decrease the other part
  - Note: Forecast was 69k, Harrison SK have a different life-history than the other Fraser SK stocks.
- Environmental Conditions
  - Discharge at Hope
    - 3780 cms 6-Aug
    - forecast: 3380 cms by 15-Aug
    - Note: Near average
  - Temp at Qualark
    - 19.6c 5-Aug
    - forecast: 19.2c by 15-Aug
- MA
  - E Summer
    - pMA=0.52
    - will have all observed days by next week, so unless timing changes, the pMA won't change much
  - Summer (hypothetical based on only 16 days of obs and pred)
    - pMA= 0.4-0.5
    - Note: The first in-season update will be available on Tue.
- **Fishery Recommendations:**
  - **Canada: None**
  - **US: None**
- Diversion Rate
  - 50%
- TF update
  - A20 PS: today, 3 sets, 50 SK, 549 PK, 53 squid

- A13 PS: today, 3 sets, 65 SK, 319 PK
- Next meeting
  - Stand by for possible panel call on Mon at 1 pm.
  - Conference call Tue. Aug 11<sup>th</sup>, 11:30 am

## Detailed Fishing Openings

### Open Times for the Mid & Upper Fraser River First Nations Fisheries

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook only (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Stl'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 9 week 32	Chinook only (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	Ti't'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook/ limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Chinook/ limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 9 week 32	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net (all but Ti'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 9 week 32	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 9 week 32	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 2 18:00	Sunday August 9 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 9 week 32	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 02	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Jul 29	12:00 Sunday Aug 02	Chinook, Chum	drift net
Aug 02	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Jul 29	12:00 Sunday Aug 02	Chinook, Chum	set net
Aug 02	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 31	12:00 Sunday Aug 02	Chinook	drift net
Aug 02	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 31	12:00 Sunday Aug 02	Chinook	drift net
Aug 02	DN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 29	18:00 Sunday Aug 02	Chinook	set net, dip net, rod and reel
Aug 02	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Jul 29	18:00 Sunday Aug 02	Chinook	set net, dip net, rod and reel
Aug 02	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
Aug 02	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
Aug 02	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
Aug 02	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 31	19:00 Sunday Aug 02	Chinook	fish wheel
Aug 02	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R. Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 02	19:00 Sunday Aug 02	Chinook	drift net
Aug 02	Yale First Nation	Hope to Sawmill Creek, Agassiz to	15 hrs	06:00 Sunday Aug 02	21:00 Sunday Aug 02	Chinook	dip net
Aug 09	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Aug 05	12:00 Sunday Aug 09	Chinook, Chum	set net
Aug 09	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 07	12:00 Sunday Aug 09	Chinook	drift net
Aug 09	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 07	12:00 Sunday Aug 09	Chinook	drift net
Aug 09	DN-SHUCK-CH Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Aug 05	18:00 Sunday Aug 09	Chinook	set net, dip net, rod and reel
Aug 09	Lil'wat Nation	Birkenhead R. to Harrison Lk	4 day s	18:00 Wednesday Aug 05	18:00 Sunday Aug 09	Chinook	set net, dip net, rod and reel

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 09	Seabird Island First Nation	Agassiz to Hope	12 hrs	06:00 Wednesday Aug 05	18:00 Wednesday Aug 05	Chinook	drift net

## Economic Opportunity Opening Times

none

# Preliminary In-season Catch Numbers

## Commercial

No commercial catch to report

## Recreational

See appendices

## First Nations

## Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Jun-28	1	1		4		5	10	0	0	0	19	21	21
Jul-05	4	9	0	137		3	18	0	0	0	158	171	192
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012
Jul-26	370	201	5	114	61	476	966		2639	340	4596	5172	11184
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14403

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6

N/M = No Monitoring Conducted

## Marine

N/A

# Fraser River Sockeye and Pink

## Weekly Management Plan August 9 – Aug 15/09

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### For Period of:

Sun. August 9<sup>th</sup> – Sat. August 15<sup>th</sup>, 2009

Week: 33

### Stock Aggregate Focus:

Early Summers; Summers; Harrison, Birkenhead and True Lates

### Management objectives for the current week:

- Assess run size for Early Summers
- Assess run size for Summers
- Assess run size and timing of Harrison
- Assess run size for Birkenhead
- Assess run size for True-Lates
- Monitor in-river migration conditions

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## Fraser Sockeye Management Summary

### FN0612-Salmon: Fraser River Sockeye Update - August 11 - Areas 11 to 29

The Fraser River Panel met today August 11 to review the status of sockeye salmon abundance estimates, migration behavior and the migration conditions in the Fraser River. Based on pre-season forecasts, the maximum daily Fraser sockeye migration through the marine assessment areas was projected to be occurring now. However, test fishing catches over the past week indicate that the migration of sockeye through both the northern and southern approach routes to the Fraser River continues to track far below expectations. The return of four year old Fraser sockeye is still much lower than was expected this season. Fraser sockeye abundances passing Mission have also been lower than expected over the past week. The estimated total non-commercial catch of Fraser sockeye this season is 42,000 fish, which have been harvested in test fisheries and First Nations FSC fisheries.

The run size estimate for Early Summer-run sockeye was increased today to 175,000 fish. The estimated escapement of Early Summer-run sockeye past Mission through August 10 is approximately 121,000 fish.

Summer-run sockeye were expected to comprise more than 80% of the total adult return of Fraser River sockeye this season and provide most of the harvest opportunities. However, they are currently tracking substantially below forecast. The Panel adopted the PSC recommendation of 600,000 Summer-run sockeye run size which is considerably below their 90% probability level forecast of 2,858,000 fish and are less than those needed to provide harvestable surpluses. The estimated abundance of Summer-run sockeye passing Mission through August 10 is approximately 317,000 fish.

The reason for the low return of Fraser sockeye to-date is presently unknown. The forecast of four year old sockeye returning now assumed that juveniles produced in the brood year would experience historical average survival rates to the adult stage. However, the very low sockeye abundances being estimated from in-season assessments suggest that most Fraser sockeye stocks have experienced much poorer than average survival during their marine life cycle stages. Further studies will be conducted to identify the likely cause(s) of the low returns of Fraser sockeye observed to-date.

It is still early in the marine migration of most Late-run sockeye stocks. However, Harrison sockeye exhibit earlier marine timing than other Late-run stocks, and the Panel adopted a run size of 125,000 fish which is more abundant than their 50% probability level forecast of 69,000 fish. Harrison sockeye have a different life history than most other Fraser sockeye salmon, because they migrate to sea as fry, rather than rearing for two years as juveniles in a lake before migrating seaward. Assessments of other Late-run sockeye abundance and marine timing will be provided over the next few weeks. DNA analyses indicate Late-run sockeye excluding Harrison now account for approx. 20% in marine areas, with the Harrison at 7-19%. The estimated abundance of True Late-run sockeye passing Mission through August 10 is approximately 83,000 fish. The migration of pink salmon through the marine approach areas has been occurring since approximately mid July and increased substantially near the end of July. The expected peak migration of Fraser River pink salmon through Juan de Fuca Strait is late August. Assessments of their migratory timing, stock composition and abundance will be conducted over the next several weeks. Recent DNA analyses of pink salmon samples collected in Johnstone Strait and Juan de Fuca Strait test fisheries indicate that Fraser pinks currently comprise only a low proportion of the mixtures. Their contribution to marine area abundances of pink salmon is expected to increase over the next few weeks as they near their peak migration period. Any fisheries targeting Fraser River pink salmon will be constrained by conservation requirements for Late-run sockeye stocks. Pink salmon directed fisheries may occur later in the season, after the majority of Late-run sockeye have cleared marine waters.

Migration conditions for sockeye entering the Fraser River have improved over last week with cooler air temperatures and some rain. On August 10 the Fraser River discharge at Hope was approximately 3,300 cms, which is near normal, while the water temperature at Qualark Creek was 18.8 °C, which is 1.0 °C higher than average for this date. Water temperatures in this range may cause increased mortality of Fraser River sockeye. Due to cooler weather in the Fraser River watershed, water temperatures are forecast to decrease to 18.3-18.7 °C range through August 19. Environmental conditions for salmon migration in the Fraser River will be monitored closely over the coming weeks. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye and were unchanged at the meeting today.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time. First Nations sockeye fisheries have been curtailed and DFO is continuing planning meetings with First Nations groups to review current information.

The next scheduled Panel meeting is Friday August 14.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### **FN0625-COMMERCIAL Salmon: Fraser River Sockeye Update - Areas 11 to 29 South Coast - August 14**

The Fraser River Panel met today to receive assessments from the Pacific Salmon Commission staff on the status of the Fraser River sockeye and pink salmon runs. Test fishing catches of Fraser sockeye have remained far below expectations over the past several days. The diversion rate of Fraser River sockeye through Johnstone Strait is currently estimated to be 50%. There has been steady escapement of Fraser River sockeye past Mission and Hells Gate over the past week although it has still been well below expectations.

At the Panel meeting on August 11, the run size estimate for Early Summer-run sockeye of 150,000 fish was increased to 175,000 fish, with 50% migration timing through Area 20 of July 30, which is four days later than expected. At the meeting today this run size estimate was unchanged. The estimated escapement of Early Summer-run sockeye past Mission through August 13 is approximately 127,000 fish.

At the meeting on August 11, the Panel adopted a run size estimate of 600,000 Summer-run sockeye; with 50% migration timing through Area 20 of August 4, which is one day earlier than expected. At the meeting today this run size estimate was unchanged. The estimated escapement of Summer-run sockeye past Mission through August 13 is approximately 344,000 fish.

The reason(s) for the very low returns of most Fraser sockeye stocks to-date this season are presently unknown. However, some potential factors can be rejected. First, the spawning escapement in the parent year (2005) of four year old Fraser sockeye was 3,300,000 fish; more than 1,000,000 fish greater than the average escapement on this cycle. There has been no commercial harvest of Fraser River sockeye this year and the total catch (from First Nations food, social and ceremonial fisheries and test fisheries used to assess the return) to-date is only 47,000 fish. Thus, overfishing and insufficient escapement can be ruled out as large numbers of sockeye reached their spawning areas in 2005 and only a small fraction of the total Fraser sockeye run has been harvested in 2009. Second, freshwater survival (egg-to-fry or smolt stage) was not a contributing factor in either the Chilko or Quesnel sockeye stocks which were forecast to produce 7,750,000 fish (approximately 75%) of the 10,488,000 total adult Fraser River sockeye forecast in 2009. Fry abundances measured through acoustic surveys in Quesnel Lake (52,000,000 fry) were only slightly below average for the cycle (58,000,000 fry) and the smolt outmigration estimated through an enumeration fence at the outlet of Chilko Lake (77,000,000 smolts) was nearly double the previous highest outmigration (40,000,000 smolts) in the 50 year time series. Third, the warmer than average Fraser River water temperatures in 2009 are also not a factor in

the low return of adults in 2009 because the in-season estimates of Fraser sockeye abundance are generated from a combination of marine-area test fisheries and lower Fraser River hydro-acoustic surveys and both of these assessment tools have provided consistent data indicating very low Fraser sockeye abundances.

The above factors, coupled with the poor returns across most of the Fraser River sockeye stocks suggests that some factors in marine areas sometime between the time of ocean entry of the smolts in late spring and summer of 2007 and the adult return in 2009 as potential causal factors. Although there have been some preliminary discussions with experts that conduct research on juvenile sockeye in the ocean, the current fisheries management focus remains on in-season assessments of the remaining migration of Fraser sockeye salmon (primarily Late-run stocks) and pink salmon which are expected to peak over the next few weeks. These assessments along with assessments of other salmon returns along the Pacific coast are needed to help focus future investigations into potential causal factors for the very low Fraser sockeye returns being observed.

Recent DNA analyses indicate that the proportion of Late-run sockeye in the marine approach areas is increasing. A run size estimate of 125,000 Harrison Late-run sockeye (nearly double their 50% probability level forecast of 69,000 fish) was approved at the Panel meeting on August 11, with peak Area 20 marine timing of August 4, which is one day later than expected. At the meeting today, the run size estimate of Harrison sockeye was increased to 150,000 fish, which is close to their 25% probability level forecast of 160,000 fish. The estimated peak marine timing of Harrison sockeye through Area 20 is August 4, which is one day later than expected. Thus far this season, Harrison sockeye are unique in that they are the only Fraser sockeye stock that appears to be returning in higher than their forecast level of abundance, which may be associated with their different life history and marine migratory behavior relative to other Fraser sockeye stocks. It is too early to provide an assessment on the run size of Birkenhead and non-Harrison Late-run sockeye, however, if they are near their forecast level of abundance, their 50% marine timing through Area 20 would have to be several days later than expected. Recent DNA analyses indicate that True Late-run sockeye are exhibiting little marine-area delay prior to entering the Fraser River. The estimated escapement of True Late-run sockeye past Mission through August 13 is approximately 118,000 fish.

Test fishing catches of pink salmon by purse seines in Johnstone Strait have been at moderate levels over the past week. In Juan de Fuca Strait, test fishing catches of pinks have been generally low, although they increased on August 13. Recent DNA analyses of pink salmon sampled from marine approach areas indicate that Fraser pinks currently comprise approximately 30% of the fishery mixtures. Assessments of the abundance of Fraser River pink salmon will be made near their expected peak migration through the marine approach areas, which usually occurs in late August.

Migration conditions for sockeye entering the Fraser River have improved considerably over the past week. On August 13 the Fraser River discharge at Hope was approximately 2,900 cms, which is about 20% lower than normal, while the water temperature at Qualark Creek was 18.7 °C, which is 1 °C higher than average for this date. Water temperatures in this range may cause some stress to migrating sockeye and slow their upstream migration. Water temperatures are forecast to decrease below 18 °C by August 16 and then increase to 19 °C by August 22. At the meeting on August 11, after reviewing environmental and stock assessment information, the Panel approved an increase in the management adjustment factor for Early Summer-run sockeye from 0.51 to 0.60 and for Summer-run sockeye, an increase in the management adjustment factor from 0 to 0.32. At the meeting today, these management adjustments were unchanged. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time. First Nations sockeye fisheries have been curtailed and DFO is continuing planning meetings with First Nations groups to review current information.

The next scheduled Panel meeting is Tuesday, August 18.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Aug 9	Mon Aug 10	Tues Aug 11	Wed Aug 12	Thurs Aug 13	Fri Aug 14	Sat Aug 15
First Nations – FSC Mid and Upper Fraser	Chinook with mortally wounded sockeye or limited sockeye directed in terminal areas (dip net)						
First Nations – FSC Lower Fraser	Chinook with mortally wounded sockeye – sockeye only by beach seine for 10hrs Thurs Aug 14 and for 12 hrs Fri in Harrison – Pitt Lake 48 hrs by set net or drift net (terminal area)						
First Nations – FSC Marine	Closed						
Recreational - Upper Fraser River	Closed						
Recreational - Lower Fraser River	Closed						
Recreational Marine Areas	Closed						
Commercial Area D	Closed						
Commercial Area E	Closed						
Commercial Area B	Closed						
Commercial Area H	Closed						
U.S. Treaty Indian	Closed						
U.S. Non-treaty Indian	Closed						

## Fishery Notices Summary

### RECREATIONAL – Salmon

FN0611-RECREATIONAL: SALMON: Sockeye Hook & Release Pilot Mortality Study Region 2, Fraser River, Grassy Bar

FN0612-Salmon: Fraser River Sockeye Update - August 11 - Areas 11 to 29

FN0614-RECREATIONAL - SALMON: Region 2 - No fishing for sockeye in Non-tidal Waters of the Fraser River

FN0616-Recreational Fishery: Angling opportunities for pink salmon in Nanaimo Harbour and Departure Bay- Area 17

FN0625-COMMERCIAL Salmon: Fraser River Sockeye Update - Areas 11 to 29 South Coast - August 14

FN0628-RECREATIONAL - SALMON: Region 2 - Non-tidal Waters of the Fraser River

### COMMERCIAL – Salmon

FN0604-COMMERCIAL - Salmon Seine - Area A Seine Opening - Areas 3, 4, 5, & 6

FN0605-COMMERCIAL - Salmon Gillnet: Area C Gillnet - Area 6 Update

FN0606-Commercial: Salmon Troll - Area G - 123 to 127 - Chinook - Monday August 10 WCVI Closing.

FN0608-COMMERCIAL - Salmon Seine- Area A Seine - Areas 3, 4, 5, & 6 Opening

FN0612-Salmon: Fraser River Sockeye Update - August 11 - Areas 11 to 29

FN0613-COMMERCIAL Salmon: Area C Gillnet - Areas 6, 7, & 8 UpdateFN0617-Commercial: Salmon Seine & Gill Net - Area A & C - 7 & 8 Chum and Pink Fishery

FN0618- COMMERCIAL Salmon: Area C Gillnet - Areas 3, 4, 5 & 6 Update

FN0621-COMMERCIAL Salmon: Gillnet - Status of 2009 Area E Fraser River Chinook Demonstration Pool Fishery - Area 29

FN0622-COMMERCIAL: Salmon Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening

FN0623-Commercial - Salmon: Gill Net - Area D - Chinook gill net, Area 25 Tlupana Inlet

FN0624-COMMERCIAL - Salmon: Troll - Area F - Area 3 Coho and Pink Opening

FN0625-COMMERCIAL Salmon: Fraser River Sockeye Update - Areas 11 to 29 South Coast - August 14

ABORIGINAL – Salmon

FN0612-Salmon: Fraser River Sockeye Update - August 11 - Areas 11 to 29

FN0625-COMMERCIAL Salmon: Fraser River Sockeye Update - Areas 11 to 29 South Coast - August 14

# Management Information

## 2009 Fraser River Sockeye In-season Status

### 2009 Fraser River Sockeye In-season Status

Week of: Aug. 9 - Aug. 15, 2009

Date: Aug. 14, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	175,000	600,000	334,000	573,000	1,767,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,840	5,440	15,710	930	4,840	28,760	3,710
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	251	533	1,149	34	360	2,327	0
Escapement-to-date @ Mission	82,440	126,770	344,080	12,080	118,450	683,820	0
Potential Gross Escapement	82,691	127,303	345,229	12,114	118,810	686,147	0
Adjusted Gross Esc. Target *	85,000	175,000	600,000	305,000	507,300	1,672,300	0
Accounted-to-date							
Catch + Escapement to Mission	84,531	132,743	360,939	13,044	123,650	714,907	3,710
Potential Remaining To Come							
Potential En-route	469	42,257	239,061	320,956	449,350	1,052,093	17,531,290
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	93	746	2,243	81	395	3,558	30
Test Fishing	1,690	4,250	11,700	720	4,050	22,410	620
Canadian Charter (Albion & Qualark TF)	56	139	520	8	62	785	0
Canadian Marine Recreational	0	0	0	0	0	0	2,560
U.S. TI Ceremonial	0	301	1,249	124	334	2,008	500
U.S. Recreational	0	0	0	0	0	0	0
Total	1,840	5,440	15,710	930	4,840	28,760	3,710
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	251	533	1,149	34	360	2,327	0
Catch Above Mission (incl. FSC & EO)	6,185	5,296	4,518	14	398	16,411	0
Total	6,436	5,829	5,667	48	758	18,738	0
Total In-river Catch	6,436	5,829	5,667	48	758	18,738	0
Total Catch in All Areas							
Total	8,276	11,269	21,377	978	5,598	47,498	3,710
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	30-Jul	4-Aug	11-Aug	11-Aug		25-Aug
Mission Timing	5-Jul	5-Aug	10-Aug		19-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Aug. 9 - Aug. 15, 2009

Date: Aug. 14, 2009

Area		Gear	Fraser Sockeye	Cumul.
<b>Commercial Catch</b>				
<u>Canada</u>				
A & C Areas 1-10		Net		0
F Areas 1-10		Troll		0
G Areas 123-127,11-12		Troll		0
B Areas 11-16		PS		0
D Areas 11-13		GN		0
H Areas 12-16		Troll		0
H Areas 18-29		Troll		0
B Area 20		PS		0
E Area 29		GN		0
Canadian Selective				0
FRA Economic Opportunity				0
BC Interior FN Demo				0
Canadian Total				0
<u>United States</u>				
<u>Alaska</u>		Net&Troll		0
<u>Washington</u>				
T.I. Areas 4B/5/6C		Net		0
T.I. Areas 6/7/7A		Net		0
N.I. Areas 7/7A		Net		0
Washington Total				0
U.S. Total				0
<b>Non-commercial Catch</b>				
PSC Test				15,110
Other Test				7,290
Fraser River Aboriginal (FSC)				18,740
Areas 12-124 Aboriginal				3,560
Recreational				0
Charter				786
U.S. TI Ceremonial				2,000
Non-comm. Total				47,490
<b>Catch and Escapement</b>				
Catch Accounted-to-date				47,490
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)				666,980
Total Accounted-to-date				714,470

<b>Gross Escapement (includes Pitt R. sockeye)</b>						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,400	300	82,700	97%
ESum	Early Summer	175,000	126,800	500	127,300	73%
Summ	Quesnel/Chilko	600,000	214,700	600	345,200	58%
	L.Stu./Stel.		129,300	600		
Late	Birkenhead	305,000	12,100	0	12,100	4%
	Adams/L.Shuswap	507,300	9,800	0	118,700	23%
	Weav/L.Misc.		5,800	0		
	Sub 1s		102,800	300		



## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

**2009 Pacific Salmon Commission Sockeye Test Fishing Summary**

	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug	13-Aug
Area 20 Gillnet	111	144	132	8	10	21	88	329	96
US Area 5 Gillnet									
Area 20 Purse Seine	76	208	232	362	152	210	160	341	451
29B Cottonwood Gillnet*	72	25	39	37	67	21	25	24	4
29D Whonnock Gillnet*	58	118	69	28	23	32	42	30	15
Area 12 Round Island GN	34	62	14	16	3	38	0	11	
Area 12 Naka Cr. Gillnet									
Area 12 Purse Seine	153	114	443	563	1095	1064	716	236	446
Area 13 Purse Seine	802	1546	378	78	85	6	717	761	640
Area 7 Reef Net Obs.	42	194		10	50	0	59	274	198
Hells Gate Daily Estimate	1650	2630	1240	2040	7580	4880	1700	1420	4020
Mission Escapement**	28200	54760	55960	62499	42912	31967	39358	37673	19567

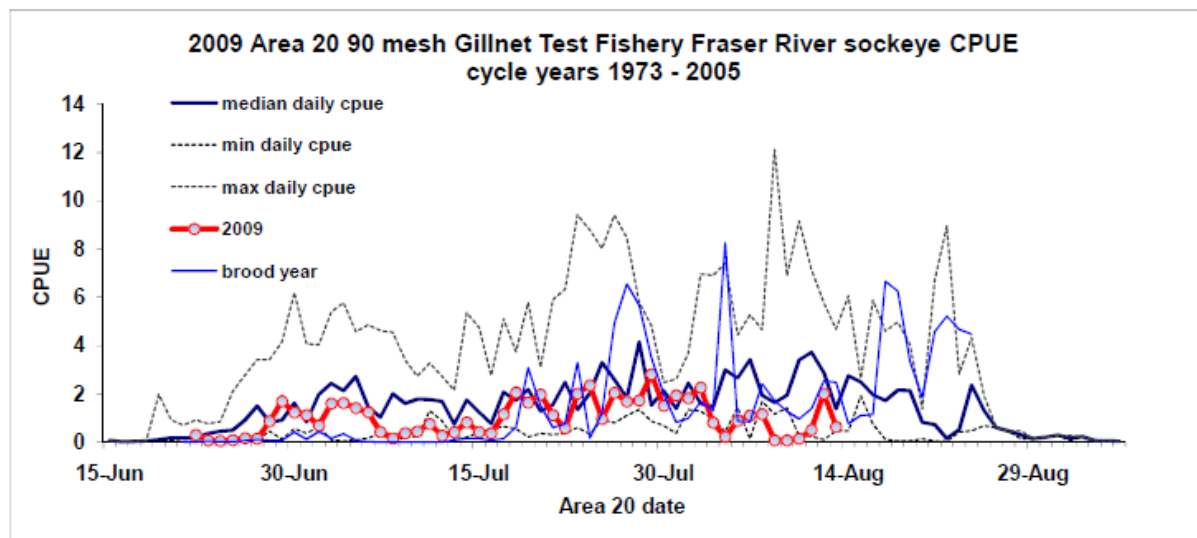
\* Variable mesh Gillnet

\*\* Preliminary, subject to revision.

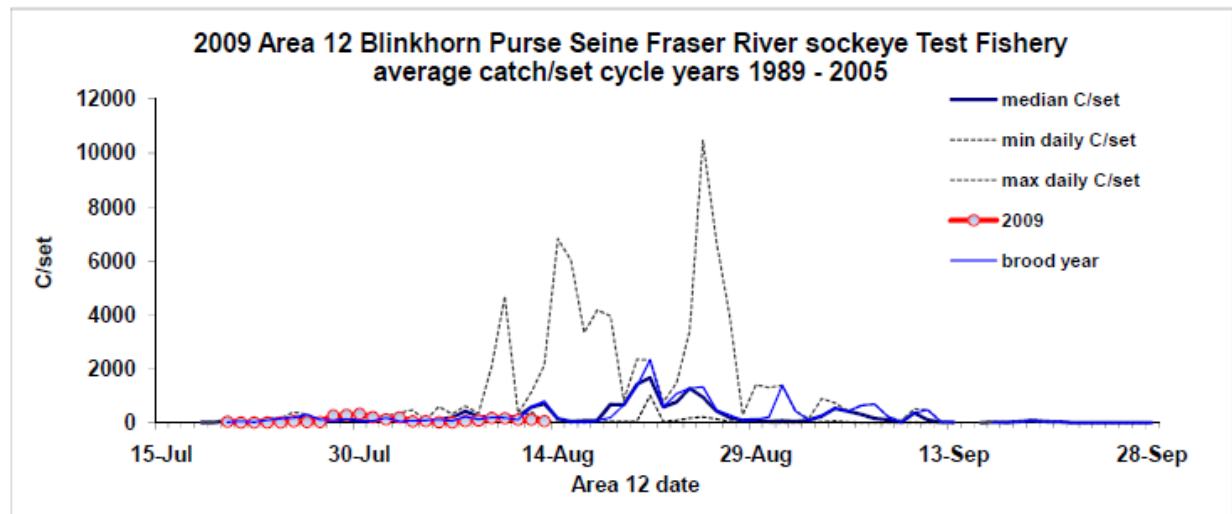
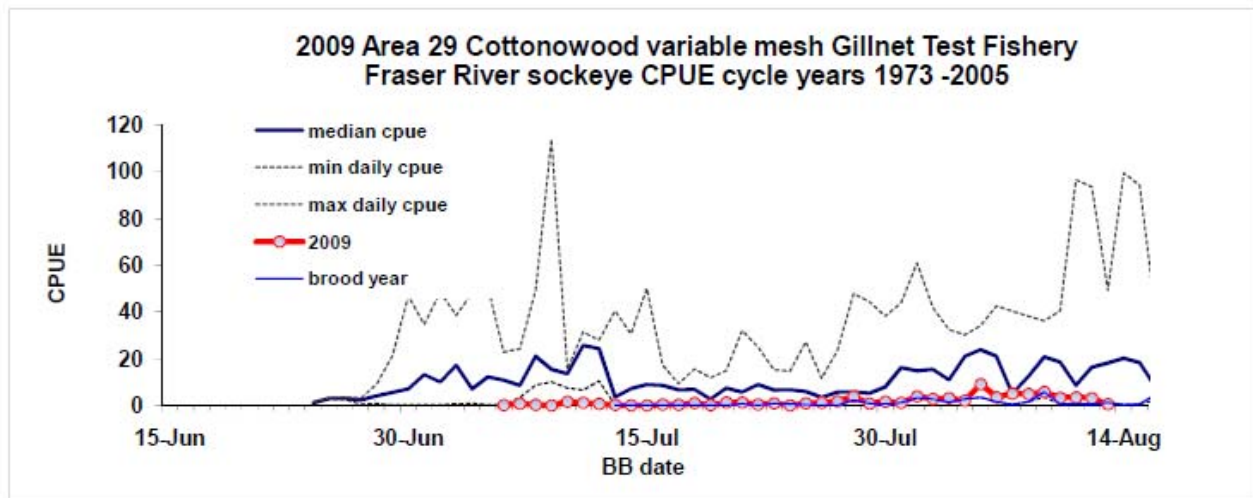
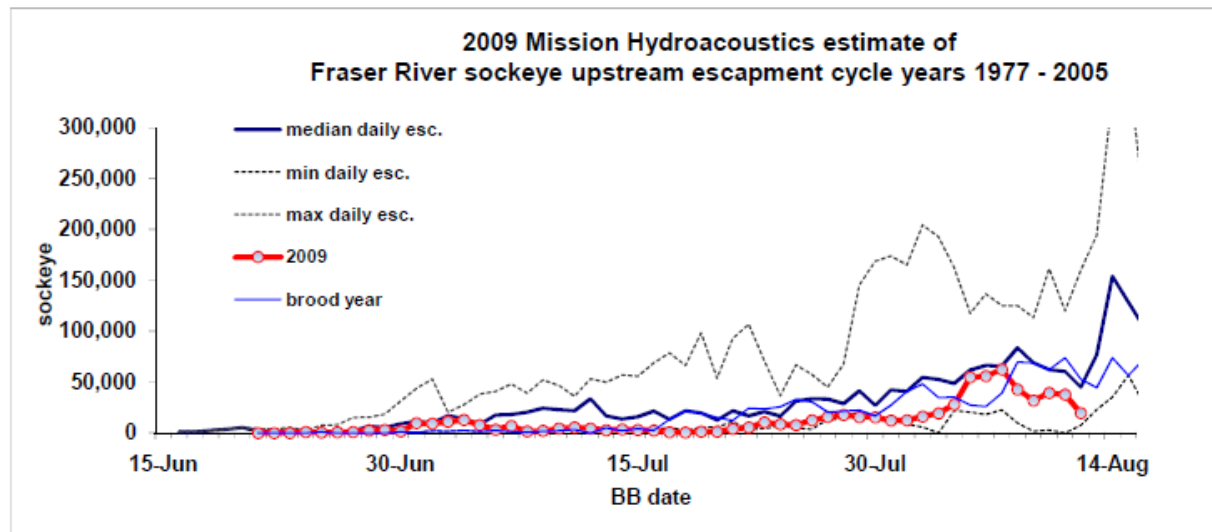
N.O. = No Observation.

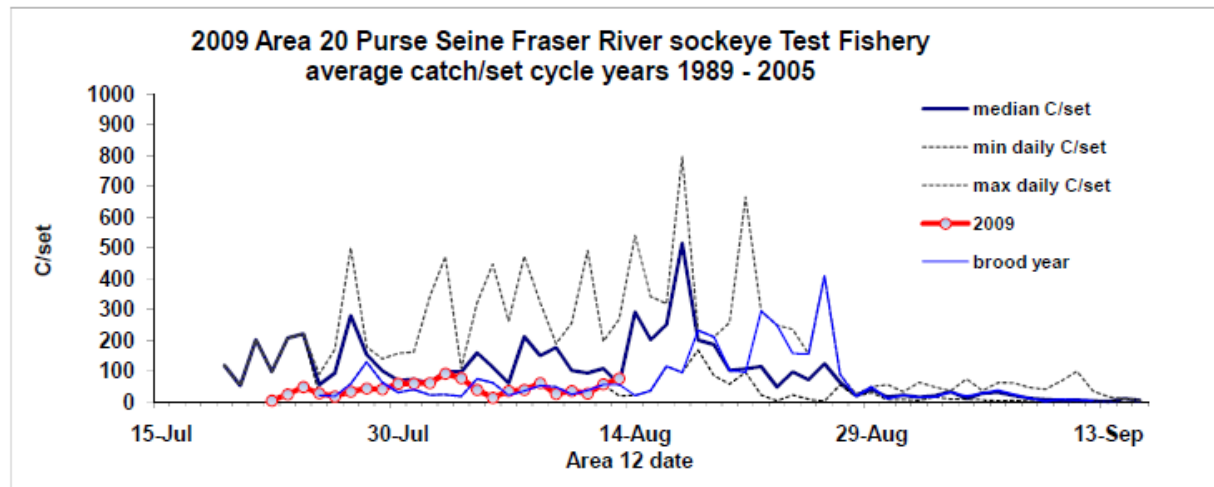
<sup>a</sup> mechanical problems 1 set only

DNF = did not fish









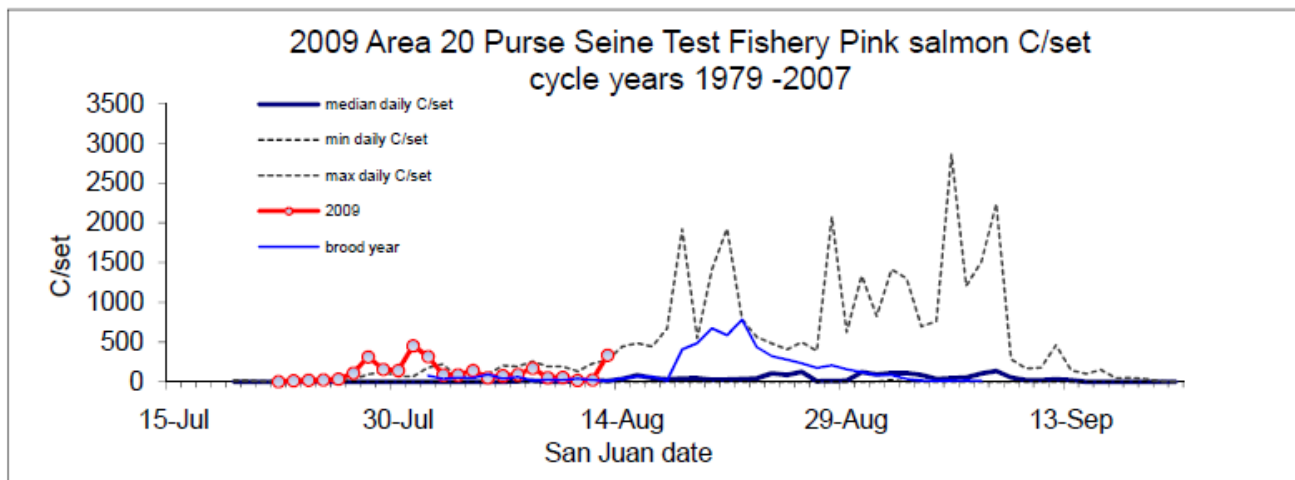
### Pacific Salmon Commission Pink Test Fishing Summary

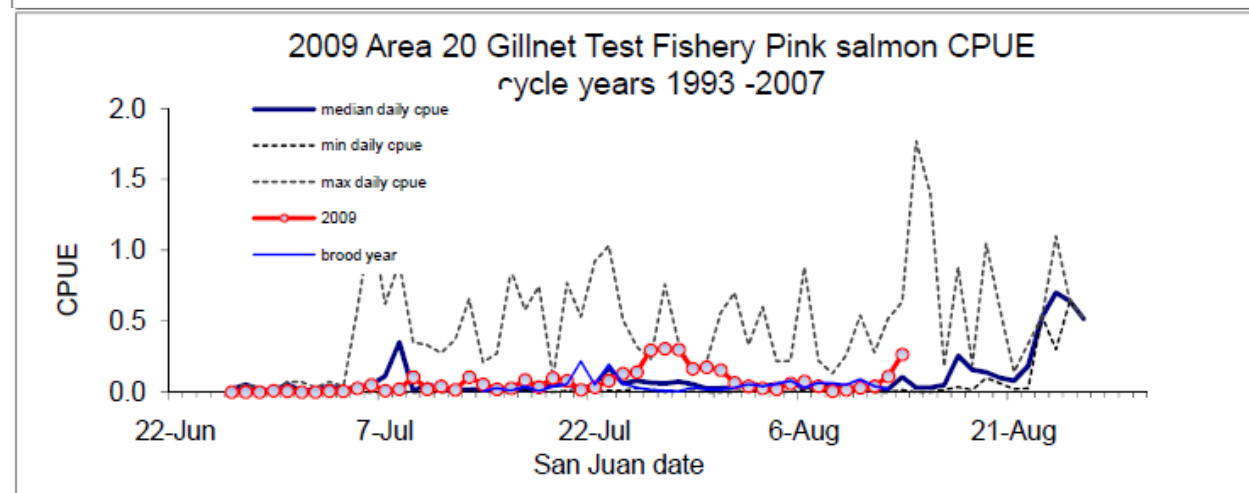
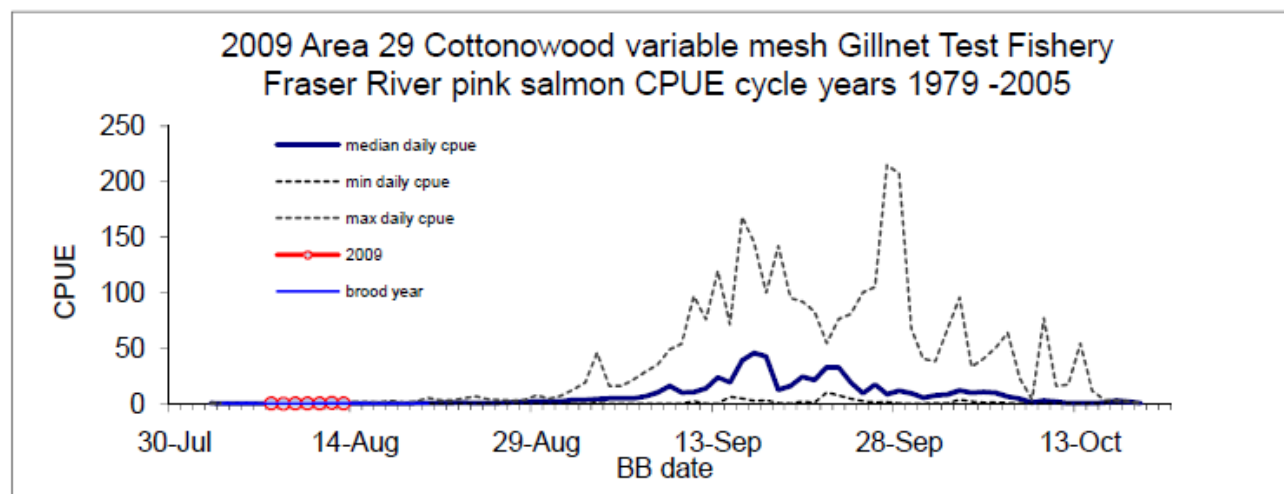
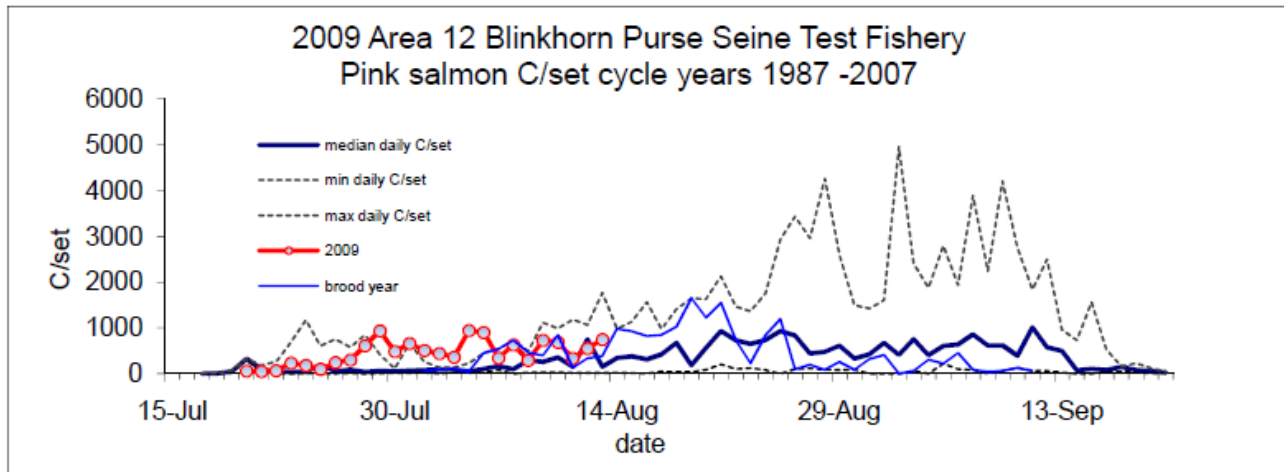
	Aug-07	Aug-08	Aug-09	Aug-10	Aug-11	Aug-12	Aug-13
Area 20 seine	549	1013	320	338	107	137	2011
Area 20 gillnet	9	1	4	9	13	32	75
Area 7 Reef net (observed)		0	17	0	58	174	260
Area 12 seine	3785	1745	4375	4110	2004	1100	4498
Area 13 seine	955	125	157	99	2540	1710	2239
Round Island Gillnet	4	5	4	20	2	31	
Area 29B Cottonwood *	1	0	1	1	1	5	2
Area 29D Whonnock *	0	0	0	1	0	0	0
Mission Escapement **	0	1000	2000	5000	7000	7000	9000

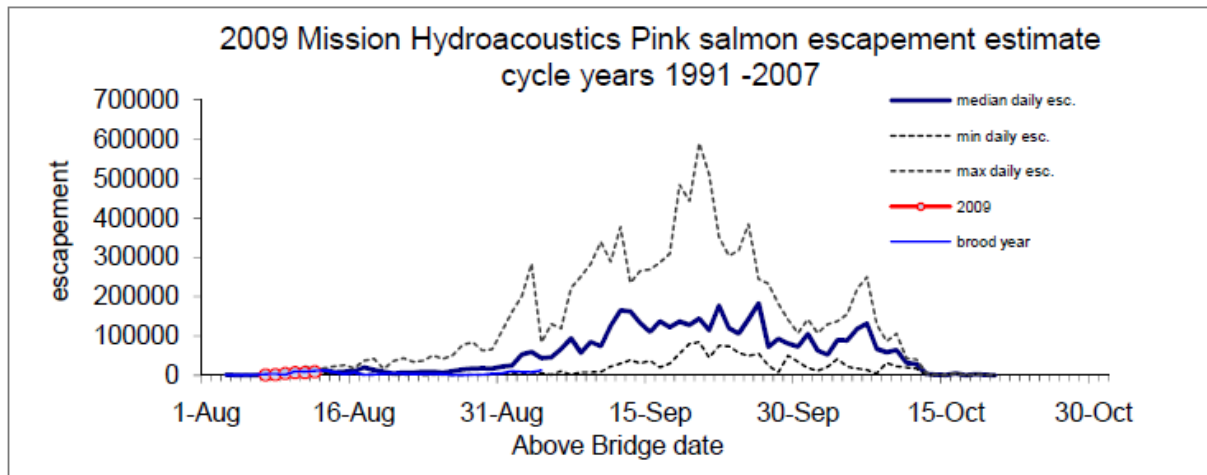
\*\* preliminary - subject to revision.

\* Variable mesh gillnet.

DNF = did not fish







## Detailed Test Fishing Data

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine							
	09/08/2009	1	6	6	1095	0	4375
	10/08/2009	1	6	6	1064	0	4110
	11/08/2009	1	6	6	716	76	2004
	12/08/2009	1	2	2	236	20	1100
	13/08/2009	1	6	6	446	49	4498
	14/08/2009	1	6	6	98	33	3530
	15/08/2009	1	6	6	277	18	5481
Area 12 - Naka Creek Sockeye Gillnet							
	09/08/2009	0	0	0			
	10/08/2009	0	0	0			
	11/08/2009	0	0	0			
	12/08/2009	0	0	0			
	13/08/2009	0	0	0			
	14/08/2009	0	0	0			
	15/08/2009	0	0	0			
Area 12 - Round Island Sockeye Gillnet							
	09/08/2009	1	3	83.5	3	0	4
	10/08/2009	1	3	88.1	38	0	20
	11/08/2009	1	3	90.1	0	0	2
	12/08/2009	1	3	85.9	11	0	31
	13/08/2009	0	0	0			
	14/08/2009	0	0	0			
	15/08/2009	0	0	0			
Area 13 - Area 13 Sockeye Seine							
	09/08/2009	1	6	6	85	2	157
	10/08/2009	1	3	3	6	0	99
	11/08/2009	1	6	6	717	20	2540
	12/08/2009	1	6	6	761	32	1710
	13/08/2009	1	6	6	640	47	2239
	14/08/2009	1	6	6	760	30	2762
	15/08/2009	1	6	6	880	11	2391
Area 20 - San Juan Sockeye	09/08/2009	2	4	287.85	10	0	4

## Gillnet

10/08/2009	2	4	282.75	21	0	9
11/08/2009	2	4	325.8	88	0	13
12/08/2009	2	4	306.3	329	0	32
13/08/2009	2	4	286.05	96	0	75
14/08/2009	0	0	0			
15/08/2009	0	0	0			

Area 20 - San Juan Sockeye  
Seine

09/08/2009	1	6	6	152	14	320
10/08/2009	1	6	6	210	15	338
11/08/2009	1	6	6	160	0	107
12/08/2009	1	6	6	341	0	137
13/08/2009	1	6	6	451	11	2011
14/08/2009	1	6	6	400	10	642
15/08/2009	1	6	6	165	7	2640

Area 29 - Cottonwood Sockeye  
Gillnet

09/08/2009	1	2	7.92	67	0	1
10/08/2009	1	2	6.12	21	0	1
11/08/2009	1	2	7.2	25	0	1
12/08/2009	1	2	7.44	24	2	5
13/08/2009	1	2	7.26	4	1	2
14/08/2009	1	2	7.44	28	0	6
15/08/2009	1	2	9	104	0	8

Area 29 - Whonnock Sockeye  
Gillnet

09/08/2009	1	2	11.025	23	0	0
10/08/2009	1	2	11.025	32	0	1
11/08/2009	1	2	11.8125	41	0	0
12/08/2009	1	2	12.3375	30	0	0
13/08/2009	1	2	10.7625	15	0	0
14/08/2009	1	2	12.6	38	0	7
15/08/2009	1	2	11.4625	26	0	5

U.S. Area 5 - U.S. Juan de Fuca  
Sockeye Gillnet

09/08/2009	0	0	0			
10/08/2009	0	0	0			
11/08/2009	0	0	0			
12/08/2009	0	0	0			
13/08/2009	0	0	0			
14/08/2009	0	0	0			
15/08/2009	0	0	0			

U.S. Area 7 - Area 7 U.S. Reef  
Net Payfish

09/08/2009	0	0	0			
10/08/2009	0	0	0			
11/08/2009	0	0	0			
12/08/2009	0	0	0			
13/08/2009	0	0	0			
14/08/2009	0	0	0			
15/08/2009	0	0	0			

U.S. Area 7 - Area 7 U.S.  
Sockeye Reef Net

09/08/2009	0	22	1320	50	0	17
10/08/2009	0	23	1320	0	0	0
11/08/2009	0	25	1440	59	0	58
12/08/2009	0	23	1380	274	0	174
13/08/2009	0	24	1440	198	0	260

14/08/2009	0	0	0			
15/08/2009	0	26	1470	537	0	948

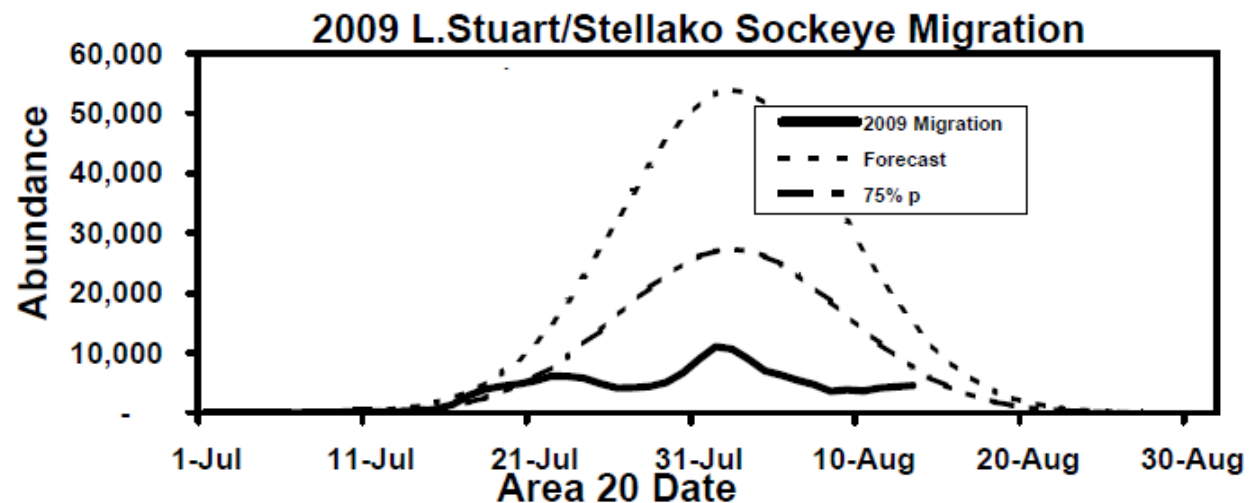
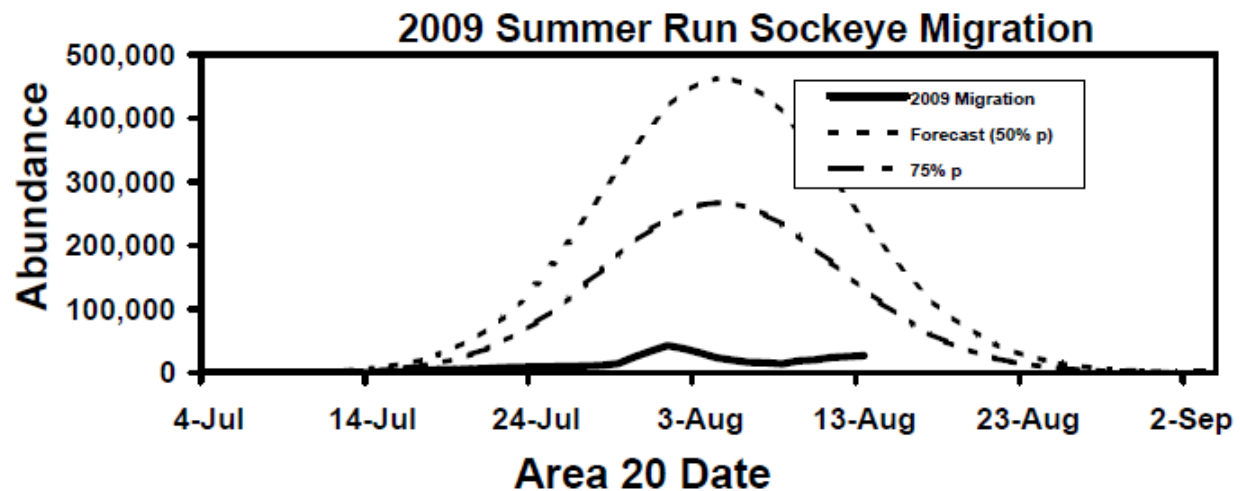
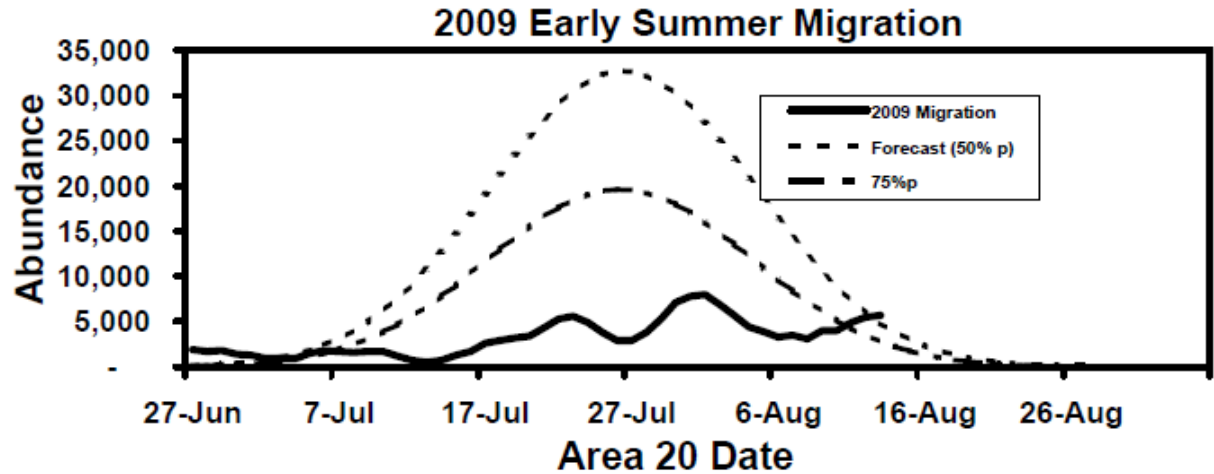
## DNA Analysis

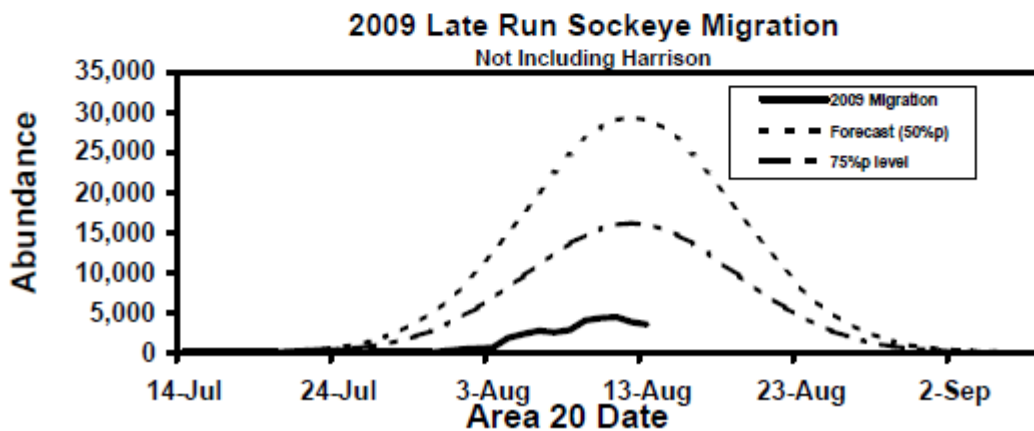
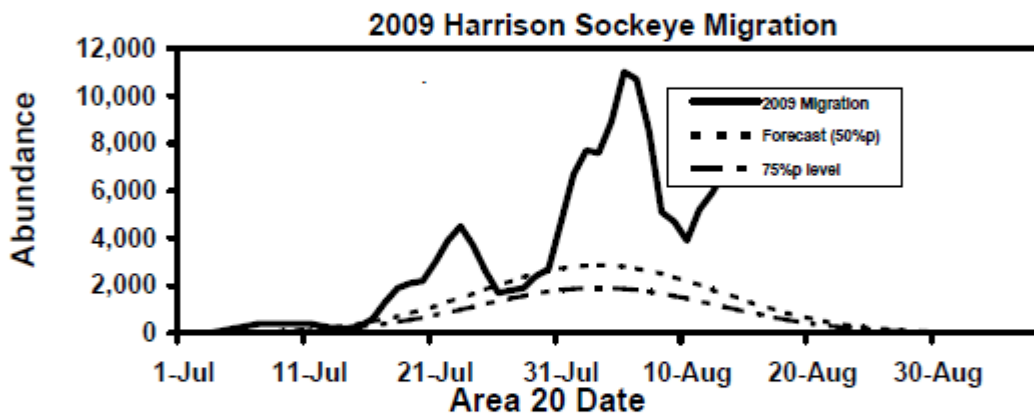
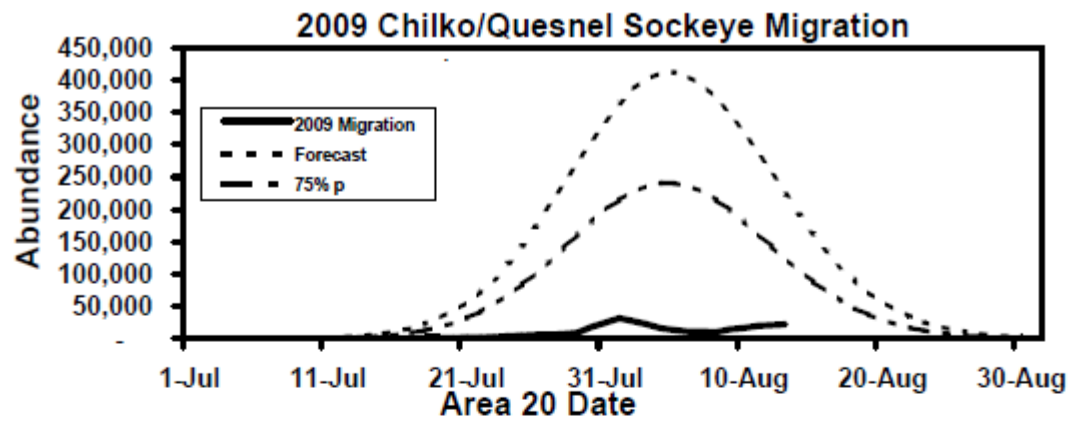
## Racial Analysis

Racial Analysis					
Area/Gear	Date	n	%Fraser	Stocks/Percentages	
dna A12pstf	aug.10	94	99%	EM 0%;ET 11%;CQ 51%;LS 10%;Bi 6%;AW 15%;Ha 6%;	
dna A20pstf	aug.10	100	97%	EM 1%;ET 3%;CQ 32%;LS 10%;Bi 7%;AW 24%;Ha 23%;	
dna A20pstf	aug.12	100	97%	EM 3%;ET 11%;CQ 42%;LS 5%;Bi 12%;AW 9%;Ha 18%;	
dna A20gntf	aug.11	80	94%	EM 3%;ET 12%;CQ 59%;LS 7%;Bi 10%;AW 2%;Ha 7%;	
dna BBgntf	aug10,11	42	100%	EM 7%;ET 0%;CQ 30%;LS 15%;Bi 0%;AW 8%;Ha 40%;	
dna ABgntf	aug10,11	69	100%	EM 6%;ET 11%;CQ 31%;LS 19%;Bi 3%;AW 5%;Ha 26%;	
<u>E.Stuart</u>	<u>Early Summer</u>		<u>Summer</u>		<u>Late</u>
ES=EStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel		Bi=Birk; Ha=Harr; AW=Adam/Weav

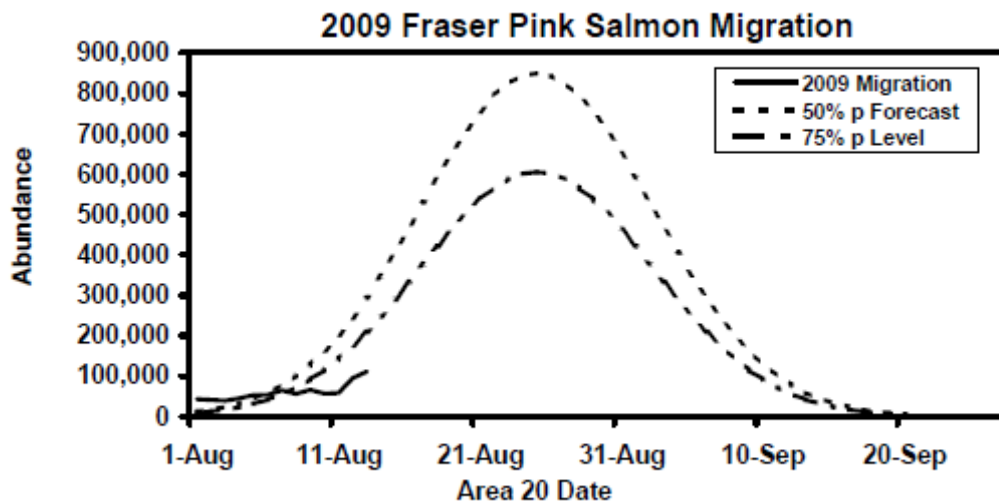
\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## Migration Graphs









## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...										
Mission Date	Escapement Total	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
Mission Total:	686,100	95,600	15,100	16,600	129,900	142,400	72,900	12,100	103,200	15,600
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)										
Mission Date	Projected Escapement	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
14-Aug	37,800	2,500	600	1,700	4,500	7,000	6,300	1,600	6,500	7,100
15-Aug	25,100	1,200	200	1,000	2,900	6,200	4,600	1,500	2,300	5,200
16-Aug	43,800	1,600	600	2,300	4,000	12,000	7,600	2,500	5,100	8,100
17-Aug	40,800	1,000	900	3,000	3,900	11,600	7,400	2,800	4,100	6,100
18-Aug	46,100	800	1,600	2,600	4,300	12,800	8,100	4,400	6,000	5,500
19-Aug	52,700	1,100	1,900	3,300	4,700	14,200	9,000	5,300	7,300	5,900
Projected Gross Escapement <sup>1</sup>										
14-Aug										
19-Aug	246,300	8,200	5,800	13,900	24,300	63,800	43,000	18,100	31,300	37,900
Projected Total	932,400	103,800	20,900	30,500	154,200	206,200	115,900	30,200	134,500	53,500
Early Summers 155,200					Summer Runs 476,300			Birkenhead 30,200	True Lates 188,000	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted.										
Analysis fixed at this time: 8/14/2009 8:52										

# Escapement Summary

## 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009	COTTONWOOD T.F.			AB T.F.		MISSION	BEST Est.	Hells Gate	
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)	CUMM.	DAILY EST.
DATE	1277	155.8	(BB+1)	1998	159.66	1,270,126	1,303,200	TOTAL	(AB+4) 129,130
01-Aug	28	3.96	02-Aug vmn	32	2.79	12,700	13,200	263,700	06-Aug 2,630
02-Aug	20	2.78	03-Aug vmn	34	2.88	16,300	17,000	280,700	07-Aug 1,240
03-Aug	22	3.15	04-Aug vmn	50	4.24	19,400	20,200	300,900	08-Aug 2,040
04-Aug	14	2.00	05-Aug vmn	58	4.47	28,200	29,300	330,200	09-Aug 7,580
05-Aug	72	9.23	06-Aug vmn	118	8.85	65,378	67,600	397,800	10-Aug 4,880
06-Aug	25	3.46	07-Aug vmn	69	5.33	55,960	57,700	455,500	11-Aug 1,700
07-Aug	38	5.11	08-Aug vmn	28	2.31	62,499	64,200	519,700	12-Aug 1,420
08-Aug	37	4.89	09-Aug vmn	23	2.10	42,912	44,000	563,700	13-Aug 4,020
09-Aug	67	5.79	10-Aug vmn	32	2.88	31,967	32,700	596,400	14-Aug 3,840
10-Aug	21	3.34	11-Aug vmn	42	3.55	39,358	40,200	636,600	15-Aug 1,400
11-Aug	25	3.48	12-Aug vmn	30	2.49	37,673	38,300	674,900	16-Aug 240
12-Aug	24	3.23	13-Aug vmn	15	1.40	17,667	17,800	692,700	17-Aug 320
13-Aug	4	0.54	14-Aug vmn	38	3.02	26,586	26,600	719,300	18-Aug 230
14-Aug	28	3.80	15-Aug vmn	26	2.28	29,811	29,900	749,200	19-Aug 370
15-Aug	104	8.11	16-Aug vmn	57	4.31	39,455	39,600	788,800	20-Aug 6,480

# Pinks

## 2009 Fraser River Pink Salmon Escapement Summary

**Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official. Estimates are preliminary and subject to revision post-season.**

COTTONWOOD T.F.			VMN W.C.DRIFT			DB Tagging C/set	MISSION			HG	DAILY
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.	CUMM.		EST.
DATE	1,034	109	(BB+2)	2,676	204.01		4,428,568	4,956,379	TOTAL	(BB+7)	1,112,500
01-Aug			03-Aug				0	0	0	08-Aug	0
02-Aug			04-Aug				0	0	0	09-Aug	0
03-Aug			05-Aug				0	0	0	10-Aug	0
04-Aug			06-Aug	0	0.00		0	0	0	11-Aug	0
05-Aug			07-Aug	0	0.00		1,000	1,000	1,000	12-Aug	0
06-Aug	0	0.00	08-Aug	0	0.00		2,000	2,000	3,000	13-Aug	0
07-Aug	1	0.14	09-Aug	0	0.00		5,000	5,000	8,000	14-Aug	10
08-Aug	0	0.00	10-Aug	1	0.09		7,000	7,000	15,000	15-Aug	10
09-Aug	1	0.14	11-Aug	0	0.00		7,000	7,000	22,000	16-Aug	10
10-Aug	1	0.14	12-Aug	0	0.00		9,000	9,000	31,000	17-Aug	10
11-Aug	1	0.14	13-Aug	0	0.00		5,000	5,000	36,000	18-Aug	20
12-Aug	5	0.67	14-Aug	7	0.56		8,000	8,000	44,000	19-Aug	20
13-Aug	2	0.28	15-Aug	5	0.44		8,000	8,000	52,000	20-Aug	260
14-Aug	6	0.80	16-Aug	3	0.22		15,000	15,000	67,000	21-Aug	560
15-Aug	8	0.63	17-Aug	4	0.30		15,000	15,000	82,000	22-Aug	1000

## Mission Escapement by Stock

Totals:			1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,459	72,995	0	224,466
Mission Escapement																						
			Mission Escapement																			
			Late																			
			Birk																			
			AdLS/Port/Wea/Cult/Misc																			
			Sub 1's																			

## Environmental Conditions

### Fraser Conditions & MA Report for August 14, 2009

#### Fraser River Discharge at Hope

Fraser River discharge is again tracking below historic average levels. Yesterday's discharge was about 2900 m<sup>3</sup>/s and is forecast to decline to 2600 m<sup>3</sup>/s by August 22. These low water levels make the river more susceptible to increased temperatures due to warm weather.

	date	m <sup>3</sup> /s
Last obs.	13-Aug	2,900
Forecast	22-Aug	2,595

#### Fraser River Temperature at Qualark

River temperatures are expected to continue dropping, from yesterday's 18.7C to near historic averages in the high 17C range by August 17. After August 19, warm weather is forecasted to cause river temperatures to increase to 19.0C by August 22.

	date	C
Last obs.	13-Aug	18.7
Forecast	22-Aug	19.0

#### MA Estimate for Early Summers

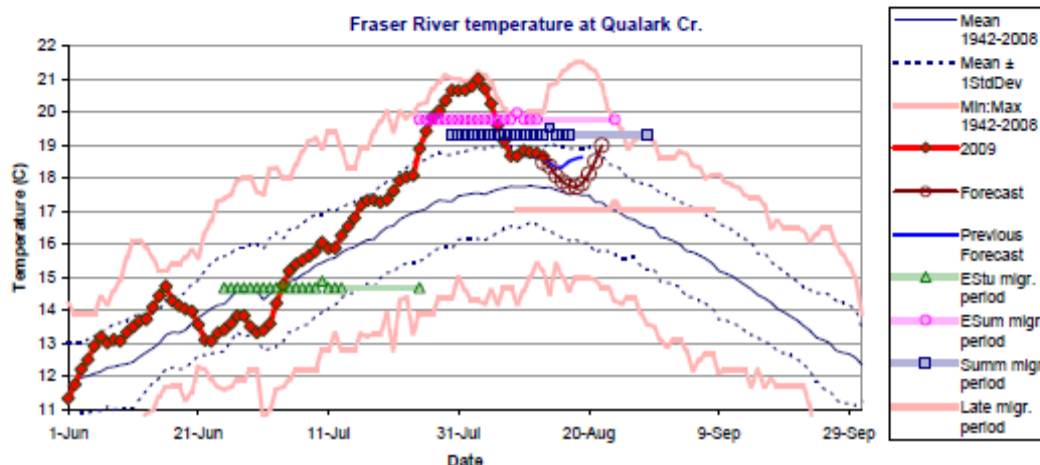
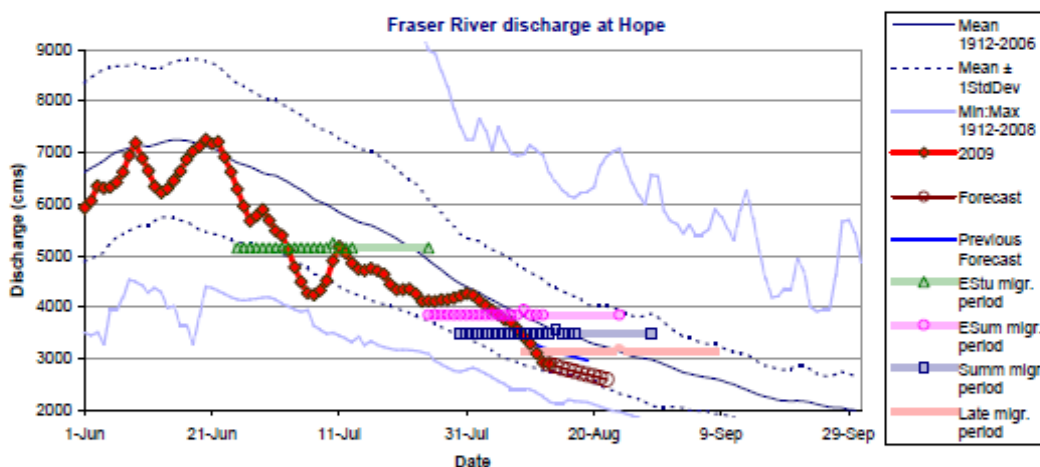
With a timing of July 30 in Area 20 and all observed discharge and temperatures values, the 19-day means are 3851 m<sup>3</sup>/s and 19.8C and the MA estimates are: pMA=0.61, DBE=-38% and MA=107,000 fish. (Estimates for the non-Pitt portion of the Early Summer group are: pMA=0.79 and DBE=-44%). These estimates will not change unless the timing assumption is revised.

HG Date	9-Aug	pMA	0.6129
#days	19	%DBE	-38%
Disch.	3,851	MA	107,300
Temp.	19.8		

#### MA Estimate for Summers

With an Area 20 date of Aug. 4, we have 15 observed and 4 forecasted days of river conditions for the MA model. The 19-day means are 3505 m<sup>3</sup>/s and 19.4C and the MA estimates are: pMA=0.30, DBE=-23% and MA=156,000 fish.

HG Date	14-Aug	pMA	0.30
#days	19	%DBE	-23%
Disch.	3,505	MA	156,000
Temp.	19.4		



# Fishery Recommendations

## *Fraser River Panel Meetings: Summaries and Discussions*

### Fraser River Panel (in-person) Summary Notes-August 14

#### **FRP Canadian Caucus**

- Test Fishing
  - Aug 14:
    - A12 PS (first set): 13 SK, 560 PK
    - A13 PS (two sets): 50 SK, 266 PK
- Mission test fishing (Planned to start today, licence still being reviewed by DFO)
- In the PSC escapement table, Aug 7 to 9, there are relatively large E Stuart counts (367, 410, 281). They may be a mistake in the stock comp. assignment.
- The large fishwheel (FW) has been catching 100-150 SK a day and 10 PK, and as of August 11, they've radio tagged 18 SK.
  - The FW is better at catching PK than it is at catching SK.
  - They've also caught 24 jack SK, 5 CN, and 17 jack CN.

#### **FRP Bi-lateral**

- Test Fishing
  - Aug 12:
    - A20 PS: 341 SK, 137 PK
    - A13 PS: 761 SK, 1710 PK
    - A12 PS: 236 SK, 1100 PK
    - A20 GN: 329 SK, 32 PK
    - Round Island GN: 11 SK, 31 PK
  - Aug 13:
    - A20 PS: 451 SK, 2011 PK
    - A13 PS: 640 SK, 2239 PK
    - A12 PS: 446 SK, 4498 PK
    - A20 GN: 96 SK, 75 PK
  - Notes:
    - There was an increase in catches starting Aug 9 in the outside, unfortunately the increase included a significant proportion of non-Harrison Lates.
    - A20 GN done as of this morning and the Round Island GN was finished Aug 12.
    - Mission esc. has dropped off since "peak" last week & has seen a significant migration of Harrison in the last few days; the measured PS expansion line is 70-80% of the expansion line used for recent projections.
    - Pinks are being observed in the river (about 10-15% of total salmon passing by Mission)
    - In-river test boats have seen increase in PK%
      - 15% Fraser Pinks last week
      - 35% Fraser Pinks this week
    - We are starting to see a trickle of Fraser Pinks, and should have a timing forecast soon. At the moment the pre-season estimate is an A20 peak date of 25-August. Run looks like it'll be a bit later.
- Stock ID

- A12 PS date: Aug 10 n=94
  - 11% ET
  - 51% Ch/Qu
  - 10% LS/St
  - 6% Bi
  - 15% Ad/We
  - 6% Ha
- A20 PS date: Aug 10 n=100
  - 1% EM
  - 3% ET
  - 32% Ch/Qu
  - 10% LS/St
  - 7% Bi
  - 24% Ad/We
  - 23% Ha
  - Note: 54% Lates
- A20 PS date: Aug 12 n=100
  - 14% E Summer
  - 47% Summer
  - 12% Birk.
  - 9% Ad/We
  - 18% Ha
  - Note: Not dominated by Summer runs.
- BB GN dates: Aug 10, 11 n=42
  - 7% EM
  - 30% Ch/Qu
  - 15% LS/St
  - 8% Ad/We
  - 40% Ha
- AB GN dates: Aug 10, 11 n=69
  - 6% EM
  - 11% ET
  - 31% Ch/Qu
  - 19% LS/St
  - 3% Bi
  - 5% Ad/We
  - 26% Ha
  - Note: There appears to have been a slow down in Harrison migration
- Assessments
  - E Summer (current run size = 175k)
    - Note: The migration appears to have had at least 3 modes, which makes fitting a model difficult.
    - 133k in catch and escapement
    - 28k projected
    - 161k accounted to date
    - Cum. Passage:
      - 179k, A20 date: Jul 30 (50% date based on 175k run-size and reconstructed run)
      - 169k, A20 date: Jul 28 (-2d)

- 189k, A20 date: Aug 1 (+2d)
  - Note: The E Sum will likely exceed 175k based on the number accounted for to date and the prolonged migration. May recommend change next meeting.
- Summer (current run size = 600k)
  - 361k in catch and escapement
  - 131k projected
  - 492k accounted to date
  - Cum. Passage:
    - 573k, A20 date: Aug 4 (appears to be peak date based on TF)
    - 500k, A20 date: Aug 2 (-2d)
    - 652k, A20 date: Aug 6 (+2d)
  - Cum. Norm (Deterministic): 534k
    - 173k LS/St
    - 361k Ch/Qu
    - total: 534k
  - Bayes C.Normal:
    - 620k, A20 date: Aug 4 80% PI (545k-707k)
      - LS/St-176k, A20 date: Aug 1, 80% PI (160k-195k)
      - Ch/Qu- 444k, A20 date: Aug 6, 80% PI (370k-530k)
    - Note: The run has been bimodal, so it makes it difficult to fit the model.
    - Seeing the later component of the Ch/Qu run (Mitchell), so we're getting to the later portion of the Summer migration.
  - No change to run size estimate recommended.
- Harrison (current run size = 125k)
  - 138k accounted to date
  - Cum. Norm. (Deterministic): 176k, A20 date: Aug 6
  - Bayes C.Normal: 155k, A20 date: Aug 6, 80% PI (130k-180k)
  - %s of Har is starting to drop, but still present in marine approaches
  - **Recommendation: 150k, A20 date: Aug 4**
    - *US agreed*
    - *Canada agreed*
- Non-Harrison Lates
  - 62k accounted to date
  - Cum. Norm (Deterministic): 136k, A20 date: Aug 14
  - Bayes: 106k, A20 date: Aug 12, 80% PI (83k-150k)
  - 100k-120k return would be consistent with the performance of the other runs with respect to their pre-season forecast, but it's still too early to update the run size estimate.
    - think 100k is "doable"
- Birkenhead
  - 31k accounted to date
  - Cum. Norm. (Deterministic): 64k, A20 date: Aug 14
  - Bayes: 105k, A20 date: Aug 19, 80% PI (68k-180k)
  - Note: If Bi are a bit earlier, then the return could be in the 60k-100k range. In recent years Bi have seen them return later than the LL
- *US? How has 2009 compared to 2005?*



- *In terms of abundance of total SK to date, we're close to 2005 (700k in 2005 vs. 500k this year), but that is where the similarities end.*
- *The stock ID is very different. In 2005 all the runs were extremely late.*
  - *A20 PS: Aug 8, 2005*
    - *78% Summer*
    - *7.5% Lates (all Harrison)*
  - *A20 PS: Aug 10, 2009*
    - *42% Summer*
    - *47% Lates*
  - *A12 PS: Aug 10, 2005*
    - *83% Summer*
    - *4% True-Lates (all Harrison)*
  - *A12 PS: Aug 10, 2009*
    - *62% Summer*
    - *21% True-Lates*
      - *6% Harrison*
  - *Note: We did not see the non-Harrison True-Lates at this time of year in 2005.*
  - *So far we've seen roughly 65% 4 yr olds, in 2005 to this point we'd seen roughly 85% 4 yr olds.*
  - *Given the age and stock composition, it is unlikely that the Summer run is simply late.*
- *US? Is the proportion of jacks observed still high?*
  - *Yes, it should be a good sign for the returns next year.*
    - *A20: 451 adult SK, 11 jacks*
    - *A12: 440 adults, 49 jacks*
    - *A13: 640 adults, 47 jacks*
  - *Jack numbers are uncertain, but these should be a minimum count since sockeye jacks are likely to be occasionally missed when mixed with large numbers of pink salmon.*
  - *Last year there were few jacks observed, but that is not usually a bad sign for the following year, since the jacking rate of most of the Fraser sockeye stocks is low. Jack returns in recent years for Fraser SK have been low.*
  - *A high % of jacks are from Chilko & Adams*
- **Environmental Conditions:**
  - **Discharge at Hope**
    - 2900 cms 13-Aug (20% < avg)
    - forecast: 2600 cms by 22-Aug
    - Note: Below average discharge, means the river is more susceptible to temperature increases due to weather.
  - **Temperature at Qualark**
    - 18.7°C 13-Aug
    - forecast: 17.7°C 17-Aug
    - forecast: 19°C 22-Aug
- **MA**
  - **E Summers (assuming a A20 peak date of Jul 30)**
    - pMA = .61                      Currently at:
    - DBE = -38%                      pMA = 0.60



- MA = 107k
- E Summer (excl. Pitt)
  - pMA = .79
  - DBE = -44%
- Summers (based on 15 observed days and 4 forecasted days)
  - pMA = .3                                      Currently at:
  - DBE = -23%                                      pMA = .32
  - MA = 156k
- No change in MAs recommended. We'll wait for the peak dates to solidify.
- *US? For E Summers, is the current estimated Pitt proportion similar to the forecast?*
  - *Forecast: Pitt/E Summer = 17%*
  - *Estimated at Mission = 23%*
  - *Note: The percentage is a bit higher than forecast, but the Pitt run is finished and other Early Summers are still coming in, so the final % should be close to the forecast.*
- *US? Is there a diversion rate estimate?*
  - SK
    - 50% diversion today
    - 38% average to date
  - PK
    - 50% average to date
- *US? Pink run size estimate?*
  - *It's too early.*
- Run sizes needed to generate a harvestable surplus, given changes to the MAs
  - E Summer: 310k
  - Summer: 720k
- News Release
  - Factors not responsible for the low number coming back.
    - Overfishing
    - Freshwater events (a lot of juveniles went out)
    - Warmer water in the Fraser this year (doesn't make any sense)
  - At sea conditions
    - The surface of the Strait of Georgia was slightly warmer than average (1-2°C).
    - All the other ocean conditions were either positive or average.
  - In-season assessments for other runs either returning this year to other places, or that went to sea at the same time as the Fraser 4 yr old component.
    - Skeena return poor.
  - Sea Lice
    - The available information is too equivocal for speculation.
- Pink salmon management: By-catch rules
  - There will be available late-run impacts, because we have an agreed-upon 20% allowable impact when no TAC is available.
  - We do not have such rules for Summer and E Summer impacts when we don't have an allowable TAC, therefore we'll need to come up with some decision rules in order to prosecute Pink fisheries.
  - We also need a decision on an allowable SK/PK ratio for PK fisheries. .
- *US Summary of Puget Sound Pink status*
  - *The forecast is for a strong return, except for Nooksack.*
  - *There are commercial openings planned next week in Skagit and Everett Bay (on Snohomish PK).*

- *Information from recreational fishermen indicates quite a few pinks in the South Sound (returning to Green and Puyallup Rivers).*
- *It is still too early to estimate the return, but indications are good.*
- *PSC? Would US fisheries on pinks be terminal, could they have any impact on Fraser pinks?*
  - *The planned fisheries are very terminal (South Sound) and should not have any impact on Fraser stocks.*
- Pink fisheries
  - Next week there may be sufficient Fr pinks to start considering fisheries.
  - Reef nets and seines can both be quite selective.
- Test Fishery schedules
  - A20 GN test fishery was done last night, what about the A7 reefnets? They may be useful for SK/PK estimates, we could stop and re-start when the SK/PK ratio becomes more important.
  - *US: The reefnet fishery should continue, but a reduced schedule would be acceptable.*
  - Mission Test Fishery
    - Set net to cover near shore.
    - Drift net to cover the channel.
    - It could start on Monday, but there will need to be further discussions with DFO.
- Next Meeting
  - Conference call Tue. Aug 18<sup>th</sup>, 11:30 am

## Detailed Fishing Openings

### Open Times for the Mid & Upper Fraser River First Nations Fisheries

## 2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon

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August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	5	Sunday August 9 18:00	Thursday August 13 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	5	Thursday August 13 18:00	Sunday August 16 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b>	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Ti't'q'et	Ti't'q'et traditional Fishing Area	4	Thursday August 13 18:00	Sunday August 16 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net (all but Ti'az't'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 9 18:00	Sunday August 16 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 09	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Sunday Aug 09	18:00 Sunday Aug 09	Chinook	drift net
Aug 09	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Sunday Aug 09	18:00 Sunday Aug 09	Chinook	drift net
Aug 09	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Aug 09	18:00 Sunday Aug 09	Chinook	drift net
Aug 09	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 09	19:00 Sunday Aug 09	Chinook	drift net
Aug 09	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 07	19:00 Sunday Aug 09	Chinook	fish wheel
Aug 09	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Sunday Aug 09	21:00 Sunday Aug 09	Chinook	dip net
Aug 16		Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
Aug 16		Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
Aug 16	Kwikwilem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
Aug 16	Kwikwilem First Nation	Pitt River	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Sockeye	set net, drift net
Aug 16	Chehalis First Nation	Harrison River	10 hrs	07:00 Thursday Aug 13	17:00 Thursday Aug 13	Sockeye	beach seine
Aug 16	Chehalis First Nation	Harrison River	12 hrs	05:00 Friday Aug 14	17:00 Friday Aug 14	Sockeye	beach seine
Aug 16	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Saturday Aug 15	18:00 Saturday Aug 15	Chinook	drift net
Aug 16	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 15	19:00 Saturday Aug 15	Chinook	drift net
Aug 16	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Aug 15	19:00 Saturday Aug 15	Chinook	drift net

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 16	Seabird Island First Nation	Mission to Sumas River	6 hrs	14:00 Monday Aug 10	20:00 Monday Aug 10	Chinook	drift net
Aug 16	Skwah First Nation	Hope to Emory Creek	12 hrs	07:00 Tuesday Aug 11	19:00 Tuesday Aug 11	Chinook	drift net
Aug 16	Sumas First Nation	Mission to Sumas River	6 hrs	14:00 Wednesday Aug 12	20:00 Wednesday Aug 12	Chinook	drift net
Aug 16	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Thursday Aug 13	19:00 Thursday Aug 13	Chinook	drift net

## Economic Opportunity Opening Times

none

# Preliminary In-season Catch Numbers

## Commercial

No commercial catch to report

## Recreational

See appendices

## First Nations

## Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14403
Aug-16	133	61	43	461		457	125		76		1119	1356	15759

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621
16-Aug	53	4719	33	147	110	5062	8683

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572
16-Aug	0	244	2384	0	36	2664	4236

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6
16-Aug	1.0	0.0	0.0	5.0	9.0	0.0	0.0	0.0	2.1

N/M = No Monitoring Conducted

**Marine**

N/A



# Fraser River Sockeye and Pink

## Weekly Management Plan August 16 – Aug 22/09

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### For Period of:

Sun. August 16<sup>th</sup> – Sat. August 22<sup>nd</sup>, 2009

Week: 34

### Stock Aggregate Focus:

Early Summers; Summers; Birkenhead and True Lates

### Management objectives for the current week:

- Assess run size and timing for Early Summers
- Assess run size and timing for Summers
- Assess run size and timing for Birkenhead
- Assess run size and timing for True-Lates
- Monitor in-river migration conditions
- 

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## Fraser Sockeye Management Summary

### FN0651-Salmon: Fraser River Sockeye Update from August 21 - Areas 11 to 29

The Fraser River Panel met Friday, August 21st, to receive assessments from the Pacific Salmon Commission staff on the status of the Fraser River sockeye and pink salmon runs as well as migration conditions for sockeye in the Fraser River. The migration of Fraser sockeye through the marine approach routes has continued at low abundance levels over the past week, while the marine migration of Fraser River pink salmon through the assessment areas has been increasing. The diversion rate of Fraser River sockeye through Johnstone Strait is currently estimated to be 41%, while for Fraser River pink salmon it is presently estimated to be 50%. The estimated total non-commercial catch of Fraser sockeye this season is 61,000 fish; harvested in test fisheries and First Nations FSC fisheries. The estimated total non commercial catch to-date of Fraser River pink salmon is approximately 8,000 fish.

At the meeting today the run size estimate of 175,000 Early Summer-run sockeye was unchanged. The estimated escapement of Early Summer-run sockeye past Mission through August 20 is approximately 144,000 fish.

At the meeting on August 18, the Panel adopted a run size estimate of 700,000 Summer-run sockeye; with 50% migration timing through Area 20 of August 6, which is one day later than expected. At the meeting today this run size estimate was unchanged. The estimated escapement of Summer-run sockeye past Mission through August 20 is approximately 481,000 fish.

At the August 18 meeting, the Panel adopted a run size estimate for the Birkenhead stock-group of 100,000 fish, with 50% migration timing through Area 20 of August 18, which is seven days later than expected. This run size estimate was unchanged at the meeting today. The estimated escapement of Birkenhead sockeye past Mission through August 20 is 30,000 fish.

At the meeting on August 18, the run size estimate for Harrison sockeye was increased from 150,000 fish to 200,000 fish, with 50% migration timing through Area 20 of August 8, which is five days later than expected. Also at the meeting on August 18, the Panel approved a run size estimate of 250,000 Weaver/Late Shuswap sockeye with 50% migration timing through Area 20 of August 19, which is seven days later than expected. These run size estimates were unchanged at the meeting today. The estimate of total True Late-run sockeye abundance is 450,000 fish (below their 50% probability level forecast of 573,000 fish), which is the sum of the estimates of Harrison and Weaver/Shuswap sockeye abundances. Current assessments suggest that a considerable proportion of Weaver/Shuswap sockeye may be delaying in marine areas prior to entering the Fraser River. The estimated escapement of True Late-run sockeye past Mission through August 20 is approximately 178,000 fish.

The estimated total Fraser sockeye return this season is currently 1,510,000 fish, which is less than half of the 90% probability level forecast of 3,556,000 fish. This total run size estimate is based on current estimates of: 85,000 Early Stuart; 175,000 Early Summer-run; 700,000 Summer-run; 100,000 Birkenhead; and 450,000 True Late-run sockeye.

DFO's forecast of the 50% migration timing of Fraser River pink salmon through Area 20 is August 31 and the forecast of their diversion rate through Johnstone Strait this season is 31%. Test fishing catches of pink salmon by purse seines in both marine approach areas have increased substantially over the past week. Recent DNA analyses of pink salmon sampled from the Area 12 and 20 purse seine test fisheries indicate that Fraser River pink salmon contributions in these areas have increased to approximately 50%. It is too early to provide a run size estimate for Fraser River pink salmon since their forecast peak migration period through the marine assessment areas has not yet

occurred. However, present assessments indicate that Fraser pinks are tracking abundance levels near or exceeding their 75% probability level forecast of 12,490,000 fish, depending on assumptions about their marine migration timing. Abundance levels in this range are sufficient to support commercial fisheries; subject to conservation concerns for Fraser River sockeye salmon that are still migrating through areas where fisheries may occur as well as other species of concern.

On August 20 the Fraser River discharge at Hope was approximately 2,500 cms, which is about 25% lower than normal, while the water temperature at Qualark Creek was 18.9 0C, which is 1.4 0C higher than average for this date. Water temperatures are forecast to increase to 19.4 0C by August 26 and then decline. Water temperatures exceeding 19 0C may cause stress to sockeye and slow their upstream migration. At the meeting today, after reviewing environmental and stock assessment information, the Panel approved a decrease in the management adjustment factor for Summer-run sockeye from 0.32 to 0.21. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye salmon.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time or anticipated. DFO is continuing planning meetings with First Nations groups to review current information which currently provides for very limited sockeye harvest opportunities on summer and late run sockeye stock groups.

The next scheduled Panel meeting is Tuesday, August 25.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Aug 16	Mon Aug 17	Tues Aug 18	Wed Aug 19	Thurs Aug 20	Fri Aug 21	Sat Aug 22
First Nations – FSC Mid and Upper Fraser	Chinook with mortally wounded sockeye or limited sockeye directed in terminal areas (dip net)						
First Nations – FSC Lower Fraser	Chinook with mortally wounded sockeye except limited sockeye directed in terminal areas – Harrison and Pitt River						
First Nations – FSC Marine	Open to limited sockeye TAC						
Recreational - Upper Fraser River	Closed						
Recreational - Lower Fraser River	Closed						
Recreational Marine Areas	Closed						
Commercial Area D	Closed						
Commercial Area E	Closed						
Commercial Area B	Closed						
Commercial Area H	Closed						
U.S. Treaty Indian	Closed						
U.S. Non-treaty Indian	Closed						

## Fishery Notices Summary

### RECREATIONAL – Salmon

FN0638-RECREATIONAL - Salmon - Alberni Inlet Chinook - Area 23

FN0639-RECREATIONAL - SALMON: Region 3 - Retention of Chinook Salmon in Thompson River and Closure of Sockeye Salmon in the Thompson River

FN0646-Recreational - Salmon: Nitinat River Recreational Salmon Fishing Opportunities

FN0647-RECREATIONAL - Salmon: Somass River & Stamp River - 2009 Salmon Opportunities

FN0651-Salmon: Fraser River Sockeye Update from August 21 - Areas 11 to 29

### COMMERCIAL – Salmon

FN0631-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening

FN0632-COMMERCIAL - Salmon: Troll - Area F Troll - ITQ Demonstration Fisheries - Re-opening of the Chinook ITQ Fishery

FN0634-COMMERCIAL - Salmon: Seine - Area A Seine - Area 6 Opening - August 18

FN0637-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening - August 19

FN0640-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3, 4, 5, & 6 Opening - August 23

FN0641-COMMERCIAL - Salmon: Troll - Area F - Chinook Demonstration Fishery

FN0642-COMMERCIAL - Salmon: Seine & Gill Net - Area A & C - Areas 7 & 8 Chum and Pink Fishery

FN0643-COMMERCIAL - Salmon: Area C Gill Net - Areas 3, 4, 5 & 6 Update

FN0644-COMMERCIAL - Salmon: Seine - Area B - Alberni Inlet Chinook Opportunity - August 24

FN0645-COMMERCIAL - Salmon: Gill Net - Area D - Alberni Inlet Chinook Opportunity - August 24

FN0651-Salmon: Fraser River Sockeye Update from August 21 - Areas 11 to 29

### ABORIGINAL – Salmon

FN0649-ABORIGINAL - Salmon: Fraser River Sockeye Salmon - Limited sockeye retention opportunities in South Coast Marine Areas

FN0651-Salmon: Fraser River Sockeye Update from August 21 - Areas 11 to 29

# Management Information

## 2009 Fraser River Sockeye In-season Status

Status

### 2009 Fraser River Sockeye In-season Status

Week of: Aug. 16 - Aug. 22, 2009

Date: Aug. 21, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	175,000	700,000	100,000	450,000	1,510,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	1,860	5,850	18,020	1,320	6,260	33,310	8,360
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	252	600	1,602	73	605	3,132	0
Escapement-to-date @ Mission	82,450	144,140	480,560	30,290	177,690	915,130	165,810
Potential Gross Escapement	82,702	144,740	482,162	30,363	178,295	918,262	165,810
Adjusted Gross Esc. Target *	85,000	175,000	686,400	92,200	422,200	1,460,800	6,000,000
Accounted-to-date							
Catch + Escapement to Mission	84,562	150,590	500,182	31,683	184,555	951,572	174,170
Potential Remaining To Come							
Potential En-route	438	24,410	199,818	68,317	265,445	558,428	17,360,830
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	109	811	2,455	100	482	3,957	1,190
Test Fishing	1,690	4,550	13,420	1,060	5,270	25,990	1,200
Canadian Charter (Albion & Qualark TF)	56	185	873	30	159	1,303	10
Canadian Marine Recreational	0	0	0	0	0	0	2,560
U.S. TI Ceremonial	0	304	1,268	127	346	2,045	500
U.S. Recreational	0	0	0	0	0	0	2,900
Total	1,860	5,850	18,020	1,320	6,260	33,310	8,360
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	252	600	1,602	73	605	3,132	0
Catch Above Mission (incl. FSC & EO)	6,289	6,689	11,205	17	531	24,731	40
Total	6,541	7,289	12,807	90	1,136	27,863	40
Total In-river Catch	6,541	7,289	12,807	90	1,136	27,863	40
Total Catch in All Areas							
Total	8,401	13,139	30,827	1,410	7,396	61,173	8,400
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	30-Jul	6-Aug	18-Aug	12-Aug		25-Aug
Mission Timing	5-Jul	5-Aug	12-Aug		20-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

# 2009 Fraser River Sockeye TAC Calculations and Catch

TAC

## 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Aug. 16 - Aug. 22, 2009

Date: Aug. 21, 2009

	Fraser Sockeye						Fraser Pinks	
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	Total	
RUN STATUS, ESCAPEMENT NEEDS & AVAILABLE SURPLUS								
In-season Run Size Estimate	85,000	175,000	700,000	100,000	450,000	1,510,000	17,535,000	
Adult Spawning Escapement Target (SET)	85,000	175,000	520,000	74,300	360,000	1,214,300	6,000,000	
%SET from TAM rules	100%	100%	74%	74%	80%		31%	
Management Adjustment (MA)	32,300	105,000	166,400	0	n/a	303,700	0	
Proportional MA (pMA)	0.38	0.60	0.32	0.00	6.04		0.00	
Adjusted Spawning Escapement Target (SET) *	85,000	175,000	686,400	74,300	360,000	1,380,700	6,000,000	
Test Fishing (TF)	1,740	5,000	18,000	1,500	6,000	32,240	10,000	
Surplus above Adjusted SET & Test fishing	0	0	0	24,200	84,000	108,200	11,525,000	
DEDUCTIONS & TAC FOR INTERNATIONAL SHARING								
Aboriginal Fishery Exemption (AFE)	7,000	12,000	25,000	24,200	84,000	152,200	0	
Available Aboriginal Fishery Exemption	0	0	0	24,200	84,000	108,200	0	
Total Deductions (Adj. SET + TF + Available A)	86,740	180,000	704,400	100,000	450,000	1,521,140	6,010,000	
Available TAC for International Sharing	0	0	0	0	0	0	11,525,000	
UNITED STATES (Washington) TAC								
U.S. Share **	16.5%	0	0	0	0	0	25.7%	2,961,930
U.S. Payback **	0.0%	0	0	0	0	0		0
Total		0	0	0	0	0		2,961,930
Treaty Indian Share **	67.7%	0	0	0	0	0	50.0%	1,480,965
Non-Indian Share	32.3%	0	0	0	0	0	50.0%	1,480,965
CANADA TAC								
Canadian Allocation	83.5%	0	0	0	0	0	74.3%	8,563,070
Available Aboriginal Fishery Exemption (AFE)	0	0	0	24,200	84,000	108,200		0
Total Canadian Share	0	0	0	24,200	84,000	108,200		8,563,070
Marine Area Aboriginal	0	0	0	6,300	21,800	28,100		0
Fraser River Aboriginal	0	0	0	17,900	62,200	80,100		0
First Nations Allocations (including AFE)	0	0	0	24,200	84,000	108,200		0
Planned Recreational Shares	0	0	0	0	0	0		0
Purse Seine B	47.5%	0	0	0	0	0	70.0%	5,994,150
Gillnet D	21.5%	0	0	0	0	0	4.0%	342,520
Gillnet E	25.0%	0	0	0	0	0	6.5%	556,600
Troll H	6.0%	0	0	0	0	0	13.0%	1,113,200
Commercial Allocations	100.0%	0	0	0	0	0	100.0%	8,563,070
CATCH-TO-DATE								
Test	1,690	4,550	13,420	1,060	5,270	25,990		1,200
Treaty Indian (Wash.)	0	300	1,270	130	350	2,040		490
Non-Indian (Wash.)	0	0	0	0	0	0		2,890
Washington	0	300	1,270	130	350	2,040		3,380
Marine Area Aboriginal	110	810	2,460	100	480	3,960		1,190
Fraser River Aboriginal	6,540	7,290	12,810	90	1,140	27,860		40
Recreational	0	0	0	0	0	0		2,560
Commercial	60	190	870	30	160	1,300		0
Canada	6,710	8,290	16,140	220	1,780	33,120		3,790
Total Catch in All Fisheries	8,400	13,140	30,830	1,410	7,400	61,160		8,370
Exploitation Rate (catch-to-date / run size)	10%	8%	4%	1%	2%	4%		0%
CATCH REMAINING (BALANCE)								
Washington	0	-300	-1,270	-130	-350	-2,050		2,958,550
Canada	-6,710	-8,290	-16,140	23,980	82,220	75,060		8,559,280
Balance Remaining [ below share / -above share]	-6,710	-8,590	-17,410	23,850	81,870	73,010		11,517,830
ESCAPEMENT RELATIVE TO TARGETS								
Potential Spawning Escapement (PSE) ***	76,600	161,860	669,170	98,590	442,600	1,448,820		17,526,630
Predicted Difference Between Estimates (%DBE)	-28%	-38%	-24%	0%	****			0%
PSE with predicted DBE removed	55,510	101,160	506,950	98,590	****			17,526,630
Spawning Escapement Target (SET)	85,000	175,000	520,000	74,300	360,000	1,214,300		6,000,000
Potential deviation from SET [ <target / >target ]	-29,490	-73,840	-13,050	24,290	****			11,526,630

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 18.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Aug. 16 - Aug. 22, 2009

Date: Aug. 21, 2009

Area		Gear	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			0		
B Areas 11-16	PS			0		
D Areas 11-13	GN			0		
H Areas 12-16	Troll			0		
H Areas 18-29	Troll			0		
B Area 20	PS			0		
E Area 29	GN			0		
Canadian Selective				0		
FRA Economic Opportunity				0		
BC Interior FN Demo				0		
Canadian Total				0		
United States						
Alaska	Net&Troll			0		
Washington						
T.I. Areas 4B/5/6C	Net			0		
T.I. Areas 6/7/7A	Net			0		
N.I. Areas 7/7A	Net			0		
Washington Total				0		
U.S. Total				0		
Non-commercial Catch						
PSC Test				17,200		
Other Test				8,800		
Fraser River Aboriginal (FSC)				27,860		
Areas 12-124 Aboriginal				3,960		
Recreational				0		
Charter				1,304		
U.S. TI Ceremonial				2,000		
Non-comm. Total				61,120		
Catch and Escapement						
Catch Accounted-to-date				61,120		
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)				889,800		
Total Accounted-to-date				950,920		
Gross Escapement (includes Pitt R. sockeye)						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,400	300	82,700	97%
ESum	Early Summer	175,000	144,100	600	144,700	83%
Summ	Quesnel/Chilko	686,400	335,200	900	482,200	70%
	L.Stu./Stel.		145,400	700		
Late	Birkenhead	92,200	30,300	100	30,400	33%
	Adams/L.Shuswap	422,200	16,000	0	178,200	42%
	Weav/L.Misc.		8,800	0		
	Sub 1s		152,900	500		



## Test Fishing Data

### Pacific Salmon Commission Test Fishing Summary

#### 2009 Pacific Salmon Commission Sockeye Test Fishing Summary

	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug	20-Aug
Area 20 Gillnet	329	96							
US Area 5 Gillnet									
Area 20 Purse Seine	341	451	400	165	303	453	203	246	103
29B Cottonwood Gillnet*	24	4	28	104	56	29	48	21	65
29D Whonnock Gillnet*	30	15	38	26	57	113	102	77	98
Area 12 Round Island GN	11								
Area 12 Naka Cr. Gillnet									
Area 12 Purse Seine	236	446	98	277	250	486	360	494	453
Area 13 Purse Seine	761	640	760	880	2465	601	534	257	171
Area 7 Reef Net Obs.	274	198		537	273	757	474	1621	456
Hells Gate Daily Estimate	1420	4020	3840	1400	240	320	230	370	6480
Mission Escapement**	37673	17667	26586	29811	39455	40700	47998	19275	NA

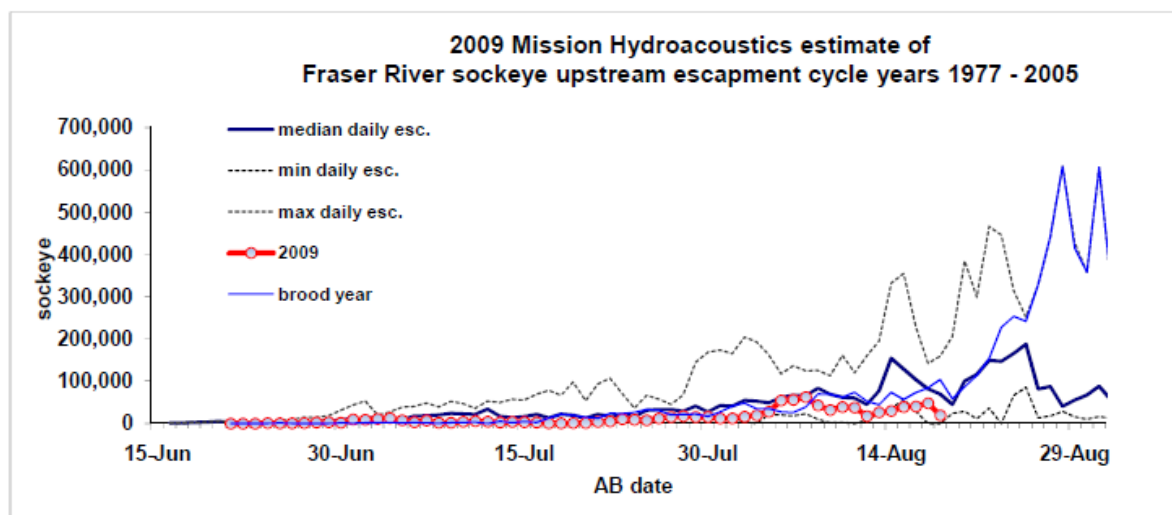
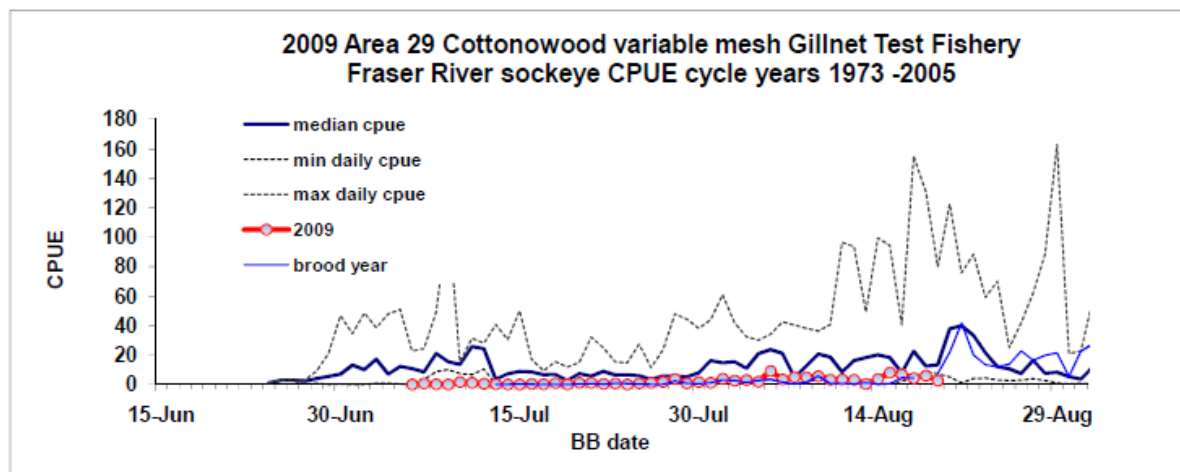
\* Variable mesh Gillnet

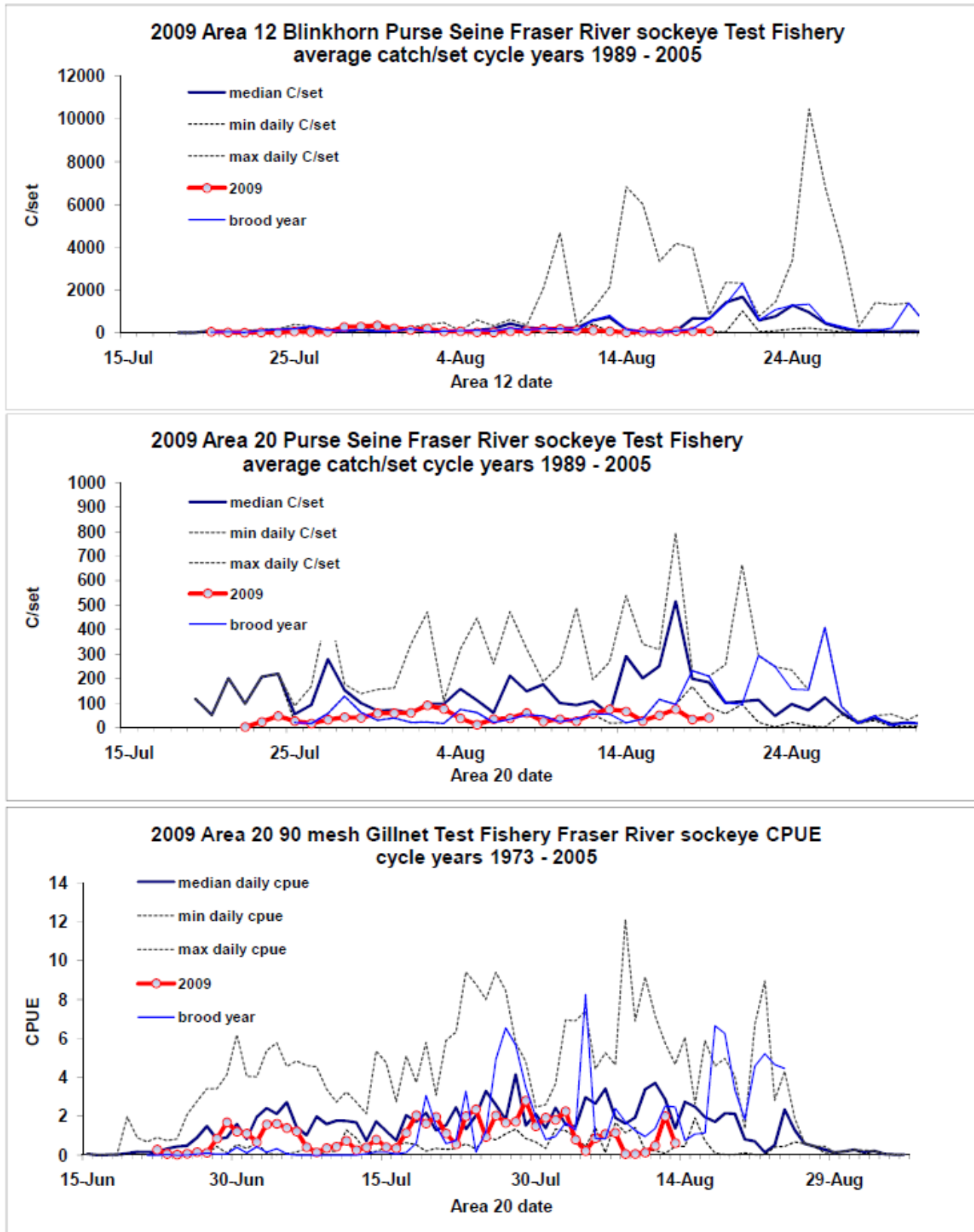
\*\* Preliminary, subject to revision.

N.O. = No Observation.

\* mechanical problems 1 set only

DNF = did not fish





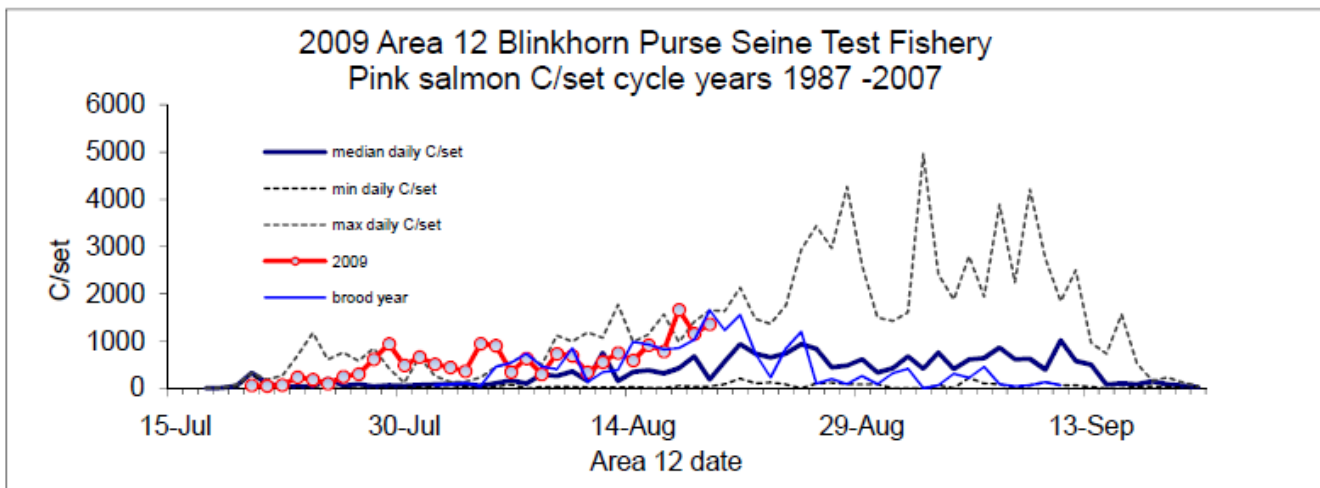
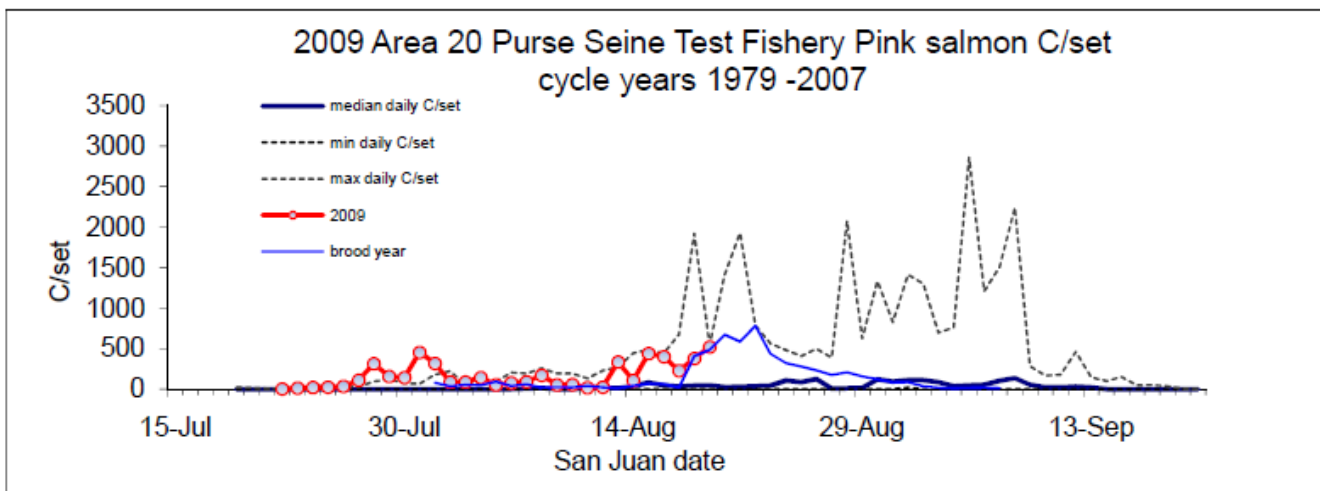


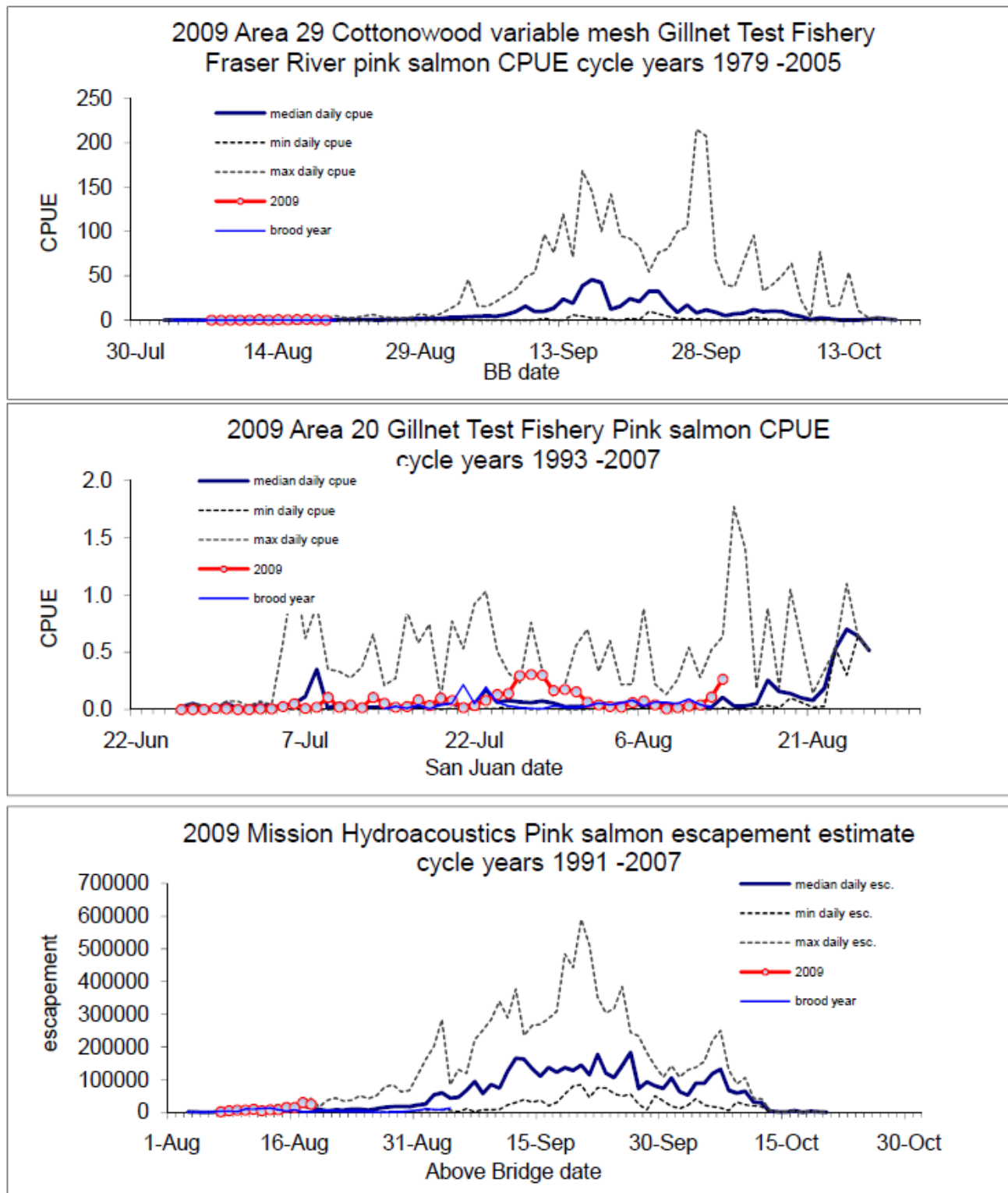
**Pacific Salmon Commission Pink Test Fishing Summary**

	Aug-14	Aug-15	Aug-16	Aug-17	Aug-18	Aug-19	Aug-20
Area 20 seine	642	2640	2390	1369	2256	3115	1161
Area 20 gillnet							
Area 7 Reef net (observed)		948	573	4660	2217	9097	1661
Area 12 seine	3530	5481	4675	9953	5754	8125	7535
Area 13 seine	2762	2391	15800	9223	6689	4665	1131
Round Island Gillnet							
Area 29B Cottonwood *	6	8	6	8	5	3	3
Area 29D Whonnock *	7	5	3	4	7	4	8
Mission Escapement **	8000	8000	15000	15000	30000	25000	NA

\*\* preliminary - subject to revision.  
DNF = did not fish

\* Variable mesh gillnet.





