



**MEMORANDUM**

**To:** Distribution List

**Prepared by:** Jason Mahoney  
Assessment Biologist  
Stock Assessment  
Lower Fraser Area

**Date:** November 2<sup>nd</sup>, 2006

**FRASER RIVER RECREATIONAL FISHERY ASSESSMENT**

**May 1<sup>st</sup> to October 9<sup>th</sup>, 2006**

**Regulations**

May 1 to Oct 9: The Fraser River mainstem was open for salmon fishing downstream of the Alexandra Bridge to the mouth of the Fraser River (Area 29: tidal and Region 2: non-tidal/freshwater). Regulations for the study area (Mouth of Vedder to Hope) are summarized in the table below.

**Table 1** – Summary of regulations for the 2006 Lower Fraser River recreational fishery within the study area (mouth of Vedder River to Hope).

	<b>Retention Open</b>	<b>Daily Limit</b>	<b>Notes</b>
<b>Chinook</b>	May 1 to Dec 31	4	only 1 above 50 cm (62cm after Sep 6)
<b>Sockeye</b>	Aug 3 to Sep 6	2	
<b>Coho</b>	no opening	—	
<b>Chum</b>	May 1 to Dec 31	2	
<b>Pink</b>	—	—	non pink year

A complete listing of regulations can be viewed at the Fisheries and Oceans Canada Pacific Region Recreational Fishery webpage: [http://www.pac.dfo-mpo.gc.ca/recfish/default\\_e.htm](http://www.pac.dfo-mpo.gc.ca/recfish/default_e.htm)

All Fisheries and Oceans fishery notices can be viewed at: <http://ops.info.pac.dfo.ca/fishman/fnotice/fnotice.htm>

**Study Area**

The 2006 Lower Fraser River recreational fishery assessment study area was bounded by the outlet of the Sumas/Vedder River (Chilliwack, B.C.) and the outlet of the Coquihalla River (Hope, B.C.). This area was divided into two regions. Region 1 included the mouth of the Vedder River up to the Agassiz-Rosedale Bridge. Region 2 covered from the Agassiz-Rosedale Bridge up to the mouth of the Coquihalla River.

## Methods

In 2006, the recreational fishery assessment on the Lower Fraser River commenced on May 5<sup>th</sup>. Surveyors worked all weekends and holidays with rotating days off during the weekdays. Surveyors worked one of two shifts (morning or afternoon), which were randomly assigned to each survey day. These shifts spanned the entire daylight period.

Surveyors conducted angler interviews at their survey site to obtain the following information: where the angler was fishing, party size, length of angling trip, how much longer they intend to fish, target species, gear used, total catch retained, total catch released. Further, if permitted by the angler, the surveyor inspected the catch to determine whether the angler's species identification was correct and to check for adipose fin-clipped (AFC) fish. If requested by the angler, heads from AFC chinook were retained by surveyors due to the possibility of CWT (coded-wire-tag) presence. If there was any doubt that an adipose might have been clipped for a particular fish, for example if the adipose fin was partially regenerated or malformed, the fish was classified as AFC.

Interviews were used to determine harvest-per-unit-effort (HPUE), release-per-unit effort (RPUE) and to summarize the angler characteristics listed above. Daily effort is calculated using a combination of interview data, hourly rod counts conducted at the survey sites, and overflight rod counts of the survey area. Using the total effort estimate, HPUE and RPUE are expanded to determine harvest and release numbers by species for the entire study area. Such analyses are documented in several DFO publications (Schubert 1992; Schubert 1995).

Interviews were obtained from anglers who had finished fishing for the day. At the end of their shift, surveyors collected interviews from anglers still fishing (incomplete interviews) at sites where it was possible. Overflight angler counts were conducted twice per week (one weekend and one weekday flight per week) by fixed wing plane. The overflights covered the entire study area and were randomly assigned. Sites that had hourly rod counts performed had a total of 9 counts per day.

In May and June, two surveyors were stationed at Island 22 in Chilliwack. Hourly rod counts were conducted by boat between the Island 22 boat launch and Grassy Bar (inclusive).

In July, there were again two surveyors. One surveyor was stationed at Island 22 in Chilliwack. The second surveyor was stationed at Landstrom bar in Hope, from July 1<sup>st</sup> to 15<sup>th</sup>. For the remainder of the month, the second surveyor was stationed at Jones Bar, near Laidlaw. Hourly rod counts were conducted on Landstrom and Jones Bar.

During August 1<sup>st</sup> - 3<sup>rd</sup>, there were two surveyors. One was stationed at Landstrom Bar in Hope and the other at Island 22 in Chilliwack. Hourly rod counts were performed at Landstrom Bar. From August 3<sup>rd</sup> to September 6<sup>th</sup> (sockeye opening), there were four surveyors. Two surveyors were stationed at Island 22. A third surveyor was stationed at Landstrom Bar. The fourth surveyor alternated between Jones Bar, near Laidlaw and Spring Bar, near Agassiz. All of these survey locations had hourly rod counts performed at them. The Island 22 rod counts were carried out by boat from Island 22 down to Grassy Bar (inclusive).