**Detailed Test Fishing Data**

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	16/08/2009	1	6	6	250	24	4675
	17/08/2009	1	6	6	486	47	9953
	18/08/2009	1	5	5	360	26	5754
	19/08/2009	1	6	6	494	31	8125
	20/08/2009	1	6	6	453	29	7535
	21/08/2009	1	6	6	372	27	9290
	22/08/2009	1	6	6	592	84	10066
	16/08/2009	1	6	6	2465	46	15800
Area 13 - Area 13 Sockeye Seine	17/08/2009	1	4	4	601	21	9223
	18/08/2009	1	4	4	534	17	6689
	19/08/2009	1	6	6	257	8	4665
	20/08/2009	1	6	6	171	10	1131
	21/08/2009	1	6	6	29	0	308
	22/08/2009	1	6	6	306	17	4104
	16/08/2009	1	6	6	303	0	2390
	17/08/2009	1	6	6	453	7	1369
Area 20 - San Juan Sockeye Seine	18/08/2009	1	6	6	206	3	2256
	19/08/2009	1	6	6	246	11	3115
	20/08/2009	1	6	6	103	15	1161
	21/08/2009	1	3	3	100	2	2962
	22/08/2009	1	6	6	72	0	6697
	16/08/2009	1	2	8.1	56	0	6
	17/08/2009	1	2	6.72	29	0	8
	18/08/2009	1	2	7.74	48	0	5
Area 29 - Cottonwood Sockeye Gillnet	19/08/2009	1	2	7.68	21	0	3
	20/08/2009	1	2	8.1	65	0	3
	21/08/2009	1	2	7.62	50	0	3
	22/08/2009	1	2	7.26	16	0	2
	22/08/2009	1	2	382	30	1	57
	16/08/2009	1	2	12.95	57	0	3
	17/08/2009	1	2	14.9625	113	0	4
	18/08/2009	1	2	15.225	102	0	7
Area 29 - Gulf Sockeye Troll	19/08/2009	1	2	14.2625	77	0	4
	20/08/2009	1	2	14.7	98	0	8
	21/08/2009	1	2	14	77	0	7
	22/08/2009	1	2	13.0375	60	0	5
	16/08/2009	0	25	1470	273	0	573
	17/08/2009	0	25	1500	757	0	4660
	18/08/2009	0	24	1410	474	0	2217
	19/08/2009	0	23	1350	1621	0	9097
Area 29 - Whonnock Sockeye Gillnet	20/08/2009	0	23	1350	456	0	1661
	21/08/2009	0	0	0			
	22/08/2009	0	23	1320	266	0	1037
U.S. Area 7 - Area 7 U.S. Sockeye Reef Net	16/08/2009	0	25	1470	273	0	573
	17/08/2009	0	25	1500	757	0	4660
	18/08/2009	0	24	1410	474	0	2217
	19/08/2009	0	23	1350	1621	0	9097
	20/08/2009	0	23	1350	456	0	1661
	21/08/2009	0	0	0			
	22/08/2009	0	23	1320	266	0	1037

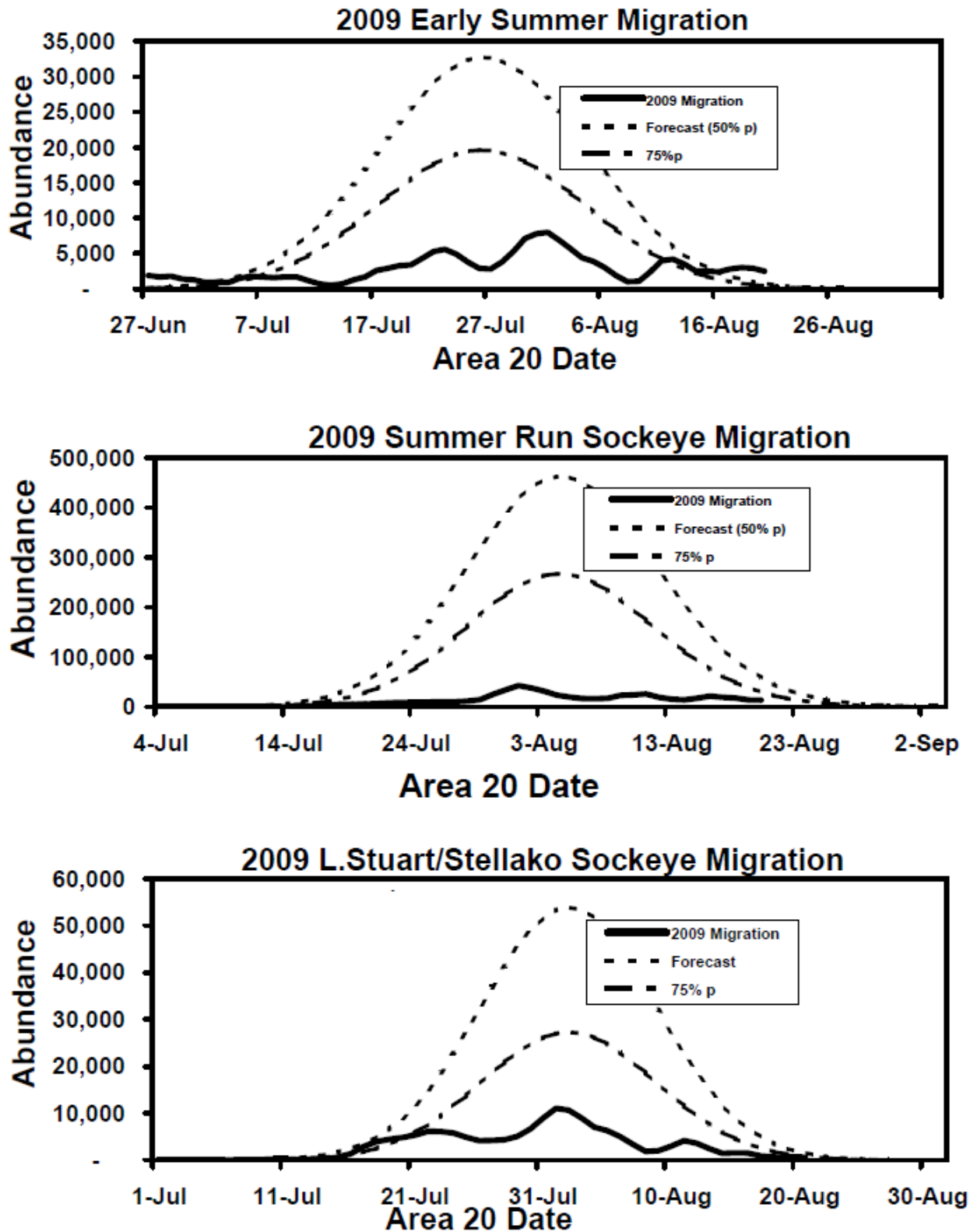
## DNA Analysis

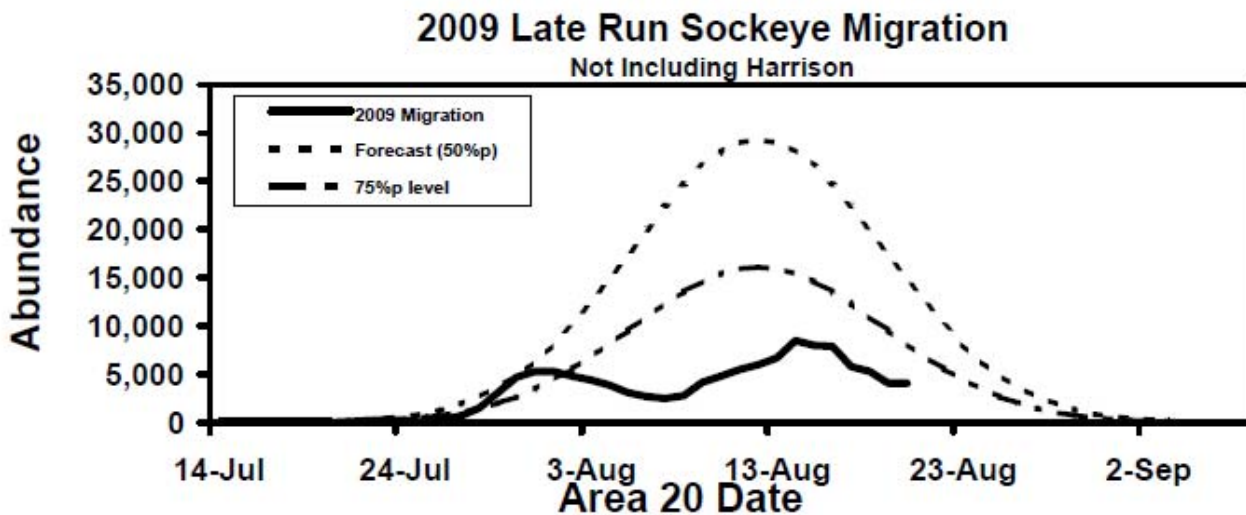
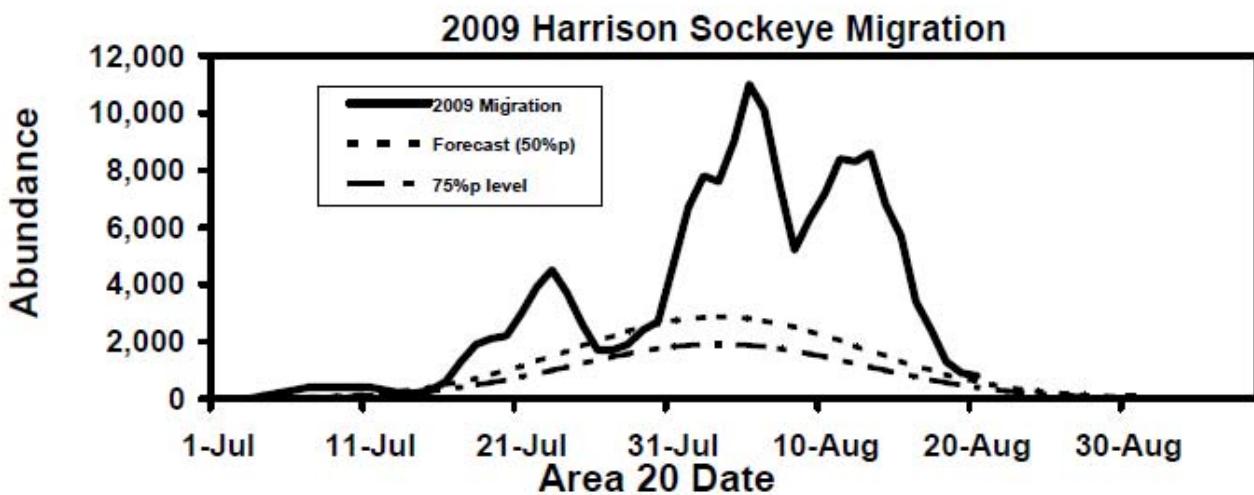
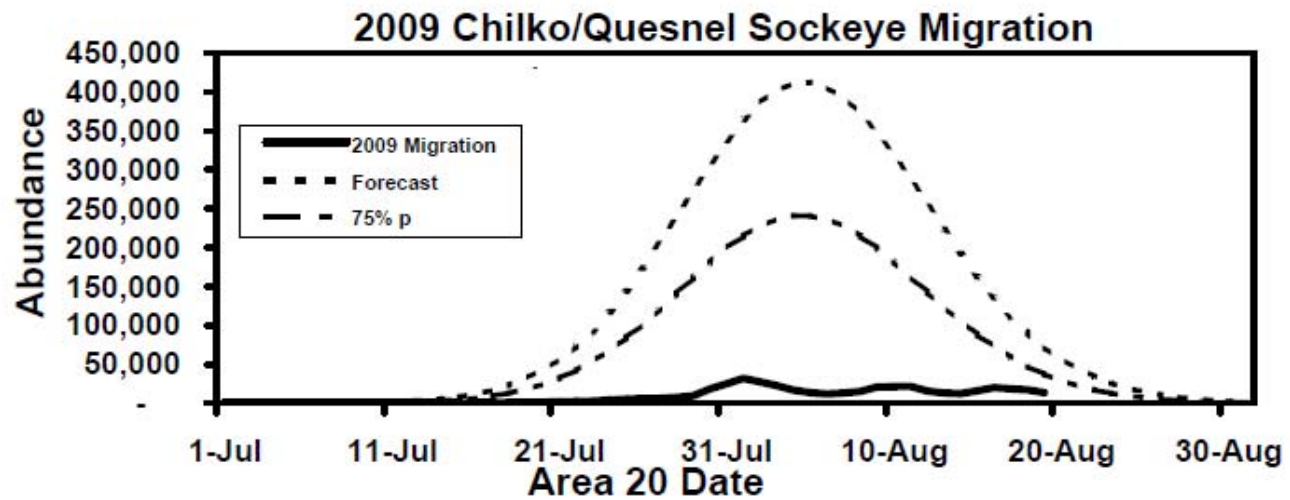
## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A12pstf	aug.17	95	99%	EM 2%;ET 5%;CQ 59%;LS 2%;Bi 8%;AW 22%;Ha 2%;
dna A20pstf	aug.17	100	93%	ES 0%;EM 1%;ET 9%;CQ 42%;LS 4%;Bi 13%;AW 27%;Ha 4%;
dna BBgntf	aug17,18	75	100%	ES 0%;EM 9%;ET 7%;CQ 37%;LS 8%;Bi 11%;AW 7%;Ha 20%;
dna ABgntf	aug.18	99	100%	EM 3%;ET 3%;CQ 43%;LS 11%;Bi 11%;AW 5%;Ha 23%;
dna ABgntf	aug.19	77	100%	EM 0%;ET 9%;CQ 35%;LS 4%;Bi 7%;AW 7%;Ha 39%;
<b>E.Stuart</b>	<b>Early Summer</b>		<b>Summer</b>	<b>Late</b>
ES=ESStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

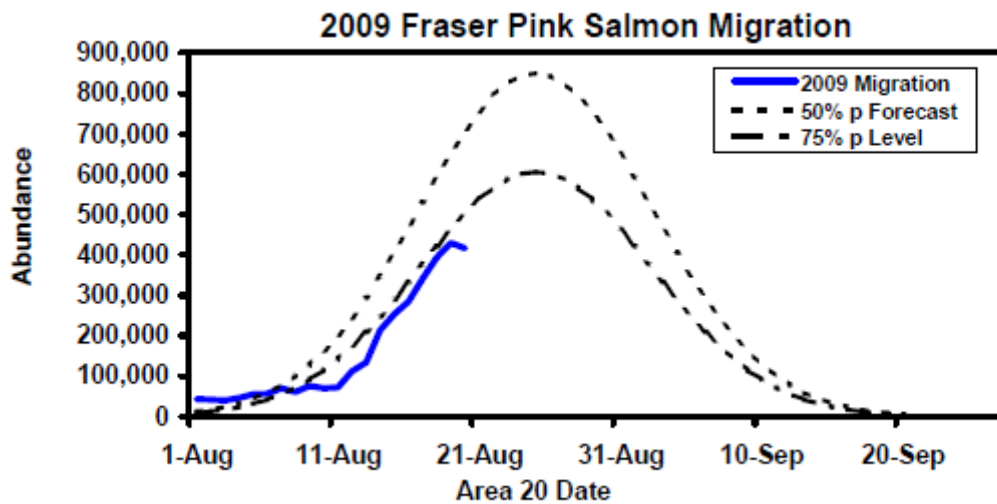
\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## Migration Graphs









## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...										
Mission Date	Escapement Total	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
Mission Total:	918,400	99,100	17,200	28,500	146,100	207,900	128,200	30,400	153,400	24,900
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)										
Mission Date	Projected Escapement	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
21-Aug	45,600	-	100	2,500	2,300	9,700	9,100	5,000	3,800	13,100
22-Aug	37,400	100	200	1,500	1,200	8,700	8,500	3,700	4,100	9,400
23-Aug	47,600	100	400	2,200	900	11,700	11,900	5,600	2,000	12,800
24-Aug	28,300	300	200	3,400	500	6,700	6,800	2,900	1,000	6,500
25-Aug	27,300	300	200	1,800	500	6,700	6,800	3,100	1,000	6,900
26-Aug	23,600	400	100	2,100	500	6,200	6,200	2,200	600	5,300
Projected Gross Escapement <sup>1,2</sup>										
21-Aug										
26-Aug	209,800	1,200	1,200	13,500	5,900	49,700	49,300	22,500	12,500	54,000
Projected Total	1,128,200	100,300	18,400	42,000	152,000	257,600	177,500	52,900	165,900	78,900
Early Summers 160,700					Summer Runs 587,100			Birkenhead 52,900	True Lates 244,800	

## Escapement Summary

### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009	COTTONWOOD T.F.			AB T.F.		MISSION	BEST Est.	Hells Gate		
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)	CUMM.	DAILY EST	
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200	TOTAL	(AB+4)	129,130
16-Aug	56	6.79	17-Aug vmn	113	8.48	40,700	40,900	829,700	21-Aug	5,770
17-Aug	29	4.43	18-Aug vmn	102	7.33	47,998	48,200	877,900	22-Aug	10,350
18-Aug	48	6.15	19-Aug vmn	77	5.80	19,275	19,500	897,400	23-Aug	10,960
19-Aug	21	2.75	20-Aug vmn	98	7.35	28,224	28,700	926,100	24-Aug	4,050
20-Aug	65	5.49	21-Aug vmn	77	5.78	19,695	20,000	946,100	25-Aug	1,590
21-Aug	50	6.50	22-Aug vmn	60	4.60	18,509	18,800	964,900	26-Aug	2,240
22-Aug	16	2.21	23-Aug vmn	15	1.30	14,340	14,500	979,400	27-Aug	1,290

## Pinks

### 2009 Fraser River Pink Salmon Escapement Summary

Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official.

Estimates are preliminary and subject to revision post-season.

COTTONWOOD T.F.			VMN W.C.DRIFT			DB Tagging C/set	MISSION		CUMM.	HG	DAILY
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.		(BB+7)	EST.
DATE	1,034	109	(BB+2)	2,676	204.01		4,428,568	4,956,379	TOTAL		1,112,500
16-Aug	6	0.76	18-Aug	7	0.52		30,000	30,000	112,000	23-Aug	2900
17-Aug	8	4.43	19-Aug	4	0.30		25,000	25,000	137,000	24-Aug	3000
18-Aug	5	0.65	20-Aug	8	0.60		28,811	28,811	165,811	25-Aug	1900
19-Aug	3	0.39	21-Aug	7	0.53		27,400	27,400	193,211	26-Aug	2000
20-Aug	3	0.28	22-Aug	5	0.39		23,743	23,743	216,954	27-Aug	1700
21-Aug	3	0.39	23-Aug	4	0.32		22,231	22,231	239,185	28-Aug	14200
22-Aug	2	0.28	24-Aug	7	0.59		34,716	34,716	273,901	29-Aug	14300

## Mission Escapement by Stock

Totals: 1,267,026 32,528 1,299,554 82,462 14,259 58,797 18,218 32,528 62,189 252,386 0 101,342 100,198 140,017 21,801 66,342 51,459 72,995 0 224,466

Mission Escapement												Mission Escapement											
Mission				Total				ESum				Summ				Birk				Late			
Date	Mission	Pitt	Escp	Escap	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum	ESum
16-Aug-09	39,455	129		39,584	0	0	9	492	129	668	14,783	0	7,264	3,550	2,283	96	2,202	460	46	0	7,600		
17-Aug-09	40,700	166		40,866	4	184	1,013	384	166	2,942	8,770	0	6,203	2,712	3,657	788	4,147	1,640	440	0	7,805		
18-Aug-09	47,998	234		48,232	4	217	1,195	453	234	3,470	10,342	0	7,316	3,199	4,313	929	4,891	1,934	519	0	9,205		
19-Aug-09	19,275	200		19,475	0	0	4	4	200	1,686	3,469	0	1,477	1,817	710	48	1,333	648	617	0	7,462		
20-Aug-09	28,224	449		28,673	0	0	992	30	449	2,328	8,898	0	2,776	5,669	1,720	94	2,927	145	648	0	1,997		
21-Aug-09	19,695	314		20,009	0	0	692	21	314	1,625	6,209	0	1,937	3,956	1,200	65	2,042	101	452	0	1,394		
22-Aug-09	18,509	337		18,846	0	0	1	41	337	1,607	3,795	0	3,329	3,401	710	738	1,249	840	2	0	2,795		



## Environmental Conditions

### Fraser Conditions & MA Report for August 21, 2009

#### Fraser River Discharge at Hope

Fraser River discharge is tracking about 25% below historic average levels. Yesterday's discharge was about 2500 m<sup>3</sup>/s and is forecast to decline below 2200 m<sup>3</sup>/s by August 29.

	date	m <sup>3</sup> /s
Last obs.	20-Aug	2,460
Forecast	29-Aug	2,163

#### Fraser River Temperature at Qualark

The river temperature was 18.9C yesterday, and is forecast to increase to 19.4C by August 26 then drop down to 18.7C by August 29. The high temperatures in the middle of the forecast period would be 2.4C higher than average and could potentially result in records for the date, but at this time of year cooler nighttime air temperatures generally moderate the effect of warm daytime temperatures.

	date	C
Last obs.	20-Aug	18.9
Forecast	29-Aug	18.7

#### MA Estimate for Summers

With an Area 20 date of Aug. 6, we have 19 observed days of river conditions for the MA model. The 19-day means are 3555 m<sup>3</sup>/s and 19.1C, and the MA estimates are: pMA=0.21, DBE=-18% and MA=109,000 fish.

HG Date	16-Aug	pMA	0.21
#days	19	%DBE	-18%
Disch.	3,355	MA	109,200
Temp.	19.1		

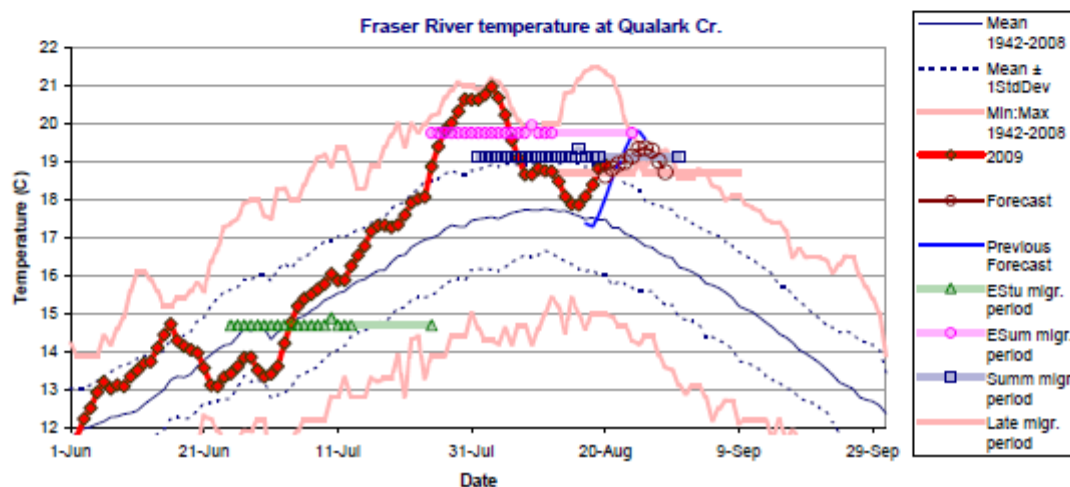
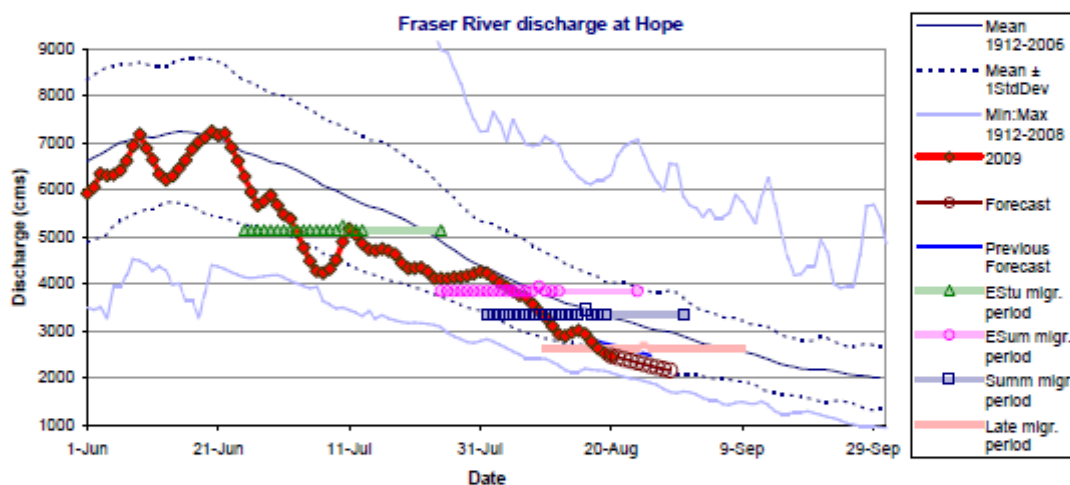
Also, we were asked to provide a sensitivity analyses wrt Summer-run timing:

Area 20 Aug.4 (Hells Gate Aug. 14): pMA=0.28, DBE=-22%, MA=146,000 fish (19 obs.)

Area 20 Aug.6 (Hells Gate Aug. 16): pMA=0.21, DBE=-18%, MA=109,000 fish (19 obs.)

Area 20 Aug.8 (Hells Gate Aug. 18): pMA=0.17, DBE=-14%, MA=88,000 fish (18 obs., 1 fcast)

Area 20 Aug.10 (Hells Gate Aug. 20): pMA=0.14, DBE=-12%, MA=73,000 fish (16 obs., 3 fcast)



## Fishery Recommendations

### *Fraser River Panel Meetings: Summaries and Discussions*

## Fraser River Panel (in-person) Summary Notes-August 21

### **FRP Canadian Caucus**

- US reefnets – Release Mortality Rate Study
  - The study provided indicated a 0.45% release mortality rate (one coho died out of 225 non-target salmon released from reefnets during a chum fishery).
  - The US has 11 reefnets, but only 10 of them usually fish.
    - They are generally not allowed to retain Chinook, coho, chum, or steelhead, and the US assumes a 0% release mortality of non-target species for domestic management purposes.
    - They are proposing using a 0.5% release mortality for international purposes.
- Pink Salmon
  - We have not yet decided on any rules, 1% mortality (i.e. 1 SK killed per 100 PK harvested) has been proposed.
    - We still need to decide how to apply it- per boat, per fishery, US as an aggregate?
  - Release Mortality
    - We have some mortality rates used in past years, but we need to verify what they were based on.
    - The rule that has been put forward, is that the encounter rate multiplied by the release mortality rate should be less than 1%
      - $(SK/(SK+PK))_{\text{gear, area}} * \text{Release Mort}_{\text{gear, area}} \leq 1\%$
    - We also need to keep track of the overall impact, not just the sockeye to pink ratio.
    - The timing forecast for pinks is A20 50% date of Aug 31 with a 90% prediction interval of Aug 23 to Sep 8.
    - The diversion forecast is 31% with a 90% prediction interval of 3% to 58%.
    - The migration speed assumptions used is 8 to 10 days from A20 to the river.
- All rules need to be in place before we can open any pink fisheries, perhaps on Sept 1.

### **FRP Bi-lateral**

- Test Fishing-General Remarks
  - In Gulf approaches, the migration has been flat (exhibiting waviness)
    - Multi-modal with significant drag
      - 30 day spread is normal, sometimes Harrison and E Summers spread a bit more
      - It is similar to 2005 except we don't expect to see a mode at the very end of the migration, except perhaps a few Lates.
  - In the river, we've had steady migration and are starting to see pinks (some observed through Hells Gate).
    - The species composition test fishery at Mission will begin today, the drift net will estimate the SK:PK for the channel, and 2 set nets will estimate the SK:PK along the banks.

- The marine SK:PK will be used to estimate today's migration past Mission.
- We are seeing a nice build-up of pinks, similar to the forecast with an increasing proportion of Fraser pinks.
- If the total return of Fraser sockeye is 1.5 million it will be either the lowest or second lowest total return since 1952. However, in terms of spawning escapement (assuming pMA is correct); there have been 10 to 12 escapements lower than this year – i.e. low escapement, but not record low.
- Stock ID
  - On the outside there are still some E Summers. E Misc. are dropping off, but E Thompson are persisting.
  - 61% Summers in A12, 46% in A20
  - 22% True Lates (excl. Ha) in A12, 27% in A20
  - Harrison is dropping out
  - Proportionally, are seeing more Har than Ad/W in-river vs projections – implies delay of Ad/W
    - Recreational fishermen have reported seeing a few sockeye jumpers
    - In small abundances, Lates don't usually delay, so the PSC would like to look at them with a troll test fishery in the Gulf.
      - It would be interesting from a science perspective. If they are holding again, we'd like to know why.
      - If SK are seen, a survey would commence.
      - The number of Ad/We holding will determine the number of allowable late impacts.
      - The maximum cost would be \$10,000 and the PSC has enough cash on hand to cover it.
- Pink salmon
  - A13(South) date: Aug 17
    - 22% Fr
    - 13% Puget Sound
    - 65% Can SC
  - A12 date: Aug 18
    - 47% Fr
    - 22% Puget Sound
    - 31% Can SC
    - Note: Better indication than A13 because there are fewer local stocks seeing high returns.
  - A20
    - 53% Fr
    - 42% Puget Sound
    - 5% Can SC
  - The unofficial forecast is Aug 31 A20 peak date and 31% diversion, the  $R^2 = 0.3$ , the lower 95% PI = Aug 23
  - Diversion rate
    - SK - 41% currently, 41% average to date
    - PK – 50% currently
  - There are a high proportions of males in the pink samples to date, meaning it's still early in the migration.
  - US? Why are you using marine samples to estimate the species composition at Mission rather than in-river samples?

- From Area 20 we assume the migration time is:
  - 10-12 days for pinks
  - 6 days for most sockeye
  - 8 days for Late sockeye
- PK in-river mig'n is different from SK, in-river GN substantially overestimates SK. Didn't used to have this problem b/c PK timing used to be later.
- The PSC will use the Mission spp comp TF to apportion the hydroacoustic data to species.
- The count of pinks is also problematic at very large abundances. The system sees only a solid wall of pink salmon.
- FRPTC? What was the Mission escapement estimate for yesterday, it is not shown on today's distribution?
  - 28k SK(excl. Pitt) + 500 Pitt SK
  - also about 28,500 PK
- FRPTC? What is the longterm average 50% date for Fraser pinks?
  - From 1959 to the present Aug 29.
  - From 1982 to the present Aug 30
- FRPTC? What is the assumed migration speed for pinks?
  - 12 days from A20 to Mission
    - 8 days travel
    - 4 days delay
    - Note: These numbers are very soft
  - 14 days from A12 to Mission
  - Historically pinks would delay for 2 to 3 weeks.
  - Pinks travel at similar speeds or slightly slower than Late sockeye.
- FRPTC? What are the chances of seeing the few SK estimated to be holding using the Gulf troll test fishery?
  - It has been run before when Lates were holding. It was last run in 2006, which was an Adams year.
- Assessments
  - E Stuart
    - 84.5k in catch and escapement to date
    - ***Currently at 85k, no change to run size estimate recommended***
  - E Summer
    - 151k in catch and escapement
    - 15k projected
    - 166k accounted to date
      - 104 E Misc (nearly complete)
      - 62k E Thomp (still in marine areas)
    - ***Currently at 175k, no change to run size estimate recommended***
    - We will get to 175k (b/c of high %comp), and may reach 200k, but it's too early to recommend a change.
  - Summer
    - 500k in catch and escapement
    - 90k projected
    - 590k accounted to date
      - 157k LS/St (nearly complete)
      - 433k Ch/Qu

- Cum. Passage: (498k gone by Mission)
  - 607k, A20 date: Aug 6 (current timing)
  - 575k, A20 date: Aug 4 (less than tl accounted)
  - 658k, A20 date: Aug 8
- Cum. Norm (Det.):
  - LS/St 159k, A20 date: Jul 30
  - Ch/Qu 494k, A20 date: Aug 8
  - 653k total
- Cum. Norm (Bayes):
  - 669k, A20 date: Aug 6 80% PI (595k-748k)
    - LS/St 161k, A20 date: Jul 31
    - Ch/Qu 508k, A20 date: Aug 8
- These estimates are a bit lower than the operational run size. The amount of drag in the migration will determine how many are still to come ( $\pm 50k$ ).
  - We need 110k seaward of assessment to get to 700k.
  - There is no way to predict at a high resolution due to the flatness of the migration.
- Birkenhead
  - 32k in catch and escapement
  - 22k projected
  - 54k accounted to date
  - Bayes:
    - 74k, A20 date: Aug 16 80% PI (59k-92k)
    - above suggests late timing
  - Still being observed in marine areas
  - ***Currently at 100k, no change to run size estimate recommended, but may reduce the estimate to 75k on Tuesday.***
    - ***US agreed***
    - ***Canada agreed***
- Lates (excl. Bi)
  - 185k in catch and escapement
  - 89k projected
  - 342k accounted to date
  - ***Currently at 450k, no change to run size estimate recommended.***
- Harrison
  - 157k in catch and escapement
  - 12k projected
  - 169k accounted to date
  - Cum. Norm (Det.)
    - 191k, A20 date: Aug 7
  - Bayes (best est)
    - 166k, A20 date: Aug 7 80% PI (148k-185k)
  - ***Currently at 200k, no change to run size estimate recommended***
  - Migration nearly complete, but more are being observed in the river than projected, so we may get to 200k. If we aren't there by Tuesday, may need to revise downward.
- Lates (excl. Bi and Ha)
  - 28k in catch and escapement
  - 56k projected + 89k delay

- 173k accounted to date
- Cum Norm (Bayes):
  - 233k, A20 date: Aug 14 80% PI (198k-273k)
- The delay is the major source of uncertainty in the estimate
- ***Currently at 250k, no change to run size estimate recommended***
- ***Gulf test fishery is recommended to evaluate the magnitude of the delay***
  - ***Canada agreed***
  - ***US agreed***
- Pink
  - 75p forecast: 12.4 million assuming Aug 25 is the peak date
  - 3.2 million reconstructed to date
  - Cum Norm (Bayes):
    - 22.8 million, A20 date: Aug 30 80% PI (13-42 million)
  - Model based on scale information (marine growth model)
    - 19.4 million, 80% PI (14.5-24.1 million) – there is no timing associated with this model
    - Minimum estimate 9.4 million (assumed all the scales with closely spaced scales were non-Fr)
  - The pinks returning this year went to sea in 2008, it may be a good sign for SK next year.
- US? Intent of Gulf Troll?
  - verify delay/differential in Mission arrival for LL → real fish delaying or exp line problem? (~10% of LL expected are reaching Mission)
  - if fish are really delaying, want to try to quantify
    - need 3 days to complete 6 quadrant sampling area
    - have a historic rel'p btwn CPUE & LL delay
  - max \$10k – 1 boat, 2 max
  - if fish are delaying, this will be the first off-dom year delay has been observed in ~15 years
  - A run size of 660k would result Aug 5 timing
  - The pMA would be about 0.25 (btwn 0.21 & 0.28)
- Environmental Conditions:
  - Discharge at Hope
    - About 25% below average
    - 2,460 cms 20-Aug
    - forecast: 2,163 cms by 29-Aug
  - Temperature at Qualark
    - 18.9°C 20-Aug
    - forecast: 19.4°C by 26-Aug (2.5° warmer than average)
    - forecast: 18.7°C by 29-Aug
- MA
  - Summers (assuming an A20 peak date of Aug 6)
    - pMA = 0.21
    - DBE = -18%
    - MA = 109,000 (@ 700k run size)
    - Aug 4 peak date: pMA = 0.28
    - Aug 8 peak date: pMA = 0.17 (incl. one forecasted day)
    - Aug 10 peak date: pMA = 0.14 (incl. three forecasted day)
    - If the run size = 720k, Aug 7 peak date: pMA = 0.21



- ***pMA = 0.21, DBE = -18%, MA = 109,000 recommended***
  - ***Canada agreed***
  - ***US agreed***
- Run sizes needed to generate a harvestable surplus, given changes to the MAs
  - E Summer: 300k
  - Summer: 660k
- Pink management issues
  - PSC needs to see:
    - all models to provide a “reasonable” TAC to open fisheries, which we have.
    - SK by-catch guidance to assess fishery proposals against
  - ***Canada: Limited discussions to date, we will have rules next week.***
  - ***US: Limited discussions to date, we will have rules next week.***
    - ***Reef nets have low release mortality***

### FRP Canadian Caucus

- Proposed Gulf troll test fishery (1 to 2 boats)
  - On the first day they will collect DNA and evaluate whether a grid-based survey is warranted.
  - Lates have not been holding much for the last 10-15 years
  - We may eventually be able to make the late MA a function of holding.
  - There was general agreement that the Gulf troll test fishery should go ahead.
- Assessments
  - The Birkenhead assessments are all lower than the operational goal.
  - There may be a problem if the Summer model runs come in lower on Tue. We are on the line between having a small TAC and no TAC; also the accepted run-sizes are not following the assessment model estimates. We might end up fishing into escapement if we fish this weekend.
  - If we use the Bayes model estimate of 660k and pMA of 0.21, we go from a 53,000 TAC to a 22,800 TAC.
  - Catch to date is already 16,000. If the pMA were to go up to 0.25, there would be no TAC left.
  - *cc The E Sum are likely to go up a bit. Regarding the Summers, the PSC doesn't think it is off by more than 50k.*
    - *If we believe the 80% SK/(SK+PK) observed in the river gillnet, we'd get 20k more SK.*
    - *They used the marine samples to estimate the SK/(SK+PK) as they have done in past years.*
    - *The PSC believes it is being cautious.*
    - *DFO should communicate the uncertainty to the FN involved and try to pace the fishery for the small, but clearly identified TAC.*
  - The Summer TAC will be the driver of all fishing decisions. We won't be targeting Lates, the 20% ER is a limit not a target.
  - Should we approve the troll test fishery?
    - ***General agreement***
  - Should we accept no change in the Birkenhead run size estimate?
    - ***General agreement***
  - Should we ask for any other changes?
    - ***None proposed***
  - Should we accept the change in the MA?
    - ***General agreement***

## FRP Bilateral

- ***The following recommendations were agreed by US & CDN at this time:***
  - ***Gulf troll to proceed***
  - ***BK run size to remain unchanged***
  - ***Summer pMA = 0.21***
- To move forward with pink fishing plans we need
  - SK/(SK+PK) by area and period (PSC will provide). Project:
    - 92% Fr PK in A20
    - 94% Fr PK in A12
    - high % of non-FR PK in both approaches – will want to project for % of all PK
  - Release mortality by gear (all parties will provide what they have)
  - Acceptable mortality of SK (policy decision to be made by Canada and the US)
  - US? We have set release mortality rates in the past, what were they based on?
    - PSC will look into where the past numbers came from.
    - DFO conducted fishing mortality studies in the late 1990's
  - US? How were the 94% PK in A12 and 92% PK estimates generated?
    - They come from the test fishery but different expansion lines are applied to SK and PK for each area.
  - US? Will travel time affect the expansion line to 7/7A?
    - Yes, but many US pinks peel off before hitting Pt. Roberts, and we don't have an expansion line for non-Fr PK.
- ***Fishery Recommendations:***
  - ***US: None, the reefnets will continue through Tue.***
  - ***Can: We will be opening some FSC fisheries directed on Summers, Pink fisheries will wait until we have rules in place.***
- Next Meeting
  - Conference call Tue. Aug 25<sup>th</sup>, 11:00 am

## Detailed Fishing Openings

### Open Times for the Mid & Upper Fraser River First Nations Fisheries



**2009 Open Times for the Mid & Upper Fraser River First Nations Fisheries - Week 34****Updated: Aug 14, 2009**

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 23 week 34	<b>Chinook only</b> (mortally wounded sockeye)	T'i'q'et	T'i'q'et traditional Fishing Area	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 23 week 34	<b>Chinook only</b> (mortally wounded sockeye)	Cayoose Creek	Cayoose traditional Fishing Area	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 23 week 34	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 23 week 34	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 23 week 34	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 23 week 34	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 23 week 34	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 23 week 34	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 23 week 34	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 23 week 34	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 23 week 34	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net (all but T'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 23 week 34	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 23 week 34	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 16 18:00	Sunday August 23 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 23 week 34	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

TBD = To Be Determined

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band  
 NSTC = Northern Shuswap Tribal Council

TNG = Tsilquot'In Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band  
 TLA = Tl'azt'en Nation

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 16	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 16	19:00 Sunday Aug 16	Chinook	drift net
Aug 16	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 16	19:00 Sunday Aug 16	Chinook	drift net
Aug 23	Kwikwilem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Aug 15	06:00 Monday Aug 17	Chinook	drift net
Aug 23	Kwikwilem First Nation	Pitt River	48 hrs	06:00 Saturday Aug 15	06:00 Monday Aug 17	Sockeye	set net, drift net
Aug 23	Chehalis First Nation	Harrison River	7 hrs	05:00 Wednesday Aug 19	12:00 Wednesday Aug 19	Sockeye	beach seine
Aug 23	Chehalis First Nation	Harrison River	7 hrs	05:00 Thursday Aug 20	12:00 Thursday Aug 20	Sockeye	beach seine
Aug 23	Musqueam First Nation	Below Port Mann Bridge	9 hrs	12:00 Thursday Aug 20	21:00 Thursday Aug 20	Pink	seine, purse, salmon
Aug 23	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Saturday Aug 22	18:00 Saturday Aug 22	Chinook	drift net
Aug 23	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 22	19:00 Saturday Aug 22	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Aug 22	19:00 Saturday Aug 22	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Aug 22	19:00 Saturday Aug 22	Chinook, Pink	set net, drift net
Aug 23	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 22	21:00 Saturday Aug 22	Chinook	dip net
Aug 23	New Westminster First Nation	Douglas I to Qnsbrgh/Alex Fras	8 hrs	15:00 Saturday Aug 22	23:00 Saturday Aug 22	Chinook	drift net
Aug 23	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Aug 19	12:00 Sunday Aug 23	Chinook, Chum	drift net
Aug 23	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Aug 19	12:00 Sunday Aug 23	Chinook, Chum	set net
Aug 23	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 21	12:00 Sunday Aug 23	Chinook	drift net
Aug 23	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Sunday Aug 23	18:00 Sunday Aug 23	Chinook	drift net
Aug 23	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 21	19:00 Sunday Aug 23	Chinook	fish wheel
Aug 23	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook, Pink	set net, drift net
Aug 23	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Sunday Aug 23	21:00 Sunday Aug 23	Chinook	dip net
Aug 30	Kwikwilem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Aug 22	06:00 Monday Aug 24	Chinook	drift net

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 23	Union Bar First Nation	Hope to Emory Creek	12 hrs	06:00 Wednesday Aug 19	18:00 Wednesday Aug 19	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	5 hrs	07:00 Thursday Aug 20	12:00 Thursday Aug 20	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	5 hrs	12:00 Thursday Aug 20	17:00 Thursday Aug 20	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	6 hrs	10:00 Friday Aug 21	16:00 Friday Aug 21	Chinook	drift net
Aug 23	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Friday Aug 21	19:00 Friday Aug 21	Chinook	drift net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report

### Recreational

See appendices

### First Nations

### Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009											21 Sep 2009 15:43		
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012
Jul-26	370	201	5	114	61	476	966		2639	340	4596	5172	11184
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14403
Aug-16	133	61	43	461		457	125		76		1119	1356	15759
Aug-23	144		16	388		536	164	0	101	0	1189	1349	17108

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621
16-Aug	53	4719	33	147	110	5062	8683
23-Aug	2	1372	N/A	270	314	1958	10641
Total	2497	7128	35	557	424	10641	10641

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572
16-Aug	0	222	2384	0	36	2642	4214
23-Aug	0	112	5684	363	408	6567	10781
Total	0	353	8200	628	1600	10781	10781

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	N/M	N/M	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	32	4	0	0	0	36	36
Total	32	4	0	0	0	36	36

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	0	0	N/M	N/M	0	0
19-Jul	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6
16-Aug	1.0	0.0	0.0	5.0	9.0	0.0	0.0	0.0	2.1
23-Aug	0.0	0.0	0.0	12.5	5.0	0.0	1.0	0.0	2.7

N/M = No Monitoring Conducted

## Marine

N/A

# Fraser River Sockeye and Pink

## Weekly Management Plan August 23 – Aug 29/09

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### For Period of:

Sun. August 23<sup>rd</sup> – Sat. August 29<sup>th</sup>, 2009

Week: 35

### Stock Aggregate Focus:

Early Summers; Summers; Birkenhead and True Lates; Pinks

### Management objectives for the current week:

- Assess run size and timing for Early Summers
- Assess run size and timing for Summers
- Assess run size and timing for Birkenhead
- Assess run size and timing for True-Lates
- Assess run size and timing for Fraser Pinks
- Monitor in-river migration conditions

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## Fraser Sockeye Management Summary

### FN0661-SALMON: Fraser River Sockeye Update - August 26 - Areas 11 to 29

The Fraser River Panel met August 25 and August 26 to receive assessments from the Pacific Salmon Commission staff on the status of the Fraser River sockeye and pink salmon runs as well as migration conditions for sockeye in the Fraser River. The migration of Fraser sockeye through the Johnstone Strait marine approach route has continued at low abundance levels over the past week, while the Juan de Fuca marine route is near complete. The diversion rate now stands at 78%. Migration of Fraser River pink salmon through the assessment areas has continued to be strong. Diversion rate for pinks is currently 47%. The estimated total non-commercial catch of Fraser sockeye this season is 65,000 fish; harvested in test fisheries and First Nations FSC fisheries. The estimated total non commercial catch to-date of Fraser River pink salmon is approximately 10,000 fish.

At the meeting today the run size estimate of 175,000 Early Summer-run sockeye was unchanged. The estimated escapement of Early Summer-run sockeye past Mission through August 24 is approximately 155,000 fish.

At the meeting on August 18, the Panel adopted a run size estimate of 700,000 Summer-run sockeye; with 50% migration timing through Area 20 of August 6, which is one day later than expected. At the meeting August 25 this run size estimate was reduced to 650,000 with a run timing date of August 4. The estimated escapement of Summer-run sockeye past Mission through August 25 is approximately 540,000 fish.

The Panel also adopted a reduced run size estimate for the Birkenhead stock-group of 60,000 down from 100,000 fish. The estimated escapement of Birkenhead sockeye past Mission through August 25 is 37,000 fish.

At the meeting on August 18, the run size estimate for Harrison sockeye was increased from 150,000 fish to 200,000 fish, with 50% migration timing through Area 20 of August 8, which is five days later than expected. Also at the meeting on August 18, the Panel approved a run size estimate of 250,000 Weaver/Late Shuswap sockeye with 50% migration timing through Area 20 of August 19, which is seven days later than expected. These run size estimates were unchanged at the August 25 meeting. The estimate of total True Late-run sockeye abundance is 450,000 fish, which is the sum of the estimates of Harrison and Weaver/Shuswap sockeye abundances. Current assessments suggest that 127,000 of the Lates are delaying in marine areas prior to entering the Fraser River. A troll test fishery has confirmed this estimate. The estimated escapement of True Late-run sockeye past Mission through August 25 is approximately 182,000 fish.

The estimated total Fraser sockeye return this season is currently 1,420,000 fish, which is less than half of the 90% probability level forecast of 3,556,000 fish. This total run size estimate is based on current estimates of: 85,000 Early Stuart; 175,000 Early Summer-run; 650,000 Summer-run; 60,000 Birkenhead; and 450,000 True Late-run sockeye.

Panel adopted a 50% migration timing of Fraser River pink salmon through Area 20 at August 28 and the forecast of their diversion rate through Johnstone Strait this season is 47%. It is too early to provide an in-season run size estimate for Fraser River pink salmon since their forecast peak migration period through the marine assessment areas has not yet occurred. However, present assessments indicate that Fraser pinks are tracking abundance levels near 50% probability level forecast of 17,000,000 fish, depending on assumptions about their marine migration timing. Abundance levels in this range are sufficient to support commercial fisheries; subject to conservation concerns for Fraser River sockeye salmon that are still migrating through areas where fisheries may occur as well as other species of concern.

On August 24 the Fraser River discharge at Hope was approximately 2,400 cms, which is about 25% lower than normal, while the water temperature at Qualark Creek was 18.3 0C. Water temperatures are forecast to decrease to 18 0C and lower for the period August 25 to September 2nd. At the meeting today, after reviewing environmental and stock assessment information, the Panel approved an increase in the management adjustment factor for Summer-run sockeye from 0.21 to 0.28, consistent with the decrease in run size. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye salmon.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time or anticipated. DFO is continuing planning meetings with First Nations groups to review current information which currently provides for very limited sockeye harvest opportunities late run sockeye stock group with no TAC for Summers.

The Panel approved pink salmon fisheries in the U.S. as follows:  
TREATY INDIAN FISHERY:

Areas 4B, 5 and 6C: Open to drift gill nets from 12:00 p.m. (noon), Wednesday, August 26, 2009 to 12:00 p.m. (noon) Saturday, August 29, 2009. All sockeye caught are for ceremonial and subsistence use only.

NON INDIAN FISHERY:

Areas 7 and 7A: Open to reef nets with non-retention of sockeye from 5:00 a.m. to 9:00 p.m. Wednesday, August 26, 2009; 5:00 a.m. to 9:00 p.m. Thursday, August 27, 2009; and from 5:00 a.m. to 9:00 p.m. Friday, August 28, 2009.

The next scheduled Panel meeting is Friday, August 28.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### **FN0670-Salmon: Fraser River Sockeye and Pink Update - August 28 - Areas 11 to 29**

The Fraser River Panel met today August 28 to review stock assessment data on the Fraser sockeye and pink salmon runs and discuss fisheries management plans for the harvest of pink salmon. The marine migration of Fraser sockeye has been at low abundance levels over the past several days, while the marine migration of Fraser River pink salmon through the assessment areas has been increasing. The diversion rate of Fraser River sockeye through Johnstone Strait is currently estimated to be 73%, while for Fraser River pink salmon it is presently estimated to be about 50%. The estimated total non-commercial catch of Fraser sockeye this season is 79,000 fish; harvested in test fisheries and First Nations FSC fisheries. The estimated total catch of Fraser River pink salmon thus far is approximately 25,000 fish, although it will be substantially higher after the catch from ongoing U.S. commercial pink salmon-directed fisheries is included.

The marine migration of Early Summer-run sockeye has extended over a very long period this season with an especially protracted migration of North Thompson River sockeye. At the meeting today the run size estimate of 175,000 Early Summer-run sockeye was unchanged. The estimated escapement of Early Summer-run sockeye past Mission through August 27 is approximately 155,000 fish.

At the meeting on August 25, the Panel reduced the run size estimate of 700,000 Summer-run sockeye to 650,000 fish and at the meeting today the run size estimate was unchanged. The estimated escapement of Summer-run sockeye past Mission through August 27 is approximately 556,000 fish.

At the August 25 meeting, the Panel reduced the run size estimate for the Birkenhead stock-group from 100,000 fish, to 60,000 fish with 50% migration timing through Area 20 of August 12 which is one day later than expected. This run size estimate was unchanged at the meeting today. The estimated escapement of Birkenhead sockeye past Mission through August 27 is 40,000 fish.

Data collected by the gulf troll test fishery suggests that over 100,000 True Late-run sockeye may be delaying in the lower Strait of Georgia prior to entering the Fraser River. The proportion of True Late-run sockeye currently delaying is unusually high relative to recent years when most True Late-run sockeye migrated upstream with little or no delay. If this pattern of marine-area delay continues, it could increase the en route survival and spawning success of these delaying True Late-run sockeye. At the meeting today, the run size estimate of 200,000 Harrison sockeye was unchanged, while the Panel approved a decrease in the run size estimate of 250,000 Weaver/Late Shuswap to 200,000 fish. The estimated total True Late-run sockeye abundance is now 400,000 fish (which exceeds their 75% probability level forecast of 323,000 fish), with 50% migration timing through Area 20 of August 10, which is two days earlier than expected. The estimated escapement of True Late-run sockeye past Mission through August 27 is approximately 195,000 fish.

The estimated total Fraser sockeye return this season is currently 1,370,000 fish, which is less than half of the 90% probability level forecast of 3,556,000 fish. This total run size estimate is based on current estimates of: 85,000 Early Stuart; 175,000 Early Summer-run; 650,000 Summer-run; 60,000 Birkenhead; and 400,000 True Late-run sockeye.

Test fishing catches of pink salmon by purse seines in both marine approach areas have increased in recent days. DNA analyses of pink salmon sampled from the marine area test fisheries earlier this week indicate average contributions of approximately 60% Fraser River pink salmon. There is still considerable uncertainty in run size assessments of Fraser River pink salmon; however they are currently tracking abundance levels near or exceeding their 50% probability level forecast of 17,535,000 fish, depending on assumptions about their marine migration timing. A run size estimate for Fraser River pink salmon should be available next week, after their peak migration period through the marine assessment areas has occurred. Abundance levels in this range are sufficient to support commercial fisheries; subject to conservation needs for Fraser River sockeye salmon that are still migrating through areas where fisheries may occur as well as other species of concern.

Fraser River environmental conditions are currently satisfactory for the migration of Fraser River sockeye and pink salmon. On August 27 the Fraser River discharge at Hope was approximately 2,300 cms, which is about 23% lower than normal, while the water temperature at Qualark Creek was 17.5 °C, which is 0.8 °C higher than average for this date. Water temperatures are forecast to decrease to 16.3 °C by September 5. At the meeting on August 25, after reviewing environmental and stock assessment information, the Panel approved an increase in the management adjustment factor for Summer-run sockeye from 0.21 to 0.28. Management adjustments are employed to help achieve spawning escapement targets for Fraser River sockeye salmon.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time or anticipated. DFO is continuing planning meetings with First Nations groups to review current information which currently provides for very limited sockeye harvest opportunities on the late run sockeye stock group with no TAC for Summers.

Commercial directed pink fisheries by Area B seine and Area H troll are currently being planned. Refer to separate Area B and H Fishery notice for details.

The next scheduled Panel meeting is Tuesday, September 1.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Aug 23	Mon Aug 24	Tues Aug 25	Wed Aug 26	Thurs Aug 27	Fri Aug 28	Sat Aug 29
First Nations – FSC Mid and Upper Fraser	Chinook with mortally wounded sockeye or limited sockeye directed in terminal areas (dip net)						
First Nations – FSC Lower Fraser	Chinook with mortally wounded sockeye except Tues Aug 25, MFN and TFN sockeye directed 6 hours each						
First Nations – FSC Marine	Open to limited sockeye TAC within Subareas 29-1, 2 and 5 only Aug 24/25 Aug 26 – Non-retention of sockeye until further notice.						
Recreational - Upper Fraser River	Closed						
Recreational - Lower Fraser River	Closed						
Recreational Marine Areas	Closed						
Commercial Area D	Closed						
Commercial Area E	Closed						
Commercial Area B	Closed						
Commercial Area H	Closed						
U.S. Treaty Indian	Closed						
U.S. Non-treaty Indian	Closed						

## Fishery Notices Summary

### RECREATIONAL – Salmon

FN0661-SALMON: Fraser River Sockeye Update - August 26 - Areas 11 to 29

FN0670-Salmon: Fraser River Sockeye and Pink Update - August 28 - Areas 11 to 29

### COMMERCIAL – Salmon

FN0653-COMMERCIAL - Salmon: Troll - Area F - Chinook ITQ Demonstration Fishery - Open Area Boundary Extension

FN0656-COMMERCIAL - Salmon: Troll - Area F Troll - Chinook ITQ Demonstration Fishery - Open Area Boundary Extension (Correction to FN0653)

FN0657-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 3, 4, 5, &amp; 6 – Closing

FN0658-COMMERCIAL - Salmon: Gill Net - Area D - Chinook Opportunity in Alberni Inlet - August 25

FN0659-COMMERCIAL - Salmon: Seine- Area A - Areas 5 &amp; 6 Opening

FN0659-COMMERCIAL - Salmon: Seine- Area A - Areas 5 &amp; 6 Opening

FN0661-SALMON: Fraser River Sockeye Update - August 26 - Areas 11 to 29

FN0665-COMMERCIAL - Salmon: Gillnet - Area D - Chinook Gill Net, Area 23 Alberni Inlet

FN0666-COMMERCIAL - Salmon: Gillnet - Area D - Mainland Inlets Pinks - Area 12

FN0667-COMMERCIAL - Salmon: Troll - Area H - Mainland Inlets Pinks - Area 12

FN0668-COMMERCIAL Salmon: Seine - Area B - Mainland Inlets Pinks - Area 12

FN0669-COMMERCIAL - Salmon: Seine- Area B - Alberni Inlet Chinook Opening - Area 23

FN0670-Salmon: Fraser River Sockeye and Pink Update - August 28 - Areas 11 to 29

FN0671-COMMERCIAL - Salmon: Troll- Area H - Fraser River Pink - Areas 12, 13, 18 Fraser River Pink Opening

FN0672-Commercial- Salmon: Seine - Status of Area B - Areas 12, 13 - Fraser River Pink – Opening

FN0673-Commercial- Salmon: Seine - Status of Area B - Areas 12, 13 - Fraser River Pink – Opening

Fraser River Sockeye Weekly Management Plan August 23<sup>rd</sup> – August 29<sup>th</sup>, 2009

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FN0674-Commercial - Salmon: Seine - Area B - Areas 12, 13 - Fraser River Pink - Opening

### ABORIGINAL – Salmon

FN0655- Aboriginal: Limited Fraser River sockeye retention opportunities in Marine First Nations Food, Social and Ceremonial Fisheries in most Southern B.C. Marine Waters - Revision to opportunities in Area 29 (FN0649)

FN0660-ABORIGINAL: Sockeye non-retention in First Nations Food, Social and Ceremonial Fisheries in most Southern B.C. Marine Waters

FN0661-SALMON: Fraser River Sockeye Update - August 26 - Areas 11 to 29

FN0670-Salmon: Fraser River Sockeye and Pink Update - August 28 - Areas 11 to 29

# Management Information

## 2009 Fraser River Sockeye In-season Status

Status

### 2009 Fraser River Sockeye In-season Status

Week of: Aug. 23 - Aug. 29, 2009

Date: Aug. 28, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	175,000	650,000	60,000	450,000	1,420,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	2,110	7,050	21,190	2,090	8,610	41,050	24,830
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	253	690	1,840	115	731	3,629	n/a
Escapement-to-date @ Mission	82,450	154,850	555,990	40,380	194,570	1,028,240	n/a
Potential Gross Escapement	82,703	155,540	557,830	40,495	195,301	1,031,869	n/a
Adjusted Gross Esc. Target *	85,000	175,000	650,000	55,770	422,160	1,387,930	6,000,000
Accounted-to-date							
Catch + Escapement to Mission	84,813	162,590	579,020	42,585	203,911	1,072,919	n/a
Potential Remaining To Come							
Potential En-route	187	12,410	70,980	17,415	246,089	347,081	n/a
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	0
U.S. Commercial	0	0	0	0	0	0	0
Marine Area Aboriginal	110	1,180	4,167	600	1,842	7,899	16,790
Test Fishing	1,940	5,350	14,670	1,320	6,220	29,500	1,760
Canadian Charter (Albion & Qualark TF)	56	220	1,088	47	203	1,614	20
Canadian Marine Recreational	0	0	0	0	0	0	2,560
U.S. TI Ceremonial	0	304	1,268	127	346	2,045	500
U.S. Recreational	0	0	0	0	0	0	3,200
Total	2,110	7,050	21,190	2,090	8,610	41,050	24,830
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	253	690	1,840	115	731	3,629	10
Catch Above Mission (incl. FSC & EO)	6,229	7,636	19,503	18	880	34,266	70
Total	6,482	8,326	21,343	133	1,611	37,895	80
Total In-river Catch	6,482	8,326	21,343	133	1,611	37,895	80
Total Catch in All Areas							
Total	8,592	15,376	42,533	2,223	10,221	78,945	24,910
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	30-Jul	4-Aug	12-Aug	12-Aug		25-Aug
Mission Timing	5-Jul	5-Aug	10-Aug		20-Aug		
JS Diversion Rate						32%	40%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.



# 2009 Fraser River Sockeye TAC Calculations and Catch

TAC

## 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Aug. 23 - Aug. 29, 2009

Date: Aug. 28, 2009

	Fraser Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	Total
<b>RUN STATUS, ESCAPEMENT NEEDS &amp; AVAILABLE SURPLUS</b>							
In-season Run Size Estimate	85,000	175,000	650,000	60,000	450,000	1,420,000	17,535,000
Adult Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	360,000	1,188,000	6,000,000
%SET from TAM rules	100%	100%	80%	80%	80%		31%
Management Adjustment (MA)	32,300	105,000	145,600	0	n/a	282,900	0
Proportional MA (pMA)	0.38	0.60	0.28	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	85,000	175,000	650,000	48,000	360,000	1,318,000	6,000,000
Test Fishing (TF)	1,740	5,000	18,000	1,500	6,000	32,240	10,000
Surplus above Adjusted SET & Test fishing	0	0	0	10,500	84,000	94,500	11,525,000
<b>DEDUCTIONS &amp; TAC FOR INTERNATIONAL SHARING</b>							
Aboriginal Fishery Exemption (AFE)	7,000	12,000	35,000	10,500	84,000	148,500	0
Available Aboriginal Fishery Exemption	0	0	0	10,500	84,000	94,500	0
Total Deductions (Adj. SET + TF + Available A)	86,740	180,000	668,000	60,000	450,000	1,444,740	6,010,000
Available TAC for International Sharing	0	0	0	0	0	0	11,525,000
<b>UNITED STATES (Washington) TAC</b>							
U.S. Share **	16.5%	0	0	0	0	0	25.7% 2,961,930
U.S. Payback **	0.0%	0	0	0	0	0	0
Total	0	0	0	0	0	0	2,961,930
Treaty Indian Share **	67.7%	0	0	0	0	0	50.0% 1,480,965
Non-Indian Share	32.3%	0	0	0	0	0	50.0% 1,480,965
<b>CANADA TAC</b>							
Canadian Allocation	83.5%	0	0	0	0	0	74.3% 8,563,070
Available Aboriginal Fishery Exemption (AFE)	0	0	0	10,500	84,000	94,500	0
Total Canadian Share	0	0	0	10,500	84,000	94,500	8,563,070
Marine Area Aboriginal	0	0	0	2,730	21,840	24,570	0
Fraser River Aboriginal	0	0	0	7,770	62,160	69,930	0
First Nations Allocations (including AFE)	0	0	0	10,500	84,000	94,500	0
Planned Recreational Shares	0	0	0	0	0	0	0
Purse Seine B	47.5%	0	0	0	0	0	70.0% 5,994,150
Gillnet D	21.5%	0	0	0	0	0	4.0% 342,520
Gillnet E	25.0%	0	0	0	0	0	6.5% 556,600
Troll G	0.0%	0	0	0	0	0	6.5% 556,600
Troll H	6.0%	0	0	0	0	0	13.0% 1,113,200
Commercial Allocations	100.0%	0	0	0	0	0	100.0% 8,563,070
<b>CATCH-TO-DATE</b>							
Test	1,940	5,350	14,670	1,320	6,220	29,500	1,750
Treaty Indian (Wash.)	0	300	1,270	130	350	2,040	490
Non-Indian (Wash.)	0	0	0	0	0	0	3,200
Washington	0	300	1,270	130	350	2,040	3,690
Marine Area Aboriginal	110	1,180	4,170	600	1,840	7,900	16,790
Fraser River Aboriginal	6,480	8,330	21,340	130	1,610	37,900	80
Recreational	0	0	0	0	0	0	2,560
Commercial	60	220	1,090	50	200	1,610	0
Canada	6,650	9,730	26,600	780	3,650	47,410	19,430
Total Catch in All Fisheries	8,590	15,380	42,540	2,230	10,220	78,950	24,870
Exploitation Rate (catch-to-date / run size)	10%	9%	7%	4%	2%	6%	0%
<b>CATCH REMAINING (BALANCE)</b>							
Washington	0	-300	-1,270	-130	-350	-2,050	2,958,240
Canada	-6,650	-9,730	-26,600	9,720	80,350	47,090	8,543,640
Balance Remaining [ below share / -above share]	-6,650	-10,030	-27,870	9,590	80,000	45,040	11,501,880
<b>ESCAPEMENT RELATIVE TO TARGETS</b>							
Potential Spawning Escapement (PSE) ***	76,410	159,620	607,460	57,770	439,780	1,341,040	17,510,130
Predicted Difference Between Estimates (%DBE)	-28%	-38%	-22%	0%	****		0%
PSE with predicted DBE removed	55,370	99,760	474,580	57,770	****		17,510,130
Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	360,000	1,188,000	6,000,000
Potential deviation from SET [ <target / >target]	-29,630	-75,240	-45,420	9,770	****		11,510,130

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Aug. 23 - Aug. 29, 2009

Date: Aug. 28, 2009

		Fraser Sockeye	
Area	Gear		Cumul.
<b>Commercial Catch</b>			
<u>Canada</u>			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127,11-12	Troll		0
B Areas 11-16	PS		0
D Areas 11-13	GN		0
H Areas 12-16	Troll		0
H Areas 18-29	Troll		0
B Area 20	PS		0
E Area 29	GN		0
Canadian Selective			0
FRA Economic Opportunity			0
BC Interior FN Demo			0
Canadian Total			0
<u>United States</u>			
<u>Alaska</u>	Net&Troll		0
<u>Washington</u>			
T.I. Areas 4B/5/6C	Net		0
T.I. Areas 6/7/7A	Net		0
N.I. Areas 7/7A	Net		0
Washington Total			0
U.S. Total			0
<b>Non-commercial Catch</b>			
PSC Test			19,190
Other Test			10,310
Fraser River Aboriginal (FSC)			37,890
Areas 12-124 Aboriginal			7,900
Recreational			0
Charter			1,613
U.S. TI Ceremonial			2,000
Non-comm. Total			78,900
<b>Catch and Escapement</b>			
Catch Accounted-to-date			78,900
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)			993,270
Total Accounted-to-date			1,072,170

### Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,400	300	82,700	97%
ESum	Early Summer	175,000	154,900	700	155,600	89%
Summ	Quesnel/Chilko	650,000	400,000	1,100	557,800	86%
	L.Stu./Stel.		156,000	700		
Late	Birkenhead	55,770	40,400	100	40,500	73%
	Adams/L. Shuswap	422,160	20,400	100	195,400	46%
	Weav/L.Misc.		11,900	100		
	Sub 1s		162,300	600		



## Test Fishing Data

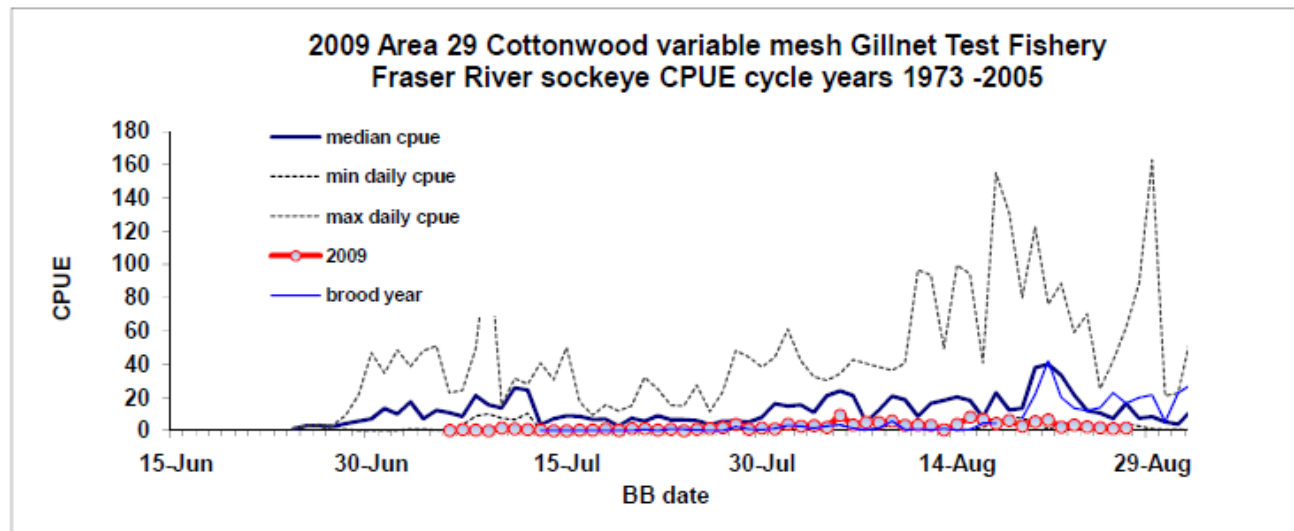
### Pacific Salmon Commission Test Fishing Summary

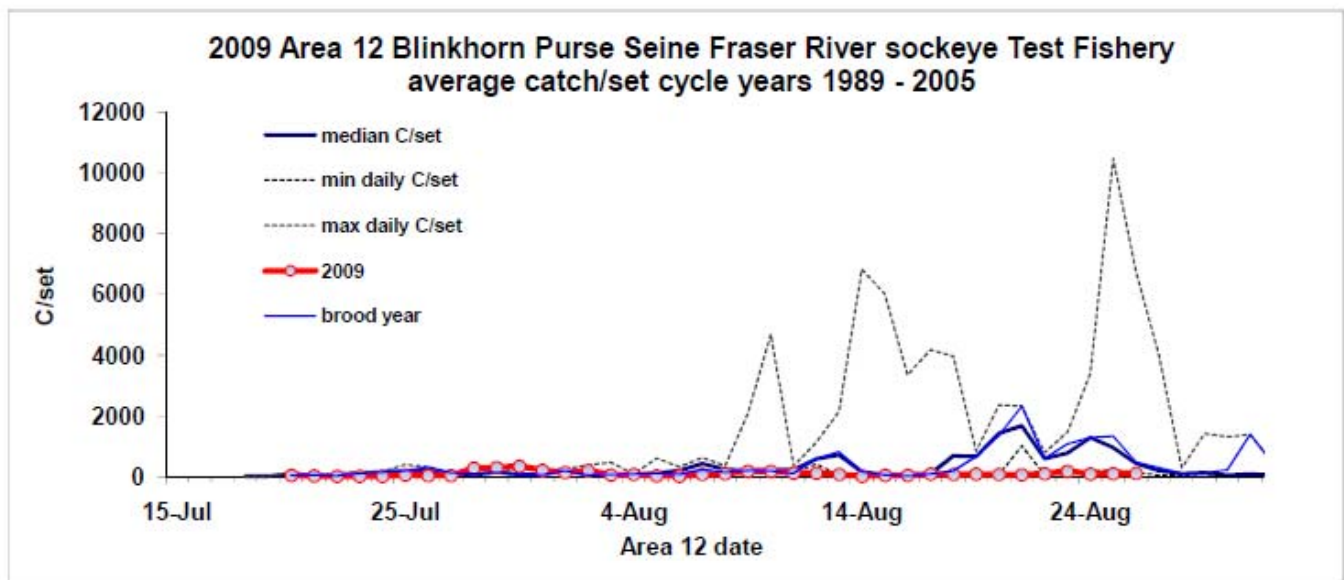
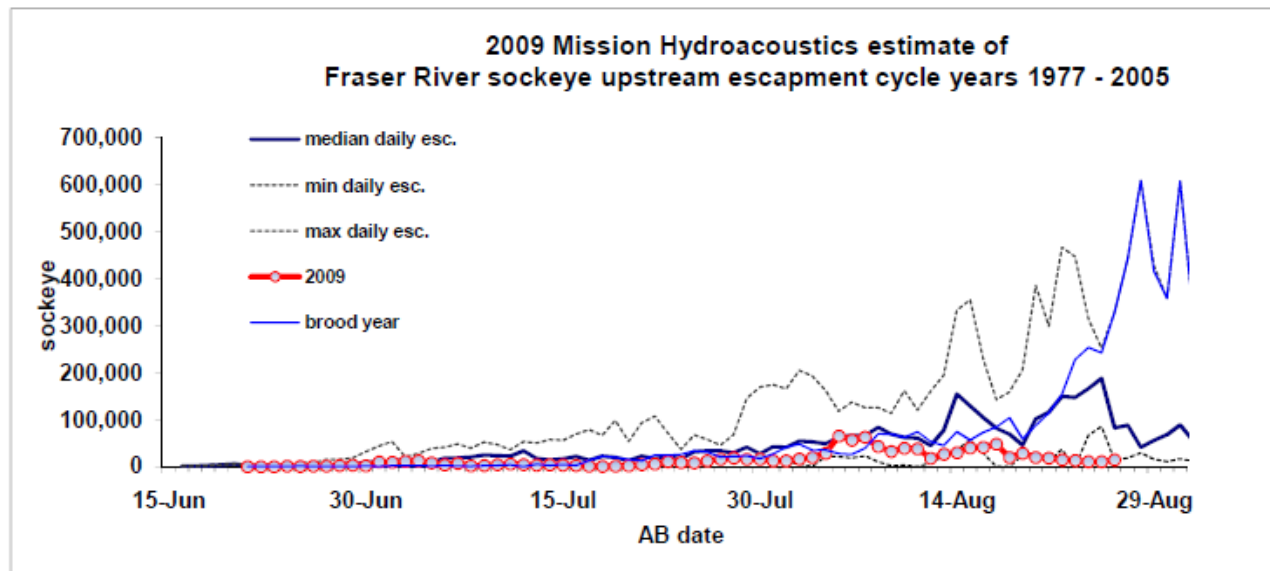
#### 2009 Pacific Salmon Commission Sockeye Test Fishing Summary

	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug
Area 20 Purse Seine	246	103	100	72	26	4	33	68	67
Area 12 Purse Seine	494	453	372	592	1079	543	601	553	27a
Area 13 Purse Seine	257	171	29	306	138	144	38	142	133
Area 7 Reef Net Obs.	1621	456		266	114	89	245		
29B Cottonwood Gillnet*	21	65	50	16	27	18	14	9	12
29D Whonnock Gillnet*	77	98	77	60	15	28	28	14	20
29A Gulf Troll				30	7		8		
Mission Gillnet			33			38		35	74
Mission Escapement**	19275	28224	19695	18509	14340	12887	10522	10285	14620
Hells Gate Daily Estimate	370	6480	5770	10350	10960	4050	1590	2240	1290

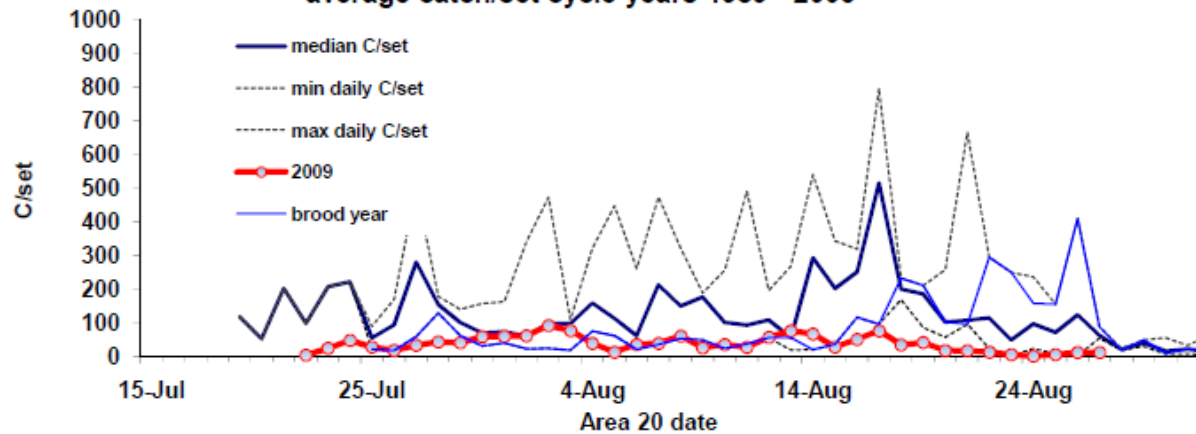
\* Variable mesh Gillnet

\*\* Preliminary, subject to revision. a = 1 set only

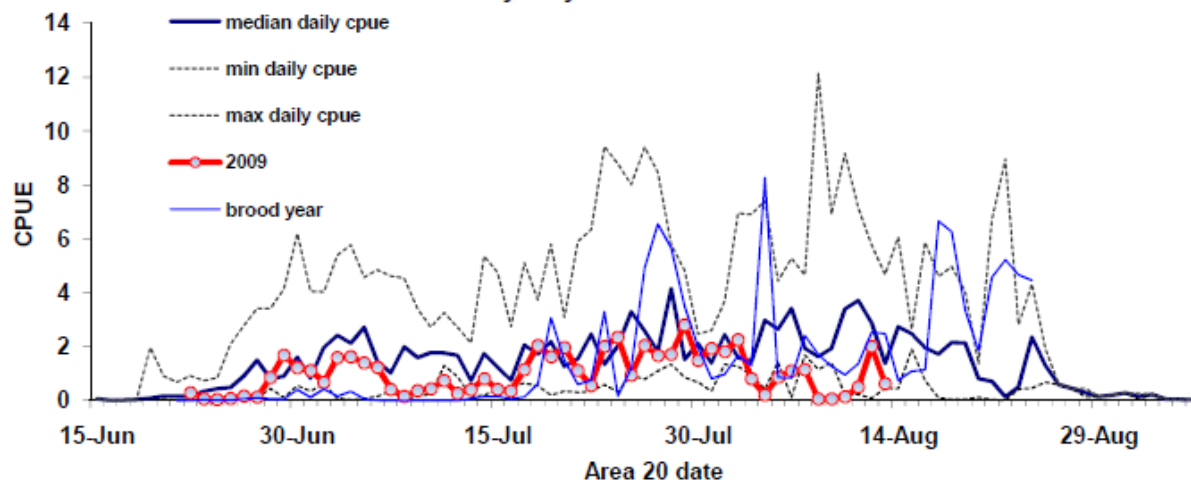




**2009 Area 20 Purse Seine Fraser River sockeye Test Fishery  
average catch/set cycle years 1989 - 2005**



**2009 Area 20 90 mesh Gillnet Test Fishery Fraser River sockeye CPUE  
cycle years 1973 - 2005**



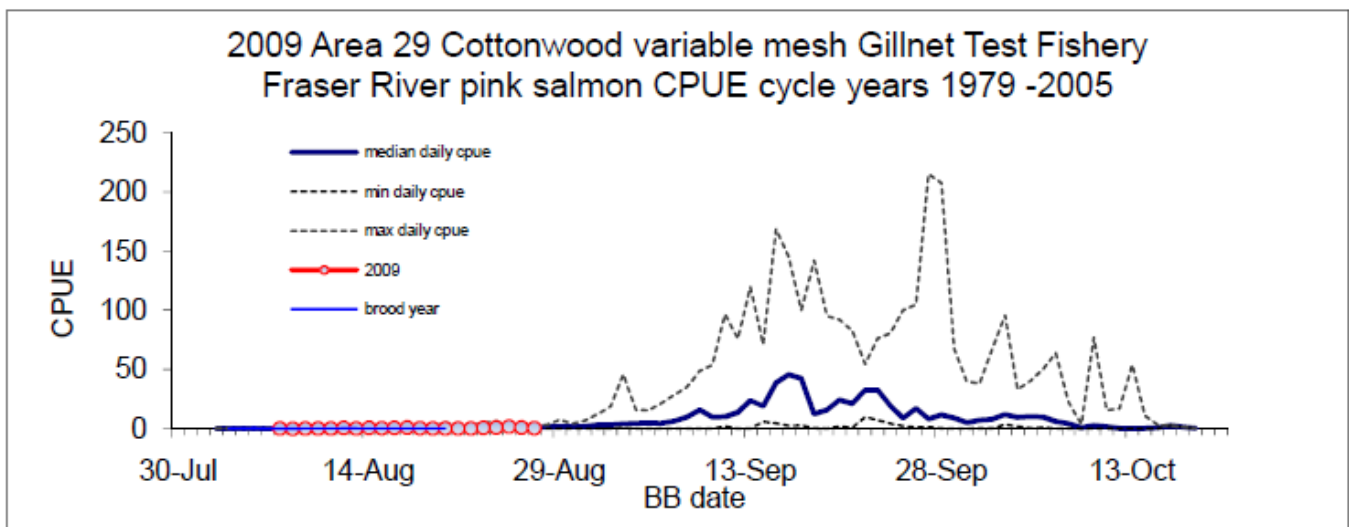
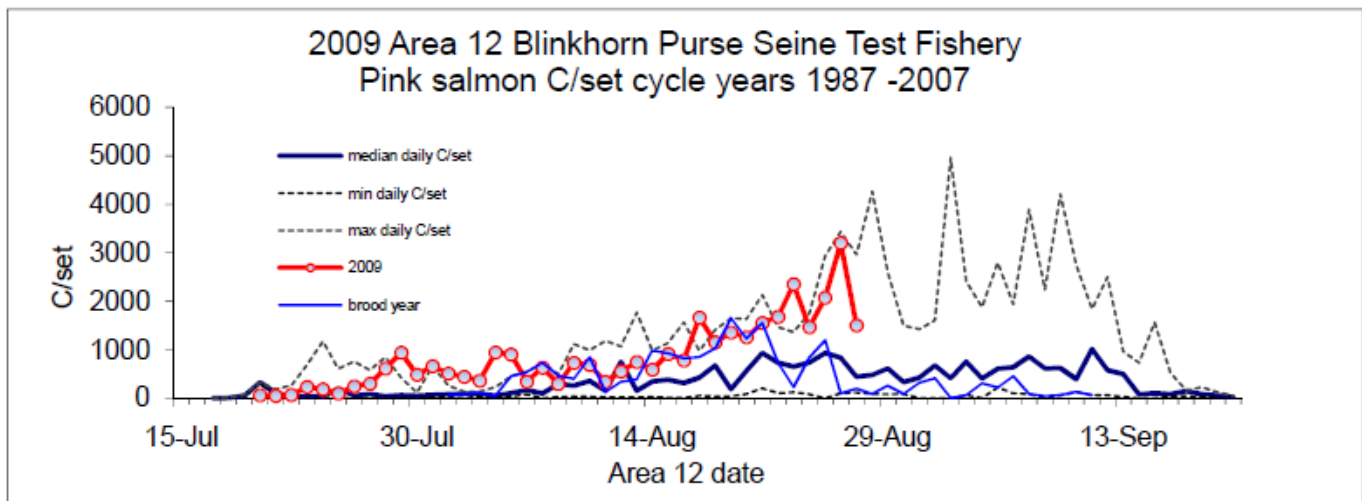
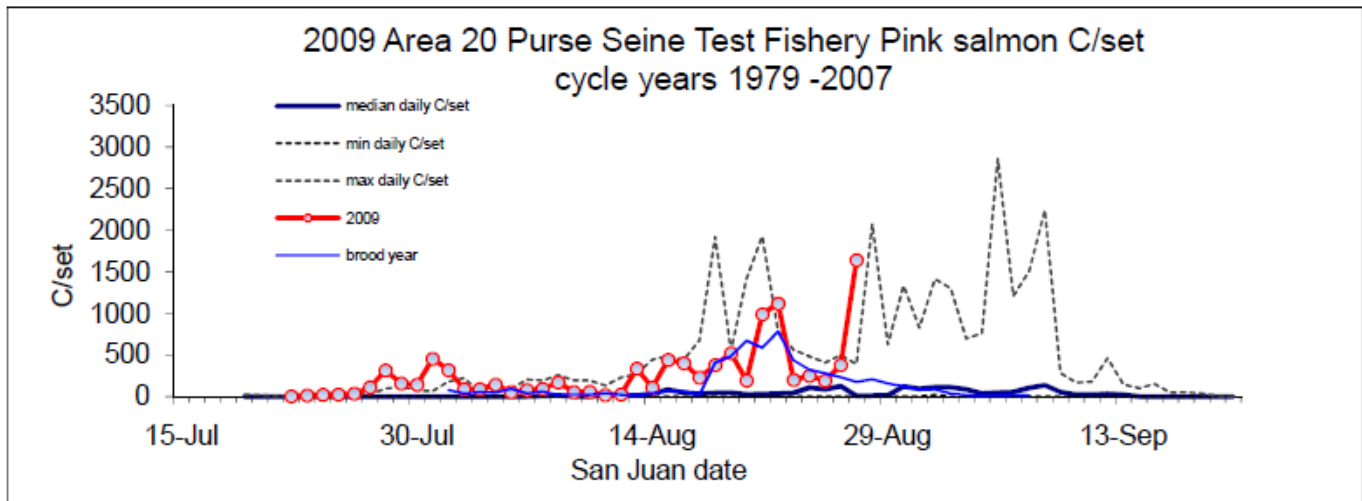
**Pacific Salmon Commission Pink Test Fishing Summary**

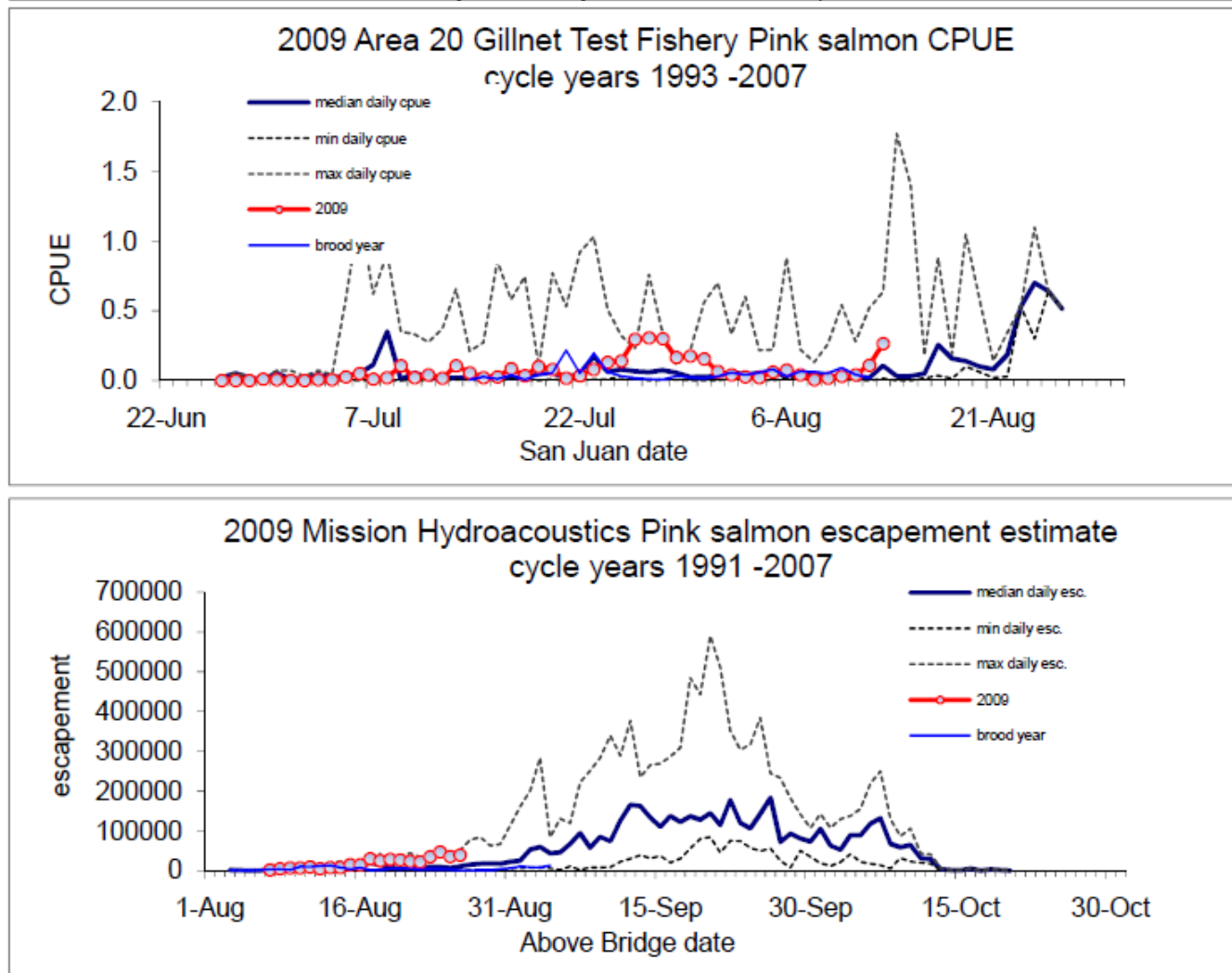
	Aug-21	Aug-22	Aug-23	Aug-24	Aug-25	Aug-26	Aug-27
Area 20 seine	2962	6697	990	1501	1124	2261	9829
Area 12 seine	9290	10066	14130	8802	12450	16000	1500a
Area 13 seine	308	4104	3346	4291	1019	3514	2980
Area 7 Reef net		1037	1076	1281	7894		
Area 29B Cottonwood *	3	2	6	9	13	8	3
Area 29D Whonnock *	7	5	4	7	9	2	11
29A Gulf Troll		57	55		140		
Mission Gillnet	6			19		25	78
Mission Escapement **	27400	23743	22231	34716	46906	35495	38941

\*\* preliminary - subject to revision.

\* Variable mesh gillnet.

a= 1 set only





## Detailed Test Fishing Data

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	23/08/2009	1	6	6	1079	51	14130
	24/08/2009	1	6	6	543	19	8802
	25/08/2009	1	6	6	601	40	12450
	26/08/2009	1	5	5	553	34	16000
	27/08/2009	1	1	1	27	3	1500
	28/08/2009	1	6	6	126	14	7270
	29/08/2009	1	6	6	103	28	13965
Area 12 - Naka Creek Sockeye Gillnet	23/08/2009	0	0	0			
	24/08/2009	0	0	0			
	25/08/2009	0	0	0			
	26/08/2009	0	0	0			
	27/08/2009	0	0	0			
	28/08/2009	0	0	0			
	29/08/2009	0	0	0			
	23/08/2009	0	0	0			

	24/08/2009	0	0	0			
	25/08/2009	0	0	0			
	26/08/2009	0	0	0			
	27/08/2009	0	0	0			
	28/08/2009	0	0	0			
	29/08/2009	0	0	0			
Area 13 - Area 13 Sockeye Seine	23/08/2009	1	6	6	138	13	3346
	24/08/2009	1	6	6	144	16	4291
	25/08/2009	1	6	6	38	1	1019
	26/08/2009	1	5	5	142	10	3514
	27/08/2009	1	6	6	133	14	2980
	28/08/2009	1	6	6	189	8	14388
	29/08/2009	1	5	5	202	22	14170
Area 20 - San Juan Sockeye Gillnet	23/08/2009	0	0	0			
	24/08/2009	0	0	0			
	25/08/2009	0	0	0			
	26/08/2009	0	0	0			
	27/08/2009	0	0	0			
	28/08/2009	0	0	0			
	29/08/2009	0	0	0			
Area 20 - San Juan Sockeye Seine	23/08/2009	1	5	5	26	0	990
	24/08/2009	1	6	6	4	0	1501
	25/08/2009	1	6	6	33	0	1124
	26/08/2009	1	6	6	68	4	2261
	27/08/2009	1	6	6	67	0	9829
	28/08/2009	1	6	6	56	1	7180
	29/08/2009	1	6	6	15	1	4406
Area 29 - Cottonwood Sockeye Gillnet	23/08/2009	1	2	7.62	27	0	6
	24/08/2009	1	2	7.68	18	0	9
	25/08/2009	1	2	7.44	14	0	13
	26/08/2009	1	2	7.02	9	0	8
	27/08/2009	1	2	7.32	12	0	3
	28/08/2009	1	2	6.78	2	0	3
	29/08/2009	1	2	6.78	12	0	10
Area 29 - Gulf Sockeye Troll	23/08/2009	1	1	450	7	0	55
	24/08/2009	0	0	0			
	25/08/2009	1	2	431	8	0	140
	26/08/2009	0	0	0			
	27/08/2009	0	0	0			
	28/08/2009	0	0	0			
	29/08/2009	0	0	0			
Area 29 - Whonnock Sockeye Gillnet	23/08/2009	1	2	11.4625	15	0	4
	24/08/2009	1	2	11.9	28	0	7
	25/08/2009	1	2	12.3375	28	0	9
	26/08/2009	1	2	11.55	14	0	2
	27/08/2009	1	2	11.6375	20	0	11
	28/08/2009	1	2	12.3375	18	0	9
	29/08/2009	1	2	12.775	32	0	20
U.S. Area 7 - Area 7 U.S. Sockeye Reef Net	23/08/2009	0	24	1410	114	0	1076
	24/08/2009	0	29	1650	89	0	1281
	25/08/2009	0	25	1380	245	0	7894
	26/08/2009	0	0	0			



27/08/2009	0	0	0
28/08/2009	0	0	0
29/08/2009	0	0	0

## 2009 Test fisheries Summary of sockeye salmon Encounter rates

Calculations are: (sockeye catch or encounters)/(sockeye +pink)

2009								
Date	Area 20 GN	US Reefnet	Area 20 PS	Area 12 GN	Area 12 PS	Area 13 PS	7PS CM	7APS CM
8-Aug	89%	100%	27%	76%	26%	39%		
9-Aug	71%	75%	34%	43%	20%	36%		
10-Aug	70%		40%	66%	21%	6%		
11-Aug	87%	50%	60%	0%	28%	22%		
12-Aug	91%	61%	71%	26%	19%	32%		
13-Aug	56%	43%	19%		10%	23%		
14-Aug			39%		4%	22%		
15-Aug		36%	6%		5%	27%		
16-Aug		32%	11%		6%	14%		
17-Aug		14%	25%		5%	6%		
18-Aug		18%	8%		6%	8%		
19-Aug		15%	8%		6%	5%		
20-Aug		22%	9%		6%	14%		
21-Aug			3%		4%	9%		
22-Aug		20%	1%		6%	7%		
23-Aug		10%	3%		7%	4%		
24-Aug		6%	0.3%		6%	4%		
25-Aug		3%	3%		5%	4%		
26-Aug			3%		3%	4%		
27-Aug			1%		2%	4%	2%	1%
28-Aug					Note Area 12 PS (1 set only)			
29-Aug								

**DNA Analysis****Racial Analysis**

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A12pstf	aug.23	100	98%	EM 3%;ET 3%;CQ 40%;LS 2%;Bi 16%;AW 36%;Ha 0%;
dna A12pstf	aug.24	96	99%	EM 2%;ET 7%;CQ 30%;LS 3%;Bi 18%;AW 35%;Ha 4%;
dna A12pstf	aug.25	98	99%	ES 0%;EM 0%;ET 10%;CQ 49%;LS 4%;Bi 7%;AW 30%;
dna A20pstf	aug.25	33	97%	EM 0%;ET 20%;CQ 31%;LS 3%;Bi 20%;AW 24%;Ha 2%;
dna A29trtf	aug.25	8	100%	ES 0%;ET 2%;CQ 3%;LS 0%;AW 74%;Ha 21%;
dna ABgntf	aug24-26	69	100%	EM 2%;ET 0%;CQ 44%;LS 9%;Bi 10%;AW 13%;Ha 21%;
dna BBgntf	aug24-26	41	100%	EM 3%;ET 0%;CQ 27%;Bi 18%;AW 40%;Ha 12%;
dna Area1/101	aug4-25	8	70%	EM 20%;ET 12%;CQ 0%;LS 0%;Bi 59%;AW 9%;
<b>E.Stuart</b>	<b>Early Summer</b>		<b>Summer</b>	<b>Late</b>
ES=ESStu	Scale: FBE=Fe,Bo,EShu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

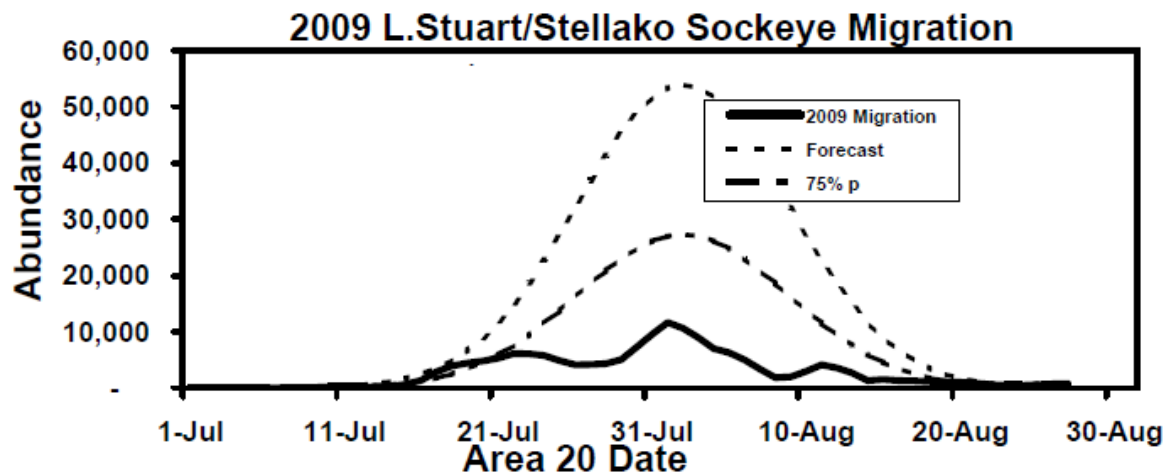
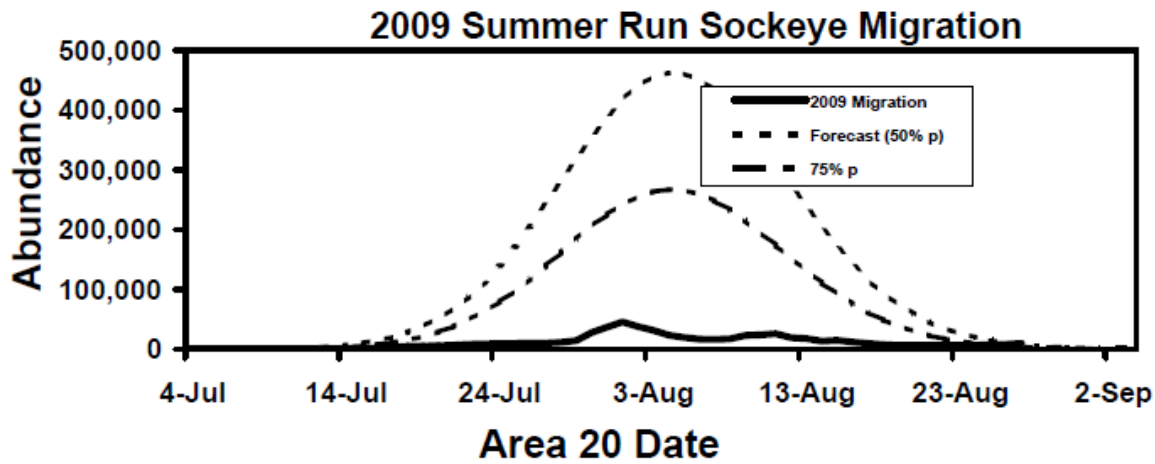
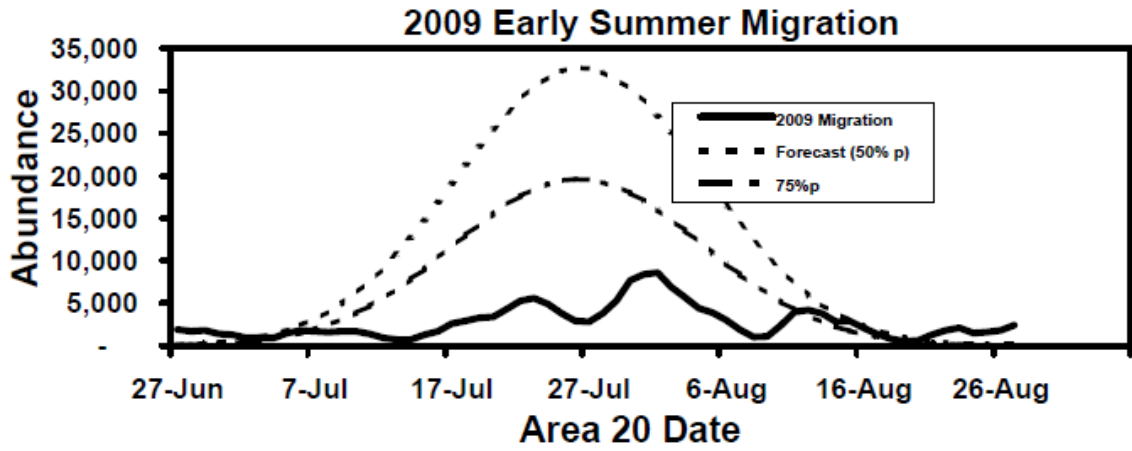
## Comparisons for fishing decisions

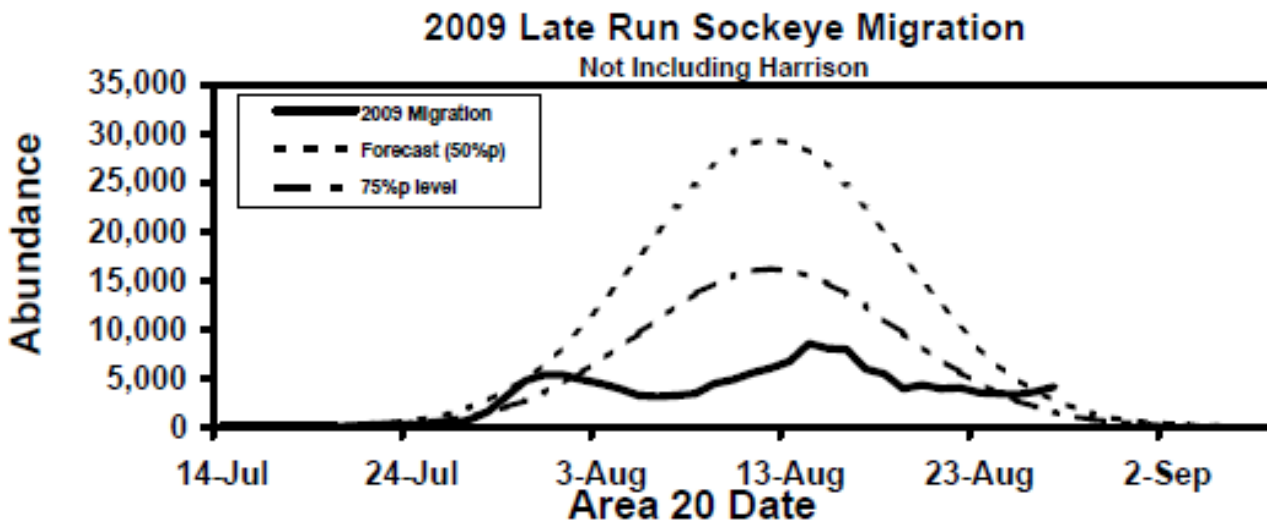
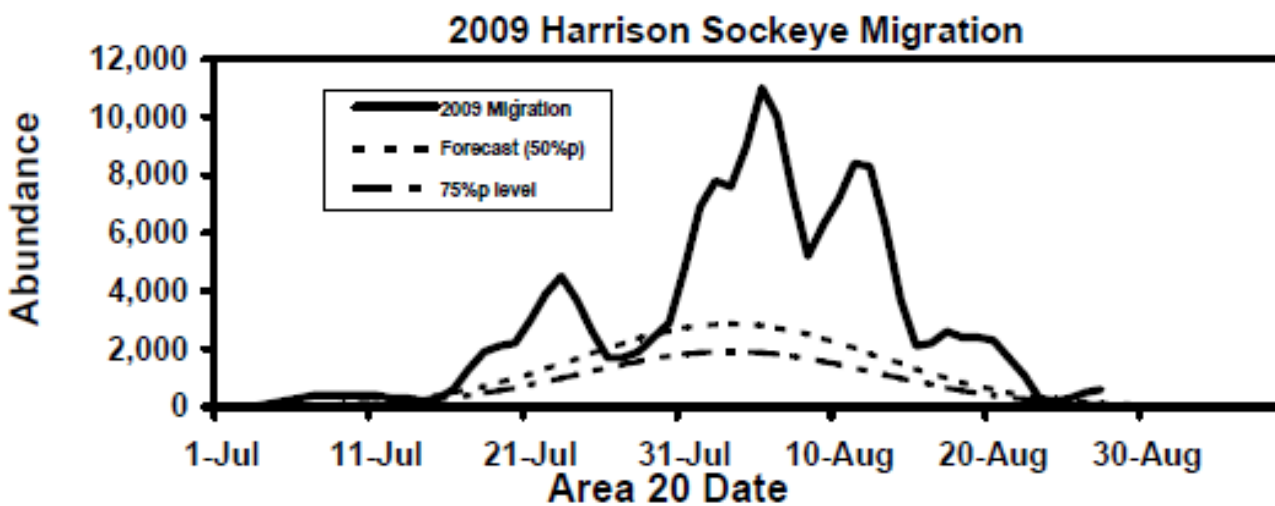
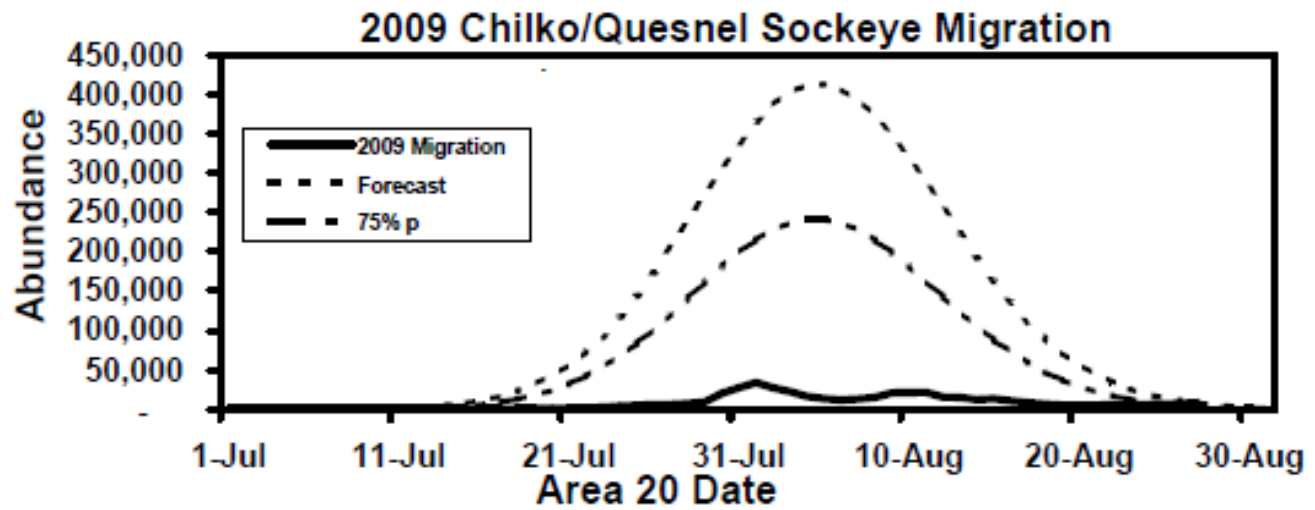
### Summer run assessment issues

Area 20 timing	Reconstructed Abundance	Implied Total return 2X Reconstructed Abundance	Mean Fraser River Temp 19 days around Hells gate peak timing	Mean Fraser River Discharge 19 days around Hells gate peak timing	Predicted proportional Management Adjustment	Spawning Escapement Target	Numerical Management Adjustment
3-Aug	297,031	594,062	19.5	3,604	0.34	520,000	176,800
4-Aug	316,843	633,687	19.3	3,530	0.28	520,000	145,600
5-Aug	337,004	674,008	19.2	3,446	0.24	520,000	124,800
6-Aug	356,265	712,530	19.1	3,355	0.21	520,000	109,200

## Migration Graphs







## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...										
Mission Date	Escapement Total	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
Mission Total:	1,031,900	104,500	17,600	33,500	156,700	237,500	163,600	40,500	162,900	32,400
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)										
Mission Date	Projected Escapement	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
28-Aug	14,000	300	100	2,100	500	1,700	3,300	1,000	700	4,300
29-Aug	14,000	-	100	1,700	300	2,400	3,100	1,500	300	4,600
30-Aug	18,500	-	100	1,900	600	2,400	4,400	2,900	-	6,200
31-Aug	10,000	-	100	300	400	1,500	2,900	1,400	200	3,200
1-Sep	15,200	-	100	1,900	600	2,100	4,000	1,900	500	4,100
2-Sep	25,300	-	100	2,500	900	3,600	6,700	3,300	700	7,500
Projected Gross Escapement <sup>1,2,3</sup>										
28-Aug										
2-Sep	97,000	300	600	10,400	3,300	13,700	24,400	12,000	2,400	29,900
Projected Total										
	1,128,900	104,800	18,200	43,900	160,000	251,200	188,000	52,500	165,300	62,300
Early Summers 166,900					Summer Runs 599,200			Birkenhead 52,500	True Lates 227,600	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted.										
<sup>2</sup> Note that possible delay has been indicated in the assessments of Weaver/L. to Mission. These fish may not escape over the next 6 days.										
<sup>3</sup> Due to recent high pink salmon catches, Sockeye CPUE data and subsequent sockeye escapement projections are highly uncertain.										
Analysis fixed at this time:					8/28/2009 9:24					

### Escapement Summary

#### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009 COTTONWOOD T.F.			AB T.F.		MISSION		BEST Est.	Hells Gate		
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)	CUMM.	DAILY EST.	
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200	TOTAL	(AB+4)	129,130
23-Aug	27	3.51	24-Aug vmn	28	2.36	12,887	13,000	992,400	28-Aug	2,270
24-Aug	18	2.34	25-Aug vmn	28	2.26	10,522	10,700	1,003,100	29-Aug	780
25-Aug	14	1.88	26-Aug vmn	14	1.21	10,285	10,400	1,013,500	30-Aug	1,250
26-Aug	9	1.29	27-Aug vmn	20	1.72	14,620	14,800	1,028,300	31-Aug	610
27-Aug	12	1.64	28-Aug vmn	18	1.46	12,410	12,500	1,040,800	01-Sep	570
28-Aug	2	0.44	29-Aug vmn	32	2.50	21,250	21,500	1,062,300	02-Sep	340
29-Aug	12	1.76	30-Aug vmn	27	2.14	18,148	18,400	1,080,700	03-Sep	150

# Pinks

## 2009 Fraser River Pink Salmon Escapement Summary

**Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official. Estimates are preliminary and subject to revision post-season.**

COTTONWOOD T.F.			VMN W.C.DRIFT			DB Tagging C/set	MISSION		CUMM. TOTAL	HG (BB+7)	DAILY EST. 1,112,500
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.			
DATE	1,034	109	(BB+2)	2,676	204.01		4,428,568	4,956,379			
23-Aug	6	0.79	25-Aug	9	0.73		46,906	46,906	320,807	30-Aug	15900
24-Aug	9	1.18	26-Aug	2	0.17		35,495	35,495	356,302	31-Aug	9200
25-Aug	13	1.72	27-Aug	11	0.95		38,941	38,941	395,243	01-Sep	6600
26-Aug	8	1.13	28-Aug	9	0.73		37,398	37,398	432,641	02-Sep	8300
27-Aug	3	0.41	29-Aug	20	1.57		46,703	46,703	479,344	03-Sep	3700
28-Aug	3	0.44	30-Aug	22	1.79		48,846	48,846	528,190	04-Sep	27500
29-Aug	10	1.54	31-Aug	26	2.00		55,397	55,397	583,587	05-Sep	52200

## Mission Escapement by Stock

Totals:			1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,459	72,995	0	224,466		
Mission Escapement																								
						Mission Escapement																		
Mission						Total		ESum					Summ					Birk		Late				
Date	Escape	Pitt Escp	Escape	ESum		Chilwk	EMisc	Se/Sc/UAd	Pitt	NThom	Chilko	SEChilko	Hfly/Mckin	Mitch/Tribs	LStu	Stel	Birk	AdLS/Port	Wea/Cult	Misc	Sub 1's			
23-Aug-09	14,340	127	14,467	0	0	1	32	127	1,245	2,941	0	2,579	2,635	550	571	968	651	2	0	2,166				
24-Aug-09	12,887	159	13,046	0	0	309	6	159	18	2,187	0	503	2,984	1,076	98	1,272	967	770	0	2,696				
25-Aug-09	10,522	143	10,665	0	0	252	5	143	15	1,786	0	410	2,436	878	80	1,038	789	628	0	2,201				
26-Aug-09	10,285	97	10,382	0	0	246	5	97	15	1,745	0	401	2,381	859	78	1,015	771	614	0	2,152				
27-Aug-09	14,620	146	14,766	0	0	232	61	146	753	2,390	0	923	3,306	810	340	1,740	948	1,232	0	1,883				
28-Aug-09	12,410	116	12,526	0	0	96	97	116	1,261	1,951	0	1,083	2,739	339	483	1,730	678	1,350	0	600				
29-Aug-09	21,250	231	21,481	0	1	165	167	231	2,159	3,341	0	1,855	4,690	580	828	2,962	1,162	2,311	0	1,028				

## Environmental Conditions

### Fraser Conditions & MA Report for August 28, 2009

#### Comment on Forecasts

There were problems running the forecast model yesterday, so this forecast is based on historical trends rather than weather forecasts and associated effects on river discharge and temperature.

This is the last forecast for the 2009 season. We will continue to track observed discharge and temperature levels.

#### Fraser River Discharge at Hope

Fraser River discharge continues to track about 25% below historic average levels.

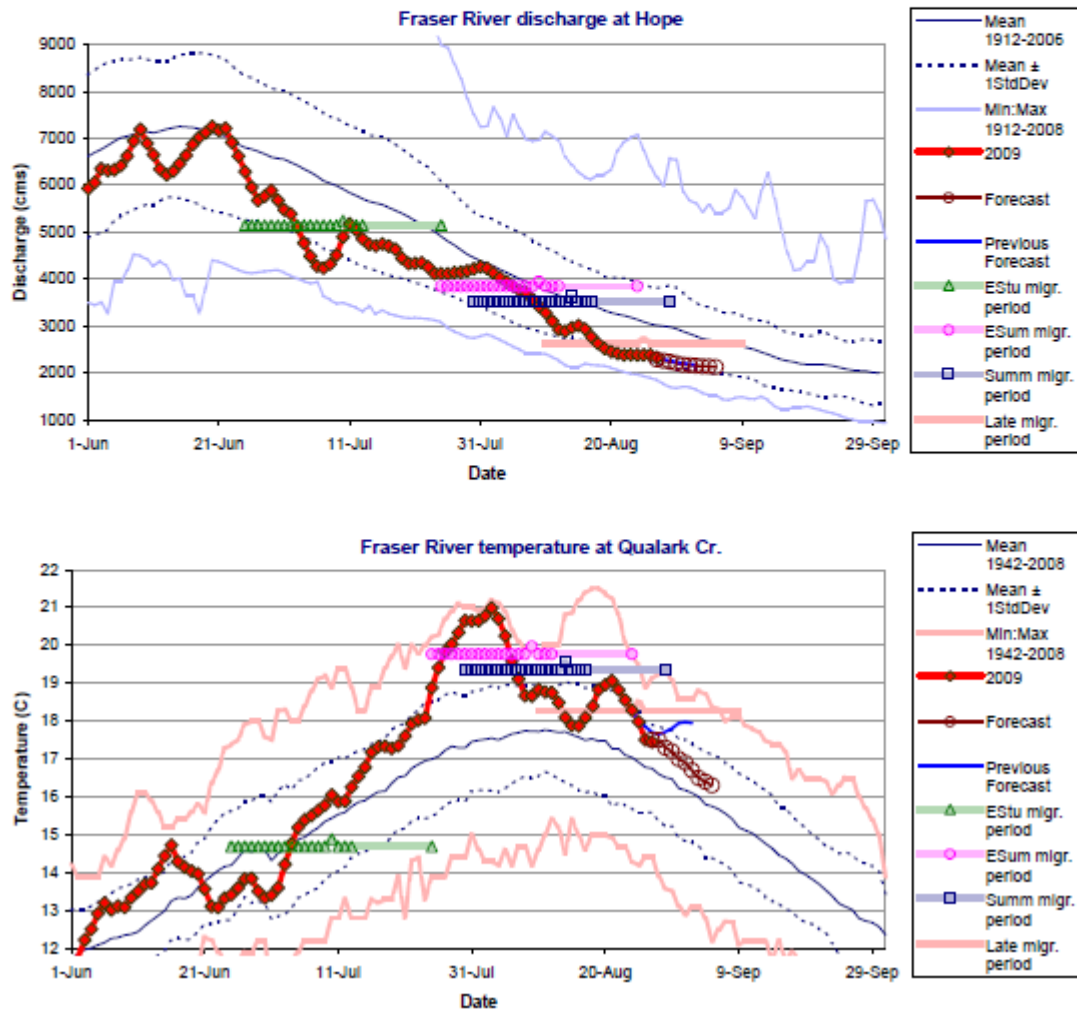
Yesterday's discharge was 2300 m<sup>3</sup>/s and is forecast to decline to 2100 m<sup>3</sup>/s by Sept. 5.

	date	m <sup>3</sup> /s
Last obs.	27-Aug	2,325
Forecast	5-Sep	2,128

#### Fraser River Temperature at Qualark

River temperature was 17.5C yesterday, and is forecast to decrease to 16.3C by Sept. 5.

	date	C
Last obs.	27-Aug	17.5
Forecast	5-Sep	16.3



## Fishery Recommendations

### *Fraser River Panel Meetings: Summaries and Discussions*

## Fraser River Panel (in-person) Summary Notes-August 21

### **FRP Canadian Caucus**

- US reefnets – Release Mortality Rate Study
  - The study provided indicated a 0.45% release mortality rate (one coho died out of 225 non-target salmon released from reefnets during a chum fishery).
  - The US has 11 reefnets, but only 10 of them usually fish.
    - They are generally not allowed to retain Chinook, coho, chum, or steelhead, and the US assumes a 0% release mortality of non-target species for domestic management purposes.
    - They are proposing using a 0.5% release mortality for international purposes.
- Pink Salmon
  - We have not yet decided on any rules, 1% mortality (i.e. 1 SK killed per 100 PK harvested) has been proposed.
    - We still need to decide how to apply it- per boat, per fishery, US as an aggregate?
  - Release Mortality
    - We have some mortality rates used in past years, but we need to verify what they were based on.
    - The rule that has been put forward, is that the encounter rate multiplied by the release mortality rate should be less than 1%
      - $(SK/(SK+PK))_{\text{gear, area}} * \text{Release Mort}_{\text{gear, area}} \leq 1\%$
    - We also need to keep track of the overall impact, not just the sockeye to pink ratio.
    - The timing forecast for pinks is A20 50% date of Aug 31 with a 90% prediction interval of Aug 23 to Sep 8.
    - The diversion forecast is 31% with a 90% prediction interval of 3% to 58%.
    - The migration speed assumptions used is 8 to 10 days from A20 to the river.
- All rules need to be in place before we can open any pink fisheries, perhaps on Sept 1.

### **FRP Bi-lateral**

- Test Fishing-General Remarks
  - In Gulf approaches, the migration has been flat (exhibiting waviness)
    - Multi-modal with significant drag
      - 30 day spread is normal, sometimes Harrison and E Summers spread a bit more
      - It is similar to 2005 except we don't expect to see a mode at the very end of the migration, except perhaps a few Lates.
  - In the river, we've had steady migration and are starting to see pinks (some observed through Hells Gate).
    - The species composition test fishery at Mission will begin today, the drift net will estimate the SK:PK for the channel, and 2 set nets will estimate the SK:PK along the banks.

- The marine SK:PK will be used to estimate today's migration past Mission.
- We are seeing a nice build-up of pinks, similar to the forecast with an increasing proportion of Fraser pinks.
- If the total return of Fraser sockeye is 1.5 million it will be either the lowest or second lowest total return since 1952. However, in terms of spawning escapement (assuming pMA is correct); there have been 10 to 12 escapements lower than this year – i.e. low escapement, but not record low.
- Stock ID
  - On the outside there are still some E Summers. E Misc. are dropping off, but E Thompson are persisting.
  - 61% Summers in A12, 46% in A20
  - 22% True Lates (excl. Ha) in A12, 27% in A20
  - Harrison is dropping out
  - Proportionally, are seeing more Har than Ad/W in-river vs projections – implies delay of Ad/W
    - Recreational fishermen have reported seeing a few sockeye jumpers
    - In small abundances, Lates don't usually delay, so the PSC would like to look at them with a troll test fishery in the Gulf.
      - It would be interesting from a science perspective. If they are holding again, we'd like to know why.
      - If SK are seen, a survey would commence.
      - The number of Ad/We holding will determine the number of allowable late impacts.
      - The maximum cost would be \$10,000 and the PSC has enough cash on hand to cover it.
- Pink salmon
  - A13(South) date: Aug 17
    - 22% Fr
    - 13% Puget Sound
    - 65% Can SC
  - A12 date: Aug 18
    - 47% Fr
    - 22% Puget Sound
    - 31% Can SC
    - Note: Better indication than A13 because there are fewer local stocks seeing high returns.
  - A20
    - 53% Fr
    - 42% Puget Sound
    - 5% Can SC
  - The unofficial forecast is Aug 31 A20 peak date and 31% diversion, the  $R^2 = 0.3$ , the lower 95% PI = Aug 23
  - Diversion rate
    - SK - 41% currently, 41% average to date
    - PK – 50% currently
  - There are a high proportions of males in the pink samples to date, meaning it's still early in the migration.
  - US? Why are you using marine samples to estimate the species composition at Mission rather than in-river samples?