During September 7<sup>th</sup> to October 9<sup>th</sup>, there were two surveyors. One was stationed at Island 22. The second was at Minto Channel, just North from the mouth of the Harrison River. Hourly rod counts were performed at Minto Channel.

Interviews from anglers fishing systems other than the Fraser River were excluded from this analysis. Interviews from anglers only targeting sturgeon were also excluded from this analysis. For anglers alternating fishing effort between sturgeon and salmon, the time fishing for sturgeon and the sturgeon release data were excluded from these interviews; only salmon fishing hours, release and harvest data were

included. Sturgeon release was not estimated due to different effort profiles required for sturgeon analysis (not assessed in this Fraser River creel program).

For May, June and July analysis, data were blocked by day type (weekend and weekday) and by time period (1<sup>st</sup> to 15<sup>th</sup>, 16<sup>th</sup> to 30<sup>th</sup>/31<sup>st</sup>).

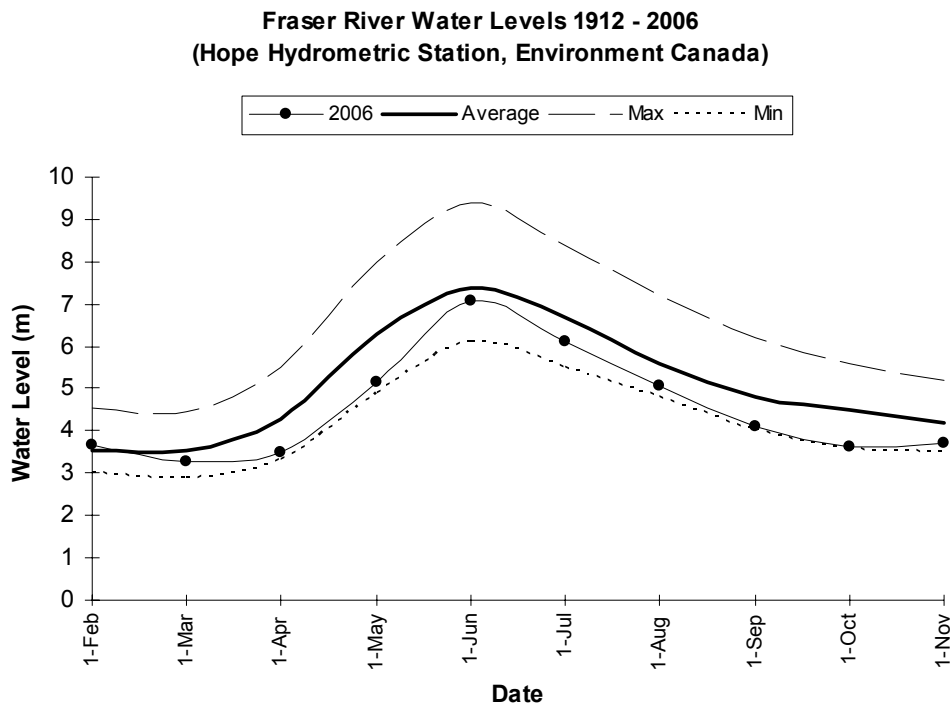
For analysis of August 1<sup>st</sup> to October 9<sup>th</sup>, data were blocked by day type (weekend and weekday). Data were temporally blocked ; (August 1<sup>st</sup> – 2<sup>nd</sup>, 3<sup>rd</sup> - 31<sup>st</sup>), (September 1<sup>st</sup> - 6<sup>th</sup>, 7<sup>th</sup> – 30<sup>th</sup>) and (October 1<sup>st</sup> – 9<sup>th</sup>) due to differing shift times between the months (accounting for changing daylight hours) and differing regulation (sockeye opened from August 3<sup>rd</sup> to September 6<sup>th</sup>).

Data were stored and analyzed using DPA software. The data were verified in three steps. First, all field data sheets were examined for compliance with study procedures by the supervising technician and/or the creel data manager. Second, during data entry, the data entry program performed 31 automatic error checks, including duplication detection, code validity, and range and consistency verification. Third, after data entry was complete, all data were imported into an excel file for verification with the field data sheets; all data were error checked once by the supervising technician.

## Results

### Water Levels

The 2006 Fraser River water levels were just under the average of 1912-2005 (figure 1).



**Figure 1** – 2006 Fraser River primary water level with maximum, minimum and average levels from 1912-2005, at the Hope Hydrometric Station, Environment Canada Results February 1<sup>st</sup> to November 1<sup>st</sup>, 1912-2006.

Website: <http://scitech.pyr.ec.gc.ca/waterweb/formnav.asp?lang=0> (as accessed on November 1<sup>st</sup>, 2006).

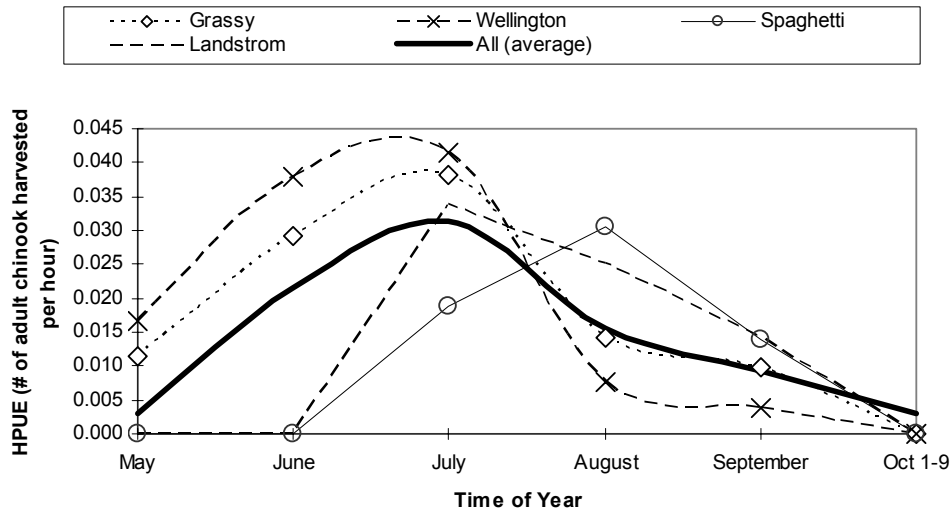
**Catch Rates**

The average target species on the Fraser River from May 1<sup>st</sup> to August 2<sup>nd</sup>, was chinook. From August 3<sup>rd</sup> to September 6<sup>th</sup>, it was sockeye, and from September 7<sup>th</sup> to October 9<sup>th</sup>, it was again chinook. There was a total estimated effort of 747,058 angler hours. Average HPUE and RPUE for this reporting period are summarized below (tables 1 and 2). When permitted by the angler, all catch were inspected for proper species identification. Catch was inspected for 80% of the creel interviews and of these inspections, anglers had correctly identified the species in 100% of these interviews.

**Table 2 – Average harvest per unit effort, HPUE, (fish retained per hour of effort), by month, during May 1<sup>st</sup> through October 9<sup>th</sup> for the 2006 Lower Fraser River recreational fishery. Sockeye HPUE does not include August 1<sup>st</sup> and 2<sup>nd</sup> or September 7<sup>th</sup> to 30<sup>th</sup>; sockeye opened on August 3<sup>rd</sup> to September 6<sup>th</sup>.**

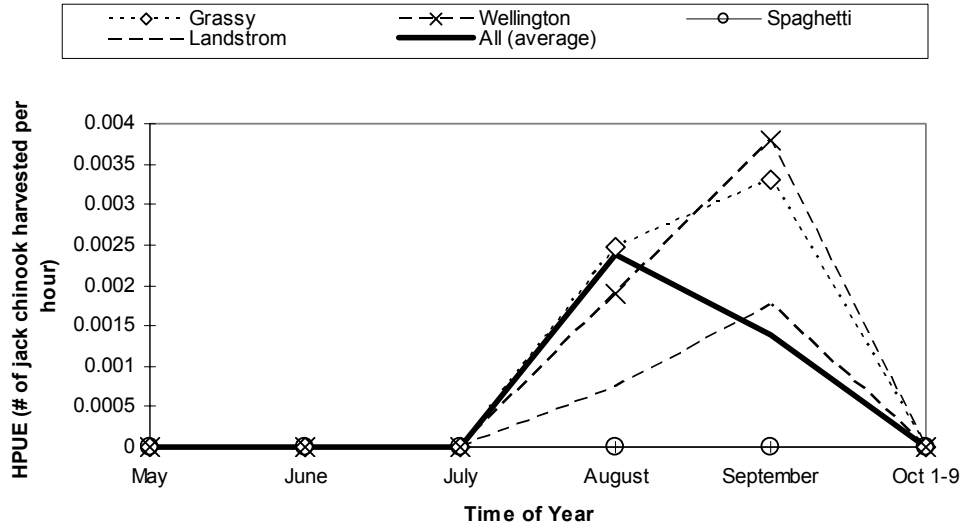
HPUE	May	June	July	August	September	Oct 1-9
<i>Chinook Adult</i>	0.003	0.02	0.03	0.02	0.009	0.003
<i>Chinook Jack</i>	-	-	-	0.002	0.001	-
<i>Sockeye</i>	-	-	-	0.25	0.1	-
<i>Coho</i>	-	-	-	-	-	-
<i>Chum</i>	-	-	-	-	0.001	0.04
<i>Pink</i>	-	-	-	-	-	-