- From Area 20 we assume the migration time is:
  - 10-12 days for pinks
  - 6 days for most sockeye
  - 8 days for Late sockeye
- PK in-river mig'n is different from SK, in-river GN substantially overestimates SK. Didn't used to have this problem b/c PK timing used to be later.
- The PSC will use the Mission spp comp TF to apportion the hydroacoustic data to species.
- The count of pinks is also problematic at very large abundances. The system sees only a solid wall of pink salmon.
- FRPTC? What was the Mission escapement estimate for yesterday, it is not shown on today's distribution?
  - 28k SK(excl. Pitt) + 500 Pitt SK
  - also about 28,500 PK
- FRPTC? What is the longterm average 50% date for Fraser pinks?
  - From 1959 to the present Aug 29.
  - From 1982 to the present Aug 30
- FRPTC? What is the assumed migration speed for pinks?
  - 12 days from A20 to Mission
    - 8 days travel
    - 4 days delay
    - Note: These numbers are very soft
  - 14 days from A12 to Mission
  - Historically pinks would delay for 2 to 3 weeks.
  - Pinks travel at similar speeds or slightly slower than Late sockeye.
- FRPTC? What are the chances of seeing the few SK estimated to be holding using the Gulf troll test fishery?
  - It has been run before when Lates were holding. It was last run in 2006, which was an Adams year.
- Assessments
  - E Stuart
    - 84.5k in catch and escapement to date
    - ***Currently at 85k, no change to run size estimate recommended***
  - E Summer
    - 151k in catch and escapement
    - 15k projected
    - 166k accounted to date
      - 104 E Misc (nearly complete)
      - 62k E Thomp (still in marine areas)
    - ***Currently at 175k, no change to run size estimate recommended***
    - We will get to 175k (b/c of high %comp), and may reach 200k, but it's too early to recommend a change.
  - Summer
    - 500k in catch and escapement
    - 90k projected
    - 590k accounted to date
      - 157k LS/St (nearly complete)
      - 433k Ch/Qu



- Cum. Passage: (498k gone by Mission)
  - 607k, A20 date: Aug 6 (current timing)
  - 575k, A20 date: Aug 4 (less than tl accounted)
  - 658k, A20 date: Aug 8
- Cum. Norm (Det.):
  - LS/St 159k, A20 date: Jul 30
  - Ch/Qu 494k, A20 date: Aug 8
  - 653k total
- Cum. Norm (Bayes):
  - 669k, A20 date: Aug 6 80% PI (595k-748k)
    - LS/St 161k, A20 date: Jul 31
    - Ch/Qu 508k, A20 date: Aug 8
- These estimates are a bit lower than the operational run size. The amount of drag in the migration will determine how many are still to come ( $\pm 50k$ ).
  - We need 110k seaward of assessment to get to 700k.
  - There is no way to predict at a high resolution due to the flatness of the migration.
- Birkenhead
  - 32k in catch and escapement
  - 22k projected
  - 54k accounted to date
  - Bayes:
    - 74k, A20 date: Aug 16 80% PI (59k-92k)
    - above suggests late timing
  - Still being observed in marine areas
  - ***Currently at 100k, no change to run size estimate recommended, but may reduce the estimate to 75k on Tuesday.***
    - ***US agreed***
    - ***Canada agreed***
- Lates (excl. Bi)
  - 185k in catch and escapement
  - 89k projected
  - 342k accounted to date
  - ***Currently at 450k, no change to run size estimate recommended.***
- Harrison
  - 157k in catch and escapement
  - 12k projected
  - 169k accounted to date
  - Cum. Norm (Det.)
    - 191k, A20 date: Aug 7
  - Bayes (best est)
    - 166k, A20 date: Aug 7 80% PI (148k-185k)
  - ***Currently at 200k, no change to run size estimate recommended***
  - Migration nearly complete, but more are being observed in the river than projected, so we may get to 200k. If we aren't there by Tuesday, may need to revise downward.
- Lates (excl. Bi and Ha)
  - 28k in catch and escapement
  - 56k projected + 89k delay

- 173k accounted to date
- Cum Norm (Bayes):
  - 233k, A20 date: Aug 14 80% PI (198k-273k)
- The delay is the major source of uncertainty in the estimate
- ***Currently at 250k, no change to run size estimate recommended***
- ***Gulf test fishery is recommended to evaluate the magnitude of the delay***
  - ***Canada agreed***
  - ***US agreed***
- Pink
  - 75p forecast: 12.4 million assuming Aug 25 is the peak date
  - 3.2 million reconstructed to date
  - Cum Norm (Bayes):
    - 22.8 million, A20 date: Aug 30 80% PI (13-42 million)
  - Model based on scale information (marine growth model)
    - 19.4 million, 80% PI (14.5-24.1 million) – there is no timing associated with this model
    - Minimum estimate 9.4 million (assumed all the scales with closely spaced scales were non-Fr)
  - The pinks returning this year went to sea in 2008, it may be a good sign for SK next year.
- US? Intent of Gulf Troll?
  - verify delay/differential in Mission arrival for LL → real fish delaying or exp line problem? (~10% of LL expected are reaching Mission)
  - if fish are really delaying, want to try to quantify
    - need 3 days to complete 6 quadrant sampling area
    - have a historic rel'p btwn CPUE & LL delay
  - max \$10k – 1 boat, 2 max
  - if fish are delaying, this will be the first off-dom year delay has been observed in ~15 years
- FRPTC? How much of a reduction in the Summer runsize estimate would result in a Aug 5 50% date? What would be the MA?
  - A run size of 660k would result Aug 5 timing
  - The pMA would be about 0.25 (btwn 0.21 & 0.28)
- Environmental Conditions:
  - Discharge at Hope
    - About 25% below average
    - 2,460 cms 20-Aug
    - forecast: 2,163 cms by 29-Aug
  - Temperature at Qualark
    - 18.9°C 20-Aug
    - forecast: 19.4°C by 26-Aug (2.5° warmer than average)
    - forecast: 18.7°C by 29-Aug
- MA
  - Summers (assuming an A20 peak date of Aug 6)
    - pMA = 0.21
    - DBE = -18%
    - MA = 109,000 (@ 700k run size)
    - Aug 4 peak date: pMA = 0.28
    - Aug 8 peak date: pMA = 0.17 (incl. one forecasted day)

- Aug 10 peak date: pMA = 0.14 (incl. three forecasted day)
- If the run size = 720k, Aug 7 peak date: pMA = 0.21
- **pMA = 0.21, DBE = -18%, MA = 109,000 recommended**
  - **Canada agreed**
  - **US agreed**
- Run sizes needed to generate a harvestable surplus, given changes to the MAs
  - E Summer: 300k
  - Summer: 660k
- Pink management issues
  - PSC needs to see:
    - all models to provide a “reasonable” TAC to open fisheries, which we have.
    - SK by-catch guidance to assess fishery proposals against
  - **Canada: Limited discussions to date, we will have rules next week.**
  - **US: Limited discussions to date, we will have rules next week.**
    - **Reef nets have low release mortality**

### FRP Canadian Caucus

- Proposed Gulf troll test fishery (1 to 2 boats)
  - On the first day they will collect DNA and evaluate whether a grid-based survey is warranted.
  - Lates have not been holding much for the last 10-15 years
  - We may eventually be able to make the late MA a function of holding.
  - There was general agreement that the Gulf troll test fishery should go ahead.
- Assessments
  - The Birkenhead assessments are all lower than the operational goal.
  - There may be a problem if the Summer model runs come in lower on Tue. We are on the line between having a small TAC and no TAC; also the accepted run-sizes are not following the assessment model estimates. We might end up fishing into escapement if we fish this weekend.
  - If we use the Bayes model estimate of 660k and pMA of 0.21, we go from a 53,000 TAC to a 22,800 TAC.
  - Catch to date is already 16,000. If the pMA were to go up to 0.25, there would be no TAC left.
  - The Summer TAC will be the driver of all fishing decisions. We won't be targeting Lates, the 20% ER is a limit not a target.
  - Should we approve the troll test fishery?
    - **General agreement**
  - Should we accept no change in the Birkenhead run size estimate?
    - **General agreement**
  - Should we ask for any other changes?
    - **None proposed**
  - Should we accept the change in the MA?
    - **General agreement**

### FRP Bilateral

- **The following recommendations were agreed by US & CDN at this time:**
  - **Gulf troll to proceed**
  - **BK run size to remain unchanged**
  - **Summer pMA = 0.21**
- To move forward with pink fishing plans we need
  - SK/(SK+PK) by area and period (PSC will provide). Project:

- 92% Fr PK in A20
- 94% Fr PK in A12
- high % of non-FR PK in both approaches – will want to project for % of all PK
- Release mortality by gear (all parties will provide what they have)
- Acceptable mortality of SK (policy decision to be made by Canada and the US)
- US? We have set release mortality rates in the past, what were they based on?
  - PSC will look into where the past numbers came from.
  - DFO conducted fishing mortality studies in the late 1990's
- US? How were the 94% PK in A12 and 92% PK estimates generated?
  - They come from the test fishery but different expansion lines are applied to SK and PK for each area.
- US? Will travel time affect the expansion line to 7/7A?
  - Yes, but many US pinks peel off before hitting Pt. Roberts, and we don't have an expansion line for non-Fr PK.
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- ***Fishery Recommendations:***
  - ***US: None, the reefnets will continue through Tue.***
  - ***Can: We will be opening some FSC fisheries directed on Summers, Pink fisheries will wait until we have rules in place.***
- Next Meeting
  - Conference call Tue. Aug 25<sup>th</sup>, 11:00 am

# Detailed Fishing Openings

## Open Times for the Mid & Upper Fraser River First Nations Fisheries

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
Sept 6 week 35	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
Sept 6 week 35	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
Sept 6 week 35	<b>Chinook only</b> (non-retention sockeye)	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
Sept 6 week 35	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
Sept 6 week 35	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
Sept 6 week 35	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
Sept 6 week 35	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
Sept 6 week 35	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
Sept 6 week 35	<b>Chinook/ limited Sockeye</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
Sept 6 week 35	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
Sept 6 week 35	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Fishwheel (Fraser only) Gill net
Sept 6 week 35	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
Sept 6 week 35	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net (all but T'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
Sept 6 week 35	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Sunday August 30 18:00	Sunday September 6 18:00	Closed
Sept 6 week 35	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 30 18:00	Sunday September 6 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
Sept 6 week 35	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

TBD = To Be Determined

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band  
 NSTC = Northern Shuswap Tribal Council

TNG = Tsilquot'In Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band  
 TLA = T'azt'en Nation

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
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Aug 23	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
Aug 23	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook, Pink	set net, drift net
Aug 23	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Sunday Aug 23	21:00 Sunday Aug 23	Chinook	dip net
Aug 30	Kwikwiltlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Aug 22	06:00 Monday Aug 24	Chinook	drift net
Aug 30	Musqueam First Nation	Below Port Mann Bridge	6 hrs	06:00 Tuesday Aug 25	12:00 Tuesday Aug 25	Sockeye	set net, drift net
Aug 30	Tsawwassen First Nation	Below Port Mann Bridge	6 hrs	12:00 Tuesday Aug 25	18:00 Tuesday Aug 25	Sockeye	set net, drift net
Aug 30	Tsleil-Waututh First Nation	Below Port Mann Bridge	12 hrs	18:00 Tuesday Aug 25	06:00 Wednesday Aug 26	Chinook	drift net
Aug 30	Tsleil-Waututh First Nation	Below Port Mann Bridge	24 hrs	15:00 Wednesday Aug 26	15:00 Thursday Aug 27	Chinook	drift net
Aug 30	New Westminster First Nation	Douglas I to Qnsbrgh/Alex Fras	24 hrs	12:00 Friday Aug 28	12:00 Saturday Aug 29	Chinook, Pink	drift net
Aug 30	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 29	19:00 Saturday Aug 29	Chinook, Pink	set net, drift net
Aug 30	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Aug 29	19:00 Saturday Aug 29	Chinook, Pink	set net, drift net
Aug 30	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Aug 26	12:00 Sunday Aug 30	Chinook, Chum	drift net
Aug 30	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Aug 26	12:00 Sunday Aug 30	Chinook, Chum	set net
Aug 30	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 28	12:00 Sunday Aug 30	Chinook, Pink	drift net

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
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Aug 30	Musqueam First Nation	Below Port Mann Bridge	12 hrs	13:00 Monday Aug 24	01:00 Tuesday Aug 25	Sockeye	drift net
Aug 30	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook	drift net
Aug 30	Yale First Nation	Strawberry I. to Sawmill Cr.	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook	drift net
Aug 30	Chawathil First Nation	Agassiz to Hope	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook	drift net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report

### Recreational

See appendices

### First Nations

### Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14403
Aug-16	133	61	43	461		457	125		76		1119	1356	15759
Aug-23	144		16	388		536	164	0	101	0	1189	1349	17108
Aug-30	2749	766	13	162		19	54	0	311	3	549	4077	21185



**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621
16-Aug	53	4719	33	147	110	5062	8683
23-Aug	2	1372	N/A	270	314	1958	10641
30-Aug	0	0	N/A	N/A	N/A	0	10641
Total	2497	7128	35	557	424	10641	10641

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572
16-Aug	0	244	2384	0	36	2664	4236
23-Aug	0	164	5684	363	408	6619	10855
30-Aug	0	335	4368	534	1358	6595	17450
Total	0	762	12568	1162	2958	17450	17450



**Mid and Upper Fraser River - mainstem - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	N/M	N/M	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	32	4	N/A	0	0	36	36
30-Aug	0	72	N/A	N/A	N/A	72	108
Total	32	76	0	0	0	108	108

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	0	0	N/M	N/M	0	0
19-Jul	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6
16-Aug	1.0	0.0	0.0	5.0	9.0	0.0	0.0	0.0	2.1
23-Aug	0.0	0.0	0.0	12.5	5.0	0.0	1.0	0.0	2.7
30-Aug	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	3.0

N/M = No Monitoring Conducted

**Marine**

N/A

# Fraser River Sockeye and Pink

## Weekly Management Plan August 30 – Sept 5/09

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### For Period of:

Sun. August 30<sup>th</sup> – Sat. September 5<sup>th</sup>, 2009

Week: 36

### Stock Aggregate Focus:

Summers; Birkenhead and True Lates; Pink

### Management objectives for the current week:

- Assess run size and timing for True-Lates
- Assess run size and timing for Pink
- Monitor in-river migration conditions
- 

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## Fraser Sockeye Management Summary

### FN0694-Salmon: Fraser River Sockeye and Pink Update - September 1 - Areas 11 to 29

The Fraser River Panel met on September 1 to review stock assessment data on the Fraser sockeye and pink salmon runs and discuss fisheries management plans for the harvest of pink salmon. The marine migration of Fraser sockeye has been at low abundance levels over the past several days and continues to decline, while the marine migration of Fraser River pink salmon through the assessment areas has been increasing. The diversion rate of Fraser River sockeye through Johnstone Strait is currently estimated to be 73%, while for Fraser River pink salmon it is presently estimated to be about 30%.

At the September 1 Fraser River Panel meeting, there were no changes to sockeye run size estimates. Estimates are currently 175,000 for Early Summer run sockeye, 650,000 for Summer run sockeye, 60,000 for Birkenhead and 400,000 for true lates including Harrison sockeye. The total Fraser River sockeye return is currently estimated at 1,370,000.

In regards to pink salmon abundance estimates, at the September 1 meeting, the 50% probability level forecast of 17,535,000 was adopted.

Fraser River environmental conditions are currently satisfactory for the migration of Fraser River sockeye and pink salmon, however discharge levels are near record low levels. On August 31 the Fraser River discharge at Hope was approximately 1,900 cms. The water temperature at Qualark Creek was 17.9 °C, which is about 1.6 °C higher than average for this date.

There are no directed recreational and commercial fisheries for Fraser River sockeye at the present time or anticipated. DFO is continuing planning meetings with First Nations groups to review current information which currently provides for very limited sockeye harvest opportunities on the late run sockeye stock group with no TAC for Summers.

Commercial directed pink fisheries by Area B seine and Area H troll are currently continuing. Refer to separate Area B (FN0685) and Area H (FN0686) fishery notices for details.

The next scheduled Panel meeting is Friday, September 4.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

### FN0704-Salmon: Fraser River Sockeye and Pink Update - September 4 - Areas 11 to 29

The Fraser River Panel met today to review stock assessment data on the Fraser sockeye and pink salmon runs and discuss fisheries management plans for the harvest of pink salmon. The migration of Fraser sockeye through Johnstone Strait and Juan de Fuca Strait is nearing completion while the marine migration of Fraser River pink salmon through these areas has been generally strong over the past two weeks. Large numbers of pink salmon have been observed passing Hells Gate over the past week en route to their spawning grounds. The estimated total non-commercial catch of Fraser River sockeye this season is approximately 95,000 fish; harvested in test fisheries and First Nations FSC fisheries. The estimated total catch of Fraser River pinks to-date is approximately 1,108,000 fish; harvested primarily in Canadian and U.S. commercial fisheries.

At the meeting today the run size estimates of 175,000 Early Summer-run, 650,000 Summer-run, and 60,000 Birkenhead sockeye were unchanged. Data collected by the gulf troll test fishery continues to suggest that over 100,000 True Late-run sockeye may be delaying in the lower Strait of Georgia prior to entering the Fraser River. At the meeting today, the run size estimates of 200,000 Harrison and 200,000 Weaver/Late Shuswap sockeye (for Fraser River Sockeye Weekly Management Plan **August 30<sup>th</sup> – September 5<sup>th</sup>**, 2009

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a total of 400,000 True Late-run sockeye) were unchanged. The estimated escapement of True Late-run sockeye past Mission through September 3 is 214,000 fish.

The estimated total Fraser sockeye return this season remains at 1,370,000 fish, which is less than half of the 90% probability level forecast of 3,556,000 fish. This total in-season run size estimate is based on the Fraser sockeye estimates noted above plus an estimated 85,000 Early Stuart sockeye.

Stock identification analyses indicate that Fraser River pink salmon comprised approximately 65% of the pink salmon migrating through Johnstone Strait and Juan de Fuca Strait at the end of August. Historically, Fraser pink contributions in these areas at the end of August typically exceed 80% however; significant pink salmon runs are being observed returning to the terminal areas of a number of Washington and Canada South Coast pink salmon stocks. This has reduced the dominance of Fraser pinks relative to other co-migrating stocks even though the abundance of Fraser River pinks appears to be tracking near the forecast. The diversion rate of Fraser River pink salmon through Johnstone Strait is presently estimated at approximately 29%.

At the meeting on September 1, the Panel approved the 50% probability level forecast for Fraser River pink salmon of 17,535,000 fish for fisheries planning purposes and at the meeting today, this estimate was unchanged. The abundance of Fraser River pink salmon this season is sufficient to support commercial fisheries; subject to conservation needs for Fraser River sockeye salmon that are still migrating through areas where fisheries may occur as well as other species of concern.

On September 3 the Fraser River discharge at Hope was approximately 1,900 cms, which is about 30% lower than normal and slightly higher than the historic minimum discharge on this date. The water temperature of the Fraser River at Qualark Creek on September 3 was 19 °C, which is 3 °C higher than average for this date. Fraser River water temperatures are expected to decline as cooler, wetter weather is forecast for much of the Fraser River watershed.

There are no directed recreational and commercial fisheries planned for Fraser River sockeye. DFO is continuing planning meetings with First Nations groups to review current information which currently provides for very limited sockeye harvest opportunities on the late run sockeye stock group with no TAC for Summers.

Commercial directed pink fisheries by Area B seine and Area H troll are currently continuing. Refer to separate Area B and H Fishery notice for details.

Recreational fishing in that portion of the Fraser River between Agassiz and Hope previously closed to salmon fishing is re-opened effective Sept 4, with pink, chum and chinook salmon retention but closed to sockeye fishing. Refer to Recreational Fishery notice for more details.

The next scheduled Panel meeting is Tuesday, September 8.

FOR MORE INFORMATION:

Barry Rosenberger 250-851-4892

## Fishery Status Summary

	Sun Aug 30	Mon Aug 31	Tues Sept 1	Wed Sept 2	Thurs Sept 3	Fri Sept 4	Sat Sept 5
First Nations – FSC Mid and Upper Fraser	Chinook with mortally wounded sockeye or limited sockeye directed in terminal areas (dip net)						
First Nations – FSC Lower Fraser	Chinook and pink directed						

First Nations – FSC Marine	Non-retention of sockeye
Recreational - Upper Fraser River	No fishing for sockeye
Recreational - Lower Fraser River	Open Sept 4 for chinook, chum and pink retention - closed to sockeye fishing
Recreational Marine Areas	No fishing for sockeye
Commercial Area D	Closed
Commercial Area E	Closed
Commercial Area B	Open for pink directed
Commercial Area H	Open for pink directed
U.S. Treaty Indian	Closed
U.S. Non-treaty Indian	Closed

## Fishery Notices Summary

### RECREATIONAL – Salmon

FN0681-RECREATIONAL - Salmon - Chinook salmon retention opportunities - Thompson River - Region 3

FN0683-RECREATIONAL - Salmon: Area 29 and Region 2 - Size limit for Chinook Salmon in Non-tidal Waters of the Fraser River

FN0691-RECREATIONAL - SALMON: Region 2 - Retention of Pink, Chinook and Chum Salmon in Non-tidal Waters of the Fraser River

FN0692-RECREATIONAL - Salmon: Pink Retention in Non-tidal portions of Region 2 (Fraser, Harrison, Stave and Chilliwack Rivers)

FN0693-RECREATIONAL - Salmon: Region 2 - Management Measures to Protect Interior Fraser River Coho

FN0694-Salmon: Fraser River Sockeye and Pink Update - September 1 - Areas 11 to 29

FN0701- RECREATIONAL - SALMON: Region 3 - Retention of Pink Salmon in Thompson River

FN0702-Recreational-Salmon: Region 3- Retention of Pink Salmon in Fraser River

FN0704-Salmon: Fraser River Sockeye and Pink Update - September 4 - Areas 11 to 29

### COMMERCIAL – Salmon

FN0677-COMMERCIAL - Salmon: Seine - Area A Seine - Areas 5 & 6 Update

FN0685-COMMERCIAL - Salmon: Seine - Area B - Areas 12 & 13 - Fraser River Pink Update

FN0686-COMMERCIAL - Salmon: Troll - Area H - Fraser River Pink - Areas 12, 13, 18 Fraser River Pink Update

FN0687-COMMERCIAL - Salmon: Seine - Area B - Area 12 - Mainland Inlet Pink Closure

FN0688-COMMERCIAL - Salmon: Gill Net - Area D - Area 12 - Mainland Inlet Pink Closure

FN0689-COMMERCIAL - Salmon: Troll - Area H - Area 12 - Mainland Inlet Pink Closure

FN0694-Salmon: Fraser River Sockeye and Pink Update - September 1 - Areas 11 to 29

FN0695-COMMERCIAL - Salmon: Gill net - Area D - Mainland Inlets Pinks Continued Opening

FN0696-COMMERCIAL - Salmon: Troll - Area F - ITQ Demonstration Fisheries - Expansion of the Management Area 142-2 Boundary

FN0699-COMMERCIAL - Salmon Seine & Gill Net - Area A & C - Area 7 Chum and Pink Fishery

FN0703-COMMERCIAL - Salmon Troll - Area F Troll - ITQ Demonstration Fisheries - Amendment to FN0696 Expansion of the Management Area 142-2 Boundary

FN0704-Salmon: Fraser River Sockeye and Pink Update - September 4 - Areas 11 to 29

FN0705-COMMERCIAL Salmon Seine & Gill Net: Area A & C - Area 7 Chum and Pink Fishery

FN0706-COMMERCIAL Area D: Chinook gill net, Alberni Inlet - Area 23

FN0707-COMMERCIAL Salmon Seine and Troll: - Areas B and H Areas 12, 13, 18 - Fraser River Pink - Update.

### ABORIGINAL – Salmon

FN0694-Salmon: Fraser River Sockeye and Pink Update - September 1 - Areas 11 to 29

FN0704-Salmon: Fraser River Sockeye and Pink Update - September 4 - Areas 11 to 29

# Management Information

## 2009 Fraser River Sockeye In-season Status

Status

### 2009 Fraser River Sockeye In-season Status

Week of: Aug. 30 - Sep. 5, 2009

Date: Sep. 4, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	17,535,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	2,110	7,440	23,190	2,590	10,230	45,560	1,107,160
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	253	830	2,937	794	2,599	7,413	n/a
Escapement-to-date @ Mission	82,450	168,440	608,170	58,850	213,500	1,131,410	n/a
Potential Gross Escapement	82,703	169,270	611,107	59,644	216,099	1,138,823	n/a
Adjusted Gross Esc. Target *	85,000	175,000	650,000	55,770	374,760	1,340,530	6,052,000
Accounted-to-date							
Catch + Escapement to Mission	84,813	176,710	634,297	62,234	226,329	1,184,383	n/a
Potential Remaining To Come							
Potential En-route	187	0	15,703	0	173,671	189,561	n/a
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	520,950
U.S. Commercial	0	0	0	0	0	0	563,240
Marine Area Aboriginal	111	1,359	5,100	850	2,603	10,023	8,020
Test Fishing	1,940	5,410	15,270	1,430	6,760	30,810	8,650
Canadian Charter (Albion & Qualark TF)	56	238	1,214	59	232	1,799	40
Canadian Marine Recreational	0	0	0	0	0	0	2,560
U.S. TI Ceremonial	0	436	1,609	248	639	2,932	500
U.S. Recreational	0	0	0	0	0	0	3,200
Total	2,110	7,440	23,190	2,590	10,230	45,560	1,107,160
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	253	830	2,937	794	2,599	7,413	210
Catch Above Mission (incl. FSC & EO)	6,229	8,711	25,620	20	1,249	41,829	150
Total	6,482	9,541	28,557	814	3,848	49,242	360
Total In-river Catch	6,482	9,541	28,557	814	3,848	49,242	360
Total Catch in All Areas							
Total	8,592	16,981	51,747	3,404	14,078	94,802	1,107,520
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	30-Jul	4-Aug	12-Aug	10-Aug		28-Aug
Mission Timing	5-Jul	5-Aug	10-Aug		18-Aug		
JS Diversion Rate - current						55%	37%
JS Diversion Rate - to date						44%	41%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.



## 2009 Fraser River Sockeye TAC Calculations and Catch

### 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Aug. 30 - Sep. 5, 2009

Date: Sep. 4, 2009

	Fraser Sockeye					Fraser Pinks	
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	Total
RUN STATUS, ESCAPEMENT NEEDS & AVAILABLE SURPLUS							
In-season Run Size Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	17,535,000
Adult Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000	6,000,000
%SET from TAM rules	100%	100%	80%	80%	80%		31%
Management Adjustment (MA)	32,300	105,000	145,600	0	n/a	282,900	0
Proportional MA (pMA)	0.38	0.60	0.28	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	85,000	175,000	650,000	48,000	320,000	1,278,000	6,000,000
Test Fishing (TF)	1,740	5,000	18,000	1,500	6,000	32,240	10,000
Surplus above Adjusted SET & Test fishing	0	0	0	10,500	74,000	84,500	11,525,000
DEDUCTIONS & TAC FOR INTERNATIONAL SHARING							
Aboriginal Fishery Exemption (AFE)	7,000	12,000	35,000	10,500	74,000	138,500	0
Available Aboriginal Fishery Exemption	0	0	0	10,500	74,000	84,500	0
Total Deductions (Adj. SET + TF + Available AFE)	86,740	180,000	668,000	60,000	400,000	1,394,740	6,010,000
Available TAC for International Sharing	0	0	0	0	0	0	11,525,000
UNITED STATES (Washington) TAC							
U.S. Share **	16.5%	0	0	0	0	0	25.7% 2,961,930
U.S. Payback **	0.0%	0	0	0	0	0	0
	Total	0	0	0	0	0	2,961,930
Treaty Indian Share **	67.7%	0	0	0	0	0	50.0% 1,480,965
Non-Indian Share	32.3%	0	0	0	0	0	50.0% 1,480,965
CANADA TAC							
Canadian Allocation	83.5%	0	0	0	0	0	74.3% 8,563,070
Available Aboriginal Fishery Exemption (AFE)	0	0	0	10,500	74,000	84,500	0
Total Canadian Share	0	0	0	10,500	74,000	84,500	8,563,070
Marine Area Aboriginal FSC	0	0	0	2,730	19,240	21,970	25,000
Fraser River Aboriginal FSC	0	0	0	7,770	54,760	62,530	52,000
First Nations Allocations (including AFE)	0	0	0	10,500	74,000	84,500	77,000
Planned Recreational Shares	0	0	0	0	0	0	150,000
Purse Seine B	47.5%	0	0	0	0	0	70.0% 5,532,850
Gillnet D	21.5%	0	0	0	0	0	4.0% 316,160
Gillnet E	25.0%	0	0	0	0	0	6.5% 513,760
Troll G	0.0%	0	0	0	0	0	6.5% 513,760
Troll H	6.0%	0	0	0	0	0	13.0% 1,027,530
Commercial Allocations (incl. BCI FN Demo)	100.0%	0	0	0	0	0	100.0% 7,904,070
Fraser River Aboriginal Economic Opportunity)	0	0	0	0	0	0	432,000
Total Commercial	0	0	0	0	0	0	8,336,070
CATCH-TO-DATE							
Test	1,940	5,410	15,270	1,430	6,760	30,810	8,640
Treaty Indian (Wash.)	0	440	1,610	250	640	2,930	175,430
Non-Indian (Wash.)	0	0	0	0	0	0	391,500
Washington	0	440	1,610	250	640	2,930	566,930
Marine Area Aboriginal	110	1,360	5,100	850	2,600	10,020	8,020
Fraser River Aboriginal	6,480	9,540	28,560	810	3,850	49,240	360
Recreational	0	0	0	0	0	0	2,560
Commercial	60	240	1,210	60	230	1,800	520,950
Canada	6,650	11,140	34,870	1,720	6,680	61,060	531,890
Total Catch in All Fisheries	8,590	16,990	51,750	3,400	14,080	94,810	1,107,460
Exploitation Rate (catch-to-date / run size)	10%	10%	8%	6%	4%	7%	6%
CATCH REMAINING (BALANCE)							
Washington	0	-440	-1,610	-250	-640	-2,940	2,395,000
Canada	-6,650	-11,140	-34,870	8,780	67,320	23,440	8,031,180
Balance Remaining [ below share / -above share]	-6,650	-11,580	-36,480	8,530	66,680	20,500	10,426,180
ESCAPEMENT RELATIVE TO TARGETS							
Potential Spawning Escapement (PSE) ***	76,410	158,010	598,250	56,600	385,920	1,275,190	16,427,540
Predicted Difference Between Estimates (%DBE)	-28%	-38%	-22%	0%	****		0%
PSE with predicted DBE removed	55,370	98,760	467,380	56,600	****		16,427,540
Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000	6,000,000
Potential deviation from SET [ <-target / >-target ]	-29,630	-76,240	-52,620	8,600	****		10,427,540

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.



## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Aug. 30 - Sep. 5, 2009

Date: Sep. 4, 2009

		Fraser Sockeye	
Area	Gear		Cumul.
<b>Commercial Catch</b>			
<u>Canada</u>			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127, 11-12	Troll		0
B Areas 11-16	PS		0
D Areas 11-13	GN		0
H Areas 12-16	Troll		0
H Areas 18-29	Troll		0
B Area 20	PS		0
E Area 29	GN		0
FRA Econ. Opp. + BCI FN Demo			0
Canadian Total			0
<u>United States</u>			
<u>Alaska</u>	Net&Troll		0
<u>Washington</u>			
T.I. Areas 4B/5/6C	Net		0
T.I. Areas 6/7/7A	Net		0
N.I. Areas 7/7A	Net		0
Washington Total			0
U.S. Total			0
<b>Non-commercial Catch</b>			
PSC Test			19,600
Other Test			11,210
Fraser River Aboriginal (FSC)			49,240
Areas 12-124 Aboriginal			10,020
Recreational			0
Charter			1,799
U.S. TI Ceremonial			2,900
Non-comm. Total			94,770
<b>Catch and Escapement</b>			
Catch Accounted-to-date			94,770
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)			1,088,770
Total Accounted-to-date			1,183,540

### Gross Escapement (includes Pitt R. sockeye)

Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,500	300	82,800	97%
ESum	Early Summer	175,000	168,400	800	169,200	97%
Summ	Quesnel/Chilko	650,000	446,400	2,200	611,000	94%
	L.Stu./Stel.		161,700	700		
Late	Birkenhead	55,770	58,900	800	59,700	107%
	Adams/L.Shuswap	374,760	25,800	600	216,000	58%
	Weav/L.Misc.		19,400	900		
	Sub 1s		168,300	1,000		

## 2009 Fraser River Panel Pink Review Catch Summary

**Pink\_Review****2009 Fraser River Panel Pink Salmon Review**

Week of: Aug. 30 - Sep. 5, 2009

Date: Sep. 4, 2009

Area	Gear	Fraser Pinks	
			Cumul.
Commercial Catch			
Canada			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127,11-12	Troll		0
B Areas 11-16	PS		516,420
D+E Areas 11-16	GN		0
H Areas 12-16	Troll		4,530
H Areas 18-29	Troll		0
B Area 20	PS		0
E Area 29	GN		0
FRA Econ. Opp. + BCI FN Demo			0
Canadian Total			520,950
United States			
Alaska	Net		0
Washington			
T.I. Areas 4B/5/6C	Net		0
T.I. Areas 6/7/7A	Net		174,940
N.I. Areas 7/7A	Net		388,300
Washington Total			563,240
U.S. Total			563,240
Non-commercial Catch			
PSC Test			7,050
Other Test			1,600
Fraser River Aboriginal			360
Areas 12-124 Aboriginal			8,020
Canadian Recreational			2,560
Charter			40
U.S. Ceremonial			500
U.S. Recreational			3,200
Non-comm. Total			23,310
Catch and Escapement			
Catch Accounted-to-date			1,107,510
Potential Net Escapement (run size minus catch-to-date)			16,427,490
Total			17,535,000

**Test Fishing Data****Pacific Salmon Commission Test Fishing Summary**

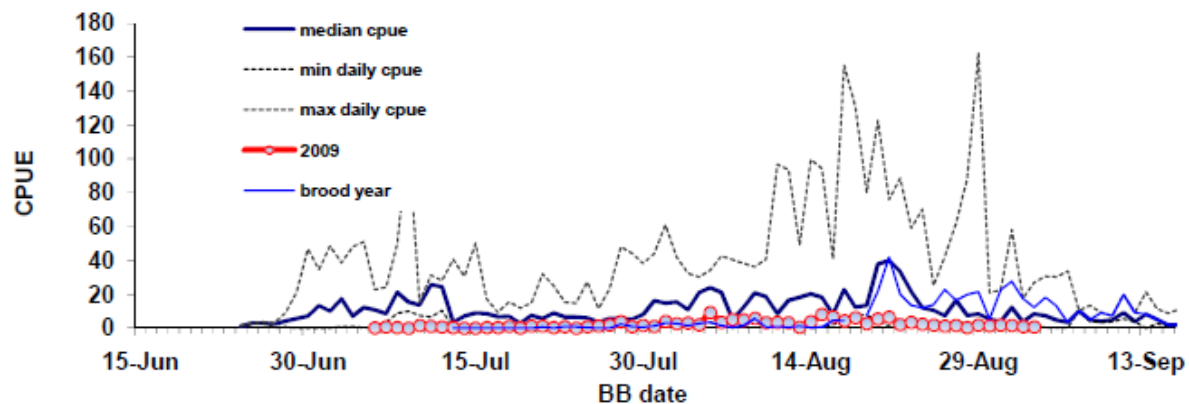
**2009 Pacific Salmon Commission Sockeye Test Fishing Summary**

	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	1-Sep	2-Sep	3-Sep
Area 20 Purse Seine	68	67	56	15	12	53	26	29	6
Area 12 Purse Seine	553	27 a	126	103	134	26	59	21	78
Area 13 Purse Seine	142	133	189	202	29	101	122	18	23
Area 7 Reef Net Obs.									
29B Cottonwood Gillnet*	9	12	2	12	11	14	13	7	8
29D Whonnock Gillnet*	14	20	18	32	27	21	28	10	16
29A Gulf Troll						35	10	43	
Mission Gillnet	35	74	28			20	14	12	
Mission Escapement**	10285	14620	12410	21250	18148	13940	18870	6843	10880
Hells Gate Daily Estimate	2240	1290	2270	780	1250	610	570	340	150

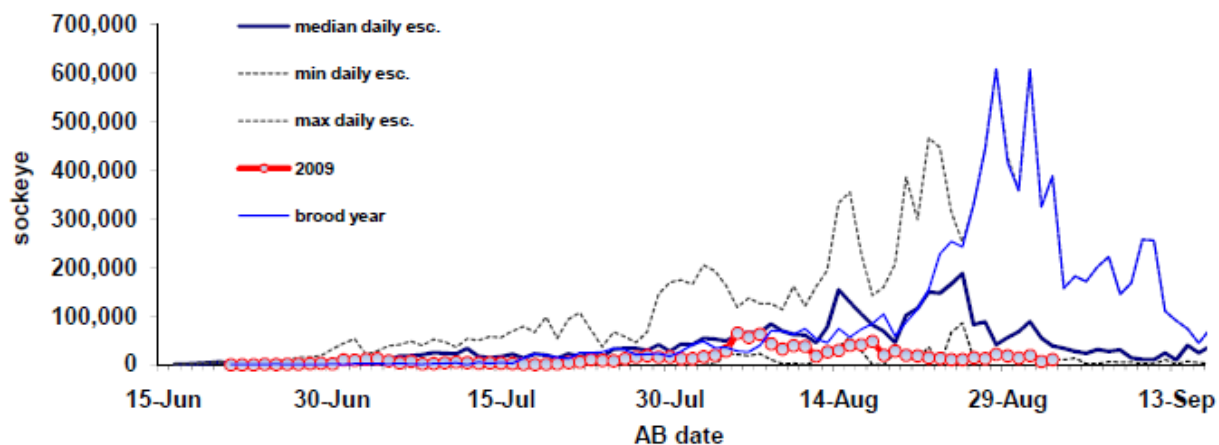
\* Variable mesh Gillnet

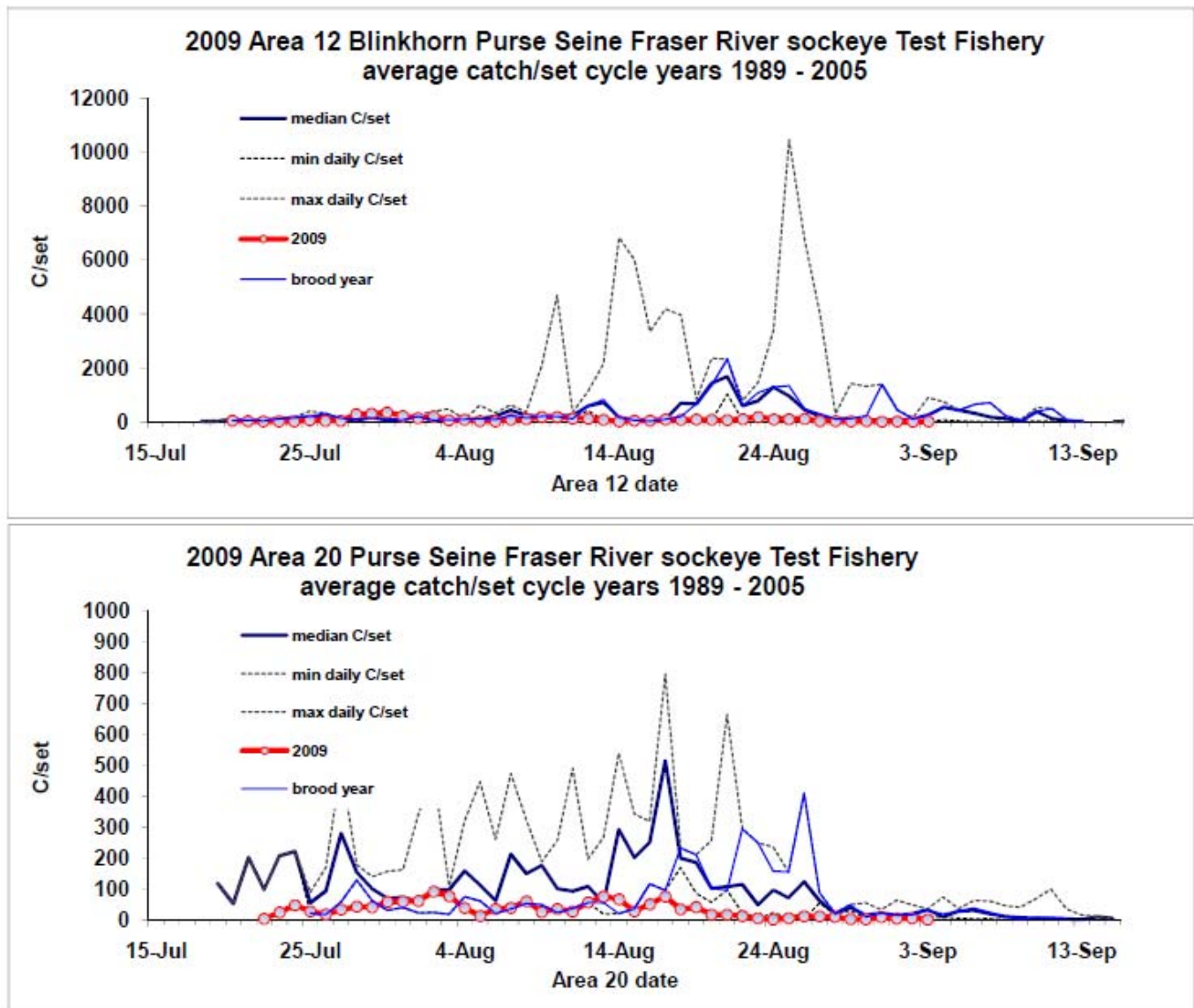
\*\* Preliminary, subject to revision. a = 1 set only

**2009 Area 29 Cottonwood variable mesh Gillnet Test Fishery  
Fraser River sockeye CPUE cycle years 1973 -2005**



**2009 Mission Hydroacoustics estimate of  
Fraser River sockeye upstream escapement cycle years 1977 - 2005**



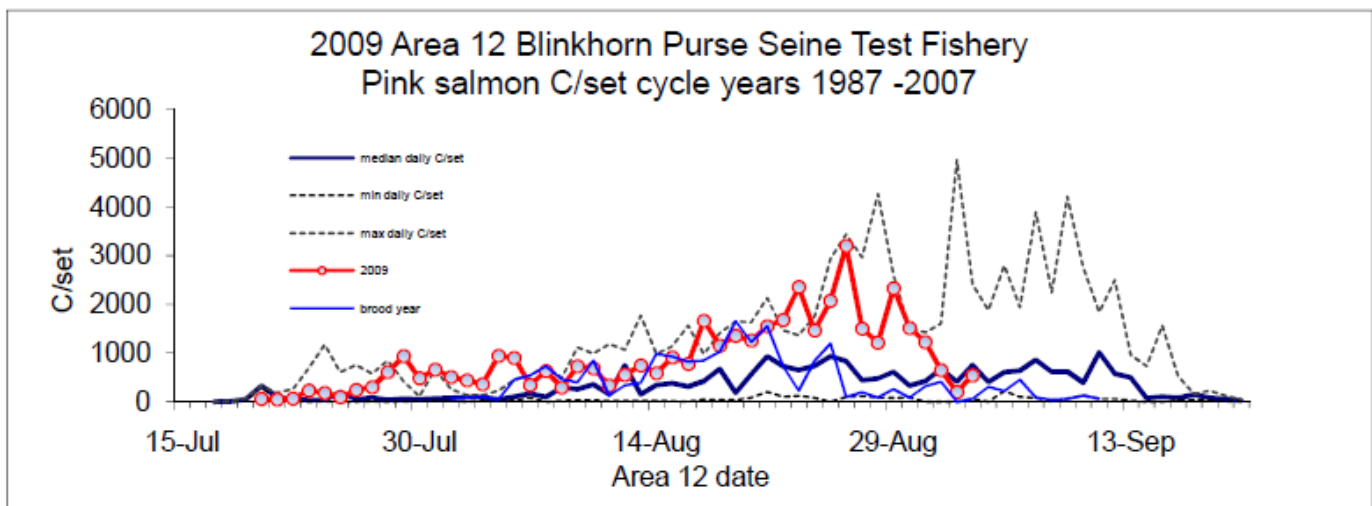
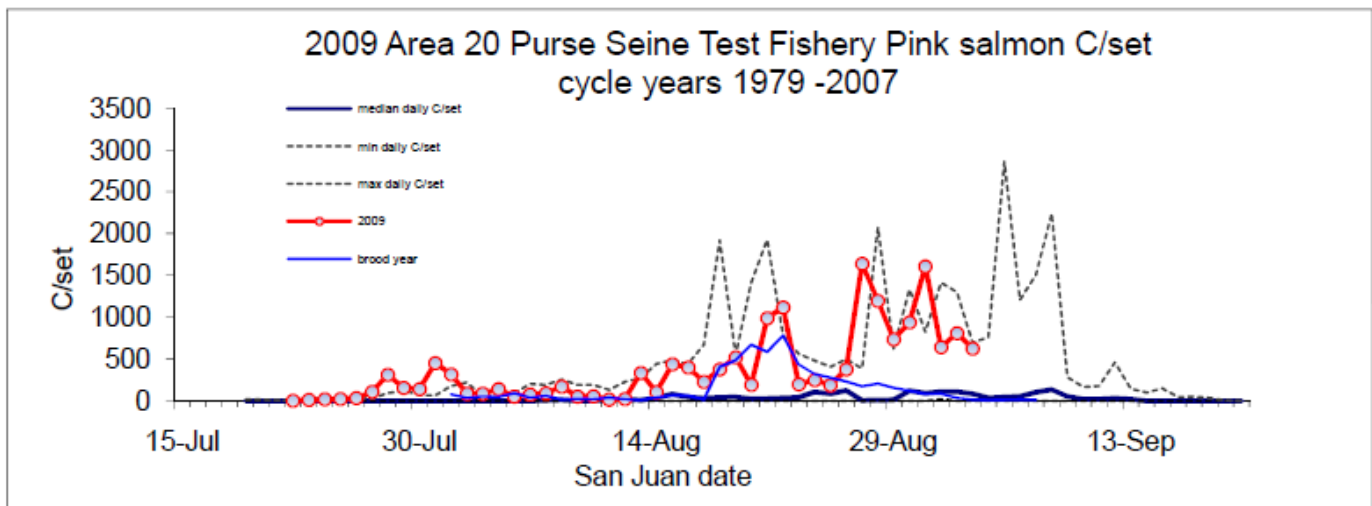


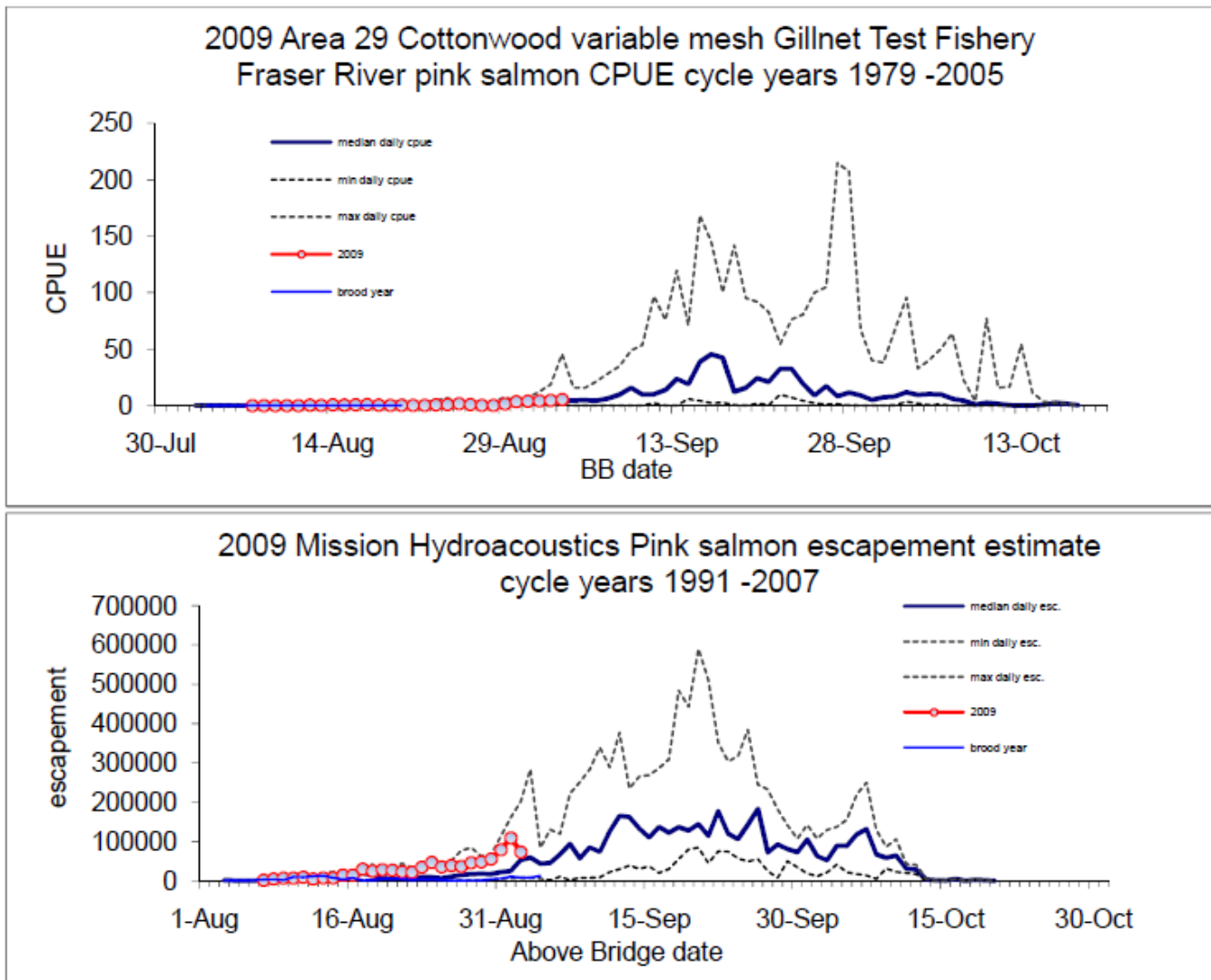
**Pacific Salmon Commission Pink Test Fishing Summary**

	Aug-28	Aug-29	Aug-30	Aug-31	Sep-01	Sep-02	Sep-03
Area 20 seine	7180	4406	5645	9639	3856	4860	3751
Area 12 seine	7270	13965	9072	7372	3897	1202	3250
Area 13 seine	14388	14170	1597	9949	11298	2383	1382
Area 7 Reef net							
Area 29B Cottonwood *	3	10	27	33	53	37	62
Area 29D Whonnock *	9	20	22	26	33	70	195
29A Gulf Troll				151	191	123	
Mission Gillnet	43			97	51	87	
Mission Escapement **	37398	46703	48846	55397	79544	109250	73303
Hells Gate Daily Estimate	14200	14300	15900	9200	6600	8300	3700

\*\* preliminary - subject to revision.

\* Variable mesh gillnet. a = one set only





## Detailed Test Fishing Data

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	30/08/2009	1	6	6	134	31	9072
	31/08/2009	1	6	6	26	5	7372
	01/09/2009	1	6	6	59	9	3897
	02/09/2009	1	6	6	21	6	1202
	03/09/2009	1	6	6	78	6	3250
	04/09/2009	1	3	3	32	3	1110
	05/09/2009	1	6	6	83	7	2720
Area 12 - Naka Creek Sockeye Gillnet	30/08/2009	0	0	0			



	31/08/2009	0	0	0			
	01/09/2009	0	0	0			
	02/09/2009	0	0	0			
	03/09/2009	0	0	0			
	04/09/2009	0	0	0			
	05/09/2009	0	0	0			
Area 12 - Round Island Sockeye Gillnet	30/07/2009	1	3	70.3	28	0	7
	31/07/2009	1	3	84.7	30	0	16
	01/08/2009	1	3	93.1	93	0	45
	02/08/2009	1	3	90.6	38	0	30
	03/08/2009	1	3	91.5	39	0	18
	04/08/2009	1	3	96.1	16	0	11
	05/08/2009	1	1	23.1	34	0	11
Area 13 - Area 13 Sockeye Seine	30/08/2009	1	6	6	29	4	1597
	31/08/2009	1	6	6	101	3	9949
	01/09/2009	1	6	6	122	7	11298
	02/09/2009	1	6	6	18	3	2383
	03/09/2009	1	6	6	23	2	1382
	04/09/2009	0	0	0			
	05/09/2009	0	0	0			
Area 20 - San Juan Sockeye Gillnet	30/08/2009	0	0	0			
	31/08/2009	0	0	0			
	01/09/2009	0	0	0			
	02/09/2009	0	0	0			
	03/09/2009	0	0	0			
	04/09/2009	0	0	0			
	05/09/2009	0	0	0			
Area 20 - San Juan Sockeye Seine	30/08/2009	1	6	6	12	0	5645
	31/08/2009	1	6	6	53	3	9639
	01/09/2009	1	6	6	26	2	3856
	02/09/2009	1	6	6	29	1	4860
	03/09/2009	1	6	6	6	2	3751
	04/09/2009	1	4	4	5	0	2751
	05/09/2009	1	6	6	4	0	9830
Area 29 - Cottonwood Sockeye Gillnet	30/08/2009	1	2	7.38	11	0	27
	31/08/2009	1	2	7.98	14	0	33
	01/09/2009	1	2	7.44	13	0	53
	02/09/2009	1	2	7.56	7	1	37
	03/09/2009	1	2	7.8	8	0	62
	04/09/2009	1	2	7.74	23	0	30
	05/09/2009	1	2	7.8	15	0	54
Area 29 - Gulf Sockeye Troll	30/08/2009	0	0	0			
	31/08/2009	1	4	206	35	0	151
	01/09/2009	1	3	486	10	0	191
	02/09/2009	1	3	358	43	0	123
	03/09/2009	0	0	0			
	04/09/2009	0	0	0			
	05/09/2009	0	0	0			
Area 29 - Whonnock	30/08/2009	1	2	12.425	27	0	22

## Sockeye Gillnet

31/08/2009	1	2	12.775	21	0	26
01/09/2009	1	2	12.6	28	0	33
02/09/2009	1	2	12.6	10	0	71
03/09/2009	1	2	13.475	16	0	195
04/09/2009	1	2	14.0875	3	0	251

## U.S. Area 5 - U.S. Juan de Fuca Sockeye Gillnet

30/08/2009	0	0	0
31/08/2009	0	0	0
01/09/2009	0	0	0
02/09/2009	0	0	0
03/09/2009	0	0	0
04/09/2009	0	0	0
05/09/2009	0	0	0

## U.S. Area 7 - Area 7 U.S. Reef Net Payfish

30/08/2009	0	0	0
31/08/2009	0	0	0
01/09/2009	0	0	0
02/09/2009	0	0	0
03/09/2009	0	0	0
04/09/2009	0	0	0
05/09/2009	0	0	0

## U.S. Area 7 - Area 7 U.S. Sockeye Reef Net

30/08/2009	0	0	0
31/08/2009	0	0	0
01/09/2009	0	0	0
02/09/2009	0	0	0
03/09/2009	0	0	0
04/09/2009	0	0	0
05/09/2009	0	0	0

## DNA Analysis

## Racial Analysis

Racial Analysis				
Area/Gear	Date	n	%Fraser	Stocks/Percentages
dna A12pstf	aug31-sep1	80	100%	ET 1%;CQ 44%;LS 4%;Bi 5%;AW 44%;Ha 2%;
dna A7,7ApsTics	aug.30	99	100%	EM 0%;ET 13%;CQ 38%;LS 0%;Bi 16%;AW 23%;Ha 10%;
dna A29trtf	aug31-sep1	44	100%	ES 0%;EM 0%;ET 0%;CQ 1%;LS 0%;Bi 2%;AW 70%;Ha 27%;
dna A29trtf	sep.2	43	100%	ET 0%;CQ 0%;LS 1%;AW 54%;Ha 46%;
dna BBgntf	aug31-sep2	38	100%	ES 0%;EM 4%;ET 7%;CQ 35%;LS 3%;Bi 25%;AW 18%;Ha 9%;
dna ABgntf	aug31-sep2	58	100%	ES 0%;ET 17%;CQ 48%;LS 6%;Bi 21%;AW 2%;Ha 7%;
dna Mlgntf	aug31-sep2	52	100%	ES 0%;EM 0%;ET 12%;CQ 47%;LS 10%;Bi 9%;AW 17%;Ha 6%;
<b>E.Stuart</b>	<b>Early Summer</b> code: FDC-FE,BU,CORU, GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc; ET=Early Tompson			<b>Late</b> Bi=Birk; Ha=Harr; AW=Adam/Weav

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

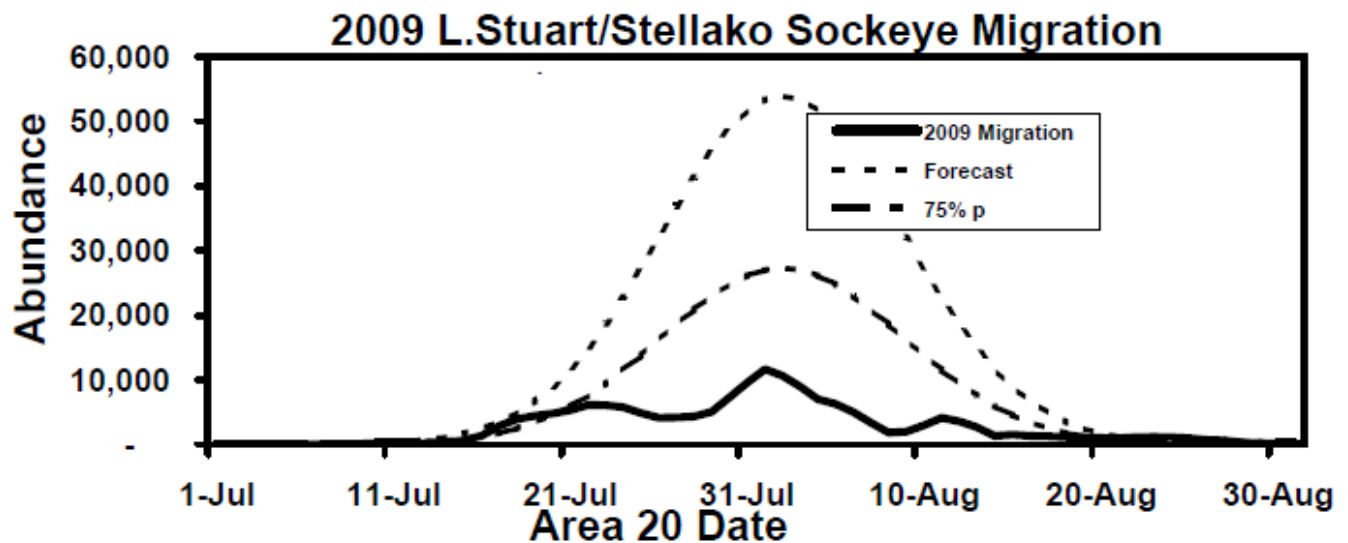
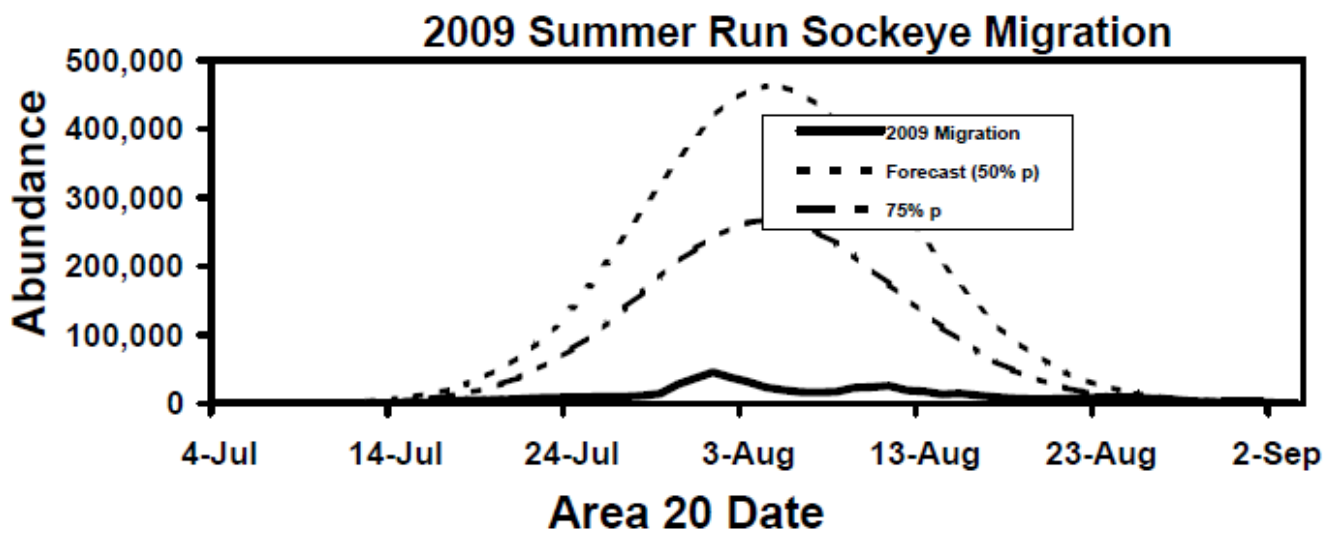
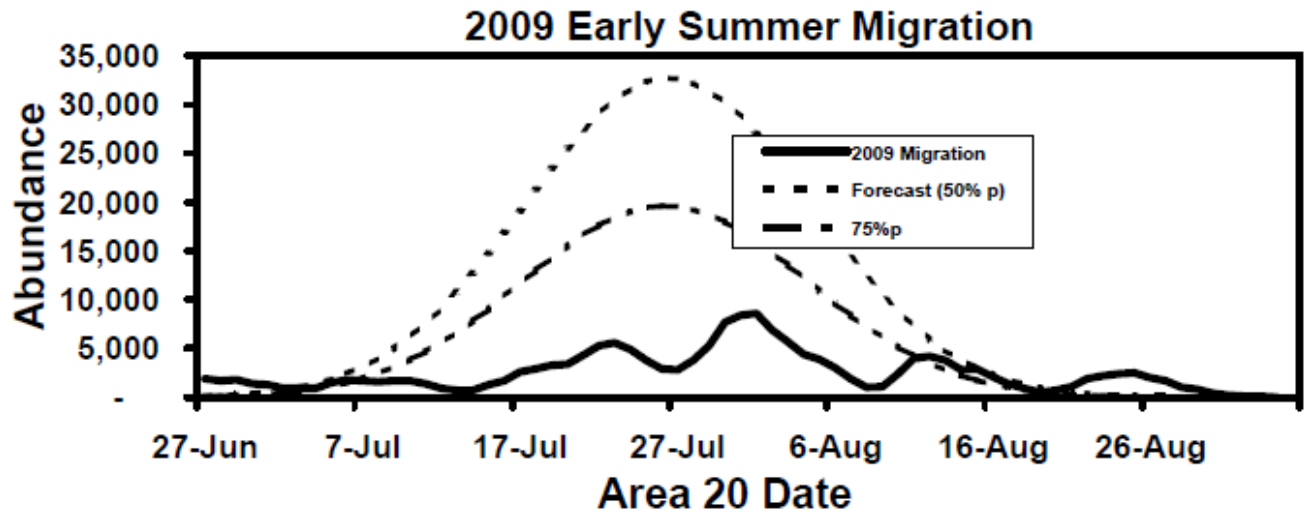


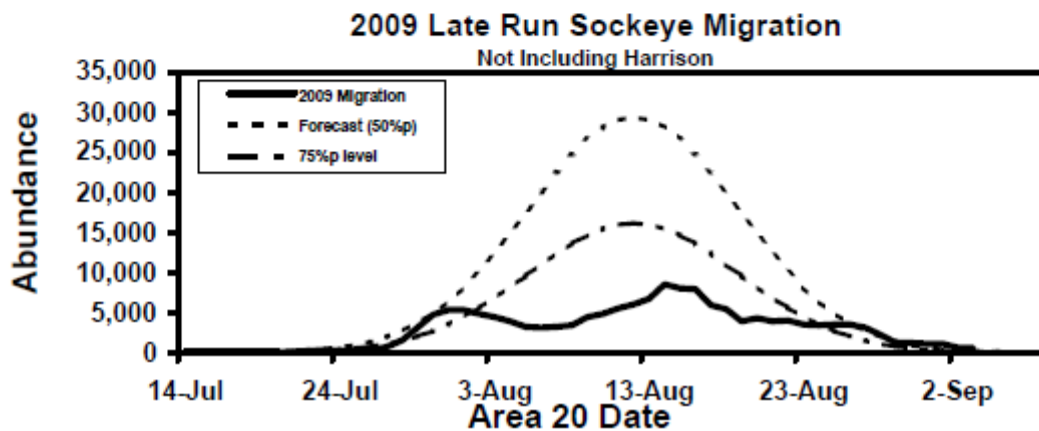
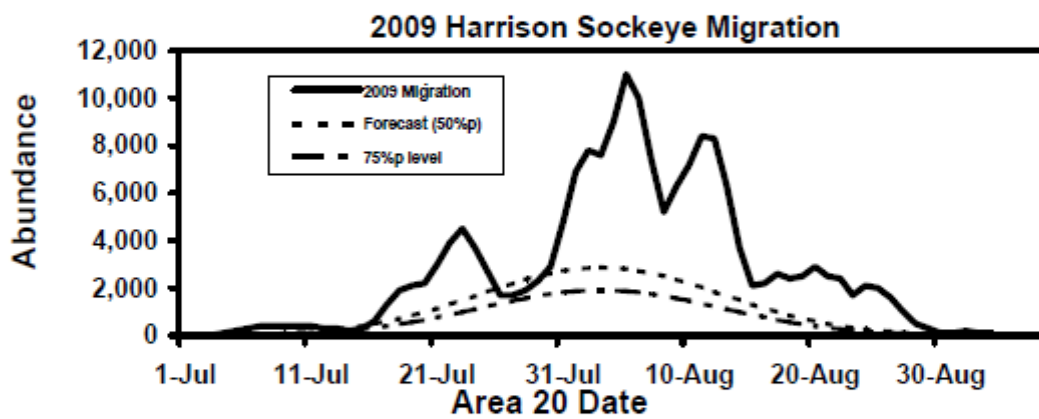
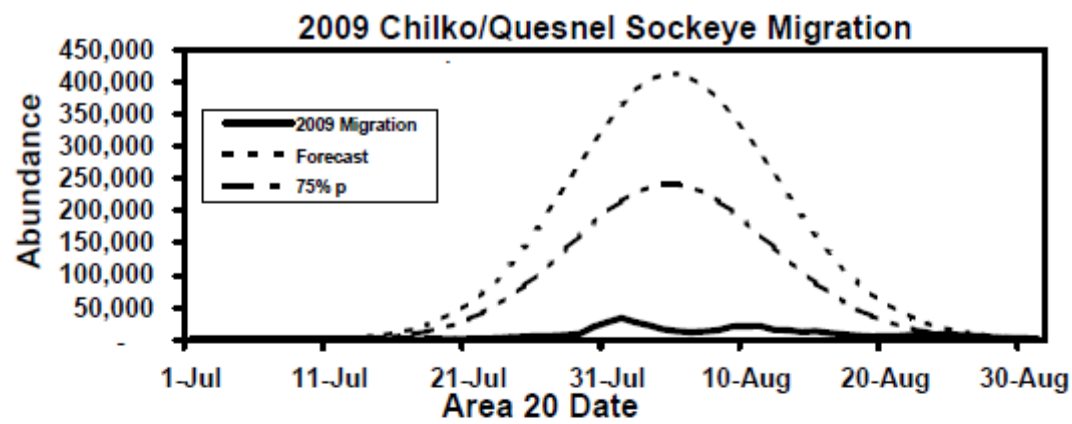
**2009 Test fisheries Summary of sockeye salmon Encounter rates**

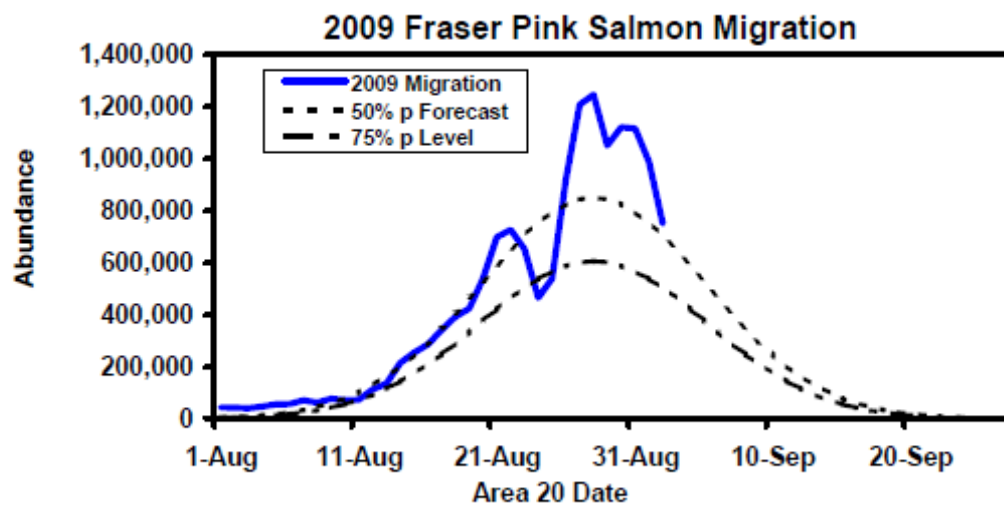
Calculations are: (sockeye catch or encounters)/(sockeye +pink)

				observer based released			observer based released	Non Treaty released from observer data		Treaty Indian fishery retained for ceremonial and subsistence use from landings (prelim)	
2009 Area 12				Area 12	Area 13	Area 13					
Date	US Reefnet	Area 20 PS	PS TF	PS CM	PS TF	PS CM	7PS CM	7APS CM	7PS CM	7APS CM	
8-Aug	100%	27%	26%			39%					
9-Aug	75%	34%	20%			36%					
10-Aug		40%	21%			6%					
11-Aug	50%	60%	28%			22%					
12-Aug	61%	71%	19%			32%					
13-Aug	43%	19%	10%			23%					
14-Aug		39%	4%			22%					
15-Aug	36%	6%	5%			27%					
16-Aug	32%	11%	6%			14%					
17-Aug	14%	25%	5%			6%					
18-Aug	18%	8%	6%			8%					
19-Aug	15%	8%	6%			5%					
20-Aug	22%	9%	6%			14%					
21-Aug		3%	4%			9%					
22-Aug	20%	1%	6%			7%					
23-Aug	10%	3%	7%			4%					
24-Aug	6%	0.3%	6%			4%					
25-Aug	3%	3%	5%			4%					
26-Aug		3%	3%			4%					
27-Aug		1%	2%			4%	2%	1%			
28-Aug		0.8%	1.7%			1.3%					0.4%
29-Aug		0.3%	0.7%			1.4%			0.3%		0.2%
30-Aug		0.2%	1.5%	0.8%	1.8%	0.3%			0.0%		0.3%
31-Aug		0.5%	0.4%	0.8%	1.0%	0.5%	0.7%	0.6%	1.3%		0.7%
1-Sep		0.7%	1.5%	0.9%	1.1%	0.7%			0.0%		0.0%
2-Sep		0.6%	1.7%		0.7%						
3-Sep		0.2%	2.3%		1.6%						

**Migration Graphs**







## Escapement Tables and Abundance Projections

### Escapement Projections

2009 Fraser River Sockeye Escapement Projections...										
Mission Date	Escapement Total	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
Mission Total:	1,138,800	105,800	18,000	45,500	162,500	252,200	196,400	59,600	169,300	46,800
(Potential Gross Escapement-to-date, Incl F.N. Catch below Mission)										
Mission Date	Projected Escapement	Early Timed Group	Scotch/ Seymour	North Thompson	Late Stuart /Stellako	Chilko	Quesnel	Birkenhead	Harrison	Weaver/L.
4-Sep	3,900	-	-	700	100	600	800	400	100	1,200
5-Sep	3,800	-	-	300	100	700	900	300	-	1,500
6-Sep	7,900	-	-	100	300	1,600	1,800	400	300	3,400
7-Sep	2,500	-	-	100	100	500	500	100	100	1,100
8-Sep	3,500	-	-	100	100	700	800	200	100	1,500
9-Sep	1,200	-	-	-	100	300	300	-	-	500
Projected Gross Escapement <sup>1,2,3</sup>										
4-Sep										
9-Sep	22,800	0	0	1,300	800	4,400	5,100	1,400	600	9,200
Projected Total										
	1,161,600	105,800	18,000	46,800	163,300	256,600	201,500	61,000	169,900	56,000
Early Summers 170,600					Summer Runs 621,400			Birkenhead 61,000	True Lates 225,900	
<sup>1</sup> Enroute Catch is incomplete: catches from present and future fisheries must be deducted.										
<sup>2</sup> Note that possible delay has been indicated in the assessments of Weaver/L. to Mission. These fish may not escape over the next 6 days.										
<sup>3</sup> Due to recent high marine pink catches, Sockeye CPUE data and subsequent sockeye escapement projections are highly uncertain.										
Analysis fixed at this time:					9/4/2009 8:59					

## Escapement Summary

### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

2009 COTTONWOOD T.F.			AB T.F.			MISSION		BEST Est.	CUMM.	Hells Gate	
BB	CATCH	CPUE	AB DATE	CATCH	CPUE	Splitbeam	(incl. Pitt)			DAILY	EST.
DATE	1277	155.82	(BB+1)	1998	159.66	1,270,126	1,303,200		TOTAL	(AB+4)	129,130
30-Aug	11	1.49	31-Aug vmn	21	1.64	13,940	14,000		1,094,700	04-Sep	360
31-Aug	14	1.76	01-Sep vmn	28	2.22	18,870	19,000		1,113,700	05-Sep	1,670
01-Sep	13	1.55	02-Sep vmn	10	0.81	6,843	6,900		1,120,600	06-Sep	1,690
02-Sep	7	0.93	03-Sep vmn	16	1.28	10,880	10,900		1,131,500	07-Sep	1,910
03-Sep	8	0.74	04-Sep vmn	3	0.27	2,253	2,300		1,133,800	08-Sep	1,100
04-Sep	19	2.44	05-Sep vmn	20	1.50	12,750	12,800		1,146,600	09-Sep	600
05-Sep	15	1.92	06-Sep vmn	20	1.50	12,750	12,800		1,159,400	10-Sep	840

## Pinks

### 2009 Fraser River Pink Salmon Escapement Summary

Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official.

Estimates are preliminary and subject to revision post-season.

COTTONWOOD T.F.			VMN W.C.DRIFT			DB	MISSION		CUMM.	HG	
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.		DAILY	EST.
DATE	1,034	109	(BB+2)	2,676	204.01	Tagging C/set	4,428,568	4,956,379	TOTAL	(BB+7)	1,112,500
30-Aug	27	3.66	01-Sep	33	2.62		79,544	79,544	663,131	06-Sep	65700
31-Aug	33	4.16	02-Sep	70	5.32		109,250	109,250	772,381	07-Sep	88200
01-Sep	53	4.21	03-Sep	195	15.41		75,303	75,303	847,684	08-Sep	75400
02-Sep	37	4.90	04-Sep	251	19.19		85,784	85,784	933,468	09-Sep	70700
03-Sep	62	5.43	05-Sep	460	34.50		208,159	208,159	1,141,627	10-Sep	84300
04-Sep	30	3.89	06-Sep	206	15.45		297,659	297,659	1,439,286	11-Sep	57800
05-Sep	54	6.93	07-Sep	138	10.35		367,809	367,809	1,807,095	12-Sep	58900

## Mission Escapement by Stock

Totals	1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,469	72,995	0	224,466	
Mission Escapement																					
Mission Escapement																					
Mission				Total		ESum				Summ						Birk		Late			
Date	Escape	Pitt Escp	Escape	ESum	Chilwk	EMsc	Se/Sr/UA	Pitt	NTrom	Chilko	SEChilko	Hfly/Mtkin	Mtch/Trib	LSu	Stel	Birk	AdLS/Port	Wear/Cut	Misc	Sub's	
30-Aug-09	18,148	220	18,368	0	1	140	143	220	1,844	2,854	0	1,584	4,006	495	707	2,529	992	1,974	0	878	
31-Aug-09	13,940	73	14,013	1	0	11	0	73	1,792	1,623	0	598	3,802	581	61	3,169	687	471	0	1,144	
01-Sep-09	18,870	99	18,969	1	0	14	0	99	2,425	2,197	0	810	5,147	787	82	4,290	930	638	0	1,549	
02-Sep-09	6,843	36	6,879	0	0	5	0	36	880	797	0	294	1,867	285	30	1,556	337	231	0	562	
03-Sep-09	10,880	56	10,936	3	0	73	5	56	1,233	819	0	147	1,299	19	46	1,497	837	2,799	0	2,104	
04-Sep-09	2,253	12	2,265	1	0	15	1	12	255	170	0	30	269	4	9	310	173	580	0	436	
05-Sep-09	12,750	43	12,793	3	0	85	5	43	1,444	959	0	172	1,522	22	54	1,755	981	3,280	0	2,466	

## Environmental Conditions

### Fraser Conditions & MA Report for September 4, 2009

#### Fraser River Discharge at Hope

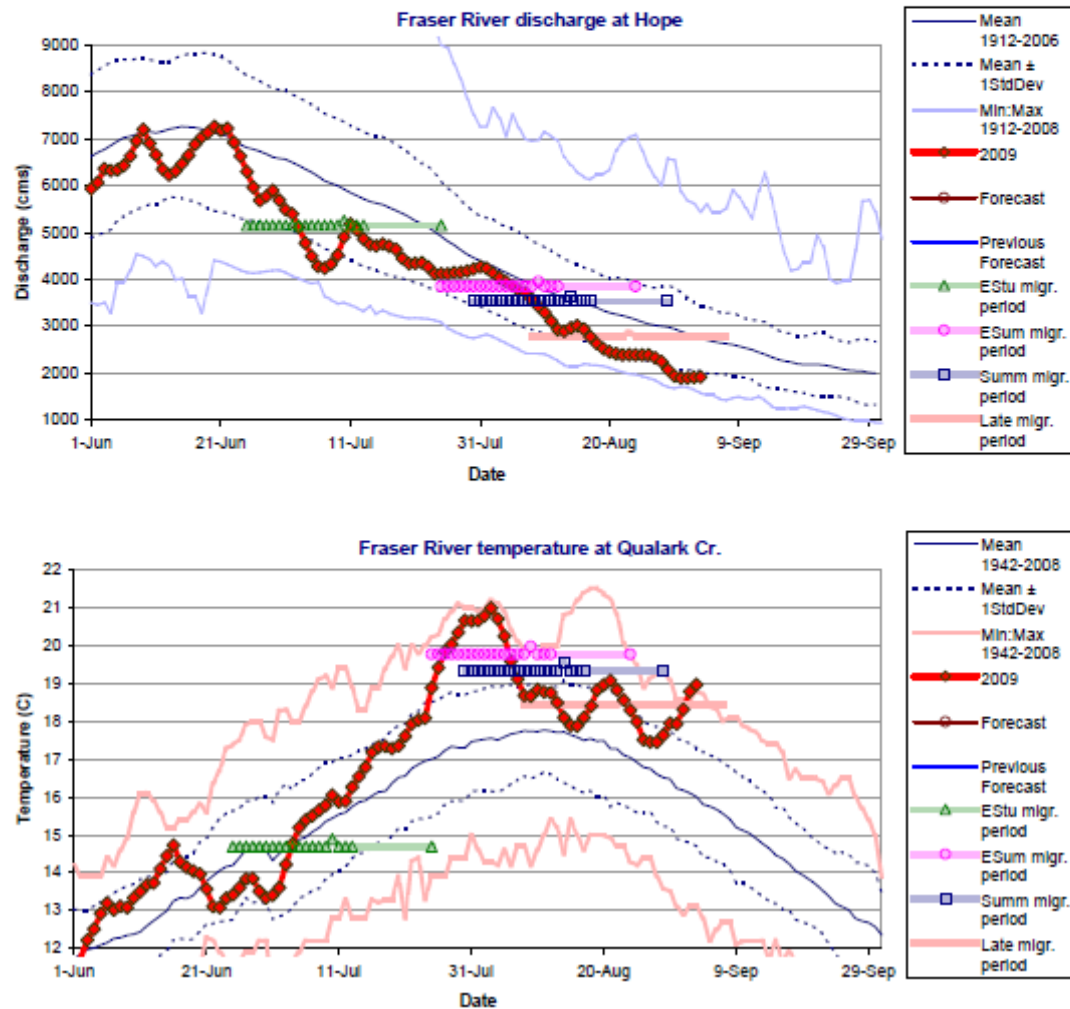
Fraser River discharge is tracking 30% below historic average levels for the date and slightly higher than historic minimum levels. Yesterday's discharge was 1920 m<sup>3</sup>/s.

	date	m <sup>3</sup> /s
Last obs.	3-Sep	1,920
Forecast	na	na

#### Fraser River Temperature at Qualark

River temperatures set new record highs for the last two days. The river was 19.0C yesterday, which is 0.2C above the previous record and 3.0C above the average for the date. These late-season high temperatures are due to the combined effect of very low discharge and warmer than usual air temperatures in the BC interior. Cooler, wet weather expected to arrive tomorrow should moderate these temperatures.

	date	C
Last obs.	3-Sep	19.0
Forecast	na	na



## Fishery Recommendations

### Fraser River Panel Meetings: Summaries and Discussions

# Detailed Fishing Openings

## Open Times for the Mid & Upper Fraser River First Nations Fisheries

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	St'at'i'mx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 6 week 36	<b>Chinook/ limited Sockeye</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Fishwheel (Fraser only) Gill net
September 6 week 36	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 6 week 36	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 30 18:00	Sunday September 6 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 6 week 36	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

TBD = To Be Determined

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band  
 NSTC = Northern Shuswap Tribal Council

TNG = Tsilquot'In Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band  
 TLA = Tl'azt'en Nation



## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Aug 30	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 30	19:00 Sunday Aug 30	Chinook, Pink	set net, drift net
Aug 30	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 28	19:00 Sunday Aug 30	Chinook	fish wheel
Aug 30	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Sunday Aug 30	19:00 Sunday Aug 30	Chinook, Pink	set net, drift net
Sep 06	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	set net, drift net
Sep 06	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	set net, drift net
Sep 06	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	drift net
Sep 06	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Sep 02	12:00 Sunday Sep 06	Chinook, Chum	drift net
Sep 06	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Sep 02	12:00 Sunday Sep 06	Chinook, Chum	set net
Sep 06	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Sep 04	12:00 Sunday Sep 06	Chinook, Pink	drift net
Sep 06	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Sep 04	18:00 Sunday Sep 06	Chinook	fish wheel

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Sep 06	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	09:00 Tuesday Sep 01	09:00 Wednesday Sep 02	Chinook	drift net
Sep 06	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Thursday Sep 03	19:00 Thursday Sep 03	Chinook	drift net
Sep 06	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Friday Sep 04	19:00 Friday Sep 04	Chinook	drift net

## Economic Opportunity Opening Times

none

## Preliminary In-season Catch Numbers

### Commercial

No commercial catch to report



## Recreational

See appendices

## First Nations

### Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009												21 Sep 2009 15:43	
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Aug-02	58	4	1	350		12	144	0	668	833	2007	2070	13254
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14403
Aug-16	133	61	43	461		457	125		76		1119	1356	15759
Aug-23	144		16	388		536	164	0	101	0	1189	1349	17108
Aug-30	2749	766	13	162		19	54	0	311	3	549	4077	21185
Sep-06	32	0		113		61	24		125		323	355	21540

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621
16-Aug	53	4719	33	147	110	5062	8683
23-Aug	2	1372	0	270	314	1958	10641
30-Aug	0	0	0	96	combined with below	96	10737
06-Sep	0	0	0	58	884	942	11679
Total	2497	7128	35	711	1308	11679	11679

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572
16-Aug	0	244	2384	0	36	2664	4236
23-Aug	0	164	5684	363	408	6619	10855
30-Aug	0	335	4368	561	1564	6828	17683
06-Sep	0	226	2080	890	586	3782	21465
Total	0	988	14648	2079	3750	21465	21465

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	N/M	N/M	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	32	4	0	0	0	36	36
30-Aug	0	72	0	0	combined with below	72	108
06-Sep	0	0	0	0	0	0	108
Total	32	76	0	0	0	108	108

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	0	0	N/M	N/M	0	0
19-Jul	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
06-Sep	0	14	0	0	0	14	14
Total	0	14	0	0	0	14	14

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6
16-Aug	1.0	0.0	0.0	5.0	9.0	0.0	0.0	0.0	2.1
23-Aug	0.0	0.0	0.0	12.5	5.0	0.0	1.0	0.0	2.7
30-Aug	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	3.0
06-Sep	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.0

N/M = No Monitoring Conducted

## Marine

N/A

# Fraser River Sockeye and Pink

## Weekly Management Plan Sept 6 – Sept 12/09

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### For Period of:

Sun. September 6<sup>th</sup> – Sat. September 12<sup>th</sup>, 2009

Week: 37

### Stock Aggregate Focus:

Birkenhead and True Lates, Pink

### Management objectives for the current week:

- Assess run size and timing for Pink
- Monitor in-river migration conditions

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## Fraser Sockeye Management Summary

### FN0708-COMMERCIAL - Salmon: Seine and Troll - Areas B and H - Areas 12, 13, 18 - Fraser River Pink – Update

The Fraser Panel met this morning and reconfirmed the Fraser River pink salmon run size at 17,535,000 fish. This means that the Area B and Area H transferable quota share remains the same at 0.4142% and 0.1461% respectively. This quota share translates into each Area B vessel having an individual quota of 32,722 pink salmon and each Area H vessel having an individual quota of 11,542 pink salmon.

The estimated catch to date since the August 30th opening for Area B is 1.1 million pinks and Area H is 21,000 pinks.

DFO will continue to monitor the pink fishery including by-catch levels of coho and chum as well as other species. If pink catch rates continue to decline and by-catch levels continue to increase as anticipated, this fishery could close later this week.

The next update to the Area B and H fleet will occur on Thursday PM September 10 to confirm the status of this fishery.

FOR MORE INFORMATION:

Kent Spencer, Resource Manager (250)286-5885

## Fishery Status Summary

	Sun Sept 6	Mon Sept 7	Tues Sept 8	Wed Sept 9	Thurs Sept 10	Fri Sept 11	Sat Sept 12
First Nations – FSC Mid and Upper Fraser	Chinook with mortally wounded sockeye or limited sockeye directed in terminal areas (dip net)						
First Nations – FSC Lower Fraser	Chinook and pink directed						
First Nations – FSC Marine	Non-retention of sockeye						
Recreational - Upper Fraser River	No fishing for sockeye						
Recreational - Lower Fraser River	No fishing for sockeye						
Recreational Marine Areas	Closed						
Commercial Area D	Closed						
Commercial Area E	Closed						
Commercial Area B	Open for pink directed						
Commercial Area H	Open for pink directed						
U.S. Treaty Indian	Closed						
U.S. Non-treaty Indian	Closed						

## Fishery Notices Summary

### RECREATIONAL – Salmon

COMMERCIAL – Salmon

FN0708-COMMERCIAL - Salmon: Seine and Troll - Areas B and H - Areas 12, 13, 18 - Fraser River Pink – Update

FN0713-Salmon: Troll - Area H - Fraser River Pink - Areas 12, 13 and 18 Fraser River Pink Closure

FN0714-Commercial Salmon: Seine - Area B Areas 12, 13, - Fraser River Pink – Closure

FN0715-Salmon Seine & Gill Net - Area A & C - Area 7 Chum and Pink Fishery

FN0719-COMMERCIAL Salmon: Troll - Area H - Fraser River Pink - Areas 18 and 29 Fraser River Pink Opening

FN0720-COMMERCIAL Salmon: Seine - Area B - Area 29 - Fraser River Pink - Opening

ABORIGINAL – Salmon

# Management Information

## 2009 Fraser River Sockeye In-season Status

Status

### 2009 Fraser River Sockeye In-season Status

Week of: Sep. 6 - Sep. 12, 2009

Date: Sep. 11, 2009

	Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	
Run Size							
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000
In-season Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	20,000,000
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational							
"Outside" Catch	2,110	7,620	24,250	3,040	11,020	48,040	2,872,300
Gross Escapement							
FRA Catch Below Mission (incl. FSC & EO)	253	846	2,960	809	2,689	7,557	n/a
Escapement-to-date @ Mission	82,460	184,160	612,710	62,050	343,040	1,284,420	n/a
Potential Gross Escapement	82,713	185,006	615,670	62,859	345,729	1,291,977	n/a
Adjusted Gross Esc. Target *	85,000	175,000	650,000	55,770	374,760	1,340,530	6,052,000
Accounted-to-date							
Catch + Escapement to Mission	84,823	192,626	639,920	65,899	356,749	1,340,017	n/a
Potential Remaining To Come							
Potential En-route	177	0	10,080	0	43,251	53,508	n/a
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Commercial (incl. selective)	0	0	0	0	0	0	707,820
U.S. Commercial	0	0	0	0	0	0	2,138,090
Marine Area Aboriginal	111	1,359	5,100	850	2,603	10,023	8,020
Test Fishing	1,940	5,490	15,660	1,550	7,230	31,870	11,680
Canadian Charter (Albion & Qualark TF)	56	250	1,253	60	246	1,865	430
Canadian Marine Recreational	0	0	0	0	0	0	2,560
U.S. TI Ceremonial	0	525	2,239	582	941	4,287	500
U.S. Recreational	0	0	0	0	0	0	3,200
Total	2,110	7,620	24,250	3,040	11,020	48,040	2,872,300
Fraser R. Aboriginal and Above-Mission Recreational Catch							
Canadian Fraser R. Recreational	0	0	0	0	0	0	0
Fraser R. Aboriginal Catch Reported-to-date							
Catch Below Mission (incl. FSC & EO)	253	846	2,960	809	2,689	7,557	420
Catch Above Mission (incl. FSC & EO)	6,233	9,388	29,769	27	1,706	47,123	410
Total	6,486	10,234	32,729	836	4,395	54,680	830
Total In-river Catch	6,486	10,234	32,729	836	4,395	54,680	830
Total Catch in All Areas							
Total	8,596	17,854	56,979	3,876	15,415	102,720	2,873,130
Timing and Diversion Assumptions							
Area 20 Timing	29-Jun	30-Jul	4-Aug	12-Aug	10-Aug		29-Aug
Mission Timing	5-Jul	5-Aug	10-Aug		18-Aug		
JS Diversion Rate - current							17%
JS Diversion Rate - to date							34%

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.



# 2009 Fraser River Sockeye TAC Calculations and Catch

TAC

## 2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement

Week of: Sep. 6 - Sep. 12, 2009

Date: Sep. 11, 2009

	Fraser Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total	Total
<b>RUN STATUS, ESCAPEMENT NEEDS &amp; AVAILABLE SURPLUS</b>							
In-season Run Size Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	20,000,000
Adult Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000	6,000,000
%SET from TAM rules	100%	100%	80%	80%	80%		31%
Management Adjustment (MA)	32,300	105,000	145,600	0	n/a	282,900	0
Proportional MA (pMA)	0.38	0.60	0.28	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	85,000	175,000	650,000	48,000	320,000	1,278,000	6,000,000
Test Fishing (TF)	1,740	5,000	18,000	1,500	6,000	32,240	10,000
Surplus above Adjusted SET & Test fishing	0	0	0	10,500	74,000	84,500	13,990,000
<b>DEDUCTIONS &amp; TAC FOR INTERNATIONAL SHARING</b>							
Aboriginal Fishery Exemption (AFE)	7,000	12,000	35,000	10,500	74,000	138,500	0
Available Aboriginal Fishery Exemption	0	0	0	10,500	74,000	84,500	0
Total Deductions (Adj. SET + TF + Available AFE)	86,740	180,000	668,000	60,000	400,000	1,394,740	6,010,000
Available TAC for International Sharing	0	0	0	0	0	0	13,990,000
<b>UNITED STATES (Washington) TAC</b>							
U.S. Share **	16.5%	0	0	0	0	0	25.7% 3,595,430
U.S. Payback **	0.0%	0	0	0	0	0	0
Total	0	0	0	0	0	0	3,595,430
Treaty Indian Share **	67.7%	0	0	0	0	0	50.0% 1,797,715
Non-Indian Share	32.3%	0	0	0	0	0	50.0% 1,797,715
<b>CANADA TAC</b>							
Canadian Allocation	83.5%	0	0	0	0	0	74.3% 10,394,570
Available Aboriginal Fishery Exemption (AFE)	0	0	0	10,500	74,000	84,500	0
Total Canadian Share	0	0	0	10,500	74,000	84,500	10,394,570
Marine Area Aboriginal FSC	0	0	0	2,730	19,240	21,970	25,000
Fraser River Aboriginal FSC	0	0	0	7,770	54,760	62,530	52,000
First Nations Allocations (including AFE)	0	0	0	10,500	74,000	84,500	77,000
Planned Recreational Shares	0	0	0	0	0	0	150,000
Purse Seine B	47.5%	0	0	0	0	0	70.0% 6,748,400
Gillnet D	21.5%	0	0	0	0	0	4.0% 385,620
Gillnet E	25.0%	0	0	0	0	0	6.5% 626,640
Troll G	0.0%	0	0	0	0	0	6.5% 626,640
Troll H	6.0%	0	0	0	0	0	13.0% 1,253,270
Commercial Allocations (inclds BCI FN Demo)	100.0%	0	0	0	0	0	100.0% 9,640,570
Fraser River Aboriginal Economic Opportunity)	0	0	0	0	0	0	527,000
Total Commercial	0	0	0	0	0	0	10,167,570
<b>CATCH-TO-DATE</b>							
Test	1,940	5,490	15,660	1,550	7,230	31,870	11,680
Treaty Indian (Wash.)	0	520	2,240	580	940	4,290	620,370
Non-Indian (Wash.)	0	0	0	0	0	0	1,521,410
Washington	0	520	2,240	580	940	4,290	2,141,780
Marine Area Aboriginal	110	1,360	5,100	850	2,600	10,020	8,020
Fraser River Aboriginal	6,490	10,230	32,730	840	4,400	54,680	830
Recreational	0	0	0	0	0	0	2,560
Commercial	60	250	1,250	60	250	1,870	708,250
Canada	6,660	11,840	39,080	1,750	7,250	66,570	719,660
Total Catch in All Fisheries	8,600	17,850	56,980	3,880	15,420	102,730	2,873,120
Exploitation Rate (catch-to-date / run size)	10%	10%	9%	6%	4%	7%	14%
<b>CATCH REMAINING (BALANCE)</b>							
Washington	0	-520	-2,240	-580	-940	-4,280	1,453,650
Canada	-6,660	-11,840	-39,080	8,750	66,750	17,920	9,674,910
Balance Remaining [ below share / -above share]	-6,660	-12,360	-41,320	8,170	65,810	13,640	11,128,560
<b>ESCAPEMENT RELATIVE TO TARGETS</b>							
Potential Spawning Escapement (PSE) ***	76,400	157,150	593,020	56,120	384,580	1,267,270	17,126,880
Predicted Difference Between Estimates (%DBE)	-28%	-38%	-22%	0%	****		0%
PSE with predicted DBE removed	55,360	98,220	463,300	56,120	****		17,126,880
Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000	6,000,000
Potential deviation from SET [ <target / >target ]	-29,640	-76,780	-56,700	8,120	****		11,126,880

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.

## 2009 Fraser River Panel Sockeye Review Catch Summary

Sockeye\_Review

### 2009 Fraser River Panel Sockeye Review

Week of: Sep. 6 - Sep. 12, 2009

Date: Sep. 11, 2009

Week 01: Sep. 0 - Sep. 12, 2000

Date: Sep. 17, 2000

Fraser Sockeye

Area	Gear	Cumul.				
Commercial Catch						
Canada						
A & C Areas 1-10	Net	0				
F Areas 1-10	Troll	0				
G Areas 123-127,11-12	Troll	0				
B Areas 11-16	PS	0				
D Areas 11-13	GN	0				
H Areas 12-16	Troll	0				
H Areas 18-29	Troll	0				
B Area 20	PS	0				
E Area 29	GN	0				
FRA Econ. Opp. + BCI FN Demo		0				
Canadian Total		0				
United States						
Alaska	Net&Troll	0				
Washington						
T.I. Areas 4B/5/6C	Net	0				
T.I. Areas 6/7/7A	Net	0				
N.I. Areas 7/7A	Net	0				
Washington Total		0				
U.S. Total		0				
Non-commercial Catch						
PSC Panel Area Test		20,300				
PSC non-Panel Area Test		11,570				
Fraser River Aboriginal (FSC)		54,680				
Areas 12-124 Aboriginal		10,020				
Recreational		0				
Charter (Albion & Qualark Tf		1,865				
U.S. TI Ceremonial		4,300				
Non-comm. Total		102,740				
Catch and Escapement						
Catch Accounted-to-date		102,740				
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)		1,236,450				
Total Accounted-to-date		1,339,190				
Gross Escapement (includes Pitt R. sockeye)						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,500	300	82,800	97%
ESum	Early Summer	175,000	184,200	800	185,000	106%
Summ	Quesnel/Chilko	650,000	450,900	2,200	615,600	95%
	L.Stu./Stel.		161,800	700		
Late	Birkenhead	55,770	62,000	800	62,800	113%
	Adams/L.Shuswap	374,760	50,000	700	345,800	92%
	Weav/L.Misc.		69,400	1,000		
	Sub 1s		223,600	1,100		

**2009 Fraser River Panel Pink Salmon Review**

Week of: Sep. 6 - Sep. 12, 2009

Date: Sep. 11, 2009

Area	Gear	Fraser Pinks	
			Cumul.
Commercial Catch			
Canada			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127,11-12	Troll		0
B Areas 11-16	PS		697,020
D+E Areas 11-16	GN		0
H Areas 12-16	Troll		10,800
H Areas 18-29	Troll		0
B Area 20	PS		0
E Area 29	GN		0
FRA Econ. Opp. + BCI FN Demo			0
Canadian Total			707,820
United States			
Alaska		Net	0
Washington			
T.I. Areas 4B/5/6C	Net		0
T.I. Areas 6/7/7A	Net		619,880
N.I. Areas 7/7A	Net		1,518,210
Washington Total			2,138,090
U.S. Total			2,138,090
Non-commercial Catch			
PSC Panel Area Test			9,960
PSC non-Panel Area Test			1,720
Fraser River Aboriginal			830
Areas 12-124 Aboriginal			8,020
Canadian Recreational			2,560
Charter (Albion & Qualark Tf			430
U.S. Ceremonial			500
U.S. Recreational			3,200
Non-comm. Total			27,210
Catch and Escapement			
Catch Accounted-to-date			2,873,120
Potential Net Escapement (run size minus catch-to-date)			17,126,880
Total			20,000,000

## Test Fishing Data

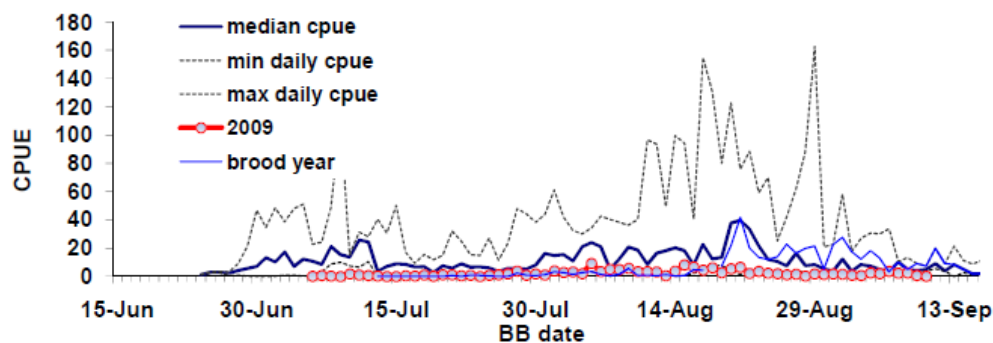
### Pacific Salmon Commission Test Fishing Summary

2009 Pacific Salmon Commission Sockeye Test Fishing Summary

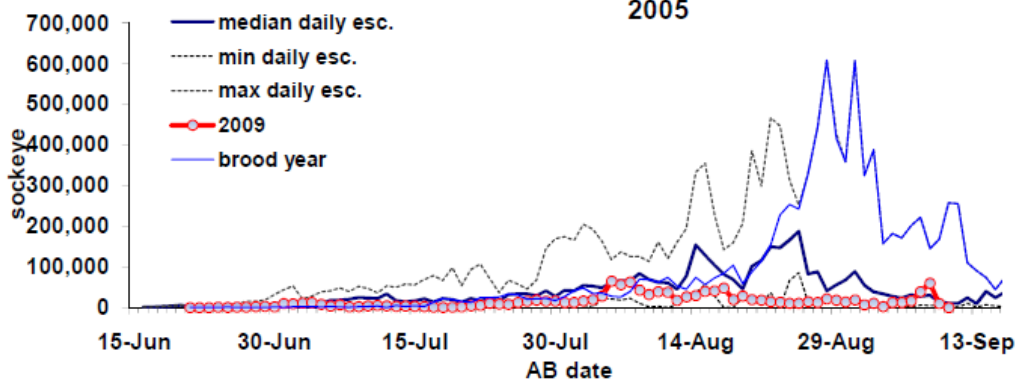
	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep
Area 20 Purse Seine	29	6	5 4sets	4	2 4sets	6	3	0	0
Area 12 Purse Seine	21	78	32 3sets	83	41	174	106	19	21
Area 13 Purse Seine	18	23							
Area 7 Reef Net Obs.									
29B Cottonwood Gillnet*	7	8	19	15	31	23	25	8	2
29D Whonnock Gillnet*	10	16	3	20	20	26	61	95	14
29A Gulf Troll	43					0	0	0	
Mission Gillnet	12	17	12			17			
Mission Escapement**	6843	10880	2253	12750	12750	16575	38888	59925	9860
Hells Gate Daily Estimate	340	150	360	1670	1690	1910	1100	600	840

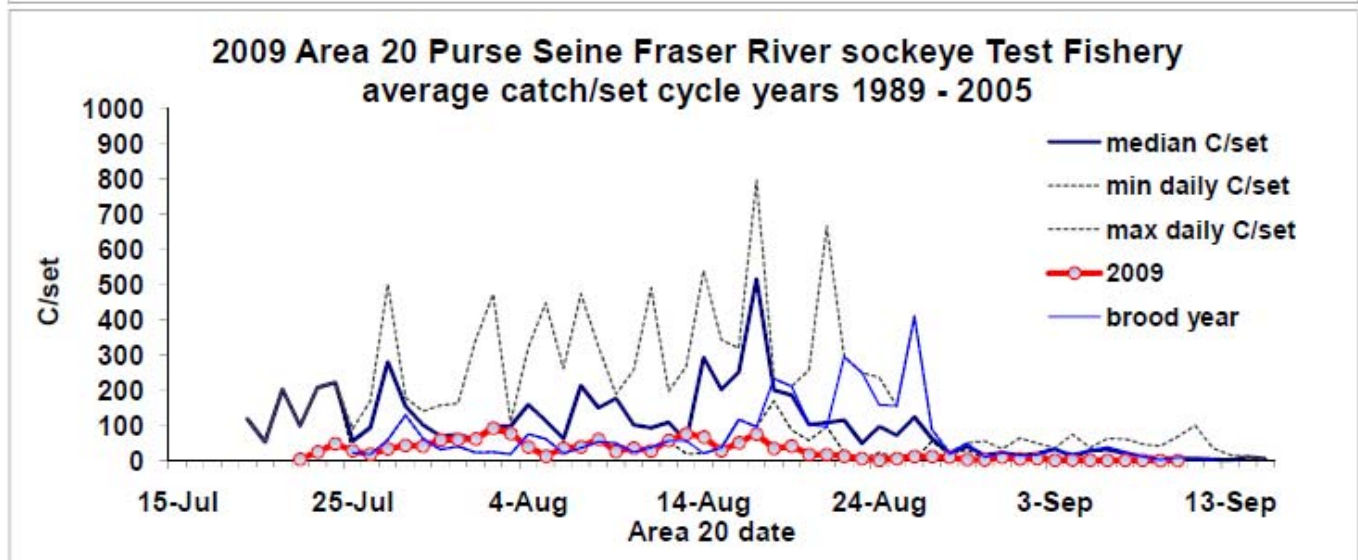
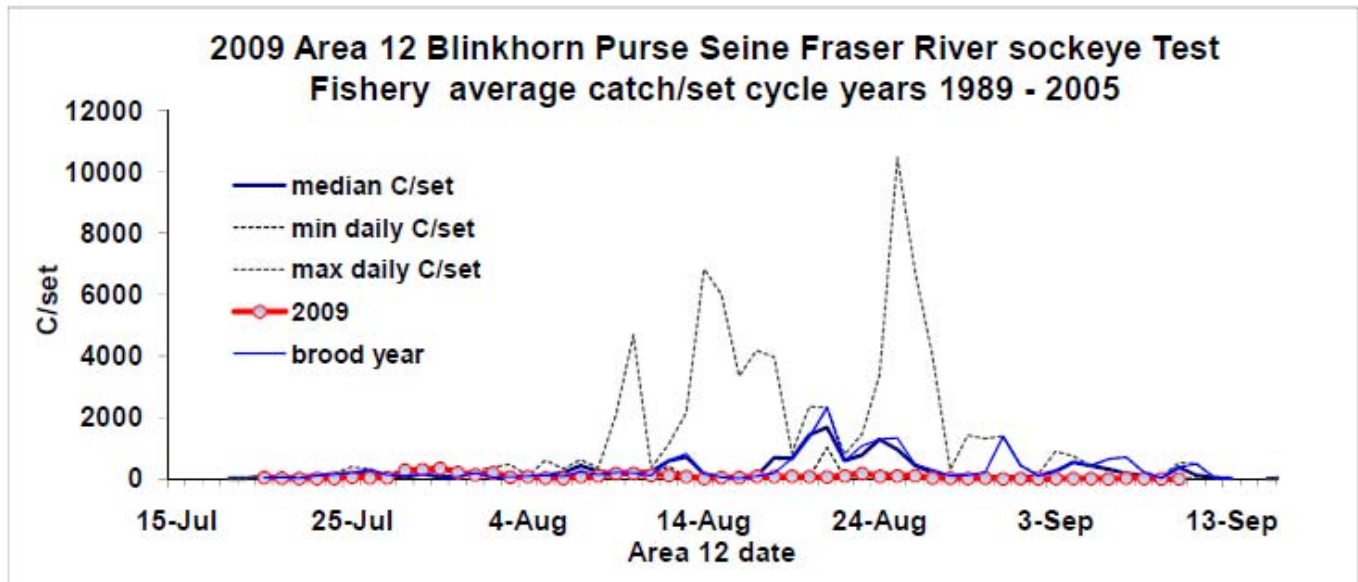
\* Variable mesh gillnet. \*\* preliminary - subject to revision.

2009 Area 29 Cottonwood variable mesh Gillnet Test Fishery  
Fraser River sockeye CPUE cycle years 1973 -2005



2009 Mission Hydroacoustics estimate of  
Fraser River sockeye upstream escapement cycle years 1977 -  
2005



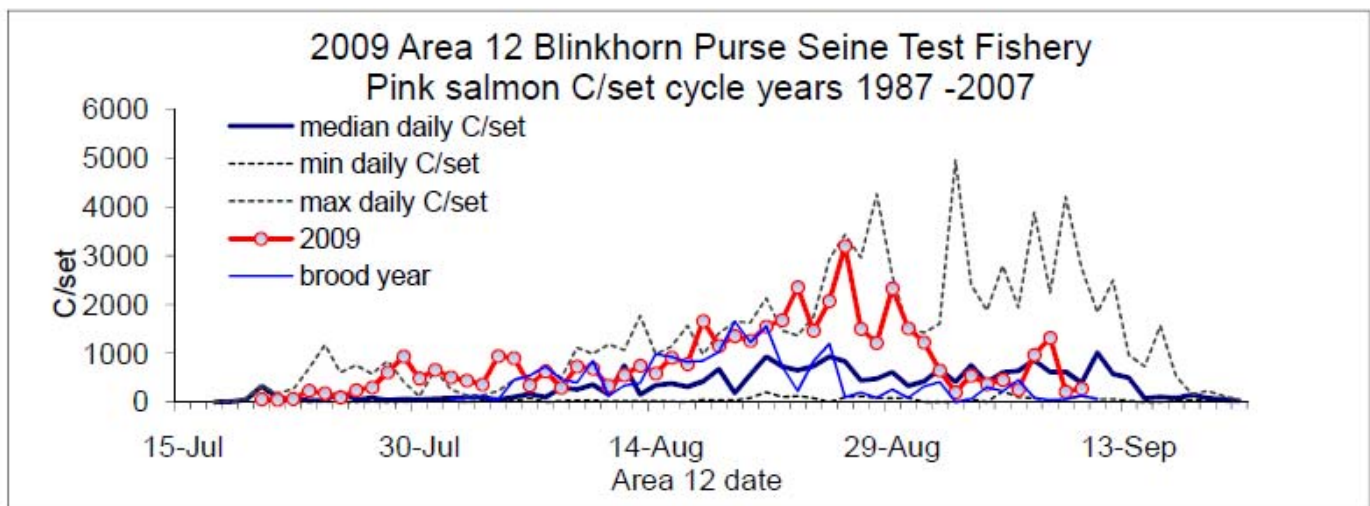
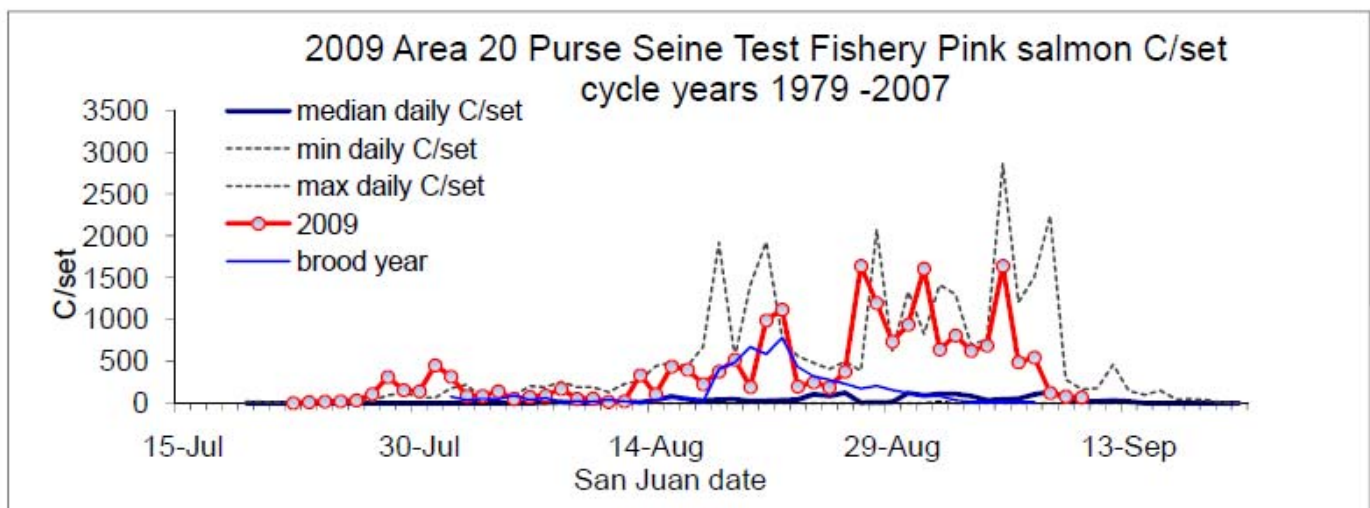


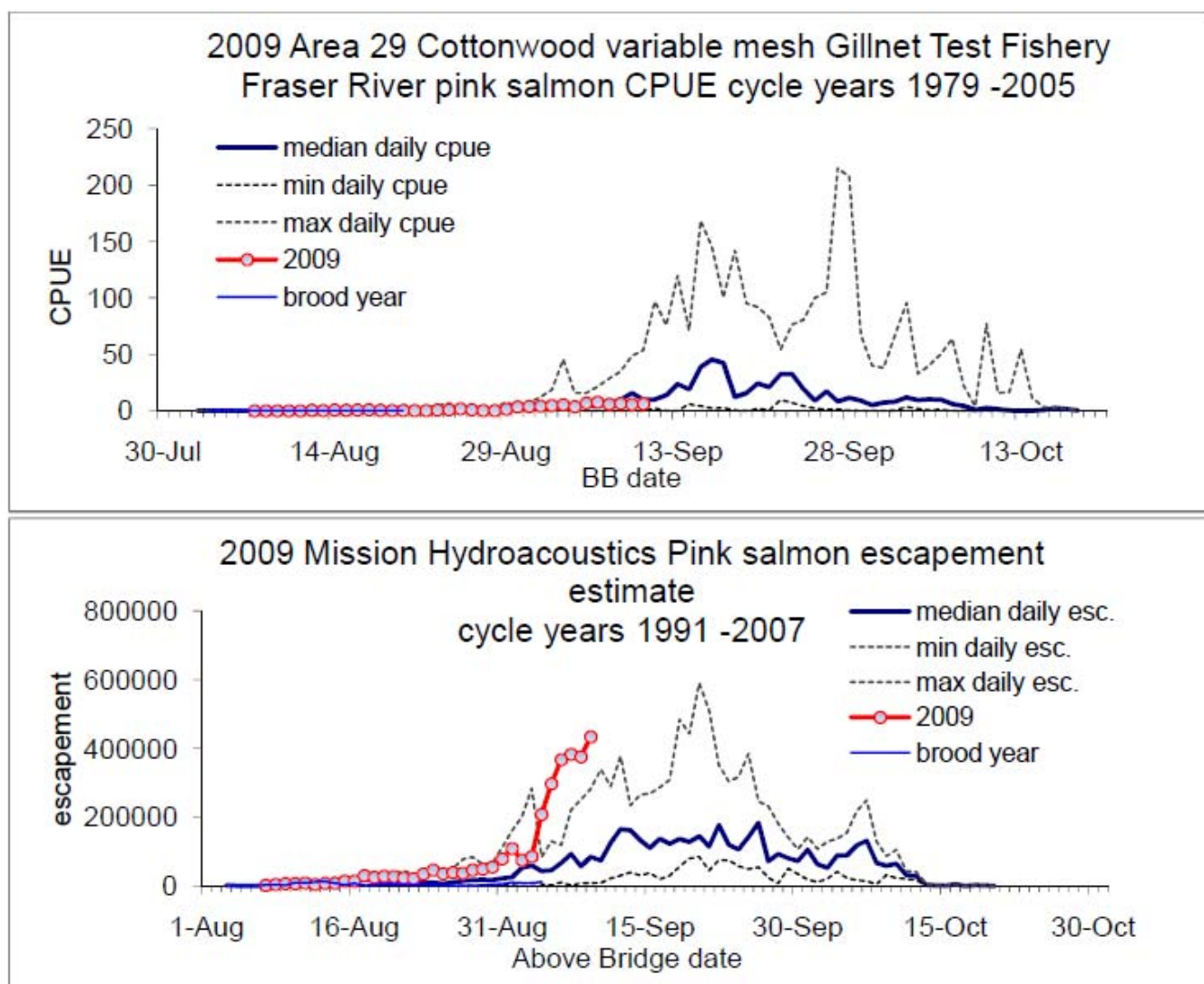


**Pacific Salmon Commission Pink Test Fishing Summary**

	Sep-04	Sep-05	Sep-06	Sep-07	Sep-08	Sep-09	Sep-10
Area 20 seine	2751 4sets	9830	1960 4sets	3278	743	490	413
Area 12 seine	1110 3sets	2720	1550	5812	3950	1291	1640
Area 13 seine							
Area 7 Reef net							
Area 29B Cottonwood *	30	54	90	81	81	67	84
Area 29D Whonnock *	251	460	206	138	258	92	39
29A Gulf Troll				5	15	15	
Mission Gillnet	68			175			
Mission Escapement **	85784	208159	297659	367809	383316	376211	433916
Hells Gate Daily Estimate	27500	52200	65700	88200	75400	70700	84300

\* Variable mesh gillnet. \*\* preliminary - subject to revision.





## Detailed Test Fishing Data

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught
Area 12 - Blinkhorn Sockeye Seine	06/09/2009	1	6	6	41	0	1550
	07/09/2009	1	6	6	174	38	5812
	08/09/2009	1	3	3	106	11	3950
	09/09/2009	1	6	6	19	5	1291
	10/09/2009	1	6	6	21	2	1640
	11/09/2009	1	6	6	41	13	3420
	12/09/2009	1	6	6	36	4	3396
	13/09/2009	1	6	6	0	0	54
	14/09/2009	0	0	0			
	06/09/2009	0	0	0			
	07/09/2009	0	0	0			
	08/09/2009	0	0	0			
	09/09/2009	0	0	0			
Area 12 - Naka Creek Sockeye Gillnet	06/09/2009	0	0	0			
	07/09/2009	0	0	0			
	08/09/2009	0	0	0			
	09/09/2009	0	0	0			

	10/09/2009	0	0	0			
	11/09/2009	0	0	0			
	12/09/2009	0	0	0			
Area 12 - Round Island Sockeye Gillnet	06/09/2009	0	0	0			
	07/09/2009	0	0	0			
	08/09/2009	0	0	0			
	09/09/2009	0	0	0			
	10/09/2009	0	0	0			
	11/09/2009	0	0	0			
	12/09/2009	0	0	0			
Area 13 - Area 13 Sockeye Seine	06/09/2009	0	0	0			
	07/09/2009	0	0	0			
	08/09/2009	0	0	0			
	09/09/2009	0	0	0			
	10/09/2009	0	0	0			
	11/09/2009	0	0	0			
	12/09/2009	0	0	0			
Area 20 - San Juan Sockeye Gillnet	06/09/2009	0	0	0			
	07/09/2009	0	0	0			
	08/09/2009	0	0	0			
	09/09/2009	0	0	0			
	10/09/2009	0	0	0			
	11/09/2009	0	0	0			
	12/09/2009	0	0	0			
Area 20 - San Juan Sockeye Seine	06/09/2009	1	4	4	2	0	1960
	07/09/2009	1	6	6	6	0	3278
	08/09/2009	1	6	6	3	0	743
	09/09/2009	1	6	6	0	0	490
	10/09/2009	1	6	6	0	0	413
	11/09/2009	1	6	6	0	0	184
	12/09/2009	0	0	0			
Area 29 - Cottonwood Sockeye Gillnet	06/09/2009	1	2	8.7	41	2	90
	07/09/2009	1	2	8.34	23	0	81
	08/09/2009	1	2	8.22	25	2	81
	09/09/2009	1	2	7.68	8	0	67
	10/09/2009	1	2	8.04	2	0	84
	11/09/2009	1	2	7.68	4	0	51
	12/09/2009	1	2	7.8	0	0	69
Area 29 - Gulf Sockeye Troll	06/09/2009	0	0	0			
	07/09/2009	1	1	409	0	0	5
	08/09/2009	1	1	419	0	0	15
	09/09/2009	1	3	436	0	0	15
	10/09/2009	0	0	0			
	11/09/2009	0	0	0			
	12/09/2009	0	0	0			
Area 29 - Whonnock Sockeye Gillnet	06/09/2009	1	2	14.35	20	0	206
	07/09/2009	1	2	13.3875	26	0	138
	08/09/2009	1	2	16.7125	61	0	258
	09/09/2009	1	2	15.4875	95	0	92
	10/09/2009	1	2	12.075	14	0	39
	11/09/2009	1	2	11.2875	4	0	21
	12/09/2009	1	2	12.075	4	0	35
U.S. Area 5 - U.S. Juan de Fuca Sockeye	06/09/2009	0	0	0			



## Gillnet

	07/09/2009	0	0	0
	08/09/2009	0	0	0
	09/09/2009	0	0	0
	10/09/2009	0	0	0
	11/09/2009	0	0	0
	12/09/2009	0	0	0
U.S. Area 7 - Area 7 U.S. Reef Net Payfish	06/09/2009	0	0	0
	07/09/2009	0	0	0
	08/09/2009	0	0	0
	09/09/2009	0	0	0
	10/09/2009	0	0	0
	11/09/2009	0	0	0
	12/09/2009	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Reef Net	06/09/2009	0	0	0
	07/09/2009	0	0	0
	08/09/2009	0	0	0
	09/09/2009	0	0	0
	10/09/2009	0	0	0
	11/09/2009	0	0	0
	12/09/2009	0	0	0

***DNA Analysis*****Racial Analysis**

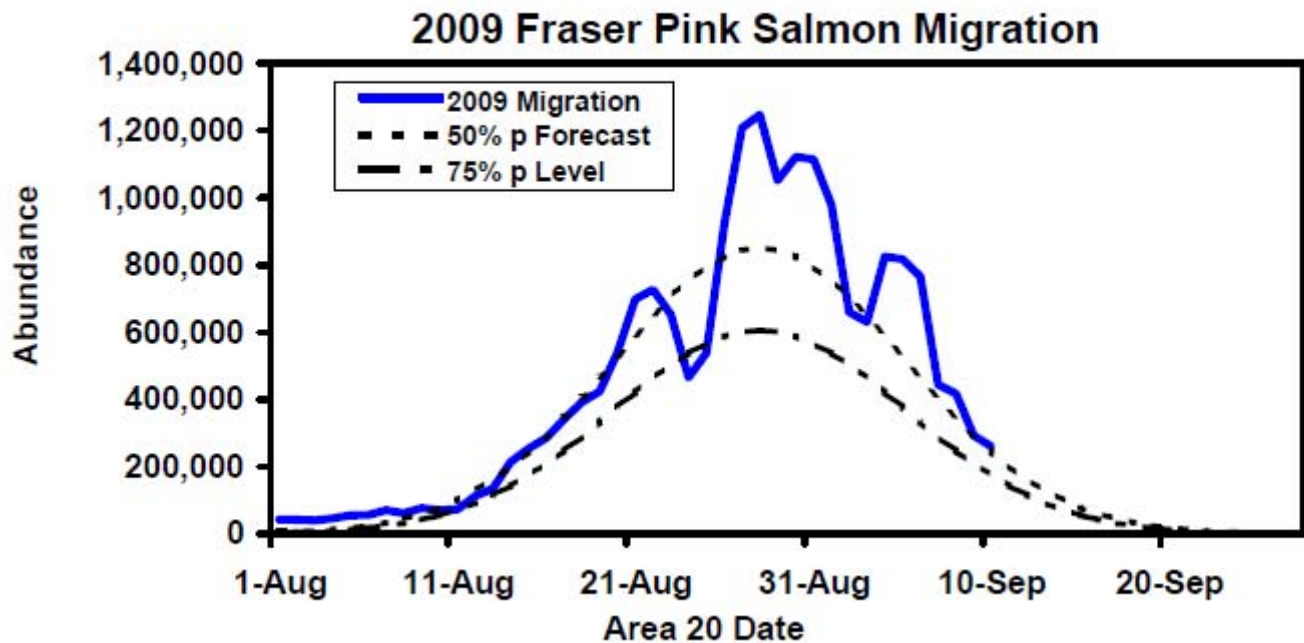
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**2009 Test fisheries Summary of sockeye salmon Encounter rates**

Calculations are: (sockeye catch or encounters)/(sockeye +pink)

Date	US Reefnet	2009 Area 12			observer based released		observer based released		Non Treaty released from observer data	Treaty Indian fishery retained for ceremonial and subsistence use from landings (prelim)	
		Area 20	PS	PS TF	Area 12 PS	Area 13 PS	Area 13 CM	Area 13 TF		7PS CM	7APS CM
22-Aug	20%		1%	6%				7%			
23-Aug	10%		3%	7%				4%			
24-Aug	6%		0.3%	6%				4%			
25-Aug	3%		3%	5%				4%			
26-Aug			3%	3%				4%			
27-Aug			1%	2%				4%	2%	1%	
28-Aug			0.8%	1.7%				1.3%			0.4%
29-Aug			0.3%	0.7%				1.4%			0.3%
30-Aug			0.2%	1.5%	0.8%		1.8%	0.3%			0.0%
31-Aug			0.5%	0.4%	0.8%		1.0%	0.5%	0.7%	0.6%	1.3%
1-Sep			0.7%	1.5%	0.9%		1.1%	0.7%			0.2%
2-Sep			0.6%	1.7%	1.1%		0.7%	0.3%			0.3%
3-Sep			0.2%	2.3%	1.7%		1.6%		0.5%	0.2%	0.2%
4-Sep			0.2%	2.8%	2.2%				0.9%	0.2%	0.2%
5-Sep			0.04%	0.3%	0.5%						0.2%
6-Sep			0.1%	2.6%	1.0%						0.2%
7-Sep			0.2%	2.9%							0.0%
8-Sep			0.4%	2.6%							0.0%
9-Sep			0.0%	1.5%							0.0%
10-Sep			0.0%	1.3%							

## Migration Graphs



## Escapement Tables and Abundance Projections

### Escapement Projections

N/A

### Escapement Summary

#### 2009 FRASER RIVER SOCKEYE ESCAPEMENT SUMMARY

<b>2009</b>			<b>COTTONWOOD T.F.</b>			<b>AB T.F.</b>		<b>MISSION</b>	<b>BEST Est.</b>	<b>CUMM.</b>	<b>Hells Gate</b>	
<b>BB</b>	<b>CATCH</b>	<b>CPUE</b>	<b>AB DATE</b>	<b>CATCH</b>	<b>CPUE</b>	<b>1998</b>	<b>159.66</b>	<b>Splitbeam</b>	<b>(incl. Pitt)</b>		<b>DAILY EST.</b>	
<b>DATE</b>	<b>1277</b>	<b>155.82</b>	<b>(BB+1)</b>					<b>1,270,126</b>	<b>1,303,200</b>	<b>TOTAL</b>	<b>(AB+4)</b>	<b>129,130</b>
06-Sep	41	3.68	07-Sep vmn	26	1.95			16,575	16,600	1,176,000	11-Sep	500
07-Sep	23	2.26	08-Sep vmn	61	4.58			38,888	38,900	1,214,900	12-Sep	860
08-Sep	25	2.54	09-Sep vmn	94	7.05			59,925	60,000	1,274,900	13-Sep	800
09-Sep	8	0.63	10-Sep vmn	14	1.16			9,860	9,900	1,284,800	14-Sep	630
10-Sep	2	0.20	11-Sep vmn	4	0.36			3,018	3,000	1,287,800	15-Sep	520
11-Sep	4	0.42	12-Sep vmn	4	0.34			2,848	2,900	1,290,700	16-Sep	310
12-Sep	0	0.00	13-Sep vmn	1	0.09			723	700	1,291,400	17-Sep	280
13-Sep	3	0.40	14-Sep vmn	5	0.38			3,188	3,200	1,294,600	18-Sep	140
14-Sep	3	0.38	15-Sep vmn	5	0.39			3,273	3,300	1,297,900	19-Sep	410
15-Sep	0	0.00	16-Sep vmn	3	0.23			1,913	1,900	1,299,800	20-Sep	310
16-Sep	2	0.14	17-Sep vmn	0	0.00			0	0	1,299,800	21-Sep	0
17-Sep	3	0.21	18-Sep vmn	1	0.08			680	700	1,300,500	22-Sep	0
18-Sep	0	0.00	19-Sep vmn	2	0.15			1,275	1,300	1,301,800	23-Sep	0
19-Sep	Program Terminated			20-Sep vmn	2	0.17		1,445	1,400	1,303,200	24-Sep	0
20-Sep			21-Sep	Note: Sockeye Stock ident.				0	0	1,303,200	25-Sep	0
21-Sep			22-Sep	unavailable this week.				0	0	1,303,200	26-Sep	0

# Pinks

## 2009 Fraser River Pink Salmon Escapement Summary

**Note: The hydroacoustic program for Fraser River pink salmon is experimental and estimates are not official. Estimates are preliminary and subject to revision post-season.**

COTTONWOOD T.F.			VMN W.C.DRIFT			DB Tagging C/set	MISSION		CUMM. TOTAL	HG (BB+7)	DAILY EST. 1,112,500
BB	CATCH	CPUE	AB DATE	CATCH	CPUE		E.S.	Best Est.			
DATE	1,034	109	(BB+2)	2,676	204.01		4,428,568	4,956,379			
06-Sep	41	3.68	08-Sep	258	19.35		383,316	383,316	2,190,411	13-Sep	63200
07-Sep	81	6.06	09-Sep	92	6.90		376,211	376,211	2,566,622	14-Sep	53900
08-Sep	81	6.46	10-Sep	39	3.23		433,916	433,916	3,000,538	15-Sep	50800
09-Sep	84	6.32	11-Sep	21	1.84		244,571	244,571	3,245,109	16-Sep	49900
10-Sep	84	6.32	12-Sep	35	2.89		321,412	321,412	3,566,521	17-Sep	31100
11-Sep	51	4.47	13-Sep	115	8.77		289,007	289,007	3,855,528	18-Sep	55400
12-Sep	69	8.85	14-Sep	148	11.10		179,290	179,290	4,034,818	19-Sep	71100
13-Sep	24	3.07	15-Sep	75	5.81		115,343	115,343	4,150,161	20-Sep	70800
14-Sep	47	5.71	16-Sep	133	9.98		140,721	140,721	4,290,882	21-Sep	0
15-Sep	69	7.28	17-Sep	246	18.59		137,686	137,686	4,428,568	22-Sep	0
16-Sep	136	13.23	18-Sep				198,059	198,059	4,626,627	23-Sep	0
17-Sep	166	11.62	19-Sep				156,827	156,827	4,783,454	24-Sep	0
18-Sep			20-Sep				172,925	172,925	4,956,379	25-Sep	0

## Mission Escapement by Stock

Totals:		1,267,026	32,528	1,299,554	82,462	14,259	58,797	18,218	32,528	62,189	252,386	0	101,342	100,198	140,017	21,801	66,342	51,459	72,995	0	224,466
Mission Escapement					Mission Escapement																
Mission		Total		ESum						Summ						Birk		Late			
Date	Escape	Pitt Escp	Escape	ESum	Chilwk	EMisc	Se/Sc/UAd	Pitt	NThom	Chilko	SEChilko	Hfly/Mckin	Mitch/Tribs	LStu	Stel	Birk	AdLS/Port	Wea/Cult	Misc	Sub 1's	
06-Sep-09	12,750	22	12,772	0	0	2	1	22	1,733	1	0	317	10	44	1	131	2,148	3,018	0	5,342	
07-Sep-09	16,575	0	16,575	0	0	3	1	0	2,253	1	0	413	13	58	1	170	2,793	3,924	0	6,945	
08-Sep-09	38,888	18	38,906	2	0	5	123	18	3,364	53	0	617	388	87	3	471	6,528	13,347	0	13,883	
09-Sep-09	59,925	27	59,952	2	0	7	189	27	5,184	82	0	951	598	134	5	725	10,059	20,567	0	21,394	
10-Sep-09	9,860	4	9,864	0	0	9	6	4	1,033	233	0	18	1,062	7	1	1,754	1,227	2,784	0	1,723	
11-Sep-09	3,018	3	3,021	0	0	3	2	3	316	71	0	6	325	2	0	537	376	852	0	527	
12-Sep-09	2,848	3	2,851	0	0	3	2	3	298	67	0	5	307	2	0	507	354	804	0	498	
13-Sep-09	723	1	724	0	0	1	0	1	76	17	0	1	78	1	0	129	90	204	0	126	
14-Sep-09	3,188	3	3,191	0	0	3	2	3	334	75	0	6	343	2	0	567	397	900	0	557	
15-Sep-09	3,273	3	3,276	0	0	3	2	3	343	78	0	6	353	2	0	582	407	924	0	572	
16-Sep-09	1,913	2	1,915	0	0	2	1	2	200	45	0	4	206	1	0	340	238	540	0	334	
17-Sep-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

## Environmental Conditions

### Fraser Conditions & MA Report for September 11, 2009

#### Fraser River Discharge at Hope

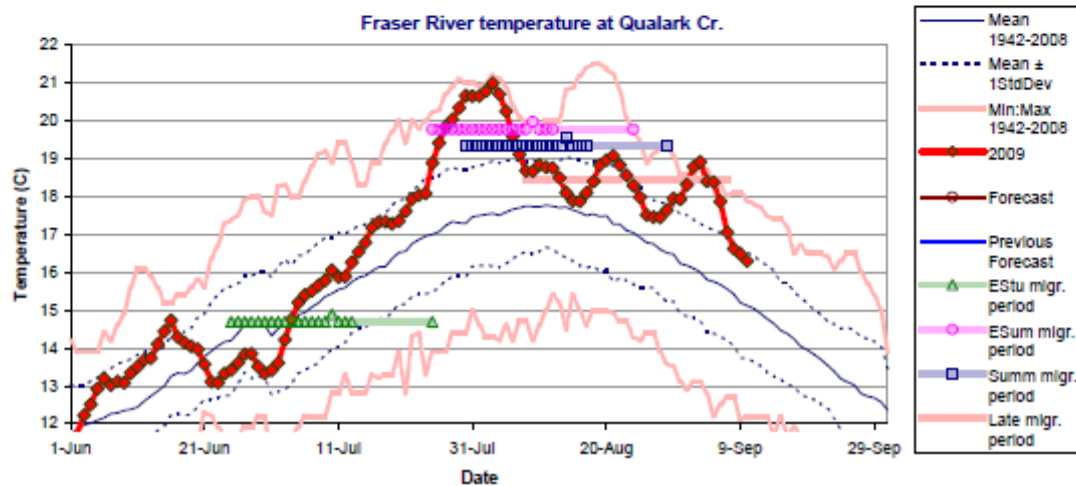
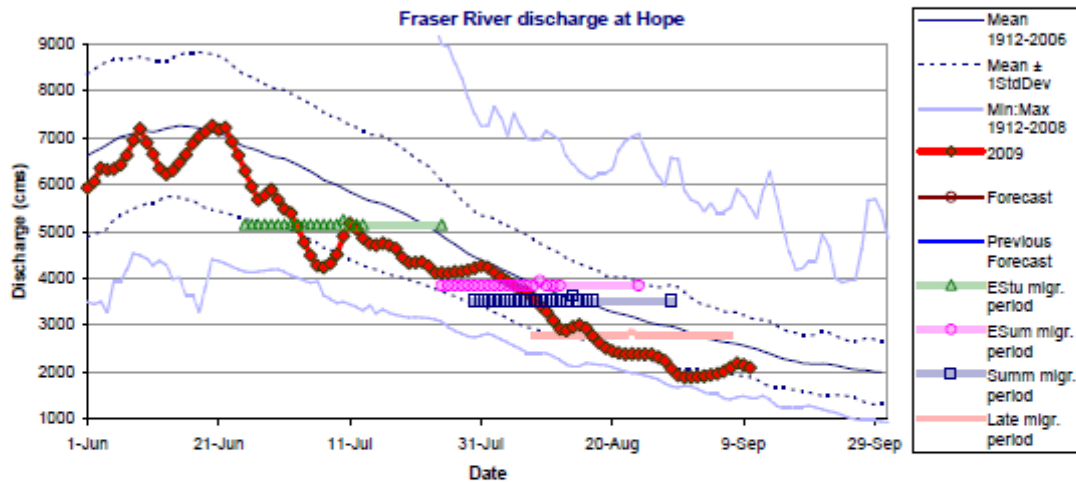
At a discharge of 2100 m<sup>3</sup>/s, the river is tracking about 17% below the average discharge for the date.

	date	m <sup>3</sup> /s
Last obs.	10-Sep	2,100
Forecast	na	na

#### Fraser River Temperature at Qualark

While river temperatures remain above average, they continue to drop. Yesterday's temperature was 16.3C, which is about 1 standard deviation above average for the date.

	date	C
Last obs.	10-Sep	16.3
Forecast	na	na



## Fishery Recommendations

### Fraser River Panel Meetings: Summaries and Discussions

# Detailed Fishing Openings

## Open Times for the Mid & Upper Fraser River First Nations Fisheries

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	St'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 13 week 37	<b>Chinook/ limited Sockeye</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Fishwheel (Fraser only) Gill net
September 13 week 37	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net (all but T'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 13 week 37	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday September 6 18:00	Sunday September 13 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 13 week 37	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.