**Average Adult Chinook HPUE per month during the 2006 Lower Fraser Recreational Fishery, May 1 - Oct 9 at Four Major Angling Locations**



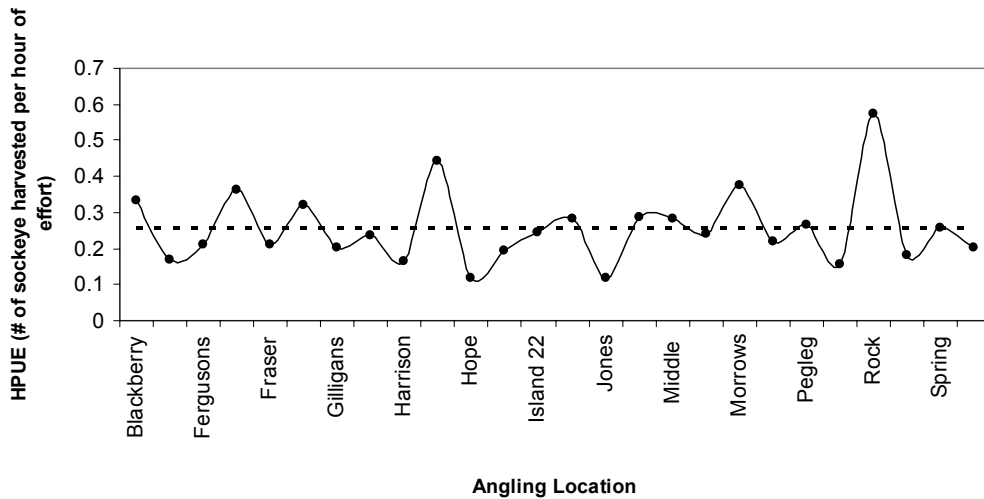
**Figure 2 –HPUE, by month, for Chinook Adults between May 1<sup>st</sup> and October 9<sup>th</sup> during the 2006 Lower Fraser Recreational Fishery, at four major angling locations. The average HPUE for the entire river is represented by the thickest line.**

**Average Jack Chinook HPUE per month during the 2006 Lower Fraser Recreational Fishery, May 1 - Oct 9 at Four Major Angling Locations**



**Figure 3** –HPUE, by month, for **Chinook Jacks** between May 1<sup>st</sup> and October 9<sup>th</sup> during the 2006 Lower Fraser Recreational Fishery, at four major angling locations. The average HPUE for the entire river is represented by the thickest line.

**Spatial Sockeye HPUE during the 2006 Lower Fraser Recreational Fishery Sockeye Opening, Aug 3 - Sept 6.**

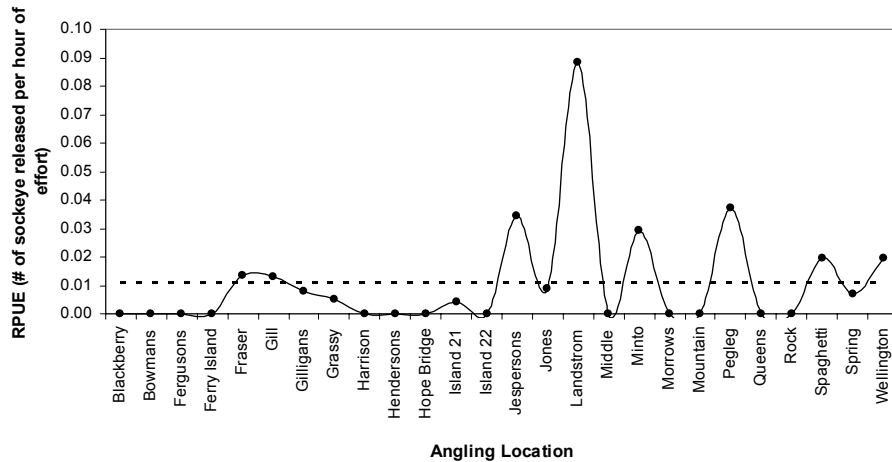


**Figure 4** –HPUE for **Sockeye** between August 3<sup>rd</sup> and September 6<sup>th</sup> during the 2006 Lower Fraser Recreational Fishery at each of the main angling locations. The average HPUE is represented by the dotted line.

**Table 3** – Average release per unit effort , **RPUE**, (fish released per hour of effort) by month, during May 1<sup>st</sup> through October 9<sup>th</sup> for the 2006 Lower Fraser River recreational fishery.

<b>RPUE</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>	<b>Oct 1-9</b>
<i>Chinook Adult</i>	-	0.0002	0.000	0.0001	0.003	0.003
<i>Chinook Jack</i>	-	-	-	0.0001	-	-
<i>Sockeye</i>	-	0.0001	0.02	0.008	0.03	0.002
<i>Coho</i>	-	-	-	0.0001	0.0004	0.003
<i>Chum</i>	-	-	-	-	0.001	0.3
<i>Pink</i>	-	-	-	-	-	-

**Spatial Sockeye RPUE during the 2006 Lower Fraser Recreational Fishery Sockeye Opening, Aug 3 - Sept 6.**



**Figure 5** – RPUE for **Sockeye** between August 3<sup>rd</sup> and September 6<sup>th</sup> during the 2006 Lower Fraser Recreational Fishery at each of the main angling locations. The average RPUE is represented by the dotted line.

**Angler Effort (spatial)**

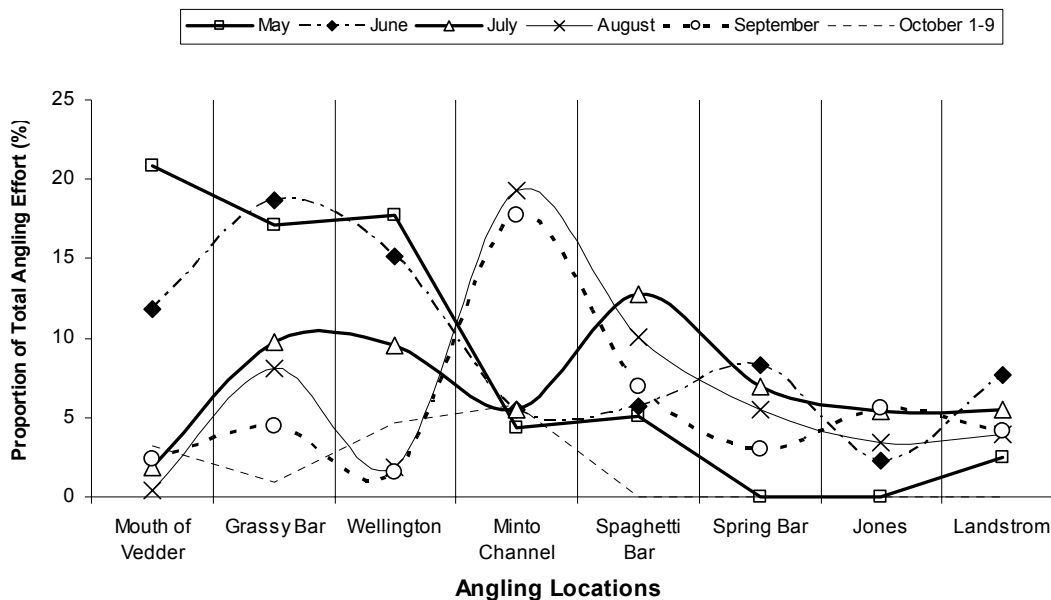
Based on overflights , angler effort during the month of May was concentrated between the outlet of the Sumas River and the outlet of the Harrison River (67.7% of total effort). Three popular angling locations made up the bulk of the total May effort: Mouth of the Vedder River (20.9%), Grassy Bar (17.1%), and Wellington Bar (17.7%). Angler effort during the month of June was again concentrated between the outlet of the Vedder River and the outlet of the Harrison River (51.6% of total effort). Three popular angling locations made up the bulk of the total June effort: Mouth of the Vedder River (11.8%), Grassy Bar (18.7%), and Wellington Bar (15.1%).

Angler effort during the month of July was distributed fairly evenly throughout the study area. Three popular angling locations made up the bulk of the total July effort: Spaghetti Bar (12.8%), Grassy Bar (9.7%), and Wellington Bar (9.4%). Angler effort during August 1<sup>st</sup> to September 6<sup>th</sup> was distributed fairly evenly throughout both regions of the study area. Three popular angling locations made up the bulk of effort during this reporting period (35.8% of total effort): Minto Channel (17.7%), Grassy Bar (7.3%), and Spaghetti Bar (10.8%). Angler effort during September 7-30<sup>th</sup>, was concentrated in Region 1 (98.5% of total effort). Two popular angling locations made up over 50% of effort during this reporting period: Minto Channel (37.5%) and Calamity Bar (12.7%). During October 1-9<sup>th</sup>, effort was again concentrated in Region 1. The mouth of the Harrison accounted for 41% of the effort, with Calamity Bar making up 17.7%. The remainder of the effort was spread throughout Region 1.

**Table 4** – Proportion of total (Region 1 & 2 combined) angler effort (as a % of total effort) during May 1<sup>st</sup> to October 9<sup>th</sup>, 2006, for the Lower Fraser River's 8 most popular angling locations.