TBD = To Be Determined

NNTC = Nlaka'pamux Nation Tribal Council;  
 NTA = Nicola Tribal Association  
 LNIB = Lower Nicola Indian Band  
 NSTC = Northern Shuswap Tribal Council

TNG = Tsilquot'In Nation Government  
 CSTC = Carrier-Sekani Tribal Council  
 LTN = Lheidli T'enneh Indian Band  
 TLA = Tl'azt'en Nation

## Open Times for the Lower Fraser River First Nations Fisheries

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Sep 06	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	set net, drift net
Sep 06	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	set net, drift net
Sep 06	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	drift net
Sep 06	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	36 hrs	07:00 Saturday Sep 05	19:00 Sunday Sep 06	Chinook, Pink	set net
Sep 13	Kwikwilem First Nation	Douglas I to Quesbrgh/Alex Fras	48 hrs	06:00 Saturday Sep 05	06:00 Monday Sep 07	Chinook	drift net
Sep 13	Musqueam First Nation	Below Port Mann Bridge	8 hrs	13:00 Tuesday Sep 08	21:00 Tuesday Sep 08	Chinook, Pink	beach seine
Sep 13	Lower Fraser First Nations	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
Sep 13	Yale First Nation	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
Sep 13	Cheam First Nation	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
Sep 13	Squamish Nation	Howe Sound (28-2 to 28-4)	4 day s	12:00 Wednesday Sep 09	12:00 Sunday Sep 13	Chinook, Chum	drift net
Sep 13	Squamish Nation	Squamish River	4 day s	12:00 Wednesday Sep 09	12:00 Sunday Sep 13	Chinook, Chum	set net
Sep 13	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Sep 11	18:00 Sunday Sep 13	Chinook	fish wheel

## Ceremonial Opening Times

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
Sep 13	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Monday Sep 07	19:00 Monday Sep 07	Chinook	drift net
Sep 13	Chehalis First Nation	Harrison to Agassiz	8 hrs	06:00 Wednesday Sep 09	14:00 Wednesday Sep 09	Chinook, Pink	beach seine
Sep 13	Chehalis First Nation	Harrison to Agassiz	8 hrs	06:00 Thursday Sep 10	14:00 Thursday Sep 10	Chinook, Pink	beach seine

## Economic Opportunity Opening Times

none

# Preliminary In-season Catch Numbers

## Commercial

No commercial catch to report

## Recreational

See appendices

## First Nations

## Lower Fraser

First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009											21 Sep 2009 15:43		
AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Aug-23	144		16	388		536	164	0	101	0	1189	1349	17108
Aug-30	2749	766	13	162		19	54	0	311	3	549	4077	21185
Sep-06	32	0		113		61	24		125		323	355	21540
Sep-13	8						0		30		30	38	21578



**Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	0	closed	closed	0	1
17-May	0	0	0	closed	closed	0	1
24-May	0	0	0	closed	closed	0	1
31-May	0	0	0	closed	closed	0	1
07-Jun	0	0	0	closed	closed	0	1
14-Jun	0	0	0	closed	closed	0	1
21-Jun	0	0	0	closed	closed	0	1
28-Jun	15	0	0	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2427	367	2	39	0	2835	2851
02-Aug	0	151	0	72	0	223	3074
09-Aug	0	518	0	29	N/A	547	3621
16-Aug	53	4719	33	147	110	5062	8683
23-Aug	2	1372	0	270	314	1958	10641
30-Aug	0	0	0	96	combined with below	96	10737
06-Sep	0	0	0	58	884	942	11679
13-Sep	0	0	0	88	N/A	88	11767
Total	2497	7128	35	799	1308	11767	11767

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).**

Fraser River Sockeye Weekly Management Plan September 6<sup>th</sup> – September 5<sup>th</sup>, 2009

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Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	1	closed	519	520	836
02-Aug	0	1	0	41	31	73	909
09-Aug	0	17	131	224	291	663	1572
16-Aug	0	244	2384	0	36	2664	4236
23-Aug	0	164	5684	363	408	6619	10855
30-Aug	0	335	4368	545	1564	6812	17667
06-Sep	0	226	2080	890	600	3796	21463
13-Sep	0	N/A	1535	457	317	2309	23772
Total	0	988	16183	2520	4081	23772	23772

**Mid and Upper Fraser River - mainstem - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	N/M	N/M	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	32	4	0	0	0	36	36
30-Aug	0	72	0	0	combined with below	72	108
06-Sep	0	0	0	0	0	0	108
13-Sep	0	12	0	0	N/A	12	120
Total	32	88	0	0	0	120	120

**2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Pink catch estimates (preliminary and subject to change).**

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	0	0	N/M	N/M	0	0
19-Jul	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
06-Sep	0	14	0	0	0	14	14
13-Sep	0	N/A	0	0	0	0	14
Total	0	14	0	0	0	14	14

**2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).**

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.0	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	7.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.2	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.0	1.3	2.0	0.0	0.1	0.0	0.6
16-Aug	1.0	0.0	0.0	5.0	9.0	0.0	0.0	0.0	2.1
23-Aug	0.0	0.0	0.0	12.5	5.0	0.0	1.0	0.0	2.7
30-Aug	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	3.0
06-Sep	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.0
13-Sep	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3.0

N/M = No Monitoring Conducted

Marine

N/A

**September 15, 2009**

**DRAFT AGENDA  
PACIFIC SALMON COMMISSION  
FRASER RIVER PANEL  
Wednesday September 23, 2009 at 9:00am  
Overlander Hotel, Williams Lake, BC**

1. Agenda.
2. Final in-season status report Staff
3. 2009 Draft TAC table Staff/Panel
4. Discussion of any issues or concerns arising from 2009 Management Season Panel
5. Fraser River Panel Winter Work Plan D.Cantillon/Panel
  - a. Discuss key priorities and approaches (assignments, products and timeframes)
6. Fisheries management Program initiatives re: FY 2010/2011 budget M. Lapointe
  - a. Identify any needed Panel follow-up
7. Upstream Escapement report DFO
8. 2010 Southern Endowment Fund?? M. Griswold
9. Other Business
  - a. Status of In-season 2009 FRP Regulatory Orders
  - b. Status of Draft minutes and Annual reports
10. Confirm/plan any follow-up assignments, schedules, and/or meetings Panel

## 2009 Fraser River Sockeye In-season Status

Week of: Sep. 13 - Sep. 19, 2009

Date: Sep. 17, 2009

		Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Summer	Birken -head	Late	Total		
Run Size								
Pre-season Forecast	165,000	739,000	8,677,000	334,000	573,000	10,488,000	17,535,000	
In-season Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	19,500,000	
Catch excluding Fraser River Aboriginal (FSC & EO) and Fraser R. Recreational								
"Outside" Catch	2,110	7,660	24,400	3,110	11,140	48,420	3,587,830	
Gross Escapement								
FRA Catch Below Mission (incl. FSC & EO)	253	846	2,960	809	2,689	7,557	n/a	
Escapement-to-date @ Mission	82,460	185,990	615,740	66,340	348,920	1,299,450	n/a	
Potential Gross Escapement	82,713	186,836	618,700	67,149	351,609	1,307,007	n/a	
Adjusted Gross Esc. Target *	85,000	175,000	650,000	55,770	374,760	1,340,530	6,052,000	
Accounted-to-date								
Catch + Escapement to Mission	84,823	194,496	643,100	70,259	362,749	1,355,427	n/a	
Potential Remaining To Come								
Potential En-route	177	0	6,900	0	37,251	44,328	n/a	
Catch Excluding Fraser R. Aboriginal and Above-Mission Recreational Catch								
Canadian Commercial (incl. selective)	0	0	0	0	0	0	866,940	
U.S. Commercial	0	0	0	0	0	0	2,669,300	
Marine Area Aboriginal	111	1,359	5,100	850	2,603	10,023	8,020	
Test Fishing	1,940	5,510	15,710	1,560	7,270	31,990	12,790	
Canadian Charter (Albion & Qualark TF)	56	250	1,253	60	246	1,865	430	
Canadian Marine Recreational	0	0	0	0	0	0	26,447	
U.S. TI Ceremonial	0	544	2,335	635	1,018	4,532	700	
U.S. Recreational	0	0	0	0	0	0	3,200	
Total	2,110	7,660	24,400	3,110	11,140	48,420	3,587,830	
Fraser R. Aboriginal and Above-Mission Recreational Catch								
Canadian Fraser R. Recreational	0	0	0	0	0	0	1,643	
Fraser R. Aboriginal Catch Reported-to-date								
Catch Below Mission (incl. FSC & EO)	253	846	2,960	809	2,689	7,557	420	
Catch Above Mission (incl. FSC & EO)	6,234	10,039	31,085	27	2,166	49,551	890	
Total	6,487	10,885	34,045	836	4,855	57,108	1,310	
Total In-river Catch	6,487	10,885	34,045	836	4,855	57,108	2,953	
Total Catch in All Areas								
Total	8,597	18,545	58,445	3,946	15,995	105,528	3,590,783	
Timing and Diversion Assumptions								
Area 20 Timing	29-Jun	30-Jul	4-Aug	12-Aug	10-Aug		29-Aug	
Mission Timing	5-Jul	5-Aug	10-Aug		18-Aug			
JS Diversion Rate - current							28%	
JS Diversion Rate - to date							37%	

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

## 2009 Fraser River Panel Sockeye Review

Week of: Sep. 13 - Sep. 19, 2009

Date: Sep. 17, 2009

Area		Gear	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			0		
B Areas 11-16	PS			0		
D Areas 11-13	GN			0		
H Areas 12-16	Troll			0		
H Areas 18-29	Troll			0		
B Area 20	PS			0		
E Area 29	GN			0		
FRA Econ. Opp. + BCI FN Demo				0		
Canadian Total				0		
United States						
Alaska	Net&Troll			0		
Washington						
T.I. Areas 4B/5/6C	Net			0		
T.I. Areas 6/7/7A	Net			0		
N.I. Areas 7/7A	Net			0		
Washington Total				0		
U.S. Total				0		
Non-commercial Catch						
PSC Panel Area Test				20,330		
PSC non-Panel Area Test				11,650		
Fraser River Aboriginal (FSC)				57,110		
Areas 12-124 Aboriginal				10,020		
Recreational				0		
Charter (Albion & Qualark TF				1,865		
U.S. TI Ceremonial				4,500		
Non-comm. Total				105,480		
Catch and Escapement						
Catch Accounted-to-date				105,480		
Potential Spawning Escapement (Mission esc. less FN, sport & Qualark TF catch above Mission)				1,249,050		
Total Accounted-to-date				1,354,530		
Gross Escapement (includes Pitt R. sockeye)						
Run	Stock/Group	Adjusted Target *	Mission Esc.	FN Below Mission	Gross Esc.	% Complete
EStu	Early Stuart	85,000	82,500	300	82,800	97%
ESum	Early Summer	175,000	186,000	800	186,800	107%
Summ	Quesnel/Chilko	650,000	453,900	2,200	618,600	95%
	L.Stu./Stel.		161,800	700		
Late	Birkenhead	55,770	66,300	800	67,100	120%
	Adams/L. Shuswap	374,760	51,500	700	351,800	94%
	Weav/L.Misc.		73,000	1,000		
	Sub 1s		224,500	1,100		
Racial Analysis						
Area/Gear	Date	n	%Fraser	Stocks/Percentages		
E.Stuart	Early Summer		Summer	Late		
ES=EStu	Scale: FBC=Fe,BO,ESnu; GNR=Ga,Na,Ra,Pi,Cwk DNA: EM=EMisc: ET=Early Thompson		CQ=Chil/Ques; LS=LStu/Stel	Bi=Birk; Ha=Harr; AW=Adam/Weav		

\* Adjusted gross escapement target = adjusted spawning escapement target plus expected catch in Fraser River aboriginal, recreational and charter fisheries.

**2009 Fraser River Panel Pink Salmon Review**

Week of: Sep. 13 - Sep. 19, 2009

Date: Sep. 17, 2009

Week 01: Sep. 15 - Sep. 19, 2005		Date: Sep. 17, 2005	
Area	Gear	Fraser Pinks	
		Cumul.	
Commercial Catch			
Canada			
A & C Areas 1-10	Net		0
F Areas 1-10	Troll		0
G Areas 123-127,11-12	Troll		0
B Areas 11-16	PS		741,280
D+E Areas 11-16	GN		0
H Areas 12-16	Troll		10,540
H Areas 18-29	Troll		190
B Area 20	PS		0
B Area 29	PS		101,750
E Area 29	GN		0
FRA Econ. Opp. + BCI FN Demo			13,180
Canadian Total			866,940
United States			
Alaska			
	Net		0
Washington			
T.I. Areas 4B/5/6C	Net		100
T.I. Areas 6/7/7A	Net		908,260
N.I. Areas 7/7A	Net		1,760,940
Washington Total			2,669,300
U.S. Total			2,669,300
Non-commercial Catch			
PSC Panel Area Test			10,920
PSC non-Panel Area Test			1,870
Fraser River Aboriginal			1,310
Areas 12-124 Aboriginal			8,020
Canadian Recreational			28,090
Charter (Albion & Qualark TF			430
U.S. Ceremonial			700
U.S. Recreational			3,200
Non-comm. Total			54,550
Catch and Escapement			
Catch Accounted-to-date			3,590,780
Potential Net Escapement (run size minus catch-to-date)			15,909,220
Total			19,500,000

**2009 Fraser River Sockeye Salmon: TAC, Catch Balance and Potential Escapement**

Week of: Sep. 13 - Sep. 19, 2009

Date: Sep. 17, 2009

**U.S. shares on date last U.S. fishery was approved (Sept. 11, 2009) as per Feb. 15, 2008 Commission Guidance. Catches will be updated post-season.**

	Fraser Sockeye						Fraser Pinks
	Early Stuart	Early Summer	Birken Summer	-head	Late	Total	Total

**RUN STATUS, ESCAPEMENT NEEDS & AVAILABLE SURPLUS**

In-season Run Size Estimate	85,000	175,000	650,000	60,000	400,000	1,370,000	19,500,000
Adult Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000	6,000,000
%SET from TAM rules	100%	100%	80%	80%	80%		31%
Management Adjustment (MA)	32,300	105,000	145,600	0	n/a	282,900	0
Proportional MA (pMA)	0.38	0.60	0.28	0.00	6.04		0.00
Adjusted Spawning Escapement Target (SET) *	85,000	175,000	650,000	48,000	320,000	1,278,000	6,000,000
Test Fishing (TF)	1,740	5,000	18,000	1,500	6,000	32,240	10,000
Surplus above Adjusted SET & Test fishing	0	0	0	10,500	74,000	84,500	13,490,000

**DEDUCTIONS & TAC FOR INTERNATIONAL SHARING**

Aboriginal Fishery Exemption (AFE)	7,000	12,000	35,000	10,500	74,000	138,500	0
Available Aboriginal Fishery Exemption	0	0	0	10,500	74,000	84,500	0
Total Deductions (Adj. SET + TF + Available AFE)	86,740	180,000	668,000	60,000	400,000	1,394,740	6,010,000
Available TAC for International Sharing	0	0	0	0	0	0	13,490,000

**UNITED STATES (Washington) TAC**

U.S. Share **	16.5%	0	0	0	0	0	25.7%	3,466,930
U.S. Payback **	0.0%	0	0	0	0	0	0	0
Total		0	0	0	0	0		3,466,930

**CANADIAN SHARE**

Canadian Allocation	83.5%	0	0	0	0	0	74.3%	10,023,070
Available Aboriginal Fishery Exemption (AFE)		0	0	0	10,500	74,000		0
Total Canadian Share		0	0	0	10,500	74,000		10,023,070

**CATCH-TO-DATE**

Test	1,940	5,510	15,710	1,560	7,270	31,990		12,790
Washington	0	540	2,340	630	1,020	4,530		2,673,200
Canada	6,660	12,500	40,400	1,750	7,710	69,000		904,780
Total Catch in All Fisheries	8,600	18,550	58,450	3,940	16,000	105,520		3,590,770
Exploitation Rate (catch-to-date / run size)	10%	11%	9%	7%	4%	8%		18%

**CATCH REMAINING (BALANCE)**

Washington	0	-540	-2,340	-630	-1,020	-4,530		793,730
Canada	-6,660	-12,500	-40,400	8,750	66,290	15,480		9,118,290
Balance Remaining [ below share / -above share ]	-6,660	-13,040	-42,740	8,120	65,270	10,950		9,912,020

**ESCAPEMENT RELATIVE TO TARGETS**

Potential Spawning Escapement (PSE) ***	76,400	156,450	591,550	56,060	384,000	1,264,460		15,909,230
Predicted Difference Between Estimates (%DBE)	-28%	-38%	-22%	0%	****			0%
PSE with predicted DBE removed	55,360	97,780	462,150	56,060	****			15,909,230
Spawning Escapement Target (SET)	85,000	175,000	520,000	48,000	320,000	1,148,000		6,000,000
Potential deviation from SET [ <target / >target ]	-29,640	-77,220	-57,850	8,060	****			9,909,230

\* The adjusted SET is the lesser of the run size or the sum of the MA + TAM-defined SET.

\*\* Washington sockeye and pink shares according to Annex IV of the Pacific Salmon Treaty.

Sockeye: 16.5% of the TAC - payback (maximum of 5% of share). Payback in 2009 to be taken from Treaty Indian share.

\*\*\* Potential spawning escapement = total run size minus catch-to-date.

\*\*\*\* pMA and DBE estimates are available only for non-Harrison component of Late run, and so are unavailable for Late-run aggregate.



**Draft 9/17/2009**

**PACIFIC SALMON COMMISSION WORK PLAN**  
**2009-2010**

**Panel / Committee: Fraser River Panel/Fraser River Panel Technical Committee**

**Date:** Provided at PSC Executive Session October 20-21, 2009 Sitka, Alaska

**Update on Bi-lateral Tasks Assigned During the October 2008 PSC Executive Session Regarding**

**Obstacles to Completing above Bi-lateral Tasks: N/A**

**Potential Issues for Commissioners:**

The Commission will receive a report from the Fraser Panel regarding the progress made on the instructions the panel was given at the October 2008 PSC Executive Session and subsequent PSC meetings regarding the renewal of Chapter 4 of Annex IV. The Commission may provide the panel with additional instructions and guidance.

The Fraser River Panel will review the 2010 Fraser test fishing requirements to support Panel sockeye and pink salmon management. If issues regarding funding of the test fisheries and/or the conduct and scope of the test fisheries cannot be resolved by the Panel, they may be raised to the Commission level.

**Proposed Meeting Dates and Draft Agendas:**

**October 21 – 23, 2008 PSC Executive Session**

Present the 2008/2009 Fraser Panel/Fraser River Panel Technical Committee Work Plan to the Commission.

The Fraser Panel will present the PSC with a report that outlines the progress the Panel has made regarding the assignment it received at the October, 2008 PSC Executive Session and subsequent PSC meetings. This assignment was to undertake a review of the provisions of Chapter 4 of Annex IV that may be in need of amendment and develop options for amendments for the PSC to consider.

**Special issues the Panel will address by the conclusion of the Annual meeting cycle including:**

1. Provide a report to the Commission on the 2009 implementation of the U.S. sockeye salmon fishery TAC overage and underage payback provisions defined in the Commission's February 15, 2008 Guidance to the Fraser River Panel and PSC Staff.
2. Address management performance and accountability issues, including review of "2009 Fraser Panel Management Plan Principles and Constraints" and "Guidelines for Pre-Season Fraser Sockeye Fishing Plans to Address Late-run Concerns" and consistency in managing all fisheries to meet bilateral objectives.
3. Review the technical information and modeling work being used as the basis for the Fraser Panel's Management Adjustments. Review the procedure for incorporating these adjustments into in-season management of Fraser sockeye.
4. Review the en-route mortality and spawning success of the Late-run stock components in 2009.
5. Compare in-season estimates of run size by management group with observed spawning escapements, catches and any applied management adjustments. Where differences are observed evaluate the potential causes of observed differences.
6. In the event Southern Endowment Funds become available, the Panel will review the findings of its Southern Endowment Fund Scoping Group and prepare recommendations on 2010 Fraser sockeye related proposals to the Southern Endowment Fund Committee.
7. Review issues concerning the management of Fraser sockeye stocks, including escapement goal determination and documentation of escapement levels and timing variations.

**The following items are linked to Fraser Panel discussions regarding the renewal of Chapter 4, Annex IV:** A complete list of outstanding Chapter 4 renewal issues currently under discussion by the Panel, and a description of the status of the discussions, is attached to this work plan.

8. The Panel will discuss alternatives, and the potential associated impacts, for re-apportioning the Fraser River Aboriginal Exemption amongst management groups in cases where total return abundances for one or more management groups are insufficient to generate total allowable catches.
9. The Panel will continue discussions on methods for determining allowable impacts of non-targets stocks and species in Panel Area fisheries.
10. The Panel will discuss the establishment and revision of Fraser River Sockeye Management Groups and review the data and historical rationale pertaining to the current aggregation of stocks into Fraser River sockeye management groups.

11. The Panel will continue discussions on the priority and conditions for apportioning the U.S. share across management groups.

### **January, 2009 PSC Post-Season Meeting**

Each National Section shall conduct detailed reviews of the 2009 Fraser River sockeye returns, fishery performance, special conservation actions and escapement levels and provide a summary of this information to the Commission.

Continue review and discussions of special issues highlighted during the October 2009 Executive Session.

Review the results of updates of Late-run studies and identify information that can be used in the planning and management of Late-run Fraser sockeye during the 2010 season. Review the data pertaining to the inclusion of Harrison River sockeye in the accounting of Late-run impacts.

Address "Other Activities" Identified for the Panel (see list below).

### **February, 2009 PSC Annual Meeting**

Continue discussions of unresolved special issues.

Address "Other Activities" Identified for the Panel (see list below)

Complete the development of a management approach to address conservation concerns across all Fraser River sockeye stock groupings, and for individual stocks within these groupings to the extent feasible, in 2010.

The Fraser River Panel will initiate the 2010 Pre-Season Planning process consistent with the provisions of Annex IV, Chapter 4 of the Pacific Salmon Treaty, any additional Commission guidance, and the Fraser Panel Pre-Season Planning Process document. The Panel will require meetings in April and June 2010 in addition to the PSC Annual Meeting to complete pre-season planning tasks.

### **Outline of Other Activities of the Fraser River Panel for the 2009/2010 Cycle**

***Note to reviewers – This list includes special items/topics of less time sensitive nature or one-time projects, etc.***

Fraser Sockeye Forecast Performance Issues: The poor performance of the Fraser sockeye return forecast in 2009 will likely trigger scientific efforts to identify the causes for the poor performance and the

developments of ways to improve the forecasts. The Panel should be apprised of these activities and the Fraser River Technical Committee and PSC staff should participate in efforts to improve Fraser sockeye forecasting methodology.

Continue the Development of an Improved Fraser Fishery Model: The Panel will facilitate, monitor and provide guidance as necessary to the efforts of the PSC Staff and Fraser River Panel Technical Committee to develop a new Fraser Fishery Model.

Essential Spawning Assessment and Enhancement/Operations Activities: The Panel will monitor the plans and funding intent for key spawning escapement assessment efforts and in-river enhancement/operations activities required to support priority conservation and management needs for Fraser River sockeye and pink salmon. The Panel will provide advice as appropriate.

Review 2009 Test Fisheries and Develop a Test Fishing Plan for the 2010 Season:

Review Catch Accounting Practices By the Parties: The Panel will identify potential areas of concern and implement any appropriate domestic and/or bilateral approaches to address these concerns.

Late-run Early Entry: The Fraser River Panel will receive a report on the information available regarding the 2009 upstream migration behavior of Late-run sockeye.

Seal Deterrent Net Operation: The Panel will receive a report on the seal deterrent study at Cottonwood that utilized an electrified net.

2009 Fish Wheel and Radio Tagging Study: The Panel will receive a report on the 2009 Fish Wheel and Radio Tagging Study.

Southern Resident Killer Whale Listings: The Panel will receive any updated information related to the ESA and SARA listings of southern resident killer whales through attendance at work shops, technical reports and special presentations.

Review of the Canadian Sockeye Escapement Initiative: 2009 was the fourth year that DFO implemented a new approach for the setting of escapement goals. Additional efforts to develop and refine this program should involve the Panel to ensure the objectives established under the Initiative are consistent with the Panel's bilateral objectives under the Treaty. The Panel will need to be involved in the setting of harvest goals

and objectives because a significant portion of the harvest takes place in Panel Area waters.

**Ad Hoc Fraser River Panel Southern Endowment Fund Scoping Group:**

This group, with the assistance of the PSC technical staff, will identify opportunities for the enhancement, restoration, and improved management of Fraser River sockeye and pink salmon. The Panel will provide advice to the Southern Fund Committee on the merit and value of Fraser sockeye and pink salmon related projects proposed by other groups. (This activity will not occur unless the Southern Fund Committee announces that funds will be available for projects in 2010.)

**Administrative Issues:** Review and approve outstanding Panel minutes and the 2006, 2007, 2008 and 2009 Fraser River Panel Annual Reports.

Review the PSC proposed budget for 2010 Fraser River Panel Programs.

Review the Panel's standing document – "Fraser Panel Pre-season Planning Process."

**Fraser River Panel 2009/2010 Meeting Schedule<sup>1</sup>**

November ??, 2009	Fraser Panel Small group. Continue Work on Annex IV, Chapter 4 Renewal per Commission Instructions	U.S. TBD
January 11-15, 2010	PSC Post-Season Meeting	Vancouver
February 8-12, 2010	PSC Annual Meeting	Portland
March, 2010 – 1 day	Fraser River Panel Technical Committee	TBD
April, 2010 – 2 days	Fraser River Panel Technical Committee	TBD
April, 2010 – 3 days	Fraser River Panel Pre-Season Planning	TBD
May, 2010 – 2 days	Technical Modeling Meeting	Vancouver
June, 2010	Fraser River Panel Technical Committee	TBD
June, 2010	Fraser River Panel Pre-Season Planning	TBD
July 9, 2010	Fraser River Panel – In-Season Meeting	Call
July 16, 2010	Fraser River Panel – In-Season Meeting	Call

July 23, 2010	Fraser River Panel – In-Season Meeting	Call
July 30, 2010	Fraser River Panel – In-Season Meeting	Richmond
August 6, 2010	Fraser River Panel – In-Season Meeting	Richmond
August 13, 2010	Fraser River Panel – In-Season Meeting	Richmond
August 20, 2010	Fraser River Panel – In-Season Meeting	Richmond
August 27, 2010	Fraser River Panel – In-Season Meeting	Richmond
September 4, 2010	Fraser River Panel – In-Season Meeting	Call
October 13-15	Fraser River Panel – Post-Season Meeting	Kamloops

1 – This schedule will be reviewed for opportunities to improve upon efficiency and reduced Panel costs.



# PACIFIC SALMON COMMISSION

ESTABLISHED BY TREATY BETWEEN CANADA  
AND THE UNITED STATES OF AMERICA  
MARCH 18, 1985

600 – 1155 ROBSON STREET  
VANCOUVER, B.C. V6E 1B5  
TELEPHONE: (604) 684-8081  
FAX: (604) 666-8707

Our File:

41201

Your File:

September 23, 2009

## MEMORANDUM

TO: Barry Rosenberger, Chair, Fraser River Panel  
Lorraine Loomis, Vice-Chair, Fraser River Panel

FROM: Don Kowal, Executive Secretary

RE: Proposed 2010 Fisheries Management Division sampling program recommendations

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Proposed FY 2010/2011 budget for Commission programs conducted in support of the Fraser River Panel. The budgeted amounts were taken from a forecast provided the Finance and Administration Committee last fall. Refinements to these amounts can be expected prior to re-submission to F&A in December 2009.

Panel Area data collection programs for 2010 will be as follows:

1. Test fishing
  - a) Area 20 gillnet
  - b) Area 20 purse seine
  - c) US area 4B gillnet (subject to results of review)
  - d) Salmon Banks reefnet observations
  - e) Cottonwood gillnet - variable mesh net
  - f) Whonnock gillnet - variable mesh net
  - g) Strait of Georgia troll (Late-run sockeye)
2. Sockeye salmon scale and biological data sampling
  - a) Steveston and Vancouver: Areas 29 & 18
  - b) Bellingham and Blaine: Areas 7 and 7A
  - c) Test fishing catches
  - d) DNA tissue collections
  - e) First Nations fisheries - In-river and Strait of Georgia (DFO)
  - f) Fraser River spawning grounds (DFO)
3. DNA Analysis
  - a) DNA analysis of sockeye tissue samples
  - b) DNA analysis of pink tissue samples(baseline)
4. Catch monitoring
  - a) Vancouver - Canadian Panel Area net and inside troll fisheries  
- U.S. Panel Area net fisheries
5. Regular echo sounding program at Mission
6. Hells Gate observations

.../2

The **Panel Area programs** have been budgeted as follows:

1. Test fishing<sup>1</sup> (Panel waters only)

Revenue estimated at	\$377,000
Expenses estimated at	<u>\$746,000</u>
Difference	\$369,000

Notes: 1 Revenues estimated only from sales of fish killed in the act of gathering samples or data (e.g. Gillnet CPUE) during conduct of test fisheries consistent with practices permissible under Larocque (approximate 41,000 sockeye forecast for Panel waters in 2010).

2. Sockeye salmon scale and biological data sampling

a)	Steveston & Vancouver: Areas 29 & 18	\$8,600
b)	Bellingham & Blaine: Areas 7 and 7A	6,500
d)	Test fishing catches	0
c)	DNA tissue collection	4,200
d)	First Nations fisheries - In-river and Strait of Georgia	Nil
e)	Fraser River spawning grounds	<u>Nil</u>
	Subtotal	\$19,300

3. DNA Analysis

a)	DNA analysis of sockeye tissue samples	\$323,000
b)	DNA analysis of pink tissue samples	\$ 20,000 <sup>2</sup>

Notes: 2 For analysis of pink salmon baseline samples.

4. Catch monitoring

a)	Vancouver	- Canadian Panel Area net and troll fisheries	Nil
		- U.S. Panel Area net fisheries	<u>Nil</u>
		Subtotal	Nil

5. Regular echo sounding program at Mission (sockeye salmon) \$260,000

6. Hells Gate observations \$26,500

Total (#2-6) \$648,800

.../3



Other proposed programs for 2009 would include sampling and monitoring programs that take place outside the Panel Area and which are the responsibilities of the Parties where the fisheries occur.

1. Test fishing
  - a) Area 12 gillnet (DFO)
  - b) Areas 12 and 13 purse seine (DFO)
2. Sockeye salmon scale and biological data sampling
  - a) Alaska District 104 (ADF&G)
  - b) Steveston and Vancouver - Areas 8 to 16 (PSC)
  - c) Port Hardy - Area G & H troll (PSC)

Our preliminary estimates of cost for the non-Panel Area programs are as follows:

1.	Test fishing	
	a) Area 12 gillnet	TBD <sup>4</sup>
	b) Areas 12 and 13 purse seine	<u>TBD</u>
	Subtotal	TBD

Notes: 4 Test fishing budget for non-Panel waters will be determined in consultation with DFO.

2.	Sockeye salmon scale and biological data sampling	
	a) Alaska District 104	Nil
	b) Steveston and Vancouver - Areas 8 to 16	\$5,000
	c) Port Hardy – Area G & H Troll	<u>\$2,600</u>
	Subtotal	\$7,600

In addition to these programs PSC staff may provide in-kind support to research groups including Universities and DFO. This in-kind support is mostly in the form of access to our test fisheries for samples. In recent years where whole fish have been require for samples, efforts have been made at cost recovery for fish taken. Thus, we expect the provision of this support will have minimal impact on budgets.

Don Kowal  
Executive Secretary

**FRP Regulatory Orders**

- draft regulatory orders are being prepared and will be sent out for review to the small group (e.g. Randy, Barry, Ann-Marie; Dave, Tim, Kyle, Gary) after the last Panel regulatory order has occurred for the 2009 season. The Panel Chairs will sign the final agreed orders (possibly at the Executive Session or they will be couriered).

**FRP Minutes for 2009**

- draft minutes from January through April have been reviewed by Canada
- draft minutes from January through June have been reviewed by the U.S.
- draft minutes for July have been sent out for review
- will be drafting the minutes for August and September over the coming weeks and will send them out for review

**Annual reports:**

- 
- 2005 – Approved. Staff to make final edits prior to posting on the internet and sending to the printers.
- 
- 2006 - Provided to the bilateral Editorial Committee on December 9, 2008. No feedback or comments have been received back.
- 
- 2007 - Provided to the bilateral Editorial Committee on March 20, 2009. No feedback or comments have been received back.
- 
- 2008 - A first draft will be distributed to the Editorial Committee before December.
- 
- 2009 – Targetted for distribution by February meeting.

Minutes of the Meeting of the  
Fraser River Panel of the Pacific Salmon Commission

Held at the Overlander Hotel  
Williams Lake, B.C.  
September 23, 2009  
PRESENT: PANEL MEMBERS

CANADA

Mr. B. Rosenberger (Chair)  
Mr. R. Morley  
Mr. T. Bird  
Mr. R. Brahniuk  
Mr. L. Rombough  
Mr. P. Sakich  
Mr. M. Shepert

UNITED STATES

Ms. L. Loomis (Vice-Chair)  
Mr. K. Adicks  
Mr. R. Kehoe  
Mr. T. Tynan  
Mr. R. Charles  
Mr. J. Giard

TECHNICAL COMMITTEE MEMBERS

Ms. A-M. Huang (Co-Chair)  
Ms. D. McHugh  
Ms. B. Pechter  
Mr. J. Scroggie  
Mr. M. Staley

Mr. G. Graves (Co-Chair)

STAFF

Mr. J. Cave  
Mr. M. Lapointe

Mr. S. Latham

ADVISORS AND GUESTS

Mr. D. Allan, DFO  
Ms. A. Seiders, NWIFC

Ms. D. Trager, DFO

The meeting was called to order at 9:25 a.m., September 23, 2009.

1. Agenda

Mr. Rosenberger thanked Staff for information provided over the past season and thanked all participants for their work and cooperation. Comments of appreciation were made by Mr. Rosenberger and Ms. Loomis regarding the skit performed the previous evening. The draft agenda (Attachment 1) was approved with the understanding that Mr. Lapointe would provide the update on the Southern Endowment Fund (agenda item #8) since Mr. Griswold could not be present.

2. Final In-season Status Report

Mr. Lapointe reviewed the status sheets (Attachment 2) and noted that Early Summer-run sockeye exceeded their operational run-size due to the continued migration of North Thompson sockeye. True Late-run sockeye would likely not meet the in-season estimate of 400,000 fish. The best estimates of run size at this time are provided in the row labeled "Accounted-to-date" in Attachment 2: 84,823 Early Stuart, 194,496 Early Summer-run, 643,100 Summer-run, 70,259 Birkenhead, and 362,749 True Late-run sockeye. Near-term plans for terminating in-river programs this season were discussed. The sockeye harvest rate was quite low this season; the Canadian catch of pink salmon was limited by diversion rate and other constraints while the U.S. harvest of pinks was less limited in those regards. The harvest rate of pink salmon is somewhat uncertain and spawning ground escapement estimates of pink salmon may become more important for fishery planning as pink salmon fisheries become more valuable. Qualark and Mission DIDSON projects may be helpful in providing more intuitive and accurate pink salmon estimates in the future. A final in-season status sheet will probably be available next week.

Mr. Shepert asked about encounter rates on sockeye and coho in ongoing First Nations pink salmon fisheries. Mr. Rosenberger replied that encounter rates are low and are being tracked. Economic Opportunity fishery opportunities at Siska and in the Thompson River are expected to have a very low impact on other species as even their pink catches are expected to be small.

Mr. Tynan asked if the current run size estimate of 19,500,000 Fraser River pink salmon was accurate. Mr. Lapointe responded that, although the run-size was certainly high enough to support the catches that occurred, the run-size estimate itself was a soft number. Fry output estimates in 2010 will help to further constrain the estimate, but information from the following spring is not helpful for in-season management. As more seasons occur without verification of pink salmon abundance from the spawning grounds there are legitimate concerns regarding uncertainty in the estimates and how to address the uncertainty. Mr. Lapointe suggested that whether or not the information provided is sufficient will be largely a policy decision. If there continue to be good prices and demand for pink salmon, perhaps there will be interest in developing technical approaches such as using DNA to expand index stream escapements (in Seton Spawning Channel, for example) to provide estimates of total pink salmon escapement. Mr. Cave noted that the distribution of pink salmon abundance has changed since historical times and so such expansions will be problematic.

Mr. Giard mentioned that there were still large schools of pink salmon being observed in the reefnet gear indicating that there may still be considerable numbers of pink salmon to assess, although some of them may be bound for Puget Sound. He then recalled a previous post-season meeting in Lillooet at which Dr. Woodey mentioned it was the first time that pink salmon had been observed at Quesnel. Mr. Giard asked how pink salmon have changed and what the implications are for assessments. Mr. Rosenberger described captures of pink salmon near Prince George in 1989 and the unfamiliarity of them with First Nations and DFO personnel there. Now pink salmon are likely spawning in the Fraser main stem from downstream of Lillooet to the Bowron River, upstream of Prince George, but the glacial nature

of the river will likely hinder their detection. The Seton spawning channel has been outgrown by pink salmon and has been complexed to provide more rearing habitat for coho salmon.

Mr. Brahniuk asked for more information on pink salmon catches on future status sheets, specifically information on non-Fraser pinks. Mr. Bird said there is a perception of pink salmon as an emerging issue and pro-active discussions should be had regarding requirements and responsibilities in subsequent years. Mr. Lapointe replied that it is important to determine who is responsible for verifying pink salmon run sizes, and potential issues regarding an emerging fishery (e.g., certification) are definitely worth considering. Mr. Sakich said that it is a recent phenomenon that sockeye are the important species. He said that pink salmon used to play a bigger role, for example, in Alert Bay where sockeye would only be worth pursuing once every four years. Mr. Rosenberger reiterated Mr. Brahniuk's request for inclusion of information on non-Fraser pink salmon in regular reports. Mr. Lapointe said that Commission Staff would accommodate the request.

### 3. Draft TAC Table

Mr. Lapointe reviewed the TAC table (Attachment 3). He noted that the table uses operational run-sizes as of September 11 and that paybacks are unidirectional. There was an overage of 4,500 sockeye due to U.S. pink salmon fisheries. There are no overages for pink salmon. Mr. Lapointe explained that even with no fisheries, sockeye would not have met the spawning escapement target. There are aspects of the total mortality that the Panel cannot control, so a better evaluation of achievement of objectives may be the harvest rate. The harvest rate was estimated to be 8% whereas the goal was 0%.

Mr. Shepert asked for clarification on how many sockeye were taken in Canadian First Nations fisheries. Ms. Huang explained that 69,000 were taken in the Aboriginal fishery, minus a small amount for two charters (Albion and Qualark). Mr. Staley asked if Aboriginal Fisheries Exemptions should be changed to actual catch. Mr. Lapointe replied that policy direction would be required on this issue going forward. Mr. Rosenberger and Mr. Morley contended that language available already provides the policy guidance – actual catch rather than projected catch should be the basis for calculation of deductions. Mr. Graves noted that the topic was being negotiated for the 2010 Annex. Mr. Lapointe said he will review the existing documentation for potential ambiguity.

### 4. Discussion of Issues/Concerns Arising From the 2009 Management Season

No substantive discussion occurred under this agenda item.

### 5. Fraser River Panel Winter Work Plan

Mr. Lapointe discussed the Pacific Salmon Commission Work Plan for 2009-2010 (Attachment 4). The work plan is due on October 9 and the draft presented should be commented upon prior to that date. Annex negotiations and test fishery funding are issues that may receive special focus. The overlap between some tasks and deadlines of the work plan with those of the Annex negotiations implies desired completion prior to February. Mr. Lapointe also made specific mention of participation in Spawning Initiative meetings and efforts to progress with a new fishery model. A preferred strategy is to hire another quantitative scientist onto Staff who could be a custodian of the model and involved in programming.

Mr. Tynan noted that items related to pink salmon are missing from most of the work plan. Mr. Lapointe agreed and observed that pink salmon should appropriately be included in some items but not others.

Mr. Rosenberger will receive Canadian comments in reviewing the work plan and Mr. Cantillon will coordinate U.S. comments.

Mr. Rosenberger asked about the order of items in the work plan and whether the poor sockeye return in 2009 relative to forecast should be listed as a primary item rather than under “Other Activities.” He further wondered if the forecast should be shared with the public; perhaps a “high, medium, low” pre-season assessment should be shared instead. Canada is reviewing forecast issues and communication, and Mr. Rosenberger suggested that Commissioners may also be interested in this review.

Mr. Shepert supported more communication regarding the forecast and expressed a desire to attend meetings with people principally involved with developing the forecast to get the full story, including technical and historical details. Mr. Lapointe mentioned that historical information on the forecast has been requested. Historical trends in forecasts were described, and Mr. Lapointe emphasized that both technical and policy issues needed to be addressed. Mr. Shepert wondered about the relevance of other sources of information and specifically about marine information on smolts. Mr. Lapointe responded that marine smolt information came from programs not intended to target sockeye and therefore not optimally designed to provide forecasting information on sockeye returns. Mr. Cave added that doing work on survival of marine smolts was very expensive, requiring large multi-year research budgets. It was noted that Canada formerly invested in high seas salmon tagging to determine nation of origin for managing high seas fisheries.

Mr. Lapointe said that he was supportive of agencies and proposals seeking to do more marine salmon research that may potentially improve forecasts and reduce surprises, but he is more supportive of in-season programs to allow appropriate management responses to surprises that will occur. Mr. Rosenberger suspects that funds allocated to research on young salmon in marine areas would reduce funds available for in-season programs aimed at assessing returning salmon adults. Mr. Morley expressed support for the priority of in-season programs.

The meeting recessed at 10:55 a.m.

The meeting reconvened at 11:00 a.m.

6. Fisheries Management Program Initiatives re: 2010/2011 Budget

Mr. Lapointe described a memorandum regarding budget implications of sampling program recommendations (Attachment 5). The proposal is within \$10,000 of the previous year’s proposal. A complete budget will likely be presented in January 2010 but not approved until February. Mr. Rombough asked about test fishing and specifically the gill net fishery at Naka Creek. Mr. Lapointe replied that more information on test fisheries could be included in the Panel budget review process. Ms. Loomis asked about the interaction between the Finance and Administration Committee and Larocque funding for test fisheries. Mr. Lapointe responded that there is little interaction because Larocque funding is not explicitly a bilateral issue. Mr. Rosenberger suggested development of a potential schedule and information packages on the various test fisheries. Mr. Lapointe said that a draft schedule and background documents can be provided for a December conference call. Mr. Shepert asked about future funding of test fisheries, and Mr. Rosenberger said there are two more years of committed funding in the current five year cycle. Mr. Rosenberger requested a draft schedule for 2010 test fishing in the near term along with information on objectives of the various test fisheries so that funds could be better allocated. Mr. Cave noted the interest in Naka Creek and suggested that a review of marine gill net test fisheries would be prepared but may not be complete by January. Mr. Rosenberger said that it would be helpful if all of the test fisheries could be eventually reviewed; a rate of two or three per year would be acceptable.

7. Upstream Escapement Report

Mr. Scroggie summarized data from the spawning grounds in a presentation (Attachment 6). In general, results to-date indicate that run-timing groups will generally have poorer escapement than in the brood year, but that there seem to be few surprises relative to data from downstream assessments of escapement at Mission. There is variation within run-timing groups, however; for example, the escapement of sockeye to Cultus Lake in 2009 surpasses that in the brood year.

Mr. Rosenberger asked about the Harrison River mark-recapture program. Mr. Scroggie answered that it would be conducted in conjunction with a mark-recapture program for Chinook at the same location.

8. 2010 Southern Endowment Fund

Mr. Lapointe presented information for Mr. Griswold regarding the status of the Southern Fund. After funding is allocated in accordance with the Chinook Annex, there should still be funds available for other projects. There will be a meeting in November to determine if a call for proposals will occur and the nature of such a call – the fund may wish to consider only on-going projects, for example.

9. Other Business

Mr. Lapointe briefly described the status and progress of Regulatory Orders, Minutes of Panel Meetings, and PSC Annual Reports (Attachment 7). Mr. Rosenberger said that the relevant people will be present at the October Executive Session in Sitka and can approve and sign the Regulatory Orders. Mr. Brahniuk expressed concern about falling further behind in completion of Annual Reports. Mr. Rosenberger requested a commitment to complete reviews for reports up to 2007 prior to meeting in January and Ms. Loomis agreed.

Mr. Shepert noted the absence of Chief Malloway and flagged the issue of having the Panel post-season meeting in September when fishing is ongoing. Mr. Lapointe replied that one benefit is to see the fruits of the summer's labor; another benefit is to have the Panel see the fish and places that are most discussed during in-season management.

Ms. Loomis stated that regulatory control should have been relinquished in Area 6 at the same time that it was relinquished in Area 7. No fisheries were affected by the omission, and control will be relinquished automatically given no other action, but Ms. Loomis would like to amend the regulatory control order. Mr. Rosenberger and Mr. Lapointe agreed to the amendment.

10. Confirm/Plan any Follow-up Assignments, Schedules, and/or Meetings

No further extraordinary assignments or meetings were discussed.

The meeting adjourned at 12:50 a.m., September 23.

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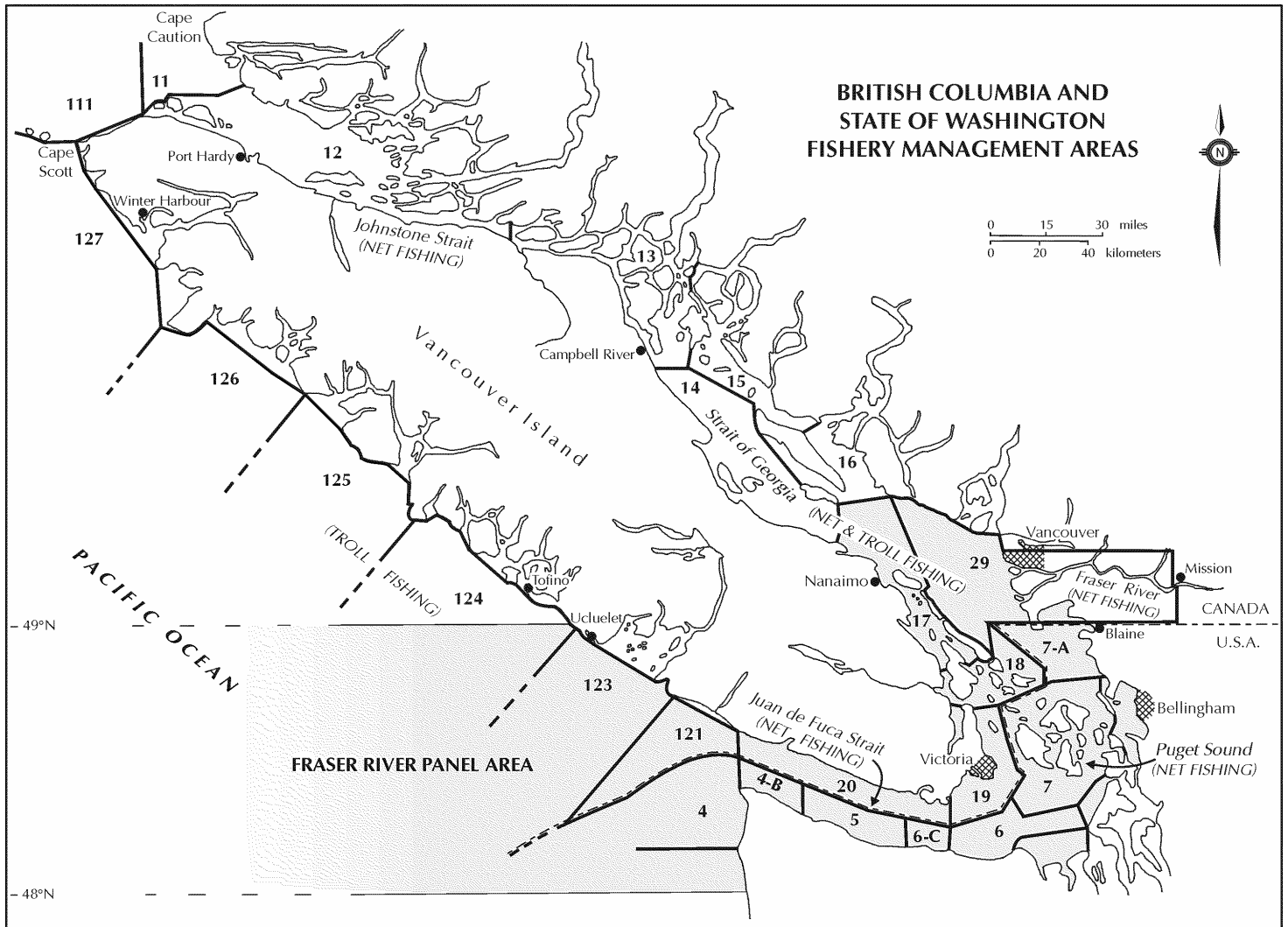
Barry Rosenberger, Chair

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Lorraine Loomis, Vice-Chair

# Appendix 1: Maps of Fishing Areas

## *British Columbia and State of Washington Fishery Management Areas*

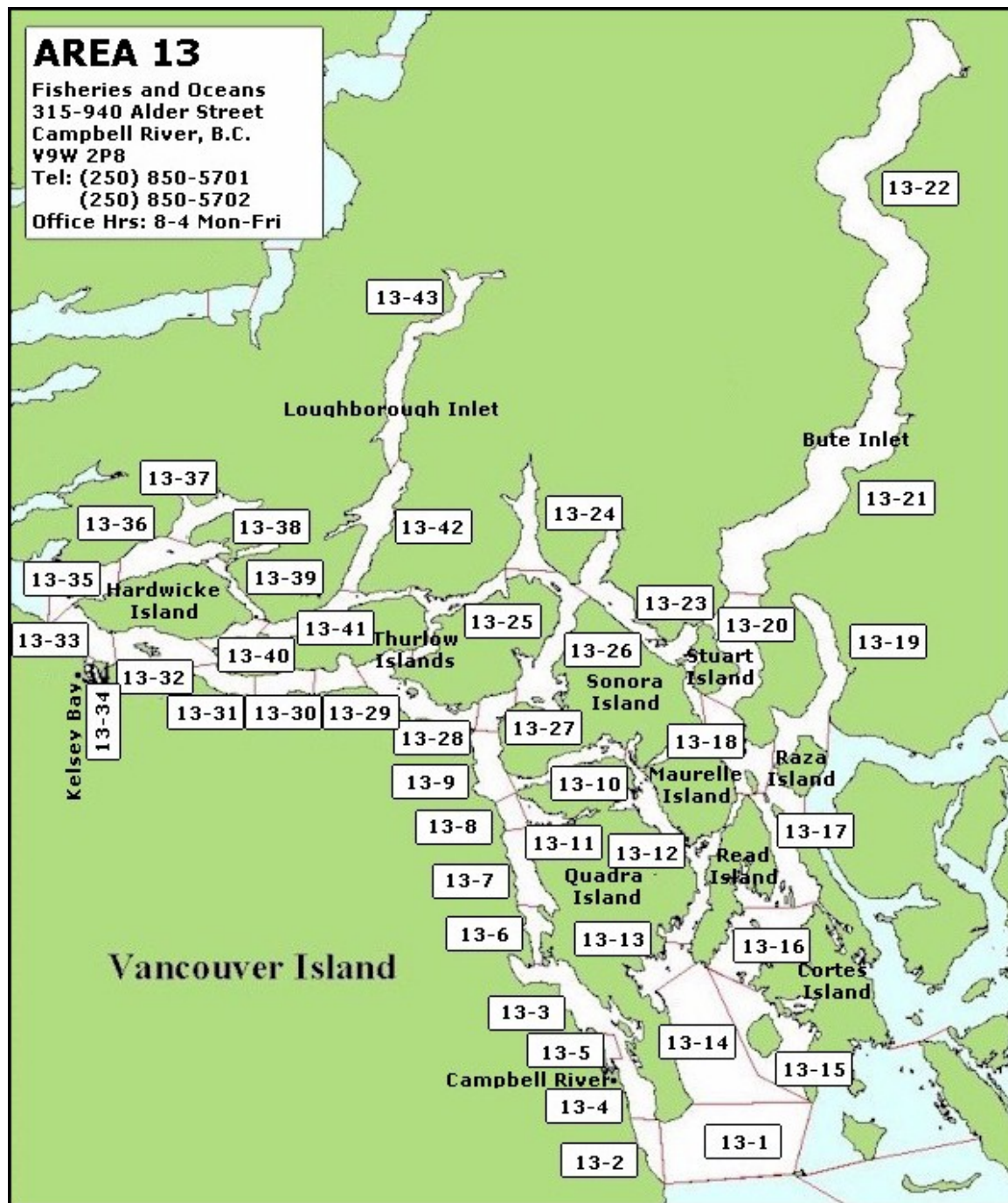




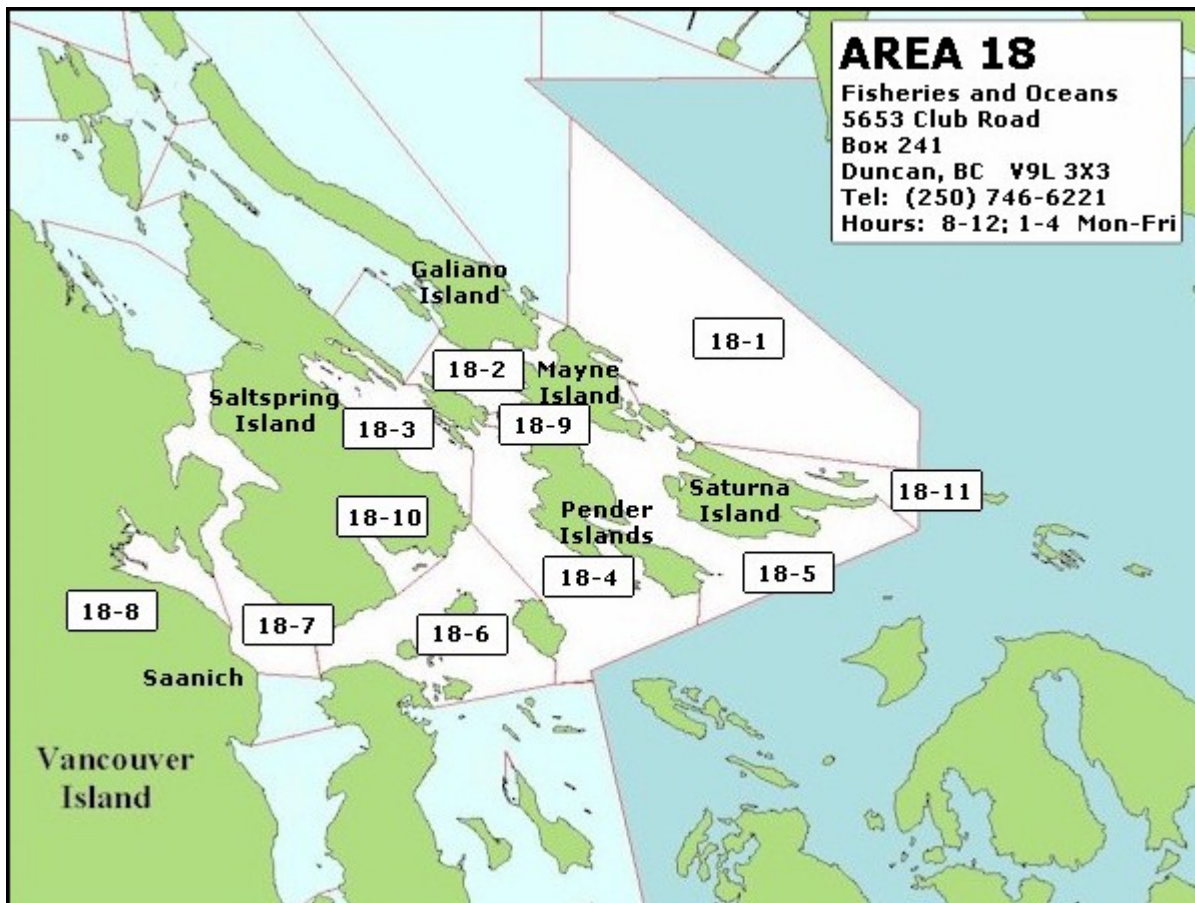
## Area 12



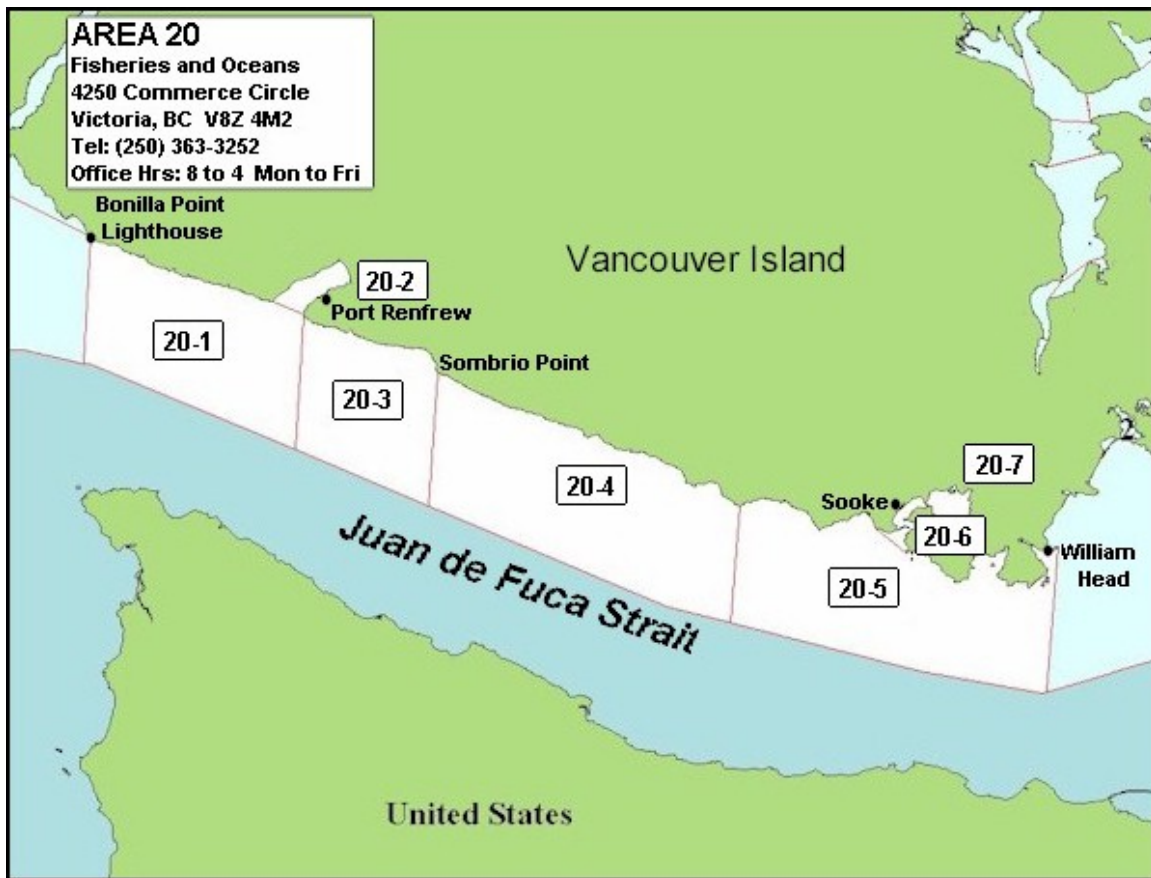
## Area 13



## Area 18

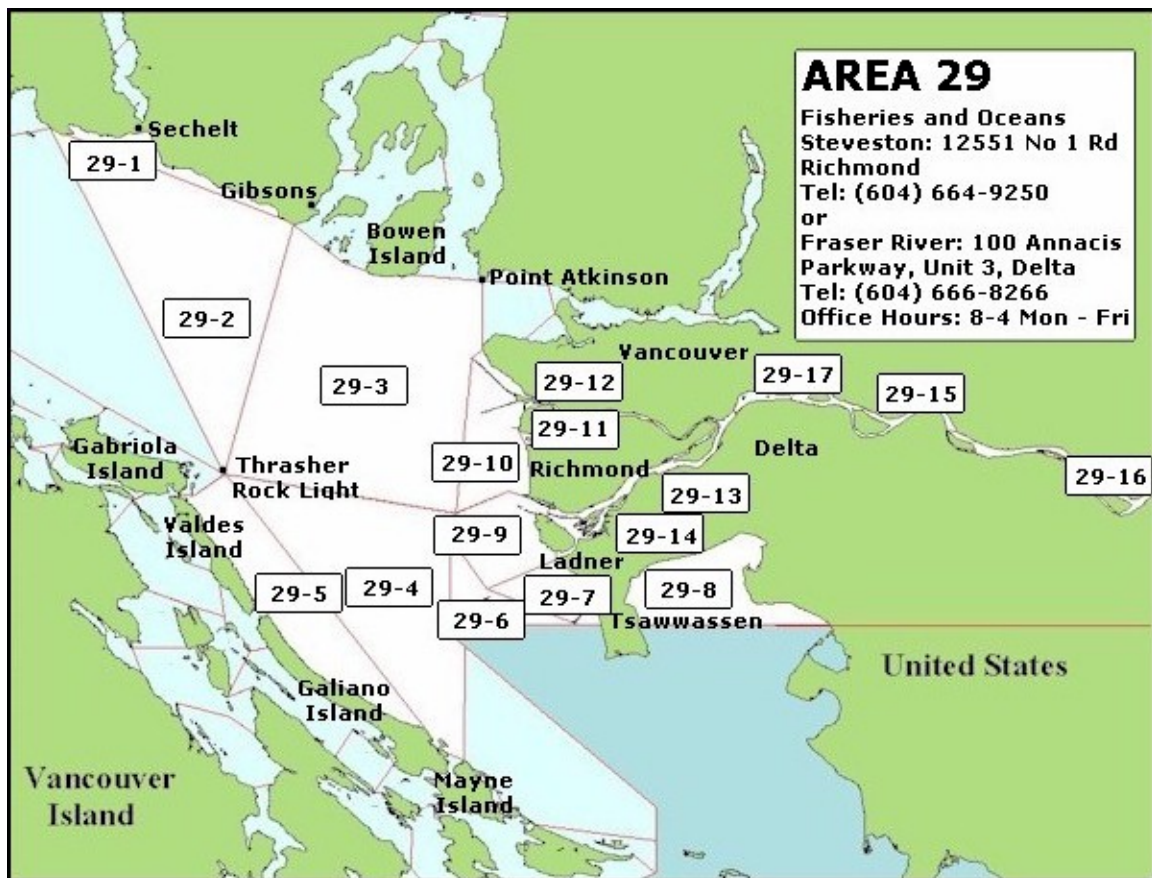


## Area 20

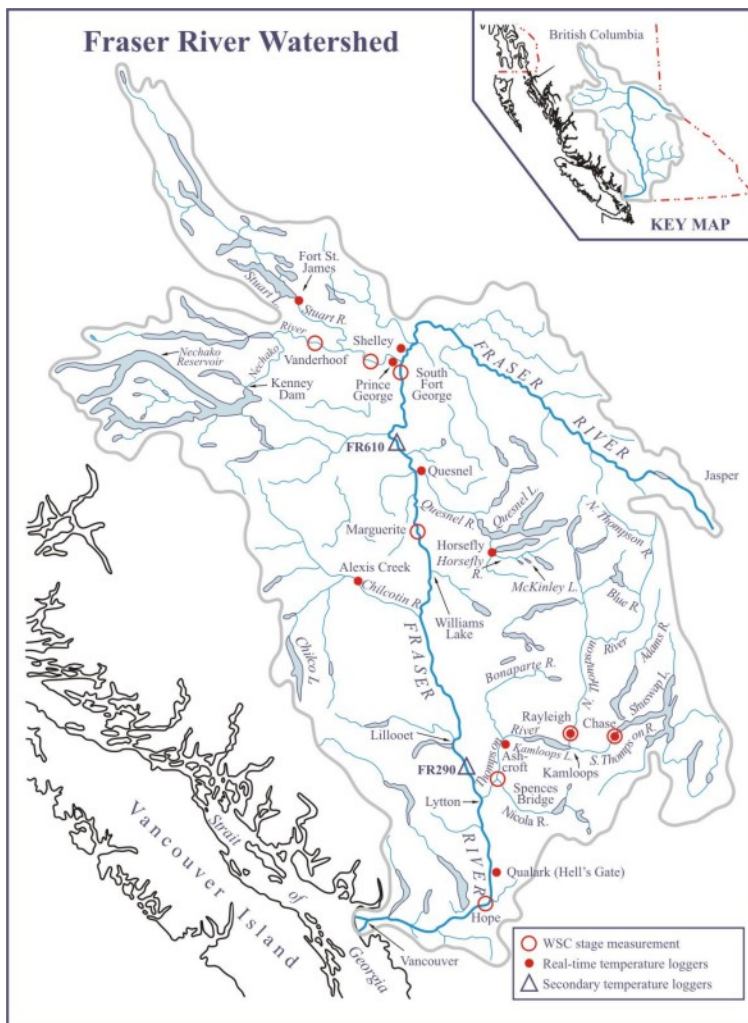




## Area 29



## Fraser River Watershed



All management areas can be found on the Fisheries and Oceans website at:  
<http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm>

A written description of management areas can be found in the Pacific Fishery Management Area Regulations at:  
[http://laws.justice.gc.ca/en/showdoc/cr/SOR-2007-77/20070618/en?command=home&caller=SI&search\\_type=all&shorttitle=pacific%20fishery%20management&day=18&month=6&year=2007&search\\_domain=cr&showall=L&statuteyear=all&lengthannual=50&length=50](http://laws.justice.gc.ca/en/showdoc/cr/SOR-2007-77/20070618/en?command=home&caller=SI&search_type=all&shorttitle=pacific%20fishery%20management&day=18&month=6&year=2007&search_domain=cr&showall=L&statuteyear=all&lengthannual=50&length=50)

## Appendix 2: Calendar for year 2009 (Canada)

### January

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
4:00	10:00	17:00	26:00			

### February

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
2:00	9:00	16:00	24:00			

### March

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				
4:00	10:00	18:00	26:00			

### April

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		
2:00	9:00	17:00	24:00			

### May

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						
1:00	9:00	17:00	24:00	30:00		

### June

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				
7:00	15:00	22:00	29:00			

### July

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	
7:00	15:00	21:00	28:00			

### August

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
5:00	13:00	20:00	27:00			

### September

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			
4:00	11:00	18:00	26:00			

### October

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
4:00	11:00	18:00	25:00			

### November

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					
2:00	9:00	16:00	24:00			

### December

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
2:00	8:00	16:00	24:00	31:00		

# Appendix 3: Tide and Current Tables

The following has been included with permission from the Canadian Hydrographic Service.

JOHNSTONE STR. CEN. PST Z+8

2009

CURRENT TABLES

July-juillet				August-août				September-septembre			
Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum
Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds
1	0240 -0.9	16	0229 -1.0	1	0401 -0.9	16	0340 -1.1	1	0509 -1.0	16	0517 -1.1
WE	0920 *	TH	0930 *	SA	1105 *	SU	1050 *	TU	1135 *	WE	1143 *
ME	1541 -0.7	JE	1515 -0.7	SA	1721 -0.6	DI	1640 -0.7	MA	1758 -0.8	ME	1758 -0.9
	2105 *		2048 *		2206 *		2218 *		2324 *		
2	0333 -0.9	17	0314 -1.1	2	0457 -1.0	17	0443 -1.2	2	0546 -1.0	17	0000 *
TH	1033 *	FR	1033 *	SU	1145 *	MO	1130 *	WE	1142 +0.4	TH	1025 -1.1
JE	1649 -0.7	VE	1618 -0.7	DI	1800 -0.7	LU	1720 -0.8	ME	1350 1822 -0.9	JE	1025 1200 +0.3
	2205 *		2145 *		2258 *		2312 *				1352 1838 -1.1
3	0433 -0.9	18	0406 -1.2	3	0539 -1.1	18	0536 -1.2	3	0609 *	18	0040 *
FR	1120 *	SA	1118 *	MO	1142 +0.3	TU	1208 *	TH	0619 -1.0	FR	0629 -1.1
VE	1738 -0.7	SA	1706 -0.7	LU	1825 -0.7	MA	1801 -0.9	JE	1033 1219 +0.4	VE	1056 1236 +0.4
	2248 *		2236 *		2342 *			SA	1421 1850 -1.0		1426 1909 -1.2
4	0526 -1.0	19	0500 -1.2	4	0612 -1.2	19	0606 *	4	0654 *	19	0115 *
SA	1203 *	FR	1128 +0.3	MA	1215 +0.4	WE	0617 -1.3	FR	0653 -1.1	SA	0702 -1.1
SA	1813 -0.7	SU	1742 -0.8	TU	1844 -0.8	WE	1057 1227 +0.3	SA	1110 1258 +0.5	SA	1132 1312 +0.4
	2320 *	DI	2330 *	MA		WE	1413 1840 -1.0	VE	1454 1924 -1.1	SA	1455 1937 -1.2
5	0605 -1.1	20	0551 -1.3	5	0624 *	20	0651 *	5	0136 *	20	0155 *
SU	1235 *	MO	1211 +0.3	WE	0643 -1.2	TH	0652 -1.3	SA	0728 -1.1	SU	0737 -1.1
DI	1836 -0.7	LU	1812 -0.9	ME	1102 1249 +0.4	JE	1129 1303 +0.4	SA	1152 1338 +0.5	DI	1349 *
					1451 1908 -1.0		1448 1918 -1.1	SA	1529 2000 -1.2		2004 -1.3
6	0000 *	21	0012 *	6	0110 *	21	0133 *	6	0217 *	21	0232 *
MO	0637 -1.2	TU	0634 -1.4	TH	0716 -1.2	FR	0723 -1.2	SU	0806 -1.1	MO	0817 -1.1
LU	1104 1246 +0.4	MA	1120 1251 +0.3	JE	1137 1324 +0.5	VE	1201 1339 +0.4	DI	1237 1418 +0.4	LU	1428 *
	1452 1858 -0.8		1436 1845 -1.0		1519 1939 -1.1		1522 1953 -1.2		1602 2039 -1.2		2036 -1.2
7	0039 *	22	0050 *	7	0154 *	22	0206 *	7	0258 *	22	0309 *
TU	0707 -1.3	WE	0712 -1.4	FR	0752 -1.2	SA	0756 -1.2	MO	0846 -1.1	TU	0858 -1.0
MA	1137 1320 +0.4	ME	1201 1329 +0.3	VE	1217 1401 +0.5	SA	1237 1414 +0.4	LU	1327 1458 +0.3	MA	1508 *
	1520 1925 -0.9		1505 1921 -1.0		1551 2015 -1.2		1555 2027 -1.2		1631 2120 -1.3		2114 -1.2
8	0123 *	23	0150 *	8	0236 *	23	0255 *	8	0338 *	23	0347 *
WE	0740 -1.3	TH	0747 -1.3	SA	0830 -1.2	SU	0834 -1.1	TU	0929 -1.0	WE	0942 -0.9
ME	1211 1354 +0.5	JE	1237 1405 +0.3	SA	1302 1441 +0.4	DI	1452 *	MA	1538 *	ME	1600 *
	1548 1958 -1.0		1539 2001 -1.1		1625 2055 -1.2		2101 -1.2		2204 -1.3		2202 -1.1
9	0209 *	24	0230 *	9	0316 *	24	0338 *	9	0438 *	24	0455 *
TH	0815 -1.3	FR	0821 -1.3	SU	0910 -1.1	MO	0917 -1.1	WE	1017 -0.9	TH	1029 -0.8
JE	1248 1429 +0.4	VE	1312 1441 +0.3	DI	1351 1522 +0.3	LU	1532 *	ME	1618 *	JE	1633 *
	1617 2034 -1.1		1616 2042 -1.2		1659 2141 -1.1		2139 -1.2		2257 -1.3		2311 -1.1
10	0253 *	25	0313 *	10	0352 *	25	0420 *	10	0540 *	25	0621 *
FR	0854 -1.2	SA	0857 -1.2	MO	0952 -1.0	TU	1005 -0.9	TH	1116 -0.7	FR	1132 -0.6
VE	1330 1506 +0.4	SA	1351 1519 +0.3	LU	1605 *	MA	1620 *	SA	1704 *	VE	1720 *
	1647 2114 -1.1		1653 2125 -1.1		2238 -1.1		2226 -1.1				
11	0334 *	26	0409 *	11	0453 *	26	0515 *	11	0601 -1.2	26	0633 -1.0
SA	0936 -1.1	SU	0937 -1.1	TU	1041 -0.9	WE	1059 -0.8	FR	0650 *	SA	0740 *
SA	1419 1547 +0.3	DI	1559 *	MA	1648 *	ME	1708 *	SA	1300 -0.6	SA	1420 -0.5
	1721 2201 -1.0		2212 -1.1		2352 -1.1		2347 -1.0	VE	1800 *		1828 *
12	0420 *	27	0454 *	12	0604 *	27	0636 *	12	0107 -1.2	27	0139 -1.0
SU	1020 -1.0	MO	1026 -0.9	WE	1146 -0.7	TH	1318 -0.6	SA	0810 *	SU	0900 *
DI	1645 *	LU	1655 *	ME	1742 *	JE	1805 *	SA	1432 -0.6	DI	1515 -0.6
	2306 -1.0		2314 -1.0					SA	1930 *		2018 *
13	0514 *	28	0554 *	13	0654 -1.1	28	0118 -0.9	13	0213 -1.1	28	0241 -0.9
MO	1111 -0.9	TU	1131 -0.8	TH	0718 *	FR	0820 *	SU	0925 *	MO	0948 *
LU	1740 *	MA	1746 *	JE	1834 -0.6	VE	1457 -0.6	DI	1524 -0.7	LU	1600 -0.6
					1844 *		1924 *		2058 *		2130 *
14	0646 -0.9	29	0655 -0.9	14	0145 -1.1	29	0222 -0.9	14	0321 -1.1	29	0343 -0.8
TU	0626 *	WE	0710 *	FR	0858 *	SA	0954 *	MO	1023 *	TU	1023 *
MA	1219 -0.8	ME	1350 -0.7	VE	1501 -0.6	SA	1558 -0.6	LU	1613 -0.7	MA	1642 -0.7
	1843 *		1856 *		2007 *		2046 *		2203 *		2224 *
15	0143 -1.0	30	0158 -0.9	15	0239 -1.1	30	0323 -1.0	15	0425 -1.1	30	0438 -0.8
WE	0748 *	TH	0850 *	SA	1003 *	SU	1040 *	TU	1105 *	WE	1055 *
ME	1353 -0.7	JE	1525 -0.7	SA	1556 -0.7	DI	1650 -0.6	MA	1707 -0.8	ME	1721 -0.8
	1942 *		2016 *		2121 *		2148 *		2300 *		2306 *
		31	0258 -0.9			31	0421 -1.0				
		FR	1013 *				1110 *				
		VE	1629 -0.6				1730 -0.7				
			2118 *				2242 *				

78

+ Flood/fort direction 100 True/vraie  
\* current weak & variable

- Ebb/jusant direction 280 True/vraie  
\* courant faible et variable



## SEYMOUR NARROWS PST Z+8

2009

## CURRENT TABLES

## July-juillet

## August-août

## September-septembre

Turns	Maximum	renverse	maximum	Turns	Maximum	renverse	maximum	Turns	Maximum	renverse	maximum
Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds
<b>1</b> WE 0614 0930 +9.8 ME 1859 2137 +5.4	0256 -9.9 0930 +9.8 1559 -6.8 2137 +5.4	<b>16</b> TH 1239 1532 -5.4 JE 1832 2103 +4.4 2330	0219 -8.5 0900 +8.6 1532 -5.4 2103 +4.4 2330	<b>1</b> SA 1450 1752 -7.2 SA 2105 2324 +3.9	0430 -7.9 1104 +9.7 1752 -7.2 2324 +3.9	<b>16</b> SU 1423 1728 -8.0 DI 2038 2301 +5.0	0403 -8.6 1040 +10.9 1728 -8.0 2301 +5.0	<b>1</b> TU 0859 1217 +9.7 MA 1546 1854 -9.1 2203	0607 -7.9 1217 +9.7 1854 -9.1 2203	<b>16</b> WE 1526 1837 -11.9 ME 2141	0558 -10.8 1206 +12.2 1837 -11.9 2141
<b>2</b> TH 1412 1708 -7.3 JE 2013 2239 +4.9	0356 -9.6 1030 +10.5 1808 -7.3 2239 +4.9	<b>17</b> FR 1348 1646 -6.3 VE 1950 2211 +4.3	0321 -8.7 1003 +9.8 1646 -6.3 2211 +4.3	<b>2</b> SU 1539 1842 -8.3 DI 2156	0532 -8.2 1157 +10.4 1842 -8.3 2156	<b>17</b> MO 1515 1821 -9.7 LU 2129 2359 +6.6	0512 -9.6 1138 +12.2 1821 -9.7 2359 +6.6	<b>2</b> WE 0942 1255 +10.3 ME 1619 1928 -10.0 2233	0650 -8.9 1255 +10.3 1928 -10.0 2233	<b>17</b> TH 0948 1252 +12.7 JE 1606 1918 -13.1 2220	0650 -12.1 1252 +12.7 1918 -13.1 2220
<b>3</b> FR 1509 1808 -8.1 VE 2116 2338 +4.8	0454 -9.5 1125 +11.2 1808 -8.1 2338 +4.8	<b>18</b> SA 1448 1749 -7.7 SA 2055 2314 +4.8	0425 -9.2 1102 +11.3 1749 -7.7 2314 +4.8	<b>3</b> MO 0918 1243 +11.0 LU 1620 1924 -9.3 2236	0018 +4.6 0624 -8.7 1243 +11.0 1924 -9.3 2236	<b>18</b> MA 2212	0611 -10.9 1228 +13.3 1907 -11.3 2212	<b>3</b> TH 1021 1328 +10.7 JE 1649 1959 -10.6 2302	0728 -9.7 1328 +10.7 1959 -10.6 2302	<b>18</b> FR 1036 1335 +12.7 VE 1644 1957 -13.7 2259	0737 -13.0 1335 +12.7 1957 -13.7 2259
<b>4</b> SA 1559 1859 -8.9 SA 2210	0549 -9.6 1215 +11.8 1859 -8.9 2210	<b>19</b> SU 1539 1842 -9.3 DI 2150	0525 -10.0 1155 +12.7 1842 -9.3 2150	<b>4</b> TU 1001 1322 +11.5 MA 1656 2001 -10.0 2311	0104 +5.4 0709 -9.2 1322 +11.5 2001 -10.0 2311	<b>19</b> WE 1000 1315 +14.1 ME 1641 1948 -12.7 2253	0051 +8.4 0703 -12.1 1315 +14.1 1948 -12.7 2253	<b>4</b> FR 1058 1401 +10.9 VE 1716 2029 -11.1 2330	0148 +8.6 0804 -10.3 1401 +10.9 2029 -11.1 2330	<b>19</b> SA 1122 1416 +12.1 SA 1720 2036 -13.9 2337	0821 -13.3 1416 +12.1 2036 -13.9 2337
<b>5</b> SU 0935 1301 +12.2 DI 1643 1944 -9.6 2257	0638 -9.7 1301 +12.2 1944 -9.6 2257	<b>20</b> MO 0921 1245 +14.0 LU 1625 1929 -10.8 2237	0621 -11.0 1245 +14.0 1929 -10.8 2237	<b>5</b> WE 1041 1358 +11.7 ME 1728 2035 -10.5 2343	0143 +6.3 0749 -9.7 1358 +11.7 2035 -10.5 2343	<b>20</b> TH 1048 1358 +14.3 JE 1719 2028 -13.5 2331	0137 +10.1 0751 -13.0 1358 +14.3 2028 -13.5 2331	<b>5</b> SA 1134 1432 +10.7 SA 1743 2058 -11.3 2359	0220 +9.6 0838 -10.6 1432 +10.7 2058 -11.3 2359	<b>20</b> SU 1206 1456 +11.2 DI 1756 2114 -13.4	0905 -12.9 1456 +11.2 2114 -13.4
<b>6</b> MO 1018 1342 +12.4 LU 1722 2025 -10.1 2338	0118 +5.3 0723 -9.8 1342 +12.4 2025 -10.1 2338	<b>21</b> TU 1011 1332 +14.8 MA 1707 2012 -12.0 2320	0103 +6.9 0713 -11.9 1332 +14.8 2012 -12.0 2320	<b>6</b> TH 1118 1431 +11.7 JE 1758 2106 -10.8	0218 +7.0 0826 -9.9 1431 +11.7 2106 -10.8	<b>21</b> FR 1134 1439 +13.9 VE 1755 2106 -13.9	0221 +11.4 0836 -13.3 1439 +13.9 2106 -13.9	<b>6</b> SU 1211 1505 +10.6 DI 1811 2128 -11.3	0254 +10.4 0914 -10.6 1505 +10.6 2128 -11.3	<b>21</b> MO 1251 1536 +9.8 LU 1832 2152 -12.5	0322 +13.6 0948 -12.0 1536 +9.8 2152 -12.5
<b>7</b> TU 1057 1420 +12.4 MA 1758 2103 -10.3	0201 +5.6 0805 -9.7 1420 +12.4 2103 -10.3	<b>22</b> WE 1059 1417 +15.1 ME 1747 2054 -12.9	0152 +8.2 0802 -12.6 1417 +15.1 2054 -12.9	<b>7</b> FR 1154 1503 +11.5 VE 1826 2137 -10.9	0252 +7.7 0901 -10.0 1503 +11.5 2137 -10.9	<b>22</b> SA 1219 1520 +12.9 SA 1831 2144 -13.7	0304 +12.1 0921 -13.0 1520 +12.9 2144 -13.7	<b>7</b> MO 1250 1540 +9.4 LU 1839 2200 -11.1	0329 +10.9 0951 -10.2 1540 +9.4 2200 -11.1	<b>22</b> MA 1908 2232 -11.1	0404 +12.9 1033 -10.7 1618 +8.1 2232 -11.1
<b>8</b> WE 1135 1456 +12.1 ME 1831 2138 -10.4	0241 +5.8 0844 -9.5 1456 +12.1 2138 -10.4	<b>23</b> TH 1145 1500 +14.8 JE 1826 2134 -13.3	0239 +9.2 0849 -12.8 1500 +14.8 2134 -13.3	<b>8</b> SA 1230 1536 +10.9 SA 1853 2207 -10.8	0326 +8.3 0937 -9.8 1536 +10.9 2207 -10.8	<b>23</b> SU 1305 1601 +11.4 DI 1907 2223 -13.0	0347 +12.4 1006 -12.1 1601 +11.4 2223 -13.0	<b>8</b> MA 1911 2236 -10.6	0408 +11.1 1032 -9.5 1618 +8.3 2236 -10.6	<b>23</b> WE 1429 1703 +6.3 ME 1948 2315 -9.4	0449 +11.6 1121 -9.1 1703 +6.3 2315 -9.4
<b>9</b> TH 1213 1531 +11.6 JE 1903 2212 -10.3	0319 +6.1 0922 -9.2 1531 +11.6 2212 -10.3	<b>24</b> FR 1232 1543 +14.0 VE 1904 2215 -13.3	0326 +10.0 0936 -12.5 1543 +14.0 2215 -13.3	<b>9</b> SU 1308 1610 +10.1 DI 1922 2239 -10.6	0401 +8.7 1014 -9.3 1610 +10.1 2239 -10.6	<b>24</b> LU 1943 2304 -11.9	0432 +12.0 1052 -10.8 1643 +9.6 2304 -11.9	<b>9</b> WE 1421 1701 +6.9 ME 1947 2317 -9.9	0451 +10.9 1118 -8.5 1701 +6.9 2317 -9.9	<b>24</b> TH 1529 1757 +4.6 JE 2033	0538 +10.1 1215 -7.6 1757 +4.6 2033
<b>10</b> FR 1250 1606 +10.9 VE 1934 2246 -10.0	0357 +6.3 1000 -8.7 1606 +10.9 2246 -10.0	<b>25</b> SA 1319 1627 +12.6 SA 1942 2256 -12.9	0412 +10.4 1023 -11.7 1627 +12.6 2256 -12.9	<b>10</b> MO 1350 1648 +8.9 LU 1952 2314 -10.2	0440 +8.9 1054 -8.6 1648 +8.9 2314 -10.2	<b>25</b> TU 1442 1729 +7.6 MA 2022 2348 -10.4	0519 +11.1 1142 -9.1 1729 +7.6 2348 -10.4	<b>10</b> TH 1519 1754 +5.4 JE 2030	0542 +10.3 1213 -7.4 1754 +5.4 2030	<b>25</b> FR 1643 1904 +3.2 2132	0636 +8.6 1320 -6.3 1904 +3.2 2132
<b>11</b> SA 1330 1643 +10.0 SA 2005 2321 -9.7	0436 +6.5 1039 -8.1 1643 +10.0 2321 -9.7	<b>26</b> SU 1408 1712 +10.8 DI 2020 2339 -12.1	0501 +10.5 1113 -10.4 1712 +10.8 2339 -12.1	<b>11</b> MA 2025 2353 -9.6	0524 +9.0 1140 -7.6 1730 +7.5 2353 -9.6	<b>26</b> WE 1542 1821 +5.6 ME 2104	0611 +10.0 1238 -7.4 1821 +5.6 2104	<b>11</b> FR 1023 1320 -6.6 VE 1633 1900 +4.2 2127	0643 +9.7 1320 -6.6 1900 +4.2 2127	<b>26</b> SA 1126 1435 -5.8 SA 1807 2025 +2.7 2251	0744 +7.5 1435 -5.8 2025 +2.7 2251
<b>12</b> SU 1412 1722 +8.9 DI 2037 2358 -9.4	0518 +6.7 1122 -7.3 1722 +8.9 2358 -9.4	<b>27</b> MO 1502 1759 +8.8 LU 2100	0552 +10.2 1206 -8.9 1759 +8.8 2100	<b>12</b> WE 1533 1820 +5.9 ME 2105	0615 +8.9 1235 -6.6 1820 +5.9 2105	<b>27</b> TH 1051 1345 -6.1 JE 1656 1925 +3.9 2157	0038 -8.8 0711 +8.9 1345 -6.1 1925 +3.9 2157	<b>12</b> SA 1136 1439 -6.4 SA 1757 2020 +3.8 2244	0109 -8.0 0754 +9.4 1439 -6.4 2020 +3.8 2244	<b>27</b> SU 1233 1550 -6.1 DI 1918 2144 +3.2	0224 -5.2 0857 +7.0 1550 -6.1 2144 +3.2
<b>13</b> MO 1501 1807 +7.6 LU 2112	0605 +6.9 1210 -6.5 1807 +7.6 2112	<b>28</b> TU 1012 1305 -7.4 MA 1603 1853 +6.8 2144	0025 -11.0 0648 +9.7 1305 -7.4 1853 +6.8 2144	<b>13</b> TH 1051 1343 -5.7 JE 1645 1922 +4.6 2153	0040 -9.0 0715 +8.8 1343 -5.7 1922 +4.6 2153	<b>28</b> FR 1206 1506 -5.5 VE 1825 2044 +3.0 2305	0138 -7.3 0821 +8.1 1506 -5.5 2044 +3.0 2305	<b>13</b> SU 1248 1557 -7.3 DI 1913 2140 +4.6	0227 -7.6 0908 +9.6 1557 -7.3 2140 +4.6	<b>28</b> MO 1332 1650 -7.0 LU 2009 2245 +4.4	0344 -5.3 1003 +7.2 1650 -7.0 2245 +4.4
<b>14</b> TU 1014 1307 -5.8 MA 1559 1858 +6.3 2151	0038 -9.0 0658 +7.2 1307 -5.8 1858 +6.3 2151	<b>29</b> WE 1123 1414 -6.3 ME 1715 1956 +5.0 2234	0116 -9.8 0750 +9.2 1414 -6.3 1956 +5.0 2234	<b>14</b> FR 1207 1503 -5.6 VE 1812 2036 +3.8 2256	0138 -8.4 0824 +9.0 1503 -5.6 2036 +3.8 2256	<b>29</b> SA 1318 1625 -5.9 SA 1946 2204 +3.0	0252 -6.4 0934 +7.9 1625 -5.9 2204 +3.0	<b>14</b> MO 1349 1700 -8.7 LU 2012 2248 +6.2	0348 -8.1 1016 +10.4 1700 -8.7 2248 +6.2	<b>29</b> TU 1419 1736 -8.0 MA 2048 2332 +5.8	0450 -6.1 1057 +7.7 1736 -8.0 2332 +5.8
<b>15</b> WE 1125 1416 -5.3 ME 1711 1957 +5.1 2237	0125 -8.7 0757 +7.8 1416 -5.3 1957 +5.1 2237	<b>30</b> TH 1239 1533 -5.8 JE 1839 2106 +3.9 2333	0215 -8.7 0856 +9.0 1533 -5.8 2106 +3.9 2333	<b>15</b> SA 1321 1623 -6.5 SA 1934 2153 +4.0	0248 -8.1 0935 +9.7 1623 -6.5 2153 +4.0	<b>30</b> DI 2045 2310 +3.9	0410 -6.4 1039 +8.3 1728 -6.9 2310 +3.9	<b>15</b> MA 2059 2344 +8.3	0459 -9.3 1115 +11.3 1752 -10.4 2344 +8.3	<b>30</b> WE 1458 1814 -9.0 ME 2120	0542 -7.2 1141 +8.4 1814 -9.0 2120
		<b>31</b> FR 0636 1003 +9.2 VE 2000 2218 +3.6	0322 -8.0 1003 +9.2 1649 -6.3 2218 +3.6			<b>31</b> MO 1507 1815 -8.1 LU 2128	0515 -7.0 1133 +9.0 1815 -8.1 2128				

## WEYNTON PASSAGE PST Z+8

2009

## CURRENT TABLES

## July-juillet

## August-août

## September-septembre

Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum
Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds
1 0555 0213 -4.2 WE 1257 1533 -2.1 ME 1827 2104 +1.8 2330	0317 -4.1 0643 0959 +3.5 TH 1403 1642 -2.3 JE 1946 2206 +1.5	16 0446 0105 -4.3 TH 1151 1422 -1.4 JE 1702 1941 +1.3 2201	0200 -4.3 0541 0858 +3.3 FR 1311 1540 -1.6 VE 1834 2053 +1.0 2255	1 0701 0355 -3.7 SA 1437 1728 -2.5 SA 2052 2248 +1.1	0448 -3.9 1105 +3.7 1809 -2.8 2132 +1.3	2 0039 0448 -3.9 2 0746 1105 +3.7 SU 1517 1809 -2.8 DI 2132 2338 +1.3	0406 -4.4 1030 +4.4 1719 -2.9 2300 +1.6	1 0130 0514 -3.7 0806 1119 +3.6 TU 1507 1809 -3.1 MA 2129	0002 +2.0 0555 -4.0 WE 0845 1154 +3.8 ME 1532 1831 -3.4 2148	16 0119 0456 -4.6 0745 1059 +4.4 WE 1433 1731 -4.2 ME 2041 2340 +3.0	0218 0546 -5.0 0834 1143 +4.6 TH 1506 1809 -4.8 JE 2115
3 0016 0414 -4.2 0726 1046 +3.8 FR 1455 1727 -2.6 VE 2048 2259 +1.4	0502 -4.3 0806 1125 +4.0 SA 1537 1821 -2.9 SA 2137 2347 +1.5	18 0634 0956 +3.9 SA 1411 1645 -2.0 SA 1947 2201 +1.1 2359	0304 -4.4 0956 +3.9 1645 -2.0 2201 +1.1	3 0134 0533 -4.1 0827 1143 +3.9 MO 1550 1841 -3.0 LU 2203	0533 -4.1 1143 +3.9 1841 -3.0	18 0107 0506 -5.0 0801 1119 +4.8 TU 1511 1759 -3.6 MA 2106 2352 +2.3	0506 -5.0 1119 +4.8 1759 -3.6 2352 +2.3	3 0035 0431 -4.2 0303 0631 -4.2 TH 0919 1227 +3.9 JE 1554 1852 -3.8 2207	0035 +2.4 0631 -4.2 1227 +3.9 1852 -3.8	18 0021 0431 +3.7 0308 0631 -5.2 FR 0919 1225 +4.6 VE 1537 1845 -5.2 2151	0021 +3.7 0631 -5.2 1225 +4.6 1845 -5.2
4 0103 0502 -4.3 0806 1125 +4.0 SA 1537 1821 -2.9 SA 2137 2347 +1.5	0502 -4.3 0806 1125 +4.0 SA 1537 1821 -2.9 SA 2137 2347 +1.5	19 0726 1048 +4.4 SU 1458 1737 -2.5 DI 2038 2302 +1.4	0410 -4.7 1048 +4.4 1737 -2.5 2302 +1.4	4 0223 0613 -4.4 TU 0905 1219 +4.1 MA 1617 1908 -3.2 2229	0613 -4.4 1219 +4.1 1908 -3.2	19 0210 0557 -5.4 0848 1203 +5.1 WE 1545 1838 -4.3 ME 2142	0557 -5.4 1203 +5.1 1838 -4.3	4 0339 0704 +4.0 FR 0951 1259 +4.0 VE 1615 1916 -4.2 2229	0105 +2.8 0704 +4.0 1259 +4.0 1916 -4.2	19 0356 0715 -5.1 SA 1003 1306 +4.4 SA 1610 1923 -5.5 2230	0100 +4.2 0715 -5.1 1306 +4.4 1923 -5.5
5 0148 0545 -4.4 0843 1201 +4.2 SU 1612 1858 -3.1 DI 2217	0545 -4.4 1201 +4.2 1858 -3.1	20 0104 0511 -5.2 0815 1135 +4.8 MO 1538 1821 -3.1 LU 2121 2357 +1.8	0511 -5.2 1135 +4.8 1821 -3.1 2357 +1.8	5 0057 0657 +1.9 0649 +4.6 WE 0940 1253 +4.3 ME 1642 1932 -3.5 2252	0657 +1.9 1253 +4.3 1932 -3.5	20 0304 0644 -5.7 0933 1246 +5.3 JE 1618 1916 -4.8 2222	0644 -5.7 1246 +5.3 1916 -4.8	5 0412 0737 +4.3 SA 1022 1330 +4.0 SA 1635 1944 -4.6 2254	0131 +3.1 0737 +4.3 1330 +4.0 1944 -4.6	20 0443 0758 -4.9 SU 1048 1349 +4.6 DI 1644 2001 -5.6 2312	0139 +4.5 0758 -4.9 1349 +4.6 2001 -5.6
6 0232 0625 -4.6 MO 0920 1237 +4.3 LU 1644 1931 -3.2 2252	0625 -4.6 1237 +4.3 1931 -3.2	21 0206 0605 -5.6 0903 1220 +5.2 TU 1615 1902 -3.7 MA 2203	0605 -5.6 1220 +5.2 1902 -3.7	6 0344 0724 -4.6 TH 1012 1327 +4.4 JE 1706 1957 -3.8 2317	0724 -4.6 1327 +4.4 1957 -3.8	21 0356 0729 -5.7 FR 1017 1329 +5.2 VE 1652 1954 -5.3 2304	0729 -5.7 1329 +5.2 1954 -5.3	6 0446 0809 -4.1 SU 1053 1401 +3.8 DI 1656 2015 -4.9 2323	0157 +3.4 0809 -4.1 1401 +3.8 2015 -4.9	21 0533 0843 -4.5 MO 1138 1433 +3.6 LU 1721 2041 -5.5 2356	0219 +4.5 0843 -4.5 1433 +3.6 2041 -5.5
7 0314 0702 -4.7 TU 0956 1312 +4.5 MA 1714 2001 -3.3 2326	0702 -4.7 1312 +4.5 2001 -3.3	22 0303 0654 -5.9 WE 0948 1305 +5.5 ME 1652 1943 -4.3 2248	0654 -5.9 1305 +5.5 1943 -4.3	7 0420 0757 -4.5 FR 1044 1400 +4.4 VE 1729 2024 -4.1 2344	0757 -4.5 1400 +4.4 2024 -4.1	22 0447 0814 -5.4 SA 1101 1413 +5.0 SA 1727 2034 -5.5 2350	0814 -5.4 1413 +5.0 2034 -5.5	7 0523 0844 -3.8 MO 1128 1433 +3.4 LU 1719 2049 -5.1 2356	0224 +3.7 0844 -3.8 1433 +3.4 2049 -5.1	22 0626 0930 -3.9 TU 1233 1518 +2.9 MA 1759 2123 -5.1	0301 +4.4 0930 -3.9 1518 +2.9 2123 -5.1
8 0353 0739 -4.7 WE 1031 1349 +4.5 ME 1740 2031 -3.5 2359	0739 -4.7 1349 +4.5 2031 -3.5	23 0357 0742 -5.9 TH 1033 1351 +5.6 JE 1730 2025 -4.7 2336	0742 -5.9 1351 +5.6 2025 -4.7	8 0457 0831 -4.3 SA 1116 1433 +4.3 SA 1751 2056 -4.4 2105	0831 -4.3 1433 +4.3 2056 -4.4	23 0541 0859 -4.8 SU 1149 1457 +4.4 DI 1805 2116 -5.5	0859 -4.8 1457 +4.4 2116 -5.5	8 0607 0923 -3.4 TU 1207 1506 +2.9 MA 1744 2127 -5.1	0256 +3.9 0923 -3.4 1506 +2.9 2127 -5.1	23 0042 0348 +4.0 0726 1023 -3.2 WE 1338 1608 +2.1 ME 1838 2206 -4.5	0348 +4.0 1023 -3.2 1608 +2.1 2206 -4.5
9 0430 0814 -4.5 TH 1105 1426 +4.5 JE 1813 2103 -3.6	0814 -4.5 1426 +4.5 2103 -3.6	24 0451 0829 -5.7 FR 1119 1437 +5.4 VE 1810 2108 -5.0	0829 -5.7 1437 +5.4 2108 -5.0	9 0013 0259 +2.7 0536 0906 -4.0 SU 1150 1506 +4.0 DI 1814 2130 -4.6	0259 +2.7 0906 -4.0 1506 +4.0 2130 -4.6	24 0037 0334 +3.8 0640 0948 -4.0 MO 1241 1544 +3.7 LU 1843 2159 -5.2	0334 +3.8 0948 -4.0 1544 +3.7 2159 -5.2	9 0035 0335 +3.9 0701 1010 -2.8 WE 1256 1544 +2.8 ME 1813 2208 -4.2	0335 +3.9 1010 -2.8 1544 +2.8 2208 -4.2	24 0130 0443 +3.6 0833 1127 -2.6 TH 1457 1708 +1.2 JE 1920 2253 -3.7	0443 +3.6 1127 -2.6 1708 +1.2 2253 -3.7
10 0033 0259 +1.8 0508 0850 -4.3 FR 1140 1503 +4.4 VE 1842 2136 -3.8	0259 +1.8 0850 -4.3 1503 +4.4 2136 -3.8	25 0027 0313 +3.2 0549 0918 -5.1 SA 1207 1525 +5.0 SA 1851 2153 -5.1	0313 +3.2 0918 -5.1 1525 +5.0 2153 -5.1	10 0045 0332 +2.9 0622 0944 -3.4 MO 1227 1540 +3.5 LU 1839 2207 -4.7	0332 +2.9 0944 -3.4 1540 +3.5 2207 -4.7	25 0128 0426 +3.5 0746 1043 -3.1 TU 1342 1633 +2.7 MA 1924 2245 -4.7	0426 +3.5 1043 -3.1 1633 +2.7 2245 -4.7	10 0121 0424 +3.8 0808 1109 -2.2 TH 1402 1629 +1.5 JE 1846 2256 -4.4	0424 +3.8 1109 -2.2 1629 +1.5 2256 -4.4	25 0224 0548 +3.2 0950 1249 -2.2 FR 1637 1829 +0.7 VE 2012 2351 -3.0	0548 +3.2 1249 -2.2 1829 +0.7 2351 -3.0
11 0107 0334 +1.8 0550 0928 -3.9 SA 1216 1540 +4.2 SA 1911 2213 -4.0	0334 +1.8 0928 -3.9 1540 +4.2 2213 -4.0	26 0120 0406 +3.2 0653 1009 -4.2 SU 1259 1614 +4.3 DI 1933 2240 -5.0	0406 +3.2 1009 -4.2 1614 +4.3 2240 -5.0	11 0123 0410 +3.0 0716 1028 -2.8 TU 1309 1616 +2.8 MA 1906 2247 -4.7	0410 +3.0 1028 -2.8 1616 +2.8 2247 -4.7	26 0222 0526 +3.2 0904 1151 -2.3 WE 1459 1732 +1.7 ME 2007 2335 -4.0	0526 +3.2 1151 -2.3 1732 +1.7 2335 -4.0	11 0217 0529 +3.6 0935 1226 -1.9 FR 1536 1734 +0.8 VE 1931 2354 -3.9	0529 +3.6 1226 -1.9 1734 +0.8 2354 -3.9	26 0326 0657 +2.9 1108 1416 -2.1 SA 1823 1953 +0.5 SA 2122	0657 +2.9 1416 -2.1 1953 +0.5
12 0143 0412 +1.9 0639 1009 -3.3 SU 1254 1619 +3.8 DI 1940 2251 -4.1	0412 +1.9 1009 -3.3 1619 +3.8 2251 -4.1	27 0216 0504 +3.0 0806 1107 -3.2 MO 1358 1706 +3.4 LU 2016 2329 -4.7	0504 +3.0 1107 -3.2 1706 +3.4 2329 -4.7	12 0206 0459 +3.0 0823 1123 -2.1 WE 1403 1657 +2.1 ME 1936 2332 -4.5	0459 +3.0 1123 -2.1 1657 +2.1 2332 -4.5	27 0320 0635 +3.0 1033 1322 -1.9 TH 1639 1852 +1.0 JE 2056	0635 +3.0 1322 -1.9 1852 +1.0	12 0324 0650 +3.5 1112 1350 -1.9 SA 1732 1914 +0.5 SA 2047	0650 +3.5 1350 -1.9 1914 +0.5	27 0436 0803 +2.8 SU 1212 1529 -2.3 DI 1925 2107 +0.8 2253	0803 +2.8 1529 -2.3 2107 +0.8
13 0222 0455 +2.0 0738 1055 -2.7 MO 1337 1658 +3.2 LU 2010 2332 -4.2	0455 +2.0 1055 -2.7 1658 +3.2 2332 -4.2	28 0314 0609 +2.9 0931 1218 -2.3 TU 1510 1805 +2.4 MA 2102	0609 +2.9 1218 -2.3 1805 +2.4	13 0259 0600 +3.1 0949 1236 -1.6 TH 1519 1750 +1.3 JE 2013	0600 +3.1 1236 -1.6 1750 +1.3	28 0423 0745 +2.9 FR 1201 1457 -1.9 VE 1833 2020 +0.7 2157	0745 +2.9 1457 -1.9 2020 +0.7	13 0438 0807 +3.6 SU 1224 1505 -2.3 DI 1851 2046 +0.8 2232	0807 +3.6 1505 -2.3 2046 +0.8	28 0545 0906 +2.8 MO 1300 1620 -2.6 LU 1959 2208 +1.2	0906 +2.8 1620 -2.6 2208 +1.2
14 0306 0547 +2.2 0850 1152 -2.1 TU 1429 1742 +2.5 MA 2042	0547 +2.2 1152 -2.1 1742 +2.5	29 0414 0720 +2.9 WE 1108 1348 -1.8 ME 1642 1920 +1.6 2149	0720 +2.9 1348 -1.8 1920 +1.6	14 0359 0715 +3.2 FR 1131 1402 -1.5 VE 1707 1910 +0.7 2105	0715 +3.2 1402 -1.5 1910 +0.7	29 0528 0850 +3.0 SA 1309 1612 -2.2 SA 1952 2132 +0.8 2311	0850 +3.0 1612 -2.2 2132 +0.8	14 0549 0913 +3.9 MO 1316 1605 -2.9 LU 1935 2157 +1.4	0913 +3.9 1605 -2.9 2157 +1.4	29 0020 0359 -2.7 0645 1000 +3.0 TU 1338 1655 -3.0 MA 2022 2256 +1.8	0359 -2.7 1000 +3.0 1655 -3.0 2256 +1.8
15 0354 0616 -4.3 WE 1017 1302 -1.6 ME 1535 1835 +1.8 2118	0616 -4.3 1302 -1.6 1835 +1.8	30 0514 0828 +3.0 TH 1238 1519 -1.8 JE 1826 2041 +1.1 2242	0828 +3.0 1519 -1.8 2041 +1.1	15 0506 0830 +3.5 SA 1253 1525 -1.7 SA 1850 2043 +0.6 2224	0830 +3.5 1525 -1.7 2043 +0.6	30 0628 0950 +3.1 SU 1359 1704 -2.5 DI 2038 2233 +1.1	0950 +3.1 1704 -2.5 2233 +1.1	15 0006 0359 -1.4 0651 1010 +4.2 TU 1358 1652 -3.6 MA 2009 2253 +2.2	0359 -1.4 1010 +4.2 1652 -3.6 2253 +2.2	30 0126 0448 -3.1 0735 1044 +3.1 WE 1408 1721 -3.3 ME 2041 2334 +2.4	0448 -3.1 1044 +3.1 1721 -3.3 2334 +2.4
		31 0610 0929 +3.2 FR 1346 1633 -2.1 VE 1952 2150 +1.0 2339	0929 +3.2 1633 -2.1 2150 +1.0			31 0027 0428 -3.4 0721 1039 +3.3 MO 1437 1741 -2.8 LU 2108 2322 +1.5	0428 -3.4 1039 +3.3 1741 -2.8 2322 +1.5				



## JUAN DE FUCA-EAST PST Z+8

2009

## CURRENT TABLES

July-juillet				August-août				September-septembre			
Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum	Turns	Maximum	reverse	maximum
Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds	Day Time	Time Knots	jour heure	heure noeuds
<b>1</b> 0912 WE 1420 ME 2141	0401 -2.5 1146 +0.7 1701 -0.9 2141 *	<b>16</b> 0758 TH 1318 JE 1850 2149	0228 -2.4 1004 +0.5 1543 -0.7 2005 +0.4	<b>1</b> 0931 SA 1611 SA 2328	0513 -2.3 1245 +1.6 1921 -1.1 2328 -0.5	<b>16</b> 0824 SU 1537 DI 2148	0410 -2.8 1146 +2.1 1804 -1.0 2148 *	<b>1</b> 1018 TU 1644 MA	0643 -2.3 1330 +2.0 1941 -1.5	<b>16</b> 0150 WE 0944 ME 1627 2240	0002 +0.6 0608 -2.7 1301 +2.6 1911 -1.8
<b>2</b> 0941 TH 1536 JE 2230	0447 -2.5 1232 +1.1 1821 -0.9 2230 -0.4	<b>17</b> 0824 FR 1451 VE 2209	0326 -2.6 1117 +1.1 1706 -0.7 2209 *	<b>2</b> 1012 SU 1654 DI 1954	0609 -2.4 1323 +1.8 1954 -1.2	<b>17</b> 0916 MO 1626 LU 2354	0515 -3.0 1238 +2.5 1856 -1.2 2354 *	<b>2</b> 0140 WE 1056 ME 1711	0140 * 0726 -2.4 1403 +2.1 2010 -1.6	<b>17</b> 0317 TH 1035 JE 1659 2321	0103 +1.0 0706 -2.7 1346 +2.6 1949 -2.1
<b>3</b> 1011 FR 1635 VE 2336	0532 -2.6 1309 +1.4 1943 -1.0 2336 -0.6	<b>18</b> 0903 SA 1558 SA 2254	0426 -2.8 1212 +1.7 1829 -0.8 2254 *	<b>3</b> 1050 MO 1050 LU 1729	0030 -0.4 0659 -2.5 1358 +1.9 2018 -1.3	<b>18</b> 1007 TU 1708 MA 2303	0617 -3.2 1326 +2.8 1939 -1.5	<b>3</b> 0027 TH 1133 JE 1733	0208 +0.4 0806 -2.4 1434 +2.1 2039 -1.8	<b>18</b> 0430 FR 1125 VE 1725	0802 -2.6 1426 +2.6 2027 -2.4
<b>4</b> 1042 SA 1722 SA	0619 -2.6 1342 +1.6 2034 -1.1	<b>19</b> 0946 SU 1653 DI	0528 -3.1 1301 +2.2 1928 -1.0	<b>4</b> 0119 TU 1127 MA 1756	0119 * 0742 -2.6 1430 +2.0 2044 -1.4	<b>19</b> 0233 WE 1056 ME 1744 2345	0055 +0.6 0715 -3.3 1411 +3.0 2017 -1.7	<b>4</b> 0045 FR 1207 VE 1752	0241 +0.6 0845 -2.3 1503 +2.1 2105 -2.0	<b>19</b> 0001 SA 0536 SA 1213 SA 1748	0250 +1.8 0859 -2.4 1505 +2.4 2106 -2.6
<b>5</b> 0037 SU 1114 DI 1759	0037 -0.6 0706 -2.6 1413 +1.8 2053 -1.1	<b>20</b> 0019 MO 1033 LU 1740	0019 * 0629 -3.3 1347 +2.7 2012 -1.2	<b>5</b> 0157 WE 1201 ME 1819	0157 * 0821 -2.7 1500 +2.1 2111 -1.5	<b>20</b> 0352 TH 1144 JE 1814	0155 +0.9 0809 -3.2 1453 +3.0 2056 -2.0	<b>5</b> 0107 SA 1241 SA 1809	0316 +0.8 0925 -2.2 1532 +2.0 2130 -2.2	<b>20</b> 0043 SU 0640 DI 1811	0337 +2.1 0955 -2.1 1541 +2.1 2147 -2.8
<b>6</b> 0124 MO 1147 LU 1830	0124 -0.6 0751 -2.7 1444 +1.9 2117 -1.2	<b>21</b> 0055 TU 1119 MA 1819	0055 * 0728 -3.5 1432 +2.9 2051 -1.5	<b>6</b> 0213 TH 1233 JE 1839	0213 * 0857 -2.6 1530 +2.2 2138 -1.6	<b>21</b> 0030 FR 1230 VE 1841	0251 +1.1 0901 -3.0 1532 +2.9 2136 -2.3	<b>6</b> 0132 SU 1316 DI 1824	0352 +0.9 1008 -1.9 1602 +1.8 2159 -2.3	<b>21</b> 0125 MO 0750 LU 1833	0423 +2.3 1051 -1.9 1618 +1.7 2230 -2.8
<b>7</b> 0203 TU 1221 MA 1854	0203 -0.5 0832 -2.7 1515 +2.0 2143 -1.3	<b>22</b> 0026 WE 1206 ME 1855	0153 +0.4 0822 -3.6 1515 +3.0 2128 -1.7	<b>7</b> 0316 FR 1304 VE 1858	0316 * 0930 -2.5 1559 +2.1 2203 -1.8	<b>22</b> 0118 SA 1315 SA 1905	0345 +1.4 0956 -2.7 1610 +2.7 2218 -2.5	<b>7</b> 0201 MO 1354 LU 1840	0430 +1.1 1055 -1.7 1631 +1.5 2232 -2.5	<b>22</b> 0209 TU 0906 MA 1443 MA 1855	0508 +2.3 1144 -1.7 1656 +1.3 2316 -2.6
<b>8</b> 0238 WE 1255 ME 1916	0238 -0.4 0910 -2.7 1548 +2.0 2210 -1.4	<b>23</b> 0109 TH 1253 JE 1926	0248 +0.5 0913 -3.5 1556 +3.0 2207 -1.9	<b>8</b> 0353 SA 1335 SA 1915	0353 * 1004 -2.3 1629 +2.0 2229 -1.9	<b>23</b> 0208 SU 1401 DI 1928	0438 +1.5 1052 -2.3 1647 +2.3 2302 -2.7	<b>8</b> 0234 TU 1435 MA 1858	0511 +1.2 1145 -1.5 1702 +1.1 2313 -2.5	<b>23</b> 0256 WE 1012 ME 1549 ME 1914	0557 +2.1 1236 -1.5 1737 +0.8
<b>9</b> 0314 TH 1328 JE 1938	0314 -0.3 0944 -2.6 1622 +2.0 2236 -1.4	<b>24</b> 0201 FR 1339 VE 1954	0343 +0.6 1003 -3.2 1637 +2.8 2249 -2.1	<b>9</b> 0430 SU 1407 DI 1931	0430 * 1041 -2.0 1658 +1.8 2300 -2.1	<b>24</b> 0259 MO 1450 LU 1950	0532 +1.5 1151 -1.9 1724 +1.8 2348 -2.7	<b>9</b> 0314 WE 0921 ME 1526 ME 1917	0557 +1.3 1236 -1.3 1736 +0.8 2359 -2.5	<b>24</b> 0350 TH 1111 JE 1712 1923	0005 -2.4 0652 +1.9 1327 -1.3 1827 +0.4
<b>10</b> 0348 FR 1401 VE 1959	0348 -0.3 1016 -2.4 1654 +1.9 2302 -1.5	<b>25</b> 0259 SA 1426 SA 2019	0441 +0.6 1056 -2.7 1717 +2.4 2334 -2.2	<b>10</b> 0512 MO 1441 LU 1947	0512 * 1127 -1.6 1727 +1.5 2337 -2.3	<b>25</b> 0355 MA 2009	0629 +1.5 1250 -1.5 1803 +1.2	<b>10</b> 0401 TH 1102 TH 1636 JE 1938	0651 +1.4 1327 -1.1 1816 +0.5	<b>25</b> 0450 FR 1206 VE 1852	0058 -2.1 0801 +1.7 1423 -1.2 1852 *
<b>11</b> 0423 SA 1433 SA 2019	0423 -0.4 1047 -2.2 1726 +1.8 2331 -1.7	<b>26</b> 0403 SU 1514 DI 2042	0543 +0.6 1154 -2.2 1756 +2.0	<b>11</b> 0429 TU 1521 MA 2004	0602 +0.4 1224 -1.3 1756 +1.2	<b>26</b> 0452 WE 1131 ME 1707 2023	0037 -2.6 0736 +1.4 1350 -1.2 1844 +0.7	<b>11</b> 0455 FR 1209 VE 1912	0052 -2.5 0755 +1.5 1420 -1.1 1912 *	<b>26</b> 0555 SA 1259 SA 2005	0156 -1.9 0931 +1.6 1546 -1.1 2005 *
<b>12</b> 0507 SU 1507 DI 2036	0507 -0.4 1122 -1.9 1757 +1.5	<b>27</b> 0510 MO 0855 LU 1607 2102	0024 -2.4 0655 +0.6 1259 -1.7 1835 +1.4	<b>12</b> 0019 WE 0508 ME 0859 2025	0019 -2.4 0704 +0.5 1325 -1.1 1827 +0.8	<b>27</b> 0552 TH 1240 JE 2013	0131 -2.4 0902 +1.4 1453 -1.1 2013 *	<b>12</b> 0554 SA 1312 SA 1925	0149 -2.5 0906 +1.7 1520 -1.0 1925 *	<b>27</b> 0659 SU 1350 DI 2304	0303 -1.7 1037 +1.6 1715 -1.2 2304 -0.4
<b>13</b> 0601 MO 1207 LU 1544 2053	0006 -1.8 0601 -0.4 1207 -1.5 1826 +1.3	<b>28</b> 0614 TU 1106 MA 1715 2117	0116 -2.4 0819 +0.7 1408 -1.3 1914 +0.9	<b>13</b> 0109 TH 0552 JE 1209 2047	0109 -2.5 0818 +0.8 1428 -0.9 1903 +0.5	<b>28</b> 0653 FR 1342 VE 2031	0230 -2.2 1026 +1.5 1618 -1.0 2031 *	<b>13</b> 0655 SU 1410 DI 2028	0250 -2.5 1016 +2.0 1634 -1.1 2028 *	<b>28</b> 0759 MO 1437 LU 2348	0428 -1.7 1129 +1.6 1801 -1.4 2348 *
<b>14</b> 0647 TU 1312 MA 1627 2111	0047 -2.0 0714 * 1312 -1.2 1856 +1.0	<b>29</b> 0711 WE 1258 ME 1946	0211 -2.4 1002 +0.9 1521 -1.0 1946 *	<b>14</b> 0205 FR 0641 SA 1330 VE 1930	0205 -2.6 0935 +1.2 1533 -0.8 1930 *	<b>29</b> 0751 SA 1438 SA 2144	0337 -2.1 1123 +1.6 1746 -1.1 2144 *	<b>14</b> 0753 MO 1503 LU 2117 2348	0355 -2.6 1117 +2.2 1743 -1.3 2315 +0.4	<b>29</b> 0853 TU 1518 MA 2259	0534 -1.8 1214 +1.7 1836 -1.5
<b>15</b> 0135 WE 1426 ME 1723 2130	0135 -2.2 0922 * 1426 -0.9 1928 +0.7	<b>30</b> 0801 TH 1413 JE 2106	0310 -2.4 1114 +1.2 1650 -0.9 2106 *	<b>15</b> 0306 SA 0732 SA 1438	0306 -2.7 1046 +1.6 1647 -0.8 2144 *	<b>30</b> 0846 SU 1529 DI 2300	0450 -2.1 1211 +1.7 1835 -1.2 2300 *	<b>15</b> 0850 TU 1549 MA 2159	0503 -2.7 1212 +2.5 1830 -1.5	<b>30</b> 0210 WE 0941 ME 1550 2317	0045 +0.4 0624 -1.9 1253 +1.7 1907 -1.7
		<b>31</b> 0847 FR 1517 VE 2211	0411 -2.3 1203 +1.4 1820 -1.0 2211 -0.4			<b>31</b> 0935 MO 1611 LU 2353	0553 -2.2 1253 +1.8 1910 -1.4 2353 *				



# Appendix 4: 2009 Staff and Management Resources

## ***Fraser River Integrated Management Team***

### ***Contacts***

#### ***Title***

Regional Recreational Fisheries Co-ordinator  
 Resource Manager – Kamloops (AFS / Recreational)  
 Stock Assessment Biologist  
 Regional Salmon Officer  
 Resource Manager - Aboriginal Fisheries - Lower Fraser  
 Resource Management Co-ordinator (Areas 11 to 13 and 27)  
 Asst. Resource Manager – Quesnel (AFS / Recreational)  
 Resource Manager - Aboriginal Fisheries - Lower Fraser  
 Resource Manager - Strait of Georgia (Areas 14 to 16)  
 Regional Resource Manager - Salmon  
 Resource Management Biologist (Sockeye, Pink) - Lower Fraser  
 Chief - Resource Management Operations - Ottawa  
 Area Chief, Resource Management - BCI  
 Resource Manager - AFS (Strait of Georgia)  
 Groundfish Recreational Manager  
 A/Senior Technician - Science - PBS  
 Area Chief, Resource Management, South Coast  
 Asst. Resource Manager – Kamloops (AFS / Recreational)  
 Resource Manager – Commercial Salmon (Area E)  
 Resource Manager - WCVI/Strait of Georgia (Areas 17 to 20)  
 Resource Management Biologist - Lower Fraser  
 Habitat Research Biologist  
 Resource Management Biologist - South Coast  
 Aboriginal Affairs Advisor - Lower Fraser  
 Resource Manager – WCVI (Areas 25 to 26) & WCVI AFS  
 Resource Manager - PICFI  
 Lead- Salmon Team  
 Resource Management Biologist - Kamloops  
 Senior Resource Management Biologist - Kamloops  
 Recreational Co-ordinator - South Coast  
 Resource Manager - Recreational Fisheries, Lower Fraser  
 Resource Manager - Campbell River (Areas 12 to 13)  
 Resource Manager – Williams Lake (AFS / Recreational)  
 Salmon and Herring Co-ordinator, South Coast  
 Area Director, Lower Fraser  
 Special Projects Officer - Treaty and Aboriginal Policy  
 Resource Manager – Campbell River (Areas 11, 12 and 27)  
 A/Area Chief, Resource Management, Lower Fraser  
 Area Chief, Salmon Stock Assessment, BCI

#### ***Name***

Adams, Devona  
 Allan, Dean  
 Benner, Keri  
 Binning, Kelly  
 Bonnet, Terri  
 Brahniuk, Randy  
 Charbonneau, Alan  
 Evers, Sheldon  
 Goruk, Andrea  
 Grout, Jeff  
 Huang, Ann-Marie  
 James, Heather  
 Jantz, Lester  
 Joe, Jonathan  
 Mawani, Tamee  
 Carmen McConnell  
 Gordon McEachen  
 Mochizuki, Merv  
 Mueller, Barbara  
 Palfrey, Terrence  
 Parslow, Matthew  
 Patterson, David  
 Pechter, Beth  
 Point, Jordan  
 Preston, Paul  
 Reedman, Dave  
 Ryall, Paul  
 Samaha, Cindy  
 Scroggie, Jamie  
 Shaw, Bill  
 Sneddon, Debra  
 Spencer, Kent  
 Stevens, Linda  
 Thomas, Greg  
 Trager, Diana  
 Trotti, Jennifer  
 Byron Koke  
 Wall, Adrian  
 Timber Whitehouse,

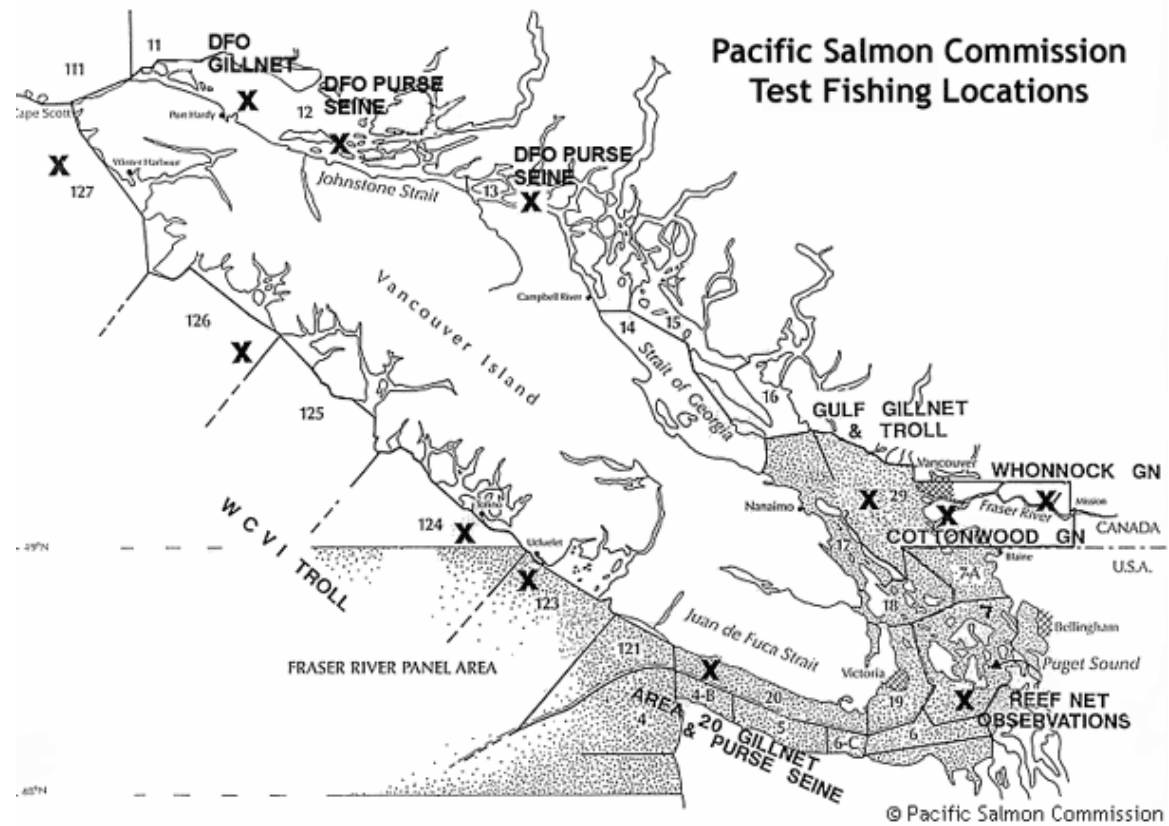
**Fraser River Panel**

Alternate Chair, Fraser River Panel	Brahniuk, Randy
Fraser River Panel	Assu, Brian
Fraser River Panel	Chatwin, Murray
Fraser River Panel	Griswold, Mike
Fraser River Panel	Lubzinski, Terry
Fraser River Panel	Rombough, Les
Fraser River Panel	Sakich, Peter
Fraser River Panel	Wick, Larry
Fraser River Panel	Bird, Tom
Fraser River Panel	Malloway, Ken
Fraser River Panel	Shepert, Marcel
Administrative support - Fraser River Panel	Soronow, Rebecca
<b>Fraser River Technical Committee</b>	
<b>Canadian Members</b>	
	Jantz, Les (Co-Chair)
	Pecter, Beth
	Huang, Ann-Marie
	Scroggie, Jamie
	Staley, Mike

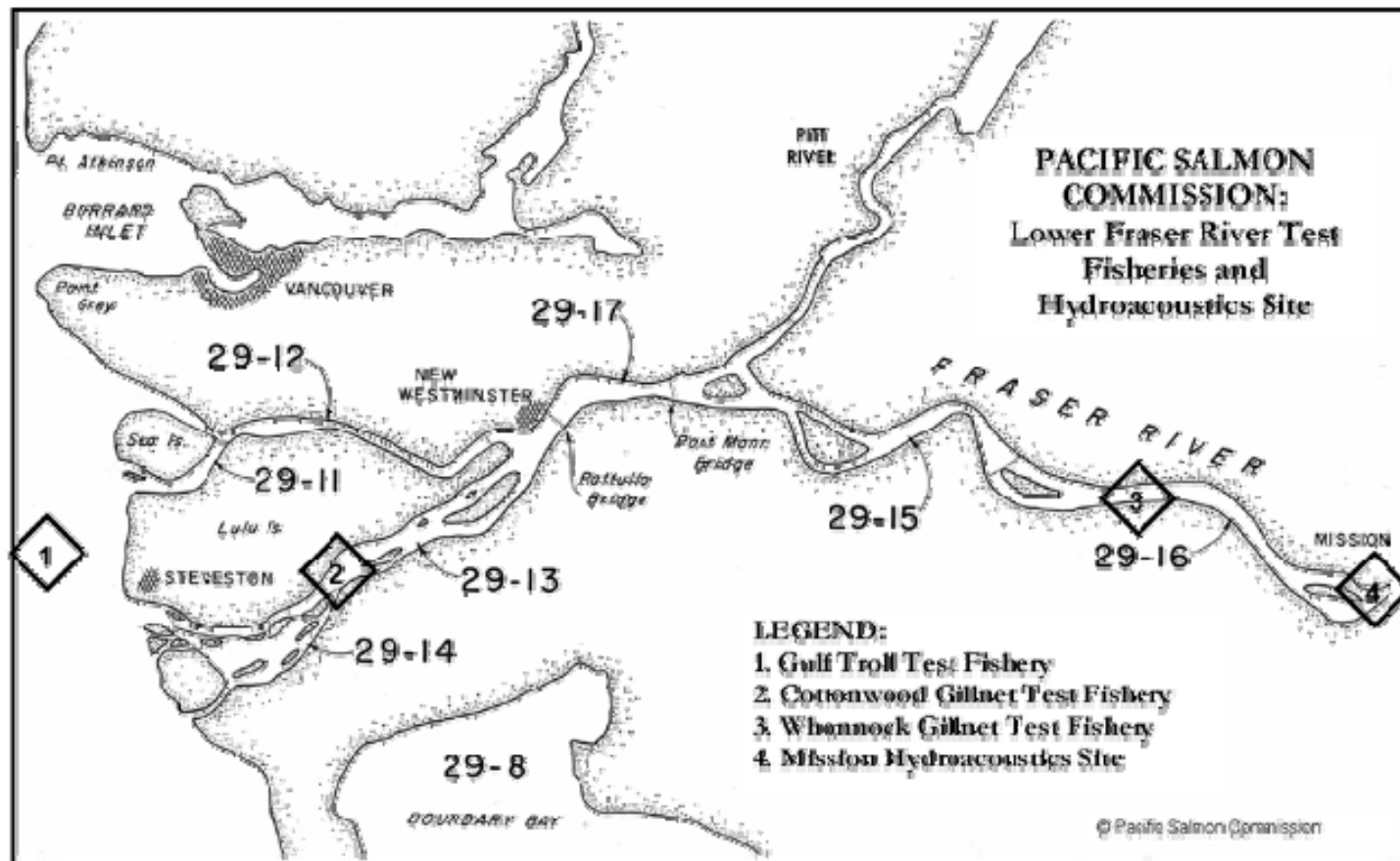
**2008 Charter Patrolmen**

Area	Location	Vessel	Operator	Start/End/Duration
29	Fraser River (Port Mann to Mission)	Various	Great River Adventures	Mid July to beginning of November
Region 2	Non-tidal Fraser River	Citmexw	CEJ Mussell	May to end of October
29	Mouth of Fraser River	Texada Belle	Dick Tritchler	During Area H opening and FSC fishing activity (July 26-30/08)
18 and 29	Pender Bluffs	Springer	Rick Hobbs	During pink openings for Area H (Sept. 13, 14)
13-7, 13-8, 13-9, 13-27, 13-28	Discovery Pass Seymour Narrows	A-Tlegay	A-Tlegay Fisheries Society	During sockeye migration (90 days)
12-1, 13-29 to 13-32	Lower Johnstone Straits	Discovery Huntress	Chris Bunn	During sockeye migration 73 days
12-3, 12-4	Robson Bight west	Port Lincoln	Glen Neieraurer	During sockeye migration 69 days
12-5, 12-6	Black fish Sound	unfunded		
12-8	North shore	Shallon	Kevin VanCleemput	During sockeye migration 57 days
12-3	Robson Bight (troll)	unfunded		

## Appendix 5: Test Fishing Maps







# Pacific Salmon Commission



600 - 1155 Robson Street  
Vancouver, B.C.  
V6E 1B5  
(604)684-8081  
(604)666-8707 (fax)

To: Barry Rosenberger, Chair Fraser River Panel  
Lorraine Loomis, Vice Chair, Fraser River Panel  
From: Mike Lapointe, Jim Cave, Keith Forrest PSC staff  
Date: June 18, 2009  
Re: Final agreed 2009 Test Fishing Schedule

Our file: 69001

For planning purposes, below find the proposed schedule for the 2009 Fraser River Sockeye test fishing program. Test fishing schedules are subject to change depending on salmon abundance, management requirements and funding. The schedule, and therefore our assessment capability, is similar to past years. Please note that the start-up of the Area 20 gill net test fishery is typical for the dominant cycle on the Early Stuart run. End dates are typical for this cycle line.

## Panel Area Waters

1. Area 20 Gillnet:	June 22	–	Aug 15
2. Area 4B, 5 Gillnet:	July 15	–	July 25
3. Area 29, Whonnock gillnet:	June 22	–	September 22*
4. Area 29, Cottonwood gillnet:	July 13	–	September 22*
5. Mission Drift and set-net:	August 10	–	September 22**
6. Area 7 Reef net:	July 20	–	August 25
7. Area 20 Purse Seine:	July 20	–	September 10***

## Non-Panel Area Waters

1. Area 12 Round Island Gillnet:	July 12	–	August 15
2. Area 12 Purse Seine:	July 20	–	September 10***
3. Area 13 Purse Seine:	July 20	–	September 10***
4. Area 12 GN assessment	July (approximately 4 days total)****		

\* End dates of river test fisheries will be based on sockeye and pink salmon CPUE information as well as required information on species composition for hydroacoustic estimates of daily passage.

\*\* Monday, Wednesday and Friday, as required for information on species composition for hydroacoustic estimates of daily passage.

\*\*\* Start dates for the purse seine test fisheries will be predicated on abundance as indicated by sockeye catches in the gillnet test fisheries. These test fisheries will be terminated based on low levels of pink salmon CPUE.

\*\*\*\* To augment CPUE data collected at Round Island with data from the Naka Creek area

## **Policy For Fraser River Panel Authorized Fraser Sockeye and Pink Salmon Test Fisheries**

**Scope:** This policy shall guide implementation of Fraser River sockeye and pink salmon test fisheries conducted by the Pacific Salmon Commission (PSC), acting through its Fraser River Panel and PSC staff.

**Authority and Responsibility:** This authority of the PSC to conduct test fisheries and the delineation of responsibilities of the PSC and the Parties to the Pacific Salmon Treaty in the conduct of such fisheries is derived from the following:

**Diplomatic Note of August 13, 1985 Pacific Salmon Treaty, Part A. paragraph 1,** *The Fraser River Panel established pursuant to the Treaty shall assume the following responsibilities consistent with the Treaty; section c) conduct test fishing on Fraser River sockeye and pink salmon;*

**Article II, paragraph 13, Pacific Salmon Treaty,** *The Commission shall authorize the disbursement of funds contributed by the Parties pursuant to paragraph 12, and may enter into contracts and acquire property necessary for the performance of its functions.*

**Exchange of Diplomatic Notes (June 30, 1999) Pacific Salmon Treaty, paragraph 7,** *Each Government shall take the necessary steps to implement the obligations under this Agreement consistent with its national laws.*

### **Understanding:**

In consultation with the Fraser River Panel, staff of the PSC will carry out Fraser River Panel approved test fisheries for the purposes of fishery management and conservation of Fraser River sockeye and pink salmon. The test fishing program will be carried out in Fraser River Panel Area Waters as defined in Annex II of the Pacific Salmon Treaty, and in other areas (non-Fraser River Panel Areas) if requested by the Fraser River Panel. The removal of fish for assessment, sampling and other purposes, must be done consistently with the regulations of the jurisdiction within which the fish removals will occur.

### **Purpose and Definition:**

The purpose of the test fishing program is to collect physical, biological and, catch per unit effort information which is used to provide estimates of run size and other stock assessment data for key stock components of Fraser River sockeye and pink salmon runs. These data, in conjunction with information from other programs of the PSC, will be used to assist the Fraser River Panel to achieve its hierarchy of objectives as specified in paragraph 10, Chapter 4, Annex IV of the Treaty: “(a) obtain spawning escapement goals by stock or stock groupings; (b) meet Treaty defined international allocation; and (c) achieve domestic objectives” for Fraser River sockeye and pink salmon. Panel approved test fisheries will provide in-season information for stock assessment (stock composition, abundance, diversion rate, by-catch and migration timing). This information will be used to determine progress towards escapement goals, allowable harvest levels, and will identify potential directed fishing opportunities.

The treatment and accounting of test fishing catches with respect to TAC is specified in paragraph 3, Chapter 4, Annex IV of the Treaty.

Panel approved test fisheries are small scale fishing programs, usually including 1-2 vessels operating in identified areas. These vessels operate fishing gear in a defined and consistent pattern designed, coordinated and administered by PSC staff in consultation with government agencies, fishing representatives from user-groups, and members of the Fraser River Panel and its technical committee as required.

**Key Elements of Test fishing Operations:**

1. Test fisheries will be operated in a consistent manner to obtain the necessary catch per unit effort and biological information (refer to Appendix A for criteria) for management and conservation of Fraser River sockeye and pink salmon. Consistency in operation is vital to preserve the integrity of the long term database.
2. Commercial and other authorized fisheries will be conducted in a manner that does not interfere with the proper operation of Panel approved test fisheries and the collection of consistent data.
3. Staff of the PSC, in consultation with the Fraser River Panel Technical Committee and management agencies as required, will design a test fishing program and provide a test fishing schedule to the Fraser River Panel for their review and approval.
4. The Executive Secretary will provide to the Finance and Administration Committee budget plans for their review.
5. PSC staff and management agencies as required will have the responsibility to implement the test fishing program.
6. Test fishing vessels and operators will be contracted by the Executive Secretary to undertake Fraser River Panel approved test fishing operations. Termination within a season shall be at the discretion of the Executive Secretary.
7. Test fishers will be selected according to their experience with the gear and area of the test fishery. Preferred candidates must have sufficient experience as vessel captain. Candidates, who have previous experience in research charters, where they have shown a willingness to conform to guidelines and direction, may receive a higher ranking. References from research agencies and the respect of industry representatives and peers will be considered. The vessel and gear are suitable for the test fishery and the vessel conforms to each countries standard of safety and stability. The fisher has the ability to provide personal observations of activities and conditions during the test fishing period. The value for services rendered is also considered in the selection process.
8. Contracts with test fishing vessel operators to deliver test fishing activities shall be developed and will detail the responsibilities of the contracting parties. Test fishing activities shall commence only after contracts have been signed and exchanged and would be valid for one fishing season. The Executive Secretary will sign on behalf of the PSC.
9. All data collection activities undertaken in Canadian waters will be licensed by the Minister of Fisheries and Oceans under section 52 of the *Fishery General Regulations*.
10. For test fishing activities undertaken in Canadian waters, all fish that are not required for scientific purposes will be returned alive to the water where there is a reasonable expectation of their survival. Fish that are unavoidably killed as a result of the test activity, or cannot be returned alive to the water with a reasonable expectation of survival, may be retained and disposed of by the [Section 52] license holder.
11. For test fishing activities undertaken in U.S. waters, any fish captured and retained in the test fishing program become the property of the PSC.
12. The test fishery will follow an operational plan that describes the requirements for data collection and reporting, as well as the test fishing locations, fishing times and frequency and fishing gear required.
13. PSC staff will review the analysis of test fishing data with the Fraser River Panel and its Technical Committee as required in-season.

**Final agreed document****June 18, 2009**

- 14.** Additional post season review and assessment of the test fishing program will be provided to the Fraser River Panel and its Technical Committee as requested by the Fraser River Panel with respect to the criteria in Appendix A.

**Appendix A**

Test fisheries will be considered and may be approved by the Fraser River Panel when the test fishery can provide useful and reliable information that will contribute to one or more of the following objectives:

1. Provide salmon catch and effort information for analysis of stock or stock group run timing [and abundance].
2. Estimate of diversion rates for integration into abundance estimation or other assessment models.
3. Provide species composition (salmon catch) information to be used for proportioning daily estimates of passage from the Hydroacoustics Program into migration by salmon species.
4. Provide information on stock composition and age-at-return, including DNA, sex, length and scales.
5. Provide other biological information as required, including fish health, endocrinology, physiology and radio tagging of salmon.
6. Provide a platform for the collection of oceanographic and limnological information, including physical, chemical, weather and other pertinent information as required.
7. Provide data to assess by-catch impacts on other species or stocks.

Fishery Name	Trip Date	Vessel Count	Set Count	Effort	Sockeye Adult Caught	Sockeye Jack Caught	Pink Caught	Chinook Adult Caught	Chinook Adult Released	Chinook Jack Caught	Chinook Jack Released	Coho Caught	Coho Released	Steelhead Caught	Chum Caught	Other Species
Area 12 - Blinkhorn Sockeye Seine	20/07/2009	1	6	6	284	2	355	2	2	0	0	12	12	2	1	1
Area 12 - Blinkhorn Sockeye Seine	21/07/2009	1	6	6	118	3	287	7	7	5	5	9	9	0	3	0
Area 12 - Blinkhorn Sockeye Seine	22/07/2009	1	6	6	73	1	407	9	9	1	1	6	6	0	4	0
Area 12 - Blinkhorn Sockeye Seine	23/07/2009	1	6	6	94	6	1381	18	18	4	4	15	15	0	7	3
Area 12 - Blinkhorn Sockeye Seine	24/07/2009	1	5	5	64	0	912	13	13	2	2	10	10	1	9	0
Area 12 - Blinkhorn Sockeye Seine	25/07/2009	1	6	6	360	4	578	0	0	0	0	15	15	0	6	0
Area 12 - Blinkhorn Sockeye Seine	26/07/2009	1	6	6	235	9	1480	14	14	0	0	18	18	0	9	0
Area 12 - Blinkhorn Sockeye Seine	27/07/2009	1	6	6	232	8	1812	20	20	0	0	15	15	1	2	1
Area 12 - Blinkhorn Sockeye Seine	28/07/2009	1	6	6	1664	16	3661	6	6	0	0	3	3	0	9	0
Area 12 - Blinkhorn Sockeye Seine	29/07/2009	1	6	6	1787	111	5610	19	19	1	1	18	18	1	10	0
Area 12 - Blinkhorn Sockeye Seine	30/07/2009	1	6	6	2063	77	2890	22	22	0	0	8	8	0	6	0
Area 12 - Blinkhorn Sockeye Seine	31/07/2009	1	6	6	1288	83	3977	16	16	2	2	12	12	0	16	5
Area 12 - Blinkhorn Sockeye Seine	01/08/2009	1	6	6	821	10	3050	18	18	0	0	11	11	0	10	0
Area 12 - Blinkhorn Sockeye Seine	02/08/2009	1	5	5	1013	4	2190	15	15	0	0	21	21	0	38	0
Area 12 - Blinkhorn Sockeye Seine	03/08/2009	1	6	6	346	4	2170	27	27	0	0	15	15	0	38	0
Area 12 - Blinkhorn Sockeye Seine	04/08/2009	1	6	6	430	5	5652	15	15	0	0	12	12	0	27	0
Area 12 - Blinkhorn Sockeye Seine	05/08/2009	1	6	6	153	47	5415	6	6	2	2	12	12	0	6	0
Area 12 - Blinkhorn Sockeye Seine	06/08/2009	1	6	6	114	8	2070	3	3	2	2	27	27	0	6	0
Area 12 - Blinkhorn Sockeye Seine	07/08/2009	1	6	6	443	61	3785	8	8	2	2	54	54	0	18	0
Area 12 - Blinkhorn Sockeye Seine	08/08/2009	1	6	6	563	44	1745	5	5	0	0	29	29	0	17	0
Area 12 - Blinkhorn Sockeye Seine	09/08/2009	1	6	6	1095	0	4375	13	13	0	0	28	28	0	58	0
Area 12 - Blinkhorn Sockeye Seine	10/08/2009	1	6	6	1064	0	4110	17	17	0	0	44	44	0	44	0
Area 12 - Blinkhorn Sockeye Seine	11/08/2009	1	6	6	716	76	2004	8	8	1	1	28	28	0	38	0
Area 12 - Blinkhorn Sockeye Seine	12/08/2009	1	2	2	236	20	1100	1	1	0	0	8	8	0	13	0
Area 12 - Blinkhorn Sockeye Seine	13/08/2009	1	6	6	446	49	4498	18	18	2	2	50	50	0	12	0
Area 12 - Blinkhorn Sockeye Seine	14/08/2009	1	6	6	98	33	3530	30	30	0	0	23	23	0	7	0
Area 12 - Blinkhorn Sockeye Seine	15/08/2009	1	6	6	277	18	5481	20	20	0	0	32	32	0	11	0
Area 12 - Blinkhorn Sockeye Seine	16/08/2009	1	6	6	250	24	4675	9	9	0	0	48	48	0	26	0
Area 12 - Blinkhorn Sockeye Seine	17/08/2009	1	6	6	486	47	9953	12	12	1	1	31	31	0	34	0
Area 12 - Blinkhorn Sockeye Seine	18/08/2009	1	5	5	360	26	5754	14	14	0	0	32	32	0	49	0
Area 12 - Blinkhorn Sockeye Seine	19/08/2009	1	6	6	494	31	8125	13	13	0	0	34	34	0	34	0
Area 12 - Blinkhorn Sockeye Seine	20/08/2009	1	6	6	453	29	7535	3	3	0	0	30	30	0	21	0
Area 12 - Blinkhorn Sockeye Seine	21/08/2009	1	6	6	372	27	9290	8	8	0	0	59	59	0	18	0
Area 12 - Blinkhorn Sockeye Seine	22/08/2009	1	6	6	592	84	10066	16	16	1	1	69	69	0	19	1
Area 12 - Blinkhorn Sockeye Seine	23/08/2009	1	6	6	1079	51	14130	5	5	1	1	63	63	0	45	0
Area 12 - Blinkhorn Sockeye Seine	24/08/2009	1	6	6	543	19	8802	2	2	0	0	23	23	0	9	0
Area 12 - Blinkhorn Sockeye Seine	25/08/2009	1	6	6	601	40	12450	4	4	2	2	35	35	0	18	0
Area 12 - Blinkhorn Sockeye Seine	26/08/2009	1	5	5	553	34	16000	9	9	0	0	29	29	0	22	0
Area 12 - Blinkhorn Sockeye Seine	27/08/2009	1	1	1	27	3	1500	0	0	0	0	4	4	0	2	0
Area 12 - Blinkhorn Sockeye Seine	28/08/2009	1	6	6	126	14	7270	7	7	3	3	29	29	0	9	0
Area 12 - Blinkhorn Sockeye Seine	29/08/2009	1	6	6	103	28	13965	0	0	0	0	112	112	0	19	0
Area 12 - Blinkhorn Sockeye Seine	30/08/2009	1	6	6	134	31	9072	7	7	0	0	130	130	0	26	0
Area 12 - Blinkhorn Sockeye Seine	31/08/2009	1	6	6	26	5	7372	2	2	0	0	83	83	0	7	0
Area 12 - Blinkhorn Sockeye Seine	01/09/2009	1	6	6	59	9	3897	6	6	0	0	26	26	0	10	0
Area 12 - Blinkhorn Sockeye Seine	02/09/2009	1	6	6	21	6	1202	1	1	0	0	34	34	0	6	0
Area 12 - Blinkhorn Sockeye Seine	03/09/2009	1	6	6	78	6	3250	11	11	0	0	49	49	0	33	0
Area 12 - Blinkhorn Sockeye Seine	04/09/2009	1	3	3	32	3	1110	0	0	4	4	46	46	0	14	0
Area 12 - Blinkhorn Sockeye Seine	05/09/2009	1	6	6	83	7	2720	3	3	1	1	62	62	0	34	0
Area 12 - Blinkhorn Sockeye Seine	06/09/2009	1	6	6	41	0	1550	1	1	1	1	35	35	0	22	0
Area 12 - Blinkhorn Sockeye Seine	07/09/2009	1	6	6	174	38	5812	1	1	0	0	288	288	0	51	0
Area 12 - Blinkhorn Sockeye Seine	08/09/2009	1	3	3	106	11	3950	0	0	0	0	185	185	0	0	0
Area 12 - Blinkhorn Sockeye Seine	09/09/2009	1	6	6	19	5	1291	1	1	0	0	32	32	0	26	0
Area 12 - Blinkhorn Sockeye Seine	10/09/2009	1	6	6	21	2	1640	0	0	0	0	26	26	0	0	0
Area 12 - Blinkhorn Sockeye Seine	11/09/2009	1	6	6	41	13	3420	3	3	0	0	104	104	0	67	0
Area 12 - Blinkhorn Sockeye Seine	12/09/2009	1	6	6	36	4	3396	1	1	1	1	117	117	0	72	0
Area 12 - Blinkhorn Sockeye Seine	13/09/2009	1	6	6	0	0	54	0	0	0	0	9	9	0	1	9
Area 12 - Blinkhorn Sockeye Seine	14/09/2009	0	0	0												0
Area 12 - Blinkhorn Sockeye Seine	15/09/2009	0	0	0												0
Area 12 - Blinkhorn Sockeye Seine	16/09/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	17/07/2009	1	4	93.4	91	0	18	0	0	0	0	3	2	0	1	4
Area 12 - Naka Creek Sockeye Gillnet	18/07/2009	1	4	93.7	168	0	25	0	0	0	0	12	1	2	6	0
Area 12 - Naka Creek Sockeye Gillnet	19/07/2009	1	4	103	285	0	72	0	0	1	1	8	4	0	2	2
Area 12 - Naka Creek Sockeye Gillnet	20/07/2009	1	3	64.7	177	0	42	1	0	0	0	7	0	0	0	0
Area 12 - Naka Creek Sockeye Gillnet	21/07/2009	1	4	92.8	195	0	164	0	0	0	0	18	0	1	0	4
Area 12 - Naka Creek Sockeye Gillnet	22/07/2009	1	5	90.4	152	0	77	1	0	0	0	14	0	0	4	4
Area 12 - Naka Creek Sockeye Gillnet	23/07/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	24/07/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	25/07/2009	1	4	100	57	0	14	0	0	0	0	8	8	0	2	4
Area 12 - Naka Creek Sockeye Gillnet	26/07/2009	1	4	97.7	33	0	3	0	0	0	0	5	5	2	3	2
Area 12 - Naka Creek Sockeye Gillnet	27/07/2009	1	4	103	24	0	4	0	0	0	0	6	6	0	0	0
Area 12 - Naka Creek Sockeye Gillnet	28/07/2009	1	3	68	51	0	5	0	0	0	0	27	27	0	1	0
Area 12 - Naka Creek Sockeye Gillnet	29/07/2009	1	4	104	113	0	12	1	1	0	0	8	8	0	2	0
Area 12 - Naka Creek Sockeye Gillnet	30/07/2009	1	4	104	197	0	6	1	1	0	0	5	5	1	1	1
Area 12 - Naka Creek Sockeye Gillnet	31/07/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	01/08/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	02/08/2009	0	0	0												0
Area 12 - Naka Creek Sockeye Gillnet	03/08/2009	0	0	0												0
Area 12 - Round Island Sockeye Gillnet	12/07/2009	1	3	84	5	0	1	0	0	2	0	5	1	0	3	3
Area 12 - Round Island Sockeye Gillnet	13/07/2009	1	3	80.3	16	0	0	3	1	0	0	7	2	0	2	3
Area 12 - Round Island Sockeye Gillnet	14/07/2009	1	3	79.7	17	0	1	1	0	0	0	5	1	0	0	2
Area 12 - Round Island Sockeye Gillnet	15/07/2009	1	3	85.2	7	0	0	0	0	0	0	2	1	0	1	1
Area 12 - Round Island Sockeye Gillnet	16/07/2009	1	3	81.6	30	0	31	1	0	1	0	14	3	0	1	7
Area 12 - Round Island Sockeye Gillnet	17/07/2009	1	3	84.8	25	0	12	1	0	1	1	21	9	0	0	14
Area 12 - Round Island Sockeye Gillnet	18/07/2009	1	3	89	21	0	12	1	0	0	0	8	3	0	0	27
Area 12 - Round Island Sockeye Gillnet	19/07/2009	1	3	83.9	31	0	75	4	4	2	2	17	10	0	0	5
Area 12 - Round Island Sockeye Gillnet	20/07/2009	1	3	88.5	21	0	25	3	0	2	2	11	3	0	2	17
Area 12 - Round Island Sockeye Gillnet	21/07/2009	1	3	88.2	59	0	28	2	2	0	0	27	11	0	2	8

Area 12 - Round Island Sockeye Gillr	22/07/2009	1	3	91.2	35	0	15	2	2	0	0	24	13	0	2	18
Area 12 - Round Island Sockeye Gillr	23/07/2009	1	3	83.9	20	0	37	2	0	1	1	15	2	0	1	3
Area 12 - Round Island Sockeye Gillr	24/07/2009	1	3	77.2	9	0	6	0	0	0	0	6	0	0	0	1
Area 12 - Round Island Sockeye Gillr	25/07/2009	1	3	81.1	22	0	12	0	0	0	0	3	0	0	0	0
Area 12 - Round Island Sockeye Gillr	26/07/2009	1	3	71.3	49	0	8	1	0	0	0	8	0	0	1	0
Area 12 - Round Island Sockeye Gillr	27/07/2009	1	3	75	3	0	5	4	0	0	0	5	0	0	3	4
Area 12 - Round Island Sockeye Gillr	28/07/2009	1	3	61	29	0	12	1	0	0	0	4	0	0	1	0
Area 12 - Round Island Sockeye Gillr	29/07/2009	1	3	83.6	17	0	10	1	0	1	0	2	0	0	1	5
Area 12 - Round Island Sockeye Gillr	30/07/2009	1	3	70.3	28	0	7	0	0	0	0	0	0	0	2	1
Area 12 - Round Island Sockeye Gillr	31/07/2009	1	3	84.7	30	0	16	0	0	0	0	2	0	0	2	0
Area 12 - Round Island Sockeye Gillr	01/08/2009	1	3	93.1	93	0	45	2	0	0	0	4	0	1	2	3
Area 12 - Round Island Sockeye Gillr	02/08/2009	1	3	90.6	38	0	30	0	0	0	0	4	1	0	0	0
Area 12 - Round Island Sockeye Gillr	03/08/2009	1	3	91.5	39	0	18	4	2	0	0	6	2	0	6	1
Area 12 - Round Island Sockeye Gillr	04/08/2009	1	3	96.1	16	0	11	1	1	0	0	1	1	0	2	1
Area 12 - Round Island Sockeye Gillr	05/08/2009	1	1	23.1	34	0	11	1	1	0	0	3	1	0	2	0
Area 12 - Round Island Sockeye Gillr	06/08/2009	1	3	93.9	62	0	65	2	0	0	0	11	1	1	3	9
Area 12 - Round Island Sockeye Gillr	07/08/2009	1	3	80.2	12	0	4	1	0	0	0	4	0	0	0	1
Area 12 - Round Island Sockeye Gillr	08/08/2009	1	3	71.6	16	0	5	4	2	0	0	8	5	0	3	0
Area 12 - Round Island Sockeye Gillr	09/08/2009	1	3	83.5	3	0	4	0	0	0	0	3	0	0	0	1
Area 12 - Round Island Sockeye Gillr	10/08/2009	1	3	88.1	38	0	20	1	0	0	0	18	8	1	3	1
Area 12 - Round Island Sockeye Gillr	11/08/2009	1	3	90.1	0	0	2	0	0	0	0	0	0	0	0	3
Area 12 - Round Island Sockeye Gillr	12/08/2009	1	3	85.9	11	0	31	0	0	0	0	15	1	0	0	4
Area 12 - Round Island Sockeye Gillr	13/08/2009	0	0	0												0
Area 12 - Round Island Sockeye Gillr	14/08/2009	0	0	0												0
Area 12 - Round Island Sockeye Gillr	15/08/2009	0	0	0												0
Area 13 - Area 13 Sockeye Seine	26/07/2009	1	6	6	121	0	86	1	1	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	27/07/2009	1	6	6	100	0	273	2	2	1	1	4	4	0	1	3
Area 13 - Area 13 Sockeye Seine	28/07/2009	1	6	6	118	0	420	1	1	0	0	2	2	0	0	0
Area 13 - Area 13 Sockeye Seine	29/07/2009	1	6	6	271	4	653	0	0	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	30/07/2009	1	6	6	81	0	71	5	5	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	31/07/2009	1	6	6	3023	14	4459	2	2	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	01/08/2009	1	6	6	2664	36	5226	8	8	0	0	1	1	0	1	0
Area 13 - Area 13 Sockeye Seine	02/08/2009	1	5	5	667	21	2518	5	5	0	0	1	1	0	2	0
Area 13 - Area 13 Sockeye Seine	03/08/2009	1	5	5	848	5	1757	22	22	2	2	4	4	0	7	1
Area 13 - Area 13 Sockeye Seine	04/08/2009	1	6	6	810	16	2716	3	3	0	0	4	4	0	10	0
Area 13 - Area 13 Sockeye Seine	05/08/2009	1	6	6	802	19	2657	6	6	0	0	0	0	0	1	0
Area 13 - Area 13 Sockeye Seine	06/08/2009	1	6	6	1546	24	3853	5	5	0	0	3	3	0	11	0
Area 13 - Area 13 Sockeye Seine	07/08/2009	1	6	6	378	5	955	11	11	0	0	2	2	0	3	0
Area 13 - Area 13 Sockeye Seine	08/08/2009	1	4	4	78	1	125	4	4	0	0	0	0	0	2	0
Area 13 - Area 13 Sockeye Seine	09/08/2009	1	6	6	85	2	157	3	3	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	10/08/2009	1	3	3	6	0	99	0	0	0	0	0	0	0	0	0
Area 13 - Area 13 Sockeye Seine	11/08/2009	1	6	6	717	20	2540	4	4	0	0	1	1	0	2	0
Area 13 - Area 13 Sockeye Seine	12/08/2009	1	6	6	761	32	1710	5	5	0	0	0	0	0	11	0
Area 13 - Area 13 Sockeye Seine	13/08/2009	1	6	6	640	47	2239	4	4	0	0	7	7	0	7	0
Area 13 - Area 13 Sockeye Seine	14/08/2009	1	6	6	760	30	2762	14	14	0	0	1	1	0	3	0
Area 13 - Area 13 Sockeye Seine	15/08/2009	1	6	6	880	11	2391	11	11	0	0	16	15	0	8	0
Area 13 - Area 13 Sockeye Seine	16/08/2009	1	6	6	2465	46	15800	6	6	0	0	9	9	0	10	0
Area 13 - Area 13 Sockeye Seine	17/08/2009	1	4	4	601	21	9223	8	8	0	0	4	4	0	9	0
Area 13 - Area 13 Sockeye Seine	18/08/2009	1	4	4	534	17	6689	11	11	1	1	6	6	0	11	0
Area 13 - Area 13 Sockeye Seine	19/08/2009	1	6	6	257	8	4665	2	2	0	0	2	2	0	5	0
Area 13 - Area 13 Sockeye Seine	20/08/2009	1	6	6	171	10	1131	2	2	1	1	5	5	0	8	0
Area 13 - Area 13 Sockeye Seine	21/08/2009	1	6	6	29	0	308	2	2	0	0	1	1	0	1	0
Area 13 - Area 13 Sockeye Seine	22/08/2009	1	6	6	306	17	4104	0	0	0	0	26	25	0	16	0
Area 13 - Area 13 Sockeye Seine	23/08/2009	1	6	6	138	13	3346	10	10	0	0	3	3	0	7	0
Area 13 - Area 13 Sockeye Seine	24/08/2009	1	6	6	144	16	4291	8	8	0	0	12	12	0	11	0
Area 13 - Area 13 Sockeye Seine	25/08/2009	1	6	6	38	1	1019	1	1	0	0	0	0	0	2	0
Area 13 - Area 13 Sockeye Seine	26/08/2009	1	5	5	142	10	3514	5	5	0	0	16	16	0	6	0
Area 13 - Area 13 Sockeye Seine	27/08/2009	1	6	6	133	14	2980	3	3	0	0	19	19	0	15	0
Area 13 - Area 13 Sockeye Seine	28/08/2009	1	6	6	189	8	14388	6	6	0	0	41	41	0	23	0
Area 13 - Area 13 Sockeye Seine	29/08/2009	1	5	5	202	22	14170	13	13	0	0	25	25	0	21	0
Area 13 - Area 13 Sockeye Seine	30/08/2009	1	6	6	29	4	1597	11	11	0	0	10	10	0	6	0
Area 13 - Area 13 Sockeye Seine	31/08/2009	1	6	6	101	3	9949	2	2	1	1	56	56	0	14	0
Area 13 - Area 13 Sockeye Seine	01/09/2009	1	6	6	122	7	11298	3	3	1	1	145	145	0	42	0
Area 13 - Area 13 Sockeye Seine	02/09/2009	1	6	6	18	3	2383	5	5	0	0	27	27	0	9	0
Area 13 - Area 13 Sockeye Seine	03/09/2009	1	6	6	23	2	1382	0	0	0	0	10	10	0	5	0
Area 13 - Area 13 Sockeye Seine	04/09/2009	0	0	0												0
Area 13 - Area 13 Sockeye Seine	05/09/2009	0	0	0												0
Area 13 - Area 13 Sockeye Seine	06/09/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	22/06/2009	1	2	162	69	0	0	1	0	8	8	17	17	0	0	205
Area 20 - San Juan Sockeye Gillnet	23/06/2009	1	2	166	16	0	0	2	0	4	4	9	9	0	0	138
Area 20 - San Juan Sockeye Gillnet	24/06/2009	1	2	168	9	0	0	1	0	6	6	3	3	1	1	196
Area 20 - San Juan Sockeye Gillnet	25/06/2009	1	2	147	14	0	0	0	0	3	3	8	8	0	0	291
Area 20 - San Juan Sockeye Gillnet	26/06/2009	1	2	149	31	0	0	0	0	4	4	5	5	2	0	99
Area 20 - San Juan Sockeye Gillnet	27/06/2009	1	2	155	25	0	0	1	0	3	3	4	4	0	1	148
Area 20 - San Juan Sockeye Gillnet	28/06/2009	2	4	315	159	0	0	5	0	3	3	23	23	0	1	96
Area 20 - San Juan Sockeye Gillnet	29/06/2009	2	4	293	287	0	2	3	0	13	13	50	50	1	1	603
Area 20 - San Juan Sockeye Gillnet	30/06/2009	2	4	314	219	0	2	0	0	6	6	45	45	2	4	386
Area 20 - San Juan Sockeye Gillnet	01/07/2009	2	4	313	191	0	0	1	0	3	3	35	35	1	2	203
Area 20 - San Juan Sockeye Gillnet	02/07/2009	2	4	300	111	0	0	3	0	6	6	68	68	4	1	544
Area 20 - San Juan Sockeye Gillnet	03/07/2009	2	4	275	236	0	1	4	1	17	17	40	40	2	2	1283
Area 20 - San Juan Sockeye Gillnet	04/07/2009	2	4	306	267	0	2	0	0	17	16	68	68	1	4	187
Area 20 - San Juan Sockeye Gillnet	05/07/2009	2	4	298	224	0	7	5	3	12	10	114	114	1	2	592
Area 20 - San Juan Sockeye Gillnet	06/07/2009	2	4	307	204	0	14	0	0	15	11	93	93	2	0	354
Area 20 - San Juan Sockeye Gillnet	07/07/2009	2	4	305	70	0	2	0	0	10	10	44	44	1	1	1007
Area 20 - San Juan Sockeye Gillnet	08/07/2009	2	4	312	26	0	6	1	0	2	2	27	27	3	0	535
Area 20 - San Juan Sockeye Gillnet	09/07/2009	2	4	303	61	0	32	0	0	6	6	44	44	1	0	624
Area 20 - San Juan Sockeye Gillnet	10/07/2009	2	4	307	73	0	7	0	0	7	6	19	19	1	0	121
Area 20 - San Juan Sockeye Gillnet	11/07/2009	2	4	323	131	0	12	4	0	5	5	24	24	1	1	117
Area 20 - San Juan Sockeye Gillnet	12/07/2009	2	4	310	46	0	4	1	0	1	0	9	9	5	0	257
Area 20 - San Juan Sockeye Gillnet	13/07/2009	2	4	311	68	0	33	5	0	9	4	24	24	1	2	458
Area 20 - San Juan Sockeye Gillnet	14/07/2009	2	4	279	117	0	16	2	0	5	1	11	11	3	0	919

Area 20 - San Juan Sockeye Gillnet	15/07/2009	2	2	225	49	0	5	2	0	6	0	10	10	2	0	3029
Area 20 - San Juan Sockeye Gillnet	16/07/2009	2	2	302	56	0	7	1	0	1	0	0	0	0	0	6384
Area 20 - San Juan Sockeye Gillnet	17/07/2009	2	4	130	78	0	11	1	0	3	3	24	24	0	0	89
Area 20 - San Juan Sockeye Gillnet	18/07/2009	2	4	254	271	0	9	6	0	20	20	31	31	1	0	943
Area 20 - San Juan Sockeye Gillnet	19/07/2009	2	4	234	198	0	23	2	1	17	11	76	76	0	1	949
Area 20 - San Juan Sockeye Gillnet	20/07/2009	2	4	247	252	0	19	5	1	25	24	39	39	1	0	1277
Area 20 - San Juan Sockeye Gillnet	21/07/2009	2	4	244	141	0	3	1	0	18	17	58	58	1	0	779
Area 20 - San Juan Sockeye Gillnet	22/07/2009	2	4	225	66	0	8	2	0	15	14	116	116	2	1	881
Area 20 - San Juan Sockeye Gillnet	23/07/2009	2	4	273	282	0	21	0	0	1	0	204	204	3	0	768
Area 20 - San Juan Sockeye Gillnet	24/07/2009	2	4	298	361	0	39	9	2	4	3	176	176	0	0	628
Area 20 - San Juan Sockeye Gillnet	25/07/2009	2	4	285	139	0	40	0	0	2	0	66	66	0	1	740
Area 20 - San Juan Sockeye Gillnet	26/07/2009	2	4	189	198	0	56	1	0	3	3	49	49	2	0	923
Area 20 - San Juan Sockeye Gillnet	27/07/2009	2	4	242	208	0	73	0	0	4	2	65	65	1	0	955
Area 20 - San Juan Sockeye Gillnet	28/07/2009	2	4	286	254	0	85	2	1	2	0	62	62	0	2	1157
Area 20 - San Juan Sockeye Gillnet	29/07/2009	2	4	285	414	0	47	8	1	7	6	44	44	1	1	587
Area 20 - San Juan Sockeye Gillnet	30/07/2009	2	4	246	190	0	42	6	0	6	4	36	36	0	3	2730
Area 20 - San Juan Sockeye Gillnet	31/07/2009	2	4	265	264	0	42	12	3	17	8	58	58	1	0	583
Area 20 - San Juan Sockeye Gillnet	01/08/2009	2	4	240	225	0	15	2	0	13	10	46	46	0	1	709
Area 20 - San Juan Sockeye Gillnet	02/08/2009	2	4	319	372	0	13	4	0	9	7	36	36	0	0	37
Area 20 - San Juan Sockeye Gillnet	03/08/2009	2	4	331	138	0	8	1	0	8	8	30	30	0	0	225
Area 20 - San Juan Sockeye Gillnet	04/08/2009	2	4	223	25	0	4	2	1	0	0	14	14	0	0	2891
Area 20 - San Juan Sockeye Gillnet	05/08/2009	2	4	247	111	0	15	0	0	2	0	31	31	0	0	1085
Area 20 - San Juan Sockeye Gillnet	06/08/2009	2	4	252	144	0	19	6	1	11	7	57	57	6	1	1758
Area 20 - San Juan Sockeye Gillnet	07/08/2009	2	4	219	132	0	9	1	1	2	0	37	37	0	0	1858
Area 20 - San Juan Sockeye Gillnet	08/08/2009	2	4	220	8	0	1	2	2	0	0	10	10	0	0	569
Area 20 - San Juan Sockeye Gillnet	09/08/2009	2	4	288	10	0	4	0	0	0	0	2	2	0	0	22
Area 20 - San Juan Sockeye Gillnet	10/08/2009	2	4	283	21	0	9	0	0	2	2	7	7	1	0	0
Area 20 - San Juan Sockeye Gillnet	11/08/2009	2	4	326	88	0	13	0	0	0	0	2	2	0	3	1
Area 20 - San Juan Sockeye Gillnet	12/08/2009	2	4	306	329	0	32	0	0	1	0	11	11	0	1	20
Area 20 - San Juan Sockeye Gillnet	13/08/2009	2	4	286	96	0	75	0	0	0	0	13	13	0	0	78
Area 20 - San Juan Sockeye Gillnet	14/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	15/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	16/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	17/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	18/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Gillnet	19/08/2009	0	0	0												0
Area 20 - San Juan Sockeye Seine	22/07/2009	1	5	5	16	1	7	5	5	18	18	70	70	0	0	374
Area 20 - San Juan Sockeye Seine	23/07/2009	1	6	6	143	3	85	3	3	29	29	94	94	0	0	1086
Area 20 - San Juan Sockeye Seine	24/07/2009	1	6	6	285	6	125	10	10	17	17	121	121	0	2	581
Area 20 - San Juan Sockeye Seine	25/07/2009	1	6	6	164	1	144	3	3	9	9	106	106	0	0	858
Area 20 - San Juan Sockeye Seine	26/07/2009	1	6	6	105	2	217	9	9	15	15	84	84	0	0	5130
Area 20 - San Juan Sockeye Seine	27/07/2009	1	6	6	198	4	660	3	3	59	59	302	302	0	1	330
Area 20 - San Juan Sockeye Seine	28/07/2009	1	6	6	257	2	1880	9	9	69	69	164	164	0	1	115
Area 20 - San Juan Sockeye Seine	29/07/2009	1	6	6	240	4	934	12	12	11	11	92	92	1	2	835
Area 20 - San Juan Sockeye Seine	30/07/2009	1	5	5	293	2	707	9	9	32	32	79	79	0	0	4250
Area 20 - San Juan Sockeye Seine	31/07/2009	1	6	6	355	9	2710	19	19	40	40	142	142	0	4	1360
Area 20 - San Juan Sockeye Seine	01/08/2009	1	6	6	364	12	1912	19	19	35	35	142	142	1	0	1310
Area 20 - San Juan Sockeye Seine	02/08/2009	1	6	6	548	11	526	19	19	83	83	108	108	0	0	450
Area 20 - San Juan Sockeye Seine	03/08/2009	1	6	6	458	13	524	20	20	61	61	126	126	0	1	1
Area 20 - San Juan Sockeye Seine	04/08/2009	1	6	6	231	7	851	9	9	63	63	108	108	0	0	0
Area 20 - San Juan Sockeye Seine	05/08/2009	1	6	6	76	2	314	8	8	80	80	86	86	0	0	165
Area 20 - San Juan Sockeye Seine	06/08/2009	1	6	6	208	6	456	13	13	96	96	85	85	0	1	0
Area 20 - San Juan Sockeye Seine	07/08/2009	1	6	6	232	9	549	9	9	65	65	136	136	0	0	5
Area 20 - San Juan Sockeye Seine	08/08/2009	1	6	6	362	11	1013	15	15	15	15	115	115	0	1	1
Area 20 - San Juan Sockeye Seine	09/08/2009	1	6	6	152	14	320	3	3	9	9	102	102	0	1	0
Area 20 - San Juan Sockeye Seine	10/08/2009	1	6	6	210	15	338	6	6	7	7	123	123	0	2	0
Area 20 - San Juan Sockeye Seine	11/08/2009	1	6	6	160	0	107	1	1	0	0	34	34	0	0	0
Area 20 - San Juan Sockeye Seine	12/08/2009	1	6	6	341	0	137	15	15	0	0	38	38	0	3	0
Area 20 - San Juan Sockeye Seine	13/08/2009	1	6	6	451	11	2011	0	0	0	0	115	115	0	0	22
Area 20 - San Juan Sockeye Seine	14/08/2009	1	6	6	400	10	642	4	4	0	0	73	73	0	3	700
Area 20 - San Juan Sockeye Seine	15/08/2009	1	6	6	165	7	2640	17	17	10	10	121	121	0	0	1450
Area 20 - San Juan Sockeye Seine	16/08/2009	1	6	6	303	0	2390	16	16	0	0	84	84	0	3	150
Area 20 - San Juan Sockeye Seine	17/08/2009	1	6	6	453	7	1369	22	22	0	0	80	80	4	6	1
Area 20 - San Juan Sockeye Seine	18/08/2009	1	6	6	206	3	2256	29	29	0	0	84	84	0	3	0
Area 20 - San Juan Sockeye Seine	19/08/2009	1	6	6	246	11	3115	25	25	4	4	108	108	1	2	0
Area 20 - San Juan Sockeye Seine	20/08/2009	1	6	6	103	15	1161	17	17	0	0	74	74	0	10	0
Area 20 - San Juan Sockeye Seine	21/08/2009	1	3	3	100	2	2962	7	7	0	0	49	49	0	5	0
Area 20 - San Juan Sockeye Seine	22/08/2009	1	6	6	72	0	6697	12	12	0	0	136	136	2	0	20
Area 20 - San Juan Sockeye Seine	23/08/2009	1	5	5	26	0	990	3	3	0	0	49	49	1	0	0
Area 20 - San Juan Sockeye Seine	24/08/2009	1	6	6	4	0	1501	0	0	24	24	112	112	0	0	0
Area 20 - San Juan Sockeye Seine	25/08/2009	1	6	6	33	0	1124	10	10	29	29	134	134	0	6	0
Area 20 - San Juan Sockeye Seine	26/08/2009	1	6	6	68	4	2261	14	14	17	17	202	202	0	0	0
Area 20 - San Juan Sockeye Seine	27/08/2009	1	6	6	67	0	9829	3	3	27	27	206	206	0	2	0
Area 20 - San Juan Sockeye Seine	28/08/2009	1	6	6	56	1	7180	19	19	14	14	373	373	0	1	0
Area 20 - San Juan Sockeye Seine	29/08/2009	1	6	6	15	1	4406	10	10	0	0	329	329	1	11	0
Area 20 - San Juan Sockeye Seine	30/08/2009	1	6	6	12	0	5645	5	5	0	0	267	267	1	1	0
Area 20 - San Juan Sockeye Seine	31/08/2009	1	6	6	53	3	9639	1	1	0	0	254	254	0	8	32
Area 20 - San Juan Sockeye Seine	01/09/2009	1	6	6	26	2	3856	4	4	0	0	114	114	0	2	0
Area 20 - San Juan Sockeye Seine	02/09/2009	1	6	6	29	1	4860	10	10	0	0	120	120	1	2	20
Area 20 - San Juan Sockeye Seine	03/09/2009	1	6	6	6	2	3751	13	13	0	0	110	110	1	5	0
Area 20 - San Juan Sockeye Seine	04/09/2009	1	4	4	5	0	2751	2	2	0	0	43	43	0	0	35
Area 20 - San Juan Sockeye Seine	05/09/2009	1	6	6	4	0	9830	1	1	0	0	282	282	0	2	170
Area 20 - San Juan Sockeye Seine	06/09/2009	1	4	4	2	0	1960	2	2	0	0	219	219	0	1	31
Area 20 - San Juan Sockeye Seine	07/09/2009	1	6	6	6	0	3278	3	3	0	0	149	149	0	5	49
Area 20 - San Juan Sockeye Seine	08/09/2009	1	6	6	3	0	743	2	2	0	0	110	110	0	0	200
Area 20 - San Juan Sockeye Seine	09/09/2009	1	6	6	0	0	490	1	1	0	0	79	79	0	0	155
Area 20 - San Juan Sockeye Seine	10/09/2009	1	6	6	0	0	413	1	1	3	3	72	72	0	4	23
Area 20 - San Juan Sockeye Seine	11/09/2009	1	6	6	0	0	184	4	4	0	0	35	35	0	4	1260
Area 20 - San Juan Sockeye Seine	12/09/2009	0	0	0												0
Area 20 - San Juan Sockeye Seine	13/09/2009	0	0	0												0
Area 20 - San Juan Sockeye Seine	14/09/2009	0	0	0												0



Area 29 - Cottonwood Sockeye Gilln	06/07/2009	1	2	7.14	1	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	07/07/2009	1	2	5.94	5	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	08/07/2009	1	2	6.96	2	0	0	1	1	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	09/07/2009	1	2	6.48	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	10/07/2009	1	2	7.14	12	0	0	2	0	0	0	0	0	0	0	1
Area 29 - Cottonwood Sockeye Gillne	11/07/2009	1	2	7.08	8	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	12/07/2009	1	2	7.26	5	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	13/07/2009	1	2	7.2	2	0	0	0	0	0	0	0	0	0	0	1
Area 29 - Cottonwood Sockeye Gillne	14/07/2009	1	2	6.6	0	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	15/07/2009	1	2	6.72	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	16/07/2009	1	2	6.78	3	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	17/07/2009	1	2	6.84	2	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	18/07/2009	1	2	7.02	7	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	19/07/2009	1	2	6.96	1	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	20/07/2009	1	2	7.08	9	0	0	1	0	1	1	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	21/07/2009	1	2	6.96	9	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	22/07/2009	1	2	6.78	3	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	23/07/2009	1	2	6.84	6	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	24/07/2009	1	2	6.72	9	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	25/07/2009	1	2	6.84	6	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	26/07/2009	1	2	6.78	8	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	27/07/2009	1	2	6.9	13	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	28/07/2009	1	2	7.08	27	0	0	3	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	29/07/2009	1	2	6.72	6	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	30/07/2009	1	2	6.9	12	0	0	4	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	31/07/2009	1	2	6.78	7	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	01/08/2009	1	2	7.08	28	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	02/08/2009	1	2	7.14	20	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	03/08/2009	1	2	7.02	22	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	04/08/2009	1	2	6.96	14	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	05/08/2009	1	2	7.8	72	0	0	4	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	06/08/2009	1	2	7.26	25	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	07/08/2009	1	2	7.44	38	1	1	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	08/08/2009	1	2	7.56	37	0	0	3	0	0	0	0	0	0	1	0
Area 29 - Cottonwood Sockeye Gillne	09/08/2009	1	2	7.92	67	0	1	6	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	10/08/2009	1	2	6.12	21	0	1	2	0	0	0	0	0	0	0	1
Area 29 - Cottonwood Sockeye Gillne	11/08/2009	1	2	7.2	25	0	1	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	12/08/2009	1	2	7.44	24	2	5	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	13/08/2009	1	2	7.26	4	1	2	2	0	0	0	0	0	0	0	2
Area 29 - Cottonwood Sockeye Gillne	14/08/2009	1	2	7.44	28	0	6	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	15/08/2009	1	2	9	104	0	8	4	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	16/08/2009	1	2	8.1	56	0	6	6	1	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	17/08/2009	1	2	6.72	29	0	8	4	0	2	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	18/08/2009	1	2	7.74	48	0	5	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	19/08/2009	1	2	7.68	21	0	3	4	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	20/08/2009	1	2	8.1	65	0	3	4	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	21/08/2009	1	2	7.62	50	0	3	7	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	22/08/2009	1	2	7.26	16	0	2	1	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	23/08/2009	1	2	7.62	27	0	6	2	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	24/08/2009	1	2	7.68	18	0	9	2	0	0	0	1	1	0	0	0
Area 29 - Cottonwood Sockeye Gillne	25/08/2009	1	2	7.44	14	0	13	2	0	1	1	1	1	0	0	0
Area 29 - Cottonwood Sockeye Gillne	26/08/2009	1	2	7.02	9	0	8	0	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	27/08/2009	1	2	7.32	12	0	3	3	0	0	0	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	28/08/2009	1	2	6.78	2	0	3	0	0	1	1	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	29/08/2009	1	2	6.78	12	0	10	5	2	1	1	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	30/08/2009	1	2	7.38	11	0	27	2	0	2	2	1	1	0	0	1
Area 29 - Cottonwood Sockeye Gillne	31/08/2009	1	2	7.98	14	0	33	3	0	1	1	2	2	0	0	1
Area 29 - Cottonwood Sockeye Gillne	01/09/2009	1	2	7.44	13	0	53	2	0	2	2	3	3	1	0	0
Area 29 - Cottonwood Sockeye Gillne	02/09/2009	1	2	7.56	7	1	37	2	0	2	2	2	2	0	0	0
Area 29 - Cottonwood Sockeye Gillne	03/09/2009	1	2	7.8	8	0	62	4	0	2	2	4	4	1	0	0
Area 29 - Cottonwood Sockeye Gillne	04/09/2009	1	2	7.74	23	0	30	3	0	4	4	2	2	0	0	0
Area 29 - Cottonwood Sockeye Gillne	05/09/2009	1	2	7.8	15	0	54	1	0	1	1	2	2	0	0	0
Area 29 - Cottonwood Sockeye Gillne	06/09/2009	1	2	8.7	41	2	90	3	0	6	5	4	4	0	0	0
Area 29 - Cottonwood Sockeye Gillne	07/09/2009	1	2	8.34	23	0	81	0	0	1	1	0	0	0	0	0
Area 29 - Cottonwood Sockeye Gillne	08/09/2009	1	2	8.22	25	2	81	3	0	2	2	4	4	0	0	1
Area 29 - Cottonwood Sockeye Gillne	09/09/2009	1	2	7.68	8	0	67	2	0	0	0	5	5	0	0	0
Area 29 - Cottonwood Sockeye Gillne	10/09/2009	1	2	8.04	2	0	84	0	0	0	0	2	2	0	0	0
Area 29 - Cottonwood Sockeye Gillne	11/09/2009	1	2	7.68	4	0	51	3	0	3	2	4	4	0	1	1
Area 29 - Cottonwood Sockeye Gillne	12/09/2009	1	2	7.8	0	0	69	0	0	5	5	4	4	0	0	0
Area 29 - Cottonwood Sockeye Gillne	13/09/2009	1	2	7.74	3	0	24	5	0	4	4	15	15	0	0	0
Area 29 - Cottonwood Sockeye Gillne	14/09/2009	1	2	8.16	3	0	47	6	1	6	6	17	17	0	0	0
Area 29 - Cottonwood Sockeye Gillne	15/09/2009	1	2	7.62	0	0	69	6	0	8	8	12	12	0	0	1
Area 29 - Cottonwood Sockeye Gillne	16/09/2009	1	2	8.46	2	1	136	4	0	14	14	15	15	0	1	0
Area 29 - Cottonwood Sockeye Gillne	17/09/2009	1	2	9.54	3	0	166	6	0	12	12	29	29	0	3	0
Area 29 - Cottonwood Sockeye Gillne	18/09/2009	1	2	7.98	0	0	81	2	0	0	0	17	17	0	2	0
Area 29 - Cottonwood Sockeye Gillne	19/09/2009	0	0	0												0
Area 29 - Cottonwood Sockeye Gillne	20/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	22/08/2009	1	2	382	30	1	57	0	0	1	1	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	23/08/2009	1	1	450	7	0	55	0	0	0	0	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	24/08/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	25/08/2009	1	2	431	8	0	140	0	0	1	1	1	1	0	0	3
Area 29 - Gulf Sockeye Troll	26/08/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	27/08/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	31/08/2009	1	4	206	35	0	151	0	0	0	0	3	3	0	0	0
Area 29 - Gulf Sockeye Troll	01/09/2009	1	3	486	10	0	191	1	1	2	2	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	02/09/2009	1	3	358	43	0	123	1	0	0	0	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	03/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	04/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	05/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	06/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	07/09/2009	1	1	409	0	0	5	0	0	0	0	0	0	0	0	0

Area 29 - Gulf Sockeye Troll	08/09/2009	1	1	419	0	0	15	0	0	0	0	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	09/09/2009	1	3	436	0	0	15	3	3	3	3	0	0	0	0	0
Area 29 - Gulf Sockeye Troll	10/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	11/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	12/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	13/09/2009	0	0	0												0
Area 29 - Gulf Sockeye Troll	14/09/2009	0	0	0												0
Area 29 - Whonnock Sockeye Gillnet	22/06/2009	1	2	8.48	0	0	0	7	0	0	0	0	0	0	0	4
Area 29 - Whonnock Sockeye Gillnet	23/06/2009	1	2	9.15	4	0	0	12	0	0	0	0	0	0	0	7
Area 29 - Whonnock Sockeye Gillnet	24/06/2009	1	2	10.6	0	0	0	12	1	0	0	0	0	0	0	1
Area 29 - Whonnock Sockeye Gillnet	25/06/2009	1	2	11.1	4	0	0	15	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	26/06/2009	1	2	10.6	2	0	0	8	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	27/06/2009	1	2	10.3	1	0	0	3	0	0	0	0	0	0	0	2
Area 29 - Whonnock Sockeye Gillnet	28/06/2009	1	2	10.6	1	0	0	2	0	0	0	0	0	0	0	2
Area 29 - Whonnock Sockeye Gillnet	29/06/2009	1	2	10.6	6	0	0	10	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	30/06/2009	1	2	11.6	13	0	0	13	0	0	0	0	0	0	0	3
Area 29 - Whonnock Sockeye Gillnet	01/07/2009	1	2	10.3	1	0	0	3	0	0	0	0	0	0	0	1
Area 29 - Whonnock Sockeye Gillnet	02/07/2009	1	2	9.98	3	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	03/07/2009	1	2	9.89	0	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	04/07/2009	1	2	11.5	43	0	0	10	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	05/07/2009	1	2	11.1	29	0	0	5	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	06/07/2009	1	2	10.9	11	0	0	9	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	07/07/2009	1	2	10.2	1	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	08/07/2009	1	2	9.98	6	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	09/07/2009	1	4	20	1	0	0	3	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	10/07/2009	1	2	9.8	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	11/07/2009	1	2	9.89	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	12/07/2009	1	2	9.98	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	13/07/2009	1	2	9.98	0	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	14/07/2009	1	2	9.89	0	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	15/07/2009	1	2	10.1	0	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	16/07/2009	1	2	10.1	0	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	17/07/2009	1	2	10.2	1	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	18/07/2009	1	2	10.6	3	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	19/07/2009	1	2	10.9	2	0	0	8	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	20/07/2009	1	2	0	6	0	0	9	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	21/07/2009	1	2	11.5	16	0	0	12	0	1	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	22/07/2009	1	2	11.4	15	0	0	9	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	23/07/2009	1	2	11.1	20	0	0	12	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	24/07/2009	1	2	10.6	6	0	0	3	0	0	0	0	0	0	0	1
Area 29 - Whonnock Sockeye Gillnet	25/07/2009	1	2	10.5	4	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	26/07/2009	1	2	10.9	9	0	0	8	1	1	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	27/07/2009	1	2	10.1	1	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	28/07/2009	1	2	9.98	3	0	0	0	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	29/07/2009	1	2	10.9	18	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	30/07/2009	1	2	10.4	14	0	0	1	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	31/07/2009	1	2	11.6	34	0	0	4	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	01/08/2009	1	2	11.1	21	0	0	2	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	02/08/2009	1	2	11.5	32	0	0	5	0	1	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	03/08/2009	1	2	11.8	34	0	0	9	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	04/08/2009	1	2	11.8	50	0	0	15	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	05/08/2009	1	2	13	58	0	0	21	0	1	0	0	0	0	0	1
Area 29 - Whonnock Sockeye Gillnet	06/08/2009	1	2	13.7	118	0	0	21	2	1	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	07/08/2009	1	2	12.7	69	0	0	13	1	2	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	08/08/2009	1	2	11.7	28	0	0	4	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	09/08/2009	1	2	11	23	0	0	5	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	10/08/2009	1	2	11	32	0	1	7	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	11/08/2009	1	2	11.8	41	0	0	7	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	12/08/2009	1	2	12.3	30	0	0	11	0	1	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	13/08/2009	1	2	10.8	15	0	0	7	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	14/08/2009	1	2	12.6	38	0	7	17	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	15/08/2009	1	2	11.5	26	0	5	2	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	16/08/2009	1	2	13	57	0	3	8	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	17/08/2009	1	2	15	113	0	4	23	0	0	0	0	0	0	0	1
Area 29 - Whonnock Sockeye Gillnet	18/08/2009	1	2	15.2	102	0	7	23	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	19/08/2009	1	2	14.3	77	0	4	27	1	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	20/08/2009	1	2	14.7	98	0	8	33	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	21/08/2009	1	2	14	77	0	7	23	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	22/08/2009	1	2	13	60	0	5	17	1	0	0	0	0	1	0	0
Area 29 - Whonnock Sockeye Gillnet	23/08/2009	1	2	11.5	15	0	4	9	1	2	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	24/08/2009	1	2	11.9	28	0	7	16	1	1	0	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	25/08/2009	1	2	12.3	28	0	9	12	0	1	0	0	0	0	1	1
Area 29 - Whonnock Sockeye Gillnet	26/08/2009	1	2	11.6	14	0	2	20	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	27/08/2009	1	2	11.6	20	0	11	13	0	0	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	28/08/2009	1	2	12.3	18	0	9	19	0	2	0	4	4	0	0	0
Area 29 - Whonnock Sockeye Gillnet	29/08/2009	1	2	12.8	32	0	20	10	0	1	0	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	30/08/2009	1	2	12.4	27	0	22	9	0	2	0	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	31/08/2009	1	2	12.8	21	0	26	16	0	0	0	2	2	0	0	0
Area 29 - Whonnock Sockeye Gillnet	01/09/2009	1	2	12.6	28	0	33	14	0	1	0	2	2	0	1	0
Area 29 - Whonnock Sockeye Gillnet	02/09/2009	1	2	12.6	10	0	71	9	0	1	0	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	03/09/2009	1	2	13.5	16	0	195	5	0	2	0	3	3	0	2	0
Area 29 - Whonnock Sockeye Gillnet	04/09/2009	1	2	14.1	3	0	251	5	0	0	1	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	05/09/2009	1	2	17.2	20	0	460	1	0	3	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	06/09/2009	1	2	14.4	20	0	206	3	0	2	0	0	0	0	0	0
Area 29 - Whonnock Sockeye Gillnet	07/09/2009	1	2	13.4	26	0	138	10	0	2	0	1	1	0	0	0
Area 29 - Whonnock Sockeye Gillnet	08/09/2009	1	2	16.7	61	0	258	11	0	0	0	1	1	0	1	0
Area 29 - Whonnock Sockeye Gillnet	09/09/2009	1	2	15.5	95	0	92	15	0	2	0	3	3	0	1	0
Area 29 - Whonnock Sockeye Gillnet	10/09/2009	1	2	12.1	14	0	39	10	0	1	0	1	1	0	2	0
Area 29 - Whonnock Sockeye Gillnet	11/09/2009	1	2	11.3	4	0	21	7	0	0	0	3	3	0	0	0
Area 29 - Whonnock Sockeye Gillnet	12/09/2009	1	2	12.1	4	0	35	12	0	3	0	0	0	0	1	0
Area 29 - Whonnock Sockeye Gillnet	13/09/2009	1	2	13.5	1	0	115	10	0	3	0	8	8	0	1	1

Area 29 - Whonnock Sockeye Gillnet	14/09/2009	1	2	13.9	5	0	148	16	0	1	0	14	14	0	5	0
Area 29 - Whonnock Sockeye Gillnet	15/09/2009	1	2	12.8	5	0	75	12	0	2	0	18	18	0	2	0
Area 29 - Whonnock Sockeye Gillnet	16/09/2009	1	2	13.7	3	1	133	7	0	3	0	7	7	0	5	0
Area 29 - Whonnock Sockeye Gillnet	17/09/2009	1	2	15.4	0	0	246	9	0	2	0	7	7	0	5	0
Area 29 - Whonnock Sockeye Gillnet	18/09/2009	1	2	14.1	1	0	140	5	0	2	0	6	6	0	5	0
Area 29 - Whonnock Sockeye Gillnet	19/09/2009	1	2	13.9	2	0	178	1	0	2	0	5	5	0	7	0
Area 29 - Whonnock Sockeye Gillnet	20/09/2009	1	2	14.2	2	0	135	11	0	7	0	6	6	0	10	0
Area 29 - Whonnock Sockeye Gillnet	21/09/2009	1	2	14.2	0	0	118	5	0	3	0	4	4	0	13	0
Area 29 - Whonnock Sockeye Gillnet	22/09/2009	1	2	13.1	0	0	72	5	0	2	0	4	4	0	13	0
Area 29 - Whonnock Sockeye Gillnet	23/09/2009	1	2	11.6	1	0	20	4	0	2	0	5	5	0	7	0
Area 29 - Whonnock Sockeye Gillnet	24/09/2009	1	2	11.9	0	0	13	4	0	2	0	6	6	0	8	0
Area 29 - Whonnock Sockeye Gillnet	25/09/2009	1	2	11.6	0	0	19	2	0	1	0	2	2	0	13	0
U.S. Area 5 - U.S. Juan de Fuca Soci	15/07/2009	1	2	137	34	0	156	13	0	0	0	5	0	0	1	289
U.S. Area 5 - U.S. Juan de Fuca Soci	16/07/2009	1	2	152	78	0	22	6	0	0	0	2	0	0	0	629
U.S. Area 5 - U.S. Juan de Fuca Soci	17/07/2009	1	2	148	83	0	43	5	0	1	0	10	0	0	0	1419
U.S. Area 5 - U.S. Juan de Fuca Soci	18/07/2009	1	1	54.6	6	0	4	0	0	0	0	1	0	0	0	102
U.S. Area 5 - U.S. Juan de Fuca Soci	19/07/2009	1	1	69.3	9	0	4	0	0	0	0	4	1	0	0	83
U.S. Area 5 - U.S. Juan de Fuca Soci	20/07/2009	1	2	148	18	0	25	6	0	0	0	56	0	0	0	224
U.S. Area 5 - U.S. Juan de Fuca Soci	21/07/2009	0	0	0												0
U.S. Area 5 - U.S. Juan de Fuca Soci	22/07/2009	1	2	136	63	0	86	8	0	1	0	26	0	0	1	1002
U.S. Area 5 - U.S. Juan de Fuca Soci	23/07/2009	1	2	198	42	0	72	11	0	0	0	99	0	2	1	490
U.S. Area 5 - U.S. Juan de Fuca Soci	24/07/2009	1	2	144	88	0	162	4	0	0	0	50	0	1	1	161
U.S. Area 5 - U.S. Juan de Fuca Soci	25/07/2009	1	2	112	68	0	53	10	0	0	0	24	0	0	0	176
U.S. Area 5 - U.S. Juan de Fuca Soci	26/07/2009	1	2	132	46	0	37	5	0	0	0	21	0	0	0	306
U.S. Area 5 - U.S. Juan de Fuca Soci	27/07/2009	1	2	124	22	0	59	8	0	0	0	26	0	0	0	447
U.S. Area 5 - U.S. Juan de Fuca Soci	28/07/2009	1	2	104	27	0	44	6	0	0	0	30	0	0	0	388
U.S. Area 5 - U.S. Juan de Fuca Soci	29/07/2009	1	2	106	30	0	22	3	0	0	0	10	0	0	1	392
U.S. Area 5 - U.S. Juan de Fuca Soci	30/07/2009	1	2	101	44	0	34	4	0	0	0	13	0	1	3	722
U.S. Area 5 - U.S. Juan de Fuca Soci	31/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	16/07/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	17/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	18/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	19/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	20/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	21/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	22/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	23/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	24/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	25/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	26/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	27/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	28/07/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	29/07/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	30/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	31/07/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	01/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	02/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	03/08/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	04/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	05/08/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	06/08/2009	1	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	07/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	08/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	09/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	10/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	11/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	12/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	13/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Reef Net P	14/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	20/07/2009	0	25	1470	175	0	9	8	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	21/07/2009	0	25	1440	611	0	10	5	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	22/07/2009	0	23	1320	202	0	8	11	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	23/07/2009	0	22	1320	338	0	109	5	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	24/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	25/07/2009	0	19	1140	51	0	3	5	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	26/07/2009	0	22	1260	103	0	15	1	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	27/07/2009	0	24	1440	195	0	30	3	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	28/07/2009	0	28	1707	519	0	298	4	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	29/07/2009	0	25	1440	710	0	622	9	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	30/07/2009	0	26	1500	449	0	316	4	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	31/07/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	01/08/2009	0	26	1530	486	0	276	4	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	02/08/2009	0	26	1500	1416	0	629	15	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	03/08/2009	0	24	1380	232	0	117	6	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	04/08/2009	0	23	1350	92	0	38	7	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	05/08/2009	0	22	1290	42	0	29	12	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	06/08/2009	0	22	1260	194	0	87	10	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	07/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	08/08/2009	0	22	1260	10	0	0	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	09/08/2009	0	22	1320	50	0	17	1	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	10/08/2009	0	23	1320	0	0	0	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	11/08/2009	0	25	1440	59	0	58	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	12/08/2009	0	23	1380	274	0	174	1	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	13/08/2009	0	24	1440	198	0	260	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	14/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	15/08/2009	0	26	1470	537	0	948	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	16/08/2009	0	25	1470	273	0	573	14	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	17/08/2009	0	25	1500	757	0	4660	6	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	18/08/2009	0	24	1410	474	0	2217	13	0	0	0	1	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	19/08/2009	0	23	1350	1621	0	9097	29	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye Ri	20/08/2009	0	23	1350	456	0	1661	24	0	0	0	0	0	0	0	0

U.S. Area 7 - Area 7 U.S. Sockeye R	21/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	22/08/2009	0	23	1320	266	0	1037	2	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye R	23/08/2009	0	24	1410	114	0	1076	16	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye R	24/08/2009	0	29	1650	89	0	1281	0	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye R	25/08/2009	0	25	1380	245	0	7894	5	0	0	0	0	0	0	0	0
U.S. Area 7 - Area 7 U.S. Sockeye R	26/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	27/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	28/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	29/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	30/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	31/08/2009	0	0	0												0
U.S. Area 7 - Area 7 U.S. Sockeye R	01/09/2009	0	0	0												0

## **Appendix 6: 2009 Preseason Planning Model Summaries**

In 2009 there was no agreed to preseason fishing plan as the United States and Canada were no able to come to agreement. Fishery planning was based on in-season assessment information.

**2009 Fraser River sockeye escapement plan using current run size estimates (in thousands of fish).**

Updated: 21-Jun-08

**50% Run Size Estimates used in this table!**

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guidelines	Total Allowable Mortality at Run Size	Escapement Target at Run Size	Management Adjustment (a)		Exploitation Rate after MA	Cycle year adult escapement estimates				
										1989	1993	1997	2001	2005
Early Stuart		-	156	0%						180	66	88	90	9
	255	156 390	390	0 - 60% 60%	39%	156	59%	92	3%					
Early Summer		-	200	0%						218	102	363	574	157
	739	200 500	500	0 - 60% 60%	60%	296	42%	123	43%					
Summer		-	520	0%						745	635	1,412	1,650	272
	8,677	520 1,300	1,300	0 - 60% 60%	60%	3,471	7%	243	57%					
Birkenhead and Birkenhead-type Lates (b)				0%						167	186	56	14	38
	334			0 - 60% 60%	60%	134			60%					
true-Late (excl. Birk. Type)		-	420	20%						61	80	143	25	54
	573	420 1,049	1,049	20 - 60% 60%	27%	420	604%	2535	20%					
Cultus	5								20%	1	1	2	1	0
Sockeye Totals	10,578 <i>Est. Return</i>					4,476		2,993		1,371	1,070	2,064	2,354	529
Fraser Pink		-	7,059	0% - 15%						1999	2001	2003	2005	2007
	17,535	7,059 17,143	17,143	15% - 65% 65% - 70%	66%	6,000				3,422	19,726	23,939	8,966	10,180

a) Management adjustments (MAs) are added to the escapement targets to correct for the actual differences between Mission and upstream abundance estimates over all years. This approach makes no prior assumption about environmental conditions because we don't yet know whether conditions will be favourable or unfavourable in 2008. We expect that the MAs will be revised to take into account an environmental conditions during the inseason management period.

b) Birkenhead type Lates include returns in the miscellaneous non-Shuswap component of the forecast returning to natal spawning areas in the Harrison-Lillooet systems (excluding Harrison and Weaver).

**2009 Fraser River sockeye escapement plan using current run size estimates (in thousands of fish).**

Updated: 21-Jun-08

*75% Run Size Estimates used in this table!*

Stock Group	Run Size Estimate of forecasted stocks	Run Size Reference Points		Total Mortality Rate Guidelines	Total Allowable Mortality at Run Size	Escapement Target at Run Size	Management Adjustment (a)		Exploitation Rate after MA	Cycle year adult escapement estimates				
										1989	1993	1997	2001	2005
Early Stuart		-	156	0%						180	66	88	90	9
	165	156 390	390	0 - 60% 60%	5%	156	59%	92	0%					
Early Summer		-	195	0%						218	102	363	574	157
	443	195 489	489	0 - 60% 60%	56%	195	40%	79	38%					
Summer		-	520	0%						745	635	1,412	1,650	272
	4,914	520 1,300	1,300	0 - 60% 60%	60%	1,966	7%	138	57%					
Birkenhead and Birkenhead-type Lates (b)				0% 0 - 60% 60%						167	186	56	14	38
	194			60%	60%	78			60%					
true-Late (excl. Birk. Type)	323	-	422	20%	20%	258	604%	1561	20%	61	80	143	25	54
		422 1,056	1,056	20 - 60% 60%										
Cultus	3								20%	1	1	2	1	0
Sockeye Totals	6,039 <i>Est. Return</i>					2,653		1,869		1,371	1,070	2,064	2,354	529
Fraser Pink	12,490	- 7,059 17,143	7,059 17,143	0% - 15% 15% - 65% 65% - 70%	52%	6,000			52%	1999 3,422	2001 19,726	2003 23,939	2005 8,966	2007 10,180

a) Management adjustments (MAs) are added to the escapement targets to correct for the actual differences between Mission and upstream abundance estimates over all years. This approach makes no prior assumption about environmental conditions because we don't yet know whether conditions will be favourable or unfavourable in 2008. We expect that the MAs will be revised to take into account an environmental conditions during the inseason management period.

b) Birkenhead type Lates include returns in the miscellaneous non-Shuswap component of the forecast returning to natal spawning areas in the Harrison-Lillooet systems (excluding Harrison and Weaver).

## Appendix 7: Catch Monitoring

### ***Introduction***

Catch monitoring is an important element to the understanding of stock status and dynamics. Catch monitoring is also used to evaluate progress to meeting specific harvest and other socio-economic objectives including First Nations allocations, harvest and the catch for each of the commercial sectors as well as drive the development of specific policies. Catch monitoring to varying intensities is carried out across all fisheries.

In 2009, First Nations FSC fishing opportunities for Fraser River sockeye were very limited due to extremely low abundances. There were no commercial or recreational opportunities for Fraser River sockeye as no commercial TAC was identified. Limited commercial opportunities were available for Fraser River pink; however these were constrained by potential impacts to sockeye.

This report will focus on catch monitoring activities for the 2009 Fraser River sockeye and pink fishery in the areas of southern BC where Fraser River sockeye and pink are harvested.

### ***Johnstone Strait***

#### **First Nations**

##### **1. Northern Johnstone Strait (Area 12) Local First Nation's**

In 2009, comprised of 10 First Nation Bands within 6 groups;  
DMT – (Mamalilikulla-Qwe-Qwa-Sot-Em, Dn'naxda'xw/Awaetlala and Tlatlasikwala)  
MTTC - (Tsawataineuk, Kwicksutaineuk-Ak-kwaw-Ah-Mish and Gwa-wa-enuk)  
Other local groups – Namgis, Kwakiutl, Gwa'sala-Nakwaxda'wx and Quatsino

#### Geographic Area:

This group's traditional fishing area for Fraser River sockeye is in the northern portion of Johnstone Strait and in Queen Charlotte Strait in Statistical Areas 11 and 12.

#### Participation (Effort):

Participation is measured in terms of permits issued by the First Nation Band for seine, gillnet and troll vessels. Effort levels are also verified on-grounds by First Nation guardians and DFO. Participation is approximately 40 permits per year with the majority of the catch caught by seine vessels.

#### Catch:

Catches for this group varies annually and typically ranges from 30,000 to 50,000 sockeye annually dependant upon the availability of fishing vessels, diversion rates and



run size. In 2009 the estimated catch in Area 12 by these groups was 6,348 sockeye. Catches were poor due to low abundances and limited sockeye harvest opportunities. In most cases Fraser pinks are harvested as by-catch during sockeye fishing, in 2009 the pink catch is estimated at 8,695 pieces.

Catch Estimation Process:

Catch estimates are provided to DFO by the First Nation group on a weekly basis based on permit issuance. On-grounds observations of effort and catch by DFO is also factored into catch estimates. Namgis is also interested in utilizing the electronic catch monitoring program.

Data Quality:

There is limited validation of the landings by these local First Nation groups and accuracy of the estimate has been raised as an issue.

## **2. Southern Johnstone Strait (Area 13) Local First Nation's**

**Comprised of the A'Tlegay Fisheries Society which includes 5 First Nation Bands;**  
Cape Mudge, Campbell River, Comox, Kwiakah and Tlowitsis

Geographic Area:

This group's traditional fishing area for Fraser River sockeye is in the lower portion of Johnstone Strait below Lewis Point and mainly in Statistical Area 13.

Participation (Effort):

Participation is measured in terms of permits issued by the A'Tlegay Fisheries Society for seines, gillnet and troll vessels. Effort levels are also verified on-grounds by A'Tlegay guardians and DFO. Participation is approximately 130 permits per year with the majority of the catch caught by seine vessels.

Catch:

In 2009, the catch for this group was 3,776 sockeye which is considerably lower than recent year catches in the range of 40 to 50,000 sockeye due to low abundances and limited harvest opportunities. In most cases Fraser pinks are harvested as by-catch during sockeye fishing. In 2009 the estimated pink catch was 13,806 pieces.

Catch Estimation Process:

A'Tlegay in cooperation with DFO has developed an electronic catch reporting system to track their FSC catch and distribution. A'Tlegay fishery guardians monitor their FSC fisheries on the grounds. Data is captured in the field electronically and is downloaded into their central information system where it is exported automatically to DFO. This system has been fully functional and has been used for the past 6 years.

Data Quality:

Approximately 90% of all catch is monitored and validated at the time of offload by the A'Tlegay fishery guardians.

### **3. First Nation's Fraser Sockeye Coordinated Fishery**

Over the past 6 years since this program was developed and implemented, approximately 20 First Nation groups mainly from the Southern Vancouver Island area have participated in this program to harvest Fraser River sockeye mainly from the Johnstone Strait area.

In 2008, the coordinated fishery was not conducted due to low inside diversion of sockeye through Johnstone Strait and low abundances. Similarly, in 2009, the coordinated fishery was not conducted due to low abundances.

### **4. Independent South Island First Nations Fisheries**

#### Geographic Area:

Some South Island First Nation groups fish independently in Johnstone Strait (Area 12 and 13) for Fraser River sockeye.

#### Participation (Effort) and (Catch):

Participation and catch numbers are received primarily as reports from First Nation resource managers.

In 2009 there was no fishing in Johnstone Strait due to low abundance.

#### **Summary:**

In 2009, the total First Nations catch in southern marine waters was estimated at 10,235 sockeye and 22,501 pink.

### **Recreational**

#### Geographic Area:

Statistical Areas 11, 12 and 13 (Johnstone Strait)

#### Participation (Effort):

Participation varies by area and year and has generally been increasing annually and is measured in boat trips. The main portion of this fishery takes place in July and August and is directed towards coho and Chinook stocks (sockeye is normally a by-catch in most cases however some directed sockeye fishing does occur, mainly in lower Area 13 where targeted effort and catch has been increasing in recent years).

In 2009, there were no directed sockeye retention opportunities due to low abundances. The estimated pink catch was 38,897 pieces.

Catch Estimation Process:

Catches in the recreational fishery are estimated using creel survey programs. One program operates in the northern portion of Johnstone Strait (Area 12) during July and August. The focus of this creel survey is to monitor Chinook and coho catches but catches of other species is also estimated. The portion of Johnstone Strait southerly of Chatham Point in Area 13 is covered by the Strait of Georgia Creel Program that operates from April to October. The portion of Johnstone Strait between Chatham Pt and the lower boundary of Area 12 is not covered by a creel survey, however effort and catches in this area which is remote for recreational access is low.

Catches are estimated using the creel survey program where regular over flights are conducted to count the amount of gear that is operating and fishers are interviewed at a number of landing sites regarding their fishing activity. The interview information is then extrapolated to account for all vessels that were fishing.

Data Quality:

The creel survey in the northern portion of Johnstone Strait only covers the July and August time period when the majority of effort and catch occurs. Catches outside of this time period are not known or included in these catch estimates. Both the Area 12 and 13 creel surveys cover the majority of the time period and locations when and where sockeye are caught.

**Commercial (Area B Seine, Area D Gillnet, Area G and H Troll)**Geographic Area:

The commercial fishing area for Fraser River sockeye in Johnstone Strait is: Pacific Fishery Management Areas 12 and 13 from Separation Head in the south to the north shore of Malcolm Island in the north. In addition, gillnets are permitted to fish in the Roller Bay area of Area 11. In years of high inside diversion and when Area G has a Fraser sockeye or pink allocation, Area G is permitted to fish in portions of Areas 11 and 12 down to Blackfish Sound.

Participation (Effort):

Effort levels are also somewhat dependant upon the preseason forecast for Fraser River sockeye, diversion forecasts, and available opportunities in other fisheries.

Catch:

Catch is dependant upon the available Canadian Commercial TAC and conservation constraints for weaker stocks. Commercial sockeye catches in Johnstone Strait have ranged from zero to 6,300,000 in the past 11 years, with recent catches prior to 2008 ranging from zero to 2.3 million since 2000.

In 2009, there were no opportunities for Fraser River sockeye. Fraser River pink opportunities were limited due to constraints on sockeye. Area B seine fished for 13 days on Aug. 30-Sept. 11 (ITQ fishery), 64 vessels participated for a validated catch of

1,295,095 pink. Area H troll also fished for 13 days Aug. 30-Sept. 11 (ITQ fishery), 20 vessels participated for a catch of 16,541 pink. The total commercial catch in Johnstone Strait was 1,311,636 pink. Catches were poor due to constraints on sockeye.

#### Catch Estimation Process:

In-season catch estimates for Fraser River sockeye and pink are derived from a combination of sources. These include:

##### 1) Charter Patrol Vessel Reporting

On the fishing grounds Charter Patrol vessels observe fishing activities and survey a subset of the fishing fleet for their catches. These 'hailed' catches are then reported to the local fishery manager on a real time basis throughout each day of fishing. For most fisheries these reports are given in the morning and afternoon during the fishery. Effort is estimated either by the Charter Patrol and/or over flights. Using total effort, these 'hailed' catches are then expanded to provide an estimate of total catch for the given area. These estimates are the first received from the fishery, providing an early indication of catch rates. This is essential to determine whether or not catch rates are comparable to those projected in the PSC pre-season model.

##### 2) Phone-In/Logbook Reporting

As a condition of licence, commercial fishers are required to maintain a daily catch logbook and report their catch and release of all species by phoning into a catch monitoring service provider. For Fraser River sockeye fisheries, fishers are required to phone-in their catch on a daily basis. This catch estimation method is used considerably by managers in estimating daily in-season catch estimates.

##### 3) Observer Reporting

Independent trained observers are deployed on fishing vessels and are responsible for recording the catch and release of all species. On board observer reporting is used to help verify catch information from other sources in the area (Charter Patrol and Phone In/Logbook). Observer catch information is used mainly to determine the catch of non-target species. Non-target estimates from the vessels with observers are expanded to estimate the by-catch for the entire fleet. There were no observers in 2009 in Johnstone Straits.

##### 4) Company Reporting

During seine fisheries, major fishing companies provide catch information including their catch estimate and number of vessels participating. This information is voluntary and is used to complement catch information from other sources.

##### 5) Post Season Reports

As a condition of the fishing license, fishers are required to submit their logbooks to DFO for verification with the Phone In data. This process does not occur until well after the fishing season and therefore cannot be used for in-season fishery management.

##### 6) Dockside Validation

Area B and H vessels that were participating in the Individual Vessel Quota demonstration fishery were required to validate 100% of their catch either shore-side or to a designated packer through an independent service provider. This catch estimation method is weighted the most in deriving a final in-season catch estimate for ITQ fisheries.

#### Data Quality:

##### 1) Charter Patrol Reporting

Johnstone Strait is a significant area to cover fishing activities. In past years, the Johnstone Strait area had 8 Charter Patrol vessels operating in the area (120+ days per charter). Since 2005, the number of charters has been reduced to 4(averaging 75 days per charter). Note that starting in 2005, William review funding provided funding for 1 of the 4 charters.

Currently charter patrol coverage is approximately 50% of the fishing area during commercial fisheries. This source of catch information has become less reliable for catch estimates during the fishery. However it still provides for the first indication of catch rates during the fishery which can be critical in some fisheries.

##### 2) Phone-In/Logbook Reporting

Phone in data is one source of information for in season management decisions. However phone data does need to be verified or augmented with other sources of information such as charter patrol or observer data. Although the quality of the data appears to be good, reporting compliance within the required time frame needs improvement. Catch reporting after 2 or 3 days of the fishery improves but does not provide for real time catch information which could have a negative impact on fishery management decisions. DFO is currently working with the commercial sector to improve catch reporting compliance.

##### 3) Observer Reporting

The main function of the observer program is to verify catch rates, in particular non-retention species. In past years (prior to 2004) 16 to 20 observers were deployed on commercial fisheries in Johnstone Strait.

In recent years observer funding has been very limited. With the reduction of observer coverage, observers are now deployed to focus on “hot spot areas” in fisheries and locations where there is the potential for high by-catch rates on non-retention species. The observer program is a key component of the catch monitoring program by providing for an auditing function for reported catches.

##### 4) Effort Estimation

Effort levels in the commercial fishery are determined by over flights which are conducted during each fishery. In the event that an over flight estimate is not available (due to poor weather conditions or lack of funding as examples) other sources to

determine effort counts include; on-grounds estimates from charter patrol vessels and fishery officers and the log/book phone-in program.

Over flights are the most accurate and efficient method for determining effort, however funding is an issue.

## ***West Coast Vancouver Island***

### **First Nations**

#### Geographic Area:

First Nations communities participating in the Fraser River sockeye fishery on the West Coast Vancouver Island (WCVI) fish from Area 121 (off-shore from Nitinat Lake) to Area 126 (Brooks Peninsula), a natural northern boundary for the Nuuchahnulth (NTC) people.

#### Participation (Effort):

Of the 14 NTC First Nations on the WCVI, less than 10 of the bands harvest Fraser sockeye in each year. Fishing is carried out primarily in small troll and gill net vessels near shore and occasionally by seine vessels in Area 20. Most of the catch comes from Areas 20 and Areas 121 to 124. The number of vessels operating averages about 10 annually.

#### Catch:

Catches of Fraser sockeye are generally thought to be less than 500 Fraser sockeye annually, although in some years, dependant on diversion rates catch of sockeye by NTC First Nations fishing in Area 20 has reached approximately 9,000. In 2009 the catch estimate was only 90 sockeye and 20 pink due to low abundances and limited harvest opportunities.

#### Catch Estimation Process:

Participants fish under the authority of a communal licence which requires that catches are reported monthly to the Aboriginal Fisheries manager.

#### Data Quality:

Compliance with catch reporting requirements is variable, with some First Nations providing reliable reports, while others rarely report their catch. The quality of the data is unknown as catches by the small boat fleet are done on an inconsistent and sporadic basis and are rarely audited.

### **Recreational**

#### Geographic Area:

Recreational fishing occurs on the west coast of Vancouver Island from Areas 21 to Area 26 and Areas 121 to 126.

Participation (Effort):

Effort is mainly focused targeting Chinook and coho however in years of high sockeye abundance there can be significant effort targeting Fraser sockeye particularly in Area 20.

Catch:

Total sockeye catch for WCVI encompassing areas outside of Alberni Inlet averages approximately 2 to 3,000 sockeye in recent years. In 2009 due to low abundances there were no sockeye retention opportunities. The estimated pink catch was 924 pieces.

Catch Estimation Process:

Aerial over flights were conducted to estimate effort for SWVI from June 1 to September 30 and for NWVI July 1 to August 31. For catch per unit of effort calculations, access point creel survey, with a similar design as the Georgia Strait Creel Survey, with the addition of some lodge reporting and independent guides reporting catch and effort was used.

Data Quality:

Estimates are preliminary at this time; the goal of this survey is to produce estimates with in 10% CV by area.

## **Commercial**

Geographic Area:

The Area G troll fishery harvests Fraser sockeye in the offshore areas of the WCVI, primarily Areas 123 to 127 as well as Areas 11, 111, and 12, in years in which allocation is provided. There are no other gear groups that access Fraser sockeye on WCVI.

Participation (Effort):

In recent years, Area G has not been allocated sockeye with the exception of 2006.

Catch:

There was no Area G fishery directed at Fraser sockeye in 2009 due to low abundances and no Area G TAC.

Catch Estimation Process:

The commercial catch estimation process is detailed in the Commercial catch estimation section of the Johnstone Straits portion of this report. In-season estimates of catch per unit of effort based on daily hauls provided by fishermen as required by condition of licence are the primary source of information in the determination of a final estimate. This information was augmented by chartered over flights, PAL over flights, observer reports, and reports from on grounds Harvest Committee members. There is no charter patrol available for WCVI sockeye fisheries.

Data Quality:

The quality of the data is sometimes compromised due to late reporting by the fleet. Because of the degree of correlation between the hail information and other objective information sources (e.g., charter patrol and observer verification of fishermen's hails), catch information is thought to be reliable.

***Strait of Juan de Fuca*****First Nations**Geographic Area:

Most fishing for Fraser River sockeye by WCVI First Nations takes place in the Strait of Juan de Fuca between the town of Sooke and Carmanah Point by seine. As well, there is some activity near-shore with gill-nets set from commercial style vessels and small boats.

Participation (Effort):

In some years, 2 – 4 seine vessels are chartered to harvest sockeye for NTC First Nations in this area. A small number of gill net vessels, fishing for the Pacheedaht First Nation, operate in Area 20 as well.

Catch:

The catch is highly variable depending on abundance, diversion rates and availability of gear. In 2009 there was no sockeye or pink catch due to low abundances and limited harvest opportunities

Catch Estimation Process:

The fishing activity is authorized under a supplemental communal licence that stipulate the vessel name, catch allocation, time and area. The vessels are required to carry an aboriginal fishery guardian, and to report catch, place and time of offloading to a fishery manager.

Data Quality:

Catches by seine vessels are periodically audited at the point of landing. Based on these audits, catch reports have generally been found to be accurate.

**Recreational**Geographic Area:

Recreational fishing occurs throughout Areas 19 and 20, with concentrations around the Victoria Waterfront, the entrance of Sooke Harbour and the area outside of San Juan.

Participation (Effort):



Effort is mainly focused targeting Chinook and coho however in years of high sockeye abundance there can be significant effort targeting Fraser sockeye.

Catch:

In 2009 there were no sockeye retention opportunities due to low abundances. The estimated pink catch was 50,917 pieces.

Catch Estimation Process:

Part of the Georgia Strait Creel Survey, which is an access point creel survey, using interviews of returning fishermen for catch rate and fishery pattern data, with scheduled flights to count fishing effort. Counted effort is expanded to total effort and catch rate is applied to effort to determine total catch.

Data Quality:

95% estimate of confidence limits for catch and effort.

## **Commercial**

Geographic Area:

In recent years the fishery has been limited to a highly restricted seine fishery operating in the outer portion of the Strait of Juan de Fuca.

Participation (Effort):

The area is fished under a controlled fishery management approach due to potential high by-catch concerns particularly for coho but also other species. Participation has ranged from as few as 2 to as many as 60 seines in recent years. In years of high inside diversion there is either very limited or no fishing opportunities for Area B seine. In 2008 the Area B seine fishery was conducted as a demonstration ITQ fishery.

Catch:

During the period 1977 to 1997, catches by gill net and seine averaged 800,000 sockeye annually. More recently, fisheries have been limited to seines only. Catches during the period 2002 – 2006 have ranged from 10, 000 to 54,000 sockeye. In 2007 there were no directed Fraser sockeye fisheries due to low abundances. In 2008 there was only a very limited fishing opportunity due to low abundances. Area B seine fished for 2 days on July 27 to 28, 6 vessels participated (ITQ) for a catch of 11,222 sockeye. In 2009 there were no sockeye harvest opportunities due to low abundances. Fraser pink opportunities have not been permitted due to impacts on Interior Fraser coho.

Catch Estimation Process:

In-season catches are hailed following each set to the fishery manager on grounds. In addition the fishermen must contact a Service Provider by telephone to hail their daily catch. In addition, the fishery is monitored by observers. All catches are independently

validated at the point of landing by Fishery Observers. In 2008 the ITQ demonstration fishery required 100% dockside validation by independent monitors.

Data Quality:

The catch estimates are considered to be very accurate.

## ***Strait of Georgia***

### **First Nations**

There are approximately 21 groups that constitute the South Island First Nations (SIFN). These groups have fished under different aggregates and/or independently over the years. In 2009, there was no coordinated fishery where in recent years a number of these groups would have participated in the coordinated fishery and harvested FSC sockeye from Johnstone Strait.

Geographic Area:

South Island First Nations fishing for Fraser sockeye in the Strait of Georgia area generally fish either in Sabine Channel (near Texada Island) or at the mouth of the Fraser River. First Nations harvest most of their FSC fish by hiring seine vessels in these areas or by fishing with commercial gillnet gear.

In 2009, the total catch was 20 sockeye and 211 pink. Catches of sockeye were poor due to limited opportunities and low abundances.

### **Recreational**

Geographic Area:

Recreational fishing occurs throughout Areas 14 to 18, 28 and 29, with concentrations around French Creek, Nanaimo and to a lesser degree Vancouver / Howe Sound.

Participation (Effort):

Effort is mainly focused targeting Chinook and coho however in years of high sockeye abundance some effort is focused on sockeye mainly in Areas 18, 19 and 29.

Catch:

Sockeye catches are typically low in the Strait of Georgia. In 2009 there were no sockeye opportunities, the pink catch was 2,595.

Catch Estimation Process:

Part of the Georgia Strait Creel Survey, which is an access point creel survey, using interviews of returning fishermen for catch rate and fishery pattern data, with scheduled flights to count fishing effort. Counted effort is expanded to total effort and catch rate is applied to effort to determine total catch.

Data Quality:

The 80% to 95% estimate of confidence limits on catch and effort.

## **Commercial**

Geographic Area:

In recent years only limited sockeye fisheries have occasionally occurred in the Strait of Georgia near the southern Gulf Islands (Pender and Saturna) or off the mouth of the Fraser River by troll and seine.

Participation (Effort):

In recent years, effort has mainly been limited to a few Area H troll vessels fishing in either Area 18 or Area 29 off the Fraser River mouth. In 2009 there was no commercial fishery for sockeye. In the Strait of Georgia, Area H troll was open for 13 days from Aug. 30-Sept. 11 (ITQ fishery) in Area 18 where 1 vessel participated. Area H was open for an additional 7 days in Area 18 and 29 from Sept. 12-18 where 2 vessels participated. Area B was open for 7 days in Area 29 from Sept. 13-19 where 5 vessels participated.

Catch:

The Area H troll catch in Area 18 was 187 pink and 0 in Area 29. Catches were poor due to low abundances. The Area B seine catch in Area 29 was 98,461 pink.

Catch Estimation Process:

Demonstration fishery ITQ fisheries require 100% dockside validation by independent monitors. Derby style fisheries are hailed daily, and vessel masters are required by condition of licence to phone their catch in daily as part of the logbook/phone-in program.

Data Quality:

In the derby fishery compliance is generally good in the range of 70 to 85%, and however there is room for improvement. With the combination of charter patrol hails and daily phone-ins, catch estimates are thought to be reasonably accurate. Confidence levels in demonstration fisheries (ITQ) are considered very high as they require 100% dockside validation.

## ***Lower Fraser***

### **First Nations:**

#### **1. First Nations below the Port Mann Bridge**

Geographic Area:

The area fished by these groups extends from the mouth of the Fraser River to the Port Mann Bridge, including the North Arm and Canoe Pass. Fishing opportunity is provided for non-salmon species in the Strait of Georgia adjacent to the mouth, however, all salmon-directed fisheries are conducted within the Fraser River. Other groups that have an allocation of Fraser sockeye, and are located outside the Fraser River may undertake fisheries in this area by contracting individual fishermen from Musqueam and Tsawwassen, or have a protocol in place to allow for harvest in a particular area.

Tsawwassen Treaty:

April 3, 2009 the Tsawwassen First Nation Treaty became effective. The Tsawwassen Fisheries Operations Guidelines provides direction on how the fisheries chapter of the Tsawwassen Treaty Final Agreement is implemented ([www.tsawwassenfirstnation.com](http://www.tsawwassenfirstnation.com)). For 2009, the Tsawwassen First Nation fishery was run similar to previous years with a few exceptions. Some of these changes include, rather than being issued a communal licence for FSC purposes, a Harvest Document (HD) was issued. In the case of economic opportunities, these are referred to as a commercial opportunity and are identified in the Tsawwassen First Nation Harvest Agreement. For more information refer to the Pacific Region Integrated Fisheries Management Plan Southern BC (IFMP) or the Tsawwassen Treaty. ([www.tsawwassenfirstnation.com](http://www.tsawwassenfirstnation.com))

Participation (Effort):

The number of participants in a fishery is, in part, related to the numbers of fish that are available for harvest. In previous years, fishing effort in the lower river has ranged from a low of 1 drift gillnet during Early-timed Chinook fisheries to a high of 90 or more vessels during sockeye fisheries for Food, Social and Ceremonial (FSC) purposes. Effort can increase to more than 100 drift gillnets for sockeye fisheries when these fish can be sold. More recent FSC fisheries for sockeye have had effort in the 50 vessel range.

Catch:

Since 2002, the annual catch for First Nations below Port Mann for both FSC and Economic Opportunity fisheries has ranged from 5,000 to 140,000 fish for sockeye, and from 18,000 to 29,000 fish for chum. In addition, harvest of other salmon species during FSC fisheries (and as by-catch during sockeye or chum-directed EO fisheries) has varied from 100 to 2,100 fish for coho; from 2,600 to 39,000 fish for pinks; and from 1,800 to 6,000 fish for Chinook.

The table below provides catch estimates by species for 2009 FSC and economic opportunity (as per an agreement) or commercial opportunity (in the case of Tsawwassen) fisheries.

	Sockeye	Chinook	Chum	Pink	Coho
FSC	4,875	7,212	7,170	341	109
EO & CO	12	107	10,758	38,808	146

Catch Estimation Process:

### *Food, Social, and Ceremonial Fisheries*

The Musqueam First Nation (MFN) employs Aboriginal Fisheries Officers (AFO's) who monitor FSC fisheries by vessel for a portion of the open time and collect "hail" catch information from all participants during FSC fisheries. The hail data obtained by AFO's at the close of the fishery (catch reported by each participant) is then provided to DFO catch monitoring staff at the Lower Fraser Area office for review and input into DFO's catch database.

The Tsawwassen First Nation (TFN) employs one full time AFO and one full time monitor for FSC fisheries with additional monitors hired as needed. In 2009 the AFO and monitors patrolled a portion of the open times collecting "hail" catch information from all participants and conducting counts of catch. Following the close of each fishery TFN staff called each registered/licensed fisher to verify if they fished and if so, collected a hail of their final catch. This data was then provided to DFO catch monitoring staff at the Lower Fraser Area office for review and input into the DFO's catch database.

Catch data from other First Nations fishing in this area is provided by individual fishers to the First Nation administration office which in turn supplies the data to DFO for review and input into DFO's catch database.

### *Economic Opportunity Fisheries*

Both Musqueam economic opportunity and Tsawwassen commercial opportunity fisheries are monitored using a mandatory landing program. Each Nation hires and trains additional monitors for these fisheries to staff landing sites throughout the fishing area. Fishers are then required to land at one of these sites and have their catch enumerated by the monitor.

#### Data Quality:

There are concerns about all catch estimation programs based solely on "hail" information, regardless of the nature of the fishery. Sporadic audits by DFO C&P and Resource Management staff have been inconclusive insofar as providing a quantitative assessment of data quality. DFO is continuing to work with Musqueam and Tsawwassen to improve the accuracy of reporting in FSC fisheries.

## **2. Port Mann to Sawmill First Nations**

Included in this section are all First Nations who fish between the Port Mann Bridge and Sawmill Creek. Other groups that have an allocation of Fraser sockeye, and are located outside the Fraser River may undertake fisheries in this area by contracting individual fishermen from local First Nations, or have a protocol in place with the local First Nation to allow for harvest in a particular area.

Geographic Area:

This area includes the waters of the Fraser River from the Port Mann Bridge to Sawmill Creek upstream of Yale, B.C. In addition, some harvest by individual communities takes place in tributary systems (e.g. Pitt River and Harrison River).

Participation (Effort):

Since 2006, both set nets and drift nets have been permitted for use throughout the entire area from the Port Mann Bridge to Sawmill Creek. Drift nets are used predominantly in the area from Port Mann Bridge to Mission Bridge and from Jones Hill to Jespersen's Bar (in the vicinity of the Rosedale-Agassiz Bridge); set nets are used primarily from Mission to Sawmill Creek.

The number of set nets participating in food, social, and ceremonial openings in recent years has ranged from less than 10 during Early-timed Chinook fisheries to a high of 400 during sockeye fisheries, while the drift net participation ranged from less than 10 early in the season to a high of 100 during sockeye openings. During sales fisheries, the effort can increase to 650 for set nets and over 100 for drift nets. More recent FSC sockeye fisheries have had set net and drift net gear counts in the 250 and 50 range respectively.

For a large proportion of the 2009 fishing season, due to concerns for by-catch species, set net effort was greatly reduced or absent due to both the restriction of gear to drift nets and the requirement for large-mesh set net gear for many fisheries.

Catch:

Since 2002, the annual salmon catches for both FSC purposes and Economic Opportunity fisheries in this area have ranged from 17,000 to 525,000 fish for sockeye, 233,000 to 470,000 fish for pink; 11,000 to 29,000 fish for chinook; and 36,000 to 101,000 fish for chum. In addition, for this same period, by-catch of coho has ranged from 170 to 1,800 fish.

The table below provides catch estimates by species for 2009 FSC and EO fisheries (as per agreements). EO catches listed here include catch arising from fisheries targeting allocation transferred upstream by Musqueam and Tsawwassen.

	Sockeye	Chinook	Chum	Pink	Coho
FSC	16,829	17,307	5,821	1,102	169
EO	35	3,576	57,392	469,150	508

Catch Estimation Process:

Three First Nations (Yale, Cheam and Chehalis) operate their own monitoring programs developed in consultation with DFO. During FSC fisheries each First Nation has monitors stationed at their landing sites where hauls and counts of catch are collected from their fishers. Catch and effort information from these fisheries is forwarded to DFO within 24 hours of the completion of each fishery.

Monitoring for the other First Nations in this area (representing the majority of fishers and catch) is conducted by the Fraser Valley Aboriginal Fisheries Society (FVAFS). FVAFS organizes the hiring, training, supervision and scheduling of up to 40 First Nations fisheries observers. Monitoring plans are prepared by DFO in discussion with FVAFS each year. These monitoring plans include the number and locations of observers among other details and are reviewed below by fishery type.

### *Food, Social and Ceremonial Fisheries*

FVAFS monitors are stationed at major access sites and boat launches, as determined by the stage of the river and the fishing effort. For a portion of the set net participants at each site, monitors keep a daily running tally of the number of harvested salmon by species, along with the amount of time the net was fishing, thus obtaining catch-per-unit-effort (CPUE) data for each site. To generate “24-hour effort profiles” for each site monitors also track the number of set nets fishing throughout the fishery, noting when additional gear begins fishing, and when nets are pulled from the water. Drift net catch data is obtained by hail or direct count from access sites when catch is landed. All catch data is forwarded to DFO within 24 hours following the close of the fishery.

In addition to data collected at landing sites an instantaneous effort count is obtained from overflights conducted a minimum of once per opening during periods of lower activity (Chinook and chum fisheries) and up to once every 24 hours during periods of significant fishing activity (sockeye fisheries). These flights count both set gillnets (set nets) and drift gillnets (drift nets) between Mission and Sawmill Creek.

These three pieces of information (instantaneous counts, CPUE data, and 24-hour effort profiles) are then used by DFO staff to estimate total catch occurring in set net fisheries. Drift net data is summed from interviews obtained at landing sites. All catch and effort data is entered into the DFO catch database.

### *Economic Opportunity Fisheries*

During Economic Opportunity (EO) fisheries for sockeye, fishers are required to land at an approved landing site where monitors directly count their catch. During pink and chum fisheries harvesters currently use selective fishing gear (beach seines) due to concerns over by-catch species. In this case a monitor is provided to each beach seine crew for the duration of the fishery and records fish kept and released on a set-by-set basis. Catch data is forwarded to DFO Lower Fraser Area catch monitoring staff every day during the beach seine fishery.

### Data Quality:

Catch estimates during sales fisheries provide an accurate assessment of landed catch as all landed catch is enumerated by monitors. In FSC fisheries, an accurate estimate of catch-per-unit-effort can be made as the monitor can observe much of the catch being moved from the vessel into vehicles. However, estimates of total catch are based on an

expansion of this CPUE data using the effort profiles and instantaneous effort counts and therefore the accuracy of this estimate is dependent on these data being representative. Similar to fisheries below the Port Mann there is concern when hail information is used, as is the case for drift net fisheries, as the accuracy of this information is difficult to verify.

## **Commercial (Area E Gillnet)**

Geographic Area: The Area E gill net fleet is licensed to fish in Areas 16 to 22, 28, 29 and 121. This section covers only those fisheries in the Fraser River Mainstem- Area 29: Mission downstream and lower Strait of Georgia

Participation (Effort):

There were 393 eligible Area E salmon licenses in 2009.

Catch:

Catch is dependent upon the available Canadian Commercial TAC and conservation constraints for weaker stocks. Commercial sockeye catches in the Fraser River in recent years have ranged from 0 to almost 1,000,000. In addition, chum (30,000 to 70,000 pieces) and chinook (4,000 to 6,000 pieces) salmon are also harvested.

There was no commercial sockeye fishery in the Fraser River in 2009. The Fraser River commercial chum harvest was approximately 42,000 pieces, with a by-catch of 34 chinook and 0 pink salmon.

Description of Catch Estimation Process:

To estimate effort and catch, the following methods are used during sockeye and chum fisheries in Area 29 (Fraser River and lower Strait of Georgia):

- (a) Overflights with a fixed wing aircraft are conducted to count the number of fishing vessels during a fishery opening. Overflights are scheduled to account for time of year and tide in order to obtain a maximum vessel count during the peak of the fishery. There were no overflights conducted during the chum opening in 2009.
- (b) Gear counts are made using on-grounds DFO and charter patrol vessels.
- (c) A limited number of independent observers are placed on board fishing vessels.
- (d) Charter patrol, contractors, and DFO fisheries staff are deployed in the field to collect catch (hail) information, including target and by-catch numbers per vessel. Hails are used for average catch at a given time interval and area of a fishery. Hail information is used for planning overflights, comparing logbook reporting compliance, and providing a mid-opening catch estimate. Hails collected at or near the close of a fishery are compared with reported catch information.
- (e) In addition to the phone-in, a logbook requirement and effort counts, the monitoring plan for chum fisheries includes a roving observer component. This approach



was first introduced in 2007 and involves an “observe, record, and report” element; where independent observers conduct net haul observations of target & non-target species. A priority in chum fisheries is an evaluation of impact on non-target species (stocks of concern), such as steelhead and coho salmon; the purpose of this component of the catch monitoring program was to capture this kind of information.

Catch monitoring and reporting requirements are identified and detailed in the 2009/2010 Conditions of Area E licence. To estimate catch, licence holders are subject to certain conditions of their licence. These conditions include the following:

- (a) The requirement to provide information for each day fished before 08:00h of the following day. This information includes the number of fish caught and retained by species, the number of fish caught and released by species, and the number of non-fish (i.e. birds and mammals) encountered by species. This information is entered into the DFO catch database.
- (b) The requirement to immediately provide an accurate estimate of the amount of fish on board the vessel as well as fish caught and released, the location of the catch, and the rate of catch upon demand of any fishery officer or representative of the Department.
- (c) The requirement to take on board an observer when requested. During the fishery, observers are deployed throughout the opening area. Observers provide an average catch profile which can be compared with other sources of catch data, and obtain information about catch distribution useful for fishery planning. The use of observers depends on an assessment of fishery impacts on stocks of concern, in addition to limitations imposed by departmental budgets and logistical/operational constraints.
- (d) The requirement to maintain a harvest log of all harvest operations. The harvest logs for 2009 must be delivered to the Department prior to January 31, 2010.
- (e) The requirement to submit fish slips to the Department within 7 days of any landing.

#### Data Quality:

Catch data obtained from the commercial fleet is primarily “hail” information, and there are concerns about all hail-based catch estimation programs, regardless of the nature of the fishery. Sporadic audits by DFO C&P and Resource Management staff have been inconclusive insofar as providing a quantitative assessment of data quality. Though the quality of data from on-board observers is high, there are very few boats with observers due to budgetary limitations.

### ***B.C. Interior***

#### **First Nations:**

## **1. Nlaka'pamux Nation Tribal Council and Nicola Watershed and Stewardship Fisheries Authority**

There are 17 individual First Nation Bands that belong to these representative organizations that reside along the Fraser River from Hell's Gate (Spuzzum) to Lytton, in the lower Thompson River and throughout the Nicola Basin. The fishery in this area is principally set nets although dip nets and angling are used on an opportunistic basis.

### Geographic Area:

The area of the fishery is in the Fraser River from Sawmill Creek upstream to Texas Creek (located between Lytton and Lillooet) and in the Thompson River downstream of the Bonaparte River.

### Participation (Effort):

The mean number of nets<sup>1</sup> fishing in this area on a weekly basis ranges from 3 to 30 during the chinook fishing period and 50 to 80 during the sockeye fishery. In 2009, the peak mean effort count was 10 set nets during the chinook fishery and 49 set nets during the 1 week the sockeye fishery was open (wk 30).

### Catch:

The catch of chinook and sockeye in this area, in recent years, ranges from 1,900 to 3,700 and 67,000 to 130,000, respectively. In 2009, the catch was estimated to be 701 Chinook and 3,112 Sockeye.

### Description of Catch Estimation Process:

When budgets permit, effort counts are derived from helicopter overflights. In 2009 effort counts were undertaken by a combination of vessel and vehicle patrols during the chinook fishing period and by helicopter overflights during the typical sockeye fishing period (wk 30 – wk 38). In addition, catch monitors conduct interviews of fishermen at fishing sites to determine catch per unit of effort. To further augment this information, specific sites are monitored for extended periods of time during the sockeye fishery to determine the effort over the period of the entire day. These effort patrols were provided with 24 hour coverage twice weekly.

### Data Quality:

There are no catch estimates generated for this area unless a survey has been conducted. The quality of the data in recent years has been significantly improved with the implementation of aerial surveys and an increase of the time spent undertaking the effort surveys.

## **2. Stl'atl'imx Tribal Council**

There are 7 First Nations within this tribal grouping that are located in the Lillooet area and west to Mt Currie.

### Geographic Area:

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<sup>1</sup>Mean number of nets is the mean of the number of nets counted on each daily effort count over a 1 week period.

This group conducts the salmon fishery in the Fraser River from Texas Creek north to Kelly Creek.

Participation (Effort):

The mean number of nets fishing in this area on a weekly basis ranges from 1 to 20 during the chinook period and from 10 to 40 during the sockeye fishery. As well there are usually 5 to 10 dip net sites in operation throughout the season. In 2009, the peak weekly mean set net effort was 6 during the chinook fishery and 5 during the 7 day sockeye fishery (wk 30/31). The peak weekly mean dip net effort was 9 during the chinook fishery and 2 during the 7 day sockeye fishery.

Catch:

It is estimated that catches of Chinook are less than 2,000 fish and catches of Sockeye range from 40,000 to 90,000. In 2009 the estimated catch of Chinook was 589 and of Sockeye was 4,352.

Description of Catch Estimation Process:

When budgets permit, effort counts are derived from helicopter overflights. In 2009 effort counts were undertaken by a combination of vessel and vehicle patrols during the chinook fishing period and by helicopter overflights during the typical sockeye fishing period (wk 30 – wk 38). In addition, catch monitors conduct interviews of fishermen at fishing sites to determine catch per unit of effort. To further augment this information, specific sites are monitored for extended periods of time during the sockeye fishery to determine the effort over the period of the entire day. These effort patrols are ideally done for a 24 hour period twice weekly. In recent years these patrols have been reduced to a 16 hour period due to budget shortfalls and recognition of the daylight only fishery. In 2009 the specified sites were provided with 16 hour coverage twice weekly.