	May	June	July	August	September	Oct 1-9
<i>Mouth of Vedder</i>	20.9	11.8	1.9	0.4	2.4	3.2
<i>Grassy Bar</i>	17.1	18.7	9.7	8.1	4.5	0.9
<i>Wellington</i>	17.7	15.1	9.5	1.9	1.6	4.7
<i>Minto Channel</i>	4.4	5.5	5.5	19.3	17.7	5.8
<i>Spaghetti Bar</i>	5.1	5.7	12.8	10.1	7	0
<i>Spring Bar</i>	0	8.3	7	5.5	3	0
<i>Jones</i>	0	2.3	5.4	3.4	5.6	0
<i>Landstrom</i>	2.5	7.7	5.5	3.9	4.2	0

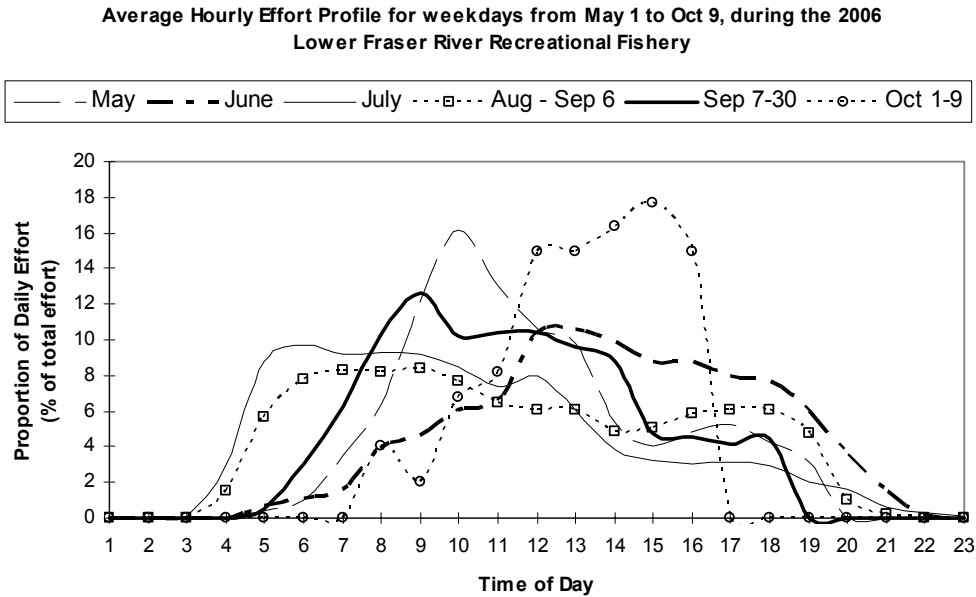
**Proportion of Total Effort at the 8 most popular bars during the 2006 Lower Fraser Recreational Fishery**



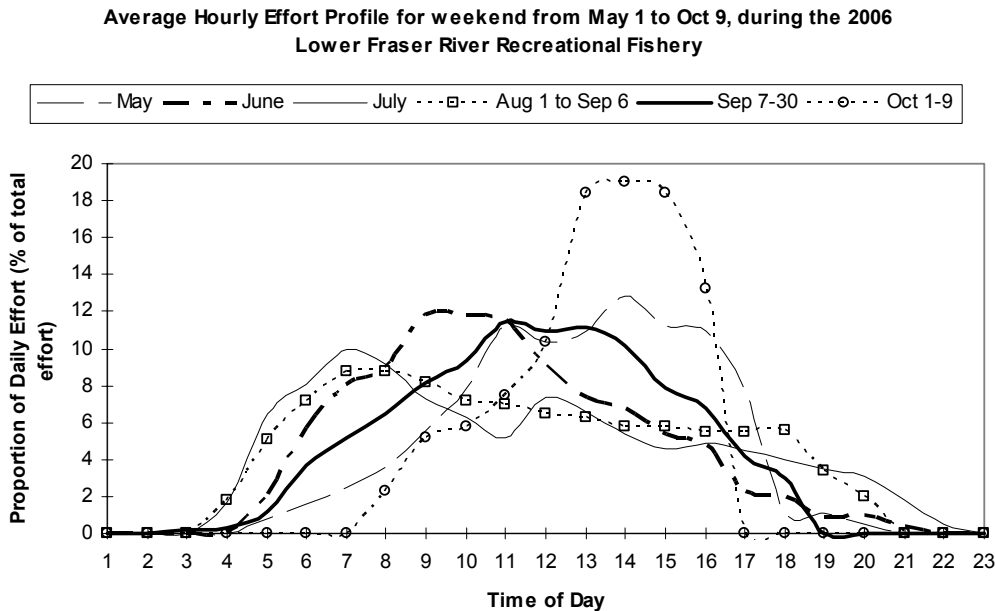
**Figure 6** – Proportion of total (Region 1 & 2 combined) angler effort during May 1<sup>st</sup> to October 9<sup>th</sup>, 2006, for the Lower Fraser River's 8 most popular angling locations.

**Angler Effort (temporal)**

**Effort Profile:** Anglers fished throughout the daylight hours. Hourly proportion of daily effort varied among the differing temporal blocks. Daily effort profiles are summarized below (figures 7 and 8).