Data Quality:

There are no catch estimates generated for this area unless a survey has been conducted. The quality of the data in recent years has been significantly improved with the implementation of aerial surveys and an increase of the time spent undertaking the effort surveys (16 hours).

### **3. Whispering Pines and High Bar Indian Band**

Geographic Area:

These 2 Bands conduct their fishery in the area from Kelly Creek to Deadman Creek.

Participation (Effort):

There are only a very small number of nets (<10) that participate in this fishery.

Catch:

The catch is predominantly sockeye and is usually less than 2,000 fish. In 2009, the estimate of catch was 12 Sockeye and 0 Chinook.

Description of Catch Estimation Process:

When budgets permit, effort counts are derived from helicopter overflights. In 2009 effort counts were undertaken by vehicle patrols. In addition, catch monitors conduct interviews of fishermen at fishing sites to determine catch per unit of effort.

Data Quality:

There are no catch estimates generated for this area unless a survey has been conducted. The quality of the data when the creel is operational is thought to be sound although it has been compromised with the elimination of aerial surveys and reduction of the time spent undertaking the effort surveys.

**4. Northern Shuswap Tribal Council, Tsilhqot'in National Government, Alkali Lake Band and Red Bluff Band**

These groups comprise 10 bands in the Williams Lake area.

Geographic Area:

The area fished by these groups includes the Fraser River from Deadman Creek to Alexandria and the Chilcotin and Chilko Rivers. There are approximately 10 major fishing locations and almost 40 individual fishing sites.

Participation (Effort):

The fishing effort in this area is undertaken by dip nets and effort is enumerated in estimated hours fished. The usual range of cumulative hours fished throughout the area is thought to be from 4,000 to 7,000 hours. In 2009 the estimated hours fished in the areas that were monitored was 5030.

Catch:

The catch in this area is usually in the range of 35,000 to 55,000 Sockeye. In 2009, the estimate of catch in the areas that were monitored was 21,794 Sockeye and 291 Chinook.

Description of Catch Estimation Process:

Monitors provided by the Bands undertake catch monitoring activities with support from DFO. Major sites are extensively monitored with interviews being conducted on a high number of fishermen. The data is expanded post season to account for areas/times not covered. Less intensively fished sites are monitored by roving surveys (that are not expanded).

Data Quality:

Funding to support catch monitoring has increased in recent years resulting in more extensive coverage throughout the Chinook and Sockeye fishery.

**5. Lheidli T'enneh, Carrier-Sekani Tribal Council, Tl'azt'en Nation**Geographic Area:

These groups fish the portion of the Fraser River from Naver Creek to Shelley, the Nechako River (including Nautley and Stellako Rivers) and the Stuart River system.

Participation (Effort):

There are approximately 15 nets used in the Fraser River and lower portion of the Nechako River (Lheidli). The Carrier Sekani Tribal Council (CSTC) bands use approximately 50 gillnets, one beach seine (Nadleh) and a fence (on the Stellako River) in the Nechako and lower Stuart Basin while the Tl'azt'en Nation communities use approximately 20 gillnets.

Catch:

The catch for all groups is usually in the range of 10,000 to 20,000 sockeye. In 2009, the final estimate of catch was 9,403 Sockeye and 139 Chinook.

Description of Catch Estimation Process:

The catch monitoring process varies between the different groups for various reasons. Lheidli T'enneh is engaged in Treaty discussions and have moved from monitors conducting extensive surveys to complete hailing by all fishers as a condition of licence. Both CSTC and Tl'azt'en communities employ catch monitors that undertake interviews with varying success; some individual communities have refused to participate in catch monitoring exercises. Catches from the counting fence are fully enumerated.

Data Quality:

The data associated with the counting fence is thought to be of high quality while the information based on hails or interviews is of unknown quality. Of course the quality of the estimate is further compromised by groups that do not participate in catch monitoring programs however they represent a small portion of the total effort and harvest.

**6. Secwepemc Nation Fisheries Commission**Geographic Area:

Individual member bands affiliated with the Shuswap Nation fish in the Thompson River watershed upstream of Bonaparte / Thompson River confluence. Fishing activity occurs in the mainstem Thompson River, North and South Thompson Rivers, and a variety of locations in smaller tributary streams to the larger systems noted.

Participation (Effort):

Harvest is undertaken throughout the fishing area using a variety of fishing gear including set nets, beach seines, 1 commercial size drift net in Little Shuswap Lake, an enumeration weir on the Raft and Barrier Rivers, hook and line, spear, and gaff. In addition, a gill net test fishery was conducted in the Thompson River.

Catch:

Catch of Sockeye by member bands of the Shuswap Nation in recent years is usually in the range of 1,000 to 6,000 fish and catch of Chinook has been in the range of 600 to 2400 fish depending on abundance in any given year. In 2009, the final estimate of catch was 1,183 Chinook and 1,474 Sockeye.

Description of Catch Estimation Process:

The Shuswap Nation Fisheries Commission arranges for catch monitors to be hired from bands whose members actively participate in fishing activity for food, social, and ceremonial (FSC) purposes. Catch monitors estimate catch by interviewing fishermen on site or after the fact through telephone interviews. Records are kept on a by set basis in the drift net and beach seine fisheries and submitted annually. The daily harvest of fish at fence/weir sites is compiled by operators of the fence/weirs.

Data Quality:

Quality of data varies with the type of enumeration undertaken. The quality of data estimated based on hail information is unknown while the quality of on-site interviews is good. The quality of information from the most efficient fisheries (i.e. the large driftnet and beach seine operations, fence/weir structures) is very good.

**7. Okanagan Nation:**Geographic Area:

The Okanagan Nation fishes for Chinook salmon in the Middle Shuswap River system and Sockeye in the Okanagan River in Canada.

Participation (Effort):

Chinook fishing is carried out using hook and line (angling, 3-4 harvesters fishing at any one time sporadically over the course of the return). Sockeye fishing has recently been carried out by purse seine and vessel and vessel trolling lines with plugs and spoons, though harvesting by dip and tangle nests, spears, gaffs, harpoons and angling with hook and line can also occur.

Catch:

Catch of chinook varies from 30 to 300 fish from the Middle Shuswap River depending on abundance in any given year. In 2009, the final reported number of Chinook caught was 64. Prior to 2008, approximately 25 Sockeye were harvested annually from the Okanagan River. Recent escapements of Sockeye salmon to the Okanagan River have increased over the past 2 years and, as a result, the Okanagan Nation has harvested more

Sockeye for FSC purposes than in the past. In 2009, the final reported number of Sockeye catch was 1630.

Description of Catch Estimation Process:

The Okanagan Nation Alliance Fisheries Program hires a monitor to collect harvest information annually. The monitor contacts fishers from member bands who are known to undertake fishing activity for food, social, and ceremonial purposes to obtain harvest information.

Data Quality:

The quality of this data is unknown because there is no audit function in place to verify the harvest reports.

## **Recreational**

Geographic Area:

Angling opportunities for Sockeye, Pink and Chinook salmon are provided in the Fraser River and Thompson River watersheds in the B.C. Interior Area.

Participation (Effort):

Chinook angling opportunities were provided in 16 terminal locations of the Fraser River and Thompson River watersheds. Structured creel surveys are usually undertaken on several Chinook sport fisheries (Thompson River @ Spences Bridge, Lower Shuswap River, Mabel Lake, Bridge River). Receipt of additional funding in 2009 resulted in the expansion of creel programs to include monitoring of the Clearwater/North Thompson and the South Thompson as well as a new program on the Thompson River. In 2009, new Chinook (Chinook/Pink) angling opportunities occurred at Savona, Walhachin, Juniper Beach, Ashcroft and Goldpan. In cooperation with Conservation and Protection staff, limited coverage of the Bowron River was also provided by means of 10 random vehicle patrols. The remaining 8 Chinook sport fisheries (Chilko, Cariboo River, Fraser River @ Prince George, Fraser River @ Seton, Quesnel River, Middle Shuswap River, Thompson River @ Martel, Thompson @ Bonaparte (closed)) were not monitored due to budget limitations, assumed low effort and catch relative to stock abundance and closures.

Sockeye angling opportunities are generally provided in 4 terminal locations in the Fraser River watershed (Horsefly Bay/Quesnel Lake, Quesnel River, Fraser River @ Lillooet, Nechako River) and were also provided in 2006 on the Thompson River (Savona, Walhachin, Spence's Bridge). In 2009 there were no directed recreational sockeye fisheries in the B.C. Interior Area due to low return of Fraser River sockeye.

Pink angling opportunities are generally available at the Fraser River @ Lillooet (Seton) location. In 2009, an additional Pink fishery (Chinook/Pink) occurred on the Thompson River at Savona, Walhachin, Juniper Beach, Ashcroft and Goldpan.

Catch:

Recreational harvest of Chinook salmon on an annual basis is estimated to be approximately 3,000 – 4,000 fish. In 2009, estimated recreational harvest of Chinook in creel fisheries (including Bowron River) was 3,247 Chinook. In recent years recreational harvest of Sockeye has ranged from 30- 3,400 fish. Since there were no openings for recreational sockeye fisheries no harvest estimate is provided. Recreational harvest for Pinks in the Fraser River @ Lillooet (Seton) area was creel most recently in 2003 and 2005. The annual estimated harvest from those two years ranged from 357 to 368 (average of 363 fish). In 2009, an estimated 1473 Pink salmon were angled from the Fraser River @ Lillooet (Seton) location and 9 Pink salmon were angled from the new fishery on the Thompson (Thompson @ Savona, Walhachin, Juniper Beach, Ashcroft and Goldpan).

Data Quality:

Quality of catch data in fisheries where a creel census is in place is expected to be good. The quality of data for unmonitored recreational fisheries is low.



## Appendix 8: 2009 Fraser River Sockeye and Pink Commercial Openings

LICENCE AREA	OPNG CATEGORY	TARGET STOCK	MONTH	DAYS OPEN		BOAT DAYS	
Area B - Salmon Seine	IVQ / ITQ	Pink - Fraser	August-2009	2		55.26	
Area B - Salmon Seine	IVQ / ITQ	Pink - Fraser	September-2009	18		144.76	
	<b>IVQ / ITQ</b>			Sum	20	Sum	200.02
ALL				Sum	20	Sum	200.02

LICENCE AREA	OPNG CATEGORY	TARGET STOCK	MONTH	DAYS OPEN		BOAT DAYS	
Area H - Salmon Troll	IVQ / ITQ	Pink - Fraser	August-2009	2		12	
Area H - Salmon Troll	IVQ / ITQ	Pink - Fraser	September-2009	18		74	
	<b>IVQ / ITQ</b>			Sum	20	Sum	86
ALL				Sum	20	Sum	86

## Appendix 9: 2009 Fraser River Sockeye and Pink Recreational Salmon Openings

### Sockeye and Pink

Area	Open	Closed	Days	Fishery Notice	Species/Quota
<b>Tidal Waters</b>					
Areas 11 -27					0 sockeye per day
Subareas 18-7 and 18-8 – from Hecate Boat Ramp at approximately 48 44.518N 123 37.475 W and shoreward of 8 boundary markers located at approximately 48 44.569N 123 37.376W, 48 44.540N 123 37.019W, 48 44. 523 N 123 36.684W, 48 44.344N 123 35.869W, 48 44.232N 123 35.387W, 48 43.982N 123 34.798W, 48 43.531N 123 33.961W, 48 43.258N 123 33.599W	00:01 h Aug 01	23:59 h Sep 30	61	571	4 pink per day
Area 17 – That portion of Nanaimo Harbour shoreward of a line from the end of the most southerly dock located at the Nanaimo Yacht Club (49° 10.614N 123° 56.336W) to the Pedestrian Fishing Pier (Crab Dock) located at Swy-a-lana Lagoon (49° 10.264N 123° 56.051W)  That portion of Departure Bay westerly of a line running from the following coordinates 49° 12.600N 123° 57.350W near the Pacific Biological Station to the light on Brandon Island 49° 12.427N 123° 57.571W to the most westerly BC Ferry dock located at approximately 49° 11.672N 123° 57.372W	00:01 h Aug 14	23:59 Sep 30	48	616 724 726	4 Pink per day
Area 28 (Howe Sound, Burrard Inlet and Indian Arm);	00:01 h Jan 1	23:59 h Dec 31	365	SFG	4 pink per day
Area 29 - (includes the tidal waters of the Fraser River downstream from the CPR Bridge at Mission, B.C. excluding Subarea 29-8 (Boundary Bay)	00:01 h Jan 1	23:59 h Dec 31	365	SFG	4 pink per day
<b>Non-Tidal Waters</b>					
Fraser River from the CPR bridge at Mission upstream to the Alexandra Bridge	one hour before sunrise on Septemb er 4	one hour after sunset on Decembe r 31		0691 0515 0528	4 pink per day

## 2009 Past Openings

2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon

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Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
May 3 week 18	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr./Thompson R. downstream of the Bonaparte River	0	Closed	Closed	All
May 3 week 18	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	3 - daylight hours only	Friday May 1 18:00	Sunday May 3 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 3 week 18	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
May 3 week 18	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Friday May 1 18:00	Sunday May 3 18:00	Gill net, Dip net, Angling with Rod and Reel
May 3 week 18	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 3 week 18	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All
May 3 week 18	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 3 week 18	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 3 week 18	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 3 week 18	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 3 week 18	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 3 week 18	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 3 week 18	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
May 3 week 18	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 3 week 18	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 3 week 18	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
May 10 week 19	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr./Thompson R. downstream of the Bonaparte River	0	Closed	Closed	All
May 10 week 19	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday May 4 05:00	Sunday May 10 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All

May 10 week 19	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 3 18:00	Sunday May 10 18:00	Gill net, Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 10 week 19	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All
May 10 week 19	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 10 week 19	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 10 week 19	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 10 week 19	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 10 week 19	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 10 week 19	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 10 week 19	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
May 10 week 19	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 10 week 19	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 10 week 19	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
May 10 week 19	Chinook	NNTC/ NTA/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2 -weekend only	Friday May 8 18:00	Sunday May 10 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	NNTC/ NTA/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday May 8 18:00	Sunday May 10 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	NNTC/ NTA/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
May 10 week 19	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday May 4 05:00	Sunday May 10 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
May 10 week 19	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 3 18:00	Sunday May 10 18:00	Gill net, Dip net, Angling with Rod and Reel
May 10 week 19	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 10 week 19	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All

May 10 week 19	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 10 week 19	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 10 week 19	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 10 week 19	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 10 week 19	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
May 10 week 19	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 10 week 19	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 10 week 19	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
May 17 week 20	Chinook	NNTC/ NTA/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr./Thompson R. downstream of the Bonaparte River	2 -weekend only	Friday May 15 18:00	Sunday May 17 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 17 week 20	Chinook	NNTC/ NTA/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday May 15 18:00	Sunday May 17 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 17 week 20	Chinook	NNTC/ NTA/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
May 17 week 20	Chinook	St'l'at'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday May 11 05:00	Sunday May 17 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 17 week 20	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
May 17 week 20	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 10 18:00	Sunday May 17 18:00	Gill net, Dip net, Angling with Rod and Reel
May 17 week 20	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 17 week 20	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All
May 17 week 20	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 17 week 20	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 17 week 20	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 17 week 20	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 17 week 20	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All

May 17 week 20	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 17 week 20	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 17 week 20	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
May 24 week 21	Chinook	NNTC/ NTA/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2 -weekend only	Friday May 22 18:00	Sunday May 24 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 24 week 21	Chinook	NNTC/ NTA/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday May 22 18:00	Sunday May 24 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 24 week 21	Chinook	NNTC/ NTA/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
May 24 week 21	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday May 18 05:00	Sunday May 24 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 24 week 21	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
May 24 week 21	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 17 18:00	Sunday May 24 18:00	Gill net, Dip net, Angling with Rod and Reel
May 24 week 21	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 24 week 21	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All
May 24 week 21	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 24 week 21	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 24 week 21	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 24 week 21	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 24 week 21	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
May 24 week 21	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 24 week 21	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 24 week 21	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>

May 31 week 22	Chinook	NNTC/ NTA/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2 -weekend only	Friday May 29 18:00	Sunday May 31 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 31 week 22	Chinook	NNTC/ NTA/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday May 29 18:00	Sunday May 31 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 31 week 22	Chinook	NNTC/ NTA/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
May 31 week 22	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday May 25 05:00	Sunday May 31 22:00	Gill net (attended), Dip net, Angling with Rod and Reel
May 31 week 22	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
May 31 week 22	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 24 18:00	Sunday May 31 18:00	Gill net, Dip net, Angling with Rod and Reel
May 31 week 22	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	0	Closed	Closed	All
May 31 week 22	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	0	Closed	Closed	All
May 31 week 22	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	0	Closed	Closed	All
May 31 week 22	Chinook	Red Bluff	Fraser R - Alexandria upstream to Moffat bridge	0	Closed	Closed	All
May 31 week 22	Chinook	Red Bluff	Quesnel River from Fraser confluence to BC Rail Bridge	0	Closed	Closed	All
May 31 week 22	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
May 31 week 22	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
May 31 week 22	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
May 31 week 22	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
May 31 week 22	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
June 7 week 23	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2 -weekend only	Friday June 5 18:00	Sunday June 7 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
June 7 week 23	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday June 5 18:00	Sunday June 7 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
June 7 week 23	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
June 7 week 23	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday June 1 05:00	Sunday June 7 22:00	Gill net, Dip net, Angling with Rod and Reel
June 7	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek Near Final Draft for Internal Review	0	Closed	Closed	All

June 7 week 23	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday May 31 18:00	Sunday June 7 18:00	Gill net, Dip net, Angling with Rod and Reel
June 7 week 23	Chinook	CTC/TNG/Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Monday June 1 18:00	Sunday June 7 18:00	Dip net
June 7 week 23	Chinook	CTC/TNG/Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Monday June 1 18:00	Sunday June 7 18:00	Dip net
June 7 week 23	Chinook	CTC/TNG/Esketemc	Chilko and Chilcotin Rivers	7	Monday June 1 18:00	Sunday June 7 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
June 7 week 23	Chinook	Red Bluff/ Toosey/ Kluskus	Fraser R - Alexandria upstream to Moffat bridge	7	Monday June 1 18:00	Sunday June 7 18:00	Dip net
June 7 week 23	Chinook	Red Bluff/ Toosey/ Kluskus	Quesnel River from Fraser confluence to BC Rail Bridge	7	Monday June 1 18:00	Sunday June 7 18:00	Dip net
June 7 week 23	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
June 7 week 23	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
June 7 week 23	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
June 7 week 23	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
June 7 week 23	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
June 14 week 24	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2 -weekend only	Friday June 12 18:00	Sunday June 14 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
June 14 week 24	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	2 -weekend only	Friday June 12 18:00	Sunday June 14 18:00	Gill net (attended), Dip net, Angling with Rod and Reel
June 14 week 24	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
June 14 week 24	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday June 8 05:00	Sunday June 14 22:00	Gill net, Dip net, Angling with Rod and Reel
June 14 week 24	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
June 14 week 24	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday June 7 18:00	Sunday June 14 18:00	Gill net, Dip net, Angling with Rod and Reel
June 14 week 24	Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday June 7 18:00	Sunday June 14 18:00	Dip net
June 14 week 24	Chinook	NSTC/ TNG/ Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday June 7 18:00	Sunday June 14 18:00	Dip net
June 14 week 24	Chinook	NSTC/ TNG/ Esketemc	Chilko and Chilcotin Rivers	7	Sunday June 7 18:00	Sunday June 14 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
June 14	Chinook	Red Bluff/ Toosey/	Fraser R - Alexandria upstream to	7	Sunday June 7 18:00	Sunday June 14 18:00	Dip net



June 14 week 24	Chinook	Red Bluff/ Toosey/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday June 7 18:00	Sunday June 14 18:00	Dip net 457
June 14 week 24	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
June 14 week 24	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
June 14 week 24	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All
June 14 week 24	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
June 14 week 24	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
June 21 week 25	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday June 14 18:00	Sunday June 21 18:00	Gill net, Dip net, Angling with Rod and Reel
June 21 week 25	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	7	Sunday June 14 18:00	Sunday June 21 18:00	Gill net, Dip net, Angling with Rod and Reel
June 21 week 25	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All
June 21 week 25	Chinook	St'l'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday June 15 05:00	Sunday June 21 22:00	Gill net, Dip net, Angling with Rod and Reel
June 21 week 25	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
June 21 week 25	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday June 14 18:00	Sunday June 21 18:00	Gill net, Dip net, Angling with Rod and Reel
June 21 week 25	Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday June 14 18:00	Sunday June 21 18:00	Dip net
June 21 week 25	Chinook	NSTC/ TNG/ Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday June 14 18:00	Sunday June 21 18:00	Dip net
June 21 week 25	Chinook	NSTC/ TNG/ Esketemc	Chilko and Chilcotin Rivers	7	Sunday June 14 18:00	Sunday June 21 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
June 21 week 25	Chinook	Red Bluff/ Toosey/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday June 14 18:00	Sunday June 21 18:00	Dip net
June 21 week 25	Chinook	Red Bluff/ Toosey/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday June 14 18:00	Sunday June 21 18:00	Dip net
June 21 week 25	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All
June 21 week 25	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All
June 21	Chinook	CSTC/TLA	Nechako River - upstream of Isle	0	Closed	Closed	All

June 21 week 25	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All	458
June 21 week 25	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All	
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>	
June 28 week 26	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday June 21 18:00	Sunday June 28 18:00	Gill net, Dip net, Angling with Rod and Reel	
June 28 week 26	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to Skihist & Oregon Jack Ck to the Bonaparte.	7	Sunday June 21 18:00	Sunday June 28 18:00	Gill net, Dip net, Angling with Rod and Reel	
June 28 week 26	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R. - Skihist to Oregon Jack Creek	0	Closed	Closed	All	
June 28 week 26	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday June 22 05:00	Sunday June 28 22:00	Gill net, Dip net, Angling with Rod and Reel	
June 28 week 26	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All	
June 28 week 26	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday June 21 18:00	Sunday June 28 18:00	Gill net, Dip net, Angling with Rod and Reel	
June 28 week 26	Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday June 21 18:00	Sunday June 28 18:00	Dip net	
June 28 week 26	Chinook	NSTC/ TNG/ Esketemc	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday June 21 18:00	Sunday June 28 18:00	Dip net	
June 28 week 26	Chinook	NSTC/ TNG/ Esketemc	Chilko and Chilcotin Rivers	7	Sunday June 21 18:00	Sunday June 28 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko	
June 28 week 26	Chinook	Red Bluff/ Toosey/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday June 21 18:00	Sunday June 28 18:00	Dip net	
June 28 week 26	Chinook	Red Bluff/ Toosey/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday June 21 18:00	Sunday June 28 18:00	Dip net	
June 28 week 26	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	0	Closed	Closed	All	
June 28 week 26	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	0	Closed	Closed	All	
June 28 week 26	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	0	Closed	Closed	All	
June 28 week 26	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All	
June 28 week 26	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All	
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>	
July 5 week 27	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)	
July 5	Chinook only	NNTC/ NTA/ LNIB/	Thompson R - Fraser confluence to				Gill net, Dip net, Angling with Rod and	

July 5 week 27	Chinook only (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday June 29 05:00	Sunday July 5 22:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 5 week 27	Chinook only (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	All
July 5 week 27	Chinook only (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 5 week 27	Chinook	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net
July 5 week 27	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net
July 5 week 27	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 5 week 27	Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net
July 5 week 27	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday June 28 18:00	Sunday July 5 18:00	Dip net
July 5 week 27	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	4	Wednesday July 1 18:00	Sunday July 5 18:00	Gill net, Dip net, Fishwheel (Fraser only)
July 5 week 27	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	4	Wednesday July 1 18:00	Sunday July 5 18:00	Dip net
July 5 week 27	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	4	Wednesday July 1 18:00	Sunday July 5 18:00	Gill net (all), Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en)
July 5 week 27	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
July 5 week 27	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
July 12 week 28	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net, Dip net, Angling with Rod and Reel
July 12 week 28	Chinook only (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 6 05:00	Sunday July 12 22:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, Angling with Rod and Reel (Gill net use prohibited)
July 12 week 28	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 12	Chinook only	Red Bluff/ Kluskus/	Fraser R - Alexandria upstream to	Near Final Draft for Internal Review			

July 12 week 28	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net 460
July 12 week 28	Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net, Dip net, Fishwheel (Fraser only)
July 12 week 28	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 5 18:00	Sunday July 12 18:00	Dip net
July 12 week 28	Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River system	7	Sunday July 5 18:00	Sunday July 12 18:00	Gill net (all), Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en)
July 12 week 28	Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	0	Closed	Closed	All
July 12 week 28	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	0	Closed	Closed	All
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
July 19 week 29	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook only (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net, Angling with Rod and Reel
July 19 week 29	Chinook only (non-retention sockeye)	St'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 13 05:00	Sunday July 19 22:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook only (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook only (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook only (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 19 week 29	Chinook only (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook only (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook only (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>

July 19 week 29	Sockeye/ Chinook	Bonaparte	2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon Thompson R. watershed upstream of Bonaparte (specific locations)	7	Sunday July 12 18:00	Sunday July 19 18:00	Gear listed in communal licence. (Weirs, gill nets, dip nets, spears, gaffs, harpoon and angling with hook and line)
July 19 week 29	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	TBA	TBA	TBA	All
July 19 week 29	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net, Angling with Rod and Reel
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 13 05:00	Sunday July 19 22:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 19			Bowron R.- from the confluence of				

July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 19 week 29	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net
July 19 week 29	Sockeye/ Chinook	Bonaparte	Thompson R. watershed upstream of Bonaparte (specific locations)	7	Sunday July 12 18:00	Sunday July 19 18:00	Gear listed in communal licence. (Weirs, gill nets, dip nets, spears, gaffs, harpoon and angling with hook and line)
July 19 week 29	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	TBA	TBA	TBA	All
July 19 week 29	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net, Angling with Rod and Reel
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Friday 17 2009 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All catch MUST be reported
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7 - daylight hours only	Monday July 13 05:00	Sunday July 19 22:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7 - daylight hours only	Monday July 13 18:00	Sunday July 19 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko

July 19 week 29	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net 463
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 19 week 29	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net
July 19 week 29	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 19 week 29	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 12 18:00	Sunday July 19 18:00	Gill net, Dip net
July 19 week 29	Sockeye/ Chinook	Bonaparte	Thompson R. watershed upstream of Bonaparte (specific locations)	7	Sunday July 12 18:00	Sunday July 19 18:00	Gear listed in communal licence. (Weirs, gill nets, dip nets, spears, gaffs, harpoon and angling with hook and line)
July 19 week 29	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations) including Shuswap River.	TBA	TBA	TBA	All
July 19 week 29	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	<b>TBA</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Gill net, Dip net, Angling with Rod and Reel
July 25 week 30	<b>TBA</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	<b>TBA</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present



July 25 week 30	<b>TBA</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	<b>TBA</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 25 week 30	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 25 week 30	Sockeye/ Chinook	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Gill net, Dip net
July 25 week 30	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 19 18:00	Sunday July 25 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
July 25 week 30	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	TBA	TBA	TBA	All
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	<b>TBA</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES All catch MUST be reported</b>
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Gill net, Dip net, Angling with Rod and Reel
July 25 week 30	<b>TBA</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	TBA	TBA	TBA



July 25 week 30	TBA	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	TBA	TBA	TBA 465
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	TBA	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 25 week 30	TBA	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	TBA	TBA	TBA
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 25 week 30	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net
July 25 week 30	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 25 week 30	Sockeye/ Chinook	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 25 18:00	Gill net, Dip net
July 25 week 30	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 19 18:00	Sunday July 25 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon							
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All catch MUST be reported
July 26 week 30	<b>Sockeye/ Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	4	Tuesday July 21 18:00	Saturday July 25 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Sockeye/ Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	1	Saturday July 25 18:00	Sunday July 26 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday July 19 18:00	Tuesday July 21 18:00	Gill net, Dip net, Angling with Rod and Reel
July 26 week 30	<b>Sockeye/ Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	4	Tuesday July 21 18:00	Saturday July 25 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Sockeye/ Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	1	Saturday July 25 18:00	Sunday July 26 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	2 - daylight hours only	Sunday July 19 18:00	Tuesday July 21 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES Catch Monitor must be present
July 26 week 30	<b>Sockeye/ Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	4	Tuesday July 21 18:00	Saturday July 25 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Sockeye/ Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	1	Saturday July 25 18:00	Sunday July 26 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 26 week 30	<b>Sockeye/ Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	4	Tuesday July 21 18:00	Saturday July 25 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Sockeye/ Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	1	Saturday July 25 18:00	Sunday July 26 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 19 18:00	Tuesday July 21 18:00	Dip net, Angling with Rod and Reel <b>(Gill net use prohibited)</b>
July 26 week 30	<b>Sockeye/ Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	4	Tuesday July 21 18:00	Saturday July 25 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Sockeye/ Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	1	Saturday July 25 18:00	Sunday July 26 18:00	Gill net, Dip net, Angling with Rod and Rod
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net

July 26 week 30	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff - Chilko
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net
July 26 week 30	Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
July 26 week 30	Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net
July 26 week 30	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
July 26 week 30	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 19 18:00	Sunday July 26 18:00	Gill net, Dip net
July 26 week 30	Closed	TLA	Stuart River system above Highway Bridge at Fort St. James	Closed	Closed	Wednesday July 22	Closed
July 26 week 30	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 19 18:00	Sunday July 26 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
July 26 week 30	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 19 18:00	Sunday July 26 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)
August 2 week 31	<b>Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 2 week 31	<b>Sockeye/ Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net

August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaffs
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
August 2 week 31	<b>Sockeye/ Chinook</b>	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
August 2 week 31	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 2 week 31	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)
August 2 week 31	<b>Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2	<b>Sockeye/ Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and

August 2 week 31	<b>Sockeye/ Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Reel
August 2 week 31	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc/ Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
August 2 week 31	<b>Sockeye/ Chinook</b>	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
August 2 week 31	Sockeye/ Chinook	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 2 week 31	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Chinook only</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	2	Friday July 31 05:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- <b>NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors</b>
August 2 week 31	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod (No angling in Bridge River mainstem)

August 2 week 31	<b>Chinook only</b> (mortally wounded sockeye)	Ts'Kw'aylaxw	2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon Ts'Kw'aylaxw traditional fishing area 7	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	5	Tuesday July 28 18:00	Sunday August 2 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 2 week 31	<b>Sockeye/ Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday July 26 18:00	Tuesday July 28 18:00	Gill net, Dip net, Angling with Rod and Rod
August 2 week 31	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday July 28 18:00	Sunday August 2 18:00	Dip net, Angling with Rod and Reel
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek to the confluence of the Chilcotin River,	5	Sunday July 26 18:00	Friday July 31 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (mortally wounded sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	2	Friday July 31 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net, Fishwheel (Fraser only) <b>(Gill net use prohibited)</b>
August 2 week 31	<b>Sockeye/ Chinook</b>	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net
August 2 week 31	<b>Chinook only</b> (non-retention sockeye)	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) <b>(Gill net use prohibited)</b>
August 2 week 31	<b>Sockeye/ Chinook</b>	CSTC	Stuart River system above Highway Bridge at Fort St. James	7	Sunday July 26 18:00	Sunday August 2 18:00	Gill net, Dip net
August 2 week 31	<b>Sockeye/ Chinook</b>	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal	7	Sunday July 26 18:00	Sunday August 2 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps,

Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon							
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook only (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 9 week 32	Chinook only (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook only (mortally wounded sockeye)	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 9 week 32	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to	7	Sunday August 2	Sunday August 9 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence

August 9 week 32	Sockeye/ Chinook	Shuswap FN Bands	2009 Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 2 18:00	Sunday August 9 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 9 week 32	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook only (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 9 week 32	Chinook only (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook only (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	7	Sunday August 2 18:00	Sunday August 9 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 9 week 32	Chinook	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Angling with Rod and Reel
August 9 week 32	Chinook/ limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Chinook/ limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net
August 9 week 32	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, Fishwheel (Fraser only) Gill net



August 9 week 32	Sockeye/ Chinook	CSTC/TLA	2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 9 week 32	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 9 week 32	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 2 18:00	Sunday August 9 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 9 week 32	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 2 18:00	Sunday August 9 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday August 9 18:00	Tuesday August 11 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday August 9 18:00	Tuesday August 11 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday August 9 18:00	Tuesday August 11 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	TBD	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge/ Texas Creek	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday August 9 18:00	Tuesday August 11 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday August 9 18:00	Tuesday August 11 18:00	Dip net, Angling with Rod and Reel

August 16 week 33	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 9 18:00	Sunday August 16 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	5	Sunday August 9 18:00	Thursday August 13 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	TBD	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	TBD	TBD	TBD	TBD

August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	6 mile on Hwy 12 / Old Bridge / Texas Creek	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	TBD	Highbar Band	Fraser R - Barney Creek to French Bar Creek	TBD	TBD	TBD	TBD
August 16 week 33	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 9 18:00	Sunday August 16 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 16		NNTC/ NTA/ LNIB/			Sunday August 9	Thursday August 13	

August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA/ NWSFA	2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	5	Sunday August 9 18:00	Thursday August 13 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA/ NWSFA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	5	Thursday August 13 18:00	Sunday August 16 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	T'it'q'et tradional Fishing Area	4	Thursday August 13 18:00	Sunday August 16 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Sunday August 9 18:00	Thursday August 13 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	4	Thursday August 13 18:00	Sunday August 16 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/ limited</b> Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	<b>Chinook/ limited</b> Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko

August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre 2009 Record of Management Strategies for Fraser River Sockeye and Pink Salmon	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 9 18:00	Sunday August 16 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 9 18:00	Sunday August 16 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Ts'Kw'aylaxw	Ts'Kw'aylaxw traditional fishing area /	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	T'it'q'et tradional Fishing Area	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Cayoose Creek	Cayoose tradional Fishing Area	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Xaxli'p	3 mile/ 6 mile/ 10 mile / Station Hill	TBD	TBD	TBD	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to

August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band 2009	Fraser R - Barney Creek to French Record of Management Strategies for Fraser River Sockeye and Pink Salmon	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 16 18:00	Sunday August 23 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday August 16 18:00	<b>Tuesday August 18 18:00</b>	Dip net, Angling with Rod and Reel
<b>August 16 week 33</b>	<b>Chinook only</b> <b>(non-retention sockeye)</b>	<b>NNTC/ NTA/ LNIB/ Nicomen</b>	<b>Fraser R - Sawmill Cr. to Texas Cr.</b>	<b>5</b>	<b>Tuesday August 18 18:00</b>	<b>Sunday August 23 18:00</b>	<b>Dip net, Angling with Rod and Reel</b>
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 16 18:00	Sunday August 23 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday August 16 18:00	<b>Tuesday August 18 18:00</b>	Dip net, Angling with Rod and Reel

August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	St'l'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	T'it'q'et traditional Fishing Area	2	Sunday August 16 18:00	Tuesday August 18 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Cayoose Creek	Cayoose traditional Fishing Area	2	Sunday August 16 18:00	Tuesday August 18 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	<b>Chinook/ limited Sockeye</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 16 18:00	Sunday August 23 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)



August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NTA	Siska traditional Fishing Area (CN Bridge to Frenchmen's Bay)	7	Sunday August 16 18:00	<b>Tuesday August 18 18:00</b>	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to band.
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	T'it'q'et	T'it'q'et tradional Fishing Area	2	Sunday August 16 18:00	Tuesday August 18 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook only</b> (mortally wounded sockeye)	Cayoose Creek	Cayoose tradional Fishing Area	2	Sunday August 16 18:00	Tuesday August 18 18:00	---- 8 inch mesh gill net (Chinook net) ---- NET MUST BE ATTENDED AT ALL TIMES All Catch must be reported to monitors
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook</b> (mortally wounded sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	2	Sunday August 16 18:00	Tuesday August 18 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	5	Tuesday August 18 18:00	Sunday August 23 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/ limited Sockeye</b>	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	<b>Chinook/ limited Sockeye</b>	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	<b>Chinook/ limited Sockeye</b>	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net



August 16 week 33	Sockeye/ Chinook	LTN	2009 Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
August 16 week 33	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Closed	Closed	Closed
August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 16 18:00	Sunday August 23 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 16 18:00	Sunday August 23 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Angling with Rod and Reel
August 16 week 33	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net
August 16 week 33	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
August 16 week 33	<b>Chinook/</b> limited Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net
August 16 week 33	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, Fishwheel (Fraser only) Gill net
August 16 week 33	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net

August 16 week 33	Sockeye/ Chinook	Shuswap FN Bands	2009 Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 23 18:00	Sunday August 30 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
August 16 week 33	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 23 18:00	Sunday August 30 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 6 week 36	<b>Chinook/</b> limited Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Fishwheel (Fraser only) Gill net
September 6 week 36	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre and Stuart River up to Highway Bridge at Fort St. James	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 6 week 36	Closed	CSTC/ TLA	Stuart River system above Highway Bridge at Fort St. James	0	Sunday August 30 18:00	Sunday September 6 18:00	Closed
September 6 week 36	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 30 18:00	Sunday September 6 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 6		Okanagan First Nation	Mid Shuswap R. between Mabel		Sunday August 30	Sunday September 6	Dip net, tangle net, spear, gaffs,

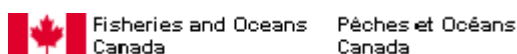
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel 483
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Angling with Rod and Reel
September 6 week 36	<b>Chinook/ limited</b> Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	<b>Chinook/ limited</b> Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 6 week 36	<b>Chinook/ limited</b> Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, Fishwheel (Fraser only) Gill net
September 6 week 36	Sockeye/ Chinook	LTN	Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net
September 6 week 36	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 6 week 36	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday August 30 18:00	Sunday September 6 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 6 week 36	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday August 30 18:00	Sunday September 6 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel
September 13 week 37	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)

September 13 week 37	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 13 week 37	<b>Chinook/</b> limited Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, Fishwheel (Fraser only) Gill net
September 13 week 37	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net
September 13 week 37	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 13 week 37	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday September 6 18:00	Sunday September 13 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 13 week 37	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday September 6 18:00	Sunday September 13 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
<b>Wk Ending</b>	<b>Species</b>	<b>First Nations Groups</b>	<b>Area</b>	<b>Length (days)</b>	<b>Open Time/Date</b>	<b>Closed Time/Date</b>	<b>Gear</b>
September 20 week 38	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, Angling with Rod and Reel
September 20 week 38	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, Angling with Rod and Reel
September 20 week 38	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 20 week 38	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, Angling with Rod and Reel
September 20 week 38	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, Angling with Rod and Reel
September 20 week 38	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net
September 20 week 38	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net
September 20 week 38	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 20	<b>Chinook/</b> limited	Red Bluff/ Kluskus/	Fraser R - Alexandria upstream to	7	Sunday September 13	Sunday September 20	Dip net

September 20 week 38	Sockeye/ Chinook	LTN	2009 Bowron R. - from the confluence of the Fraser upstream to FSR Bridge	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net
September 20 week 38	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 20 week 38	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday September 13 18:00	Sunday September 20 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 20 week 38	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday September 13 18:00	Sunday September 20 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
September 27 week 39	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	1	Sunday September 20 18:00	Monday September 21 18:00	Dip net, Angling with Rod and Reel
September 27 week 39	<b>CLOSED</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	6	Monday September 21 18:00	Sunday September 27 18:00	CLOSED - Coho Conservation
September 27 week 39	<b>Chinook only</b> (non-retention sockeye)	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	1	Sunday September 20 18:00	Monday September 21 18:00	Dip net, Angling with Rod and Reel
September 27 week 39	<b>CLOSED</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	6	Monday September 21 18:00	Sunday September 27 18:00	CLOSED - Coho Conservation
September 27 week 39	<b>Chinook only</b> (non-retention sockeye)	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	1	Sunday September 20 18:00	Monday September 21 18:00	Dip net, Angling with Rod and Reel (No Angling in Bridge River mainstem)
September 27 week 39	<b>CLOSED</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	6	Monday September 21 18:00	Sunday September 27 18:00	CLOSED - Coho Conservation
September 27 week 39	<b>Chinook only</b> (non-retention sockeye)	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	1	Sunday September 20 18:00	Monday September 21 18:00	Dip net, Angling with Rod and Reel
September 27 week 39	<b>CLOSED</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	6	Monday September 21 18:00	Sunday September 27 18:00	CLOSED - Coho Conservation
September 27 week 39	<b>Chinook only</b> (non-retention sockeye)	Highbar Band	Fraser R - Barney Creek to French Bar Creek	1	Sunday September 20 18:00	Monday September 21 18:00	Dip net, Angling with Rod and Reel
September 27 week 39	<b>CLOSED</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	6	Monday September 21 18:00	Sunday September 27 18:00	CLOSED - Coho Conservation
September 27 week 39	<b>Chinook/ limited</b> Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net
September 27 week 39	<b>Chinook/ limited</b> Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net
September 27 week 39	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
September 27 week 39	<b>Chinook/ limited</b> Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net
September 27 week 39	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net

September 27 week 39	Sockeye/ Chinook	CSTC/TLA	2009 Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
September 27 week 39	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday September 20 18:00	Sunday September 27 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)
September 27 week 39	Chinook	Okanagan First Nation Bands	Mid Shuswap R. between Mabel Lake and Shuswap Falls.	7	Sunday September 20 18:00	Sunday September 27 18:00	Dip net, tangle net, spear, gaffs, harpoons, angling with hook and line.
Wk Ending	Species	First Nations Groups	Area	Length (days)	Open Time/Date	Closed Time/Date	Gear
October 4 week 40	<b>CLOSED</b>	NNTC/ NTA/ LNIB/ Nicomen	Fraser R - Sawmill Cr. to Texas Cr.	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte.	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
October 4 week 40	<b>Chinook/</b> limited Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net, Fishwheel (Fraser only) Gill net
October 4 week 40	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)
October 4 week 40	Sockeye/ Chinook	Shuswap FN Bands	Thompson R. watershed upstream of Bonaparte (specific locations per band - see specific bands communal license) including Shuswap River.	7	Sunday September 27 18:00	Sunday October 4 18:00	Gear listed in each bands specific communal licence. (eg. Weirs, gill nets, dip nets, spears, gaffs, seine, traps, harpoon, angling with hook and line)

October 4 week 40	<b>CLOSED</b>	NNTC/ NTA/ LNIB/ Nicomen	Thompson R - Fraser confluence to the Bonaparte	0	Closed	Closed	CLOSED - Coho Conservation 487
October 4 week 40	<b>Chinook/ Pink</b>	<b>NTA</b>	Thompson R - Skoonka Cr upstream to the Bonaparte	4	Wednesday September 30 06:00	Sunday October 4 18:00	Dip net, Angling with Rod and Reel
October 4 week 40	<b>CLOSED</b>	Stl'atl'imx/ Xaxli'p	Fraser R - Texas Creek to Kelly Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	Whispering Pines	Fraser R - Kelly Creek to Barney Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>CLOSED</b>	Highbar Band	Fraser R - Barney Creek to French Bar Creek	0	Closed	Closed	CLOSED - Coho Conservation
October 4 week 40	<b>Chinook/</b> limited Sockeye	NSTC/ TNG/ Esketemc	Fraser R - Deadman Creek upstream to Alexandria	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	<b>Chinook/</b> limited Sockeye	Toosey	Fraser R - confluence with Chilcotin River upstream to Alexandria - west bank only	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	NSTC/ TNG/ Esketemc/ Toosey	Chilko and Chilcotin Rivers	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net, hook (single barb) - Chilko & Chilcotin, gaff- Chilko
October 4 week 40	<b>Chinook/</b> limited Sockeye	Red Bluff/ Kluskus/ Nazko	Fraser R - Alexandria upstream to Moffat bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	Red Bluff/ Kluskus/ Nazko	Quesnel River from Fraser confluence to BC Rail Bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	LTN	Fraser R - Naver Cr to Salmon River / Nechako River upstream to Isle Pierre	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net, Fishwheel (Fraser only) Gill net
October 4 week 40	Sockeye/ Chinook	LTN	Bowron R.- from the confluence of the Fraser upstream to FSR Bridge	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net
October 4 week 40	Sockeye/ Chinook	CSTC/TLA	Nechako River - upstream of Isle Pierre, and Stuart River system	7	Sunday September 27 18:00	Sunday October 4 18:00	Dip net (all but Tl'azt'en) Fish trap (Saik'uz) Beach Seine (Nadleh) Fence (Stellat'en) Gill net (all)



Communal Opening Times between 01/01/2009 and 21/12/2009

Dec 21 2009 15:00

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
<b>Mar 08</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	3 days	18:00 Thursday Mar 05	18:00 Sunday Mar 08	Chinook	set net, dip net, rod and reel
<b>Mar 08</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	3 days	18:00 Thursday Mar 05	18:00 Sunday Mar 08	Chinook	set net, dip net, rod and reel
<b>Mar 15</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 11	18:00 Sunday Mar 15	Chinook	set net, dip net, rod and reel
<b>Mar 15</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 11	18:00 Sunday Mar 15	Chinook	set net, dip net, rod and reel
<b>Mar 22</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Mar 21	21:00 Saturday Mar 21	Chinook	set net, drift net
<b>Mar 22</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 18	18:00 Sunday Mar 22	Chinook	set net, dip net, rod and reel
<b>Mar 22</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 18	18:00 Sunday Mar 22	Chinook	set net, dip net, rod and reel
<b>Mar 29</b>	Cheam First Nation	Jone's Hill to Jespersion's	6 hrs	12:00 Saturday Mar 28	18:00 Saturday Mar 28	Chinook	drift net
<b>Mar 29</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Mar 28	21:00 Saturday Mar 28	Chinook	set net, drift net
<b>Mar 29</b>	Tsawwassen First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Mar 28	21:00 Saturday Mar 28	Chinook	set net, drift net
<b>Mar 29</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	19:00 Saturday Mar 28	07:00 Sunday Mar 29	Chinook	set net
<b>Mar 29</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 25	18:00 Sunday Mar 29	Chinook	set net, dip net, rod and reel
<b>Mar 29</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Mar 25	18:00 Sunday Mar 29	Chinook	set net, dip net, rod and reel
<b>Apr 05</b>	Tsawwassen	TFN / Musq.	56.5	12:00	23:59	Dungeness	dip net, hand



	First Nation	Crab Area	days	Thursday Feb 05	Thursday Apr 02	Crab, Graceful Crab, Red Rock Crab	picking, net, ring, trap, crab
<b>Apr 05</b>	Cheam First Nation	Jone's Hill to Jespersion's	6 hrs	12:00 Saturday Apr 04	18:00 Saturday Apr 04	Chinook	drift net
<b>Apr 05</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 04	21:00 Saturday Apr 04	Chinook	set net, drift net
<b>Apr 05</b>	Tsawwassen First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 04	21:00 Saturday Apr 04	Chinook	set net, drift net
<b>Apr 05</b>	Cheam First Nation	Jone's Hill to Jespersion's	18 hrs	12:00 Saturday Apr 04	06:00 Sunday Apr 05	Chinook	set net
<b>Apr 05</b>	IN-SHUCK- CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 03	18:00 Sunday Apr 05	Chinook	set net, dip net, rod and reel
<b>Apr 05</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 03	18:00 Sunday Apr 05	Chinook	set net, dip net, rod and reel
<b>Apr 12</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	07:00 Saturday Apr 11	15:00 Saturday Apr 11	Chinook	drift net
<b>Apr 12</b>		Strawberry I. to Sawmill Cr., Hope to Sawmill Creek	8 hrs	07:00 Saturday Apr 11	15:00 Saturday Apr 11	Chinook	drift net
<b>Apr 12</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	07:00 Saturday Apr 11	15:00 Saturday Apr 11	Chinook	drift net
<b>Apr 12</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	07:00 Saturday Apr 11	15:00 Saturday Apr 11	Chinook	drift net
<b>Apr 12</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka	24 hrs	18:00 Friday Apr 10	18:00 Saturday Apr 11	Chinook	set net

		Cr/Derby Rch to Mission					
<b>Apr 12</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday Apr 10	18:00 Saturday Apr 11	Chinook	set net
<b>Apr 12</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday Apr 10	18:00 Saturday Apr 11	Chinook	set net
<b>Apr 12</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 11	21:00 Saturday Apr 11	Chinook	set net, drift net
<b>Apr 12</b>	Tsawwassen First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 11	21:00 Saturday Apr 11	Chinook	set net, drift net
<b>Apr 12</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 10	18:00 Sunday Apr 12	Chinook	set net, dip net, rod and reel
<b>Apr 12</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 10	18:00 Sunday Apr 12	Chinook	set net, dip net, rod and reel
<b>Apr 19</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday Apr 18	16:00 Saturday Apr 18	Chinook	drift net
<b>Apr 19</b>		Strawberry I. to Sawmill Cr., Hope to Sawmill Creek	8 hrs	08:00 Saturday Apr 18	16:00 Saturday Apr 18	Chinook	drift net
<b>Apr 19</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	08:00 Saturday Apr 18	16:00 Saturday Apr 18	Chinook	drift net
<b>Apr 19</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	08:00 Saturday Apr 18	16:00 Saturday Apr 18	Chinook	drift net
<b>Apr 19</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday Apr 17	18:00 Saturday Apr 18	Chinook	set net
<b>Apr 19</b>	Yale First	Harrison to	24	18:00	18:00	Chinook	set net

	Nation	Sawmill Creek	hrs	Friday Apr 17	Saturday Apr 18		
<b>Apr 19</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday Apr 17	18:00 Saturday Apr 18	Chinook	set net
<b>Apr 19</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 18	21:00 Saturday Apr 18	Chinook	set net, drift net
<b>Apr 19</b>	Tsawwassen First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 18	21:00 Saturday Apr 18	Chinook	set net, drift net
<b>Apr 19</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 17	18:00 Sunday Apr 19	Chinook	set net, dip net, rod and reel
<b>Apr 19</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 17	18:00 Sunday Apr 19	Chinook	set net, dip net, rod and reel
<b>Apr 26</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday Apr 25	14:00 Saturday Apr 25	Chinook	drift net
<b>Apr 26</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday Apr 25	14:00 Saturday Apr 25	Chinook	drift net
<b>Apr 26</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	06:00 Saturday Apr 25	14:00 Saturday Apr 25	Chinook	drift net
<b>Apr 26</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	09:00 Saturday Apr 25	17:00 Saturday Apr 25	Chinook	drift net
<b>Apr 26</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday Apr 24	18:00 Saturday Apr 25	Chinook	set net
<b>Apr 26</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday Apr 24	18:00 Saturday Apr 25	Chinook	set net
<b>Apr 26</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday Apr 24	18:00 Saturday Apr 25	Chinook	set net

<b>Apr 26</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 25	21:00 Saturday Apr 25	Chinook	set net, drift net
<b>Apr 26</b>	Tsawwassen First Nation	Below Port Mann Bridge	12 hrs	09:00 Saturday Apr 25	21:00 Saturday Apr 25	Chinook	set net, drift net
<b>Apr 26</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 24	18:00 Sunday Apr 26	Chinook	set net, dip net, rod and reel
<b>Apr 26</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday Apr 24	18:00 Sunday Apr 26	Chinook	set net, dip net, rod and reel
<b>May 03</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday May 02	14:00 Saturday May 02	Chinook	drift net
<b>May 03</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday May 02	14:00 Saturday May 02	Chinook	drift net
<b>May 03</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	06:00 Saturday May 02	14:00 Saturday May 02	Chinook	drift net
<b>May 03</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday May 02	16:00 Saturday May 02	Chinook	drift net
<b>May 03</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday May 01	18:00 Saturday May 02	Chinook	set net
<b>May 03</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday May 01	18:00 Saturday May 02	Chinook	set net
<b>May 03</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday May 01	18:00 Saturday May 02	Chinook	set net
<b>May 03</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 02	12:00 Sunday May 03	Chinook	set net, drift net
<b>May 03</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 02	12:00 Sunday May 03	Chinook	set net, drift net

<b>May 03</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 01	18:00 Sunday May 03	Chinook	set net, dip net, rod and reel
<b>May 03</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 01	18:00 Sunday May 03	Chinook	set net, dip net, rod and reel
<b>May 10</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday May 09	14:00 Saturday May 09	Chinook	drift net
<b>May 10</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	06:00 Saturday May 09	14:00 Saturday May 09	Chinook	drift net
<b>May 10</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday May 09	14:00 Saturday May 09	Chinook	drift net
<b>May 10</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday May 09	16:00 Saturday May 09	Chinook	drift net
<b>May 10</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday May 08	18:00 Saturday May 09	Chinook	set net
<b>May 10</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday May 08	18:00 Saturday May 09	Chinook	set net
<b>May 10</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday May 08	18:00 Saturday May 09	Chinook	set net
<b>May 10</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 09	12:00 Sunday May 10	Chinook	set net, drift net
<b>May 10</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 09	12:00 Sunday May 10	Chinook	set net, drift net
<b>May 10</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 08	18:00 Sunday May 10	Chinook	set net, dip net, rod and reel
<b>May 10</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 08	18:00 Sunday May 10	Chinook	set net, dip net, rod and reel

<b>May 17</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday May 16	14:00 Saturday May 16	Chinook	drift net
<b>May 17</b>	Cheam First Nation	Jone's Hill to Jespersen's	8 hrs	06:00 Saturday May 16	14:00 Saturday May 16	Chinook	drift net
<b>May 17</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday May 16	14:00 Saturday May 16	Chinook	drift net
<b>May 17</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday May 16	16:00 Saturday May 16	Chinook	drift net
<b>May 17</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday May 15	18:00 Saturday May 16	Chinook	set net
<b>May 17</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday May 15	18:00 Saturday May 16	Chinook	set net
<b>May 17</b>	Cheam First Nation	Jone's Hill to Jespersen's	24 hrs	18:00 Friday May 15	18:00 Saturday May 16	Chinook	set net
<b>May 17</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 16	12:00 Sunday May 17	Chinook	set net, drift net
<b>May 17</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 16	12:00 Sunday May 17	Chinook	set net, drift net
<b>May 24</b>	Kwikwitlem First Nation	Below Port Mann Bridge	48 hrs	06:00 Saturday May 16	06:00 Monday May 18	Chinook	set net, drift net
<b>May 24</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	3 days	18:00 Friday May 15	18:00 Monday May 18	Chinook	set net, dip net, rod and reel
<b>May 24</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	3 days	18:00 Friday May 15	18:00 Monday May 18	Chinook	set net, dip net, rod and reel
<b>May 24</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday May 23	14:00 Saturday May 23	Chinook	drift net

<b>May 24</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	06:00 Saturday May 23	14:00 Saturday May 23	Chinook	drift net
<b>May 24</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday May 23	14:00 Saturday May 23	Chinook	drift net
<b>May 24</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday May 23	16:00 Saturday May 23	Chinook	drift net
<b>May 24</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday May 22	18:00 Saturday May 23	Chinook	set net
<b>May 24</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday May 22	18:00 Saturday May 23	Chinook	set net
<b>May 24</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday May 22	18:00 Saturday May 23	Chinook	set net
<b>May 24</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 23	12:00 Sunday May 24	Chinook	set net, drift net
<b>May 24</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 23	12:00 Sunday May 24	Chinook	set net, drift net
<b>May 24</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 22	18:00 Sunday May 24	Chinook	set net, dip net, rod and reel
<b>May 24</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 22	18:00 Sunday May 24	Chinook	set net, dip net, rod and reel
<b>May 31</b>	Kwikwitlem First Nation	Below Port Mann Bridge	48 hrs	06:00 Saturday May 23	06:00 Monday May 25	Chinook	set net, drift net
<b>May 31</b>	Yale First Nation	Harrison to Sawmill Creek	8 hrs	06:00 Saturday May 30	14:00 Saturday May 30	Chinook	drift net
<b>May 31</b>	Cheam First Nation	Jone's Hill to Jespersion's	8 hrs	06:00 Saturday May 30	14:00 Saturday May 30	Chinook	drift net

<b>May 31</b>	Lower Fraser First Nations	Mission to Sawmill Creek	8 hrs	06:00 Saturday May 30	14:00 Saturday May 30	Chinook	drift net
<b>May 31</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Saturday May 30	16:00 Saturday May 30	Chinook	drift net
<b>May 31</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	24 hrs	18:00 Friday May 29	18:00 Saturday May 30	Chinook	set net
<b>May 31</b>	Yale First Nation	Harrison to Sawmill Creek	24 hrs	18:00 Friday May 29	18:00 Saturday May 30	Chinook	set net
<b>May 31</b>	Cheam First Nation	Jone's Hill to Jespersion's	24 hrs	18:00 Friday May 29	18:00 Saturday May 30	Chinook	set net
<b>May 31</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 30	12:00 Sunday May 31	Chinook	set net, drift net
<b>May 31</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday May 30	12:00 Sunday May 31	Chinook	set net, drift net
<b>May 31</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 29	18:00 Sunday May 31	Chinook	set net, dip net, rod and reel
<b>May 31</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	48 hrs	18:00 Friday May 29	18:00 Sunday May 31	Chinook	set net, dip net, rod and reel
<b>May 31</b>	Tsawwassen First Nation	TFN / Musq. Crab Area	58 days	00:01 Saturday Apr 04	23:59 Sunday May 31	Dungeness Crab, Graceful Crab, Red Rock Crab	dip net, hand picking, net, ring, trap, crab
<b>Jun 07</b>	Kwikwitlem First Nation	Below Port Mann Bridge	48 hrs	06:00 Saturday May 30	06:00 Monday Jun 01	Chinook	set net, drift net
<b>Jun 07</b>	Yale First Nation	Harrison to Sawmill Creek	12 hrs	07:00 Saturday Jun 06	19:00 Saturday Jun 06	Chinook	drift net



<b>Jun 07</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jun 06	19:00 Saturday Jun 06	Chinook	drift net
<b>Jun 07</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Jun 06	19:00 Saturday Jun 06	Chinook	drift net
<b>Jun 07</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 05	12:00 Sunday Jun 07	Chinook	set net, drift net
<b>Jun 07</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 05	12:00 Sunday Jun 07	Chinook	set net, drift net, rod and reel
<b>Jun 07</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 03	18:00 Sunday Jun 07	Chinook	set net, dip net, rod and reel
<b>Jun 07</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 03	18:00 Sunday Jun 07	Chinook	set net, dip net, rod and reel
<b>Jun 07</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	18:00 Friday Jun 05	18:00 Sunday Jun 07	Chinook	set net
<b>Jun 07</b>	Yale First Nation	Harrison to Sawmill Creek	48 hrs	18:00 Friday Jun 05	18:00 Sunday Jun 07	Chinook	set net
<b>Jun 07</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Jun 05	18:00 Sunday Jun 07	Chinook	set net
<b>Jun 14</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jun 06	06:00 Monday Jun 08	Chinook	set net, drift net
<b>Jun 14</b>	Yale First Nation	Harrison to Sawmill Creek	13 hrs	06:00 Saturday Jun 13	19:00 Saturday Jun 13	Chinook	drift net
<b>Jun 14</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka	13 hrs	06:00 Saturday Jun 13	19:00 Saturday Jun 13	Chinook	drift net

		Cr/Derby R, Kanaka Cr/Derby Rch to Mission					
<b>Jun 14</b>	Cheam First Nation	Jone's Hill to Jespersion's	13 hrs	06:00 Saturday Jun 13	19:00 Saturday Jun 13	Chinook	drift net
<b>Jun 14</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 12	12:00 Sunday Jun 14	Chinook	set net, drift net
<b>Jun 14</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 12	12:00 Sunday Jun 14	Chinook	set net, drift net, rod and reel
<b>Jun 14</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 10	18:00 Sunday Jun 14	Chinook	set net, dip net, rod and reel
<b>Jun 14</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 10	18:00 Sunday Jun 14	Chinook	set net, dip net, rod and reel
<b>Jun 14</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	18:00 Friday Jun 12	18:00 Sunday Jun 14	Chinook	set net
<b>Jun 14</b>	Yale First Nation	Harrison to Sawmill Creek	48 hrs	18:00 Friday Jun 12	18:00 Sunday Jun 14	Chinook	set net
<b>Jun 14</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Jun 12	18:00 Sunday Jun 14	Chinook	set net
<b>Jun 21</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jun 13	06:00 Monday Jun 15	Chinook	set net, drift net
<b>Jun 21</b>	Yale First Nation	Harrison to Sawmill Creek	13 hrs	06:00 Saturday Jun 20	19:00 Saturday Jun 20	Chinook	drift net
<b>Jun 21</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	13 hrs	06:00 Saturday Jun 20	19:00 Saturday Jun 20	Chinook	drift net

<b>Jun 21</b>	Cheam First Nation	Jone's Hill to Jespersion's	13 hrs	06:00 Saturday Jun 20	19:00 Saturday Jun 20	Chinook	drift net
<b>Jun 21</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 19	12:00 Sunday Jun 21	Chinook	set net, drift net
<b>Jun 21</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 19	12:00 Sunday Jun 21	Chinook	set net, drift net, rod and reel
<b>Jun 21</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 17	18:00 Sunday Jun 21	Chinook	set net, dip net, rod and reel
<b>Jun 21</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 17	18:00 Sunday Jun 21	Chinook	set net, dip net, rod and reel
<b>Jun 21</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	18:00 Friday Jun 19	18:00 Sunday Jun 21	Chinook	set net
<b>Jun 21</b>	Yale First Nation	Harrison to Sawmill Creek	48 hrs	18:00 Friday Jun 19	18:00 Sunday Jun 21	Chinook	set net
<b>Jun 21</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Jun 19	18:00 Sunday Jun 21	Chinook	set net
<b>Jun 28</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jun 20	06:00 Monday Jun 22	Chinook	set net, drift net
<b>Jun 28</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Friday Jun 26	19:00 Friday Jun 26	Chinook	drift net
<b>Jun 28</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Jun 27	19:00 Saturday Jun 27	Chinook	drift net
<b>Jun 28</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jun 27	19:00 Saturday Jun 27	Chinook	drift net

<b>Jun 28</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Jun 27	19:00 Saturday Jun 27	Chinook	drift net
<b>Jun 28</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Saturday Jun 27	21:00 Saturday Jun 27	Chinook	dip net
<b>Jun 28</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 26	12:00 Sunday Jun 28	Chinook	drift net
<b>Jun 28</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jun 26	12:00 Sunday Jun 28	Chinook	drift net
<b>Jun 28</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 24	18:00 Sunday Jun 28	Chinook	set net, dip net, rod and reel
<b>Jun 28</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jun 24	18:00 Sunday Jun 28	Chinook	set net, dip net, rod and reel
<b>Jun 28</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Jun 28	19:00 Sunday Jun 28	Chinook	drift net
<b>Jun 28</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jun 28	19:00 Sunday Jun 28	Chinook	drift net
<b>Jun 28</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Sunday Jun 28	21:00 Sunday Jun 28	Chinook	dip net
<b>Jul 05</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jun 27	06:00 Monday Jun 29	Chinook	drift net
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Monday Jun 29	21:00 Monday Jun 29	Chinook	dip net
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Tuesday Jun 30	21:00 Tuesday Jun 30	Chinook	dip net
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Wednesday Jul 01	21:00 Wednesday Jul 01	Chinook	dip net
<b>Jul 05</b>	Skwah First	Hope to Emory	15	06:00	21:00	Chinook	dip net

	Nation	Creek	hrs	Thursday Jul 02	Thursday Jul 02		
<b>Jul 05</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Friday Jul 03	19:00 Friday Jul 03	Chinook	drift net
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Friday Jul 03	21:00 Friday Jul 03	Chinook	dip net
<b>Jul 05</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Jul 04	19:00 Saturday Jul 04	Chinook	drift net
<b>Jul 05</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jul 04	19:00 Saturday Jul 04	Chinook	drift net
<b>Jul 05</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Jul 04	19:00 Saturday Jul 04	Chinook	drift net
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Saturday Jul 04	21:00 Saturday Jul 04	Chinook	dip net
<b>Jul 05</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 03	12:00 Sunday Jul 05	Chinook	drift net
<b>Jul 05</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 03	12:00 Sunday Jul 05	Chinook	drift net
<b>Jul 05</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 01	18:00 Sunday Jul 05	Chinook	set net, dip net, rod and reel
<b>Jul 05</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 01	18:00 Sunday Jul 05	Chinook	set net, dip net, rod and reel
<b>Jul 05</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Jul 05	19:00 Sunday Jul 05	Chinook	drift net
<b>Jul 05</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R,	12 hrs	07:00 Sunday Jul 05	19:00 Sunday Jul 05	Chinook	drift net

		Kanaka Cr/Derby Rch to Mission					
<b>Jul 05</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Sunday Jul 05	21:00 Sunday Jul 05	Chinook	dip net
<b>Jul 12</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 04	06:00 Monday Jul 06	Chinook	drift net
<b>Jul 12</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Monday Jul 06	21:00 Monday Jul 06	Chinook	dip net
<b>Jul 12</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Tuesday Jul 07	21:00 Tuesday Jul 07	Chinook	dip net
<b>Jul 12</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Wednesday Jul 08	21:00 Wednesday Jul 08	Chinook	dip net
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	13.6 days	06:00 Friday Jun 26	21:00 Thursday Jul 09	Chinook	dip net
<b>Jul 12</b>	Seabird Island First Nation	Agassiz to Sawmill Creek	12.6 days	06:00 Saturday Jun 27	21:00 Thursday Jul 09	Chinook	dip net
<b>Jul 12</b>	Shxw'owhamel First Nation	Yale Creek to Sawmill Creek	12.6 days	06:00 Saturday Jun 27	21:00 Thursday Jul 09	Chinook	dip net
<b>Jul 12</b>	Skwah First Nation	Hope to Emory Creek	15 hrs	06:00 Thursday Jul 09	21:00 Thursday Jul 09	Chinook	dip net
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Friday Jul 10	19:00 Friday Jul 10	Chinook	drift net
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Friday Jul 10	21:00 Friday Jul 10	Chinook	dip net
<b>Jul 12</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net
<b>Jul 12</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net

		to Mission					
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Saturday Jul 11	19:00 Saturday Jul 11	Chinook	drift net
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Saturday Jul 11	21:00 Saturday Jul 11	Chinook	dip net
<b>Jul 12</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 10	12:00 Sunday Jul 12	Chinook	drift net
<b>Jul 12</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 10	12:00 Sunday Jul 12	Chinook	drift net
<b>Jul 12</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 08	18:00 Sunday Jul 12	Chinook	set net, dip net, rod and reel
<b>Jul 12</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 08	18:00 Sunday Jul 12	Chinook	set net, dip net, rod and reel
<b>Jul 12</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Sunday Jul 12	19:00 Sunday Jul 12	Chinook	drift net
<b>Jul 12</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 12	19:00 Sunday Jul 12	Chinook	drift net
<b>Jul 12</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Sunday Jul 12	21:00 Sunday Jul 12	Chinook	dip net
<b>Jul 19</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 11	06:00 Monday Jul 13	Chinook	drift net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Monday Jul 13	21:00 Monday Jul 13	Chinook	dip net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Tuesday Jul 14	21:00 Tuesday Jul 14	Chinook	dip net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	15 hrs	06:00 Wednesday Jul 15	21:00 Wednesday Jul 15	Chinook	dip net
<b>Jul 19</b>	Yale First	Agassiz to	15	06:00	21:00	Chinook	dip net

	Nation	Sawmill Creek	hrs	Thursday Jul 16	Thursday Jul 16		
<b>Jul 19</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Friday Jul 17	21:00 Friday Jul 17	Sockeye	set net, dip net
<b>Jul 19</b>	Yale First Nation	Hope to Sawmill Creek	16 hrs	06:00 Friday Jul 17	21:59 Friday Jul 17	Sockeye	set net, dip net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
<b>Jul 19</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
<b>Jul 19</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Jul 18	19:00 Saturday Jul 18	Chinook	drift net
<b>Jul 19</b>	Musqueam First Nation	Below Port Mann Bridge	9 hrs	11:00 Saturday Jul 18	20:00 Saturday Jul 18	Chinook, Sockeye	set net, drift net
<b>Jul 19</b>	Tsawwassen First Nation	Below Port Mann Bridge	9 hrs	11:00 Saturday Jul 18	20:00 Saturday Jul 18	Chinook, Sockeye	set net, drift net
<b>Jul 19</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Saturday Jul 18	21:00 Saturday Jul 18	Sockeye	set net, dip net
<b>Jul 19</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Saturday Jul 18	21:00 Saturday Jul 18	Sockeye	set net, dip net
<b>Jul 19</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	24 hrs	06:00 Saturday Jul 18	06:00 Sunday Jul 19	Chinook	drift net
<b>Jul 19</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
<b>Jul 19</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 17	12:00 Sunday Jul 19	Chinook	drift net
<b>Jul 19</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	3 days	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	drift net



<b>Jul 19</b>	Squamish Nation	Squamish River	3 days	12:00 Thursday Jul 16	12:00 Sunday Jul 19	Chinook, Chum	set net
<b>Jul 19</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
<b>Jul 19</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 15	18:00 Sunday Jul 19	Chinook	set net, dip net, rod and reel
<b>Jul 19</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
<b>Jul 19</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
<b>Jul 19</b>	Yale First Nation	Agassiz to Sawmill Creek	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
<b>Jul 19</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 19	19:00 Sunday Jul 19	Sockeye	drift net
<b>Jul 19</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	fish wheel
<b>Jul 19</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 17	19:00 Sunday Jul 19	Sockeye	set net
<b>Jul 19</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Sunday Jul 19	21:00 Sunday Jul 19	Sockeye	set net, dip net
<b>Jul 19</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Sunday Jul 19	21:00 Sunday Jul 19	Sockeye	set net, dip net
<b>Jul 26</b>	Kwikwitlem	Pattullo Bridge	24	06:00	06:00	Chinook,	set net, drift net

	First Nation	to Douglas I.	hrs	Sunday Jul 19	Monday Jul 20	Sockeye	
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Monday Jul 20	21:00 Monday Jul 20	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Monday Jul 20	21:00 Monday Jul 20	Sockeye	set net, dip net
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Tuesday Jul 21	21:00 Tuesday Jul 21	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Tuesday Jul 21	21:00 Tuesday Jul 21	Sockeye	set net, dip net
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Wednesday Jul 22	21:00 Wednesday Jul 22	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Wednesday Jul 22	21:00 Wednesday Jul 22	Sockeye	set net, dip net
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Thursday Jul 23	21:00 Thursday Jul 23	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Thursday Jul 23	21:00 Thursday Jul 23	Sockeye	set net, dip net
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Friday Jul 24	21:00 Friday Jul 24	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Friday Jul 24	21:00 Friday Jul 24	Sockeye	set net, dip net
<b>Jul 26</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net
<b>Jul 26</b>	Cheam First Nation	Jone's Hill to Jespersion's	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net
<b>Jul 26</b>	Yale First Nation	Agassiz to Sawmill Creek	18 hrs	18:00 Friday Jul 24	12:00 Saturday Jul 25	Sockeye	set net

<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Saturday Jul 25	21:00 Saturday Jul 25	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Saturday Jul 25	21:00 Saturday Jul 25	Sockeye	set net, dip net
<b>Jul 26</b>	Musqueam First Nation	Below Port Mann Bridge	8 hrs	14:00 Saturday Jul 25	22:00 Saturday Jul 25	Sockeye	set net, drift net
<b>Jul 26</b>	Tsawwassen First Nation	Below Port Mann Bridge	8 hrs	14:00 Saturday Jul 25	22:00 Saturday Jul 25	Sockeye	set net, drift net
<b>Jul 26</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	drift net
<b>Jul 26</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Jul 22	12:00 Sunday Jul 26	Chinook, Chum	set net
<b>Jul 26</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 24	12:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel
<b>Jul 26</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 22	18:00 Sunday Jul 26	Chinook	set net, dip net, rod and reel
<b>Jul 26</b>	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Sunday Jul 26	18:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Jul 26	19:00 Sunday Jul 26	Chinook	drift net
<b>Jul 26</b>	Matsqui First	Kanaka	48	19:00	19:00	Sockeye	fish wheel

	Nation	Cr/Derby Rch to Mission	hrs	Friday Jul 24	Sunday Jul 26		
<b>Jul 26</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Sunday Jul 26	21:00 Sunday Jul 26	Sockeye	set net, dip net
<b>Jul 26</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Sunday Jul 26	21:00 Sunday Jul 26	Sockeye	set net, dip net
<b>Aug 02</b>	Kwkwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Jul 25	06:00 Monday Jul 27	Chinook	drift net
<b>Aug 02</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Monday Jul 27	21:00 Monday Jul 27	Sockeye	set net, dip net
<b>Aug 02</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Monday Jul 27	21:00 Monday Jul 27	Sockeye	set net, dip net
<b>Aug 02</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	15 hrs	06:00 Tuesday Jul 28	21:00 Tuesday Jul 28	Sockeye	set net, dip net
<b>Aug 02</b>	Yale First Nation	Hope to Sawmill Creek	15 hrs	06:00 Tuesday Jul 28	21:00 Tuesday Jul 28	Sockeye	set net, dip net
<b>Aug 02</b>	Lower Fraser First Nations	Bristol Island to Sawmill Creek	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Sockeye	set net, dip net
<b>Aug 02</b>	Yale First Nation	Hope to Sawmill Creek	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Sockeye	set net, dip net
<b>Aug 02</b>	Musqueam First Nation	TFN / Musq. Crab Area	130 days	00:01 Tuesday Mar 24	23:59 Friday Jul 31	Dungeness Crab, Graceful Crab, Red Rock Crab	dip net, hand picking, net, ring, trap, crab
<b>Aug 02</b>	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
<b>Aug 02</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
<b>Aug 02</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Saturday Aug 01	18:00 Saturday Aug 01	Chinook	drift net
<b>Aug 02</b>	Lower Fraser First Nations	Port Mann to Kanaka	12 hrs	07:00 Saturday	19:00 Saturday	Chinook	drift net

		Cr/Derby R, Kanaka Cr/Derby Rch to Mission		Aug 01	Aug 01		
<b>Aug 02</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 01	21:00 Saturday Aug 01	Chinook	dip net
<b>Aug 02</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Jul 29	12:00 Sunday Aug 02	Chinook, Chum	drift net
<b>Aug 02</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Jul 29	12:00 Sunday Aug 02	Chinook, Chum	set net
<b>Aug 02</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 31	12:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Jul 31	12:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	IN-SHUCK- CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 29	18:00 Sunday Aug 02	Chinook	set net, dip net, rod and reel
<b>Aug 02</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Jul 29	18:00 Sunday Aug 02	Chinook	set net, dip net, rod and reel
<b>Aug 02</b>	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Sunday Aug 02	18:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Jul 31	19:00 Sunday Aug 02	Chinook	fish wheel
<b>Aug 02</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 02	19:00 Sunday Aug 02	Chinook	drift net
<b>Aug 02</b>	Yale First Nation	Hope to Sawmill Creek,	15 hrs	06:00 Sunday	21:00 Sunday	Chinook	dip net

		Agassiz to Hope		Aug 02	Aug 02		
<b>Aug 09</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 01	06:00 Monday Aug 03	Chinook	drift net
<b>Aug 09</b>		Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 01	06:00 Monday Aug 03	Chinook	drift net
<b>Aug 09</b>	Yale First Nation	Agassiz to Sawmill Creek	12 hrs	06:00 Saturday Aug 08	18:00 Saturday Aug 08	Chinook	drift net
<b>Aug 09</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Saturday Aug 08	18:00 Saturday Aug 08	Chinook	drift net
<b>Aug 09</b>	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Saturday Aug 08	18:00 Saturday Aug 08	Chinook	drift net
<b>Aug 09</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 08	19:00 Saturday Aug 08	Chinook	drift net
<b>Aug 09</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 08	21:00 Saturday Aug 08	Chinook	dip net
<b>Aug 09</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Aug 05	12:00 Sunday Aug 09	Chinook, Chum	drift net
<b>Aug 09</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Aug 05	12:00 Sunday Aug 09	Chinook, Chum	set net
<b>Aug 09</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 07	12:00 Sunday Aug 09	Chinook	drift net
<b>Aug 09</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 07	12:00 Sunday Aug 09	Chinook	drift net
<b>Aug 09</b>	IN-SHUCK-CH Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Aug 05	18:00 Sunday Aug 09	Chinook	set net, dip net, rod and reel
<b>Aug 09</b>	Lil'wat Nation	Birkenhead R to Harrison Lk	4 days	18:00 Wednesday Aug 05	18:00 Sunday Aug 09	Chinook	set net, dip net, rod and reel
<b>Aug 09</b>	Yale First	Agassiz to	12	06:00	18:00	Chinook	drift net

	Nation	Sawmill Creek	hrs	Sunday Aug 09	Sunday Aug 09		
<b>Aug 09</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	06:00 Sunday Aug 09	18:00 Sunday Aug 09	Chinook	drift net
<b>Aug 09</b>	Lower Fraser First Nations	Mission to Sawmill Creek	12 hrs	06:00 Sunday Aug 09	18:00 Sunday Aug 09	Chinook	drift net
<b>Aug 09</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 09	19:00 Sunday Aug 09	Chinook	drift net
<b>Aug 09</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 07	19:00 Sunday Aug 09	Chinook	fish wheel
<b>Aug 09</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Sunday Aug 09	21:00 Sunday Aug 09	Chinook	dip net
<b>Aug 16</b>		Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
<b>Aug 16</b>		Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
<b>Aug 16</b>	Kwikwitlem First Nation	Pattullo Bridge to Douglas I.	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Chinook	drift net
<b>Aug 16</b>	Kwikwitlem First Nation	Pitt River	48 hrs	06:00 Saturday Aug 08	06:00 Monday Aug 10	Sockeye	set net, drift net
<b>Aug 16</b>	Chehalis First Nation	Harrison River	10 hrs	07:00 Thursday Aug 13	17:00 Thursday Aug 13	Sockeye	beach seine
<b>Aug 16</b>	Chehalis First Nation	Harrison River	12 hrs	05:00 Friday Aug 14	17:00 Friday Aug 14	Sockeye	beach seine
<b>Aug 16</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Saturday Aug 15	18:00 Saturday Aug 15	Chinook	drift net
<b>Aug 16</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to	12 hrs	07:00 Saturday Aug 15	19:00 Saturday Aug 15	Chinook	drift net

		Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission					
<b>Aug 16</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Aug 15	19:00 Saturday Aug 15	Chinook	drift net
<b>Aug 16</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 15	21:00 Saturday Aug 15	Chinook	dip net
<b>Aug 16</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Aug 12	12:00 Sunday Aug 16	Chinook, Chum	drift net
<b>Aug 16</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Aug 12	12:00 Sunday Aug 16	Chinook, Chum	set net
<b>Aug 16</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 14	12:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 14	12:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Sunday Aug 16	18:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	New Westminster First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	18:00 Friday Aug 14	18:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 14	19:00 Sunday Aug 16	Chinook	fish wheel
<b>Aug 16</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 16	19:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 16	19:00 Sunday Aug 16	Chinook	drift net
<b>Aug 16</b>	Yale First Nation	Hope to Sawmill Creek,	15 hrs	06:00 Sunday	21:00 Sunday	Chinook	dip net



		Agassiz to Hope		Aug 16	Aug 16		
<b>Aug 23</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Aug 15	06:00 Monday Aug 17	Chinook	drift net
<b>Aug 23</b>	Kwikwitlem First Nation	Pitt River	48 hrs	06:00 Saturday Aug 15	06:00 Monday Aug 17	Sockeye	set net, drift net
<b>Aug 23</b>	Chehalis First Nation	Harrison River	7 hrs	05:00 Wednesday Aug 19	12:00 Wednesday Aug 19	Sockeye	beach seine
<b>Aug 23</b>	Chehalis First Nation	Harrison River	7 hrs	05:00 Thursday Aug 20	12:00 Thursday Aug 20	Sockeye	beach seine
<b>Aug 23</b>	Musqueam First Nation	Below Port Mann Bridge	9 hrs	12:00 Thursday Aug 20	21:00 Thursday Aug 20	Pink	seine, purse, salmon
<b>Aug 23</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Saturday Aug 22	18:00 Saturday Aug 22	Chinook	drift net
<b>Aug 23</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Aug 22	19:00 Saturday Aug 22	Chinook	drift net
<b>Aug 23</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Aug 22	19:00 Saturday Aug 22	Chinook	drift net
<b>Aug 23</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Saturday Aug 22	21:00 Saturday Aug 22	Chinook	dip net
<b>Aug 23</b>	New Westminster First Nation	Douglas I to Qnsbrgh/Alex Fras	8 hrs	15:00 Saturday Aug 22	23:00 Saturday Aug 22	Chinook	drift net
<b>Aug 23</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Aug 19	12:00 Sunday Aug 23	Chinook, Chum	drift net
<b>Aug 23</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Aug 19	12:00 Sunday Aug 23	Chinook, Chum	set net
<b>Aug 23</b>	Musqueam	Below Port	48	12:00	12:00	Chinook	drift net

	First Nation	Mann Bridge	hrs	Friday Aug 21	Sunday Aug 23		
<b>Aug 23</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	06:00 Sunday Aug 23	18:00 Sunday Aug 23	Chinook	drift net
<b>Aug 23</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 21	19:00 Sunday Aug 23	Chinook	fish wheel
<b>Aug 23</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
<b>Aug 23</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 23	19:00 Sunday Aug 23	Chinook	drift net
<b>Aug 23</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	15 hrs	06:00 Sunday Aug 23	21:00 Sunday Aug 23	Chinook	dip net
<b>Aug 30</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Aug 22	06:00 Monday Aug 24	Chinook	drift net
<b>Aug 30</b>	Musqueam First Nation	Below Port Mann Bridge	6 hrs	06:00 Tuesday Aug 25	12:00 Tuesday Aug 25	Sockeye	set net, drift net
<b>Aug 30</b>	Tsawwassen First Nation	Below Port Mann Bridge	6 hrs	12:00 Tuesday Aug 25	18:00 Tuesday Aug 25	Sockeye	set net, drift net
<b>Aug 30</b>	Tsleil-Waututh First Nation	Below Port Mann Bridge	12 hrs	18:00 Tuesday Aug 25	06:00 Wednesday Aug 26	Chinook	drift net
<b>Aug 30</b>	Tsleil-Waututh First Nation	Below Port Mann Bridge	24 hrs	15:00 Wednesday Aug 26	15:00 Thursday Aug 27	Chinook	drift net
<b>Aug 30</b>	New Westminster First Nation	Douglas I to Qnsbrgh/Alex Fras	24 hrs	12:00 Friday Aug 28	12:00 Saturday Aug 29	Chinook, Pink	drift net
<b>Aug 30</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R,	12 hrs	07:00 Saturday Aug 29	19:00 Saturday Aug 29	Chinook, Pink	set net, drift net

		Kanaka Cr/Derby Rch to Mission					
<b>Aug 30</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Aug 29	19:00 Saturday Aug 29	Chinook, Pink	set net, drift net
<b>Aug 30</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Aug 29	19:00 Saturday Aug 29	Chinook, Pink	set net, drift net
<b>Aug 30</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Aug 26	12:00 Sunday Aug 30	Chinook, Chum	drift net
<b>Aug 30</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Aug 26	12:00 Sunday Aug 30	Chinook, Chum	set net
<b>Aug 30</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Aug 28	12:00 Sunday Aug 30	Chinook, Pink	drift net
<b>Aug 30</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Aug 30	19:00 Sunday Aug 30	Chinook, Pink	set net, drift net
<b>Aug 30</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Aug 28	19:00 Sunday Aug 30	Chinook	fish wheel
<b>Aug 30</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Sunday Aug 30	19:00 Sunday Aug 30	Chinook, Pink	set net, drift net
<b>Aug 30</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Aug 30	19:00 Sunday Aug 30	Chinook, Pink	set net, drift net
<b>Sep 06</b>	Musqueam First Nation	Below Port Mann Bridge	6 hrs	15:00 Friday Sep 04	21:00 Friday Sep 04	Pink	beach seine
<b>Sep 06</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	set net, drift net
<b>Sep 06</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	set net, drift net

<b>Sep 06</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Sep 05	19:00 Saturday Sep 05	Chinook, Pink	drift net
<b>Sep 06</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Sep 02	12:00 Sunday Sep 06	Chinook, Chum	drift net
<b>Sep 06</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Sep 02	12:00 Sunday Sep 06	Chinook, Chum	set net
<b>Sep 06</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Sep 04	12:00 Sunday Sep 06	Chinook, Pink	drift net
<b>Sep 06</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Sep 04	18:00 Sunday Sep 06	Chinook	fish wheel
<b>Sep 06</b>	Yale First Nation	Hope to Sawmill Creek, Agassiz to Hope	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	set net, drift net
<b>Sep 06</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	set net, drift net
<b>Sep 06</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Sep 06	19:00 Sunday Sep 06	Chinook, Pink	drift net
<b>Sep 06</b>	Lower Fraser First Nations	Mission to Sawmill Creek, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	36 hrs	07:00 Saturday Sep 05	19:00 Sunday Sep 06	Chinook, Pink	set net
<b>Sep 06</b>	Musqueam First Nation	Below Port Mann Bridge	4 hrs	17:00 Sunday Sep 06	21:00 Sunday Sep 06	Pink	seine, purse, salmon
<b>Sep 13</b>	Kwikwitlem	Douglas I to	48	06:00	06:00	Chinook	drift net

	First Nation	Qnsbrgh/Alex Fras	hrs	Saturday Sep 05	Monday Sep 07		
<b>Sep 13</b>	Musqueam First Nation	Below Port Mann Bridge	8 hrs	13:00 Tuesday Sep 08	21:00 Tuesday Sep 08	Chinook, Pink	beach seine
<b>Sep 13</b>	Lower Fraser First Nations	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
<b>Sep 13</b>	Yale First Nation	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
<b>Sep 13</b>	Cheam First Nation	Hope to Sawmill Creek	12 hrs	06:00 Friday Sep 11	18:00 Friday Sep 11	Chinook, Pink	set net, drift net
<b>Sep 13</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Sep 09	12:00 Sunday Sep 13	Chinook, Chum	drift net
<b>Sep 13</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Sep 09	12:00 Sunday Sep 13	Chinook, Chum	set net
<b>Sep 13</b>	Matsqui First Nation	Kanaka Cr/Derby Rch to Mission	48 hrs	18:00 Friday Sep 11	18:00 Sunday Sep 13	Chinook	fish wheel
<b>Sep 20</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Sep 16	12:00 Sunday Sep 20	Chinook, Chum	drift net
<b>Sep 20</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Sep 16	12:00 Sunday Sep 20	Chinook, Chum	set net
<b>Sep 27</b>	Kwantlen First Nation	Kanaka Cr/Derby Rch to Mission	10 hrs	08:00 Saturday Sep 26	18:00 Saturday Sep 26	Pink	beach seine
<b>Sep 27</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Sep 23	12:00 Sunday Sep 27	Chinook, Chum	drift net
<b>Sep 27</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Sep 23	12:00 Sunday Sep 27	Chinook, Chum	set net
<b>Oct 04</b>	Tsawwassen First Nation	Tsawwassen Treaty Fishing Area	138 days	00:01 Saturday May 16	23:59 Wednesday Sep 30		rod and reel
<b>Oct 04</b>	Tsawwassen First Nation	TFN / Musq. Crab Area	120 days	00:01 Wednesday Jun 03	23:59 Wednesday Sep 30	Dungeness Crab, Graceful Crab, Red Rock	dip net, hand picking, trap, crab, net, ring

						Crab	
<b>Oct 04</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Sep 30	12:00 Sunday Oct 04	Chinook, Chum	drift net
<b>Oct 04</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Sep 30	12:00 Sunday Oct 04	Chinook, Chum	set net
<b>Oct 11</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	12 hrs	07:00 Saturday Oct 10	19:00 Saturday Oct 10	Chum	drift net
<b>Oct 11</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Oct 10	19:00 Saturday Oct 10	Chum	drift net
<b>Oct 11</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Oct 07	12:00 Sunday Oct 11	Chinook, Chum	drift net
<b>Oct 11</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Oct 07	12:00 Sunday Oct 11	Chinook, Chum	set net
<b>Oct 11</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday Oct 10	12:00 Sunday Oct 11	Chum	set net, drift net, rod and reel
<b>Oct 11</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday Oct 10	12:00 Sunday Oct 11	Chum	set net, drift net
<b>Oct 11</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	29 hrs	07:00 Saturday Oct 10	12:00 Sunday Oct 11	Chum	set net
<b>Oct 11</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	12 hrs	07:00 Sunday Oct 11	19:00 Sunday Oct 11	Chum	drift net
<b>Oct 11</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	36 hrs	07:00 Saturday Oct 10	19:00 Sunday Oct 11	Chum	set net
<b>Oct 11</b>	Lower Fraser First Nations	Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Oct 11	19:00 Sunday Oct 11	Chum	drift net

<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Tuesday Oct 13	18:00 Tuesday Oct 13	Pink	dip net
<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Wednesday Oct 14	18:00 Wednesday Oct 14	Pink	dip net
<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Thursday Oct 15	18:00 Thursday Oct 15	Pink	dip net
<b>Oct 18</b>	Katzie First Nation	Pitt River	8 hrs	08:00 Friday Oct 16	16:00 Friday Oct 16	Chum	fence, salmon
<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Friday Oct 16	18:00 Friday Oct 16	Pink	dip net
<b>Oct 18</b>	Katzie First Nation	Pitt River	8 hrs	08:00 Saturday Oct 17	16:00 Saturday Oct 17	Chum	fence, salmon
<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Saturday Oct 17	18:00 Saturday Oct 17	Pink	dip net
<b>Oct 18</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Oct 17	19:00 Saturday Oct 17	Chum	drift net
<b>Oct 18</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Oct 17	19:00 Saturday Oct 17	Chum	drift net
<b>Oct 18</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Oct 17	19:00 Saturday Oct 17	Chum	drift net
<b>Oct 18</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Oct 14	12:00 Sunday Oct 18	Chinook, Chum	drift net
<b>Oct 18</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Oct 14	12:00 Sunday Oct 18	Chinook, Chum	set net
<b>Oct 18</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Oct 16	12:00 Sunday Oct 18	Chum	set net, drift net, rod and reel
<b>Oct 18</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday	12:00 Sunday	Chum	set net, drift net

				Oct 16	Oct 18		
<b>Oct 18</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Sunday Oct 18	18:00 Sunday Oct 18	Pink	dip net
<b>Oct 18</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Oct 18	19:00 Sunday Oct 18	Chum	drift net
<b>Oct 18</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	19:00 Friday Oct 16	19:00 Sunday Oct 18	Chum	set net
<b>Oct 18</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Oct 18	19:00 Sunday Oct 18	Chum	drift net
<b>Oct 18</b>	Yale First Nation	Agassiz to Hope	48 hrs	19:00 Friday Oct 16	19:00 Sunday Oct 18	Chum	set net
<b>Oct 18</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Oct 18	19:00 Sunday Oct 18	Chum	drift net
<b>Oct 18</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	19:00 Friday Oct 16	19:00 Sunday Oct 18	Chum	set net
<b>Oct 25</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Oct 17	06:00 Monday Oct 19	Chum	set net, drift net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Monday Oct 19	18:00 Monday Oct 19	Pink	dip net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Tuesday Oct 20	18:00 Tuesday Oct 20	Pink	dip net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Wednesday Oct 21	18:00 Wednesday Oct 21	Pink	dip net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Thursday Oct 22	18:00 Thursday Oct 22	Pink	dip net



<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Friday Oct 23	18:00 Friday Oct 23	Pink	dip net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Saturday Oct 24	18:00 Saturday Oct 24	Pink	dip net
<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Oct 24	19:00 Saturday Oct 24	Chum	drift net
<b>Oct 25</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Oct 24	19:00 Saturday Oct 24	Chum	drift net
<b>Oct 25</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Oct 24	19:00 Saturday Oct 24	Chum	drift net
<b>Oct 25</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Oct 21	12:00 Sunday Oct 25	Chinook, Chum	drift net
<b>Oct 25</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Oct 21	12:00 Sunday Oct 25	Chinook, Chum	set net
<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	16:00 Friday Oct 23	16:00 Sunday Oct 25	Chum	set net
<b>Oct 25</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Sunday Oct 25	18:00 Sunday Oct 25	Pink	dip net
<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Oct 25	19:00 Sunday Oct 25	Chum	drift net
<b>Oct 25</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday	19:00 Sunday	Chum	drift net

				Oct 25	Oct 25		
<b>Oct 25</b>	Yale First Nation	Agassiz to Hope	48 hrs	19:00 Friday Oct 23	19:00 Sunday Oct 25	Chum	set net
<b>Oct 25</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Oct 25	19:00 Sunday Oct 25	Chum	drift net
<b>Oct 25</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	19:00 Friday Oct 23	19:00 Sunday Oct 25	Chum	set net
<b>Nov 01</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Oct 24	06:00 Monday Oct 26	Chum	set net, drift net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Monday Oct 26	18:00 Monday Oct 26	Pink	dip net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Tuesday Oct 27	18:00 Tuesday Oct 27	Pink	dip net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Wednesday Oct 28	18:00 Wednesday Oct 28	Pink	dip net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	1 hrs	17:00 Thursday Oct 29	18:00 Thursday Oct 29	Pink	dip net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Friday Oct 30	18:00 Friday Oct 30	Pink	dip net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Saturday Oct 31	18:00 Saturday Oct 31	Pink	dip net
<b>Nov 01</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Oct 31	19:00 Saturday Oct 31	Chum	drift net
<b>Nov 01</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Oct 31	19:00 Saturday Oct 31	Chum	drift net
<b>Nov 01</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Oct 31	19:00 Saturday Oct 31	Chum	drift net
<b>Nov 01</b>	Squamish	Howe Sound	4	12:00	12:00	Chinook,	drift net

	Nation	(28-2 to 28-4)	days	Wednesday Oct 28	Sunday Nov 01	Chum	
<b>Nov 01</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Oct 28	12:00 Sunday Nov 01	Chinook, Chum	set net
<b>Nov 01</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	16:00 Friday Oct 30	16:00 Sunday Nov 01	Chum	set net
<b>Nov 01</b>	Yale First Nation	Hope to Sawmill Creek	11 hrs	07:00 Sunday Nov 01	18:00 Sunday Nov 01	Pink	dip net
<b>Nov 01</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Nov 01	19:00 Sunday Nov 01	Chum	drift net
<b>Nov 01</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Nov 01	19:00 Sunday Nov 01	Chum	drift net
<b>Nov 01</b>	Yale First Nation	Agassiz to Hope	48 hrs	19:00 Friday Oct 30	19:00 Sunday Nov 01	Chum	set net
<b>Nov 01</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Nov 01	19:00 Sunday Nov 01	Chum	drift net
<b>Nov 01</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	19:00 Friday Oct 30	19:00 Sunday Nov 01	Chum	set net
<b>Nov 08</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Oct 31	06:00 Monday Nov 02	Chum	set net, drift net
<b>Nov 08</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	08:00 Sunday Nov 01	08:00 Monday Nov 02	Chum	set net, drift net, rod and reel
<b>Nov 08</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	08:00 Sunday Nov 01	08:00 Monday Nov 02	Chum	set net, drift net
<b>Nov 08</b>	Lower Fraser First Nations	Mission to Hope, Port	12 hrs	07:00 Saturday	19:00 Saturday	Chum	drift net

		Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission		Nov 07	Nov 07		
<b>Nov 08</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Nov 07	19:00 Saturday Nov 07	Chum	drift net
<b>Nov 08</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Nov 07	19:00 Saturday Nov 07	Chum	drift net
<b>Nov 08</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Nov 04	12:00 Sunday Nov 08	Chinook, Chum	drift net
<b>Nov 08</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Nov 04	12:00 Sunday Nov 08	Chinook, Chum	set net
<b>Nov 08</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Nov 06	12:00 Sunday Nov 08	Chum	set net, drift net
<b>Nov 08</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Nov 06	12:00 Sunday Nov 08	Chum	set net, drift net, rod and reel
<b>Nov 08</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	16:00 Friday Nov 06	16:00 Sunday Nov 08	Chum	set net
<b>Nov 08</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	16:00 Friday Nov 06	16:00 Sunday Nov 08	Chum	set net
<b>Nov 08</b>	Yale First Nation	Agassiz to Hope	48 hrs	16:00 Friday Nov 06	16:00 Sunday Nov 08	Chum	set net
<b>Nov 08</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Nov 08	19:00 Sunday Nov 08	Chum	drift net
<b>Nov 08</b>	Cheam First	Jone's Hill to	12	07:00	19:00	Chum	drift net

	Nation	Jespersion's	hrs	Sunday Nov 08	Sunday Nov 08		
<b>Nov 08</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Nov 08	19:00 Sunday Nov 08	Chum	drift net
<b>Nov 15</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Nov 07	06:00 Monday Nov 09	Chum	set net, drift net
<b>Nov 15</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Nov 14	19:00 Saturday Nov 14	Chum	drift net
<b>Nov 15</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Nov 14	19:00 Saturday Nov 14	Chum	drift net
<b>Nov 15</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Nov 14	19:00 Saturday Nov 14	Chum	drift net
<b>Nov 15</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Nov 11	12:00 Sunday Nov 15	Chinook, Chum	drift net
<b>Nov 15</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Nov 11	12:00 Sunday Nov 15	Chinook, Chum	set net
<b>Nov 15</b>	Tsawwassen First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Nov 13	12:00 Sunday Nov 15	Chum	set net, drift net, rod and reel
<b>Nov 15</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	12:00 Friday Nov 13	12:00 Sunday Nov 15	Chum	set net, drift net
<b>Nov 15</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	16:00 Friday Nov 13	16:00 Sunday Nov 15	Chum	set net
<b>Nov 15</b>	Cheam First Nation	Jone's Hill to Jespersen's	48 hrs	16:00 Friday Nov 13	16:00 Sunday Nov 15	Chum	set net
<b>Nov 15</b>	Yale First Nation	Agassiz to Hope	48 hrs	16:00 Friday	16:00 Sunday	Chum	set net

				Nov 13	Nov 15		
<b>Nov 15</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Nov 15	19:00 Sunday Nov 15	Chum	drift net
<b>Nov 15</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Nov 15	19:00 Sunday Nov 15	Chum	drift net
<b>Nov 15</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Nov 15	19:00 Sunday Nov 15	Chum	drift net
<b>Nov 22</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Nov 14	06:00 Monday Nov 16	Chum	set net, drift net
<b>Nov 22</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Nov 21	19:00 Saturday Nov 21	Chum	drift net
<b>Nov 22</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Saturday Nov 21	19:00 Saturday Nov 21	Chum	drift net
<b>Nov 22</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Nov 21	19:00 Saturday Nov 21	Chum	drift net
<b>Nov 22</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Nov 18	12:00 Sunday Nov 22	Chinook, Chum	drift net
<b>Nov 22</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Nov 18	12:00 Sunday Nov 22	Chinook, Chum	set net
<b>Nov 22</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	48 hrs	16:00 Friday Nov 20	16:00 Sunday Nov 22	Chum	set net
<b>Nov 22</b>	Cheam First	Jone's Hill to	48	16:00	16:00	Chum	set net

	Nation	Jespersion's	hrs	Friday Nov 20	Sunday Nov 22		
<b>Nov 22</b>	Yale First Nation	Agassiz to Hope	48 hrs	16:00 Friday Nov 20	16:00 Sunday Nov 22	Chum	set net
<b>Nov 22</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Nov 22	19:00 Sunday Nov 22	Chum	drift net
<b>Nov 22</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Sunday Nov 22	19:00 Sunday Nov 22	Chum	drift net
<b>Nov 22</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Nov 22	19:00 Sunday Nov 22	Chum	drift net
<b>Nov 29</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Nov 21	06:00 Monday Nov 23	Chum	set net, drift net
<b>Nov 29</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Saturday Nov 28	19:00 Saturday Nov 28	Chum	drift net
<b>Nov 29</b>	Cheam First Nation	Jone's Hill to Jespersen's	12 hrs	07:00 Saturday Nov 28	19:00 Saturday Nov 28	Chum	drift net
<b>Nov 29</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Saturday Nov 28	19:00 Saturday Nov 28	Chum	drift net
<b>Nov 29</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Nov 25	12:00 Sunday Nov 29	Chinook, Chum	drift net
<b>Nov 29</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Nov 25	12:00 Sunday Nov 29	Chinook, Chum	set net
<b>Nov 29</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R,	48 hrs	16:00 Friday Nov 27	16:00 Sunday Nov 29	Chum	set net

		Kanaka Cr/Derby Rch to Mission					
<b>Nov 29</b>	Cheam First Nation	Jone's Hill to Jespersion's	48 hrs	16:00 Friday Nov 27	16:00 Sunday Nov 29	Chum	set net
<b>Nov 29</b>	Yale First Nation	Agassiz to Hope	48 hrs	16:00 Friday Nov 27	16:00 Sunday Nov 29	Chum	set net
<b>Nov 29</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	12 hrs	07:00 Sunday Nov 29	19:00 Sunday Nov 29	Chum	drift net
<b>Nov 29</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Sunday Nov 29	19:00 Sunday Nov 29	Chum	drift net
<b>Nov 29</b>	Yale First Nation	Agassiz to Hope	12 hrs	07:00 Sunday Nov 29	19:00 Sunday Nov 29	Chum	drift net
<b>Dec 06</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Nov 28	06:00 Monday Nov 30	Chum	set net, drift net
<b>Dec 06</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Dec 02	12:00 Sunday Dec 06	Chinook, Chum	drift net
<b>Dec 06</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Dec 02	12:00 Sunday Dec 06	Chinook, Chum	set net
<b>Dec 13</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Dec 05	06:00 Monday Dec 07	Chum	set net, drift net
<b>Dec 13</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday Dec 09	12:00 Sunday Dec 13	Chinook, Chum	drift net
<b>Dec 13</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Dec 09	12:00 Sunday Dec 13	Chinook, Chum	set net
<b>Dec 20</b>	Kwikwitlem First Nation	Douglas I to Qnsbrgh/Alex Fras	48 hrs	06:00 Saturday Dec 12	06:00 Monday Dec 14	Chum	set net, drift net
<b>Dec 20</b>	Squamish Nation	Howe Sound (28-2 to 28-4)	4 days	12:00 Wednesday	12:00 Sunday	Chinook, Chum	drift net



				Dec 16	Dec 20		
<b>Dec 20</b>	Squamish Nation	Squamish River	4 days	12:00 Wednesday Dec 16	12:00 Sunday Dec 20	Chinook, Chum	set net

**Notes:**\* Drift net fisheries occurring between June 26, 2007 and July 26, 2007 are restricted to the use of 8" mesh nets with a 3:1 hang ratio.

Printed from the Fishery Operations System on Dec 21 2009 at 15:00

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Ceremonial Opening Times between 01/01/2009 and 21/12/2009

Dec 21 2009 15:00

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
<b>Mar 22</b>	Yale First Nation	Strawberry I. to Sawmill Cr.	48 hrs	07:00 Thursday Mar 19	07:00 Saturday Mar 21	Chinook	set net
<b>Apr 05</b>	Yale First Nation	Strawberry I. to Sawmill Cr.	48 hrs	07:00 Saturday Mar 28	07:00 Monday Mar 30	Chinook	set net
<b>Apr 19</b>	Shxw'owhamel First Nation	Agassiz to Hope	8 hrs	07:00 Friday Apr 17	15:00 Friday Apr 17	Chinook	drift net
<b>Apr 19</b>	Shxw'owhamel First Nation	Agassiz to Hope	24 hrs	18:00 Thursday Apr 16	18:00 Friday Apr 17	Chinook	set net
<b>Apr 26</b>	Tsawwassen First Nation	Below Port Mann Bridge	8 hrs	06:00 Monday Apr 20	13:59 Monday Apr 20	Eulachon	drift net
<b>Apr 26</b>	Musqueam First Nation	Below Port Mann Bridge	8 hrs	10:00 Monday Apr 20	18:00 Monday Apr 20	Eulachon	drift net
<b>Apr 26</b>	Seabird Island First Nation	Agassiz to Hope	8 hrs	07:00 Wednesday Apr 22	15:00 Wednesday Apr 22	Chinook	drift net
<b>Apr 26</b>	Seabird Island First Nation	Agassiz to Hope	24 hrs	18:00 Tuesday Apr 21	18:00 Wednesday Apr 22	Chinook	set net
<b>Apr 26</b>	Seabird Island First Nation	Agassiz to Hope	8 hrs	07:00 Thursday Apr 23	15:00 Thursday Apr 23	Chinook	drift net
<b>Apr 26</b>	Seabird Island First Nation	Agassiz to Hope	24 hrs	18:00 Wednesday Apr 22	18:00 Thursday Apr 23	Chinook	set net
<b>Apr 26</b>	Katzie First Nation	Port Mann to Kanaka Cr/Derby R	8 hrs	07:00 Saturday Apr 25	15:00 Saturday Apr 25	Eulachon	drift net

<b>Apr 26</b>	Kwantlen First Nation	Kanaka Cr/Derby Rch to Mission	8 hrs	09:00 Sunday Apr 26	17:00 Sunday Apr 26	Eulachondrift net
<b>May 03</b>	Tsawwassen First Nation	Below Port Mann Bridge	8 hrs	06:30 Monday Apr 27	14:29 Monday Apr 27	Eulachondrift net
<b>May 03</b>	Musqueam First Nation	Below Port Mann Bridge	8 hrs	12:00 Monday Apr 27	20:00 Monday Apr 27	Eulachondrift net
<b>May 03</b>	Kwantlen First Nation	Kanaka Cr/Derby Rch to Mission	8 hrs	07:00 Wednesday Apr 29	15:00 Wednesday Apr 29	Eulachondrift net
<b>May 03</b>	Katzie First Nation	Port Mann to Kanaka Cr/Derby R	8 hrs	08:00 Wednesday Apr 29	16:00 Wednesday Apr 29	Eulachondrift net
<b>May 03</b>	Musqueam First Nation	Below Port Mann Bridge	7 hrs	14:00 Wednesday Apr 29	21:00 Wednesday Apr 29	Eulachondrift net
<b>May 03</b>	Kwantlen First Nation	Kanaka Cr/Derby Rch to Mission	8 hrs	07:00 Thursday Apr 30	15:00 Thursday Apr 30	Eulachondrift net
<b>May 03</b>	Kwantlen First Nation	Kanaka Cr/Derby Rch to Mission	8 hrs	08:00 Sunday May 03	16:00 Sunday May 03	Eulachondrift net
<b>May 03</b>	Tsawwassen First Nation	Below Port Mann Bridge	8 hrs	12:00 Sunday May 03	20:00 Sunday May 03	Eulachondrift net
<b>May 10</b>	Musqueam First Nation	Below Port Mann Bridge	8 hrs	12:00 Wednesday May 06	20:00 Wednesday May 06	Eulachondrift net
<b>May 17</b>	Squiala First Nation	Agassiz to Hope	12 hrs	06:00 Wednesday May 13	18:00 Wednesday May 13	Chinook drift net
<b>May 17</b>	Squiala First Nation	Agassiz to Hope	12 hrs	06:00 Thursday May 14	18:00 Thursday May 14	Chinook drift net
<b>May 31</b>	Tsawwassen First Nation	Below Port Mann Bridge	10 hrs	12:00 Tuesday May 26	22:00 Tuesday May 26	Chinook set net, drift net
<b>May 31</b>	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Thursday May 28	18:00 Thursday May 28	Chinook drift net
<b>May 31</b>	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Friday May 29	18:00 Friday May 29	Chinook drift net

<b>Jun 07</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	06:00 Thursday Jun 04	18:00 Thursday Jun 04	Chinook drift net
<b>Jun 07</b>		Agassiz to Hope	24 hrs	18:00 Wednesday Jun 03	18:00 Thursday Jun 04	Chinook set net, drift net
<b>Jun 07</b>	Seabird Island First Nation	Agassiz to Hope	24 hrs	18:00 Wednesday Jun 03	18:00 Thursday Jun 04	Chinook set net
<b>Jun 07</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	06:00 Thursday Jun 04	18:00 Thursday Jun 04	Chinook drift net
<b>Jun 07</b>	Squiala First Nation	Sumas River to Harrison	12 hrs	06:00 Friday Jun 05	18:00 Friday Jun 05	Chinook drift net
<b>Jun 14</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	06:00 Monday Jun 08	18:00 Monday Jun 08	Chinook drift net
<b>Jun 14</b>	Cheam First Nation	Jone's Hill to Jesperson's	6 hrs	07:00 Friday Jun 12	13:00 Friday Jun 12	Chinook drift net
<b>Jun 21</b>	Leq'a:mel First Nation	Mission to Sumas River	8 hrs	07:00 Monday Jun 15	15:00 Monday Jun 15	Chinook drift net
<b>Jun 21</b>	Leq'a:mel First Nation	Mission to Sumas River	8 hrs	07:00 Tuesday Jun 16	15:00 Tuesday Jun 16	Chinook drift net
<b>Jun 21</b>	Katzie First Nation	Port Mann to Kanaka Cr/Derby R	7 hrs	14:00 Tuesday Jun 16	21:00 Tuesday Jun 16	Chinook drift net
<b>Jun 21</b>	Leq'a:mel First Nation	Mission to Sumas River	8 hrs	07:00 Wednesday Jun 17	15:00 Wednesday Jun 17	Chinook drift net
<b>Jun 21</b>	Seabird Island First Nation	Agassiz to Hope	36 hrs	06:00 Tuesday Jun 16	18:00 Wednesday Jun 17	Chinook set net
<b>Jun 21</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	06:00 Wednesday Jun 17	18:00 Wednesday Jun 17	Chinook drift net
<b>Jun 21</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	09:00 Wednesday Jun 17	09:00 Thursday Jun 18	Chinook set net, drift net
<b>Jun 21</b>	Leq'a:mel First Nation	Mission to Sumas River	8 hrs	07:00 Thursday Jun 18	15:00 Thursday Jun 18	Chinook drift net

<b>Jun 21</b>	Seabird Island First Nation	Jone's Hill to Jesperson's	12 hrs	06:00 Thursday Jun 18	18:00 Thursday Jun 18	Chinook drift net
<b>Jun 21</b>	Leq'a:mel First Nation	Mission to Sumas River	48 hrs	18:00 Tuesday Jun 16	18:00 Thursday Jun 18	Chinook set net
<b>Jun 21</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	09:00 Thursday Jun 18	09:00 Friday Jun 19	Chinook set net, drift net
<b>Jun 21</b>	Yale First Nation	Strawberry I. to Sawmill Cr.	48 hrs	18:00 Wednesday Jun 17	18:00 Friday Jun 19	Chinook set net
<b>Jun 21</b>	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Friday Jun 19	18:00 Friday Jun 19	Chinook drift net
<b>Jun 21</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	06:00 Friday Jun 19	18:00 Friday Jun 19	Chinook drift net
<b>Jun 28</b>	Seabird Island First Nation	Agassiz to Hope	24 hrs	18:00 Sunday Jun 21	18:00 Monday Jun 22	Chinook set net
<b>Jun 28</b>	Scowlitz First Nation	Yale Creek to Sawmill Creek	24 hrs	18:00 Sunday Jun 21	18:00 Monday Jun 22	Chinook set net
<b>Jun 28</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	08:00 Monday Jun 22	08:00 Tuesday Jun 23	Chinook set net, drift net
<b>Jun 28</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	09:00 Tuesday Jun 23	09:00 Wednesday Jun 24	Chinook set net, drift net
<b>Jun 28</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Thursday Jun 25	19:00 Thursday Jun 25	Chinook drift net
<b>Jun 28</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	06:00 Friday Jun 26	18:00 Friday Jun 26	Chinook drift net
<b>Jul 05</b>	Chehalis First Nation	Sumas River to Agassiz	10 hrs	10:00 Monday Jun 29	20:00 Monday Jun 29	Chinook drift net
<b>Jul 05</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Wednesday Jul 01	19:00 Wednesday Jul 01	Chinook drift net
<b>Jul 05</b>	Musqueam First Nation	Below Port Mann Bridge	4 hrs	18:00 Thursday Jul 02	22:00 Thursday Jul 02	Chinook drift net

<b>Jul 05</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Friday Jul 03	18:00 Friday Jul 03	Chinook drift net
<b>Jul 12</b>	Musqueam First Nation	Below Port Mann Bridge	34 hrs	12:00 Tuesday Jul 07	22:00 Wednesday Jul 08	Chinook drift net
<b>Jul 19</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Wednesday Jul 15	19:00 Wednesday Jul 15	Chinook drift net
<b>Jul 19</b>	Squiala First Nation	Emory Creek to Sawmill Creek	12 hrs	07:00 Wednesday Jul 15	19:00 Wednesday Jul 15	Chinook drift net
<b>Jul 19</b>	Musqueam First Nation	Below Port Mann Bridge	7 hrs	15:00 Wednesday Jul 15	22:00 Wednesday Jul 15	Chinook drift net
<b>Jul 19</b>	Squiala First Nation	Emory Creek to Sawmill Creek	12 hrs	07:00 Thursday Jul 16	19:00 Thursday Jul 16	Chinook drift net
<b>Jul 19</b>	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Friday Jul 17	18:00 Friday Jul 17	Chinook drift net
<b>Jul 19</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	14:00 Saturday Jul 18	14:00 Sunday Jul 19	Chinook drift net
<b>Jul 26</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Wednesday Jul 22	18:00 Wednesday Jul 22	Chinook drift net
<b>Jul 26</b>	Shxw'owhamel First Nation	Agassiz to Hope	8 hrs	12:00 Thursday Jul 23	20:00 Thursday Jul 23	Chinook, Sockeye drift net
<b>Aug 02</b>	Chehalis First Nation	Sumas River to Agassiz	12 hrs	06:00 Wednesday Jul 29	18:00 Wednesday Jul 29	Chinook drift net
<b>Aug 02</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	06:00 Friday Jul 31	18:00 Friday Jul 31	Chinook drift net
<b>Aug 02</b>	Seabird Island First Nation	Agassiz to Hope	8 hrs	12:00 Friday Jul 31	20:00 Friday Jul 31	Chinook drift net
<b>Aug 02</b>	Skwah First Nation	Hope to Emory Creek	7 hrs	14:00 Friday Jul 31	21:00 Friday Jul 31	Chinook drift net
<b>Aug 09</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	06:00 Wednesday Aug 05	18:00 Wednesday Aug 05	Chinook drift net

<b>Aug 16</b>	Seabird Island First Nation	Mission to Sumas River	6 hrs	14:00 Monday Aug 10	20:00 Monday Aug 10	Chinook drift net
<b>Aug 16</b>	Skwah First Nation	Hope to Emory Creek	12 hrs	07:00 Tuesday Aug 11	19:00 Tuesday Aug 11	Chinook drift net
<b>Aug 16</b>	Sumas First Nation	Mission to Sumas River	6 hrs	14:00 Wednesday Aug 12	20:00 Wednesday Aug 12	Chinook drift net
<b>Aug 16</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Thursday Aug 13	19:00 Thursday Aug 13	Chinook drift net
<b>Aug 23</b>	Union Bar First Nation	Hope to Emory Creek	12 hrs	06:00 Wednesday Aug 19	18:00 Wednesday Aug 19	Chinook drift net
<b>Aug 23</b>	Cheam First Nation	Jone's Hill to Jesperson's	5 hrs	07:00 Thursday Aug 20	12:00 Thursday Aug 20	Chinook drift net
<b>Aug 23</b>	Cheam First Nation	Jone's Hill to Jesperson's	5 hrs	12:00 Thursday Aug 20	17:00 Thursday Aug 20	Chinook drift net
<b>Aug 23</b>	Cheam First Nation	Jone's Hill to Jesperson's	6 hrs	10:00 Friday Aug 21	16:00 Friday Aug 21	Chinook drift net
<b>Aug 23</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Friday Aug 21	19:00 Friday Aug 21	Chinook drift net
<b>Aug 30</b>	Musqueam First Nation	Below Port Mann Bridge	12 hrs	13:00 Monday Aug 24	01:00 Tuesday Aug 25	Sockeye drift net
<b>Aug 30</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook drift net
<b>Aug 30</b>	Yale First Nation	Strawberry I. to Sawmill Cr.	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook drift net
<b>Aug 30</b>	Chawathil First Nation	Agassiz to Hope	12 hrs	07:00 Thursday Aug 27	19:00 Thursday Aug 27	Chinook drift net
<b>Sep 06</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	09:00 Tuesday Sep 01	09:00 Wednesday Sep 02	Chinook drift net
<b>Sep 06</b>	Cheam First Nation	Jone's Hill to Jesperson's	12 hrs	07:00 Thursday Sep 03	19:00 Thursday Sep 03	Chinook drift net

<b>Sep 06</b>	Cheam First Nation	Jone's Hill to Jespersion's	12 hrs	07:00 Friday Sep 04	19:00 Friday Sep 04	Chinook drift net
<b>Sep 13</b>	Seabird Island First Nation	Agassiz to Hope	12 hrs	07:00 Tuesday Sep 08	19:00 Tuesday Sep 08	Chinook drift net
<b>Sep 13</b>	Chehalis First Nation	Harrison to Agassiz	8 hrs	06:00 Wednesday Sep 09	14:00 Wednesday Sep 09	Chinook, Pink, beach seine
<b>Sep 13</b>	Chehalis First Nation	Harrison to Agassiz	8 hrs	06:00 Thursday Sep 10	14:00 Thursday Sep 10	Chinook, Pink, beach seine

**Notes:**\* Drift net fisheries occurring between June 26, 2007 and July 26, 2007 are restricted to the use of 8" mesh nets with a 3:1 hang ratio.

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Economic Opportunity Opening Times between 01/01/2009 and 21/12/2009 Dec 21 2009 15:00

Wk Ending	First Nations Groups	Area	Length	Open Time/Date	Closed Time/Date	Target Species	Gear
<b>Sep 13</b>	Musqueam First Nation	Below Port Mann Bridge	10 hrs	06:00 Wednesday Sep 09	16:00 Wednesday Sep 09	Pink	beach seine, seine, purse, salmon
<b>Sep 13</b>	Musqueam First Nation	Below Port Mann Bridge	48 hrs	16:00 Wednesday Sep 09	16:00 Friday Sep 11	Pink	beach seine, seine, purse, salmon
<b>Sep 20</b>	Musqueam First Nation	Below Port Mann Bridge	5 days	16:00 Friday Sep 11	16:00 Wednesday Sep 16	Pink	beach seine, seine, purse, salmon
<b>Sep 20</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Friday Sep 18	17:00 Friday Sep 18	Chinook, Pink	beach seine
<b>Sep 20</b>	Scowlitz First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Friday Sep 18	17:00 Friday Sep 18	Chinook, Pink	beach seine
<b>Sep 20</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Saturday Sep 19	17:00 Saturday Sep 19	Chinook, Pink	beach seine
<b>Sep 20</b>	Scowlitz First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Saturday Sep 19	17:00 Saturday Sep 19	Chinook, Pink	beach seine
<b>Sep 20</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Sunday Sep 20	17:00 Sunday Sep 20	Chinook, Pink	beach seine
<b>Sep 20</b>	Scowlitz First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Sunday Sep 20	17:00 Sunday Sep 20	Chinook, Pink	beach seine
<b>Sep 27</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Monday Sep 21	17:00 Monday Sep 21	Pink	beach seine

<b>Sep 27</b>	Musqueam First Nation	Below Port Mann Bridge	6 days	16:00 Wednesday Sep 16	16:00 Tuesday Sep 22	Pink	seine, purse, salmon
<b>Sep 27</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Tuesday Sep 22	17:00 Tuesday Sep 22	Pink	beach seine
<b>Sep 27</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Wednesday Sep 23	17:00 Wednesday Sep 23	Pink	beach seine
<b>Sep 27</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	3 hrs	07:00 Thursday Sep 24	10:00 Thursday Sep 24	Pink	beach seine
<b>Sep 27</b>	Musqueam First Nation	Below Port Mann Bridge	3 days	16:00 Tuesday Sep 22	16:00 Friday Sep 25	Pink	seine, purse, salmon
<b>Oct 04</b>	Musqueam First Nation	Below Port Mann Bridge	3 days	16:00 Friday Sep 25	16:00 Monday Sep 28	Pink	seine, purse, salmon
<b>Oct 04</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Tuesday Sep 29	17:00 Tuesday Sep 29	Pink	beach seine
<b>Oct 04</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Wednesday Sep 30	17:00 Wednesday Sep 30	Pink	beach seine
<b>Oct 04</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Sumas River	10 hrs	07:00 Thursday Oct 01	17:00 Thursday Oct 01	Pink	beach seine

<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	10 hrs	07:00 Wednesday Oct 21	17:00 Wednesday Oct 21	Chum	beach seine
<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	10 hrs	07:00 Thursday Oct 22	17:00 Thursday Oct 22	Chum	beach seine
<b>Oct 25</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	10 hrs	07:00 Friday Oct 23	17:00 Friday Oct 23	Chum	beach seine
<b>Oct 25</b>	Musqueam First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday Oct 24	12:00 Sunday Oct 25	Chum	drift net
<b>Oct 25</b>	Tsawwassen First Nation	Below Port Mann Bridge	24 hrs	12:00 Saturday Oct 24	12:00 Sunday Oct 25	Chum	drift net
<b>Nov 01</b>	Lower Fraser First Nations	Mission to Hope, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission	7 hrs	08:00 Monday Oct 26	15:00 Monday Oct 26	Chum	beach seine
<b>Nov 01</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Tuesday Oct 27	17:00 Tuesday Oct 27	Chum	beach seine
<b>Nov 01</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Wednesday Oct 28	17:00 Wednesday Oct 28	Chum	beach seine
<b>Nov 01</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Thursday Oct 29	17:00 Thursday Oct 29	Chum	beach seine
<b>Nov 01</b>	Musqueam First Nation	Below Port Mann Bridge	36 hrs	07:00 Friday Oct 30	19:00 Saturday Oct 31	Chum	seine, purse, salmon
<b>Nov 08</b>	Lower Fraser First Nations	Harrison to Agassiz	10 hrs	07:00 Tuesday Nov 03	17:00 Tuesday Nov 03	Chum	beach seine

<b>Nov 08</b>	Lower Fraser First Nations	Harrison to Agassiz	10 hrs	07:00 Wednesday Nov 04	17:00 Wednesday Nov 04	Chum	beach seine
<b>Nov 08</b>	Chehalis First Nation	Harrison River, Sumas River to Agassiz	10 hrs	07:00 Wednesday Nov 04	17:00 Wednesday Nov 04	Chum	beach seine
<b>Nov 08</b>	Lower Fraser First Nations	Mission to Harrison, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission, Harrison to Hope	10 hrs	07:00 Thursday Nov 05	17:00 Thursday Nov 05	Chum	beach seine
<b>Nov 08</b>	Musqueam First Nation	Below Port Mann Bridge	3.3 days	13:00 Monday Nov 02	19:00 Thursday Nov 05	Chum	seine, purse, salmon
<b>Nov 08</b>	Lower Fraser First Nations	Mission to Harrison, Port Mann to Kanaka Cr/Derby R, Kanaka Cr/Derby Rch to Mission, Harrison to Hope	8 hrs	07:00 Friday Nov 06	15:00 Friday Nov 06	Chum	beach seine

**Notes:**\* Drift net fisheries occurring between June 26, 2007 and July 26, 2007 are restricted to the use of 8" mesh nets with a 3:1 hang ratio.

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## Appendix 13: Commercial Catch Summary

FOS ad hoc query

Feb 19 2010 09:57

GEAR	OPNG_CAT	STATWEEK	FISHING_DATE	AREA	EFFORT	SOCKEYE _KEPT	SOCKEYE _REL	COHO _REL	PINK_ KEPT	PINK_ REL	CHUM_ _KEPT	CHUM_ REL	CHINOOK _KEPT	CHINOOK _REL	STEELHEAD _REL	HRS_ OPEN	
Seine B	IVQ / ITQ	09/1	30/08/2009 0:00		12	22.8	0	2638	4355	3E+05	0	779	248	0	131	9	18
Seine B	IVQ / ITQ	09/1	30/08/2009 0:00		13	6.14	0	177	235	61850	0	54	76	0	20	0	18
Seine B	IVQ / ITQ	09/1	31/08/2009 0:00		12	19.74	0	1403	2303	2E+05	0	541	38	0	69	4	24
Seine B	IVQ / ITQ	09/1	31/08/2009 0:00		13	6.58	0	169	553	40414	0	108	0	0	22	0	24
Seine B	IVQ / ITQ	09/1	01/09/2009 0:00		12	19.74	0	854	807	1E+05	0	233	46	0	44	1	24
Seine B	IVQ / ITQ	09/1	01/09/2009 0:00		13	9.21	0	552	1080	57272	0	398	0	0	23	1	24
Seine B	IVQ / ITQ	09/1	02/09/2009 0:00		12	22.36	13	902	1440	99899	0	273	46	0	92	3	24
Seine B	IVQ / ITQ	09/1	02/09/2009 0:00		13	9.21	0	719	1106	43739	0	183	0	0	21	3	24
Seine B	IVQ / ITQ	09/1	03/09/2009 0:00		12	9.21	0	585	818	38686	0	162	0	0	33	1	24
Seine B	IVQ / ITQ	09/1	03/09/2009 0:00		13	7.89	0	384	627	19803	0	75	5	0	27	3	24
Seine B	IVQ / ITQ	09/1	04/09/2009 0:00		12	1.32	0	119	40	19800	0	145	0	0	0	0	24
Seine B	IVQ / ITQ	09/1	04/09/2009 0:00		13	1.32	0	17	25	1023	0	0	8	0	3	0	24
Seine B	IVQ / ITQ	09/1	05/09/2009 0:00		12	9.21	0	230	410	45271	0	329	0	0	32	0	24
Seine B	IVQ / ITQ	09/1	05/09/2009 0:00		13	0	0	0	0	0	0	0	0	0	0	0	24
Seine B	IVQ / ITQ	09/2	06/09/2009 0:00		12	17.11	0	647	2339	61570	53	495	12	0	71	1	24
Seine B	IVQ / ITQ	09/2	06/09/2009 0:00		13	1.32	0	70	176	6732	0	48	0	0	3	0	24
Seine B	IVQ / ITQ	09/2	07/09/2009 0:00		12	15.79	0	661	3153	62894	0	681	8	0	56	3	24
Seine B	IVQ / ITQ	09/2	07/09/2009 0:00		13	2.64	0	132	368	10956	0	137	0	0	2	1	24
Seine B	IVQ / ITQ	09/2	08/09/2009 0:00		12	6.58	0	295	772	20917	0	332	0	0	12	0	24
Seine B	IVQ / ITQ	09/2	08/09/2009 0:00		13	1.32	0	21	79	6600	0	92	0	0	0	0	24
Seine B	IVQ / ITQ	09/2	09/09/2009 0:00		12	2.63	0	92	184	11844	0	184	0	0	1	0	24
Seine B	IVQ / ITQ	09/2	09/09/2009 0:00		13	2.63	0	76	260	16175	0	156	0	0	1	0	24
Seine B	IVQ / ITQ	09/2	10/09/2009 0:00		12	2.63	0	164	644	17095	0	723	0	0	19	0	24
Seine B	IVQ / ITQ	09/2	10/09/2009 0:00		13	1.32	0	48	193	2904	0	87	0	0	0	0	24
Seine B	IVQ / ITQ	09/2	11/09/2009 0:00		12	1.32	0	132	792	13200	0	0	0	0	10	0	20
Seine B	IVQ / ITQ	09/2	11/09/2009 0:00		13	0	0	0	0	0	0	0	0	0	0	0	20
Seine B	IVQ / ITQ	09/3	13/09/2009 0:00		29	0											14
Seine B	IVQ / ITQ	09/3	14/09/2009 0:00		29	0											14
Seine B	IVQ / ITQ	09/3	15/09/2009 0:00		29	0											14
Seine B	IVQ / ITQ	09/3	17/09/2009 0:00		29	0											14
Troll H	IVQ / ITQ	09/1	30/08/2009 0:00		12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	30/08/2009 0:00		13	3	0	4	5	981	0	1	0	0	2	0	24
Troll H	IVQ / ITQ	09/1	30/08/2009 0:00		18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	31/08/2009 0:00		12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	31/08/2009 0:00		13	9	0	60	70	2338	0	10	0	0	9	0	24
Troll H	IVQ / ITQ	09/1	31/08/2009 0:00		18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	01/09/2009 0:00		12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	01/09/2009 0:00		13	12	0	41	120	2775	0	8	0	0	6	0	24
Troll H	IVQ / ITQ	09/1	01/09/2009 0:00		18	0	0	0	0	0	0	0	0	0	0	0	24

Troll H	IVQ / ITQ	09/1	02/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	02/09/2009 0:00	13	15	0	71	173	4143	0	12	0	0	5	0	24
Troll H	IVQ / ITQ	09/1	02/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	03/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	03/09/2009 0:00	13	12	0	56	97	2270	0	3	0	0	5	0	24
Troll H	IVQ / ITQ	09/1	03/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	04/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	04/09/2009 0:00	13	6	0	29	29	847	0	1	0	0	4	0	24
Troll H	IVQ / ITQ	09/1	04/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	05/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/1	05/09/2009 0:00	13	8	0	34	42	1197	0	4	0	0	8	0	24
Troll H	IVQ / ITQ	09/1	05/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	06/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	06/09/2009 0:00	13	4	0	21	12	742	0	1	0	0	4	0	24
Troll H	IVQ / ITQ	09/2	06/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	07/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	07/09/2009 0:00	13	2	0	18	13	272	0	1	0	0	1	0	24
Troll H	IVQ / ITQ	09/2	07/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	08/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	08/09/2009 0:00	13	3	0	5	17	202	0	0	0	0	5	0	24
Troll H	IVQ / ITQ	09/2	08/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	09/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	09/09/2009 0:00	13	3	0	9	25	362	0	1	0	0	6	0	24
Troll H	IVQ / ITQ	09/2	09/09/2009 0:00	18	1	0	0	0	109	0	0	0	0	2	0	24
Troll H	IVQ / ITQ	09/2	10/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	10/09/2009 0:00	13	3	0	10	20	314	0	0	0	0	2	0	24
Troll H	IVQ / ITQ	09/2	10/09/2009 0:00	18	1	0	0	0	78	0	0	0	0	1	0	24
Troll H	IVQ / ITQ	09/2	11/09/2009 0:00	12	0	0	0	0	0	0	0	0	0	0	0	20
Troll H	IVQ / ITQ	09/2	11/09/2009 0:00	13	1	0	6	11	98	0	2	0	0	0	0	20
Troll H	IVQ / ITQ	09/2	11/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	20
Troll H	IVQ / ITQ	09/2	12/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/2	12/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	13/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	13/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	14/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	14/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	15/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	15/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	16/09/2009 0:00	18	1	0	0	0	0	7	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	16/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	17/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	17/09/2009 0:00	29	2	0	0	0	0	12	0	0	0	3	0	24
Troll H	IVQ / ITQ	09/3	18/09/2009 0:00	18	0	0	0	0	0	0	0	0	0	0	0	24
Troll H	IVQ / ITQ	09/3	18/09/2009 0:00	29	0	0	0	0	0	0	0	0	0	0	0	24

**Area 12 - Naka Creek Sockeye Gillnet**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
17-Jul-09	1	4	93.40	91	0	18	0	0	0	0	3	2	0	1	4
18-Jul-09	1	4	93.70	168	0	25	0	0	0	0	12	1	2	6	0
19-Jul-09	1	4	103.20	285	0	72	0	1	0	1	8	4	0	2	2
20-Jul-09	1	3	64.70	177	0	42	1	0	0	0	7	0	0	0	0
21-Jul-09	1	4	92.80	195	0	164	0	0	0	0	18	0	1	0	4
22-Jul-09	1	5	90.40	152	0	77	1	0	0	0	14	0	0	4	4
23-Jul-09	0	0	0.00												0
24-Jul-09	0	0	0.00												0
25-Jul-09	1	4	100.00	57	0	14	0	0	0	0	8	8	0	2	4
26-Jul-09	1	4	97.70	33	0	3	0	0	0	0	5	5	2	3	2
27-Jul-09	1	4	103.40	24	0	4	0	0	0	0	6	6	0	0	0
28-Jul-09	1	3	68.00	51	0	5	0	0	0	0	27	27	0	1	0
29-Jul-09	1	4	104.20	113	0	12	1	0	1	0	8	8	0	2	0
30-Jul-09	1	4	104.10	197	0	6	1	0	1	0	5	5	1	1	1
31-Jul-09	0	0	0.00												0
<b>August</b>															
01-Aug-09	0	0	0.00												0
02-Aug-09	0	0	0.00												0
03-Aug-09	0	0	0.00												0
04-Aug-09	0	0	0.00												0
05-Aug-09	0	0	0.00												0
06-Aug-09	0	0	0.00												0
07-Aug-09	0	0	0.00												0
08-Aug-09	0	0	0.00												0
09-Aug-09	0	0	0.00												0
10-Aug-09	0	0	0.00												0
11-Aug-09	0	0	0.00												0
12-Aug-09	0	0	0.00												0
13-Aug-09	0	0	0.00												0
14-Aug-09	0	0	0.00												0
15-Aug-09	0	0	0.00												0
16-Aug-09	0	0	0.00												0
17-Aug-09	0	0	0.00												0
18-Aug-09	0	0	0.00												0
19-Aug-09	0	0	0.00												0
20-Aug-09	0	0	0.00												0
21-Aug-09	0	0	0.00												0
22-Aug-09	0	0	0.00												0
23-Aug-09	0	0	0.00												0
24-Aug-09	0	0	0.00												0
25-Aug-09	0	0	0.00												0

**Area 12 - Naka Creek Sockeye Gillnet**

(Note: "Rel." = Released)

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
26-Aug-09	0	0	0.00												0
27-Aug-09	0	0	0.00												0
28-Aug-09	0	0	0.00												0
29-Aug-09	0	0	0.00												0
30-Aug-09	0	0	0.00												0
31-Aug-09	0	0	0.00												0
<b>September</b>															
01-Sep-09	0	0	0.00												0
02-Sep-09	0	0	0.00												0
03-Sep-09	0	0	0.00												0
04-Sep-09	0	0	0.00												0
05-Sep-09	0	0	0.00												0
06-Sep-09	0	0	0.00												0
07-Sep-09	0	0	0.00												0
08-Sep-09	0	0	0.00												0
09-Sep-09	0	0	0.00												0
10-Sep-09	0	0	0.00												0
11-Sep-09	0	0	0.00												0
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	12	47	1,115.60	1,543	0	442	4	1	2	1	121	66	6	22	21



**Area 12 - Blinkhorn Sockeye Seine**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
20-Jul-09	1	6	6.00	284	2	355	2	0	2	0	12	12	2	1	1
21-Jul-09	1	6	6.00	118	3	287	7	5	7	5	9	9	0	3	0
22-Jul-09	1	6	6.00	73	1	407	9	1	9	1	6	6	0	4	0
23-Jul-09	1	6	6.00	94	6	1,381	18	4	18	4	15	15	0	7	3
24-Jul-09	1	5	5.00	64	0	912	13	2	13	2	10	10	1	9	0
25-Jul-09	1	6	6.00	360	4	578	0	0	0	0	15	15	0	6	0
26-Jul-09	1	6	6.00	235	9	1,480	14	0	14	0	18	18	0	9	0
27-Jul-09	1	6	6.00	232	8	1,812	20	0	20	0	15	15	1	2	1
28-Jul-09	1	6	6.00	1,664	16	3,661	6	0	6	0	3	3	0	9	0
29-Jul-09	1	6	6.00	1,787	111	5,610	19	1	19	1	18	18	1	10	0
30-Jul-09	1	6	6.00	2,063	77	2,890	22	0	22	0	8	8	0	6	0
31-Jul-09	1	6	6.00	1,288	83	3,977	16	2	16	2	12	12	0	16	5
<b>August</b>															
01-Aug-09	1	6	6.00	821	10	3,050	18	0	18	0	11	11	0	10	0
02-Aug-09	1	5	5.00	1,013	4	2,190	15	0	15	0	21	21	0	38	0
03-Aug-09	1	6	6.00	346	4	2,170	27	0	27	0	15	15	0	38	0
04-Aug-09	1	6	6.00	430	5	5,652	15	0	15	0	12	12	0	27	0
05-Aug-09	1	6	6.00	153	47	5,415	6	2	6	2	12	12	0	6	0
06-Aug-09	1	6	6.00	114	8	2,070	3	2	3	2	27	27	0	6	0
07-Aug-09	1	6	6.00	443	61	3,785	8	2	8	2	54	54	0	18	0
08-Aug-09	1	6	6.00	563	44	1,745	5	0	5	0	29	29	0	17	0
09-Aug-09	1	6	6.00	1,095	0	4,375	13	0	13	0	28	28	0	58	0
10-Aug-09	1	6	6.00	1,064	0	4,110	17	0	17	0	44	44	0	44	0
11-Aug-09	1	6	6.00	716	76	2,004	8	1	8	1	28	28	0	38	0
12-Aug-09	1	2	2.00	236	20	1,100	1	0	1	0	8	8	0	13	0
13-Aug-09	1	6	6.00	446	49	4,498	18	2	18	2	50	50	0	12	0
14-Aug-09	1	6	6.00	98	33	3,530	30	0	30	0	23	23	0	7	0
15-Aug-09	1	6	6.00	277	18	5,481	20	0	20	0	32	32	0	11	0
16-Aug-09	1	6	6.00	250	24	4,675	9	0	9	0	48	48	0	26	0
17-Aug-09	1	6	6.00	486	47	9,953	12	1	12	1	31	31	0	34	0
18-Aug-09	1	5	5.00	360	26	5,754	14	0	14	0	32	32	0	49	0
19-Aug-09	1	6	6.00	494	31	8,125	13	0	13	0	34	34	0	34	0
20-Aug-09	1	6	6.00	453	29	7,535	3	0	3	0	30	30	0	21	0
21-Aug-09	1	6	6.00	372	27	9,290	8	0	8	0	59	59	0	18	0
22-Aug-09	1	6	6.00	592	84	10,066	16	1	16	1	69	69	0	19	1
23-Aug-09	1	6	6.00	1,079	51	14,130	5	1	5	1	63	63	0	45	0
24-Aug-09	1	6	6.00	543	19	8,802	2	0	2	0	23	23	0	9	0
25-Aug-09	1	6	6.00	601	40	12,450	4	2	4	2	35	35	0	18	0
26-Aug-09	1	5	5.00	553	34	16,000	9	0	9	0	29	29	0	22	0
27-Aug-09	1	1	1.00	27	3	1,500	0	0	0	0	4	4	0	2	0
28-Aug-09	1	6	6.00	126	14	7,270	7	3	7	3	29	29	0	9	0
29-Aug-09	1	6	6.00	103	28	13,965	0	0	0	0	112	112	0	19	0

Monday, September 28, 2009

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**Area 12 - Blinkhorn Sockeye Seine**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
30-Aug-09	1	6	6.00	134	31	9,072	7	0	7	0	130	130	0	26	0
31-Aug-09	1	6	6.00	26	5	7,372	2	0	2	0	83	83	0	7	0
<b>September</b>															
01-Sep-09	1	6	6.00	59	9	3,897	6	0	6	0	26	26	0	10	0
02-Sep-09	1	6	6.00	21	6	1,202	1	0	1	0	34	34	0	6	0
03-Sep-09	1	6	6.00	78	6	3,250	11	0	11	0	49	49	0	33	0
04-Sep-09	1	3	3.00	32	3	1,110	0	4	0	4	46	46	0	14	0
05-Sep-09	1	6	6.00	83	7	2,720	3	1	3	1	62	62	0	34	0
06-Sep-09	1	6	6.00	41	0	1,550	1	1	1	1	35	35	0	22	0
07-Sep-09	1	6	6.00	174	38	5,812	1	0	1	0	288	288	0	51	0
08-Sep-09	1	3	3.00	106	11	3,950	0	0	0	0	185	185	0	0	0
09-Sep-09	1	6	6.00	19	5	1,291	1	0	1	0	32	32	0	26	0
10-Sep-09	1	6	6.00	21	2	1,640	0	0	0	0	26	26	0	0	0
11-Sep-09	1	6	6.00	41	13	3,420	3	0	3	0	104	104	0	67	0
12-Sep-09	1	6	6.00	36	4	3,396	1	1	1	1	117	117	0	72	0
13-Sep-09	1	6	6.00	0	0	54	0	0	0	0	9	9	0	1	9
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	56	317	317.00	22,987	1,296	253,776	489	39	489	39	2,359	2,359	5	1,119	20

**Area 12 - Round Island Sockeye Gillnet**

(Note: "Rel." = Released)

Assessment				Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
Date	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
12-Jul-09	1	3	84.00	5	0	1	0	2	0	0	5	1	0	3	3
13-Jul-09	1	3	80.30	16	0	0	3	0	1	0	7	2	0	2	3
14-Jul-09	1	3	79.70	17	0	1	1	0	0	0	5	1	0	0	2
15-Jul-09	1	3	85.20	7	0	0	0	0	0	0	2	1	0	1	1
16-Jul-09	1	3	81.60	30	0	31	1	1	0	0	14	3	0	1	7
17-Jul-09	1	3	84.80	25	0	12	1	1	0	1	21	9	0	0	14
18-Jul-09	1	3	89.00	21	0	12	1	0	0	0	8	3	0	0	27
19-Jul-09	1	3	83.90	31	0	75	4	2	4	2	17	10	0	0	5
20-Jul-09	1	3	88.50	21	0	25	3	2	0	2	11	3	0	2	17
21-Jul-09	1	3	88.20	59	0	28	2	0	2	0	27	11	0	2	8
22-Jul-09	1	3	91.20	35	0	15	2	0	2	0	24	13	0	2	18
23-Jul-09	1	3	83.90	20	0	37	2	1	0	1	15	2	0	1	3
24-Jul-09	1	3	77.20	9	0	6	0	0	0	0	6	0	0	0	1
25-Jul-09	1	3	81.10	22	0	12	0	0	0	0	3	0	0	0	0
26-Jul-09	1	3	71.30	49	0	8	1	0	0	0	8	0	0	1	0
27-Jul-09	1	3	75.00	3	0	5	4	0	0	0	5	0	0	3	4
28-Jul-09	1	3	61.00	29	0	12	1	0	0	0	4	0	0	1	0
29-Jul-09	1	3	83.60	17	0	10	1	1	0	0	2	0	0	1	5
30-Jul-09	1	3	70.30	28	0	7	0	0	0	0	0	0	0	2	1
31-Jul-09	1	3	84.70	30	0	16	0	0	0	0	2	0	0	2	0
<b>August</b>															
01-Aug-09	1	3	93.10	93	0	45	2	0	0	0	4	0	1	2	3
02-Aug-09	1	3	90.60	38	0	30	0	0	0	0	4	1	0	0	0
03-Aug-09	1	3	91.50	39	0	18	4	0	2	0	6	2	0	6	1
04-Aug-09	1	3	96.10	16	0	11	1	0	1	0	1	1	0	2	1
05-Aug-09	1	1	23.10	34	0	11	1	0	1	0	3	1	0	2	0
06-Aug-09	1	3	93.90	62	0	65	2	0	0	0	11	1	1	3	9
07-Aug-09	1	3	80.20	12	0	4	1	0	0	0	4	0	0	0	1
08-Aug-09	1	3	71.60	16	0	5	4	0	2	0	8	5	0	3	0
09-Aug-09	1	3	83.50	3	0	4	0	0	0	0	3	0	0	0	1
10-Aug-09	1	3	88.10	38	0	20	1	0	0	0	18	8	1	3	1
11-Aug-09	1	3	90.10	0	0	2	0	0	0	0	0	0	0	0	3
12-Aug-09	1	3	85.90	11	0	31	0	0	0	0	15	1	0	0	4
13-Aug-09	0	0	0.00												0
14-Aug-09	0	0	0.00												0
15-Aug-09	0	0	0.00												0
16-Aug-09	0	0	0.00												0
17-Aug-09	0	0	0.00												0
18-Aug-09	0	0	0.00												0
19-Aug-09	0	0	0.00												0
20-Aug-09	0	0	0.00												0
21-Aug-09	0	0	0.00												0

**Area 12 - Round Island Sockeye Gillnet**

(Note: "Rel." = Released)

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
22-Aug-09	0	0	0.00												0
23-Aug-09	0	0	0.00												0
24-Aug-09	0	0	0.00												0
25-Aug-09	0	0	0.00												0
26-Aug-09	0	0	0.00												0
27-Aug-09	0	0	0.00												0
28-Aug-09	0	0	0.00												0
29-Aug-09	0	0	0.00												0
30-Aug-09	0	0	0.00												0
31-Aug-09	0	0	0.00												0
<b>September</b>															
01-Sep-09	0	0	0.00												0
02-Sep-09	0	0	0.00												0
03-Sep-09	0	0	0.00												0
04-Sep-09	0	0	0.00												0
05-Sep-09	0	0	0.00												0
06-Sep-09	0	0	0.00												0
07-Sep-09	0	0	0.00												0
08-Sep-09	0	0	0.00												0
09-Sep-09	0	0	0.00												0
10-Sep-09	0	0	0.00												0
11-Sep-09	0	0	0.00												0
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	32	94	2,612.20	836	0	559	43	10	15	6	263	79	3	45	143

**Area 13 - Area 13 Sockeye Seine**

(Note: "Rel." = Released)

Assessment				Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
Date	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
26-Jul-09	1	6	6.00	121	0	86	1	0	1	0	0	0	0	0	0
27-Jul-09	1	6	6.00	100	0	273	2	1	2	1	4	4	0	1	3
28-Jul-09	1	6	6.00	118	0	420	1	0	1	0	2	2	0	0	0
29-Jul-09	1	6	6.00	271	4	653	0	0	0	0	0	0	0	0	0
30-Jul-09	1	6	6.00	81	0	71	5	0	5	0	0	0	0	0	0
31-Jul-09	1	6	6.00	3,023	14	4,459	2	0	2	0	0	0	0	0	0
<b>August</b>															
01-Aug-09	1	6	6.00	2,664	36	5,226	8	0	8	0	1	1	0	1	0
02-Aug-09	1	5	5.00	667	21	2,518	5	0	5	0	1	1	0	2	0
03-Aug-09	1	5	5.00	848	5	1,757	22	2	22	2	4	4	0	7	1
04-Aug-09	1	6	6.00	810	16	2,716	3	0	3	0	4	4	0	10	0
05-Aug-09	1	6	6.00	802	19	2,657	6	0	6	0	0	0	0	1	0
06-Aug-09	1	6	6.00	1,546	24	3,853	5	0	5	0	3	3	0	11	0
07-Aug-09	1	6	6.00	378	5	955	11	0	11	0	2	2	0	3	0
08-Aug-09	1	4	4.00	78	1	125	4	0	4	0	0	0	0	2	0
09-Aug-09	1	6	6.00	85	2	157	3	0	3	0	0	0	0	0	0
10-Aug-09	1	3	3.00	6	0	99	0	0	0	0	0	0	0	0	0
11-Aug-09	1	6	6.00	717	20	2,540	4	0	4	0	1	1	0	2	0
12-Aug-09	1	6	6.00	761	32	1,710	5	0	5	0	0	0	0	11	0
13-Aug-09	1	6	6.00	640	47	2,239	4	0	4	0	7	7	0	7	0
14-Aug-09	1	6	6.00	760	30	2,762	14	0	14	0	1	1	0	3	0
15-Aug-09	1	6	6.00	880	11	2,391	11	0	11	0	16	15	0	8	0
16-Aug-09	1	6	6.00	2,465	46	15,800	6	0	6	0	9	9	0	10	0
17-Aug-09	1	4	4.00	601	21	9,223	8	0	8	0	4	4	0	9	0
18-Aug-09	1	4	4.00	534	17	6,689	11	1	11	1	6	6	0	11	0
19-Aug-09	1	6	6.00	257	8	4,665	2	0	2	0	2	2	0	5	0
20-Aug-09	1	6	6.00	171	10	1,131	2	1	2	1	5	5	0	8	0
21-Aug-09	1	6	6.00	29	0	308	2	0	2	0	1	1	0	1	0
22-Aug-09	1	6	6.00	306	17	4,104	0	0	0	0	26	25	0	16	0
23-Aug-09	1	6	6.00	138	13	3,346	10	0	10	0	3	3	0	7	0
24-Aug-09	1	6	6.00	144	16	4,291	8	0	8	0	12	12	0	11	0
25-Aug-09	1	6	6.00	38	1	1,019	1	0	1	0	0	0	0	2	0
26-Aug-09	1	5	5.00	142	10	3,514	5	0	5	0	16	16	0	6	0
27-Aug-09	1	6	6.00	133	14	2,980	3	0	3	0	19	19	0	15	0
28-Aug-09	1	6	6.00	189	8	14,388	6	0	6	0	41	41	0	23	0
29-Aug-09	1	5	5.00	202	22	14,170	13	0	13	0	25	25	0	21	0
30-Aug-09	1	6	6.00	29	4	1,597	11	0	11	0	10	10	0	6	0
31-Aug-09	1	6	6.00	101	3	9,949	2	1	2	1	56	56	0	14	0
<b>September</b>															
01-Sep-09	1	6	6.00	122	7	11,298	3	1	3	1	145	145	0	42	0
02-Sep-09	1	6	6.00	18	3	2,383	5	0	5	0	27	27	0	9	0

**Area 13 - Area 13 Sockeye Seine**

(Note: "Rel." = Released)

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
03-Sep-09	1	6	6.00	23	2	1,382	0	0	0	0	10	10	0	5	0
04-Sep-09	0	0	0.00												0
05-Sep-09	0	0	0.00												0
06-Sep-09	0	0	0.00												0
07-Sep-09	0	0	0.00												0
08-Sep-09	0	0	0.00												0
09-Sep-09	0	0	0.00												0
10-Sep-09	0	0	0.00												0
11-Sep-09	0	0	0.00												0
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	40	227	227.00	20,998	509	149,904	214	7	214	7	463	461	0	290	4

**Area 20 - San Juan Sockeye Seine**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
22-Jul-09	1	5	5.00	16	1	7	5	18	5	18	70	70	0	0	374
23-Jul-09	1	6	6.00	143	3	85	3	29	3	29	94	94	0	0	1,086
24-Jul-09	1	6	6.00	285	6	125	10	17	10	17	121	121	0	2	581
25-Jul-09	1	6	6.00	164	1	144	3	9	3	9	106	106	0	0	858
26-Jul-09	1	6	6.00	105	2	217	9	15	9	15	84	84	0	0	5,130
27-Jul-09	1	6	6.00	198	4	660	3	59	3	59	302	302	0	1	330
28-Jul-09	1	6	6.00	257	2	1,880	9	69	9	69	164	164	0	1	115
29-Jul-09	1	6	6.00	240	4	934	12	11	12	11	92	92	1	2	835
30-Jul-09	1	5	5.00	293	2	707	9	32	9	32	79	79	0	0	4,250
31-Jul-09	1	6	6.00	355	9	2,710	19	40	19	40	142	142	0	4	1,360
<b>August</b>															
01-Aug-09	1	6	6.00	364	12	1,912	19	35	19	35	142	142	1	0	1,310
02-Aug-09	1	6	6.00	548	11	526	19	83	19	83	108	108	0	0	450
03-Aug-09	1	6	6.00	458	13	524	20	61	20	61	126	126	0	1	1
04-Aug-09	1	6	6.00	231	7	851	9	63	9	63	108	108	0	0	0
05-Aug-09	1	6	6.00	76	2	314	8	80	8	80	86	86	0	0	165
06-Aug-09	1	6	6.00	208	6	456	13	96	13	96	85	85	0	1	0
07-Aug-09	1	6	6.00	232	9	549	9	65	9	65	136	136	0	0	5
08-Aug-09	1	6	6.00	362	11	1,013	15	15	15	15	115	115	0	1	1
09-Aug-09	1	6	6.00	152	14	320	3	9	3	9	102	102	0	1	0
10-Aug-09	1	6	6.00	210	15	338	6	7	6	7	123	123	0	2	0
11-Aug-09	1	6	6.00	160	0	107	1	0	1	0	34	34	0	0	0
12-Aug-09	1	6	6.00	341	0	137	15	0	15	0	38	38	0	3	0
13-Aug-09	1	6	6.00	451	11	2,011	0	0	0	0	115	115	0	0	22
14-Aug-09	1	6	6.00	400	10	642	4	0	4	0	73	73	0	3	700
15-Aug-09	1	6	6.00	165	7	2,640	17	10	17	10	121	121	0	0	1,450
16-Aug-09	1	6	6.00	303	0	2,390	16	0	16	0	84	84	0	3	150
17-Aug-09	1	6	6.00	453	7	1,369	22	0	22	0	80	80	4	6	1
18-Aug-09	1	6	6.00	206	3	2,256	29	0	29	0	84	84	0	3	0
19-Aug-09	1	6	6.00	246	11	3,115	25	4	25	4	108	108	1	2	0
20-Aug-09	1	6	6.00	103	15	1,161	17	0	17	0	74	74	0	10	0
21-Aug-09	1	3	3.00	100	2	2,962	7	0	7	0	49	49	0	5	0
22-Aug-09	1	6	6.00	72	0	6,697	12	0	12	0	136	136	2	0	20
23-Aug-09	1	5	5.00	26	0	990	3	0	3	0	49	49	1	0	0
24-Aug-09	1	6	6.00	4	0	1,501	0	24	0	24	112	112	0	0	0
25-Aug-09	1	6	6.00	33	0	1,124	10	29	10	29	134	134	0	6	0
26-Aug-09	1	6	6.00	68	4	2,261	14	17	14	17	202	202	0	0	0
27-Aug-09	1	6	6.00	67	0	9,829	3	27	3	27	206	206	0	2	0
28-Aug-09	1	6	6.00	56	1	7,180	19	14	19	14	373	373	0	1	0
29-Aug-09	1	6	6.00	15	1	4,406	10	0	10	0	329	329	1	11	0
30-Aug-09	1	6	6.00	12	0	5,645	5	0	5	0	267	267	1	1	0

**Area 20 - San Juan Sockeye Seine**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
31-Aug-09	1	6	6.00	53	3	9,639	1	0	1	0	254	254	0	8	32
<b>September</b>															
01-Sep-09	1	6	6.00	26	2	3,856	4	0	4	0	114	114	0	2	0
02-Sep-09	1	6	6.00	29	1	4,860	10	0	10	0	120	120	1	2	20
03-Sep-09	1	6	6.00	6	2	3,751	13	0	13	0	110	110	1	5	0
04-Sep-09	1	4	4.00	5	0	2,751	2	0	2	0	43	43	0	0	35
05-Sep-09	1	6	6.00	4	0	9,830	1	0	1	0	282	282	0	2	170
06-Sep-09	1	4	4.00	2	0	1,960	2	0	2	0	219	219	0	1	31
07-Sep-09	1	6	6.00	6	0	3,278	3	0	3	0	149	149	0	5	49
08-Sep-09	1	6	6.00	3	0	743	2	0	2	0	110	110	0	0	200
09-Sep-09	1	6	6.00	0	0	490	1	0	1	0	79	79	0	0	155
10-Sep-09	1	6	6.00	0	0	413	1	3	1	3	72	72	0	4	23
11-Sep-09	1	6	6.00	0	0	184	4	0	4	0	35	35	0	4	1,260
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	<b>52</b>	<b>302</b>	<b>302.00</b>	<b>8,312</b>	<b>214</b>	<b>114,450</b>	<b>476</b>	<b>941</b>	<b>476</b>	<b>941</b>	<b>6,640</b>	<b>6,640</b>	<b>14</b>	<b>105</b>	<b>1,169</b>



**Area 20 - San Juan Sockeye Gillnet**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>June</b>															
22-Jun-09	1	2	162.15	69	0	0	1	8	0	8	17	17	0	0	205
23-Jun-09	1	2	165.60	16	0	0	2	4	0	4	9	9	0	0	138
24-Jun-09	1	2	167.55	9	0	0	1	6	0	6	3	3	1	1	196
25-Jun-09	1	2	146.55	14	0	0	0	3	0	3	8	8	0	0	291
26-Jun-09	1	2	148.95	31	0	0	0	4	0	4	5	5	2	0	99
27-Jun-09	1	2	154.80	25	0	0	1	3	0	3	4	4	0	1	148
28-Jun-09	2	4	315.45	159	0	0	5	3	0	3	23	23	0	1	96
29-Jun-09	2	4	293.25	287	0	2	3	13	0	13	50	50	1	1	603
30-Jun-09	2	4	314.10	219	0	2	0	6	0	6	45	45	2	4	386
<b>July</b>															
01-Jul-09	2	4	312.60	191	0	0	1	3	0	3	35	35	1	2	203
02-Jul-09	2	4	300.45	111	0	0	3	6	0	6	68	68	4	1	544
03-Jul-09	2	4	274.65	236	0	1	4	17	1	17	40	40	2	2	1,283
04-Jul-09	2	4	305.85	267	0	2	0	17	0	16	68	68	1	4	187
05-Jul-09	2	4	298.05	224	0	7	5	12	3	10	114	114	1	2	592
06-Jul-09	2	4	307.05	204	0	14	0	15	0	11	93	93	2	0	354
07-Jul-09	2	4	304.50	70	0	2	0	10	0	10	44	44	1	1	1,007
08-Jul-09	2	4	312.15	26	0	6	1	2	0	2	27	27	3	0	535
09-Jul-09	2	4	302.55	61	0	32	0	6	0	6	44	44	1	0	624
10-Jul-09	2	4	307.05	73	0	7	0	7	0	6	19	19	1	0	121
11-Jul-09	2	4	322.50	131	0	12	4	5	0	5	24	24	1	1	117
12-Jul-09	2	4	309.60	46	0	4	1	1	0	0	9	9	5	0	257
13-Jul-09	2	4	310.80	68	0	33	5	9	0	4	24	24	1	2	458
14-Jul-09	2	4	279.00	117	0	16	2	5	0	1	11	11	3	0	919
15-Jul-09	2	2	225.45	49	0	5	2	6	0	0	10	10	2	0	3,029
16-Jul-09	2	2	301.80	56	0	7	1	1	0	0	0	0	0	0	6,384
17-Jul-09	2	4	130.35	78	0	11	1	3	0	3	24	24	0	0	89
18-Jul-09	2	4	253.50	271	0	9	6	20	0	20	31	31	1	0	943
19-Jul-09	2	4	233.70	198	0	23	2	17	1	11	76	76	0	1	949
20-Jul-09	2	4	247.20	252	0	19	5	25	1	24	39	39	1	0	1,277
21-Jul-09	2	4	244.35	141	0	3	1	18	0	17	58	58	1	0	779
22-Jul-09	2	4	225.30	66	0	8	2	15	0	14	116	116	2	1	881
23-Jul-09	2	4	272.70	282	0	21	0	1	0	0	204	204	3	0	768
24-Jul-09	2	4	298.05	361	0	39	9	4	2	3	176	176	0	0	628
25-Jul-09	2	4	285.00	139	0	40	0	2	0	0	66	66	0	1	740
26-Jul-09	2	4	188.55	198	0	56	1	3	0	3	49	49	2	0	923
27-Jul-09	2	4	241.65	208	0	73	0	4	0	2	65	65	1	0	955
28-Jul-09	2	4	285.75	254	0	85	2	2	1	0	62	62	0	2	1,157
29-Jul-09	2	4	285.30	414	0	47	8	7	1	6	44	44	1	1	587
30-Jul-09	2	4	246.00	190	0	42	6	6	0	4	36	36	0	3	2,730
31-Jul-09	2	4	264.75	264	0	42	12	17	3	8	58	58	1	0	583

**Area 20 - San Juan Sockeye Gillnet**

(Note: "Rel." = Released)

Assessment				Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
Date	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>August</b>															
01-Aug-09	2	4	240.15	225	0	15	2	13	0	10	46	46	0	1	709
02-Aug-09	2	4	319.05	372	0	13	4	9	0	7	36	36	0	0	37
03-Aug-09	2	4	331.05	138	0	8	1	8	0	8	30	30	0	0	225
04-Aug-09	2	4	222.75	25	0	4	2	0	1	0	14	14	0	0	2,891
05-Aug-09	2	4	246.60	111	0	15	0	2	0	0	31	31	0	0	1,085
06-Aug-09	2	4	251.70	144	0	19	6	11	1	7	57	57	6	1	1,758
07-Aug-09	2	4	219.15	132	0	9	1	2	1	0	37	37	0	0	1,858
08-Aug-09	2	4	219.75	8	0	1	2	0	2	0	10	10	0	0	569
09-Aug-09	2	4	287.85	10	0	4	0	0	0	0	2	2	0	0	22
10-Aug-09	2	4	282.75	21	0	9	0	2	0	2	7	7	1	0	0
11-Aug-09	2	4	325.80	88	0	13	0	0	0	0	2	2	0	3	1
12-Aug-09	2	4	306.30	329	0	32	0	1	0	0	11	11	0	1	20
13-Aug-09	2	4	286.05	96	0	75	0	0	0	0	13	13	0	0	78
14-Aug-09	0	0	0.00												0
15-Aug-09	0	0	0.00												0
16-Aug-09	0	0	0.00												0
17-Aug-09	0	0	0.00												0
18-Aug-09	0	0	0.00												0
19-Aug-09	0	0	0.00												0
20-Aug-09	0	0	0.00												0
21-Aug-09	0	0	0.00												0
22-Aug-09	0	0	0.00												0
23-Aug-09	0	0	0.00												0
24-Aug-09	0	0	0.00												0
25-Aug-09	0	0	0.00												0
26-Aug-09	0	0	0.00												0
27-Aug-09	0	0	0.00												0
28-Aug-09	0	0	0.00												0
29-Aug-09	0	0	0.00												0
30-Aug-09	0	0	0.00												0
31-Aug-09	0	0	0.00												0
<b>September</b>															
01-Sep-09	0	0	0.00												0
02-Sep-09	0	0	0.00												0
03-Sep-09	0	0	0.00												0
04-Sep-09	0	0	0.00												0
05-Sep-09	0	0	0.00												0
06-Sep-09	0	0	0.00												0
07-Sep-09	0	0	0.00												0
08-Sep-09	0	0	0.00												0
09-Sep-09	0	0	0.00												0

**Area 20 - San Juan Sockeye Gillnet**

(Note: "Rel." = Released)

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
10-Sep-09	0	0	0.00												0
11-Sep-09	0	0	0.00												0
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	100	196	13,883.55	7,774	0	887	115	364	18	296	2,194	2,194	55	38	2,018

**Area 29 - Cottonwood Sockeye Gillnet**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>July</b>															
06-Jul-09	1	2	7.14	1	0	0	0	0	0	0	0	0	0	0	0
07-Jul-09	1	2	5.94	5	0	0	0	0	0	0	0	0	0	0	0
08-Jul-09	1	2	6.96	2	0	0	1	0	1	0	0	0	0	0	0
09-Jul-09	1	2	6.48	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul-09	1	2	7.14	12	0	0	2	0	0	0	0	0	0	0	1
11-Jul-09	1	2	7.08	8	0	0	1	0	0	0	0	0	0	0	0
12-Jul-09	1	2	7.26	5	0	0	2	0	0	0	0	0	0	0	0
13-Jul-09	1	2	7.20	2	0	0	0	0	0	0	0	0	0	0	1
14-Jul-09	1	2	6.60	0	0	0	1	0	0	0	0	0	0	0	0
15-Jul-09	1	2	6.72	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul-09	1	2	6.78	3	0	0	0	0	0	0	0	0	0	0	0
17-Jul-09	1	2	6.84	2	0	0	1	0	0	0	0	0	0	0	0
18-Jul-09	1	2	7.02	7	0	0	0	0	0	0	0	0	0	0	0
19-Jul-09	1	2	6.96	1	0	0	2	0	0	0	0	0	0	0	0
20-Jul-09	1	2	7.08	9	0	0	1	1	0	1	0	0	0	0	0
21-Jul-09	1	2	6.96	9	0	0	0	0	0	0	0	0	0	0	0
22-Jul-09	1	2	6.78	3	0	0	1	0	0	0	0	0	0	0	0
23-Jul-09	1	2	6.84	6	0	0	0	0	0	0	0	0	0	0	0
24-Jul-09	1	2	6.72	9	0	0	1	0	0	0	0	0	0	0	0
25-Jul-09	1	2	6.84	6	0	0	0	0	0	0	0	0	0	0	0
26-Jul-09	1	2	6.78	8	0	0	0	0	0	0	0	0	0	0	0
27-Jul-09	1	2	6.90	13	0	0	1	0	0	0	0	0	0	0	0
28-Jul-09	1	2	7.08	27	0	0	3	0	0	0	0	0	0	0	0
29-Jul-09	1	2	6.72	6	0	0	1	0	0	0	0	0	0	0	0
30-Jul-09	1	2	6.90	12	0	0	4	0	0	0	0	0	0	0	0
31-Jul-09	1	2	6.78	7	0	0	1	0	0	0	0	0	0	0	0
<b>August</b>															
01-Aug-09	1	2	7.08	28	0	0	1	0	0	0	0	0	0	0	0
02-Aug-09	1	2	7.14	20	0	0	1	0	0	0	0	0	0	0	0
03-Aug-09	1	2	7.02	22	0	0	1	0	0	0	0	0	0	0	0
04-Aug-09	1	2	6.96	14	0	0	1	0	0	0	0	0	0	0	0
05-Aug-09	1	2	7.80	72	0	0	4	0	0	0	0	0	0	0	0
06-Aug-09	1	2	7.26	25	0	0	2	0	0	0	0	0	0	0	0
07-Aug-09	1	2	7.44	38	1	1	2	0	0	0	0	0	0	0	0
08-Aug-09	1	2	7.56	37	0	0	3	0	0	0	0	0	0	1	0
09-Aug-09	1	2	7.92	67	0	1	6	0	0	0	0	0	0	0	0
10-Aug-09	1	2	6.12	21	0	1	2	0	0	0	0	0	0	0	1
11-Aug-09	1	2	7.20	25	0	1	2	0	0	0	0	0	0	0	0
12-Aug-09	1	2	7.44	24	2	5	1	0	0	0	0	0	0	0	0
13-Aug-09	1	2	7.26	4	1	2	2	0	0	0	0	0	0	0	2
14-Aug-09	1	2	7.44	28	0	6	2	0	0	0	0	0	0	0	0
15-Aug-09	1	2	9.00	104	0	8	4	0	0	0	0	0	0	0	0

**Area 29 - Cottonwood Sockeye Gillnet**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
16-Aug-09	1	2	8.10	56	0	6	6	0	1	0	0	0	0	0	0
17-Aug-09	1	2	6.72	29	0	8	4	2	0	0	0	0	0	0	0
18-Aug-09	1	2	7.74	48	0	5	1	0	0	0	0	0	0	0	0
19-Aug-09	1	2	7.68	21	0	3	4	0	0	0	0	0	0	0	0
20-Aug-09	1	2	8.10	65	0	3	4	0	0	0	0	0	0	0	0
21-Aug-09	1	2	7.62	50	0	3	7	0	0	0	0	0	0	0	0
22-Aug-09	1	2	7.26	16	0	2	1	0	0	0	0	0	0	0	0
23-Aug-09	1	2	7.62	27	0	6	2	0	0	0	0	0	0	0	0
24-Aug-09	1	2	7.68	18	0	9	2	0	0	0	1	1	0	0	0
25-Aug-09	1	2	7.44	14	0	13	2	1	0	1	1	1	0	0	0
26-Aug-09	1	2	7.02	9	0	8	0	0	0	0	0	0	0	0	0
27-Aug-09	1	2	7.32	12	0	3	3	0	0	0	0	0	0	0	0
28-Aug-09	1	2	6.78	2	0	3	0	1	0	1	0	0	0	0	0
29-Aug-09	1	2	6.78	12	0	10	5	1	2	1	0	0	0	0	0
30-Aug-09	1	2	7.38	11	0	27	2	2	0	2	1	1	0	0	1
31-Aug-09	1	2	7.98	14	0	33	3	1	0	1	2	2	0	0	1
<b>September</b>															
01-Sep-09	1	2	7.44	13	0	53	2	2	0	2	3	3	1	0	0
02-Sep-09	1	2	7.56	7	1	37	2	2	0	2	2	2	0	0	0
03-Sep-09	1	2	7.80	8	0	62	4	2	0	2	4	4	1	0	0
04-Sep-09	1	2	7.74	23	0	30	3	4	0	4	2	2	0	0	0
05-Sep-09	1	2	7.80	15	0	54	1	1	0	1	2	2	0	0	0
06-Sep-09	1	2	8.70	41	2	90	3	6	0	5	4	4	0	0	0
07-Sep-09	1	2	8.34	23	0	81	0	1	0	1	0	0	0	0	0
08-Sep-09	1	2	8.22	25	2	81	3	2	0	2	4	4	0	0	1
09-Sep-09	1	2	7.68	8	0	67	2	0	0	0	5	5	0	0	0
10-Sep-09	1	2	8.04	2	0	84	0	0	0	0	2	2	0	0	0
11-Sep-09	1	2	7.68	4	0	51	3	3	0	2	4	4	0	1	1
12-Sep-09	1	2	7.80	0	0	69	0	5	0	5	4	4	0	0	0
13-Sep-09	1	2	7.74	3	0	24	5	4	0	4	15	15	0	0	0
14-Sep-09	1	2	8.16	3	0	47	6	6	1	6	17	17	0	0	0
15-Sep-09	1	2	7.62	0	0	69	6	8	0	8	12	12	0	0	1
16-Sep-09	1	2	8.46	2	1	136	4	14	0	14	15	15	0	1	0
17-Sep-09	1	2	9.54	3	0	166	6	12	0	12	29	29	0	3	0
18-Sep-09	1	2	7.98	0	0	81	2	0	0	0	17	17	0	2	0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0

**Area 29 - Cottonwood Sockeye Gillnet***(Note: "Rel." = Released)*

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
<b>Total</b>	75	150	552.66	1,276	10	1,449	155	81	5	77	146	146	2	8	10

**Area 29 - Whonnock Sockeye Gillnet**

(Note: "Rel." = Released)

Date	Assessment			Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>June</b>															
22-Jun-09	1	2	8.48	0	0	0	7	0	0	0	0	0	0	0	4
23-Jun-09	1	2	9.15	4	0	0	12	0	0	0	0	0	0	0	7
24-Jun-09	1	2	10.59	0	0	0	12	0	1	0	0	0	0	0	1
25-Jun-09	1	2	11.11	4	0	0	15	0	0	0	0	0	0	0	0
26-Jun-09	1	2	10.59	2	0	0	8	0	0	0	0	0	0	0	0
27-Jun-09	1	2	10.33	1	0	0	3	0	0	0	0	0	0	0	2
28-Jun-09	1	2	10.59	1	0	0	2	0	0	0	0	0	0	0	2
29-Jun-09	1	2	10.59	6	0	0	10	0	0	0	0	0	0	0	0
30-Jun-09	1	2	11.55	13	0	0	13	0	0	0	0	0	0	0	3
<b>July</b>															
01-Jul-09	1	2	10.33	1	0	0	3	0	0	0	0	0	0	0	1
02-Jul-09	1	2	9.98	3	0	0	1	0	0	0	0	0	0	0	0
03-Jul-09	1	2	9.89	0	0	0	2	0	0	0	0	0	0	0	0
04-Jul-09	1	2	11.46	43	0	0	10	0	0	0	0	0	0	0	0
05-Jul-09	1	2	11.11	29	0	0	5	0	1	0	0	0	0	0	0
06-Jul-09	1	2	10.94	11	0	0	9	0	0	0	0	0	0	0	0
07-Jul-09	1	2	10.15	1	0	0	2	0	0	0	0	0	0	0	0
08-Jul-09	1	2	9.98	6	0	0	1	0	0	0	0	0	0	0	0
09-Jul-09	1	4	20.04	1	0	0	3	0	0	0	0	0	0	0	0
10-Jul-09	1	2	9.80	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul-09	1	2	9.89	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul-09	1	2	9.98	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul-09	1	2	9.98	0	0	0	1	0	0	0	0	0	0	0	0
14-Jul-09	1	2	9.89	0	0	0	1	0	0	0	0	0	0	0	0
15-Jul-09	1	2	10.06	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul-09	1	2	10.06	0	0	0	2	0	0	0	0	0	0	0	0
17-Jul-09	1	2	10.24	1	0	0	0	0	0	0	0	0	0	0	0
18-Jul-09	1	2	10.59	3	0	0	1	0	0	0	0	0	0	0	0
19-Jul-09	1	2	10.94	2	0	0	8	0	0	0	0	0	0	0	0
20-Jul-09	1	2	0.00	6	0	0	9	0	1	0	0	0	0	0	0
21-Jul-09	1	2	11.46	16	0	0	12	1	0	0	0	0	0	0	0
22-Jul-09	1	2	11.38	15	0	0	9	0	1	0	0	0	0	0	0
23-Jul-09	1	2	11.11	20	0	0	12	0	0	0	0	0	0	0	0
24-Jul-09	1	2	10.59	6	0	0	3	0	0	0	0	0	0	0	1
25-Jul-09	1	2	10.50	4	0	0	0	0	0	0	0	0	0	0	0
26-Jul-09	1	2	10.85	9	0	0	8	1	1	0	0	0	0	0	0
27-Jul-09	1	2	10.06	1	0	0	0	0	0	0	0	0	0	0	0
28-Jul-09	1	2	9.98	3	0	0	0	0	0	0	0	0	0	0	0
29-Jul-09	1	2	10.85	18	0	0	1	0	0	0	0	0	0	0	0
30-Jul-09	1	2	10.41	14	0	0	1	0	0	0	0	0	0	0	0
31-Jul-09	1	2	11.55	34	0	0	4	0	0	0	0	0	0	0	0

**Area 29 - Whonnock Sockeye Gillnet**

(Note: "Rel." = Released)

Assessment				Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
Date	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>August</b>															
01-Aug-09	1	2	11.11	21	0	0	2	0	0	0	0	0	0	0	0
02-Aug-09	1	2	11.46	32	0	0	5	1	0	0	0	0	0	0	0
03-Aug-09	1	2	11.81	34	0	0	9	0	0	0	0	0	0	0	0
04-Aug-09	1	2	11.81	50	0	0	15	0	1	0	0	0	0	0	0
05-Aug-09	1	2	12.95	58	0	0	21	1	0	0	0	0	0	0	1
06-Aug-09	1	2	13.65	118	0	0	21	1	2	0	0	0	0	0	0
07-Aug-09	1	2	12.69	69	0	0	13	2	1	0	0	0	0	0	0
08-Aug-09	1	2	11.73	28	0	0	4	0	0	0	0	0	0	0	0
09-Aug-09	1	2	11.03	23	0	0	5	0	1	0	0	0	0	0	0
10-Aug-09	1	2	11.03	32	0	1	7	0	0	0	0	0	0	0	0
11-Aug-09	1	2	11.81	41	0	0	7	0	1	0	0	0	0	0	0
12-Aug-09	1	2	12.34	30	0	0	11	1	0	0	0	0	0	0	0
13-Aug-09	1	2	10.76	15	0	0	7	0	0	0	0	0	0	0	0
14-Aug-09	1	2	12.60	38	0	7	17	0	0	0	0	0	0	0	0
15-Aug-09	1	2	11.46	26	0	5	2	0	0	0	0	0	0	0	0
16-Aug-09	1	2	12.95	57	0	3	8	0	0	0	0	0	0	0	0
17-Aug-09	1	2	14.96	113	0	4	23	0	0	0	0	0	0	0	1
18-Aug-09	1	2	15.23	102	0	7	23	0	1	0	0	0	0	0	0
19-Aug-09	1	2	14.26	77	0	4	27	0	1	0	0	0	0	0	0
20-Aug-09	1	2	14.70	98	0	8	33	0	0	0	0	0	0	0	0
21-Aug-09	1	2	14.00	77	0	7	23	0	0	0	0	0	0	0	0
22-Aug-09	1	2	13.04	60	0	5	17	0	1	0	0	0	1	0	0
23-Aug-09	1	2	11.46	15	0	4	9	2	1	0	0	0	0	0	0
24-Aug-09	1	2	11.90	28	0	7	16	1	1	0	1	1	0	0	0
25-Aug-09	1	2	12.34	28	0	9	12	1	0	0	0	0	0	1	1
26-Aug-09	1	2	11.55	14	0	2	20	0	0	0	0	0	0	0	0
27-Aug-09	1	2	11.64	20	0	11	13	0	0	0	0	0	0	0	0
28-Aug-09	1	2	12.34	18	0	9	19	2	0	0	4	4	0	0	0
29-Aug-09	1	2	12.78	32	0	20	10	1	0	0	1	1	0	0	0
30-Aug-09	1	2	12.43	27	0	22	9	2	0	0	1	1	0	0	0
31-Aug-09	1	2	12.78	21	0	26	16	0	0	0	2	2	0	0	0
<b>September</b>															
01-Sep-09	1	2	12.60	28	0	33	14	1	0	0	2	2	0	1	0
02-Sep-09	1	2	12.60	10	0	71	9	1	0	0	1	1	0	0	0
03-Sep-09	1	2	13.48	16	0	195	5	2	0	0	3	3	0	2	0
04-Sep-09	1	2	14.09	3	0	251	5	0	0	0	1	1	0	0	0
05-Sep-09	1	2	17.24	20	0	460	1	3	0	0	0	0	0	0	0
06-Sep-09	1	2	14.35	20	0	206	3	2	0	0	0	0	0	0	0
07-Sep-09	1	2	13.39	26	0	138	10	2	0	0	1	1	0	0	0
08-Sep-09	1	2	16.71	61	0	258	11	0	0	0	1	1	0	1	0
09-Sep-09	1	2	15.49	95	0	92	15	2	0	0	3	3	0	1	0



**Area 29 - Whonnock Sockeye Gillnet**

(Note: "Rel." = Released)

<i>Date</i>	<i>Assessment</i>			<i>Sockeye</i>		<i>Pink</i>	<i>Chinook</i>		<i>Chinook (Rel.)</i>		<i>Coho</i>		<i>Sthd</i>	<i>Chum</i>	<i>Other</i>
	<i>Vessels</i>	<i>Sets</i>	<i>Effort</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Adult</i>	<i>Jack</i>	<i>Adult</i>	<i>Jack</i>	<i>All</i>	<i>Rel.</i>	<i>All</i>	<i>All</i>	<i>All</i>
10-Sep-09	1	2	12.08	14	0	39	10	1	0	0	1	1	0	2	0
11-Sep-09	1	2	11.29	4	0	21	7	0	0	0	3	3	0	0	0
12-Sep-09	1	2	12.08	4	0	35	12	3	0	0	0	0	0	1	0
13-Sep-09	1	2	13.48	1	0	115	10	3	0	0	8	8	0	1	1
14-Sep-09	1	2	13.91	5	0	148	16	1	0	0	14	14	0	5	0
15-Sep-09	1	2	12.78	5	0	75	12	2	0	0	18	18	0	2	0
16-Sep-09	1	2	13.74	3	1	133	7	3	0	0	7	7	0	5	0
17-Sep-09	1	2	15.40	0	0	246	9	2	0	0	7	7	0	5	0
18-Sep-09	1	2	14.09	1	0	140	5	2	0	0	6	6	0	5	0
19-Sep-09	1	2	13.91	2	0	178	1	2	0	0	5	5	0	7	0
20-Sep-09	1	2	14.18	2	0	135	11	7	0	0	6	6	0	10	0
21-Sep-09	1	2	14.18	0	0	118	5	3	0	0	4	4	0	13	0
22-Sep-09	1	2	13.13	0	0	72	5	2	0	0	4	4	0	13	0
23-Sep-09	1	2	11.64	1	0	20	4	2	0	0	5	5	0	7	0
24-Sep-09	1	2	11.90	0	0	13	4	2	0	0	6	6	0	8	0
25-Sep-09	1	2	11.64	0	0	19	2	1	0	0	2	2	0	13	0
<b>Total</b>	96	194	1,142.88	2,001	1	3,372	807	66	16	0	117	117	1	103	25

**Area 29 - Gulf Sockeye Troll**

(Note: "Rel." = Released)

Assessment				Sockeye		Pink	Chinook		Chinook (Rel.)		Coho		Sthd	Chum	Other
Date	Vessels	Sets	Effort	Adult	Jack	All	Adult	Jack	Adult	Jack	All	Rel.	All	All	All
<b>August</b>															
22-Aug-09	1	2	382.00	30	1	57	0	1	0	1	0	0	0	0	0
23-Aug-09	1	1	450.00	7	0	55	0	0	0	0	0	0	0	0	0
24-Aug-09	0	0	0.00												0
25-Aug-09	1	2	431.00	8	0	140	0	1	0	1	1	1	0	0	3
26-Aug-09	0	0	0.00												0
27-Aug-09	0	0	0.00												0
28-Aug-09	0	0	0.00												0
29-Aug-09	0	0	0.00												0
30-Aug-09	0	0	0.00												0
31-Aug-09	1	4	206.00	35	0	151	0	0	0	0	3	3	0	0	0
<b>September</b>															
01-Sep-09	1	3	486.00	10	0	191	1	2	1	2	0	0	0	0	0
02-Sep-09	1	3	358.00	43	0	123	1	0	0	0	0	0	0	0	0
03-Sep-09	0	0	0.00												0
04-Sep-09	0	0	0.00												0
05-Sep-09	0	0	0.00												0
06-Sep-09	0	0	0.00												0
07-Sep-09	1	1	409.00	0	0	5	0	0	0	0	0	0	0	0	0
08-Sep-09	1	1	419.00	0	0	15	0	0	0	0	0	0	0	0	0
09-Sep-09	1	3	436.00	0	0	15	3	3	3	3	0	0	0	0	0
10-Sep-09	0	0	0.00												0
11-Sep-09	0	0	0.00												0
12-Sep-09	0	0	0.00												0
13-Sep-09	0	0	0.00												0
14-Sep-09	0	0	0.00												0
15-Sep-09	0	0	0.00												0
16-Sep-09	0	0	0.00												0
17-Sep-09	0	0	0.00												0
18-Sep-09	0	0	0.00												0
19-Sep-09	0	0	0.00												0
20-Sep-09	0	0	0.00												0
21-Sep-09	0	0	0.00												0
22-Sep-09	0	0	0.00												0
23-Sep-09	0	0	0.00												0
24-Sep-09	0	0	0.00												0
25-Sep-09	0	0	0.00												0
<b>Total</b>	<b>9</b>	<b>20</b>	<b>3,577.00</b>	<b>133</b>	<b>1</b>	<b>752</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>

## 2009 Lower Fraser River Mainstem Recreational Fishery Assessment – Preliminary Results

Study Area: Mission Bridge (Mission)  
upstream to the mouth of the Coquihalla River (Hope).

<b>SURVEY EFFORT</b>	May 1 - Jun 15	Jun 16-30	Jul 1-31	Aug 1 - Sep 3	Sep 4-30	Oct 1-15	2009 TOTALS
Number of Interviews	19	266	1,964	1,880	2,705	224	7,058
Interview Hours	62	1,424	9,598	9,824	11,705	817	33,429
Number of Overflights	11	5	8	12	8	3	47

<b>ANGLER EFFORT</b>							
Average Overflight Count	5	100				162	
Estimated Effort (hours)	2,957	17,226	122,984	118,512	143,598	24,621	429,898

### ESTIMATED HARVEST (including AFC)

Chinook Adult	0	401	2,812	4,178	789	42	8,222
Chinook Jack	0	0	167	360	446	0	973
Coho Adult	0	0	0	0	73	117	190
Coho Jack	0	0	0	0	0	0	0
Sockeye	0	0	0	0	0	0	0
Pink	0	0	0	573	39,190	696	40,459
Chum	0	0	0	0	21	22	43

### ESTIMATED RELEASE

Chinook Adult	0	0	0	60	45	339	444
Chinook Jack	0	0	0	38	9	11	58
Coho Adult	0	0	0	28	457	288	773
Coho Jack	0	0	0	0	34	0	34
Sockeye	0	0	4,929	14,160	1,026	274	20,389
Pink	0	0	0	484	67,458	4,097	72,039
Chum	0	0	0	0	0	890	890

### ESTIMATED AFC HARVEST

Chinook Adult	0	15	45	0	25	0	85
Chinook Jack	0	0	0	0	0	0	0
Coho Adult	0	0	0	0	0	81	81
Coho Jack	0	0	0	0	0	0	0

**2009 SALMON SPORT FISHERY SUMMARY – BCI AREA**  
**(Adult Retention Opportunities)**  
**NEAR FINAL ESTIMATES**

**A. CHINOOK**

Annual limit of 10 adult Chinook (> 50 cm fork length) from all non-tidal waters.

All retained adult Chinook must be recorded immediately on the back of provincial non-tidal angling licence.

**BOWRON RIVER CHINOOK SPORT FISHERY - 2009**

**Time Period:** July 15 to August 15, 7 days/week.

**Open Area:** From the Forestry Road Bridge nearest the Fraser River to Bowron Forest Road Bridge crossing near Haggen Creek. (Region 7)

**Daily Limit:** **4 per day, only 2 over 50 cm.**  
 Possession limit is 2 times daily limit.

**Note:** A bait ban is in effect. Single barbless hook restriction.

**Comments:** No creel in 2002 - 2009 because effort and catch are presumed to be low.

	2001	2002	2003	2004	2005	2006	2007	*2008	**2009
Interviews	98	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	7	15
Hours fished	1 146	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	704	486
Harvest	9	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	40	51
Release	0	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	70	26
Total Catch	9	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	110	77
CPUE	0.008	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	0.156	0.158

\* Roving vehicle patrols (6) conducted in 2008 to assess effort and catch

\*\* Roving vehicle patrols (10) conducted in 2009 to assess effort and catch

**BRIDGE RIVER CHINOOK SPORT FISHERY – 2009**

**Time Period:** June 21 to July 16, Sunday, Monday, Tuesday, Wednesday, Thursday  
 (0600 to 2100 hrs only)

**Open Area:** Downstream from Road 40 bridge to the confluence of the Fraser River. (Region 3)

**Daily Limit:** **4 per day, only 1 over 50 cm.**  
 Possession limit is 2 times daily limit.

**Note:** Single barbless hook restriction

**Comments:** Census

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	523	291	740	729	905	220	103	332	759
Hours fished	1 789	1 011	2 046	2 156	3 165	675	264	858	2 222
Harvest	141	73	380	315	243	63	0	110	217
Release	2	N/A	2	8	3	0	0	270	1
Total Catch	143	73	382	323	246	63	0	380	218
CPUE	0.080	0.072	0.187	0.150	0.078	0.093	0.000	0.443	0.098

**CARIBOO RIVER CHINOOK SPORT FISHERY – 2009**

**Time Period:** July 27 to August 18, 7 days/week

**Open Area:** From confluence with Quesnel River to confluence with Seller Creek. (Region 5)

**Daily Limit:** **4 per day, only 2 over 50 cm.**  
Possession limit is 2 times daily limit.

**Note:** Single barbless hook restriction

**Comments:** No creel in 2002 - 2009 because effort and catch are presumed to be low.

	2008	2009
Patrols	2	No Creel
Interviews	3	No Creel
Effort (Anglers observed)	3	No Creel
Reported Harvest	0	No Creel
Reported Release	0	No Creel

\* Roving vehicle patrols conducted in 2008 to assess effort and catch.

**CHILKO RIVER CHINOOK SPORT FISHERY - 2009**

**Time Period:** July 25 to August 16, 7 days / week

**Open Area:** From Chilko Lake downstream to boundary signs 1.5 km upstream of Siwash bridge (12 km upstream from Chilcotin R. junction). (Region 5)

**Daily Limit:** **4 per day, only 2 over 50 cm. Monthly quota is 4 over 50 cm.**  
Possession limit is 2 times daily limit.

**Note:** Bait ban. Single barbless hook restriction.

**Comments:** No creel in 2002 - 2009 because effort and catch are presumed to be low.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	3	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel
Hours fished	15	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel
Harvest	4	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel
Release	0	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel
Total Catch	4	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel
CPUE	0.267	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel

**CLEARWATER/NORTH THOMPSON CHINOOK SPORT FISHERY - 2009**

**Time Period:** August 1 to August 31 - 7 days/week.

**Open Area:** North Thompson River open from the MOTH ferry at Little Fort upstream to the Station Road Bridge located approximately 1.5 km upstream of the confluence with the Clearwater River and Clearwater River open from the North Thompson River confluence to Clearwater Lake. Clearwater River closed from Murtle River downstream to 35 kilometre, from August 16-31 to protect Mahood River Chinook (Region 3)

**Daily Limit:** *4 per day, only 2 over 50 cm. Monthly quota is 4 over 50 cm.*  
Possession quota is 2 times daily limit.

**Note:** Clearwater River - bait ban in effect (i) from Falls Creek to Mahood River, all year (ii) from Mahood River to North Thompson River, September 1 – July 31. No angling from power boats below Falls Creek. A single barbless hook restriction is in effect all year.  
North Thompson River - a single barbless hook restriction is in effect all year.

**Comments:** No creel in 2002 - 2008 due to budget constraints.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	697	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	211
Hours fished	8 753	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	5 282
Harvest	258	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	209
Release	N/A	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	17
Total Catch	258	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	226
CPUE	0.033	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	0.043

**FRASER RIVER CHINOOK SPORT FISHERY (Prince George) - 2009**

**Time Period:** July 10 to July 25 - 7 days/week.

**Open Area:** From power lines crossing the Fraser near College Hts, upstream to the Northwoods Bridge. (Region 7)

**Daily Limit:** *4 per day, only 1 over 50 cm.*  
Possession limit is 2 times daily limit.

**Note:** Single barbless hook only

**Comments:** No creel in 2002 - 2009 because effort and catch are presumed to be low.

	2008	2009
Patrols	1	No Creel
Interviews	1	No Creel
Effort (Anglers observed)	3	No Creel
Reported Harvest	1	No Creel
Reported Release	0	No Creel

\* Roving vehicle patrols conducted in 2008 to assess effort and catch.

**FRASER RIVER CHINOOK SPORT FISHERY (Seton) - 2009**

- Time Period:** July 1 to September 7 - 7 days/week.
- Open Area:** Fraser River from confluence with Seton River downstream to fishing boundary signs located 4km downstream of the town of Lillooet. (Region 3)
- Daily Limit:** *4 per day, only 1 over 50 cm.*  
Possession limit is 2 times daily limit.
- Note:** Single barbless hook
- Comments:** No creel in 2002 - 2009 because effort and catch are presumed to be low.

**MABEL LAKE CHINOOK SPORT FISHERY – 2009**

- Time Period:** noon July 25 to noon September 12 - 7 days/week
- Open Area:** South of boundary signs located on opposite shores approximately 1 km from Wap Creek. (Region 8)
- Daily Limit:** *4 per day, only 2 over 50 cm. Monthly quota is 4 over 50 cm.*  
(Daily & monthly quota is an aggregate quota which includes all Shuswap River and Mabel Lake Chinook).  
Possession limit is 2 times daily limit.
- Note:** Single barbless hook restriction.
- Comments:** Expanded creel survey in 2007,2008 & 2009 to include the South end of Mabel Lake.

	2001	2002	2003	2004	2005	2006	* 2007	* 2008	* 2009
Interviews	516	749	479	492	492	322	315	405	471
Hours Fished	7 692	7 912	5 505	4 693	3 865	4 725	9 148	8 816	12 965
Harvest	143	306	137	131	109	301	272	173	345
Release	N/A	N/A	9	6	5	13	25	27	28
Total Catch	143	306	146	137	113	314	297	200	373
CPUE	0.019	0.039	0.026	0.029	0.029	0.067	0.032	0.023	0.029

**QUESNEL RIVER CHINOOK SPORT FISHERY – 2009**

**Time Period:** July 15 to September 1 - 7 days/week

**Open Area:** Downstream of Poquette Creek. (Region 5)

**Daily Limit:** **4 per day, only 2 over 50 cm.**  
Possession limit is 2 times daily limit.

**Note:** Single barbless hook restriction

**Comments:** No creel in 2002 - 2009 because effort and catch are low.

	2008	2009
Patrols	13	No Creel
Interviews	18	No Creel
Effort (Anglers observed)	12	No Creel
Reported Harvest	7	No Creel
Reported Release	0	No Creel

\* Roving vehicle patrols (13) conducted in 2008 to assess effort and catch.

**LOWER SHUSWAP RIVER CHINOOK SPORT FISHERY – 2009**

**Time Period:** noon July 25 to noon September 12 - 7 days/week (0500 – 2200 hrs only)

**Open Area:** From signs above Mara bridge upstream to Mabel Lake. (Region 8)

**Daily Limit:** **4 per day, only 2 over 50 cm. Monthly quota is 4 over 50 cm.**  
(Daily / monthly quota are aggregate quotas which include all of Shuswap River and Mabel Lake Chinook).  
Possession limit is 2 times daily limit.

**Note:** Single barbless hook restriction.

**Comments:** Hybrid Creel.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	1 511	2 144	1 310	1 339	1 235	1 580	1 179	1 368	1 036
Hours fished	39 436	38 060	22 830	16 221	14 564	14 689	14 215	15 180	14 773
Harvest	1 363	1 987	640	757	620	616	531	1 201	507
Release	N/A	N/A	20	10	15	21	57	53	77
Total Catch	1 363	1 987	660	767	635	637	588	1 254	584
CPUE	0.035	0.052	0.029	0.047	0.043	0.043	0.041	0.083	0.040

Note: corrections made to 2001-2004 data.

High Proportion of Jacks in 2008 (included above) - 496 Jacks Harvested (41%), 22 Jacks Released (42%)



**MIDDLE SHUSWAP RIVER CHINOOK SPORT FISHERY - 2009**

**Time Period:** noon July 25 to noon August 15 - 7 days/week.

**Open Area:** From Mabel Lake upstream to Shuswap Falls. (Region 8)

**Daily Limit:** *4 per day, only 2 over 50 cm. Monthly quota is 4 over 50 cm.*  
(Daily / monthly quotas are aggregate quotas which include all Shuswap River and Mabel Lake Chinook)

**Note:** Single barbless hook restriction.

**Comments:** No creel in 2002 – 2007 & 2009 due to budget constraints.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	412	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	291	No Creel
Hours fished	5 360	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	3 037	No Creel
Harvest	314	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	178	No Creel
Release	N/A	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	15	No Creel
Total Catch	314	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	193	No Creel
CPUE	0.059	No Creel	No Creel	No Creel	No Creel	No Creel	No Creel	0.064	No Creel

**SOUTH THOMPSON RIVER CHINOOK SPORT FISHERY - 2009**

**Time Period:** August 5 to September 22 - 7 days/week.

**Open Area:** From green buoy near outlet of Little River to 100m downstream of Campbell Creek (Region 3)

**Daily Limit:** *4 per day, only 2 over 50 cm. Monthly quota is 6 over 50 cm.*  
Possession limit is 2 times daily limit

**Note:** Single barbless hook only

**Comments:** No creel in 2004 – 2007 due to budget constraints.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	1 305	1 781	1 474	No Creel	No Creel	No Creel	No Creel	1 708	928
Hours fished	30 027	29 326	25 192	No Creel	No Creel	No Creel	No Creel	27 750	29 163
Harvest	2 058	1 426	1 233	No Creel	No Creel	No Creel	No Creel	2 255	1 617
Release	N/A	N/A	26	No Creel	No Creel	No Creel	No Creel	149	54
Total Catch	2 058	1 426	1 259	No Creel	No Creel	No Creel	No Creel	2 404	1 671
CPUE	0.066	0.050	0.049	No Creel	No Creel	No Creel	No Creel	0.087	0.057

*High Proportion of Jacks in 2008 (included above) - 403 Jacks Harvested (18%)*

**THOMPSON RIVER CHINOOK SPORT FISHERY (Bonaparte) - 2009****Time Period:** *Closed in 2009.***Open Area:** Waters of the Thompson River from the confluence of the Thompson/Bonaparte Rivers to a fishing boundary sign located approximately 1 km downstream – north side of Thompson River only. (Region 3)**Daily Limit:** *To be determined* (dependant on in-season run size to Bonaparte Fishway by July 25)**Note:** Bait ban. Single barbless hook only.**Comments:** No creel in 2002 - 2005 because effort and catch are presumed to be low.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	39	Closed
Hours fished	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	202	Closed
Harvest	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	8	Closed
Release	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	4	Closed
Total Catch	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	12	Closed
CPUE	N/A	No Creel	No Creel	No Creel	No Creel	Closed	Closed	0.059	Closed

**THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Martel) - 2009****Time Period:** Chinook : September 3 to September 20 - 7 days/week  
*Pink : September 5 to September 5 - 7 days/week***Open Area:** West side of river only from hwy 8 bridge at Spences Bridge upstream to boundary marker located approximately 1 km downstream of Martel. (Region 3)**Daily Limit:** Chinook : 4 per day, only 1 over 50 cm.  
*Pink : 2 per day, combined limit of 4 salmon per day.***Note:** Single barbless hook only. (No bait ban – ban begins above the boundary sign)**Comments:** No creel in 2003 - 2007 & 2009 because effort and catch are presumed to be low.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	N/A	33	No Creel	No Creel	No Creel	No Creel	No Creel	15	No Creel
Hours fished	N/A	168	No Creel	No Creel	No Creel	No Creel	No Creel	44	No Creel
Harvest	N/A	8	No Creel	No Creel	No Creel	No Creel	No Creel	0	No Creel
Release	N/A	N/A	No Creel	No Creel	No Creel	No Creel	No Creel	0	No Creel
Total Catch	N/A	8	No Creel	No Creel	No Creel	No Creel	No Creel	0	No Creel
CPUE	N/A	0.050	No Creel	No Creel	No Creel	No Creel	No Creel	0.000	No Creel

**THOMPSON RIVER CHINOOK SPORT FISHERY (Spences Bridge) – 2009**

**Time Period:** July 25 to *August 3rd*, 3 days/week (Saturday, Sunday, Monday), 0600 to 2100 hrs only

**Open Area:** Waters of the Thompson River (Region 3) between the upstream side of the confluence of the Thompson / Nicola Rivers, downstream to the powerline crossing between the Hwy #1 bridge at Spences Bridge and the Hwy #8 Bridge.  
*Closed on east side of river from confluence of Nicola/Thompson rivers to fishing boundary sign located approximately 1 km downstream where the CP rail tracks cross HWY #8.*

**Daily Limit:** *4 per day, only 1 over 50 cm.*  
 Possession limit is 2 times daily limit

**Note:** Single barbless hook only

**Comments:** Hybrid Creel Survey

	2001	* 2002	2003	2004	2005	2006	2007	2008	** 2009
Interviews	245	179	211	53	249	364	237	150	128
Hours fished	3 241	1 251	1 478	380	1 605	2 175	1 466	2 034	409
Harvest	228	57	209	14	373	329	170	205	39
Release	5	163	125	0	45	31	0	53	3
Total Catch	233	220	334	14	418	360	170	258	42
CPUE	0.072	0.176	0.226	0.037	0.260	0.166	0.116	0.127	0.082

Note: \* Mark only fishery in 2002. Contingency fishery in 2004, change in boundary. Change in open area for 2008.  
*(Openings vary annually in relationship with environmental conditions and abundance).*  
 \*\* Census survey in 2009 (some data excluded from CPUE due to sampling bias).

**B. NEWCHINOOK/PINK FISHERIES (Pink retention determined in-season if TAC is identified):****THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Savona) - 2009**

**Time Period:** Chinook : August 21 to September 20 – 7 days/week  
*Pink : September 5 to September 20 – 7 days/week*

**Open Area:** Open from the outlet of Kamloops Lake to 500m d/s of the Hwy 1 Bridge. (Region 3)

**Daily limit:** Chinook : 4 per day, only 1 over 50 cm.  
*Pink : 2 per day, combined limit of 4 salmon per day.*

**Note:** Single barbless hook only.

	2009	
	Chinook	Pink
Interviews	47	31
Hours fished	361	188
Harvest	17	0
Release	4	3
Total Catch	21	3
CPUE	0.060	0.018

**THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Walhachin) – 2009**

**Time Period:** Chinook : August 21 to September 20 – 7 days/week  
**Pink :** *September 5 to September 20 – 7 days/week*

**Open Area:** Open 1km upstream to train bridge and 1km downstream of road bridge at Walhachin.

**Daily limit:** Chinook : 4 per day, only 1 over 50 cm.  
**Pink :** *2 per day, combined limit of 4 salmon per day.*

**Note:** Single barbless hook only.

	2009	
	Chinook	Pink
Interviews	47	31
Hours fished	10	5
Harvest	1	0
Release	0	0
Total Catch	1	0
CPUE	0.060	0.018

**THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Juniper Beach) - 2009**

**Time Period:** Chinook : August 21 to September 20 – 7 days/week  
**Pink :** *September 5 to September 20 – 7 days/week*

**Open Area:** Open at Juniper beach recreation area, ~ 1.5 km beach access. (Region 3)

**Daily limit:** Chinook : 4 per day, only 1 over 50 cm.  
**Pink :** *2 per day, combined limit of 4 salmon per day.*

**Note:** Single barbless hook only

	2009	
	Chinook	Pink
Interviews	47	31
Hours fished	79	43
Harvest	4	0
Release	1	1
Total Catch	5	1
CPUE	0.060	0.018

**THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Ashcroft) – 2009**

**Time Period:** Chinook : August 21 to September 20 – 7 days/week

**Pink :** September 5 to September 20 – 7 days/week

**Open Area:** 1 km upstream of the mouth of the Bonaparte River. (Region 3)

**Daily limit:** Chinook : 4 per day, only 1 over 50 cm.

**Pink :** 2 per day, combined limit of 4 salmon per day.

**Note:** Single barbless hook only

	2009	
	Chinook	Pink
Interviews	47	31
Hours fished	97	50
Harvest	5	0
Release	1	1
Total Catch	6	1
CPUE	0.060	0.018

**THOMPSON RIVER CHINOOK/PINK SPORT FISHERY (Goldpan) – 2009**

**Time Period:** Chinook : August 21 to September 20 – 7 days/week

**Pink :** September 5 to September 20 – 7 days/week

**Open Area:** Open from ~100m (further clarification required) downstream of the Hwy 1 bridge at Spences Bridge to the Goldpan provincial campground (Region 3).

**Daily limit:** Chinook : 4 per day, only 1 over 50 cm.

**Pink :** 2 per day, combined limit of 4 salmon per day.

**Note:** Single barbless hook only

	2009	
	Chinook	Pink
Interviews	47	31
Hours fished	380	201
Harvest	18	0
Release	5	4
Total Catch	23	4
CPUE	0.060	0.018

**C. SOCKEYE/PINK****HORSEFLY BAY (QUESNEL LAKE) SOCKEYE SPORT FISHERY - 2009**

**Time Period:** *Closed in 2009.*

**Open Area:** Waters of Horsefly Bay located in Quesnel Lake inside a line connecting fishing boundary signs located on opposite shorelines at the entrance to the bay. (Region 5).

**Daily Limit:** *Opening is subject to in-season sockeye run size.*  
Possession limit is 2 times daily limit

**Note:** Bait ban. Single barbless hook only.

**Comments:** No creel in 2002 - 2006 because effort and catch are presumed to be low.

	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed
Hours fished	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed
Harvest	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed
Release	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed
Total Catch	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed
CPUE	No Creel	No Creel	No Creel	No Creel	No Creel	Closed	Closed	Closed

**QUESNEL RIVER SOCKEYE SPORT FISHERY - 2009**

**Time Period:** *Closed in 2009.*

**Open Area:** Waters of the Quesnel River downstream from boundary signs at the mouth of Quesnel Canyon to the Johnston Subdivision Bridge near Quesnel. (Region 5)

**Daily Limit:** *Opening is subject to in-season sockeye run size.*  
Possession limit is 2 times daily limit.

**Note:** Bait ban. Single barbless hook only.

**Comments:** No creel in 2002 – 2004 and 2006 because effort and catch are presumed to be low.

	2002	2003	2004	2005	2006	2007	2008	2009
Interviews	No Creel	No Creel	No Creel	207	No Creel	Closed	Closed	Closed
Hours fished	No Creel	No Creel	No Creel	810	No Creel	Closed	Closed	Closed
Harvest	No Creel	No Creel	No Creel	235	No Creel	Closed	Closed	Closed
Release	No Creel	No Creel	No Creel	451	No Creel	Closed	Closed	Closed
Total Catch	No Creel	No Creel	No Creel	686	No Creel	Closed	Closed	Closed
CPUE	No Creel	No Creel	No Creel	0.847	No Creel	Closed	Closed	Closed

**FRASER RIVER SOCKEYE/PINK SPORT FISHERY (LILLOOET, B.C.) - 2009**

**Time Period:** Sockeye : Closed in 2009.  
**Pink :** September 5 to September 20 - 7 days/week, 0500 to 2100 hrs only

**Open Area:** Waters of the Fraser River from the confluence of the Fraser/Seton River downstream to sport fishing boundary signs located on both sides of the river approximately 4 kilometres downstream of the town of Lillooet, B.C. (Region 3)

**Daily limit:** Sockeye : No sockeye retention in 2009.  
**Pink :** 2 per day, combined limit of 4 salmon per day.

**Note:** Single barbless hook only, bait ban in effect.

**Comments:** Access Point Creel Survey

	2001	2002	2003	2004	2005	2006	*2007	2008	**2009
Interviews	N/A	134	120	77	252	208	0	Closed	37
Hours fished	N/A	247	1 338	805	1 373	3 273	0	Closed	449
Harvest	N/A	31	200/246	102	1 092/284	1 189	N/A	Closed	237
Release	N/A	N/A	66/122	166	82/73	224	N/A	Closed	1 322
Total Catch	N/A	31	266/368	268	1 174/357	1 413	N/A	Closed	1 559
CPUE	N/A	0.124	0.199/0.250	0.307	0.855/0.260	0.432	N/A	Closed	3.473

Note: 2003 & 2005 sockeye/pink respectively.

\* Pink fishery only in 2007. No effort observed - fishery was not provided full coverage as a result of capacity issues (some coverage from Sept. 15-20).

\*\* Pink fishery only in 2009.

**THOMPSON RIVER SOCKEYE SPORT FISHERY (Savona) - 2009**

**Time Period:** Closed in 2009.

**Open Area:** Open from the outlet of Kamloops Lake to 500m d/s of the Hwy 1 Bridge. (Region 3)

	2006	2007	2008	2009
Interviews	344	Closed	Closed	Closed
Hours fished	4 926	Closed	Closed	Closed
Harvest	1 987	Closed	Closed	Closed
Release	455	Closed	Closed	Closed
Total Catch	2 442	Closed	Closed	Closed
CPUE	0.496	Closed	Closed	Closed

**THOMPSON RIVER SOCKEYE SPORT FISHERY (Walhachin) - 2009*****Time Period:*** *Closed in 2009.****Open Area:*** Open 1km upstream to train bridge and 1km downstream of road bridge at Walhachin.

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Interviews	39	Closed	Closed	Closed
Hours fished	440	Closed	Closed	Closed
Harvest	67	Closed	Closed	Closed
Release	60	Closed	Closed	Closed
Total Catch	127	Closed	Closed	Closed
CPUE	0.289	Closed	Closed	Closed

**THOMPSON RIVER SOCKEYE SPORT FISHERY (Spence's Bridge) – 2009*****Time Period:*** *Closed in 2009.****Open Area:*** Open from 100m d/s of the Hwy 1 bridge at Spences Bridge to the Goldpan provincial campground (Region 3).

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Interviews	64	Closed	Closed	Closed
Hours fished	1 808	Closed	Closed	Closed
Harvest	185	Closed	Closed	Closed
Release	166	Closed	Closed	Closed
Total Catch	351	Closed	Closed	Closed
CPUE	0.194	Closed	Closed	Closed

**NECHAKO RIVER SOCKEYE SPORT FISHERY – 2009*****Time Period:*** *Closed in 2009.****Open Area:*** Waters of the Nechako River from the Hwy 97 Bridge to the confluence of the Fraser River. (Region 7)

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Interviews	121	69	Closed	Closed	Closed
Hours fished	354	242	Closed	Closed	Closed
Harvest	35	5	Closed	Closed	Closed
Release	46	9	Closed	Closed	Closed
Total Catch	81	14	Closed	Closed	Closed
CPUE	0.228	0.058	Closed	Closed	Closed





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# First Nation Sockeye kept catches (including ceremonial) in the Lower Fraser River, 2009

21 Dec 2009 13:43

AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Feb-08												0	0
Feb-15												0	0
Feb-22												0	0
Mar-01												0	0
Mar-08												0	0
Mar-15												0	0
Mar-22	0									0	0	0	0
Mar-29	0	0					0				0	0	0
Apr-05		0								0	0	0	0
Apr-12		0		0		0	0	0	0	0	0	0	0
Apr-19	0	0		0		0	0	0	0	0	0	0	0
Apr-26	0			0		0	0		0		0	0	0
May-03	0	0		0		0	0		0		0	0	0
May-10	0	0		0		0	0	0	0	0	0	0	0
May-17	0	0		0		0	0	0	0	0	0	0	0
May-24	0	0	0	0		0	0	0	0	0	0	0	0
May-31	0	0	0	0		0	0	0	0	0	0	0	0
Jun-07	0	0	0	0		0	0	0	0	0	0	0	0
Jun-14	0	0	0	0		0	0	0	0	0	0	0	0
Jun-21	0	0		0		0	0	0	0	0	0	0	0
Jun-28	1	1		4		5	10	0	0	0	19	21	21
Jul-05	4	9	0	137		3	18	0	0	0	158	171	192
Jul-12	9	3	0	19		0	9		2	0	30	42	234
Jul-19	40	63	7	257	10	933	1586	0	2127	755	5668	5778	6012
Jul-26	422	201	5	114	62	462	966	0	2639	340	4583	5211	11223
Aug-02	58	4	1	350	1	12	215	0	668	833	2079	2142	13365
Aug-09	70	23	1	615	40	69	221	0	110	0	1055	1149	14514
Aug-16	133	61	43	461	0	457	125		76		1119	1356	15870
Aug-23	144		16	388	0	536	164	0	101	0	1189	1349	17219
Aug-30	2749	766	13	162	0	19	54	0	311	3	549	4077	21296
Sep-06	32	0		113	0	61	28	0	125	5	332	364	21660
Sep-13	8		0		1		0		30	6	37	45	21705
Sep-20	0					19	0				19	19	21724
Sep-27	0			0	0	5	5				10	10	21734
Oct-04				0		0	2				2	2	21736
Oct-11	0	0	0	0							0	0	21736
Oct-18	0	0		0		0	0				0	0	21736
Oct-25	0	1	0	0		4	0				4	5	21741
Nov-01			0	1		0	0				1	1	21742
Nov-08	0	0	0	0		0	0				0	0	21742
Nov-15	0	0	0	0		0	0				0	0	21742

AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Nov-22			0	0		0	0				0	0	21742
Nov-29				0		0	0				0	0	21742
Dec-06			0									0	21742
Dec-13			0									0	21742
Dec-20												0	21742
Dec-27												0	21742
Jan-03												0	21742
TOTAL	3670	1132	86	2621	114	2585	3403	0	6189	1942	16854	21742	
NOTES													
(a) Not included in area allocations													



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**First Nation Pink kept catches (including ceremonial) in the Lower Fraser River, 2009**

21 Dec 2009 14:35

AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Feb-08												0	0
Feb-15												0	0
Feb-22												0	0
Mar-01												0	0
Mar-08												0	0
Mar-15												0	0
Mar-22	0									0	0	0	0
Mar-29	0	0					0				0	0	0
Apr-05		0								0	0	0	0
Apr-12		0		0		0	0	0	0	0	0	0	0
Apr-19	0	0		0		0	0	0	0	0	0	0	0
Apr-26	0			0		0	0		0		0	0	0
May-03	0	0		0		0	0		0		0	0	0
May-10	0	0		0		0	0	0	0	0	0	0	0
May-17	0	0		0		0	0	0	0	0	0	0	0
May-24	0	0	0	0		0	0	0	0	0	0	0	0
May-31	0	0	0	0		0	0	0	0	0	0	0	0
Jun-07	0	0	0	0		0	0	0	0	0	0	0	0
Jun-14	0	0	0	0		0	0	0	0	0	0	0	0
Jun-21	0	0	0	0		0	0	0	0	0	0	0	0
Jun-28	0	0	0	0		0	0	0	0	0	0	0	0
Jul-05	0	0	0	0		0	0	0	0	0	0	0	0
Jul-12	0	0	0	0		0	0		0	0	0	0	0
Jul-19	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-26	0	0	0	0	0	0	0	0	1	0	1	1	1
Aug-02	0	1	0	0	0	0	0	0	0	0	0	1	2
Aug-09	0	0	0	1	0	0	0	0	0	0	1	1	3
Aug-16	2	0	0	3	0	4	20		13		40	42	45
Aug-23	0		0	5	0	0	2	0	1	0	8	8	53
Aug-30	138	44	2	12	0	0	19	0	0	5	36	220	273
Sep-06	154	0		65	0	177	71	0	57	1	371	525	798
Sep-13	8014		0		159		300		162	0	621	8635	9433
Sep-20	5170					20716	16158				36874	42044	51477
Sep-27	9593			0	0	135741	234466				370207	379800	431277
Oct-04				0		0	62056				62056	62056	493333
Oct-11	0	0	0	0							0	0	493333
Oct-18	0	0		0		0	18				18	18	493351
Oct-25	0	0	0	0		12	0				12	12	493363
Nov-01			0	0		1	0				1	1	493364
Nov-08	0	0	0	0		0	0				0	0	493364
Nov-15	0	0	0	0		2	0				2	2	493366

AREA	Below Port Mann Bridge			Port Mann to Mission		Mission to Harrison	Harrison to Hope		Hope to Sawmill Cr.		Subtotal - Pt. Mann to Sawmill		
BAND	Musq.	Tsa.	Other (a)	Sto:lo	Other (a)	Any	Sto:lo	Yale	Sto:lo	Yale	All Bands		
GEAR	All	All	All	All	All	All	All	All	All	All	All		
Week Ending												Total	Cumulative
Nov-22			0	0		3	0				3	3	493369
Nov-29				0		0	0				0	0	493369
Dec-06			0									0	493369
Dec-13			0									0	493369
Dec-20												0	493369
Dec-27												0	493369
Jan-03												0	493369
<b>TOTAL</b>	23071	45	2	86	159	156656	313110	0	234	6	470251	493369	
NOTES													
(a) Not included in area allocations													



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## MEMORANDUM NOTE DE SERVICE

**To**  
**A** DISTRIBUTION

**From**  
**De** Cynthia Breau for:  
Cindy Samaha  
Resource Management Biologist  
BC Interior  
250-851-4961

**Security Classification - Classification de sécurité**  
Unclassified

**Our file - Notre référence**

**Your File - Votre référence**

**Date**  
Feb 12 2010

**Subject**  
**Object** **Mid and Upper Fraser River First Nations Post Season Salmon Harvest Report 2009.**

A pre-recorded message of the Mid and Upper Fraser River First Nations fishing times is available Toll-Free at 1-877-256-4854. This report is available online at [www.pac.dfo-mpo.gc.ca/fraser/river/firstnations.htm](http://www.pac.dfo-mpo.gc.ca/fraser/river/firstnations.htm)

### **Monitoring**

#### **Sawmill Creek to Kelly Creek (including the Thompson River downstream of the Bonaparte River)**

An ARA creel survey program was conducted co-operatively by Fisheries and Oceans Canada staff and several First Nations Bands within this area. Technicians interviewed all fishers encountered during vehicle, foot and boat patrols to obtain catch and effort information (CPUE). Effort profile data was gathered from Access sites and Total Gear effort was determined from helicopter overflights. The program employs 30+ fishery monitors from 7 different First Nations groups. All monitoring programs in this area ended September 21<sup>st</sup> or prior.

#### **Barney Creek to French Bar**

High Bar Indian Band monitored their fisheries on a complete census basis. No expansion has been done on this data. High Bar monitoring program hired 2 monitors who patrolled 4-5 days a week from July 24<sup>th</sup> to September 20<sup>th</sup>.

#### **Deadman Creek to Marguerite Ferry/Chilko and Chilcotin Rivers**

Esketemc First Nation, Northern Shuswap Tribal Council, Tsilhqot'in National Government, all monitor their own fisheries using an interview census survey. Incomplete catch interviews are expanded Post-Season. Red Bluff and Nazko also conducted interview census surveys but with no expansion as yet. Overall 20+ monitors are employed to cover this area. Monitoring began July 6<sup>th</sup> and ended by September 19<sup>th</sup>.

#### **Naver Creek to Salmon River/Nechako River downstream of Isle Pierre/Bowron River**

Lheidli T'enneh Indian Band monitors their fisheries using an interview census survey. They employ 2 monitors. Monitoring began July 17<sup>th</sup> and ended on September 14<sup>th</sup>.

#### **Nechako River upstream of Isle Pierre/Stuart River System**

Carrier Sekani Tribal Council, Saik'uz, Stelat'en and Tl'azt'en Nations all monitor their own fisheries using interview census surveys. Monitoring began at various times for the groups, the earliest being July 2<sup>nd</sup>, and ended by September 20<sup>th</sup>.

**Thompson River upstream of the Bonaparte River (including the Middle Shuswap River)**

The Secwepemc Fisheries Commission monitors their fisheries using an interview census survey. Monitoring programs began July 2<sup>nd</sup> and ended September 20th.

**Middle Shuswap River between Mabel Lake and Shuswap Falls**

The Okanagan First Nation monitors their fisheries using a creel survey. Monitoring programs begin mid-July and ended in mid-October.

**Catch and Effort**

Table 1. 2009 Mid and Upper Fraser River - mainstem - Weekly and cumulative Chinook catch estimates (preliminary and subject to change).

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Naver River	Naver Cr to Salmon River and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Apr	closed	closed	closed	closed	closed	0	0
12-Apr	closed	closed	closed	closed	closed	0	0
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	N/A	N/M	closed	closed	0	0
10-May	0	N/A	N/M	closed	closed	0	0
17-May	0	0	N/M	closed	closed	0	0
24-May	1	6	N/M	closed	closed	7	7
31-May	6	5	N/M	closed	closed	11	18
07-Jun	1	4	N/M	N/M	N/M	5	23
14-Jun	13	25	N/M	N/M	N/M	38	61
21-Jun	16	15	N/M	N/M	N/M	31	92
28-Jun	74	10	N/M	N/M	N/M	84	176
05-Jul	11	9	N/M	0	N/M	20	196
12-Jul	10	34	N/M	25	N/A	69	265
19-Jul	5	41	N/M	39	5	90	355
26-Jul	436	202	0	14	51	703	1058
02-Aug	5	144	0	12	64	225	1283
09-Aug	0	5	0	14	N/A	19	1302
16-Aug	16	56	0	1	6	79	1381
23-Aug	5	8	0	2	9	24	1405
30-Aug	0	21	0	0	combined with below	21	1426
06-Sep	0	4	0	0	2	6	1432
13-Sep	0	0	0	0	0	0	1432
20-Sep	0	0	N/A	0	N/A	0	1432
27-Sep	0	N/M	N/M	N/A	N/A	0	1432
04-Oct	closed	closed	closed	N/A	N/A	0	1432
Total	599	589	0	107	137	1432	1432

N/M = No Monitoring Conducted    N/A = Not Available

Table 2. 2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Chinook catch estimates (preliminary and subject to change).

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Apr	closed	closed	closed	closed	closed	0	0
12-Apr	closed	closed	closed	closed	closed	0	0
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	closed	closed	closed	closed	0	0
10-May	0	closed	closed	closed	closed	0	0
17-May	0	closed	closed	closed	closed	0	0
24-May	0	closed	closed	closed	closed	0	0
31-May	0	closed	closed	closed	closed	0	0
07-Jun	0	N/M	N/M	N/M	N/M	0	0
14-Jun	0	N/M	N/M	N/M	N/M	0	0
21-Jun	0	0	N/M	N/M	N/M	0	0
28-Jun	0	0	N/M	N/M	N/M	0	0
05-Jul	0	5	N/M	N/M	N/M	5	5
12-Jul	8	0	3	N/A	N/A	11	16
19-Jul	34	17	22	N/A	N/A	73	89
26-Jul	2	10	14	N/A	0	26	115
02-Aug	0	48	6	0	0	54	169
09-Aug	0	41	56	0	0	97	266
16-Aug	11	136	28	0	0	175	441
23-Aug	5	137	5	2	0	149	590
30-Aug	16	212	19	0	0	247	837
06-Sep	0	297	7	0	0	304	1141
13-Sep	26	119	19	0	0	164	1305
20-Sep	N/M	193	5	0	0	198	1503
27-Sep	N/M	0	N/A	N/A	N/A	0	1503
04-Oct	N/M	2	N/A	N/A	N/A	2	1505
Total	102	1217	184	2	0	1505	1505

N/M = No Monitoring Conducted    N/A = Not Available

Table 3. 2009 Mid and Upper Fraser River - mainstem - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
19-Apr	closed	closed	closed	closed	closed	0	0
26-Apr	closed	closed	closed	closed	closed	0	0
03-May	closed	1	closed	closed	closed	1	1
10-May	0	N/A	N/M	closed	closed	0	1
17-May	0	0	N/M	closed	closed	0	1
24-May	0	0	N/M	closed	closed	0	1
31-May	0	0	N/M	closed	closed	0	1
07-Jun	0	0	N/M	closed	closed	0	1
14-Jun	0	0	N/M	closed	closed	0	1
21-Jun	0	0	N/M	closed	closed	0	1
28-Jun	15	0	N/M	closed	closed	15	16
05-Jul	closed	closed	closed	closed	closed	0	16
12-Jul	closed	closed	closed	closed	closed	0	16
19-Jul	closed	closed	closed	closed	0	0	16
26-Jul	2739	367	2	49	0	3157	3173
02-Aug	0	121	0	147	0	268	3441
09-Aug	0	442	0	94	N/A	536	3977
16-Aug	32	2922	0	226	110	3290	7267
23-Aug	214	499	0	577	314	1604	8871
30-Aug	0	0	N/M	132	combined with below	132	9003
06-Sep	0	0	10	238	884	1132	10135
13-Sep	0	0	0	117	1006	1123	11258
20-Sep	0	0	0	8	N/A	8	11266
27-Sep	0	N/M	N/M	0	N/A	0	11266
04-Oct	closed	closed	closed	N/A	N/A	0	11266
Total	3000	4352	12	1588	2314	11266	11266

N/M = No Monitoring Conducted    N/A = Not Available



Table 4. 2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Sockeye catch estimates (preliminary and subject to change).

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
07-Jun	closed	closed	closed	closed	closed	0	0
14-Jun	closed	closed	closed	closed	closed	0	0
21-Jun	closed	closed	closed	closed	closed	0	0
28-Jun	closed	closed	closed	closed	closed	0	0
05-Jul	closed	closed	closed	closed	closed	0	0
12-Jul	closed	closed	0	closed	closed	0	0
19-Jul	closed	1	0	closed	315	316	316
26-Jul	0	0	2	closed	541	543	859
02-Aug	0	1	0	41	32	74	933
09-Aug	0	17	135	224	291	667	1600
16-Aug	0	97	2826	0	36	2959	4559
23-Aug	0	71	6317	374	749	7511	12070
30-Aug	0	281	4736	562	1343	6922	18992
06-Sep	0	233	4026	862	480	5601	24593
13-Sep	12	290	1884	457	317	2960	27553
20-Sep	100	71	280	308	157	916	28469
27-Sep	N/M	0	N/A	N/A	N/A	0	28469
04-Oct	N/M	1	N/A	N/A	N/A	1	28470
Total	112	1063	20206	2828	4261	28470	28470

N/M = No Monitoring Conducted    N/A = Not Available

Table 5. 2009 Mid and Upper Fraser River - mainstem - Weekly and cumulative Pink salmon catch estimates (preliminary and subject to change).

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	N/M	N/M	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	12	1	0	0	0	13	13
30-Aug	0	69	0	0	combined with below	69	82
06-Sep	0	0	0	1	0	1	83
13-Sep	0	137	0	1	0	138	221
20-Sep	0	0	0	0	N/A	0	221
27-Sep	0	N/M	N/M	N/A	N/A	0	221
04-Oct	closed	closed	closed	N/A	N/A	0	221
Total	12	207	0	2	0	221	221

N/M = No Monitoring Conducted N/A = Not Available

Table 6. 2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Pink salmon catch estimates (preliminary and subject to change).

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	0	0	N/M	N/M	0	0
19-Jul	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
06-Sep	0	8	0	0	0	8	8
13-Sep	0	0	153	0	0	153	161
20-Sep	N/A	0	144	0	0	144	305
27-Sep	N/A	13	N/A	N/A	N/A	13	318
04-Oct	N/A	0	N/A	N/A	N/A	0	318
Total	0	21	297	0	0	318	318

N/M = No Monitoring Conducted N/A = Not Available

Table 7. 2009 Mid and Upper Fraser River - mainstem - Weekly and cumulative Coho salmon catch estimates (preliminary and subject to change).

Week Ending	Sawmill Cr to Texas Cr	Texas Cr to Kelly Cr	Kelly Cr to Deadman Cr	Deadman Cr to Marguerite Ferry (to the Blackwater River)	Naver Cr to Shelly and Nechako R to Isle Pierre	Total Weekly	Total Cumulative
28-Jun	0	0	N/M	N/M	N/M	0	0
05-Jul	0	0	N/M	N/M	N/M	0	0
12-Jul	0	0	N/M	0	N/A	0	0
19-Jul	0	0	N/M	0	0	0	0
26-Jul	0	0	0	0	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
06-Sep	0	0	0	0	0	0	0
13-Sep	0	0	0	0	0	0	0
20-Sep	0	0	0	0	N/A	0	0
27-Sep	0	N/M	N/M	N/A	N/A	0	0
04-Oct	closed	closed	closed	N/A	N/A	0	0
Total	0	0	0	0	0	0	0

Table 8. 2009 Mid and Upper Fraser River - tributaries - Weekly and cumulative Coho salmon catch estimates (preliminary and subject to change).

Week Ending	Thompson R to Bonaparte R	Thompson R u/s of Bonaparte R	Chilcotin R System	Nechako R u/s of Isle Pierre	Stuart R System	Total Weekly	Total Cumulative
28-Jun	0	N/M	N/M	N/M	N/M	0	0
05-Jul	0	N/M	N/M	N/M	N/M	0	0
12-Jul	0	N/M	0	N/M	N/M	0	0
19-Jul	0	0	0	N/M	0	0	0
26-Jul	0	0	0	N/M	0	0	0
02-Aug	0	0	0	0	0	0	0
09-Aug	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0
06-Sep	0	2	0	0	0	2	2
13-Sep	0	0	0	0	0	0	2
20-Sep	N/A	1	0	0	0	1	3
27-Sep	N/A	N/A	N/A	N/A	N/A	0	3
04-Oct	N/A	N/A	N/A	N/A	N/A	0	3
Total	0	3	0	0	0	3	3

Table 9. 2009 Effort counts in Mid Fraser First Nations salmon fisheries (preliminary and subject to change).

Week Ending	Sawmill Cr to Texas Cr			Texas Cr to Kelly Cr			Thompson River to Bonaparte		
	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels	Active Set Nets	Active Dip Nets	Active Rod and Reels
05-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
12-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
19-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
26-Apr	closed	closed	closed	closed	closed	closed	closed	closed	closed
03-May	closed	closed	closed	0.0	0.0	0.5	closed	closed	closed
10-May	3.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
17-May	3.5	0.0	0.0	0.1	0.3	1.8	0.0	0.0	0.0
24-May	3.5	0.0	0.0	0.8	0.0	3.3	0.0	0.0	0.0
31-May	3.5	0.0	0.0	2.3	1.0	1.7	0.0	0.0	0.0
07-Jun	4.5	0.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0
14-Jun	9.0	0.0	0.0	1.0	0.3	2.3	0.0	0.0	0.0
21-Jun	4.5	0.0	0.0	0.3	0.0	3.3	0.0	0.0	0.0
28-Jun	9.8	0.0	0.0	2.0	0.3	0.3	0.0	0.0	0.0
05-Jul	closed	0.5	0.3	closed	0.9	0.6	0.0	0.0	0.8
12-Jul	closed	0.9	0.1	closed	1.5	0.8	0.0	0.0	1.7
19-Jul	closed	0.4	0.9	selective	1.0	1.5	0.0	0.0	3.5
26-Jul	48.5	0.5	0.0	5.0	2.0	0.0	0.0	0.0	0.3
02-Aug	0.0	0.3	0.0	6.0	2.0	0.0	0.0	0.0	1.8
09-Aug	0.0	0.1	0.2	1.3	2.0	0.0	0.4	0.0	0.6
16-Aug	1.5	0.0	0.0	6.0	9.0	0.0	0.0	0.0	2.1
23-Aug	0.0	0.0	0.0	4.0	2.0	0.0	1.0	0.0	1.9
30-Aug	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	3.0
06-Sep	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.0
13-Sep	0.0	0.0	0.3	0.0	1.0	0.0	0.0	0.0	2.0
20-Sep	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.5
27-Sep	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
04-Oct	closed	closed	closed	closed	closed	closed	N/A	N/A	N/A

N/M = No Monitoring Conducted

## **Appendix 17: FIRST NATION ECONOMIC OPPORTUNITIES AND DEMONSTRATION FISHERY SUMMARY – 2009**

### **PACIFIC REGION**

#### **I. B.C. INTERIOR AREA**

##### **A. Secwepemc Fisheries Commission (SFC) chinook fishery**

Summary:

Allocation	5.5% of CCTAC as determined pre-season, equates to 1500 chinook salmon
Estimated Harvest	534 chinook
Location	Kamloops Lake
Gear	large mesh gill net
Time Period Fished	August 23 <sup>rd</sup> to September 18 <sup>th</sup> , 2009; 15 actual fishing days.
DFO funding contribution	50 K PICFI for both SFC fisheries

Additional Information:

Biological Sampling Data From Landed Chinook:

- Average Weight = 18.7 lbs; (N=534)
- 99 chinook scale sampled, results back April from PBS.
- Female to male ratio 29:21, or 58%:42%.

Chinook salmon products were sold fresh as headed and gutted, fillets or steaks from the SFC office. Roe was sold locally to the bait market. Belly flaps were sent for processing into BBQ strips.

##### **B. Secwepemc Fisheries Commission (SFC) pink fishery**

Summary:

Allocation	0.5% of CCTAC as determined in-season, which equated to 46,440 pink salmon.
Estimated Harvest	20,258 pink
Location	Thompson River at Steelhead Park
Gear	Beach seine
Time Period Fished	September 28 <sup>th</sup> to October 4 <sup>th</sup> , 2009; 6 actual fishing days.
DFO funding	50 K PICFI for both SFC fisheries

contribution	
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Additional Information:

Biological Sampling Data From Landed pink:

- Average Weight = 3.7 lbs; (N=20,258)
- 99 chinook scale sampled, results back April from PBS.
- Female to male ratio 52%:48%.

The Siska plant with three employees and the plant manager could strip approximately half of the SFC's pink female production. Fifty percent of all females and almost 100% of all males were shipped whole to the Virtual Warehouse for processing and sales. A tote of females and a tote of males was filleted and sent to a coastal processor for value added product development.

### C. Siska pink fishery

Summary:

Allocation	0.35% of CCTAC as determined in-season, which equated to 32,508 pink salmon.
Estimated Harvest	0 pink
Location	Fraser River at Siska
Gear	Trap net
Time Period Fished	September 21 <sup>st</sup> to October 2 <sup>nd</sup> , 2009; 3 actual fishing days.
DFO funding contribution	50 K PICFI for all Siska fisheries

Additional Information:

The Siska pink fishery did not catch any pink salmon. The trap net fishing method was not yielding any catch. After a few days of trying the gear and some moving the gear in an attempt to improve catch, the project was abandoned and the gear was removed from the river.

### D. Siska chinook fishery

Summary:

Allocation	0.75% of CCTAC as determined pre-season, equates to 200 chinook salmon.
Estimated Harvest	0 chinook
Location	Fraser River at Siska

Gear	Trap net, pursing beach seine
Time Period Fished	Did not occur.
DFO funding contribution	50 K PICFI for all Siska fisheries

Additional Information:

The Siska Chinook fishery did not go ahead. There were concerns from the Department and Chief Fred Sampson about the potential sockeye by-catch and some potential mortality when we were in a situation of low to zero total allowable catch for Fraser Sockeye. Chief Fred Sampson was also concerned about the increased reliance on Chinook by the community as food fish. For both of these reasons the fishery did not go ahead.

However, the Siska fish plant did process all of the SFC's Chinook catch, as well as stripping and brining the roe for about half of the SFC pink salmon catch.

**E. Siska sockeye fishery**

Summary:

Allocation	0.30% of CCTAC as determined in-season, which equated to 0 sockeye salmon.
Estimated Harvest	0 sockeye
Location	Fraser River at Siska
Gear	Trap net, pursing beach seine
Time Period Fished	Did not occur.
DFO funding contribution	50 K PICFI for all Siska fisheries

Additional Information:

The Siska sockeye fishery did not go ahead due to a lack of available CCTAC.

**F. Northern Shuswap Tribal Council sockeye fishery**

Summary:

Allocation	1.4% of CCTAC as determined in-season, which equated to 0 sockeye salmon.
Estimated Harvest	0 sockeye
Location	Quesnel River
Gear	Trap net, beach seine

Time Period Fished	Did not occur.
DFO funding contribution	20 K PICFI

Additional Information:

The NSTC sockeye fishery did not go ahead due to alack of available CCTAC.

#### **G. Tsilhqot'in National Government sockeye fishery**

Summary:

Allocation	0.3% of CCTAC as determined in-season, which equated to 0 sockeye salmon.
Estimated Harvest	0 sockeye
Location	Chilcotin River, near Alexis Creek
Gear	Partial weir & trap net
Time Period Fished	Did not occur.
DFO funding contribution	25 K PICFI

Additional Information:

The TNG sockeye fishery did not go ahead due to a lack of available CCTAC.

#### **H. Lheidli T'enneh Band sockeye fishery**

Summary:

Allocation	0.15% of CCTAC as determined in-season, which equated to 0 sockeye salmon.
Estimated Harvest	0 sockeye
Location	Fraser River (Fort George Canyon – Woodpecker area)
Gear	Hot-picked gillnets
Time Period Fished	Did not occur.
DFO funding contribution	25 K PICFI

Additional Information:

The LTB sockeye fishery did not go ahead due to a lack of available CCTAC.



## I. Carrier-Sekani Tribal Council sockeye fishery

### Summary:

Allocation	0.25% of CCTAC as determined in-season, which equated to 0 sockeye salmon.
Estimated Harvest	0 sockeye
Location	Nechako River, Stuart River, Nautley River
Gear	Partial weir & fish trap, beach seine
Time Period Fished	Did not occur.
DFO funding contribution	40 K PICFI

### Additional Information:

The CSTC sockeye fishery did not go ahead due to a lack of available CCTAC.

## II. LOWER FRASER AREA

### Economic Opportunities

#### D/S Port Mann

#### Pink Salmon

Allocation	93,840 Pink Salmon
Estimated Harvest	38,808 Pink, 102 Chinook, hatchery marked (HM) coho for FSC - 18
Location	Fraser River Mainstem between Mouth and Port Mann Bridge
Gear	Shallow Purse Seine
Time Period Fished	September 9 - 28

- Allocation of 120,000 pink salmon was transferred U/S Port Mann

#### Chum Salmon

Allocation	20,577 Chum Salmon
Estimated Harvest	10,756 Chum, 5 Chinook, HM coho for FSC - 128
Location	Fraser River Mainstem between Mouth Port Mann Bridge
Gear	Drift Net; Shallow Purse Seine

Time Period Fished	Drift Net: October 24-25; Shallow Purse Seine: October 30-31 and November 2-5
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- Allocation of 5,433 chum salmon was transferred U/S Port Mann

### **U/S Port Mann**

### **Pink Salmon**

Allocation	344,800 Pink Salmon
Estimated Harvest	432,263 Pink, 2980 Chinook, HM coho for FSC - 80
Location	Fraser River Mainstem between Port Mann Bridge and Hope Bridge ( Harvest mainly near Island 22)
Gear	Beach Seine
Time Period Fished	September 21-24, 29-30 and October 1

- 18 Signatory Bands
- Catch monitoring undertaken by FVAFS
- Of the estimated harvest 62,056 Pink, 1,199 Chinook and 10 HM coho for FSC were part of the allocation transfer from D/S Port Mann October 29-31 and November 1

### **Chum Salmon**

Allocation	43,967 Chum Salmon
Estimated Harvest	45,783 Chum, 233 Chinook, HM coho for FSC – 330
Location	Fraser River Mainstem between Port Mann Bridge and Hope Bridge ( Harvest mainly near Island 22)
Gear	Beach Seine
Time Period Fished	October 21-23, 26 and November 3-6

- 18 Signatory Bands
- Catch monitoring undertaken by FVAFS
- Of the estimated harvest 2,694 Chum, 3 Chinook and 53 HM coho for FSC were part of the allocation transfer from D/S Port Mann November 3-4

### **Demonstration Fishery**

### **Chehalis Indian Band (CIB) and Scowlitz Indian Band:**

**Pink Salmon**

Allocation	37,200 Pink Salmon
Estimated Harvest	36,874 Pink 339 Chinook, HM coho for FSC –1
Location	Harrison River between Highway #7 Bridge and Fraser confluence
Gear	Beach Seine –4 crews
Time Period Fished	September 18-20
DFO funding contribution	\$0K

**Chum Salmon**

Allocation	12,025 Chum Salmon
Estimated Harvest	11,517 Chum 24 Chinook, HM coho for FSC – 97
Location	Harrison River between Highway #7 Bridge and Fraser confluence
Gear	Beach Seine –4 crews
Time Period Fished	October 27-29, November 4
DFO funding contribution	\$0K

- All males and females were retained. No high grading.