**Figure 7** – Hourly angler effort profile for **weekdays** (May 1<sup>st</sup> to October 9<sup>th</sup>), during the 2006 Lower Fraser River recreational fishery.



**Figure 8** – Hourly angler effort profile for **weekends** (August 1<sup>st</sup> to September 6<sup>th</sup>), during the 2006 Lower Fraser River recreational fishery.



**Table 5** - Fraser River recreational fishery assessment final results from **May 1-31, 2006**. Data stratified into weekend (including holidays) and weekday.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS  
(STUDY PERIOD: May 1 - 31, 2006)**

SOURCE DATA		
	Weekend	Weekdays
Open Days in Study Period	9	22
Number of Survey Shifts	9	10
Number of Interviews	97	61
Interview Hours	398	256
Number of Instantaneous Rod Counts (overflights)	3	5
Mean Rod Count (Instantaneous)	34	11
Proportion of Effort in the Instantaneous Effort Count Time Block	0.119	0.142
Estimated Average Daily Effort (Hours)	286	77.5
Estimated Total Effort (Hours)	2,289	1,757

CATCH ESTIMATES				
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>17</b>	<b>0</b>	<b>27</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	17	—	27	—
<b>Chinook Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Adult</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6** - Fraser River recreational fishery assessment final results from **June 1-30<sup>th</sup>, 2006**. Data stratified into weekend (including holidays) and weekday.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS**  
(STUDY PERIOD: June 1 – 30, 2006)

	SOURCE DATA			
	Weekend		Weekdays	
Open Days in Study Period	8		22	
Number of Survey Shifts	8		14	
Number of Interviews	267		289	
Interview Hours	1,365		1,399	
Number of Instantaneous Rod Counts (overflights)	4		4	
Mean Rod Count (Instantaneous)	86		78	
Proportion of Effort in the Instantaneous Effort Count Time Block	0.118		0.061	
Estimated Average Daily Effort (Hours)	729		1,278	
Estimated Total Effort (Hours)	6,546		25,246	

	CATCH ESTIMATES			
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>101</b>	<b>10</b>	<b>1,019</b>	<b>21</b>
marked (adipose missing)	0	—	9	—
unmarked (adipose present)	101	—	1,010	—
<b>Chinook Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Adult</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 7 - Fraser River recreational fishery assessment final results from July 1-31<sup>st</sup>, 2006.** Data stratified into weekend (including holidays) and weekday.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS**  
(STUDY PERIOD: July 1 – 31, 2006)

	SOURCE DATA			
	Weekend		Weekdays	
Open Days in Study Period	11		20	
Number of Survey Shifts	11		12	
Number of Interviews	1,931		810	
Interview Hours	8,106		4,854	
Number of Instantaneous Rod Counts (overflights)	5		4	
Mean Rod Count (Instantaneous)	505		314	
Proportion of Effort in the Instantaneous Effort Count Time Block	0.068		0.088	
Estimated Average Daily Effort (Hours)	7,426		3,568	
Estimated Total Effort (Hours)	77,767		65,498	

	CATCH ESTIMATES			
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>2,025</b>	<b>31</b>	<b>2,466</b>	<b>40</b>
marked (adipose missing)	24	—	0	—
unmarked (adipose present)	2,001	—	2,466	—
<b>Chinook Jack</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	20	—	0	—
<b>Coho Adult</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>0</b>	<b>1,999</b>	<b>0</b>	<b>3,375</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 8 - Fraser River recreational fishery assessment final results from August 1<sup>st</sup> – September 6<sup>th</sup>, 2006.** Data stratified into weekend (including holidays) and weekday. Sockeye estimates do not include August 1<sup>st</sup> and 2<sup>nd</sup>; sockeye opened on August 3<sup>rd</sup>.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS**

*(STUDY PERIOD: August 1 – September 6, 2006)*

	SOURCE DATA			
	Weekend		Weekdays	
Open Days in Study Period	12		25	
Number of Survey Shifts	12		13	
Number of Interviews	2,435		3,071	
Interview Hours	15,414		10,494	
Number of Instantaneous Rod Counts (overflights)	5		6	
Mean Rod Count (Instantaneous)	1,481		892	
Proportion of Effort in the Instantaneous Effort Count Time Block	0.08		0.08	
Estimated Average Daily Effort (Hours)	18,513		11,150	
Estimated Total Effort (Hours)	218,002		314,981	
	CATCH ESTIMATES			
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>2,681</b>	<b>52</b>	<b>5,847</b>	<b>122</b>
marked (adipose missing)	0	—	12	—
unmarked (adipose present)	2,681	—	5,835	—
<b>Chinook Jack</b>	<b>381</b>	<b>76</b>	<b>286</b>	<b>72</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	381	—	286	—
<b>Coho Adult</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>43,594</b>	<b>4,443</b>	<b>90,699</b>	<b>11,524</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 9** - Fraser River recreational fishery assessment final results from **September 7<sup>th</sup> – 30<sup>th</sup>, 2006**. Data stratified into weekend (including holidays) and weekday.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS**