Area 12, 13	JN103a	JN103b	JN106	JN210	JN112,113	JN104	JN212	JN224	JN105	JN108,116	JN218	JN219	JN109	JN208	JN205	JN102
analysis date	21-Jul	21-Jul	15-Feb	23-Jul	15-Feb	30-Jul	28-Jul	30-Jul	15-Feb	15-Feb	31-Jul	04-Aug	28-Aug	06-Aug	15-Feb	11-Aug
Area	A12gntf	A12gntf	A12gntf	A12pstf	A12gntf	A12pstf	A12pstf	A12pstf	A12gntf	A12pstf	A12pstf	A12pstf	A12gntf	A12pstf	A12gntf	A12gntf
catch date	Jul12-15	Jul16,17	Jul18-20	Jul20	Jul19-21	Jul21	Jul21-24	Jul24,25	Jul27	Jul28	Jul29	Jul31	Aug.1	Aug.3	Aug.3	Aug.4-6
n	45	53	73	100	100	78	100	100	74	95	99	100	93	100	96	98
<b>Stock Group</b>	dup.	dup.	dup.							dup.						dup.
Non-Fraser	17.0	12.8	24.4	4.7	3.5	7.4	8.6	4.0	8.6	7.5	1.0	2.0	5.6	1.3	3.3	5.2
Early Stuart	5.3	6.2	0.1	6.3	0.0	0	0	0	0.1	0.0	0.1	0.0	0	0	0.4	0
Pitt	18.2	13	7.0	0.0	6.2	5.6	0.8	3.2	7.0	3.3	2.8	3.0	0.0	3.4	2.1	1.9
Chilliwack	4.4	1.9	1.3	2.0	1.1	2.6	1.4	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0
Early Miscellaneous	21.8	10.3	2.7	13.2	8.9	3.9	9.4	6.6	4.1	5.5	4.6	6.6	2.1	7.5	6.1	3.1
Early Shuswap	4.5	6.6	1.1	3.1	4.2	1.0	2.2	1.7	0.4	0.1	0.0	2.0	0.5	1.9	0.0	0.0
N. Thompson	2.2	3.5	0.1	4.6	2.8	0.8	7.6	2.5	2.0	5.5	0.1	2.7	6.2	5.6	2.2	1.7
Chilko River and Lake	3.0	14.5	15.2	11.9	12.8	33.4	22.5	25.6	47.3	34.8	34.4	33.6	43.3	30.1	23.4	18.9
Horsefly + McKinley	3.2	3.0	5	6.8	6.2	4.7	11.5	7.1	5.6	10.6	14.3	11.0	6.8	8.4	13.4	16
Mitchell + tributaries	0.1	0.0	2.7	2.0	0.0	2.6	1.9	1.4	0.0	2.1	3.0	1.4	4.7	6.6	5.0	5.1
Late Stuart	17.8	4.1	18.4	20.5	35.8	22.5	27.1	28.0	7.1	7.9	23.5	16.8	13.7	21.1	12.3	8.3
Stellako	0.1	21.5	15.1	18.1	7.8	2.0	0.0	5.2	2.4	4.9	3.3	4.3	1.5	1.3	4.8	0.1
Birkenhead + Big Silver	0.0	0.0	1.2	0.1	0.0	2.7	2.1	1.9	2.7	2.3	1.0	4.1	5.7	2.0	3.6	11.4
Late Shuswap + Portage	0	1.7	2.6	0.1	0.1	3	0	0	4.7	5.2	1.4	0	4.6	2.1	3.8	5.3
Weaver + Cultus	0	0.0	0.3	1.1	0.1	4.9	1.2	6.5	1.5	1.0	4.3	6.1	5.4	5.1	12.6	12.7
Harrison + Widgeon	2.5	0.7	2.7	5.6	10.5	2.8	3.6	6.4	6.6	9	6.2	4.1	0.0	3.7	7.0	10.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Fraser	83.0	87.2	75.6	95.3	96.5	92.6	91.4	96.0	91.4	92.5	99.0	98.0	94.4	98.7	96.7	94.8
% age-4/2	33%	33%	44%	55%		55%	58%	58%	67%	66%		67%	65%	78%	71%	73%
% age-5/2	58%	64%	52%	37%		29%	38%	36%	27%	27%		30%	26%	19%	20%	16%
% age-3/1 & -4/1	3%	2%	2%	7%		12%	3%	4%	3%	6%		3%	9%	4%	9%	3%
other	6%		2%	1%		3%	1%	1%	3%	1%			1%		3%	1%
<b>Stock Group</b>																
Early Stuart	6.4	7.1	0.1	6.6	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0
Early Miscellaneous	53.5	29.1	14.7	15.9	16.8	13.2	12.6	10.2	12.1	9.4	7.4	12.0	2.2	11.0	8.4	5.3
Early Thompson	8.1	11.6	1.7	8.1	7.2	2.0	10.8	4.3	2.6	6.0	0.2	4.8	7.1	7.6	2.3	1.8
Chilko & Quesnel	7.5	20.1	30.0	21.6	19.7	44.0	39.3	35.4	58.0	51.3	52.2	47.0	58.0	45.6	43.2	42.4
Late Stuart & Stellako	21.5	29.3	44.3	40.5	45.2	26.4	29.7	34.6	10.4	13.8	27.1	21.5	16.0	22.7	17.7	8.9
Birkenhead	0.0	0.0	1.6	0.1	0.0	3.0	2.3	2.0	3.0	2.5	1.0	4.2	6.1	2.0	3.7	12.0
Weaver & Adams	0.0	1.9	3.8	1.3	0.2	8.6	1.4	6.8	6.7	6.7	5.8	6.3	10.6	7.4	17.0	19.0
Harrison	3.1	0.8	3.6	5.9	10.9	3.0	3.9	6.7	7.2	10.2	6.2	4.2	0.0	3.7	7.3	10.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Run</b>																
ESu	6.4	7.1	0.1	6.6	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0
ESum	61.6	40.7	16.4	24.0	24.0	15.1	23.4	14.5	14.7	15.5	7.6	16.8	9.3	18.6	10.8	7.1
Summ	29.0	49.4	74.4	62.2	64.9	70.4	69.0	70.0	68.4	65.1	79.3	68.6	74.0	68.3	60.9	51.2
Birk	0.0	0.0	1.6	0.1	0.0	3.0	2.3	2.0	3.0	2.5	1.0	4.2	6.1	2.0	3.7	12.0
Late-Lates	3.1	2.7	7.5	7.1	11.1	11.5	5.3	13.4	13.9	17.0	12.0	10.4	10.6	11.1	24.2	29.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

JN204			JN222	JN206	JN209		JN203		JN220	JN217		JN235	JN236	Bulk		JN233			JN216	JN230-234	JN101		JN238
11-Aug			13-Aug	15-Feb	18-Aug		20-Aug		25-Aug	25-Aug		28-Aug	27-Aug	27-Aug		01-Sep		03-Sep	03-Sep	08-Sep	11-Sep		16-Sep
A12pstf aug.7	A12pstf aug.9	A12gntf aug.8-10	A12pstf aug.10	A12pstf aug.12	A12pstf aug.14	A12pstf aug.15	A12pstf aug.17	A12pstf aug.18	A12pstf aug.19	A12pstf aug.21	A12pstf aug.22	A12pstf aug.23	A12pstf aug.24	A12pstf aug.25	A12pstf aug.26	A12pstf aug.28	A12pstf aug.29	A12pstf aug.30	A12pstf aug.31-sep1	A12pstf sep2-4	A12pstf sep.7	A12pstf sep6,8	A12pstf sep9-12
100			94	60	100		95		99	100		100	96	98		98 dup.			80	109	100		100
2.0			1.4	0.0	1.0		1.1		1.0	1.0		2.0	0.8	1.0		1.9			0.0	1.0	0.1		0.0
0			0	0.0	0		0		0.0	0		0	0	0.0		0.0			0.0	0	0.0		0.0
0.0			0.0	0.0	0.0		1.3		0.3	0.0		0.6	2.1	0.0		1.0			0.0	0.0	0.0		0.0
0.0			0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0	0.0		0.0
4.8			0.1	8.0	0.8		1.1		2.0	1.0		2.2	0.0	0.0		0.0			0.0	0.0	0.1		0.4
1.3			2.4	0.0	0.0		0.0		0.0	0.0		0.5	0.4	0.1		0.3			0.0	0.0	3.1		0.0
3.7			8.0	5.2	6.6		4.7		4.8	6.6		2.5	6.4	9.5		3.6			1.4	5.3	0.0		6.4
18.2			30.9	15.0	17.9		29.0		24.0	10.2		17.0	12.7	14.7		16			21.2	26.3	22.0		21.7
8.5			7.2	14.1	6.5		14.2		10.5	14.6		9.0	4.7	8.9		9.9			12.5	10.2	10.6		0.2
11.7			12.5	18.9	9.1		15.1		11.8	16.8		13.5	12.7	25.1		14.7			10.8	15.1	24.2		26.6
16.1			5	3.7	5.8		2.2		5.7	4.7		2.1	0.7	2.3		3.6			3.6	0.2	4.3		0.1
0.1			5.0	0.2	0.7		0.0		0.0	0.4		0.1	2.6	1.8		0.0			0.5	0.5	0.4		1.4
4.4			6.1	0.1	9.7		7.5		4.1	6.5		15.6	18.0	7.1		8.3			4.5	13.8	16.1		13.2
5.4			2.3	6.5	2.2		0.9		10.6	7.0		12.3	14.8	7.5		13.6			18.9	10.1	7.2		14.6
17.2			12.6	20.2	29.9		20.7		22.2	31.2		22.7	19.9	21.9		26.8			25.0	17.2	11.3		15.5
6.5			6.2	8.2	9.8		2.2		2.9	0.0		0.0	4.4	0.0		0.1			1.7	0.2	0.6		0.0
100.0			100.0	100.0	100.0		100.0		100.0	100.0		100.0	100.0	100.0		100.0			100.0	100.0	100.0		100.0
98.0			98.6	100.0	99.0		98.9		99.0	99.0		98.0	99.2	99.0		98.1			100.0	99.0	99.9		100.0
74%	64%	65%	70%		79%	86%	70%	75%	74%	77%	78%	71%	58%	71%	74%	79%	72%	82%	70%	70%	70%	67%	73%
18%	22%	29%	23%		12%	14%	26%	20%	22%	19%	20%	26%	35%	26%	23%	17%	21%	16%	25%	28%	27%	27%	17%
8%	12%	4%	6%		8%		2%	2%	2%	2%	2%	1%	5%	1%	1%	1%	7%	2%	4%	1%	2%	6%	5%
	2%	2%	1%				2%	2%	2%	2%		2%	2%	1%	2%	3%			1%	1%	1%	1%	5%
0.0			0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0	0.0		0.0
4.9			0.1	8.0	0.8		2.4		2.3	1.0		2.8	2.1	0.0		1.1			0.0	0.0	0.1		0.4
5.1			10.5	5.2	6.7		4.8		4.9	6.7		3.1	6.8	9.7		4.0			1.4	5.4	3.1		6.4
39.2			51.3	47.9	33.8		59.0		46.7	42.1		40.3	30.4	49.2		41.5			44.4	52.2	56.8		48.4
16.6			10.4	3.8	6.5		2.2		5.8	5.1		2.2	3.2	4.1		3.7			4.1	0.7	4.7		1.4
4.5			6.2	0.1	9.8		7.5		4.2	6.5		15.9	18.2	7.2		8.4			4.5	13.9	16.1		13.2
23.0			15.1	26.7	32.5		21.9		33.2	38.6		35.7	34.9	29.7		41.2			43.9	27.5	18.5		30.1
6.6			6.3	8.2	9.9		2.2		2.9	0.0		0.0	4.4	0.0		0.1			1.7	0.2	0.6		0.0
100			100	100	100		100		100	100		100	100	100		100			100	100	100		100
0.0			0.0	0.0	0.0		0.0		0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0	0.0		0.0
10.0			10.7	13.2	7.5		7.2		7.2	7.7		5.9	8.9	9.7		5.1			1.4	5.4	3.2		6.8
55.8			61.7	51.8	40.3		61.2		52.5	47.2		42.5	33.6	53.3		45.2			48.5	52.9	61.6		49.9
4.5			6.2	0.1	9.8		7.5		4.2	6.5		15.9	18.2	7.2		8.4			4.5	13.9	16.1		13.2
29.6			21.4	34.9	42.3		24.1		36.1	38.6		35.7	39.3	29.7		41.2			45.6	27.8	19.2		30.1
100			100	100	100		100		100	100		100	100	100		100			100	100	100		100

Area 20, 7&7A		PR101,102	PR103,104	PR105	PR107	PR109	PR110		PR112		PR113		PR115					PR115	PR120						PR202	PR123		PR204	LR301	PR125	
analysis date	07-Jul	07-Jul	07-Jul	07-Jul	09-Jul	09-Jul			14-Jul		14-Jul		17-Jul					21-Jul	23-Jul						28-Jul	28-Jul		15-Feb	03-Aug	30-Jul	
Area	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A20gntf	A5gntf	A20gntf	A5gntf	A5gntf	A20gntf	A20gntf	A20psstf	A20gntf	A5gntf	A5gntf	A20psstf	A20gntf	A5gntf	A20psstf	A7mtf	A20gntf		
catch date	jun22,23	jun25,26	jun.28	jul.1	jul.5	jul.7	jul.8,9	jul.10	jul.11	jul.12	jul.13	jul.14	jul.15	jul.15,16	jul.17	jul.17-20	jul.18	jul.21	jul.22	A20psstf	A20gntf	A5gntf	A5gntf	A20psstf	A20gntf	A5gntf	A20psstf	jul.27	jul.29	A20gntf	
n	85	43	100	98	100	70		73		46		96					100	99						100	100		96	100	100		
Stock Group										SPM-rm																					
Non-Fraser	30.5	20.7	14.6	8.4	7.5	8.5		6.9		9.8		3.4					4.0	3.1							4.0	2.5		2.1	0.0	3.0	
Early Stuart	63.6	66.1	74.8	64.4	49.8	55.2		29.5		23.9		13.1					4.3	1.1							0	0		0.1	0	0.0	
Pitt	0.0	0.0	1.0	0.0	12.0	8.1		20.6		4.4		15.5					12.0	11.4							12.5	2.5		2.2	2.1	2.4	
Chilliwack	5.9	0.0	4.7	12.0	10.6	8.7		5.5		6.0		3.1					2.0	0.0							0.7	0.0		0.0	0.0	0.0	
Early Miscellaneous	0.0	13.1	4.6	12.0	12.4	9.1		17.7		26.6		19.3					14.5	21.0							3.6	10.2		4.2	3.2	6.2	
Early Shuswap	0.0	0.0	0.2	0.0	1.0	1.0		0.0		2.3		2.4					0.8	2.0							3.0	0.0		0.0	6.0	3.7	
N. Thompson	0.0	0	0.0	0.0	0	0		4.0		0.0		0.0					11.1	0.9							6.0	8.9		4.2	7.2	5.1	
Chilko River and Lake	0.0	0.0	0.0	0.0	0.0	1.0		0.1		2.3		5.6					15.8	18.0							18.6	9.7		16.2	18.8	25.3	
Horsefly + McKinley	0.0	0	0.0	0.0	1.0	0.0		0.1		2.2		3.1					2.3	3.8							4.9	11.4		5.7	5.3	13.6	
Mitchell + tributaries	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0					0.0	0.0							0.0	0.0		0.0	4.5	8.7	
Late Stuart	0.0	0	0	3.1	5.8	5.1		0.1		11.5		8.6					20.1	23.4							26.6	5.3		20.5	18.5	8.4	
Stellako	0.0	0	0.0	0.1	0.0	0.0		0.0		1.1		1.3					0.0	2.5							0.8	8.6		0.8	12.6	6.7	
Birkenhead + Big Silver	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		1					1.1	1.1							3.7	3.0		4	1.9	3.3	
Late Shuswap + Portage	0.0	0	0	0.0	0.0	0.0		0.0		0		0					0	0.0							0	2		2.7	0	4.0	
Weaver + Cultus	0.0	0	0.0	0.0	0.0	0		0.0		0.0		0.0					0	1							0.0	2.2		0.6	2.1	0.0	
Harrison + Widgeon	0.0	0.0	0.0	0.0	0.0	3.3		15.5		9.9		23.6					12.1	10.7							15.3	33.9		36.9	17.7	9.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0		100.0		100.0		100.0					100.0	100.0							100.0	100.0		100.0	100.0	100.0	100.0
Total Fraser	69.5	79.3	85.4	91.6	92.5	91.5		93.1		90.2		96.6					96.0	96.9							96.0	97.5		97.9	100.0	97.0	
% age-4/2	70%	73%	84%	73%	57%	58%	43%	39%	45%	46%	42%	34%	32%	23%	42%	24%	44%	54%	47%	44%	48%	47%	43%	39%	51%	47%	41%	60%			
% age-5/2	29%	28%	16%	27%	42%	37%	33%	43%	45%	41%	33%	39%	53%	28%	40%	34%	43%	32%	47%	35%	37%	16%	35%	24%	16%	14%	33%	19%			
% age-3/1 & -4/1					1%	5%	24%	18%	9%	12%	22%	26%	16%	49%	18%	41%	12%	13%		20%	15%	37%	21%	36%	33%	36%	23%	17%			
other	1%								1%		3%					1%	2%	1%	7%						1%	1%		3%	3%	4%	
Stock Group																															
Early Stuart	91.5	83.4	87.5	70.2	53.8	60.4		31.7		26.5		13.5					4.4	1.2							0.0	0.0		0.1	0.0	0.0	
Early Miscellaneous	8.5	16.6	12.1	26.3	37.7	28.3		47.1		41.0		39.2					29.7	33.4							17.5	13.0		6.5	5.3	8.9	
Early Thompson	0.0	0.0	0.3	0.0	1.1	1.1		4.3		2.5		2.5					12.4	3.1							9.4	9.1		4.3	13.3	9.0	
Chilko & Quesnel	0.0	0.0	0.0	0.0	1.1	1.1		0.2		5.0		9.0					18.8	22.5							24.5	21.6		22.5	28.6	49.1	
Late Stuart & Stellako	0.0	0.0	0.0	3.5	6.3	5.6		0.1		14.0		10.3					21.0	26.7							28.6	14.2		21.8	31.2	15.5	
Birkenhead	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		1.0					1.1	1.1							3.9	3.1		3.8	1.9	3.4	
Weaver & Adams	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		0.0					0.0	1.1							0.2	4.1		3.3	2.1	4.1	
Harrison	0.0	0.0	0.0	0.0	0.0	3.6		16.6		10.9		24.4					12.6	11.0							15.9	34.8		37.7	17.7	10.0	
Total	100	100	100	100	100	100		100		100		100					100	100							100	100		100	100	100	
Run																															
EStu	91.5	83.4	87.5	70.2	53.8	60.4		31.7		26.5		13.5					4.4	1.2							0.0	0.0		0.1	0.0	0.0	
ESum	8.5	16.6	12.4	26.3	38.8	29.4		51.3		43.6		41.7					42.0	36.4							26.9	22.1		10.8	18.6	17.9	
Summ	0.0	0.0	0.0	3.5	7.4	6.7		0.3		19.0		19.3					39.8	49.2							53.1	35.9		44.3	59.8	64.6	
Birk	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		1.0					1.1	1.1							3.9	3.1		3.8	1.9	3.4	
Late-Lates	0.0	0.0	0.0	0.0	0.0	3.6		16.6		10.9		24.4					12.6	12.1							16.1	38.9		41.0	19.7	14.1	
Total	100	100	100	100	100	100		100		100		100					100	100							100	100		100	100	100	

PR205		LR302	PR127	PR207			PR129	PR209	PR210		PR211	PR212		PR134	PR213		PR214	PR215	PR216		PR217	PR218		PR219	PR221	PR222	PR226.22	USCom10f	PR228	EM601
31-Jul		06-Aug	04-Aug	04-Aug			07-Aug	07-Aug	27-Aug		11-Aug	13-Aug		14-Aug	14-Aug		18-Aug	18-Aug	20-Aug		16-Feb	25-Aug		25-Aug	27-Aug	01-Sep	01-Sep	03-Sep	03-Sep	08-Sep
A20psf	A5gnf	A7mif	A20gnf	A20psf	A20psf	A20gnf	A20gnf	A20psf	A20psf	A20gnf	A20psf	A20psf	A20psf	A20gnf	A20psf	A20gnf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A20psf	A7psTlcs
jul.29	jul.27-30	aug.1.2	aug.1	aug.2	aug.3	aug.3	aug.4.5	aug.5	aug.7	aug.8	aug.9	aug.10	aug.11	aug.12	aug.12	aug.14	aug.16	aug.17	aug.18	aug.19	aug.21	aug.22	aug.23	aug.25	aug.26	aug.28.30	aug.30	sep.1	sep.3	
100		100	100	100			100	73	99	100	100	100	80	100	100	100	100	100	100	96	92	25	33	65	65	99	24	88		
2.2		1.0	3.0	2.1			2.8	0.7	2.1		10.0	3.1		6.4	2.6		3.4	3.8	6.9		0.0	7.1		8.5	3.1	7.8	4.6	0.0	14.9	1
0.0		0	0	0			0	0.0	0.0		0	0		0	0		0	0.0	0.0		0	0.0		0	0	0.0	0.0	0.0	0.0	0.0
5.5		1.8	2.6	2.0			0.5	0.0	0.1		1.2	0.1		1.2	1.0		2.5	3.8	0.9		3.6	1.2		4.2	0.0	0.0	0.0	0.0	0.0	0.0
0.0		0.0	0.0	0.0			0.2	0.0	0.0		0.0	0.0		0.0	0.6		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.0		2.4	1.8	1.5			2.1	3.0	1.3		2.0	1.0		1.3	1.0		0.0	0.2	0.0		1.0	0.0		0.0	0.0	3.1	0.0	0.0	0.0	0.0
1.0		2.1	3.5	2.4			1.9	0.0	1.7		0.2	0.0		3.8	4.0		1.3	0.6	1.0		0.0	1.4		3.6	0.2	2.0	0.0	3.2	0.0	0.0
4.2		1.5	3.9	2.9			6.7	0.8	11.0		3.1	3.0		7.7	6.8		0.0	14.0	6.9		7.3	8.3		11.8	19.6	5.7	11.3	10.1	1.3	5.5
26.0		26.3	40.2	32.0			31.6	28.1	21.7		25.8	21.2		30.4	19.5		15.9	13.3	9.8		7.9	8.7		18.1	9.1	9.3	11.4	14.4	8.3	11.1
7.0		5.6	1.1	5.1			13.3	16.5	7.5		6.3	7.0		17.3	5.9		13.0	8.8	13.7		9.6	0.0		6.2	0.1	10.3	12.8	6.7	0.0	4.1
5.0		4.2	7.1	10.9			5.1	5.6	4.9		6.1	2.7		7.6	15.7		7.1	10.3	16.1		12.5	15.6		27.3	21.2	15.5	13.9	17.0	20.8	30.2
11.5		13.6	10.1	10.4			10.6	7.5	7.6		6.2	7.2		5.6	5.1		11.0	0.0	3.8		0.7	1.4		5.0	2.9	0.0	0.9	0.0	0.0	0.3
0.0		5.6	0.4	2.9			0.4	1.5	0.0		0.8	2.2		1.3	0.3		0.1	2.5	0.0		1.6	0.9		0.1	0.1	0.0	0.6	0.0	0.0	0.0
3.2		5.6	5.3	0.4			10.6	0.2	7.3		3.9	7.2		9.0	11.4		7.3	9.7	12.0		9	9.8		7.5	19	4.6	10.9	16.1	8.4	23.9
1.6		1.9	4.2	1.3			2.6	7.6	10.3		9.7	13.6		1.4	5.8		16.0	11.8	14.0		18.2	15.2		0.1	4.2	17.2	16.8	3.9	27.9	14.9
4.9		2.1	0.1	8.8			1.9	4.2	11.0		7.9	9.2		0.0	3.0		6.4	8.0	10.9		23.1	17.2		3.8	18.6	18.4	12.0	19.0	8.3	7.8
26.8		26.4	16.5	17.3			9.7	24.2	13.5		16.9	22.5		6.9	17.3		16.0	13.2	4.0		5.3	13.3		3.9	2.0	6.1	4.8	9.6	10.0	1.1
100.0		100.0	100.0	100.0			100.0	100.0	100.0		100.0	100.0		100.0	100.0		100.0	100.0	100.0		100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0
97.8		99.0	97.0	97.9			97.2	99.3	97.9		90.0	96.9		93.6	97.4		96.6	96.2	93.1		100.0	92.9		91.5	96.9	92.2	95.4	100.0	85.1	99.0
55%	42%		59%	59%	48%	58%		59%	71%	57%	65%	55%	71%		66%	67%	66%	65%	78%	70%		64%	63%	71%	77%	69%	57%	69%	66%	64%
17%	27%		10%	18%	12%	21%		10%	10%	14%	14%	13%	14%		15%	20%	11%	14%	15%	13%		9%	23%	17%	13%	13%	15%	14%	15%	22%
27%	30%		24%	19%	38%	20%		29%	19%	29%	20%	32%	14%		18%	12%	23%	20%	7%	14%		26%	14%	4%	6%	18%	27%	14%	18%	12%
1%			7%	3%	2%	1%		2%			1%	1%	2%		1%	1%		1%		2%		1%		8%	3%		2%	2%	2%	1%
0.0		0.0	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.6		4.3	4.6	3.6			2.9	3.0	1.4		3.6	1.2		2.7	2.7		2.6	4.1	0.9		4.6	1.3		4.6	0.0	3.3	0.0	0.0	0.0	0.0
5.3		3.6	7.7	5.4			8.9	0.9	12.9		3.7	3.1		12.3	11.0		1.3	15.2	8.5		7.4	10.4		16.9	20.4	8.3	11.8	13.3	1.5	5.5
38.9		36.5	49.9	49.0			51.5	50.6	34.9		42.4	31.9		59.0	42.2		37.2	33.7	42.5		30.0	26.2		56.3	31.4	38.1	39.9	38.1	34.3	45.9
11.8		19.3	10.9	13.6			11.2	9.0	7.7		7.8	9.8		7.4	5.5		11.5	2.6	4.1		2.2	2.4		5.6	3.1	0.0	1.6	0.0	0.0	0.3
3.3		5.7	5.5	0.4			10.9	0.2	7.5		4.3	7.4		9.7	11.7		7.6	10.1	12.9		9.2	10.5		8.1	19.6	5.0	11.4	16.1	9.9	24.1
6.7		4.0	4.5	10.3			4.6	11.9	21.8		19.5	23.5		1.5	9.1		23.2	20.6	26.7		41.3	34.8		4.2	23.5	38.6	30.3	22.9	42.5	23.0
27.4		26.6	17.0	17.7			10.0	24.3	13.8		18.8	23.2		7.4	17.8		16.6	13.7	4.3		5.3	14.3		4.3	2.0	6.6	5.0	9.6	11.8	1.1
100		100	100	100			100	100	100		100	100		100	100		100	100	100		100	100		100	100	100	100	100	100	100
0.0		0.0	0.0	0.0			0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.9		7.9	12.3	9.0			11.7	3.9	14.4		7.2	4.3		15.0	13.7		3.9	19.3	9.5		12.0	11.7		21.4	20.4	11.7	11.9	13.3	1.5	5.5
50.7		55.8	60.8	62.6			62.7	59.6	42.6		50.2	41.6		66.4	47.7		48.7	36.3	46.6		32.3	28.6		61.9	34.5	38.1	41.5	38.1	34.3	46.2
3.3		5.7	5.5	0.4			10.9	0.2	7.5		4.3	7.4		9.7	11.7		7.6	10.1	12.9		9.2	10.5		8.1	19.6	5.0	11.4	16.1	9.9	24.1
34.1		30.6	21.5	28.0			14.7	36.3	35.5		38.3	46.7		8.9	26.9		39.8	34.3	31.0		46.6	49.1		8.5	25.6	45.3	35.3	32.5	54.3	24.1
100		100	100	100			100	100	100		100	100		100	100		100	100	100		100	100		100	100	100	100	100	100	100

<b>Whonnock &amp; Cottonwood</b>																							
analysis date	07-Jul	07-Jul	09-Jul	09-Jul	14-Jul	14-Jul	21-Jul	21-Jul	23-Jul	23-Jul	28-Jul	28-Jul	28-Jul	31-Jul	31-Jul	04-Aug	04-Aug	06-Aug	06-Aug	06-Aug	07-Aug	07-Aug	11-Aug
Area	ABgnf	ABgnf	ABgnf	AB, BB tf	ABgnf	BBgnf	BBgnf	ABgnf	ABgnf	BBgnf	ABgnf	BBgnf	ABgnf	BBgnf	ABgnf	ABgnf	BBgnf	ABgnf	BBgnf	ABgnf	BBgnf	ABgnf	BBgnf
catch date	jun23-28	jun29-jul2	jul4,5	jul6,7	jul8	jul8-12	jul13-19	jul18,19	jul20-21	jul20-21	jul22,23	jul22-26	jul24-26	jul27-29	jul27-29	jul30-aug1	jul30-aug2	aug2,3	aug3,4	aug4	aug5	aug5	aug6
n	12	22	73	16	6	25	14	4	21	17	34	30	19	46	22	66	66	66	36	49	49	56	24
<b>Stock Group</b>					SPAM-rm				SPAM-rm	SPAM-rm													
Non-Fraser	0.0	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early Stuart	83.3	73.6	85.7	81.2	79.9	75.0	13.4	25.0	7.1	36.9	8.2	0.4	2.4			0	0	0	0	0.0	0	0	0
Pitt	0.0	0.2	0.0	0.0	0.0	4.0	0.0		0.0	17.7	0.0	11.2	0.2			0.0	5.7	0.0	0.0	0.0	0.5	0.0	0.0
Chilliwack	16.7	13.8	11.0	6.3	0.0	0.0	0.0		14.3	0.0	0.0	0.0	0.0	4.4		2.8	1.5	2.7	0.0	0.0	0.0	0.0	0.0
Early Miscellaneous	0.0	12.3	3.3	12.5	0.0	10.5	27.2	50.0	20.1	11.8	24.2	7.1	20.6	24.4	9.1	1.6	9	20.1	12.5	5.8	9.2	8.4	4.2
Early Shuswap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	10.1	0.0	3.3	10.5	4.2		5.1	2.6	4.8	0.0	4.1	3.6	1.2	4.5
N. Thompson	0.0	0.0	0.0	0.0	0.0	0.0	0.3		4.7	1.8	0.8	0.1	0.1			4.7	1.5	2.4	0.0	8.8	0.3	0.0	10.0
Chilko River and Lake	0.0	0.0	0.0	0.0	16.5	0.0	0.0		9.6	0.0	8.8	3.5	5.1	8.5		20.2	42.5	19.8	16.0	42.6	40.6	50.0	21.6
Horsefly + McKinley	0.0	0.0	0	0.0	0.0	0	0.2		1.8	0.0	5.5	0.4	0.0	2.5	9.1	10.3	4.8	6.9	19.9	13.6	12.2	12.2	21.5
Mitchell + tributaries	0.0	0.0	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	2.8	0.0			4.5	2.5	0.0	3.8	0.2	2.6	4.3	7.7
Late Stuart	0	0	0.0	0.0	3.6	1.2	43.2		22.0	0.0	22.9	52.0	31.2	25.5	36.4	29.3	20.9	24.7	26.1	8.0	20.3	13.9	28.4
Stellako	0.0	0.0	0	0.0	0.0	5.7	0.0		10.6	15.7	9.7	0.4	3.8	4.7	9.1	3.9	1.8	2.2	0.3	0.0	0.6	0.2	1.2
Birkenhead + Big Silver	0.0	0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0	0			4.9	1.8	6.0	5.9	6.1	0.0	4.0	0.0
Late Shuswap + Portage	0.0	0	0.0	0.0	0.0	0.0	0.3		0.0	0.0	0.1	0	0			0	0	0.3	0.0	0.1	0.3	0.1	0.1
Weaver + Cultus	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0	0		4.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Harrison + Widgeon	0.0	0	0.0	0.0	0.0	3.5	15.4		9.8	6.1	19.8	18.8	26.1	25.8	27.3	14.7	7.7	6.1	19.0	8.3	8.2	2.2	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Fraser	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% age-4/2	71%	61%	87%	86%	67%	89%	50%	50%	40%	50%	52%	36%	33%	50%	59%	60%	75%	67%	63%	75%	79%	74%	83%
% age-5/2	29%	39%	13%	14%	33%	6%	33%	50%	45%	43%	26%	43%	40%	20%	24%	27%	16%	25%	16%	8%	7%	23%	11%
% age-3/1 & -4/1						6%	17%		10%	7%	22%	21%	27%	30%	18%	12%	9%	7%	22%	11%	12%	2%	6%
other									5%							2%		2%		6%	2%		
<b>Stock Group</b>																							
Early Stuart	83.3	73.6	85.7	81.2	79.9	75.0	13.4	25.0	7.1	36.9	8.2	0.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early Miscellaneous	16.7	26.4	14.3	18.8	0.0	14.5	27.2	50.0	34.4	29.4	24.2	18.3	20.8	28.8	9.1	4.4	16.3	22.8	12.5	5.8	9.7	8.4	4.2
Early Thompson	0.0	0.0	0.0	0.0	0.0	0.0	0.4	25.0	4.7	11.8	0.8	3.5	10.6	4.2	0.0	9.8	4.1	7.3	0.0	12.9	3.9	1.2	14.5
Chilko & Quesnel	0.0	0.0	0.0	0.0	16.5	0.0	0.2	0.0	11.4	0.0	14.4	6.6	5.1	11.0	13.6	33.0	47.4	30.5	36.1	58.8	57.0	70.0	43.1
Late Stuart & Stellako	0.0	0.0	0.0	0.0	3.6	6.8	43.2	0.0	32.6	15.7	32.5	52.4	35.0	30.2	45.5	33.2	22.7	26.9	26.4	8.0	20.9	14.1	29.7
Birkenhead	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	1.8	6.0	5.9	6.1	0.0	4.0	0.0
Weaver & Adams	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	4.5	0.0	0.0	0.3	0.0	0.1	0.3	0.1	0.1
Harrison	0.0	0.0	0.0	0.0	0.0	3.5	15.4	0.0	9.8	6.1	19.9	18.8	26.1	25.8	27.3	14.7	7.7	6.1	19.0	8.3	8.2	2.2	8.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Run</b>																							
EStu	83.3	73.6	85.7	81.2	79.9	75.0	13.4	25.0	7.1	36.9	8.2	0.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESum	16.7	26.4	14.3	18.8	0.0	14.6	27.5	75.0	39.1	41.3	25.0	21.8	31.4	32.9	9.1	14.2	20.4	30.1	12.6	18.7	13.6	9.7	18.7
Summ	0.0	0.0	0.0	0.0	20.2	6.9	43.4	0.0	44.1	15.7	46.9	59.0	40.1	41.3	59.1	66.2	70.1	57.5	62.5	66.8	77.9	84.1	72.7
Birk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	1.8	6.0	5.9	6.1	0.0	4.0	0.0
Late-Lates	0.0	0.0	0.0	0.0	0.0	3.6	15.7	0.0	9.8	6.1	19.9	18.8	26.1	25.8	31.8	14.7	7.7	6.4	19.0	8.4	8.5	2.3	8.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100



S Latham  
DNA update (2009 nearly comprehensive).xls In-River  
10:58 AM 28/04/2010  
6 / 10

11-Sep ABgnif sep3-5 39	11-Sep BBgnif sep3-5 45	11-Sep ABgnif sep6,7 45	11-Sep BBgnif sep6-8 89	11-Sep ABgnif sep8,9 154	15-Sep ABgnif 10-Sep 14	15-Sep BBgnif sep9,10 10	16-Sep ABgnif sep11-14 14	16-Sep BBgnif sep11-14 9	21-Sep ABgnif sep15,16 9	21-Sep BBgnif sep16,17 6	15-Feb QUgnas jul18-25 35	15-Feb QUgnas jul25-30 34	15-Feb QUgnas jul31-aug4 30	15-Feb QUgnas aug5-7 55	15-Feb QUgnas aug8,9 88	15-Feb QUgnas aug10,11 100	15-Feb QUgnas aug12-14 121	15-Feb QUgnas aug15-18 54	15-Feb QUgnas aug19-21 80	15-Feb QUgnas aug22-24 54	15-Feb QUgnas aug25-27 47	15-Feb QUgnas aug28-31 53	15-Feb QUgnas sep1-8 60	15-Feb QUgnas sep9-12 51	15-Feb QUgnas sep13-15 28
0.0	0	0.0	0	0.0	0	0	0.0	0.0	0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0	0	0.0	21.6	7.8	1.2	1.7	0.2	2.3	0.8	0.2	0.0	0.2	0.1	0.1	0.2	0.3	0.1
0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.4	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	60.2	7.1	6.7	11.3	3.5	3.2	2.5	2.0	1.3	0.0	4.3	0.2	0.4	0.2	0.0
0.1	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	2.5	2.3	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.3	0.0
12.0	10.8	13.6	0.1	0.0	0.0	1.1	12.5	34.0	32.7	0.0	0.0	0.0	6.3	0.0	5.1	4.9	1.3	4.9	7.8	4.9	12.4	13.7	7.2	17.4	0.0
7.9	7.2	0.0	0.4	0.2	0.0	7.8	0.0	3.7	0.1	0.0	2.3	16.4	6.7	34.5	39.0	37.4	36.5	41.8	37.8	36.7	30.1	27.6	25.1	4.9	0.5
2.9	0.0	2.5	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0	0.1	9.2	3.1	8.2	9.2	11.9	15.7	9.9	6.0	17.8	17.7	8.0	7.5	0.9	0.0
7.7	15.6	0.1	2.6	0.0	0.0	10.0	14.3	22.9	22.3	33.3	0.0	0.0	0.7	3.5	3.5	4.0	9.2	15.2	19.3	19.4	10.2	21.7	34.1	11.8	7.1
0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.1	0.6	0.0	8.5	47.8	56.8	35.0	34.2	21.8	19.2	10.5	16.7	10.9	13.7	14.3	12.6	0.3	1.3
0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	8.0	5.2	5.6	1.8	8.4	11.7	8.4	0.6	0.0	0.6	0.8	0.4	0.3	0.1
23.7	5.2	1.0	1.5	1.7	0.0	23.2	35.9	11.2	2.3	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.7	3.4	16.8	16.7	13.7	14.3	12.5	15.6	4.7	19.0	0.0	0.0	3.7	1.9	0.1	0.0	3.8	3.0	6.8	10.5	9.8	8.8	13.5	12.5	63.5	90.8
15.0	35.0	23.7	52.8	48.9	36.5	41.7	21.2	11.3	22.3	50.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.5	22.7	41.9	25.0	35.4	49.2	3.2	0.0	11.1	0.0	0.0	0.0	0.0	10.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.9	100.0	100.0	100.0	100.0
48%	63%	26%	47%	22%	46%	44%	50%	71%	71%	20%	70%	78%	74%	89%	86%	89%	86%	91%	90%	76%	69%	63%	87%	56%	54%
21%	10%	10%	18%	29%		22%	42%	14%	29%	60%	30%	22%	26%	9%	15%	8%	12%	4%	9%	11%	17%	18%	4%	5%	
21%	22%	59%	33%	46%	54%	33%	8%	14%					4%	2%	3%	3%	2%	2%	1%	5%	8%	5%	4%	21%	25%
9%	5%	5%	1%	4%					20%									2%		8%	6%	15%	6%	18%	21%
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	7.8	1.3	1.7	0.2	2.3	0.8	0.2	0.0	0.2	0.1	0.1	0.2	0.3	0.1
1.4	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	60.2	7.1	6.8	11.3	3.5	3.2	2.5	2.0	1.3	0.0	4.4	0.2	0.4	0.2	0.0
12.0	10.8	13.6	1.0	0.0	0.0	1.3	12.5	34.0	33.4	0.0	0.0	0.0	6.5	0.0	7.5	7.2	1.4	5.0	7.9	5.1	12.7	13.7	7.2	17.7	0.1
18.4	22.9	2.6	3.0	0.3	0.0	17.8	14.3	27.5	22.4	33.3	2.4	25.6	10.6	46.2	51.7	53.3	61.4	67.0	63.0	73.9	59.2	57.4	66.7	17.6	7.7
1.2	0.1	0.4	0.0	0.0	0.0	0.0	0.2	0.1	0.6	0.0	15.9	55.8	62.8	40.6	36.1	30.2	30.9	18.9	17.2	10.9	14.7	15.0	13.0	0.6	1.4
23.7	5.2	1.0	1.5	1.7	0.0	23.2	35.9	11.2	2.3	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.7	38.4	40.5	69.5	62.6	50.7	54.2	36.7	16.1	41.3	50.0	0.0	3.7	1.9	0.1	1.0	3.8	3.0	6.8	10.5	9.8	9.0	13.5	12.5	63.5	90.8
15.5	22.7	41.9	25.0	35.4	49.2	3.2	0.0	11.1	0.0	0.0	0.0	10.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	7.8	1.3	1.7	0.2	2.3	0.8	0.2	0.0	0.2	0.1	0.1	0.2	0.3	0.1
13.5	10.8	13.6	1.0	0.0	0.0	1.6	12.8	34.0	33.4	0.0	60.2	7.1	13.3	11.4	11.0	10.4	3.9	7.0	9.2	5.2	17.1	14.0	7.6	17.9	0.1
19.6	22.9	2.9	3.0	0.3	0.0	17.8	14.5	27.6	23.0	33.3	18.2	81.4	73.3	86.8	87.7	83.5	92.3	86.0	80.3	84.8	73.8	72.4	79.7	18.2	9.0
23.7	5.2	1.0	1.5	1.7	0.0	23.2	35.9	11.2	2.3	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43.2	61.0	82.4	94.5	98.0	99.9	57.4	36.7	27.2	41.3	50.0	0.0	3.7	12.1	0.1	1.0	3.8	3.0	6.8	10.5	9.8	9.0	13.5	12.5	63.5	90.8
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Extras	QC401															
analysis date	07-Jul	16-Jul	21-Jul	23-Jul	30-Jul	15-Feb	15-Feb	06-Aug	07-Aug			18-Aug	18-Aug	21-Aug	21-Aug	21-Aug
Area	Area1/101	Hope gn	BBgnfsc	Area1/101	A20jack	D104	D104	A20jack	Area1/101	A20jack	A20jack	A20jack	A20jack	ABfwas	ABfwas	ABfwas
catch date	jun18-26	jul.14	jul.18	jun29-jul16	jul22-27	jul12-aug1	aug2-29	jul28-aug3	jul20-29	aug4-5	aug.10	aug13-15	aug13-15	jul1,2	jul7,8	jul14-17
n	10	61	15	6	19	219	137	47	6			15	23	11	20	93
Stock Group														counted	counted	counted
Non-Fraser	99.9	0.0	0.0	99.9	18.9	98.7	69.5	6.4	66.7			0.9	0.0	0.0	0.0	0.0
Early Stuart	0.0	79.5	46.9	0.0	0.0	0.0	0.1	0.0	0.0			0.0	0.0	100.0	90.0	71.0
Pitt	0.0	0.0	15.3	0.0	0	0.1	0.0	0.0	16.7			0.0	0.0	0.0	0.0	1.1
Chilliwack	0.0	0.0	10.8	0.0	0.0	0.0	0.0	0.0	16.7			0.0	0.0	0.0	0.0	8.6
Early Miscellaneous	0.0	15.1	4.9	0.0	0.0	0.2	0.7	0.0	0.0			0.0	0.0	0.0	5.0	10.8
Early Shuswap	0.0	0.0	0.0	0.0	54.5	0.0	0.0	2.8	0.0			22.4	0.5	0.0	5.0	0.0
N. Thompson	0.0	0.0	0.0	0.0	0	0.0	3.3	0.0	0.0			0.1	0.0	0.0	0.0	0.0
Chilko River and Lake	0.0	0.0	0.0	0.0	4.4	0.0	6.0	26.7	0.0			0.4	17.1	0.0	0.0	3.2
Horsefly + McKinley	0.0	1.6	0.0	0.0	0.0	0.0	3.0	0.0	0.0			0.0	0.2	0.0	0.0	0.0
Mitchell + tributaries	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Late Stuart	0.0	3.8	14.6	0.0	0	0.3	1.3	0.1	0.0			0.7	0.1	0.0	0.0	2.2
Stellako	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	2.2
Birkenhead + Big Silver	0.0	0.0	0.0	0.0	0.0	0.4	2.9	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Late Shuswap + Portage	0.1	0.0	0.1	0.0	16.5	0.0	3.8	61.9	0.0			75.4	82.1	0.0	0.0	0.0
Weaver + Cultus	0.0	0.0	0.0	0.0	0.0	0.2	2.2	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Harrison + Widgeon	0.0	0.0	6.8	0.1	5.5	0.1	0.0	2.1	0.0			0.0	0.0	0.0	0.0	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0
Total Fraser	0.1	100.0	100.0	0.1	81.1	1.3	30.5	93.6	33.3			99.1	100.0	100.0	100.0	100.0
% age-4/2		83%	40%								3%					
% age-5/2		17%	47%													
% age-3/1 & -4/1			7%								3%					
other			7%		100%			100%			94%					
Stock Group																
Early Stuart	0.0	79.5	46.9	0.0	0.0	1.3	0.2	0.0	0.0			0.0	0.0	100.0	90.0	71.0
Early Miscellaneous	0.0	15.1	31.0	0.0	0.0	26.0	2.3	0.0	100.0			0.0	0.0	0.0	5.0	20.4
Early Thompson	0.0	0.0	0.1	0.0	67.2	0.2	11.0	3.0	0.0			22.6	0.5	0.0	5.0	0.0
Chilko & Quesnel	0.0	1.6	0.0	0.0	5.5	0.1	53.0	28.5	0.0			0.5	17.3	0.0	0.0	3.2
Late Stuart & Stellako	0.0	3.8	15.0	0.0	0.0	19.2	4.2	0.1	0.0			0.7	0.1	0.0	0.0	4.3
Birkenhead	0.0	0.0	0.0	0.0	0.0	30.8	9.6	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Weaver & Adams	100.0	0.0	0.1	0.0	20.4	17.6	19.7	66.1	0.0			76.1	82.1	0.0	0.0	0.0
Harrison	0.0	0.0	6.8	100.0	6.8	4.8	0.0	2.3	0.0			0.0	0.0	0.0	0.0	1.1
Total	100	100	100	100	100	100	100	100	100			100	100	100	100	100
Run																
EStu	0.0	79.5	46.9	0.0	0.0	1.3	0.2	0.0	0.0			0.0	0.0	100.0	90.0	71.0
ESum	0.0	15.1	31.1	0.0	67.3	26.2	13.3	3.0	100.0			22.6	0.5	0.0	10.0	20.4
Summ	0.0	5.4	15.0	0.0	5.5	19.3	57.2	28.6	0.0			1.2	17.4	0.0	0.0	7.5
Birk	0.0	0.0	0.0	0.0	0.0	30.8	9.6	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Late-Lates	100.0	0.0	6.9	100.0	27.2	22.4	19.7	68.4	0.0			76.1	82.1	0.0	0.0	1.1
Total	100	100	100	100	100	100	100	100	100			100	100	100	100	100

											JCom201	PRJ233	QCI401	JCom201				
21-Aug	21-Aug	20-Aug	20-Aug	21-Aug	21-Aug	21-Aug	21-Aug	20-Aug	20-Aug	20-Aug	25-Aug	27-Aug	27-Aug	28-Aug	01-Sep	03-Sep	03-Sep	04-Sep
ABfwas	ABfwas	A12jack	A20jack	ABfwjack	ABfwjack	ABfwas	ABfwas	Gill Rd bs	Gill Rd bs	A20jack	A29trtf	A20jack	Area1/101	A29trtf	MIgntrf	ABfwas	A29trtf	A29trtf
jul20-23	jul27-30	jul31-aug8	aug5-9	aug3-8	aug10-14	aug3-8	aug10-14	aug11,12	aug.18	aug14,17,18	aug22,23	aug19,20	aug4-25	aug.25	aug28,29	aug18-27	aug31-sep1	sep.2
90	92	100	42	50	66	78	71	101	29	15	36	28	8	8	101	47	43	43
counted	counted			counted	counted	counted	counted										dup.	
0.0	1.1	1.2	0.1	3.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	3.1	30.0	0.0	0.0	0.0	0.0	0.2
42.2	5.4	0.0	0.0	0.0	0.0	3.8	2.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1.1	1.1	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.1	0.0	0.0
15.6	2.2	0.0	0.0	0.0	0.0	1.3	1.4	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	2.1	0.0	0.0
16.7	17.4	2.0	2.4	6.0	6.1	5.1	5.6	4.2	14.1	0.0	3.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3.3	8.7	4.8	7.9	54.0	40.9	5.1	4.2	3.4	6.9	0.3	0.2	4.3	8.1	0.0	2.6	1.9	0.1	0.1
0.0	0.0	0.1	0.2	0.0	0.0	1.3	2.8	3.1	10.4	0.0	0.0	0.0	0.2	1.9	0.2	5.8	0.0	0.0
6.7	29.3	6.3	0.2	34.0	25.8	46.2	33.8	22.6	24.1	0.0	0.1	0.0	0.0	2.2	30.2	39.8	0.1	0.1
2.2	2.2	0.0	0.0	0.0	0.0	5.1	11.3	6.8	17.3	0.0	0.8	0.0	0.1	0.7	22.9	20.2	0.8	0.0
2.2	2.2	0.0	0.0	0.0	0.0	1.3	14.1	1.4	6.9	0.0	0.0	0.0	0.0	0.0	19.6	12.9	0.0	0.1
8.9	26.1	0.1	0.0	0.0	1.5	16.7	7.0	41.8	12.1	0.0	0.0	0.1	0.0	0.1	9.6	3.9	0.1	0.3
1.1	1.1	0.0	0.0	0.0	0.0	3.8	0.0	15.6	4.9	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.2
0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	41.0	0.0	2.8	2.2	2.1	0.0
0.0	0.0	84.0	89.3	3.0	25.8	5.1	1.4	0.1	0.0	92.8	8.9	92.2	6.2	22.2	3.3	0.5	33.8	25.3
0.0	0.0	1.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	29.4	0.0	0.0	52.0	3.0	6.0	35	28.4
0.0	2.2	0.5	0.0	0.0	0.0	3.8	12.7	0.9	3.5	0.0	54.3	0.3	0.0	21.0	5.5	2.1	27.9	45.4
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100.0	98.9	98.8	99.9	97.0	100.0	100.0	100.0	100.0	100.0	93.3	100.0	96.9	70.0	100.0	100.0	100.0	100.0	99.8
								74%	88%									
								22%	8%									
									4%									
			100%					4%										
42.2	5.5	0.0	0.0	0.0	0.0	3.8	2.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33.3	20.9	2.0	2.4	6.2	6.1	6.4	9.9	4.2	14.1	0.0	3.9	0.0	20.4	0.0	0.2	4.3	0.0	0.0
3.3	8.8	4.9	8.1	55.7	40.9	6.4	7.0	6.6	17.3	0.3	0.2	4.5	11.8	1.9	2.8	7.7	0.1	0.1
11.1	34.1	6.4	0.2	35.1	25.8	52.6	59.2	30.8	48.2	0.0	0.9	0.0	0.2	2.9	72.7	72.9	0.9	0.1
10.0	27.5	0.2	0.0	0.0	1.5	20.5	7.0	57.4	17.0	0.0	0.0	0.1	0.3	0.1	9.6	4.3	0.1	0.5
0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	58.6	0.0	2.8	2.2	2.1	0.0
0.0	0.0	86.0	89.3	3.1	25.8	6.4	1.4	0.1	0.0	99.5	38.3	95.2	8.8	74.1	6.3	6.5	68.9	53.8
0.0	2.2	0.5	0.0	0.0	0.0	3.8	12.7	0.9	3.5	0.0	54.3	0.3	0.0	21.0	5.5	2.1	27.9	45.5
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
42.2	5.5	0.0	0.0	0.0	0.0	3.8	2.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36.7	29.7	7.0	10.5	61.9	47.0	12.8	16.9	10.7	31.4	0.3	4.1	4.5	32.1	1.9	3.0	12.0	0.1	0.1
21.1	61.5	6.6	0.2	35.1	27.3	73.1	66.2	88.2	65.2	0.1	0.9	0.1	0.5	3.0	82.3	77.2	0.9	0.6
0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	58.6	0.0	2.8	2.2	2.1	0.0
0.0	2.2	86.5	89.3	3.1	25.8	10.3	14.1	1.0	3.5	99.5	92.6	95.5	8.8	95.1	11.8	8.7	96.8	99.3
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

													FN101	FN102	FN104	FN103	FN118	FN116
04-Sep									16-Sep	16-Sep	21-Sep	21-Sep	15-Feb	15-Feb	15-Feb	15-Feb	15-Feb	15-Feb
Mlgnthf	Harr.R.	Harr.R.	Harr.R.	Harr.R.	Harr.R.	Harr.R.	Harr.R.	Harr.R.	Mlgnthf	Mlgnthf	ABfwas	Area1/101	RJBridge	Stoner	Stoner	Stoner	D-09	D-09
aug31-sep2	aug10-14	aug19-21	aug24-27	31-Aug	sep3-8	sep11-14	sep17-21	sep24-28	sep3-4	sep7-9	aug29-sep1	aug29-sep7	jul28-aug26	aug10-27	aug31-sep4	sep7-13	jul27-29	28-Aug
52									30	65	99	5	99	98	96	94	22	17
0.0									0.0	0.0	0.0	20.0	0.0	0.0	0.0	1.1	0.0	0.0
0.0									0.0	0.0	0.0	0.0	4.1	4.3	0.2	0.1	1.1	0.0
0.0									0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0									0.0	0.0	0.0	0.0	2.8	3.9	2.1	4.3	4.7	7.5
0.0									0.0	0.0	0.6	3.1	0.0	0.0	0.0	0.0	0.0	0.0
11.7									6.7	2.0	0.0	37.0	0.0	0.0	0.0	0.3	0.0	0.0
22.2									15.0	1.9	8.7	0.1	15.3	3.6	7.4	1.3	9.0	37.6
12.7									18.3	0.1	0.3	0.4	32.8	0.0	0.0	0.0	4.5	18.9
11.7									23.3	1.8	9.4	0.0	11.6	0.0	0.0	0.0	9.6	6.0
10.1									0.0	0.0	2.1	0.3	21.9	62.2	51.9	65.5	33.5	29.8
0.0									0.0	0.0	0.0	0.0	11.5	25.8	38.4	27.4	37.7	0.1
9.3									0.0	5.6	3.6	38.4	0.0	0.0	0.0	0.0	0.0	0.0
4.8									10.0	19.2	26.6	0.6	0.0	0.1	0.0	0.0	0.0	0.0
11.7									11.7	43.1	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.9									15.0	26.2	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0									100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100.0									100.0	100.0	100.0	80.0	100.0	100.0	100.0	98.9	100.0	100.0
	5%	5%	15%	15%	19%	19%	32%	7%					86%	73%	91%	81%	79%	78%
	9%	4%	19%	15%	13%	9%	7%	1%					12%	24%	9%	18%	21%	22%
	86%	90%	66%	69%	68%	72%	61%	93%					1%			2%		
		0%											1%	2%				
0.0									0.0	0.0	0.0	0.0	4.1	4.3	0.2	0.1	1.1	0.0
0.0									0.0	0.0	1.5	0.0	2.8	3.9	2.1	4.4	4.7	7.5
11.7									6.7	2.0	0.6	50.2	0.0	0.0	0.0	0.3	0.0	0.0
46.5									56.7	3.8	18.5	0.7	59.7	3.6	7.4	1.3	23.0	62.5
10.1									0.0	0.0	2.1	0.3	33.4	88.0	90.3	93.8	71.2	29.9
9.3									0.0	5.6	3.6	48.0	0.0	0.0	0.0	0.0	0.0	0.0
16.5									21.7	62.3	52.5	0.8	0.0	0.1	0.0	0.0	0.0	0.0
5.9									15.0	26.2	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100									100	100	100	100	100	100	100	100	100	100
0.0									0.0	0.0	0.0	0.0	4.1	4.3	0.2	0.1	1.1	0.0
11.7									6.7	2.1	2.1	50.2	2.8	3.9	2.1	4.7	4.7	7.5
56.6									56.7	3.8	20.5	1.0	93.1	91.6	97.7	95.2	94.2	92.4
9.3									0.0	5.6	3.6	48.0	0.0	0.0	0.0	0.0	0.0	0.0
22.4									36.7	88.5	73.7	0.8	0.0	0.1	0.0	0.0	0.0	0.0
100									100	100	100	100	100	100	100	100	100	100

Appendix 19: 2009 Stock Assessment Projects				
Timing Aggregate	Project	Project Status		
Early Stuart	Early Stuart Fry	project implemented		
Early Stuart	Early Stuart Adults	project implemented		
Early Stuart	Driftwood Adults	project implemented		
Early Summer	<i>Nadina Fry Downstream</i>	<i>not proposed 2009/10</i>		
Early Summer	<i>Nadina Mark-recapture</i>	<i>not proposed 2009/10</i>		
Early Summer	Nadina Adult Visuals	project implemented		
Early Summer	Bowron Visual	project implemented		
Early Summer	North-South Thompson Adults	project implemented		
Early Summer	<i>Raft Adults Mark-recapture</i>	<i>not proposed 2009/10</i>		
Early Summer	<i>Fennell Fence</i>	<i>not proposed 2009/10</i>		
Early Summer	<i>Upper Adams Adults Mark-recapture</i>	<i>not proposed 2009/10</i>		
Early Summer	Scotch Adults Fence	project implemented		
Early Summer	<i>Eagle Mark-Recapture</i>	<i>not proposed 2009/10</i>		
Early Summer	<i>Seymour Mark-Recapture</i>	<i>not proposed 2009/10</i>		
Early Summer	<i>Chilliwack Lake Early Summer Tower</i>	<i>not proposed 2009/10</i>		
Early Summer	Chilliwack Lake Early Summer Visual	project implemented		
Early Summer	Gates Adults	project implemented		
Early Summer	Nahatlatch Adults	project implemented		
Early Summer	Upper Pitt Mark-recapture	project implemented		
Early Summer	Taseko Lake Adults	project implemented		
Summer	Big Silver Adults	project implemented		
Summer	Quesnel Lake Tributaries-Adults Visual	project implemented		
Summer	<i>Mitchell Mark-Recapture</i>	<i>not proposed 2009/10; alternative method (DIDSON) implemented</i>		
Summer	<b>Mitchell River DIDSON</b>	<b>project implemented</b>		
Summer	<i>Quesnel Downstream</i>	<i>not proposed 2009/10</i>		
Summer	Chilko Smolts	project implemented		
Summer	<i>Chilko River-Lake Mark-Recapture</i>	<i>not proposed 2009/10; alternative method (DIDSON) implemented</i>		
Summer	Chilko River DIDSON	project implemented		
Summer	Stellako Fence	project implemented		
Summer	<i>Stellako Mark-Recapture</i>	<i>not proposed 2009/10</i>		
Summer	<i>Horsefly Mark-Recapture</i>	<i>cancelled - alternate method (visual surveys) implemented</i>		
Summer	<i>Middle River Mark-recapture</i>	<i>not proposed 2009/10</i>		
Summer	Tachie River Mark-Recapture	project implemented		
Summer	Late Stuart Adult Visual	project implemented		
Early Summer/Late	<i>Ashcroft Tagging</i>	<i>not proposed 2009/10</i>		
Early Summer/Late	<i>Thompson Mainstem Recovery</i>	<i>not proposed 2009/10</i>		
Late	<i>Adams Downstream</i>	<i>not proposed 2009/10</i>		
Late	<i>Adams-Little River Mark-Recapture</i>	<i>not proposed 2009/10</i>		
Late	<i>Adams Mark-Recapture</i>	<i>not proposed 2009/10</i>		
Late	South Thompson System Visual	project implemented		
Late	Portage Visual	project implemented		
Late	Birkenhead Fence	project implemented		
Late	Cultus Fence	project implemented		
Late	Harrison Adults (Visual)	<i>not proposed 2009/10; alternative method (mark-recapture) implemented</i>		
Late	<b>Harrison Mark Recapture</b>	<b>project implemented</b>		
Late	Weaver Adults	project implemented		
Late	Widgeon Adults	project implemented		
All Aggregates	Water Temperature Monitoring at spawning grounds	project implemented		
All Aggregates	Water Temperature Monitoring for Environmental Watch			

## Appendix 20: 2009 Fraser River Sockeye Research

2009 Research Activities. Environmental Watch Program  
David Patterson. SAFE. Science

### **Improvement to Environmental Management Adjustment Models (DFO/PSC/SFU).**

This project examined both specific areas of improvement to the current application of MA models and general tools for managers to assimilate information on en route mortality. The results from this project are available in technical reports that are posted on the Ewatch website: [http://www-sci.pac.dfo-mpo.gc.ca/fwh/index\\_e.htm](http://www-sci.pac.dfo-mpo.gc.ca/fwh/index_e.htm).

### **Examination of high rates of pre-spawn mortality in Fraser sockeye salmon (DFO).**

In 2008, all major Fraser sockeye salmon populations experienced above average pre-spawn mortality. A survey of stocks from Early Summer, Summer, and Late run was undertaken in 2008 and 2009 to match histopathology results with both physiological and behavioural condition of the fish to determine the potential cause(s) of low spawning success.

**Cumulative effects at multiple scales: case studies of the development of habitat-population assessment tools using Fraser River salmon (DFO/SFU)** - The project funded by the Centre for Aquatic Habitat Research, is examining different methods for dealing with cumulative habitat stressors. The project has two main objectives. 1) Develop tools for integrating cumulative freshwater habitat indicators developed during the peer-reviewed Wild Salmon Policy process as a means to identify and prioritise critical and productive salmon habitats at the highest risk for management action. 2) Evaluate different habitat-population linkage modelling tools to assess the cumulative effects of multiple freshwater habitat variables on fish population productivity using a case-study of Pacific salmon migration success.

**Fraser River water temperature archive project:** Funding was provided by the NSDMC to rescue old paper copies of historic Fraser River water temperature data. This information is being digitized and QA/QC'd and has been inputted into ACCESS staging database. This next year an ORACLE database will be built and an open access to the data will be available. This information will be invaluable for assessing subtle changes in water temperatures over the past 60 years and forecasting future changes on regional watershed scale.

**Predicting the magnitude and timeline of climate change effects on spawning migration success for major populations of Fraser River salmon and implications for fisheries:** This SEF funded project generated Fraser River temperature and flow forecasts based on different climate change models and matching them with population-specific information about upriver migration of Pacific salmon in order to provide fisheries and habitat managers with pro-active advice regarding the effect of climate change on adult salmon migratory success. A SEF report is available and several publications are forth coming on this topic.

**Lower Fraser River sockeye recreational hook and release mortality study** (J.O. Thomas/DFO/UBC-NSERC). Funded initially by the FSWP, this pilot project examined the short term (24hr) mortality associated with recreational fisheries. In 2009 a radio-telemetry component was added to track fate of fish captured via angling, beach seining and after 24hr. holding. Ewatch contribution to the project was to evaluate the physiological condition of fish at the time of capture and at the time of release (24hr), to look at sub-lethal indicators of stress, to partition the stress associated with capture from handling and holding. This was accomplished by utilizing non-lethal blood sampling at different stages of capture.

**Climate warming and high salmon migration mortality** (UBC-DFO) – This NSERC funded project is examining the impact of warm water temperatures on salmon migration success, as well as the potential interactive effects of fishing. A series of experiments were conducted at Cultus lake lab this summer using Early Stuart, Chilko, Weaver, and Harrison sockeye, and Fraser Pink salmon.

**Quantifying and reducing the mortality of released fish (Carleton-DFO-UBC)** – The NSERC strategic grant is attempting to quantify the mortality of adult salmon captured and then released in fresh water. In addition, the project aims to look at different capture approaches and behaviours designed to reduce release mortality. In 2009, several field and laboratory projects were initiated using Fraser Pinks, Interior Coho, and Fraser Sockeye. Several assessment tools were used including acoustic and radio-telemetry, physiological biopsies, and reflex impairment.

**Condition of juvenile salmon smolts leaving the Fraser system** (DFO-Miller Genomics PBS) – A Genome BC funded project lead by Kristi Miller at PBS to examine the role that genomics can play in understanding both juvenile survival and predict adult upstream migration. Salmon smolts from a variety of river systems within the Fraser River were sampled are currently being processed to determine individual and population level variability in physiological condition and genome expression.

#### Ewatch supported publications in 2009:

##### *Primary Publications:*

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- Pon, L. B., S. G. Hinch, S. J. Cooke, D. A. Patterson, and A. P. Farrell. 2009. A comparison of the physiological condition, and fishway passage time and success of migrant adult sockeye salmon at Seton River Dam, British Columbia, under three operational water discharge rates. *North American Journal of Fisheries Management* 29(5):1195-1205.
- Pon, L. B., S. G. Hinch, S. J. Cooke, D. A. Patterson, and A. P. Farrell. 2009. Physiological, energetic and behavioural correlates of successful fishway passage of adult sockeye salmon *Oncorhynchus nerka* in the Seton River, British Columbia *Journal of Fish Biology* 74(6):1323-1336.
- Tierney, K. B., D. A. Patterson, and C. J. Kennedy. 2009. The influence of maternal condition on offspring performance in sockeye salmon *Oncorhynchus nerka*. *Journal of Fish Biology* 75(6):1244-1257.

### Technical Reports:

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- Cooke, S. J., G. T. Crossin, S. G. Hinch, D. A. Patterson, A. P. Farrell, J. M. Shrimpton, K. K. English, D. W. Welch, G. Van Der Kraak, K. C. Hanson, and J. L. Young. 2009. Consequences of early entry on late-run sockeye salmon: focus on riverine migration. Pages 68-70 in S. G. Hinch, and J. Gardner, editors. *Proceedings of the Conference on Early Migration and Premature Mortality in Fraser River Late-Run Sockeye Salmon*. Pacific Fisheries Resource Conservation Council, Forest Sciences Centre, University of British Columbia.
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## Appendix 21: Special Projects

### 2009 Sockeye Catch & Release Study

The Fraser River supports a substantial recreational fishery directed at sockeye *Oncorhynchus nerka*. At certain times and under certain conditions, this fishery is pursued as a catch-and-release (CR) fishery. “Bottom-bouncing” is the predominant angling technique in the non-tidal portion of the Fraser River. Anecdotal observations have suggested that mortality rates of captured and released sockeye should be low for this type of fishery. However, no formal data has been collected or analyzed to quantify mortality rates to-date. In 2009, the second year of a planned four year study was conducted to monitor this fishery under typical conditions, collect pertinent catch-and-release data and to quantify short-term (24-h) mortality rates.

This year’s study was conducted using volunteer anglers over 16 days between 10 August and 28 August, 2009 at Grassy Bar in the Fraser River. In total, the study collected and analyzed data from 291 hooked and landed sockeye (angled group) and 63 sockeye captured by beach seine (reference group). All captured sockeye were floy-tagged and held in net pens for 24 h observation prior to release back into the river. Net pens were situated in a side channel close to the angling site.

Primary hooking locations were observed to be on the outside of the mouth or body (90% of all landed sockeye). Of this group, most were specifically hooked in the left maxillary bone (80%). Approximately 25% of the hooked fish exhibited bleeding at the time of capture. However, all the sockeye that were hooked, held and released alive after 24 h in the net pens showed no signs of bleeding and all but six (2%) were released in vigorous condition.

Total mortality was calculated using a simple adjusted (additive finite) method where the hooking mortality is computed as the difference between the total mortality rate observed in the hooked group of sockeye and the mortality rate observed in the reference group (after Nelson 1998, Wilde et al. 2003, Wilde and Pope 2008, Millard et al. 2003, 2005). Only five mortalities were witnessed in the study and short-term (0 to 24 h) catch-and-release mortality was estimated to be 1.7% (95% confidence interval of 0% - 4.0%). The five fish that died were all initially hooked through the left maxillary bone followed by the hook either puncturing or lacerating major arteries in the gills or under the tongue. No mortalities were observed in the reference group.

Physiological sampling and radio-tagging were conducted concurrently during the study. Nondestructive and destructive physiological samples were collected to investigate physiological stressors related to hooking or capture of sockeye by beach seine and post-capture holding of the angled sockeye in net pens for 24 h. Tissue samples were also collected for DNA stock composition analysis. Tracking and analysis of radio-tagged sockeye will provide insights into migration routes and timing, survival and corroboration

of DNA samples for stock composition. Complete documentation and final analysis of this data is pending and will be reported separately

These results suggest that bottom-bounce fishing in the Fraser River bar fishery has a minimal impact on short-term mortality of migrating adult sockeye however it should be noted that this study was conducted at one location with one set of environmental conditions. It is recommended that this study be conducted over the full sockeye cycle, 4 years to determine if there are inter-annual variations.

TABLE 1. 2009 NEAR FINAL FRASER RIVER SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>LOWER FRASER RIVER</u>									
Chilliwack Lake		504	504	0	276	228	100.0%	228	
Cultus Lake		1,441	705	736	356	349	35.2%	123	Does not include 282 sockeye kept for broodstock
Dolly Varden Creek	Aug. 20-24, 2009.	5,083	5,083	0	2,918	2,165	98.2%	2,127	Nathatlatch R. sex ratio used.
Nahatlatch Lake		336	336	0	157	179	96.1%	172	
Nahatlatch River	Sep. 11-13, 2009.	1,103	1,103	0	514	589	96.4%	568	
Pitt River, upper <sup>5</sup>	Sep. 10-12, 2009.	31,042	31,034	8	12,001	19,033	98.8%	18,119	Includes 804 males and 679 females killed for hatchery eggtake.
Widgeon Slough	Nov. 10-16, 2009.	1559	1556	3	735	821	97.8%	803	
AREA TOTAL:		41,068	40,321	747	16,957	23,364	97.6%	22,140	
<u>HARRISON-LILLOOET</u>									
Big Silver Creek	Sep. 20-24, 2009.	6,053	6,037	16	2,644	3,393	99.5%	3,377	
Birkenhead River		54,156	53,977	179	19,458	34,519	99.9%	34,475	Surveys conducted by Lil'wat First Nations.
Cogburn Creek	Sep. 22-29, 2009.	288	288	0	126	162	99.5%	161	Big Silver Cr. adult sex ratio and percent spawn used.
Crazy Creek		0	0	0	0	0	0.00%	0	Surveys conducted by Douglas First Nations.
Douglas Creek	Sep. 20-24, 2009.	263	263	0	125	138	100.0%	138	Surveys conducted by Douglas First Nations.
Green River		2	2	0	1	1	99.87%	1	Birkenhead R. adult sex ratio and % spawn used.
Harrison River	Nov. 9-16, 2009.	307,373	307,210	163	199,805	107,405	93.7%	100,603	
Railroad Creek		0	0	0	0	0	0.0%	0	
Sampson Creek		1,003	1,003	0	361	642	99.9%	641	Surveys conducted by Lil'wat First Nations; Birkenhead R. adult sex ratio & % spawn used.
Sloquet Creek		16	16	0	7	9	99.5%	9	Surveys conducted by Douglas First Nations. Big Silver Cr. adult sex ratio and percent spawn used.
Tipella Creek		11	11	0	5	6	99.5%	6	Surveys conducted by Douglas First Nations. Big Silver Cr. adult sex ratio and percent spawn used.
Weaver Channel		27,475	27,114	361	11,800	15,314	82.2%	11,254	Data provided by HEB channel operator.
Weaver Creek	Oct. 20-24, 2009.	8,498	8,442	56	4,783	3,659	44.2%	1,617	
AREA TOTAL:		405,138	404,363	775	239,115	165,248	92.2%	152,282	
<u>SETON-ANDERSON</u>									
Bridge River		172	172	0	86	86	100.00%	86	Data provided by BC Hydro.
Gates Channel		5,704	5,190	514	2,100	3,090	89.7%	2,771	
Gates Creek	Sep. 8-12, 2009.	5,152	4,688	464	1,897	2,791	89.7%	2,503	Gates Channel sex ratio and percent spawn used.
Portage Creek	Oct. 24-28, 2009.	1,836	1,773	63	864	909	87.1%	792	
AREA TOTAL:		12,864	11,823	1,041	4,947	6,876	89.5%	6,152	
<u>EARLY SOUTH THOMPSON</u>									
Adams River <sup>1</sup>		0	0	0	0	0	0.0%	0	
Adams Channel <sup>3</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Anstey River	Sep. 6-15, 2009.	410	376	34	149	227	99.4%	226	Seymour R. sex ratio and percent spawn used.
Burton Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
Cayenne Creek	Sep. 2-7, 2009.	232	232	0	116	116	100.0%	116	Sex ratio and spawning success assumed.
Celista Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Crazy Creek	Sep. 6-10, 2009.	7	6	1	2	4	99.4%	4	Seymour R. sex ratio and percent spawn used.
Eagle River	Sep. 10-15, 2009.	2,038	1,870	168	743	1,127	99.4%	1,121	Seymour R. sex ratio and percent spawn used.
Hunakwa Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Loftus Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	Marginal access due to low water.
McNomee Creek	Sep. 7-14, 2009.	29	27	2	11	16	99.4%	16	Seymour R. sex ratio and percent spawn used.
Momich River		0	0	0	0	0	0.0%	0	
Perry River	Sep. 6-13, 2009.	65	60	5	24	36	99.4%	36	Seymour R. sex ratio and percent spawn used.

TABLE 1. 2009 NEAR FINAL FRASER RIVER SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Scotch Creek	Sep. 2-6, 2009.	5,770	4,672	1,098	1,980	2,692	99.0%	2,665	
Seymour River	Sep. 7-14, 2009.	5,598	5,137	461	2,042	3,095	99.4%	3,077	
Upper Adams River		36	36	0	18	18	100.0%	18	Sex ratio and spawning success assumed.
Yard Creek	Sep. 1-10, 2009.	56	51	5	20	31	99.4%	31	Seymour R. sex ratio and percent spawn used.
AREA TOTAL:		14,241	12,467	1,774	5,105	7,362	99.3%	7,310	
<u>LATE SOUTH THOMPSON</u>									
<u>Adams Lake</u>									
Adams Lake - Shore									
Bush Creek - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Misc. East Side -Shore		0	0	0	0	0	0.0%	0	
Misc. South End -Shore	Oct. 15-20, 2009.	7	3	4	1	2	99.0%	2	Adams R. sex ratio and percent spawn used.
Pass Creek - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Bush Creek <sup>b</sup>		0	0	0	0	0	0.0%	0	
Pass Creek <sup>b</sup>		63	0	63	0	0	0.0%	0	
Sub-total:		70	3	67	1	2	99.0%	2	
Little River	Oct. 10-20, 2009.	19,750	14,491	5,259	5,039	9,452	98.0%	9,259	
<u>Shuswap Lake - Anstey Arm</u>									
Anstey Arm - shore									
Four Mile Creek - Shore	Oct. 14-20, 2009.	157	67	90	25	42	99.0%	42	Adams R. sex ratio and percent spawn used.
Queest Creek - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Vanishing Creek - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Anstey River	Oct. 16-20, 2009.	40	17	23	6	11	99.0%	11	Adams R. sex ratio and percent spawn used.
Hunakwa Creek	Oct. 14-20, 2009.	95	40	55	15	25	99.0%	25	Adams R. sex ratio and percent spawn used.
Sub-total:		292	124	168	46	78	99.0%	78	
<u>Shuswap Lake - Main Arm</u>									
Main Arm - shore									
Adams River - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Cruikshank Pt West - Shore		0	0	0	0	0	0.0%	0	
Hlina Creek - Shore	Oct. 15-20, 2009.	70	30	40	11	19	99.0%	19	Adams R. sex ratio and percent spawn used.
Lee Creek - Shore	Oct. 15-22, 2009.	117	50	67	19	31	99.0%	31	Adams R. sex ratio and percent spawn used.
Misc. South Side - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Onyx Creek - Shore		0	0	0	0	0	0.0%	0	
Ross Creek - Shore	Oct. 10-20, 2009.	686	520	166	271	249	87.0%	217	
Scotch Creek - Shore	Oct. 10-20, 2009.	414	318	96	175	143	94.4%	135	
Adams River	Oct. 10-17, 2009.	37,861	16,057	21,804	6,024	10,033	99.0%	9,928	
Hiuihill Creek <sup>b</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water.
Nikwikwaia Creek <sup>b</sup>		0	0	0	0	0	0.0%	0	
Onyx Creek <sup>b</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Ross Creek <sup>b</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Scotch Creek		25	11	14	4	7	99.0%	7	Adams R. sex ratio and percent spawn used.
Sub-total:		39,173	16,986	22,187	6,504	10,482	98.6%	10,337	
<u>Shuswap Lake - Salmon Arm</u>									
Salmon Arm - shore									
Knight Creek - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Misc. East Side - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Misc. North Side - Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Misc. South Side -Shore <sup>b</sup>		0	0	0	0	0	0.0%	0	
Reinecker Creek - Shore		16	1	15	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.

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WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Canoe Creek <sup>6</sup>		0	0	0	0	0	0.0%	0	
Eagle River		1,721	103	1,618	39	64	96.1%	61	L. Shuswap R. sex ratio and percent spawn used.
Perry River		5	0	5	0	0	96.1%	0	L. Shuswap R. sex ratio and percent spawn used.
Salmon River		0	0	0	0	0	0.0%	0	
Tappen Creek <sup>6</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water.
Yard Creek <sup>7</sup>		0	0	0	0	0	0.0%	0	
Sub-total:		1,742	104	1,638	39	65	95.4%	62	
<u>Shuswap Lake - Seymour Arm</u>									
Misc. Seymour Arm - Shore <sup>6</sup>		0	0	0	0	0	0.0%	0	
McNomee Creek <sup>3</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water
Seymour River		0	0	0	0	0	0.0%	0	
Sub-total:		0	0	0	0	0	0.0%	0	
<u>Shuswap River</u>									
Bessette Creek <sup>2</sup>		18	1	17	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.
Lower Shuswap River	Oct. 14-18, 2009.	9,448	566	8,882	214	352	96.1%	338	
Middle Shuswap River		529	32	497	12	20	96.1%	19	L. Shuswap R. sex ratio and percent spawn used.
Noisy Creek <sup>6</sup>		0	0	0	0	0	0.0%	0	
Tsuius Creek <sup>6</sup>		14	1	13	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.
Wap Creek <sup>6</sup>		79	5	74	2	3	96.1%	3	L. Shuswap R. sex ratio and percent spawn used.
Sub-total:		10,088	605	9,483	228	377	96.0%	362	
South Thompson River	Oct. 17-22, 2009.	229	168	61	58	110	98.0%	108	Little R. sex ratio and percent spawn used.
AREA TOTAL:		71,344	32,481	38,863	11,915	20,566	98.3%	20,208	
<u>NORTH THOMPSON</u>									
Barriere River	Sep. 12-16, 2009.	437	437	0	164	273	97.7%	267	Fennel Cr. sex ratio and percent spawn used.
Clearwater River	Sep. 2-9, 2009.	1,179	1,179	0	537	642	96.8%	622	Raft R. sex ratio and percent spawn used.
Fennell Creek	Aug. 29-Sep. 5, 2009.	1,170	1,170	0	438	732	97.7%	715	
Finn Creek		2	2	0	1	1	96.8%	1	Raft R. sex ratio and percent spawn used.
Grouse Creek <sup>3</sup>	Sep. 2-8, 2009.	40	40	0	18	22	96.8%	21	Raft R. sex ratio and percent spawn used.
Harper Creek		0	0	0	0	0	0.0%	0	
Hemp Creek <sup>3</sup>	Sep. 5-11, 2009.	45	45	0	20	25	96.8%	24	Raft R. sex ratio and percent spawn used.
Lemieux Creek	Sep. 9-16, 2009.	108	108	0	49	59	96.8%	57	Marginal access due to low water; Raft R. sex ratio and percent spawn used.
Lion Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
Mann Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
North Thompson River	Sep. 18-24, 2009.	3,186	3,186	0	1,452	1,734	99.9%	1,731	Minimum estimate; Raft R. sex ratio used.
Raft River	Sep. 2-12, 2009.	11,464	11,464	0	5,226	6,238	96.8%	6,039	
AREA TOTAL:		17,631	17,631	0	7,905	9,726	97.4%	9,477	
<u>CHILCOTIN SYSTEM</u>									
Chilko River (incl. Lake)	Sep. 12-19, 2009.	217,778	213,379	4,399	85,478	127,901	99.6%	127,367	
Taseko Lake		40	40	0	20	20	100.0%	20	Sex ratio and spawning success assumed.
AREA TOTAL:		217,818	213,419	4,399	85,498	127,921	99.6%	127,387	
<u>QUESNEL SYSTEM</u>									
<u>Horsefly River</u>									
Horsefly Channel		8,162	8,162	0	4,056	4,106	98.67%	4,051	Data provided by HEB channel operator; Horsefly R. percent spawn used.
Horsefly River	Sep. 5-17, 2009.	56,605	56,571	34	26,327	30,244	98.7%	29,840	

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Little Horsefly River	Sep. 15-22, 2009.	6,089	6,056	33	2,309	3,747	98.6%	3,694	
Lower McKinley Creek	Sep. 16-26, 2009.	9,621	9,621	0	3,307	6,314	99.0%	6,252	
Upper McKinley Creek	Sep. 10-15, 2009.	1,906	1,906	0	655	1,251	99.0%	1,239	L. McKinley Cr. sex ratio and % spawn used.
Moffat Creek		0	0	0	0	0	0.0%	0	
Tisdall Creek		0	0	0	0	0	0.0%	0	
Sub-total:		82,383	82,316	67	36,654	45,662	98.7%	45,076	
<u>Mitchell River</u>									
Cameron Creek	Sep. 15-16, 2009.	234	234	0	100	134	99.7%	134	Mitchell R. sex ratio and % spawn used.
Mitchell River	Sep. 12-18, 2009.	45,741	45,741	0	19,513	26,228	99.7%	26,148	
Penfold Creek	Sep. 15-16, 2009.	90	90	0	38	52	99.7%	52	Mitchell R. sex ratio and % spawn used.
Sub-total:		46,065	46,065	0	19,651	26,414	99.7%	26,334	
<u>Quesnel Lake Tributaries - East Arm</u>									
Big Slide - Shore	Sep. 15-22, 2009.	394	394	0	142	252	100.0%	252	
Bill Miner Creek		0	0	0	0	0	0.0%	0	
Bill Miner Creek - Shore	Sep. 22-29, 2009.	101	101	0	46	55	97.2%	53	Summit Cr. sex ratio and % spawn used.
Blue Lead Creek	Sep. 27- Oct 3, 2009.	693	693	0	313	380	100.0%	380	Summit Cr. sex ratio used.
Blue Lead Creek - Shore	Sep. 15-22, 2009.	916	916	0	413	503	100.0%	503	Summit Cr. sex ratio used.
Bouldery Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Bouldery Creek - Shore	Sep. 15-22, 2009.	1,253	1,253	0	566	687	100.0%	687	Summit Cr. sex ratio used.
Bouldery Cr. - Shore 2 km east	Sep. 15-22, 2009.	13	13	0	6	7	100.0%	7	Summit Cr. sex ratio used.
Elysia - Shore	Sep. 24, 2009.	36	36	0	15	21	99.4%	21	L. Wasko Cr. sex ratio and % spawn used.
Franks Creek - Shore		0	0	0	0	0	0.0%	0	
Junction Shore		0	0	0	0	0	0.0%	0	
Killdog Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Killdog Creek - Shore		0	0	0	0	0	0.0%	0	
Lynx Creek	Sep. 22-29, 2009.	140	140	0	63	77	97.2%	75	Summit Cr. sex ratio and % spawn used.
Lynx Creek - Shore	Sep. 15-22, 2009.	95	95	0	43	52	97.2%	51	Summit Cr. sex ratio and % spawn used.
Slate Bay		0	0	0	0	0	0.0%	0	
Summit Creek	Sep. 20-27, 2009.	418	418	0	189	229	97.2%	223	
Unnamed Point		0	0	0	0	0	0.0%	0	
Sub-total:		4,059	4,059	0	1,796	2,263	99.5%	2,252	
<u>Quesnel Lake Tributaries - North Arm</u>									
Bear Beach - Shore	Sep. 21-28, 2009.	198	198	0	84	114	99.70%	114	Mitchell R. sex ratio and % spawn used.
Betty Frank's - Shore	Sep. 25-28, 2009.	65	65	0	28	37	0.996953405	37	Mitchell R. sex ratio and % spawn used.
Bowling Point	Sep. 14-21, 2009.	455	455	0	194	261	99.70%	260	Mitchell R. sex ratio and % spawn used.
Deception Point	Sep. 14-21, 2009.	8,296	8,296	0	3,858	4,438	99.7%	4,427	
Devoe Creek		0	0	0	0	0	0.0%	0	No access due to low water.
Devoe Creek - Shore	Sep. 21-28, 2009.	40	40	0	21	19	100.0%	19	Grain Cr. sex ratio and % spawn used.
Goose Point - Shore	Sep. 14-21, 2009.	1,114	1,114	0	475	639	99.7%	637	Mitchell R. sex ratio and % spawn used.
Grain Creek	Sep. 19-26, 2009.	556	556	0	297	259	100.0%	259	
Grain Creek - Shore	Sep. 20-27, 2009.	545	545	0	291	254	100.0%	254	Grain Cr. sex ratio and % spawn used.
Isaiah Creek	Sep. 24-28, 2009.	32	32	0	16	16	100.0%	16	
Junction Creek	Sep. 14-21, 2009.	45	45	0	19	26	100.0%	26	
Long Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Long Creek - Shore	Sep. 14-24, 2009.	724	724	0	387	337	100.0%	337	Grain Cr. sex ratio and % spawn used.
Marten Creek - Shore		0	0	0	0	0	0.0%	0	
Opa Beach		0	0	0	0	0	0.0%	0	
Roaring River		0	0	0	0	0	0.0%	0	
Roaring River - Shore	Sep. 21-27, 2009.	382	382	0	163	219	99.7%	218	Mitchell R. sex ratio and % spawn used.
Unnamed Cove	Sep. 21-24, 2009.	1,003	1,003	0	536	467	100.0%	467	Grain Cr. sex ratio and % spawn used.



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WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Wasko Creek, lower	Sep. 14-21, 2009.	3,107	3,107	0	1,276	1,831	99.4%	1,820	
Wasko Creek, upper	Sep. 15, 2009.	16	16	0	7	9	99.4%	9	L. Wasko Cr. sex ratio and % spawn used.
Wasko Creek - Shore		0	0	0	0	0	0.0%	0	
Watt Creek	Sep. 21-28, 2009.	101	101	0	43	58	99.7%	58	Mitchell R. sex ratio and % spawn used.
Watt Creek - Shore	Sep. 14-21, 2009.	281	281	0	120	161	99.7%	161	Mitchell R. sex ratio and % spawn used.
Sub-total:		16,960	16,960	0	7,815	9,145	99.7%	9,119	
<u>Quesnel Lake Tributaries - West Arm</u>									
Abbot Creek		0	0	0	0	0	0.00%	0	
Hazeltine Creek		0	0	0	0	0	0.00%	0	Limited access due to low water.
Spusks Creek		0	0	0	0	0	0.00%	0	No access due to low water.
Tasse Creek		0	0	0	0	0	0.00%	0	Limited access due to low water.
Tasse Creek - Shore		0	0	0	0	0	0.00%	0	
Whiffle Creek		0	0	0	0	0	0.00%	0	Limited access due to low water.
Sub-total:		0	0	0	0	0	0.0%	0	
AREA TOTAL:		149,467	149,400	67	65,916	83,484	99.2%	82,781	
<u>EARLY STUART</u>									
<u>Driftwood River</u>									
Blackwater Creek		6	6	0	3	3	95.5%	3	Minimum estimate (survey conducted by CSTC); Frypan Cr. sex ratio and % spawn used.
Driftwood River	Aug. 2-7, 2009.	6,531	6,531	0	3,256	3,275	95.5%	3,126	Helicopter overflight; Frypan Cr. sex and percent spawn used.
Kastberg Creek		0	0	0	0	0	0.0%	0	Helicopter overflight.
Kotsine River	Aug. 2-7, 2009.	187	187	0	93	94	95.5%	90	Helicopter overflight; Frypan Cr. sex ratio and percent spawn used.
Lion Creek	Aug. 4-8, 2009.	301	301	0	150	151	42.1%	64	Helicopter overflight; Frypan Cr. sex ratio used.
Porter Creek	Aug. 4-8, 2009.	1,267	1,267	0	632	635	95.5%	606	Surveys conducted by CSTC; Frypan Cr. sex ratio and percent spawn used.
Sub-total:		8,292	8,292	0	4,134	4,158	93.5%	3,889	
<u>Takla Lake Tributaries - Northwest Arm</u>									
Crow Creek	Aug. 1-6, 2009.	549	549	0	239	310	97.9%	304	Point Cr. sex ratio and percent spawn used.
Dust Creek		2,318	2,318	0	1,011	1,307	97.9%	1,280	Helicopter overflight; Point Cr. sex ratio and percent spawn used.
Hooker Creek		144	144	0	63	81	97.9%	79	Point Cr. sex ratio and percent spawn used.
McDougall Creek	Aug. 1-6, 2009.	69	69	0	30	39	97.9%	38	Point Cr. sex ratio and percent spawn used.
Point Creek	Aug. 3-8, 2009.	320	320	0	139	181	97.9%	177	
Sinta Creek		246	246	0	107	139	97.9%	136	Point Cr. sex ratio and percent spawn used.
Sub-total:		3,646	3,646	0	1,589	2,057	97.9%	2,014	
<u>Takla Lake Tributaries - Northeast Arm</u>									
Ankwill Creek	Aug. 4-10, 2009.	1,579	1,579	0	787	792	95.5%	756	Surveys conducted by CSTC; Frypan Cr. sex ratio and percent spawn used.
Blanchette Creek		0	0	0	0	0	0.0%	0	
Forsythe Creek	Aug. 3-8, 2009.	702	702	0	332	370	97.8%	362	
French Creek		0	0	0	0	0	0.0%	0	Surveys conducted by CSTC.
Frypan Creek	Aug. 4-9, 2009.	1,846	1,846	0	920	926	95.5%	884	
Hudson's Bay Creek	Aug. 6-10, 2009.	38	38	0	19	19	95.5%	18	Frypan Cr. sex ratio and percent spawn used.
Shale Creek	Aug. 2-6, 2009.	435	435	0	194	241	98.4%	237	
Unnamed Creek (North of Blanchette)		0	0	0	0	0	0.0%	0	
5 Mile Creek	Aug. 12-14, 2009.	35	35	0	16	19	98.4%	19	Shale Cr. sex ratio and percent spawn used.
10 Mile Creek		0	0	0	0	0	0.0%	0	

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15 Mile Creek	Aug. 4-9, 2009.	123	123	0	55	68	95.9%	65	Shale Cr. sex ratio used.
25 Mile Creek		0	0	0	0	0	0.0%	0	
Sub-total:		4,758	4,758	0	2,323	2,435	96.1%	2,341	
<u>Takla Lake Tributaries - Main Arm</u>									
Bivouac Creek	Jul. 30-Aug. 3, 2009.	1,384	1,384	0	697	687	98.6%	678	Narrows Cr. sex ratio and used.
Gluske Creek	Aug. 3-10, 2009.	2,130	2,130	0	1,113	1,017	96.5%	982	
Leo Creek	Jul. 30- Aug. 4, 2009.	531	531	0	279	252	70.5%	178	
Narrows Creek	Jul. 31- Aug. 1, 2009.	2,491	2,491	0	1,117	1,374	88.8%	1,220	
Sakeniche River	Aug. 11-15, 2009.	530	530	0	238	292	73.9%	216	
Sandpoint Creek	Aug. 2-7, 2009.	1,078	1,078	0	497	581	99.4%	577	
Takla Lake - shore <sup>3</sup>		0	0	0	0	0	0.0%	0	
Sub-total:		8,144	8,144	0	3,941	4,203	91.6%	3,851	
<u>Middle River Tributaries</u>									
Forfar Creek	Aug. 2-10, 2009.	3,570	3,570	0	1,755	1,815	95.4%	1,732	Rossette Cr. sex ratio and percent spawn used.
Kazchek Creek	Aug. 11-16, 2009.	34	34	0	16	18	95.2%	17	
Kynock Creek	Aug. 2-9, 2009.	4,438	4,438	0	2,235	2,203	96.9%	2,135	
Middle River		0	0	0	0	0	0.0%	0	
Rossette Creek	Aug. 3-8, 2009.	1,829	1,829	0	860	969	95.2%	923	
Sub-total:		9,871	9,871	0	4,866	5,005	96.0%	4,807	
<u>Trembleur Lake Tributaries</u>									
Butterfield Creek <sup>2</sup>		0	0	0	0	0	0.00%	0	Helicopter overflight; Felix Cr. sex ratio and percent spawn used.
Felix Creek	Aug. 3-10, 2009.	7,230	7,230	0	3,858	3,372	97.2%	3,277	
Fleming Creek	Aug. 3-10, 2009.	422	422	0	225	197	97.2%	191	
Paula Creek	Aug. 3-10, 2009.	2,896	2,896	0	1,279	1,617	92.5%	1,496	Helicopter overflight; Felix Cr. sex ratio and percent spawn used.
Tildesley Creek	Aug. 3-10, 2009.	32	32	0	17	15	97.2%	15	
Sub-total:		10,580	10,580	0	5,379	5,201	95.7%	4,979	
<u>Stuart Lake Tributaries</u>									
Sowchea Creek		6	6	0	3	3	97.2%	3	Minimum estimate; Felix Cr. sex ratio and percent spawn used.
Sub-total:		6	6	0	3	3	97.2%	3	
AREA TOTAL:		45,297	45,297	0	22,235	23,062	94.9%	21,884	
<u>NECHAKO</u>									
Francois Lake		0	0	0	0	0	0.0%	0	Data provided by HEB; Stellako R. sex ratio and % spawn used.
Glacier Creek		0	0	0	0	0	0.0%	0	
Nadina Channel		4,394	4,392	2	2,569	1,823	87.8%	1,601	
Nadina River	Sep. 14-18, 2009.	7,008	7,008	0	3,463	3,545	76.0%	2,117	
Nechako River		253	252	1	107	145	99.6%	144	
Nithi River		0	0	0	0	0	0.0%	0	
Ormonde Creek		0	0	0	0	0	0.0%	0	
Stellako River	Sep. 28-Oct. 1, 2009.	27,627	27,541	86	11,692	15,849	99.6%	15,770	
AREA TOTAL:		39,282	39,193	89	17,831	21,362	94.6%	19,632	
<u>LATE STUART</u>									
Kazchek Creek	Sep. 14-19, 2009.	1,271	1,271	0	637	634	100.0%	634	Tachie R. adult sex ratio used.
Kuzkwa Creek	Sep. 15-20, 2009.	4,109	4,109	0	2,058	2,051	83.6%	1,714	Tachie R. adult sex ratio used.
Middle River	Sep. 14-21, 2009.	28,831	28,831	0	14,441	14,390	98.9%	14,237	Tachie R. adult sex ratio used.

TABLE 1. 2009 NEAR FINAL FRASER RIVER SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Pinchi Creek	Sep. 16-21, 2009.	5,276	5,276	0	2,198	3,078	99.2%	3,054	
Sakeniche Creek	Sep. 14-19, 2009.	58	58	0	29	29	99.8%	29	Tachie R. adult sex ratio and % spawn used.
Sowchea Creek		4	4	0	2	2	99.8%	2	Tachie R. adult sex ratio and % spawn used.
Tachie River	Sep. 16-23, 2009.	47,452	47,415	37	23,744	23,671	99.8%	23,601	
AREA TOTAL:		87,001	86,964	37	43,109	43,855	98.7%	43,271	
<u>UPPER FRASER</u>									
Bowron River, lower <sup>c</sup>	Sep. 8-12, 2009.	356	356	0	178	178	93.0%	166	Sex ratio assumed; Upper Bowron R. % spawn used.
Bowron River, upper	Sep. 4-7, 2009.	1,792	1,792	0	896	896	93.0%	833	Sex ratio assumed.
Huckey Creek <sup>4</sup>	Sep. 4-7, 2009.	22	22	0	11	11	93.0%	10	Sex ratio assumed; Bowron R. percent spawn used.
Pomeroy Creek <sup>4</sup>		0	0	0	0	0	0.0%	0	
Sus Creek <sup>4</sup>		0	0	0	0	0	0.0%	0	
AREA TOTAL:		2,170	2,170	0	1,085	1,085	93.0%	1,009	
TOTAL:		1,103,321	1,055,529	47,792	521,618	533,911	96.4%	513,532	

<sup>a</sup> Effective female totals do not include fish killed for samples.<sup>1</sup> No historical sockeye spawning population on record for this cycle year.<sup>2</sup> No historical sockeye spawning population on record.<sup>3</sup> Not previously surveyed on this cycle year.<sup>4</sup> Historical escapements previously included as part of the Bowron River escapement.<sup>5</sup> Estimate includes sockeye spawning tributary populations (North Boise, South Boise, Corbold and Fish Hatchery creeks)<sup>6</sup> No historical late run sockeye spawning population on record for this cycle year.<sup>7</sup> No historical late run sockeye spawning population on record.

TABLE 2. 2009 NEAR FINAL EARLY STUART SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>EARLY STUART</u>									
<u>Driftwood River</u>									
Blackwater Creek		6	6	0	3	3	95.5%	3	Minimum estimate (survey conducted by CSTC); Frypan Cr. sex ratio and % spawn used.
Driftwood River	Aug. 2-7, 2009.	6,531	6,531	0	3,256	3,275	95.5%	3,126	Helicopter overflight; Frypan Cr. sex and percent spawn used.
Kastberg Creek		0	0	0	0	0	0.0%	0	Helicopter overflight.
Kotsine River	Aug. 2-7, 2009.	187	187	0	93	94	95.5%	90	Helicopter overflight; Frypan Cr. sex ratio and percent spawn used.
Lion Creek	Aug. 4-8, 2009.	301	301	0	150	151	42.1%	64	Helicopter overflight; Frypan Cr. sex ratio used.
Porter Creek	Aug. 4-8, 2009.	1,267	1,267	0	632	635	95.5%	606	Surveys conducted by CSTC; Frypan Cr. sex ratio and percent spawn used.
Sub-total:		8,292	8,292	0	4,134	4,158	93.5%	3,889	
<u>Takla Lake Tributaries - Northwest Arm</u>									
Crow Creek	Aug. 1-6, 2009.	549	549	0	239	310	97.9%	304	Point Cr. sex ratio and percent spawn used.
Dust Creek		2,318	2,318	0	1,011	1,307	97.9%	1,280	Helicopter overflight; Point Cr. sex ratio and percent spawn used.
Hooker Creek		144	144	0	63	81	97.9%	79	Point Cr. sex ratio and percent spawn used.
McDougall Creek	Aug. 1-6, 2009.	69	69	0	30	39	97.9%	38	Point Cr. sex ratio and percent spawn used.
Point Creek	Aug. 3-8, 2009.	320	320	0	139	181	97.9%	177	
Sinta Creek		246	246	0	107	139	97.9%	136	Point Cr. sex ratio and percent spawn used.
Sub-total:		3,646	3,646	0	1,589	2,057	97.9%	2,014	
<u>Takla Lake Tributaries - Northeast Arm</u>									
Ankwill Creek	Aug. 4-10, 2009.	1,579	1,579	0	787	792	95.5%	756	Surveys conducted by CSTC; Frypan Cr. sex ratio and percent spawn used.
Blanchette Creek		0	0	0	0	0	0.0%	0	
Forsythe Creek	Aug. 3-8, 2009.	702	702	0	332	370	97.8%	362	
French Creek		0	0	0	0	0	0.0%	0	Surveys conducted by CSTC.
Frypan Creek	Aug. 4-9, 2009.	1,846	1,846	0	920	926	95.5%	884	
Hudson's Bay Creek	Aug. 6-10, 2009.	38	38	0	19	19	95.5%	18	Frypan Cr. sex ratio and percent spawn used.
Shale Creek	Aug. 2-6, 2009.	435	435	0	194	241	98.4%	237	
Unnamed Creek (N. of Blanchette)		0	0	0	0	0	0.0%	0	
5 Mile Creek	Aug. 12-14, 2009.	35	35	0	16	19	98.4%	19	Shale Cr. sex ratio and percent spawn used.
10 Mile Creek		0	0	0	0	0	0.0%	0	
15 Mile Creek	Aug. 4-9, 2009.	123	123	0	55	68	95.9%	65	Shale Cr. sex ratio used.
25 Mile Creek		0	0	0	0	0	0.0%	0	
Sub-total:		4,758	4,758	0	2,323	2,435	96.1%	2,341	
<u>Takla Lake Tributaries - Main Arm</u>									
Bivouac Creek	Jul. 30-Aug. 3, 2009.	1,384	1,384	0	697	687	98.6%	678	
Gluske Creek	Aug. 3-10, 2009.	2,130	2,130	0	1,113	1,017	96.5%	982	

TABLE 2. 2009 NEAR FINAL EARLY STUART SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Leo Creek	Jul. 30- Aug. 4, 2009.	531	531	0	279	252	70.5%	178	
Narrows Creek	Jul. 31- Aug. 1, 2009.	2,491	2,491	0	1,117	1,374	88.8%	1,220	
Sakeniche River	Aug. 11-15, 2009.	530	530	0	238	292	73.9%	216	Narrows Cr. sex ratio and used.
Sandpoint Creek	Aug. 2-7, 2009.	1,078	1,078	0	497	581	99.4%	577	
Takla Lake - shore <sup>2</sup>		0	0	0	0	0	0.0%	0	
Sub-total:		8,144	8,144	0	3,941	4,203	91.6%	3,851	
<u>Middle River Tributaries</u>									
Forfar Creek	Aug. 2-10, 2009.	3,570	3,570	0	1,755	1,815	95.4%	1,732	
Kazchek Creek	Aug. 11-16, 2009.	34	34	0	16	18	95.2%	17	Rossette Cr. sex ratio and percent spawn used.
Kynock Creek	Aug. 2-9, 2009.	4,438	4,438	0	2,235	2,203	96.9%	2,135	
Middle River		0	0	0	0	0	0.0%	0	
Rossette Creek	Aug. 3-8, 2009.	1,829	1,829	0	860	969	95.2%	923	
Sub-total:		9,871	9,871	0	4,866	5,005	96.0%	4,807	
<u>Trembleur Lake Tributaries</u>									
Butterfield Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Felix Creek	Aug. 3-10, 2009.	7,230	7,230	0	3,858	3,372	97.2%	3,277	
Fleming Creek	Aug. 3-10, 2009.	422	422	0	225	197	97.2%	191	Helicopter overflight; Felix Cr. sex ratio and percent spawn used.
Paula Creek	Aug. 3-10, 2009.	2,896	2,896	0	1,279	1,617	92.5%	1,496	
Tildesley Creek	Aug. 3-10, 2009.	32	32	0	17	15	97.2%	15	Helicopter overflight; Felix Cr. sex ratio and percent spawn used.
Sub-total:		10,580	10,580	0	5,379	5,201	95.7%	4,979	
<u>Stuart Lake Tributaries</u>									
Sowchea Creek		6	6	0	3	3	97.2%	3	Minimum estimate; Felix Cr. sex ratio and percent spawn used.
Sub-total:		6	6	0	3	3	97.2%	3	
TOTAL:		45,297	45,297	0	22,235	23,062	94.9%	21,884	

<sup>a</sup> Effective female totals do not include fish killed for samples.<sup>1</sup> No historical sockeye spawning population on record.<sup>2</sup> Not previously surveyed on this cycle year.

TABLE 3. 2009 NEAR FINAL EARLY SUMMER RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>LOWER FRASER RIVER</u>									
Chilliwack Lake		504	504	0	276	228	100.0%	228	
Dolly Varden Creek	Aug. 20-24, 2009.	5,083	5,083	0	2,918	2,165	98.2%	2,127	Nathatlatch R. sex ratio used.
Nahatlatch Lake		336	336	0	157	179	96.1%	172	
Nahatlatch River	Sep. 11-13, 2009.	1,103	1,103	0	514	589	96.4%	568	
Pitt River, upper <sup>4</sup>	Sep. 10-12, 2009.	31,042	31,034	8	12,001	19,033	98.8%	18,119	Includes 804 males and 679 females killed for hatchery eggtake.
AREA TOTAL:		38,068	38,060	8	15,866	22,194	98.6%	21,214	
<u>SETON-ANDERSON</u>									
Gates Channel		5,704	5,190	514	2,100	3,090	89.7%	2,771	
Gates Creek	Sep. 8-12, 2009.	5,152	4,688	464	1,897	2,791	89.7%	2,503	Gates Channel sex ratio and percent spawn used.
AREA TOTAL:		10,856	9,878	978	3,997	5,881	89.7%	5,274	
<u>EARLY SOUTH THOMPSON</u>									
Adams River <sup>1</sup>		0	0	0	0	0	0.0%	0	
Adams Channel <sup>2</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Anstey River	Sep. 6-15, 2009.	410	376	34	149	227	99.4%	226	Seymour R. sex ratio and percent spawn used.
Burton Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
Cayenne Creek	Sep. 2-7, 2009.	232	232	0	116	116	100.0%	116	Sex ratio and spawning success assumed.
Celista Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Crazy Creek	Sep. 6-10, 2009.	7	6	1	2	4	99.4%	4	Seymour R. sex ratio and percent spawn used.
Eagle River	Sep. 10-15, 2009.	2,038	1,870	168	743	1,127	99.4%	1,121	Seymour R. sex ratio and percent spawn used.
Hunakwa Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Loftus Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	Marginal access due to low water.
McNomee Creek	Sep. 7-14, 2009.	29	27	2	11	16	99.4%	16	Seymour R. sex ratio and percent spawn used.
Momich River		0	0	0	0	0	0.0%	0	
Perry River	Sep. 6-13, 2009.	65	60	5	24	36	99.4%	36	Seymour R. sex ratio and percent spawn used.
Scotch Creek	Sep. 2-6, 2009.	5,770	4,672	1,098	1,980	2,692	99.0%	2,665	
Seymour River	Sep. 7-14, 2009.	5,598	5,137	461	2,042	3,095	99.4%	3,077	
Upper Adams River		36	36	0	18	18	100.0%	18	Sex ratio and spawning success assumed.
Yard Creek	Sep. 1-10, 2009.	56	51	5	20	31	99.4%	31	Seymour R. sex ratio and percent spawn used.
AREA TOTAL:		14,241	12,467	1,774	5,105	7,362	99.3%	7,310	
<u>NORTH THOMPSON</u>									
Barriere River	Sep. 12-16, 2009.	437	437	0	164	273	97.7%	267	Fennel Cr. sex ratio and percent spawn used.
Clearwater River	Sep. 2-9, 2009.	1,179	1,179	0	537	642	96.8%	622	Raft R. sex ratio and percent spawn used.
Fennell Creek	Aug. 29-Sep. 5, 2009.	1,170	1,170	0	438	732	97.7%	715	
Finn Creek		2	2	0	1	1	96.8%	1	Raft R. sex ratio and percent spawn used.
Grouse Creek <sup>2</sup>	Sep. 2-8, 2009.	40	40	0	18	22	96.8%	21	Raft R. sex ratio and percent spawn used.
Harper Creek		0	0	0	0	0	0.0%	0	
Hemp Creek <sup>2</sup>	Sep. 5-11, 2009.	45	45	0	20	25	96.8%	24	Raft R. sex ratio and percent spawn used.
Lemieux Creek	Sep. 9-16, 2009.	108	108	0	49	59	96.8%	57	Marginal access due to low water; Raft R. sex ratio and percent spawn used.

TABLE 3. 2009 NEAR FINAL EARLY SUMMER RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Lion Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
Mann Creek		0	0	0	0	0	0.0%	0	Marginal access due to low water.
North Thompson River	Sep. 18-24, 2009.	3,186	3,186	0	1,452	1,734	99.9%	1,731	Minimum estimate; Raft R. sex ratio used.
Raft River	Sep. 2-12, 2009.	11,464	11,464	0	5,226	6,238	96.8%	6,039	
AREA TOTAL:		17,631	17,631	0	7,905	9,726	97.4%	9,477	
<u>CHILCOTIN SYSTEM</u>									
Taseko Lake		40	40	0	20	20	100.0%	20	Sex ratio and spawning success assumed.
AREA TOTAL:		40	40	0	20	20	100.0%	20	
<u>NECHAKO</u>									
Glacier Creek		0	0	0	0	0	0.0%	0	
Nadina Channel		4,394	4,392	2	2,569	1,823	87.8%	1,601	
Nadina River	Sep. 14-18, 2009.	7,008	7,008	0	3,463	3,545	76.0%	2,117	
AREA TOTAL:		11,402	11,400	2	6,032	5,368	77.6%	3,718	
<u>UPPER FRASER</u>									
Bowron River, lower <sup>b</sup>	Sep. 8-12, 2009.	356	356	0	178	178	93.0%	166	Sex ratio assumed; Upper Bowron R. % spawn used.
Bowron River, upper	Sep. 4-7, 2009.	1,792	1,792	0	896	896	93.0%	833	Sex ratio assumed.
Huckey Creek <sup>3</sup>	Sep. 4-7, 2009.	22	22	0	11	11	93.0%	10	Sex ratio assumed; Bowron R. percent spawn used.
Pomeroy Creek <sup>3</sup>		0	0	0	0	0	0.0%	0	
Sus Creek <sup>3</sup>		0	0	0	0	0	0.0%	0	
AREA TOTAL:		2,170	2,170	0	1,085	1,085	93.0%	1,009	
TOTALS:		94,408	91,646	2,762	40,010	51,636	95.3%	48,022	

<sup>a</sup> Effective female totals do not include fish killed for samples.<sup>1</sup> No historical sockeye spawning population on record for this cycle year.<sup>2</sup> Not previously surveyed on this cycle year.<sup>3</sup> Historical escapements previously included as part of the Bowron River escapement.<sup>4</sup> Estimate includes tributary populations (North Boise, South Boise, Corbold, Blue, Cypress and Fish Hatchery creeks).<sup>b</sup> No historical sockeye spawning population on record.

TABLE 4. 2009 NEAR FINAL SUMMER RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<b>CHILCOTIN SYSTEM</b>									
Chilko River (incl. Lake)	Sep. 12-19, 2009.	217,778	213,379	4,399	85,478	127,901	99.6%	127,367	
AREA TOTAL:		217,778	213,379	4,399	85,478	127,901	99.6%	127,367	
<b>MID-FRASER RIVER</b>									
Hawks Creek		0	0	0	0	0	0.0%	0	No access due to low water.
Williams Lake River		0	0	0	0	0	0.0%	0	No access due to low water.
AREA TOTAL:		0	0	0	0	0	0.0%	0	
<b>QUESNEL SYSTEM</b>									
<b>Horsefly River</b>									
Horsefly Channel		8,162	8,162	0	4,056	4,106	98.7%	4,051	Data provided by HEB channel operator; Horsefly R. percent spawn used.
Horsefly River	Sep. 5-17, 2009.	56,605	56,571	34	26,327	30,244	98.7%	29,840	
Little Horsefly River	Sep. 15-22, 2009.	6,089	6,056	33	2,309	3,747	98.6%	3,694	
Lower McKinley Creek	Sep. 16-26, 2009.	9,621	9,621	0	3,307	6,314	99.0%	6,252	
Upper McKinley Creek	Sep. 10-15, 2009.	1,906	1,906	0	655	1,251	99.0%	1,239	L. McKinley Cr. sex ratio and % spawn used.
Moffat Creek		0	0	0	0	0	0.0%	0	
Tisdall Creek		0	0	0	0	0	0.0%	0	
Sub-total:		82,383	82,316	67	36,654	45,662	98.7%	45,076	
<b>Mitchell River</b>									
Cameron Creek	Sep. 15-16, 2009.	234	234	0	100	134	99.7%	134	Mitchell R. sex ratio and % spawn used.
Mitchell River	Sep. 12-18, 2009.	45,741	45,741	0	19,513	26,228	99.7%	26,148	
Penfold Creek	Sep. 15-16, 2009.	90	90	0	38	52	99.7%	52	Mitchell R. sex ratio and % spawn used.
Sub-total:		46,065	46,065	0	19,651	26,414	99.7%	26,334	
<b>Quesnel Lake Tributaries - East Arm</b>									
Big Slide - Shore	Sep. 15-22, 2009.	394	394	0	142	252	100.0%	252	
Bill Miner Creek		0	0	0	0	0	0.0%	0	
Bill Miner Creek - Shore	Sep. 22-29, 2009.	101	101	0	46	55	97.2%	53	Summit Cr. sex ratio and % spawn used.
Blue Lead Creek	Sep. 27- Oct 3, 2009.	693	693	0	313	380	100.0%	380	Summit Cr. sex ratio used.
Blue Lead Creek - Shore	Sep. 15-22, 2009.	916	916	0	413	503	100.0%	503	Summit Cr. sex ratio used.
Bouldery Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Bouldery Creek - Shore	Sep. 15-22, 2009.	1,253	1,253	0	566	687	100.0%	687	Summit Cr. sex ratio used.
Bouldery Cr. - Shore 2 km east	Sep. 15-22, 2009.	13	13	0	6	7	100.0%	7	Summit Cr. sex ratio used.
Elysia - Shore	Sep. 24, 2009.	36	36	0	15	21	99.4%	21	L. Wasko Cr. sex ratio and % spawn used.
Franks Creek - Shore		0	0	0	0	0	0.0%	0	
Junction Shore		0	0	0	0	0	0.0%	0	
Killdog Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Killdog Creek - Shore		0	0	0	0	0	0.0%	0	
Lynx Creek	Sep. 22-29, 2009.	140	140	0	63	77	97.2%	75	Summit Cr. sex ratio and % spawn used.
Lynx Creek - Shore	Sep. 15-22, 2009.	95	95	0	43	52	97.2%	51	Summit Cr. sex ratio and % spawn used.



TABLE 4. 2009 NEAR FINAL SUMMER RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
Slate Bay		0	0	0	0	0	0.0%	0	
Summit Creek	Sep. 20-27, 2009.	418	418	0	189	229	97.2%	223	
Unnamed Point		0	0	0	0	0	0.0%	0	
Sub-total:		4,059	4,059	0	1,796	2,263	99.5%	2,252	
<u>Quesnel Lake Tributaries - North Arm</u>									
Bear Beach - Shore	Sep. 21-28, 2009.	198	198	0	84	114	99.7%	114	Mitchell R. sex ratio and % spawn used.
Betty Frank's - Shore	Sep. 25-28, 2009.	65	65	0	28	37	99.7%	37	Mitchell R. sex ratio and % spawn used.
Bowling Point	Sep. 14-21, 2009.	455	455	0	194	261	99.7%	260	Mitchell R. sex ratio and % spawn used.
Deception Point	Sep. 14-21, 2009.	8,296	8,296	0	3,858	4,438	99.7%	4,427	
Devoe Creek		0	0	0	0	0	0.0%	0	No access due to low water.
Devoe Creek - Shore	Sep. 21-28, 2009.	40	40	0	21	19	100.0%	19	Grain Cr. sex ratio and % spawn used.
Goose Point - Shore	Sep. 14-21, 2009.	1,114	1,114	0	475	639	99.7%	637	Mitchell R. sex ratio and % spawn used.
Grain Creek	Sep. 19-26, 2009.	556	556	0	297	259	100.0%	259	
Grain Creek - Shore	Sep. 20-27, 2009.	545	545	0	291	254	100.0%	254	Grain Cr. sex ratio and % spawn used.
Isaiah Creek	Sep. 24-28, 2009.	32	32	0	16	16	100.0%	16	
Junction Creek	Sep. 14-21, 2009.	45	45	0	19	26	100.0%	26	
Long Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Long Creek - Shore	Sep. 14-24, 2009.	724	724	0	387	337	100.0%	337	Grain Cr. sex ratio and % spawn used.
Marten Creek - Shore		0	0	0	0	0	0.0%	0	
Opa Beach		0	0	0	0	0	0.0%	0	
Roaring River		0	0	0	0	0	0.0%	0	
Roaring River - Shore	Sep. 21-27, 2009.	382	382	0	163	219	99.7%	218	Mitchell R. sex ratio and % spawn used.
Unnamed Cove	Sep. 21-24, 2009.	1,003	1,003	0	536	467	100.0%	467	Grain Cr. sex ratio and % spawn used.
Wasko Creek, lower	Sep. 14-21, 2009.	3,107	3,107	0	1,276	1,831	99.4%	1,820	
Wasko Creek, upper	Sep. 15, 2009.	16	16	0	7	9	99.4%	9	L. Wasko Cr. sex ratio and % spawn used.
Wasko Creek - Shore		0	0	0	0	0	0.0%	0	
Watt Creek	Sep. 21-28, 2009.	101	101	0	43	58	99.7%	58	Mitchell R. sex ratio and % spawn used.
Watt Creek - Shore	Sep. 14-21, 2009.	281	281	0	120	161	99.7%	161	Mitchell R. sex ratio and % spawn used.
Sub-total:		16,960	16,960	0	7,815	9,145	99.7%	9,119	
<u>Quesnel Lake Tributaries - West Arm</u>									
Abbot Creek		0	0	0	0	0	0.0%	0	
Hazeltine Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Spusks Creek		0	0	0	0	0	0.0%	0	No access due to low water.
Tasse Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Tasse Creek - Shore		0	0	0	0	0	0.0%	0	
Whiffle Creek		0	0	0	0	0	0.0%	0	Limited access due to low water.
Sub-total:		0	0	0	0	0	0.0%	0	
AREA TOTAL:		149,467	149,400	67	65,916	83,484	99.2%	82,781	

TABLE 4. 2009 NEAR FINAL SUMMER RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>NECHAKO</u>									
Francois Lake		0	0	0	0	0	0.0%	0	
Nechako River		253	252	1	107	145	99.6%	144	Data provided by HEB; Stellako R. sex ratio and % spawn used.
Nithi River		0	0	0	0	0	0.0%	0	
Ormonde Creek		0	0	0	0	0	0.0%	0	
Stellako River	Sep. 28-Oct. 1, 2009.	27,627	27,541	86	11,692	15,849	99.6%	15,770	
AREA TOTAL:		27,880	27,793	87	11,799	15,994	99.6%	15,914	
<u>LATE STUART</u>									
Kazchek Creek	Sep. 14-19, 2009.	1,271	1,271	0	637	634	100.0%	634	Tachie R. adult sex ratio used.
Kuzkwa Creek	Sep. 15-20, 2009.	4,109	4,109	0	2,058	2,051	83.6%	1,714	Tachie R. adult sex ratio used.
Middle River	Sep. 14-21, 2009.	28,831	28,831	0	14,441	14,390	98.9%	14,237	Tachie R. adult sex ratio used.
Pinchi Creek	Sep. 16-21, 2009.	5,276	5,276	0	2,198	3,078	99.2%	3,054	
Sakeniche Creek	Sep. 14-19, 2009.	58	58	0	29	29	99.8%	29	Tachie R. adult sex ratio and % spawn used.
Sowchea Creek		4	4	0	2	2	99.8%	2	Tachie R. adult sex ratio and % spawn used.
Tachie River	Sep. 16-23, 2009.	47,452	47,415	37	23,744	23,671	99.8%	23,601	
AREA TOTAL:		87,001	86,964	37	43,109	43,855	98.7%	43,271	
TOTALS:		482,126	477,536	4,590	206,302	271,234	99.3%	269,333	

<sup>a</sup> Effective female totals do not include fish killed for samples.

TABLE 5. 2009 NEAR FINAL LATE RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>LOWER FRASER RIVER</u>									
Cultus Lake		1,441	705	736	356	349	35.2%	123	Does not include 282 sockeye kept for broodstock
Widgeon Slough	Nov. 10-16, 2009.	1,559	1,556	3	735	821	97.8%	803	
AREA TOTAL:		3,000	2,261	739	1,091	1,170	79.1%	926	
<u>HARRISON-LILLOOET</u>									
Big Silver Creek	Sep. 20-24, 2009.	6,053	6,037	16	2,644	3,393	99.5%	3,377	
Birkenhead River		54,156	53,977	179	19,458	34,519	99.9%	34,475	Surveys conducted by Lil'wat First Nations.
Cogburn Creek	Sep. 22-29, 2009.	288	288	0	126	162	99.5%	161	Big Silver Cr. sex ratio and percent spawn used.
Crazy Creek		0	0	0	0	0	0.0%	0	Surveys conducted by Douglas First Nations.
Douglas Creek	Sep. 20-24, 2009.	263	263	0	125	138	100.0%	138	Surveys conducted by Douglas First Nations.
Green River		2	2	0	1	1	99.9%	1	Birkenhead R. adult sex ratio and % spawn used.
Harrison River	Nov. 9-16, 2009.	307,373	307,210	163	199,805	107,405	93.7%	100,603	
Railroad Creek		0	0	0	0	0	0.0%	0	
Sampson Creek		1,003	1,003		361	642	99.9%	641	Surveys conducted by Lil'wat First Nations; Birkenhead R. adult sex ratio & % spawn used.
Sloquet Creek		16	16	0	7	9	99.5%	9	Surveys conducted by Douglas First Nations. Big Silver Cr. adult sex ratio and percent spawn used.
Tipella Creek		11	11	0	5	6	99.5%	6	Surveys conducted by Douglas First Nations. Big Silver Cr. adult sex ratio and percent spawn used.
Weaver Channel		27,475	27,114	361	11,800	15,314	82.2%	11,254	Data provided by HEB channel operator.
Weaver Creek	Oct. 20-24, 2009.	8,498	8,442	56	4,783	3,659	44.2%	1,617	
AREA TOTAL:		405,138	404,363	775	239,115	165,248	92.2%	152,282	
<u>SETON-ANDERSON</u>									
Bridge River		172	172	0	86	86	100.0%	86	Data provided by Steve Hall of BC Hydro.
Portage Creek	Oct. 24-28, 2009.	1,836	1,773	63	864	909	87.1%	792	
AREA TOTAL:		2,008	1,945	63	950	995	88.2%	878	
<u>LATE SOUTH THOMPSON</u>									
<u>Adams Lake</u>									
Adams Lake - Shore									
Bush Creek - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Misc. East Side -Shore		0	0	0	0	0	0.0%	0	
Misc. South End -Shore	Oct. 15-20, 2009.	7	3	4	1	2	99.0%	2	Adams R. sex ratio and percent spawn used.
Pass Creek - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Bush Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Pass Creek <sup>1</sup>		63	0	63	0	0	0.0%	0	
Sub-total:		70	3	67	1	2	99.0%	2	
Little River	Oct. 10-20, 2009.	19,750	14,491	5,259	5,039	9,452	98.0%	9,259	

TABLE 5. 2009 NEAR FINAL LATE RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>Shuswap Lake - Anstey Arm</u>									
Anstey Arm - shore									
Four Mile Creek - Shore	Oct. 14-20, 2009.	157	67	90	25	42	99.0%	42	Adams R. sex ratio and percent spawn used.
Queest Creek - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Vanishing Creek - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Anstey River	Oct. 16-20, 2009.	40	17	23	6	11	99.0%	11	Adams R. sex ratio and percent spawn used.
Hunakwa Creek	Oct. 14-20, 2009.	95	40	55	15	25	99.0%	25	Adame R. sex ratio and percent spawn used.
Sub-total:		292	124	168	46	78	99.0%	78	
<u>Shuswap Lake - Main Arm</u>									
Main Arm - shore									
Adams River - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Cruikshank Pt West - Shore		0	0	0	0	0	0.0%	0	
Hlina Creek - Shore	Oct. 15-20, 2009.	70	30	40	11	19	99.0%	19	Adams R. sex ratio and percent spawn used.
Lee Creek - Shore	Oct. 15-22, 2009.	117	50	67	19	31	99.0%	31	Adams R. sex ratio and percent spawn used.
Misc. South Side - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Onyx Creek - Shore		0	0	0	0	0	0.0%	0	
Ross Creek - Shore	Oct. 10-20, 2009.	686	520	166	271	249	87.0%	217	
Scotch Creek - Shore	Oct. 10-20, 2009.	414	318	96	175	143	94.4%	135	
Adams River	Oct. 10-17, 2009.	37,861	16,057	21,804	6,024	10,033	99.0%	9,928	
Hiuihill Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water.
Nikwikwaia Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Onyx Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Ross Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	No access due to low water.
Scotch Creek		25	11	14	4	7	99.0%	7	Adams R. sex ratio and percent spawn used.
Sub-total:		39,173	16,986	22,187	6,504	10,482	98.6%	10,337	
<u>Shuswap Lake - Salmon Arm</u>									
Salmon Arm - shore									
Knight Creek - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Misc. East Side - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Misc. North Side - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Misc. South Side -Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
Reinecker Creek - Shore		16	1	15	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.
Canoe Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Eagle River		1,721	103	1,618	39	64	96.1%	61	L. Shuswap R. sex ratio and percent spawn used.
Perry River <sup>1</sup>		5	0	5	0	0	96.1%	0	L. Shuswap R. sex ratio and percent spawn used.
Salmon River		0	0	0	0	0	0.0%	0	
Tappen Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water.
Yard Creek <sup>2</sup>		0	0	0	0	0	0.0%	0	
Sub-total:		1,742	104	1,638	39	65	95.4%	62	

TABLE 5. 2009 NEAR FINAL LATE RUN SOCKEYE SALMON ESCAPEMENT SUMMARY

WATERSHED AREA	PEAK SPAWNING	TOTAL POPULATION	ADULTS	JACKS	MALES	FEMALES	% SPAWN	EFFECTIVE FEMALES <sup>a</sup>	REMARKS
<u>Shuswap Lake - Seymour Arm</u>									
Misc. Seymour Arm - Shore <sup>1</sup>		0	0	0	0	0	0.0%	0	
McNomee Creek <sup>3</sup>		0	0	0	0	0	0.0%	0	Limited access due to low water
Seymour River		0	0	0	0	0	0.0%	0	
Sub-total:		0	0	0	0	0	0.0%	0	
<u>Shuswap River</u>									
Bessette Creek		18	1	17	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.
Lower Shuswap River	Oct. 14-18, 2009.	9,448	566	8,882	214	352	96.1%	338	
Middle Shuswap River		529	32	497	12	20	96.1%	19	L. Shuswap R. sex ratio and percent spawn used.
Noisy Creek <sup>1</sup>		0	0	0	0	0	0.0%	0	
Tsuius Creek <sup>1</sup>		14	1	13	0	1	96.1%	1	L. Shuswap R. sex ratio and percent spawn used.
Wap Creek <sup>1</sup>		79	5	74	2	3	96.1%	3	L. Shuswap R. sex ratio and percent spawn used.
Sub-total:		10,088	605	9,483	228	377	96.0%	362	
South Thompson River	Oct. 17-22, 2009.	229	168	61	58	110	98.0%	108	Little R. sex ratio and percent spawn used.
AREA TOTAL:		71,344	32,481	38,863	11,915	20,566	98.3%	20,208	
<b>TOTALS:</b>									
		481,490	441,050	40,440	253,071	187,979	92.7%	174,294	

<sup>a</sup> Effective female totals do not include fish killed for samples.<sup>1</sup> No historical late run sockeye spawning population on record for this cycle year.<sup>2</sup> No historical late run sockeye spawning population on record.<sup>3</sup> Not previously surveyed on this cycle year.

**Fishery Regulation Update Summary: 2009**

Key:

OP: opens CL: closes

Revised to:

April 26, 2010

8:56 PM

UFN: until further notice

Fisheries shown are "commercial" fisheries unless otherwise noted.

Note: this table is intended as a rough guide only, please refer to the specific

Fishery Notices or News Releases to confirm information that is important to you.

CANADA								UNITED STATES				
B												
Date		G	H	Purse Seine		D	E	Treaty Indian		Non-Indian		
		Troll	Troll	John. Str. & Georgia Str.	Jdf. Str. (20)	Gillnet	Gillnet	4B, 5, 6C Gillnet	6,7, 7A Net	7, 7A Gillnet	7, 7A Purse Seine	7, 7A Reef Net
17-Aug	Mon											
18-Aug	Tue											
19-Aug	Wed											
20-Aug	Thu											
21-Aug	Fri											
22-Aug	Sat											
23-Aug	Sun											
24-Aug	Mon											
25-Aug	Tue											
26-Aug	Wed							OP:1200				OP:0500 CL:2100
27-Aug	Thu							24 h		OP:0800 CL:2459	OP:0500 CL:2100	OP:0500 CL:2100
28-Aug	Fri							24 h	OP:0500	OP:1500 CL: 2459	OP:1500 CL:2100	OP:0500 CL:2100
29-Aug	Sat							24 h	CL:0800	OP:0800 CL:1159	OP:0500 CL:2100	OP:0500 CL:2100
30-Aug	Sun		OP:0001	OP:0600 CL:2000				24 h	OP:0500			OP:0500 CL:2100
31-Aug	Mon		24 h	UFN				24 h	CL:0800	OP:0800 CL:1159	OP:0500 CL:2100	OP:0500 CL:2100
01-Sep	Tue		UFN	UFN				24 h	OP:0500			OP:0500 CL:2100
02-Sep	Wed		UFN	UFN				24 h	OP:0800			OP:0500 CL:2100
03-Sep	Thu		UFN	UFN				24 h	24 h	OP:1000 CL: 2359	OP:1000 CL:2101	OP:0500 CL:2100
04-Sep	Fri		UFN	UFN				24 h	24 h	OP:0800 CL:2359	OP: 0500 CL: 2101	OP:0500 CL:2100
05-Sep	Sat		UFN	UFN				24 h	24 h			OP:0500 CL:2100
06-Sep	Sun		UFN	UFN				24 h	24 h			OP:0500 CL:2100
07-Sep	Mon		UFN	UFN				24 h	24 h	OP:1000 CL:2359	OP:1000 CL:2100	OP:0500 CL:2100
08-Sep	Tue		UFN	UFN				24 h	24 h	OP:0800 CL:2359	OP:0500 CL:2100	OP:0500 CL:2100
09-Sep	Wed		UFN	UFN				24 h	24 h			
10-Sep	Thu		UFN	UFN				24 h	24 h	OP:1000 CL:2359	OP:1000 CL:2100	OP:0500 CL:2100
11-Sep	Fri		CL:2000	CL:2000				24 h	24 h			
12-Sep	Sat		OP:0001					24 h	24 h			

13-Sep	Sun		24 h	OP:0600 CL:2000				24 h	CL:2100			
14-Sep	Mon		24 h	OP:0600 CL:2000				CL:2359				
15-Sep	Tue		24 h	OP:0600 CL:2000								
16-Sep	Wed		24 h	OP:0600 CL:2000								
17-Sep	Thu		24 h	OP:0600 CL:2000								
18-Sep	Fri		CL:2359	OP:0600 CL:2000								
19-Sep	Sat			OP:0600 CL:2000								
20-Sep	Sun											
21-Sep	Mon											
22-Sep	Tue											
23-Sep	Wed											
24-Sep	Thu											
25-Sep	Fri											
26-Sep	Sat											
27-Sep	Sun											
28-Sep	Mon											
29-Sep	Tue											
30-Sep	Wed											