*(STUDY PERIOD: September 7 – 30, 2006)*

SOURCE DATA				
	Weekend		Weekdays	
Open Days in Study Period	7		17	
Number of Survey Shifts	7		11	
Number of Interviews	486		431	
Interview Hours	3,262		2,323	
Number of Instantaneous Rod Counts (overflights)	3		3	
Mean Rod Count (Instantaneous)	116		57	
Proportion of Effort in the Instantaneous Effort Count Time Block	0.1		0.1	
Estimated Average Daily Effort (Hours)	1,160		570	
Estimated Total Effort (Hours)	9,790		9,160	

CATCH ESTIMATES				
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>147</b>	<b>55</b>	<b>83</b>	<b>19</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	147	—	83	—
<b>Chinook Jack</b>	<b>15</b>	<b>3</b>	<b>3</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	15	—	3	—
<b>Coho Adult</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>20</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>0</b>	<b>395</b>	<b>0</b>	<b>1845</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>19</b>	<b>51</b>	<b>74</b>	<b>92</b>

**Table 10 - Fraser River recreational fishery assessment final results from October 1<sup>st</sup> – 9<sup>th</sup>, 2006.** Data stratified into weekend (including holidays) and weekday.

**FRASER RIVER MAINSTEM RECREATIONAL FISHERY ASSESSMENT  
FINAL RESULTS**

*(STUDY PERIOD: October 1 – 9, 2006)*

SOURCE DATA				
	Weekend		Weekdays	
Open Days in Study Period	4		5	
Number of Survey Shifts	4		3	
Number of Interviews	243		114	
Interview Hours	1,289		718	
Number of Instantaneous Rod Counts (overflights)	3		1	
Mean Rod Count (Instantaneous)	97		54	
Proportion of Effort in the Instantaneous Effort Count Time Block	0.04		0.03	
Estimated Average Daily Effort (Hours)	2,255		1,800	
Estimated Total Effort (Hours)	8,979		7,043	

CATCH ESTIMATES				
	Weekends		Weekdays	
	Harvest	Release	Harvest	Release
<b>Chinook Adult</b>	<b>21</b>	<b>26</b>	<b>0</b>	<b>23</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	21	—	0	—
<b>Chinook Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Adult</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Coho Jack</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
marked (adipose missing)	0	—	0	—
unmarked (adipose present)	0	—	0	—
<b>Sockeye</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>0</b>
<b>Pink</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Chum</b>	<b>482</b>	<b>3,612</b>	<b>325</b>	<b>3,330</b>

**Table 11 - Fraser River recreational fishery assessment evaluation from May 1<sup>st</sup> to October 9<sup>th</sup>, 2006.**  
 Total harvest and release (weekend and weekday data combined). Sockeye estimates do not include August 1<sup>st</sup> and 2<sup>nd</sup>; sockeye opened on August 3<sup>rd</sup>.

	<b>May 1-31</b>	<b>June 1-30</b>	<b>July 1-31</b>	<b>August 1-31</b>	<b>September 1-6</b>	<b>September 7-30</b>	<b>October 1-9</b>	<b>Total 2006</b>
	chinook	chinook	chinook	sockeye	sockeye	chinook	chinook	
Number of Interviews	158	556	2,741	4,702	804	917	357	<b>10,235</b>
Interview Hours	654	2,763	12,960	22,036	3,873	5,585	2,007	<b>49,878</b>
Number of Overflights	8	8	9	8	3	6	4	<b>46</b>
<b>ANGLER EFFORT</b>								
Estimated Effort (hours)	4,046	31,792	143,265	460,566	72,417	18,950	16,022	<b>747,058</b>
<b>ESTIMATED HARVEST</b>								
Chinook Adult	44	1,121	4,491	7,701	828	230	21	<b>14,436</b>
Chinook Jack	0	0	20	486	182	19	0	<b>707</b>
Coho Adult	0	0	0	0	0	0	0	<b>0</b>
Coho Jack	0	0	0	0	0	0	0	<b>0</b>
Sockeye	0	0	0	117,468	16,824	0	0	<b>134,292</b>
Pink	0	0	0	0	0	0	0	<b>0</b>
Chum	0	0	0	0	0	93	807	<b>900</b>
<b>ESTIMATED RELEASE</b>								
Chinook Adult	0	31	71	147	27	74	49	<b>399</b>
Chinook Jack	0	0	0	148	0	3	0	<b>151</b>
Coho Adult	0	0	0	18	0	46	26	<b>90</b>
Coho Jack	0	0	0	0	0	2	0	<b>2</b>
Sockeye	0	30	5,374	13,117	2,850	2,241	31	<b>23,643</b>
Pink	0	0	0	0	0	0	0	<b>0</b>
Chum	0	0	0	0	0	143	6943	<b>7,086</b>

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